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TransPort Technical Advisory Committee

Wednesday, July 8, 2009

1:30 – 3:30 p.m.

ODOT Region 1

****

Meeting Notes

In Attendance

Jen Bachman (DKS), David Daily (C-Tran), Eric Hathaway (Kittelson), Phil Healy (Port of Portland), Tu Ho (Beaverton), Joe Marek (Clackamas Co), Galen McGill (ODOT), Dennis Mitchell (ODOT), Jim Peters (DKS Associates), Deena Platman (Metro), Willie Rotich (PDOT), Abbas Shafii (Washington Co), Kristin Tufte (PSU), Caleb Winter (Metro)

TSMO Plan Update

Deena Platman kicked off the meeting with a progress update on the TSMO plan. Project staff gave presentations on the action plan to TPAC (6/26) and Metro Council (7/7) and will meeting with JPACT on 7/9. A copy of the presentation was shared with TransPort members. (Presentation attached). Members help to brainstorm ways to compare the life cycle cost of a TSMO arterial management project with a traditional lane widening to address a question raised by Metro Council. It was suggested that we used a sample corridor where we are currently adding arterial management and estimated the cost of road widening – capital and O&M over 8 years and compare with the cost of the TSMO project in the same time frame.

Jurisdictions are underway with developing updated RTP lists and TransPort members should be participating to ensure that corridor specific projects are brought into the RTP.

Deena also announced that ITS Joint Operations Program Director Shelley Rowe will be visiting August 26 and a reception is planned. More detailed information will be forwarded when available.

TSMO Action Plan

A quorum of voting TransPort members unanimously recommend the TSMO Action Plan strategies. The TSMO Action Plan will be folded into the comprehensive Regional TSMO Plan that will be adopted this fall.

TSMO Regional Flexible Fund Allocation

Jim Peters led the discussion on the TSMO regional funds allocation proposal. (Attached) Three options were sent out with the meeting notice. Members discussed their preferences.

Option 1 with a focus on demonstration projects was preferred by the group, although some of the members also liked Option 3's focus on traveler information. Option 2 was dismissed as members felt it has serious limitations with using a private data provider.

Using Option 1 as a base, TransPort reduced the amount of funds for the Active Traffic Management and Arterial Performance Management RCTOs – OTREC awarded $100K to develop arterial performance measures, which can be used to support the RCTO. The group added an Arterial Traveler Information project that would support needed signal software configurations, TTIP upgrades, and data transfer protocols necessary for implementation. The Clackamas County railroad crossing information system was removed because the group felt that this type of project was not a compelling "first off the bench" demonstration project.

Deena agreed to update the recommended allocation summary and send out to TransPort members.

Other Business

No discussion.


The transportation system management and operations (TSMO) refinement plan identifies investments to achieve safe, reliable, accessible, and seamless travel for people and goods.

JPACT - July 9, 2009
Jim Peters – DKS Associates
Deena Platman - Metro


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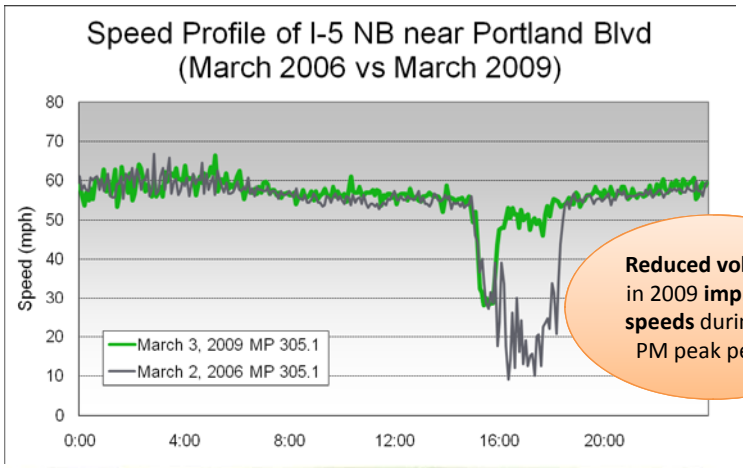
1

TSMO solutions optimize capacity and can delay the need for capital improvements



2

TSMO strategies are a good return on investment

For every $1.00 spent:

- Burnside Rd adaptive signal system provides $6.50 of benefit (after five years)
- Traffic incident detection provides about $6.00 of benefit
- Freeway service patrols range between $2.00 and $42.00 of benefit
- Portland regional van pool program recovers 50% of cost

3

Management strategies improve accessibility, safety, multimodal mobility and travel options

