

Vancouver Regional Operations Studies

February 5, 2019

Overview



- ◆ TSMO strategies can defer the need for major capital projects and supplement them by improving system efficiency and reliability
- ◆ Bi-state region has a history of working to improve traffic operations with low cost capital improvements, operational improvements and technology strategies
- ◆ Three studies currently underway in the Vancouver region

Bi-state Operational Activities



- ◆ WSDOT's Regional Ramp Meter Study (RTC)
- ◆ Bus on Shoulder Feasibility Study (RTC)
- ◆ *SR-14 BOS Pilot Project (C-TRAN, WSDOT)*
- ◆ Advanced Traffic Management Study (ODOT)
- ◆ *Bi-state Travel Time Project (WSDOT, ODOT)*
- ◆ I-205 Access and Operations Study (RTC)
- ◆ Congestion Bottleneck Operational Study (ODOT)
- ◆ *I-5 Operations Project, Hwy 217 to I-205 (ODOT)*

Programmed Operations Projects

- ◆ Ramp meter at SR-500 to I-205 north
- ◆ Ramp meter at Mill Plain Boulevard to I-205 north
- ◆ Ramp meters on I-5 south to the Interstate Bridge
- ◆ Bus on shoulder on I-5 south to the Interstate Bridge

Vancouver Area Studies

- ◆ Regional Origin Destination Study
- ◆ Urban Freeway Corridor Operations Study
- ◆ I-205 Corridor Operations Study (WSDOT)

Regional Origin Destination Study



- ◆ Determine where vehicles enter and exit the freeway
- ◆ Identify trip length and travel patterns of freeway trips
- ◆ Provides direct support to the UFCO Study
- ◆ Key data source for understanding the effectiveness and benefits of improvement strategies
- ◆ Supplements other traffic data collected for UFCO Study

UFCO Study

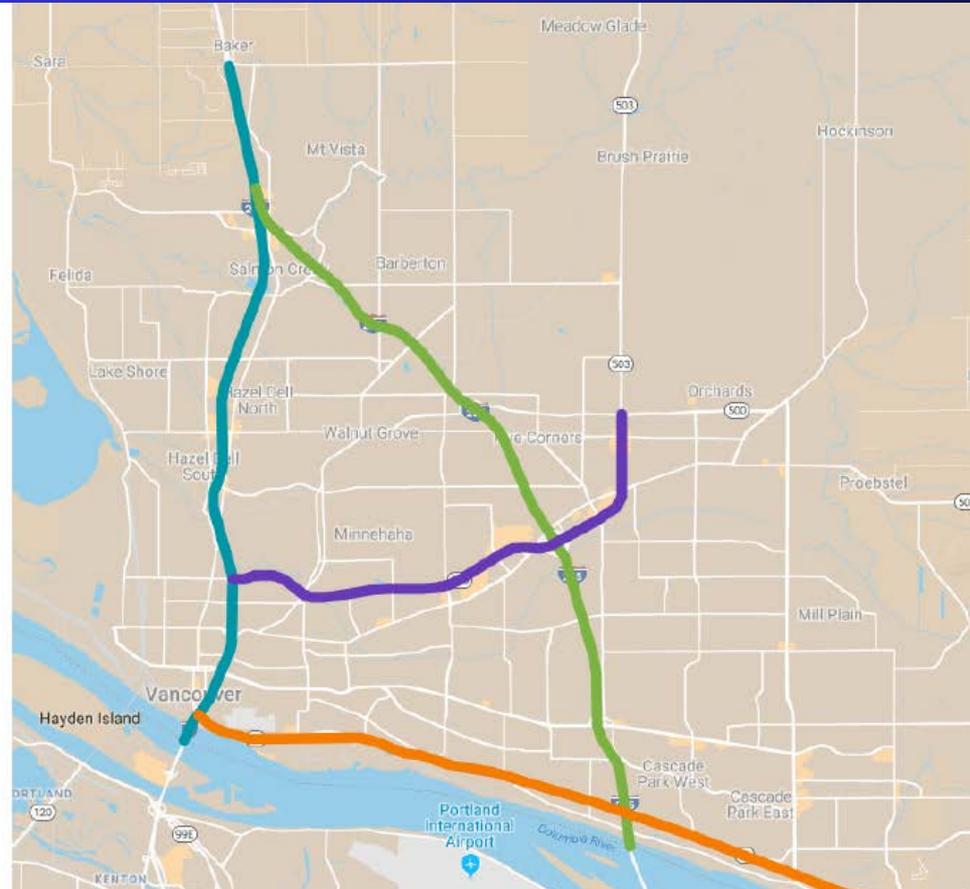
- ◆ Analyze near term freeway operations needs
- ◆ Recommend low cost strategies to improve system performance and mobility on the urban freeway system.
- ◆ Strategies will include:
 - ◆ Technology based active traffic management
 - ◆ Low cost capital improvements

