

**Regional Transportation System Management and Operations Plan
Summary of Regional Action Strategies by Agency**

TSMO Project	Project Description	Goal/Objective	Priority	Cost			Potential Lead Agency
				Time-frame	Capital	O&M	
Active Traffic Management RCTO	Conduct a study to review the various strategies and determine those feasible. 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.	Identify potential corridors for active traffic management implementation, and develop an implementation plan	High	1-5 years	\$350K	\$0	Metro
Multi-modal traveler data and tools	Provide and/or maintain data and tools to encourage and ease the use of travel options including CarpoolMatchNW.org and roadway bike-suitability data maintenance for bike maps and online trip planning tools.	Provide and/or maintain data and tools to encourage and ease the use of travel options.	High	Ongoing	\$0	\$150K	Metro
Arterial Performance Measure	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.	Expand traffic surveillance and transportation system condition data collection capabilities across all modes.	High	1-5 years	\$750K	\$100K	Metro
Emergency Responders GIS System Upgrades	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.	Provide better information and support for emergency management	Medium	1-5 years	\$200K	\$50K	Metro
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.	Continue regional collaborative marketing campaign that increases awareness and use of travel options and reduces drive-alone trips.	High	Ongoing	\$0	\$975K	Metro

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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. Additional investment in this strategy is appropriate in some corridors.	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
Rideshare Services	Implement and/or support marketing, outreach, vanpool fare incentives, and services directed at residents and employees to encourage and incentivize ridesharing. Additional investment in this strategy is appropriate in some corridors.	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
Measurement	Implement and/or support strategies that support investment in cost-effective strategies by measuring program effectiveness and easing data sharing among partners.	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
TSMO 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.	Support strategic and collaborative program oversight.	High	Ongoing	\$0	\$335K	Metro
Parking Management 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.	Provide incentives for jurisdictions to manage parking	High	1-5 years	\$0	\$100K	Metro

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Youth transit pass program	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 incorporate developing methods to upgrade transit fare collection to an instrument, such as smart cards, 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.	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	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.	Implement the youth transit pass program.	Medium	1 year (6-10 years)	\$0	\$15M	Metro
Regional Incentive/Disincentive 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.	Provide a method for incentives used to manage demand with individuals.	Low	6-10 years	\$9M	\$200K	Metro
Park&Ride Traveler Information	Add Park&Ride feature to route planning tools such as TriMet's Trip Planner. Capital cost will install parking sensors to collect and share data.	Add Park&Ride feature to route planning tools	High	Ongoing	\$500K	\$150K	Metro or TriMet
Enhance Regional Traffic Signal System	Software upgrades or enhancements including advanced signal operations, supportive GIS databases, incident management timing plans, etc. Equipment and hardware upgrades to enhance capabilities in traffic signal systems such as automation of turn movement counts collection and automated collection of arterial travel times.	Enhance regional traffic signal coordination systems and support systems that respond to current conditions.	High	1-5 years	\$12M	\$50K	Metro/TransPort

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Region-wide Access Management Strategies	Develop overall access management goals and objectives and identify potential corridors for access management implementation. 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.	Improve safety and preserve capacity on regional facilities	High	1-5 years	\$500K	\$0	ODOT
Congestion Pricing/ High Occupancy Toll Lanes	Develop and implement congestion pricing and study the effect it may have on reducing traffic congestion.	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	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.	Field prove ATM concept and show system benefit	Medium	6-10 years	\$5M	\$100K	ODOT
TripCheck Travel Information Portal (TTIP) Enhancement	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.	Provide current information that may affect roadway users and travel choices across all modes.	High	1-5 years	\$3M	\$2M	ODOT
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.	Expand traffic incident and event management capabilities to restore roadway capacity reduced by incidents, weather and construction	High	1-5 years	\$2M	\$200K	ODOT
Automated Speed Enforcement	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.	Provide a safe environment for transit, bicycling and walking	Low	6-10 years	\$1M	\$100K	ODOT or others

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24-Hour Transportation Operations Coverage	Implement 24-hour transportation operations centers (TOC) coverage to allow quicker identification of traffic issues, expansion of traffic surveillance and facilitation of communication at all hours of the day.	Expand traffic surveillance and facilitation of communication during late night/early morning hours.	Low	10-Jun	\$0	\$100K	ODOT/ TransPort
Implement Freight Data Collection System	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.	Collect region wide freight data	High	1-5 years	\$50K	\$100K	Port of Portland
Portland OR Regional Transportation Data Archive Listing (PORTAL) Enhancements	Link GIS data with PORTAL to provide more capabilities.	Expand traffic surveillance and transportation system condition data collection capabilities.	High	Ongoing	n/a	\$100K	PSU
Expand Incident Management Teams/Training	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.	Provide a coordinated response to traffic incidents	High	1-5 years	\$10M	\$500K	TransPort
Integrate Voice and Data Networks	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.	Improve communication and coordination between transportation agencies and emergency management agencies	Medium	1-5 years	\$10M	\$500K	TransPort
Transit Priority Treatment Performance Measurement	Establish a set of performance measures which will apply across all corridors with Transit signal priority (TSP) implemented, and regularly monitor and evaluate the performance of TSP.	Enhance regional traffic signal coordination systems and support systems that respond to current conditions.	High	1-5 years	\$200K	\$200K	TriMet

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Transit Performance Measurement System	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.	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
Smartcard Fare System RCTO	Develop smartcard capabilities in conjunction with Portland-Milwaukie LRT project	A smartcard fare system would improve transit operating efficiency by accelerating boarding and fare payment and enhance the attractiveness of the system by providing customers with more convenient and flexible payment options.	High	1-5 yrs	\$100K		TriMet
Smartcard Fare System Pilot Project	Implement smartcard program in conjunction with Portland-Milwaukie LRT project	A smartcard fare system would improve transit operating efficiency by accelerating boarding and fare payment and enhance the attractiveness of the system by providing customers with more convenient and flexible payment options.	High	1-5 yrs	\$12M		TriMet
Operate and Maintain Regional ITS Communications Network	Enhance the operation and maintenance of the regional ITS communications network.	Ensure ITS capital investments are used as efficiently and effectively as possible.	High	Ongoing	\$0	\$100K	TriMet/ TransPort
Next Generation Transit Signal Priority System	Develop new standards for buses communicating to the traffic signal system, giving new capabilities and increasing the operational efficiency of transit signal priority (TSP) system.	Enhance regional traffic signal systems to support efficiency goals.	Medium	6-10 years	\$500K	\$100K	TriMet/ TransPort
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.	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