Multimodal Traffic Management

Traffic Incident Management

Traveler Information

Transportation Demand Management

4

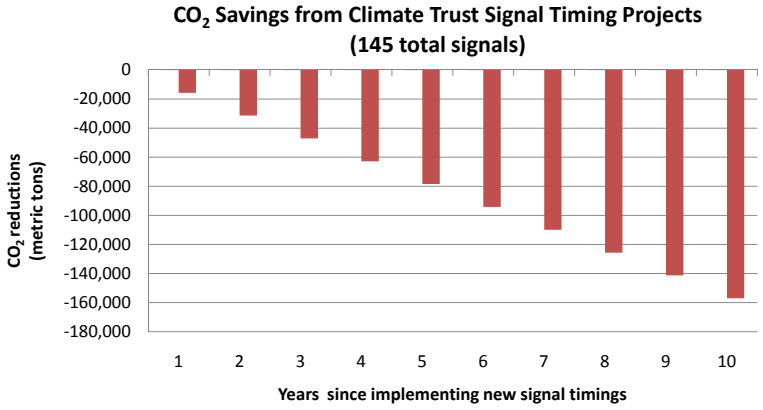
Coordinating traffic signals decreases fuel consumption and vehicle emissions.

Multimodal Traffic Management

Traveler Information

Incident Management

Transportation Demand Management



5

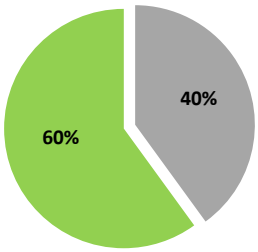
Providing real-time information allows travelers to alter decisions.

Multimodal Traffic Management

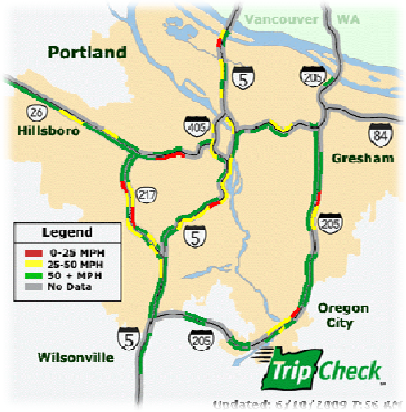
Traveler Information

Incident Management

Transportation Demand Management



Up to 60 % of visitors to the TripCheck website alter travel plans based on real-time information.



6

Improving incident clearance times reduces incident delay and cost.

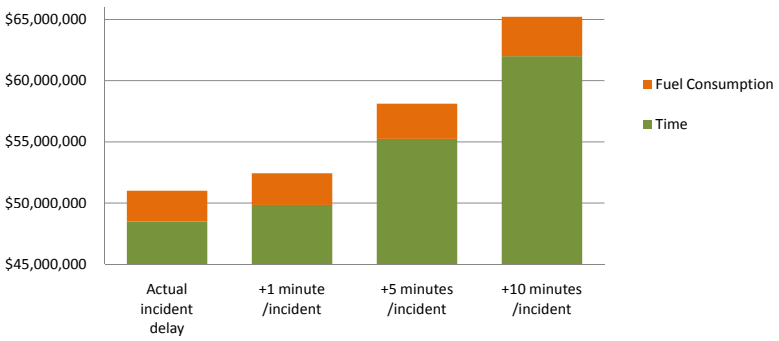
Multimodal Traffic Management

Traveler Information

Incident Management

Transportation Demand Management

Cost of ODOT Region 1 Incidents and the Impact of Additional Incident Duration



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

7

Marketing travel options encourages travel choices.

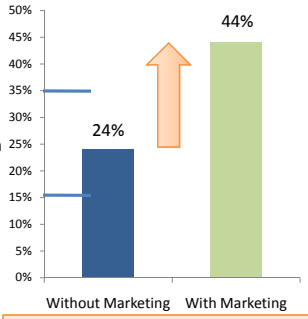
Multimodal Traffic Management

Traveler Information

Incident Management

Transportation Demand Management

MAX Yellow Line



20% larger increase in ridership in areas targeted by individualized marketing campaigns.

1 out of 5 Portland residents reduced car trips due to the Drive Less. Save More. campaign.

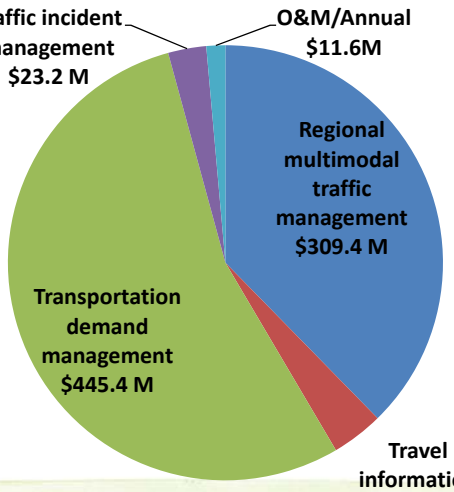
Drive less. Save more.