UFCO Study Area



UFCO STUDY AREA

- Urban freeway corridors in SW Washington

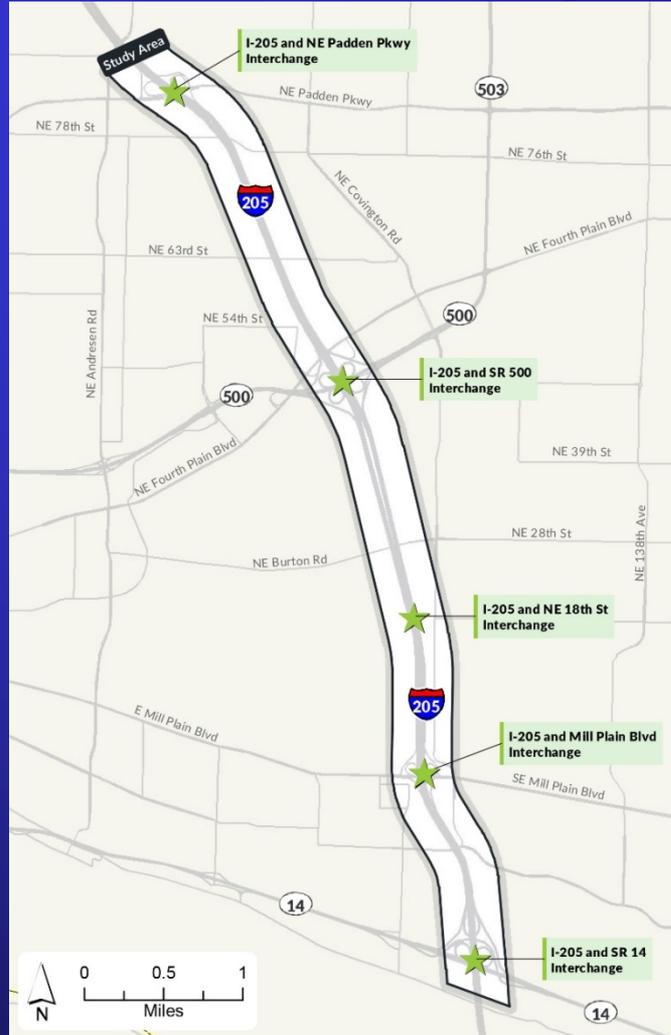


I-205 Corridor Operations Study



- ◆ Identify low cost strategies over the next 5 to 10 years to:
 - ◆ Reduce congestion
 - ◆ Increase safety
 - ◆ Improve travel reliability
- ◆ Study will result in a list of improvements for I-205
- ◆ Portions of corridor are also part of the UFCO Study
- ◆ Analysis and strategies for the two studies are being coordinated between RTC and WSDOT

I-205 Corridor Study Area



Analysis approach for overlapping I-205 corridor segments



<i>Study</i>	<i>Types of Strategies to be Analyzed</i>
<u>UFCO Study</u> Technology based real-time system management and operations	Variable speed signage Queue warning locations Variable lane assignment Additional variable message signs Dynamic ramp metering Signage and marking improvements Lane restriping
<u>I-205 Corridor Study</u> Physical roadway changes and geometric modifications	Lane extensions Mainline reconfiguration Auxiliary lanes Width improvements Interchange/ramp modifications

Next Steps

- ◆ Recommend and select origin destination data collection method
- ◆ Review existing traffic data and initial existing conditions analysis
- ◆ Identify remaining data gaps for UFCO Study