

Express Bus: HOV Access Ramps on SR 167 at Smith Street (Kent)

Project Number	S9
Subarea	South King
Primary Mode Impacted	ST Express
Facility Type	ST Express Service
Version Number	3.0
Date Last Modified	5/18/2006

Project Locator Map



Short Project Description

HOV access ramps from SR 167 to Smith Street in Kent to improve speed and reliability of express bus service to the Kent Station.

Project Purpose:

To provide an alternative routing for buses traveling between SR 167 and Kent Station; in order to improve their speed and reliability.

Cost and Schedule

Cost (In Millions of 2005\$)

Schedule

	Low	High
Agency Admin	\$10.6	\$12.2
Environmental Clearance and PE	\$14.0	\$16.1
Final Design, Specs, Permitting	\$14.0	\$16.1
ROW Acquisition	\$14.9	\$17.2
Construction	\$117.5	\$135.2
Vehicles	\$0.0	\$0.0
Contingency	\$16.0	\$18.5
Total	\$187.1	\$215.1

Proposed Schedule Not Yet Developed

Design Basis

Conceptual

Environmental Documentation Required

- Environmental Impact Statement Required
- Environmental Assessment Required
- Environmental Checklist Required

Relationships to Other Projects

Relationship	Project
Impacts	Other potential ST2 projects (Sounder Shadow service and Route 565 extension) could utilize the project if implemented (see projects S10, S11, and S14)

Project Partners

Agency

WSDOT	
City of Kent	
King County Metro	

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Long Description:

The project scope and accompanying capital cost estimate are intended to include the entire project development cycle (administration, environmental clearance, design, all aspects of property acquisition, construction, testing, commissioning, and contingencies) from project initiation through start-up of operations.

Description

Sound Transit currently operates ST Express routes 564, 565, and 585 through the City of Kent via SR 516, 4th Avenue and Central Avenue. As part of ST2, a new route operating between Pierce County and Seattle, would provide access to Kent Station. With construction of potential HOV access ramps, these routes would no longer travel on SR 516 or Central Avenue. There will also be possible use of new ramps by toll traffic (from WSDOT's funded pilot project that converts SR 167 HOV lanes to High Occupancy Toll (HOT) lanes. This project will provide speed and reliability improvement for ST Express KC Metro routes operating between SR 167 and Kent Station. ST Express buses would use James Street and Smith Street to travel between the proposed SR 167 HOV direct access ramps and Kent Sounder Station. Due to their proximity to the other structures, construction of the HOV access ramps will require re-construction of SR 167 bridges at Meeker and James Streets, and re-configuration of the SR 167 ramps at SR 516.

Project Elements Included:

HOV direct access ramps from SR 167 to Smith St. Construction of the ramps includes the following:

- Demolition and reconstruction of SR 167 bridges at Meeker and James Streets
- Demolition and reconstruction of SR 167 bridges over UPRR tracks
- Construction of new HOV direct access ramps with a structure to one side of freeway only (project unit costs for HOV ramps are based on estimates for I-405 projects)
- Reconstruction of 9 lane-miles (6 lane times 1.5 mile project length) of existing SR 167 mainline, including drainage, pavement, striping, signing, ITS, illumination, and TESC.
- HOV ramp 9 mile lane-miles (6 lane times 1.5 mile project length) of existing SR 167 mainline, including drainage, pavement, striping, signing, ITS, illumination, and TESC.
- Ramp modifications to four ramps including drainage, pavement, striping, signing, ITS, illumination, and TESC.

Utilities:

Relocation of utilities as needed to complete the project

Right-of-Way and Property Acquisition:

Property acquisition as needed for roadway and intersection widening

Easements as needed for UPRR track and bridge work

Mitigation:

The final project scope will include all mitigation(s) committed to by ST in pertinent, future project-level environmental documents

Exclusions:

Modifications to Kent Sounder Station and Kent Transit Center

Modifications to UPRR tracks

Expenses for any annual or periodic operating and maintenance of the new facilities; others (e.g. city, county, etc.) will incur these costs.

Permits Required:

Construction permit with UPRR for reconstruction of SR 167 bridge over the tracks

Electrical, utility and construction-related permits from City of Kent

Agreements Required:

Access Decision Report from FHWA

ST has developed scope definitions for ST2 project proposals for the purposes of developing cost estimates, implementation schedules, a financial plan, and the estimation of project benefits. This scope definition should not be construed as a commitment that all defined features will be included in the final developed project.

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Evaluation Measures

<i>Measure</i>	<i>Measurement/Rating</i>	<i>Notes</i>
Average Weekday Ridership	N/A	
Capital Cost	\$187.1 - \$215.1	in Millions of 2005\$
Annual Operating Cost	\$0.0	in Millions of 2005\$
Travel Time & Reliability	Low	
Connectivity & Integration	Medium	# transit routes: 3 ST (including Sounder), 14 Metro
Land Use & Development	High	
Customer Experience	Medium	
Risk Avoidance	Low	

Key Issues and Benefits

Issues:

- Only two current ST Express routes would utilize project (564 and 565). Undetermined whether any Metro routes would utilize ramp.
- For northbound ST Express Routes 564 and 565 buses to use the DA ramp, they would have to double back to the SR 167 vs. the route currently used (i.e., continuing north to SR 167 via Central Avenue.)
- Coordination with WSDOT and City of Kent on use of ramps by High Occupancy Toll (HOT) lane traffic would be necessary. Additional traffic from HOT lanes could impact bus operations.

Benefits:

- Ramp and TSP improvements provides buses ability to avoid traffic congestion at SR 167/SR 516 and along Willis St, Central Avenue and 4th Avenue, thus improving speed and reliability of service.
- WSDOT SR 167 HOT Lanes project traffic could utilize ramp.