8

The TSMO plan proposes expanding regional investment in transportation management strategies

Cost of TSMO plan by functional area

4% of state RTP financial target



9

1. Does JPACT support the overall focus of regional TSMO investment in the four functional areas of:
   regional multimodal traffic management
   traffic incident management
   traveler information
   transportation demand management?

2. To what extent should the TSMO plan action strategies be incorporated into the 2035 RTP state and federal investment strategy being developed by local, state and regional agencies?

10

TSMO – MTIP Funding Allocation Options

($6 Million for the first 4 years)

Option 1: Base projects with system improvements at specific locations

Project	Allocation
PORTAL support	$450 K
ITS network – operate and maintain	$100 K
Active Traffic Management RCTO	$300 K
Arterial Performance Measure RCTO	$300 K
Tualatin Sherwood Rd/99W	$1.85 M
Canyon Rd – Adaptive Signal Timing	$750 K
Active Corridor Management Projects on I-84/Powell/Glisan/Sandy	$2 M
Clackamas County RR Crossing info	$250 K
TOTAL	$6 million

Base projects, repeated in each option.

Projects targeting different geographic regions as shown in the attached map

Option 2: Base projects with a region wide traveler information tool

Project	Allocation
PORTAL support	$450 K
ITS network – operate and maintain	$100 K
Active Traffic Management RCTO	$350 K
Arterial Performance Measure RCTO	$350 K
Inrix (or similar) Traveler Information Subscription Tool	$4.75 M
TOTAL	$6 million

Base projects

Project targeting region-wide audience

Option 3: Base projects with a focused improvement across the region

Project	Allocation
PORTAL support	$450 K
ITS network – operate and maintain	$100 K
Active Traffic Management RCTO	$350 K
Arterial Performance Measure RCTO	$350 K
Expand Traveler Information Devices to Major Arterials	$4.75 M
TOTAL	$6 million

Base projects

Project targeting a focused improvement across the region

Other Options:

- Leverage funds based on capital improvement projects. Tack on TSMO projects as capital projects occur.

Explanation of the options:

Base Projects:

- **PORTAL support** – Supporting the PORTAL system provides new tools and an upgraded interface to archive transportation data. That data can be used to make decisions to improve the transportation system.
- **Operate and Maintain the ITS network** – This project funds replacement parts and new equipment that enables new agencies to access the ITS network.
- **Active Traffic Management Regional Concept of Transportation Operations (RCTO) –** The active traffic management RCTO evaluates the potential effectiveness of variable speeds and managed lanes. It analyzes the regional corridors and prioritizes investments in active traffic management.
- **Arterial Performance Measure RCTO –** The arterial performance measure RCTO identifies performance measures for the region's arterial roadways and develops standards for data collection and dissemination to travelers. The RCTO lays the groundwork for all future arterial system management projects and guides selection of data collection equipment and design.

Option 1: Base projects plus the following geographic specific projects.

- **Tualatin Sherwood Rd and 99W improvements** - This project addresses facilities that currently operate below jurisdictional standards during peak hours. It builds on two current projects and provides a complete traveler information and arterial management system on 99W and Tualatin Sherwood Road connection Sherwood, Tualatin, and Tigard.
- **Canyon Road Adaptive Signal Timing** – The Canyon Road project provides adaptive signal timing on Canyon Road through downtown Beaverton. It builds on the current adaptive signal timing project on Beaverton Hillsdale Highway. Due to the close proximity of the two facilities and the several cross streets that intersect the two, optimal operations occur when both are equipped with adaptive signal timing systems.
- **Active Corridor Management Projects on I-84, Powell, Glisan, and Sandy** – This project expands traveler information and enables incident management techniques that reduce traveler delay and improve safety through the I-84 corridor. The project provides real-time traveler information along I-84 and parallel facilities so travelers can make informed route decisions. It also implements incident management strategies such as variable speed limits and event signal timing plans.
- **Clackamas County Railroad At-Grade Crossing Information** – This project provides an advance warning system at select at-grade crossings to provide travelers and emergency responders with advanced train activity information. The project enables travelers and emergency responders to

choose alternative routes by providing crossing activity information at key decision points. The project provides crossing information at the 911 center and at the crossing.

Option 2: Base projects plus the following region-wide traveler information tool.

- **Inrix Traveler Information Subscription Tool (or a similar application)** – This traveler information tool uses a subscription type service to supply real-time traveler information to the public. The service provider may own the devices and data. Traveler information is distributed to the public as a service that is supported through MTIP funds.

Option 3: Base projects plus the following focused improvement across the region.

- **Expand Traveler Information Devices to Major Arterials** – This project equips major arterials across the region with permanent devices to collect and distribute traveler information. The traveler information links to the TripCheck website as the public interface.