

RTC Board

Bus on Shoulder Feasibility Study:
Recommendations
June 6, 2017

Bus on Shoulder Feasibility Study

- ◆ Examined the technical, operational, geometric, and policy options regarding part-time shoulder running for transit bus operations along I-205 and SR-14
- ◆ Developed findings on BOS feasibility and recommendations for the study corridors

Study Area and Background

SR-14 from 164th to I-205

I-205 from 18th Street to I-84

- ◆ I-205 BOS was recommended in the 2008 Clark County HCT Study
- ◆ Access and Operations Study adopted by the RTC Board in November 2014 recommended looking at BOS as a low cost option to improve bus service reliability and ridership on SR-14 and I-205



Bus on Shoulder Operations

- ◆ Buses can use the freeway shoulder when mainline speeds are less than 35 mph
- ◆ Buses allowed 15 mph faster; maximum speed of 35 mph
- ◆ Shoulders retain their primary use as a safety refuge for vehicles that must make an emergency stop and emergency response
- ◆ In 2015, 16 BOS systems in the US

Recommended BOS Concepts

SR-14 – Proposed Pilot Project

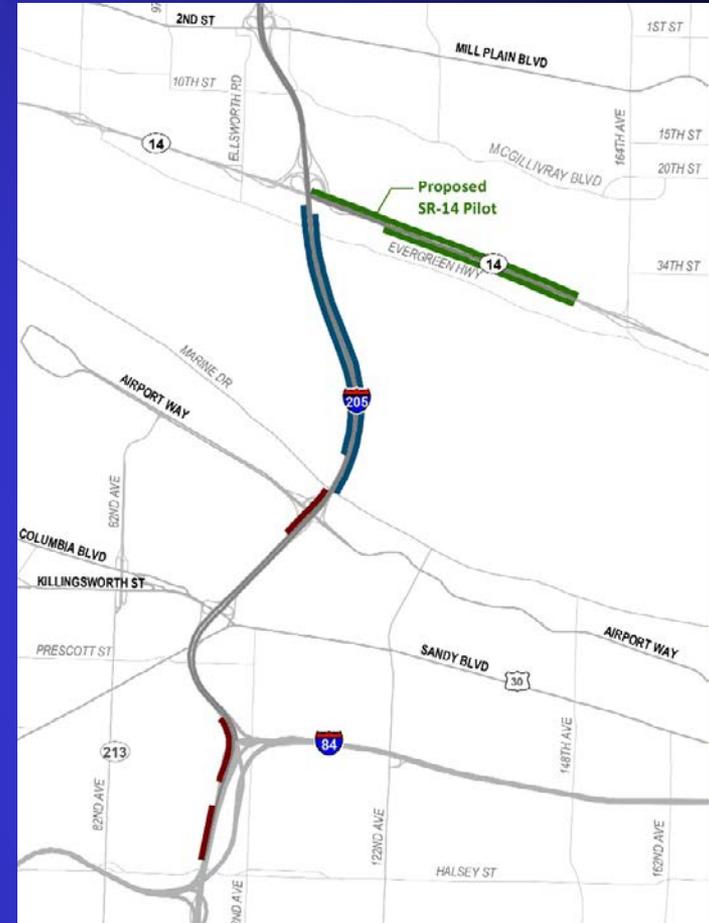
- ◆ 164th Ave. to I-205

I-205 – Recommended

- ◆ SR-14 to Airport Way, NB & SB

I-205 – Segments for Further Study

- ◆ Airport Way Exit to EB Entrance, SB
- ◆ I-84 EB Exit to WB Entrance, SB
- ◆ I-84 WB Entrance to WB Exit, SB



SR-14 Pilot Project

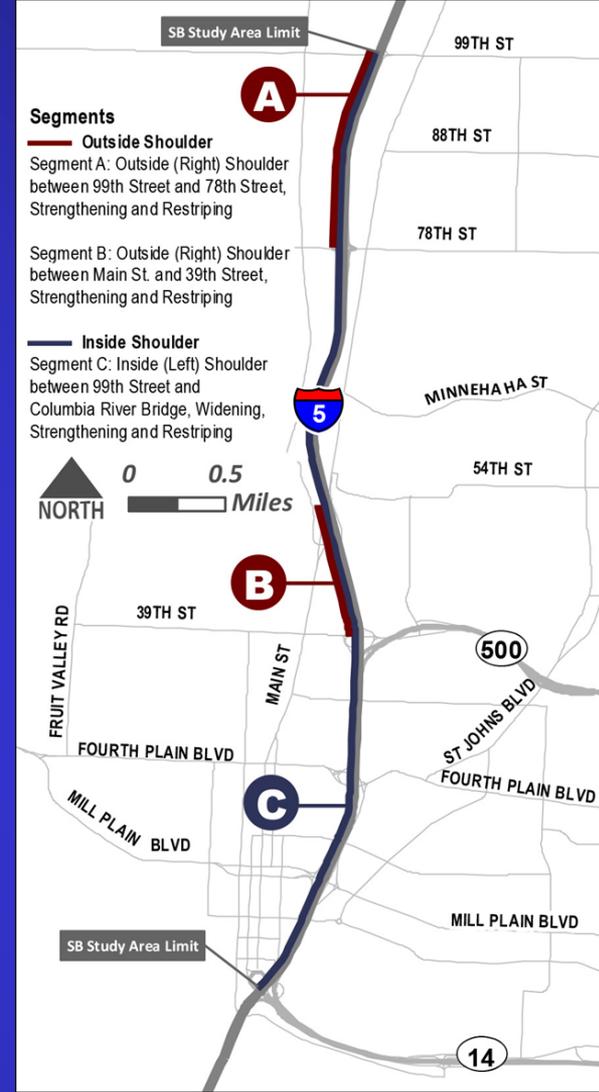


Additional Analysis

◆ Travel Time

- ◆ Transit travel time benefit on I-205 may be offset by I-84 congestion
- ◆ Buses frequently reroute to parallel facilities during morning commute
- ◆ Collect detailed bus travel times on east/west facilities from I-205 to downtown Portland

◆ I-5 Scan Assessment Findings



Policy Framework

Washington

- ◆ RCW 47.52.025 and RCW 46.61.165 provide legal framework for BOS operations

Oregon

- ◆ No specific authority in place allowing transit use of the shoulder. ODOT/OTC would need to determine if transit shoulder use could occur under OTC authority
- ◆ If ODOT needed specific authority, administrative (OAR) or legislative (ORS) changes would be required

Programmed SR-14 Improvement

Design phase should consider:

- ◆ WB transit on-ramp at 164th
- ◆ Future/ongoing transit use of the freeway shoulder
- ◆ Transition of BOS from SR-14 to SB loop ramp to I-205
- ◆ Widening loop ramp to accommodate BOS for continuous BOS from 164th to Airport Way

Next Steps

- ◆ C-TRAN and WSDOT collaborating on SR-14 pilot project for implementation in September
- ◆ Study recommendation updates to C-TRAN Board and JPACT
- ◆ Incorporate Study recommendations into 2018 RTP update

Questions?