

Express Bus: BAT Lanes on SR 99 (N. King County)

Project Number	N12
Subarea	North King
Primary Mode Impacted	ST Express
Facility Type	BRT Facility
Version Number	3.0
Date Last Modified	5/17/2006

Project Locator Map



Short Project Description

Construct approximately 5.5 lane miles of curbside BAT lanes between N 205th Street and N 165th Street in both directions and between N 145th Street and N 115th Street southbound, including transit ITS communications infrastructure.

Project Purpose: to improve the speed and reliability of existing and planned services.

Cost and Schedule

Cost (in Millions of 2005\$)

Schedule

	Low	High
Agency Admin	\$4.9	\$5.7
Environmental Clearance and PE	\$6.2	\$7.1
Final Design, Specs, Permitting	\$6.2	\$7.1
ROW Acquisition	\$10.3	\$11.9
Construction	\$52.1	\$59.9
Vehicles	\$0.0	\$0.0
Contingency	\$7.5	\$8.6
Total	\$87.3	\$100.4

Proposed Schedule Not Yet Developed

Committed Funding	\$36.2	\$36.2
Remaining Need	\$51.1	\$64.2

Design Basis

Conceptual

Environmental Documentation Required

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

Relationships to Other Projects

Relationship	Project
Complements	N11 a, b, c, and d

Project Partners and Committed Funding

City of Seattle	\$5.6	\$M
City of Shoreline		
WSDOT	\$16.1	\$M
TIB	\$4.9	\$M
FHWA / FTA	\$9.1	\$M
King County	\$0.5	\$M

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Long Description

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

Description:

This project will construct 1 ½ miles of Business Access & Transit (BAT) lane in the southbound direction on SR 99 in Seattle between N 145th Street and N 115th Street and two miles of BAT lanes in both directions between N 205th and N 165th Street in Shoreline. This is a smaller section of a large gap in existing southbound BAT lane between Snohomish County and N 50th Street in Seattle. These lanes will also continue the BAT lanes that are under construction between N 165th Street and N 145th Street and continue them to the county line. They will not connect to the BAT lanes just north of SR 104 in Edmonds. The SR 104 overpass is not included.

The proposal for the Seattle section is to improve the shoulder lane in the southbound direction to a fourteen-foot wide BAT lane with contiguous concrete curb, gutter, planting strip and sidewalk, with concrete pads at bus stations. The City of Shoreline adopted the Aurora Corridor plan for major improvements along SR 99. The design calls for the construction of thirteen-foot BAT lanes in both directions, contiguous concrete curb, gutter, sidewalks, landscaping and major pedestrian amenities. Utilities will be undergrounded and pedestrian lighting and bus zone enhancements will be provided along the Shoreline section. New storm water treatment will meet or exceed City, County and State requirements.

In Seattle, the existing right-of-way (ROW) varies from 45 to 50 feet wide on the west side of the centerline for most of the distance. The proposal requires 44 feet of roadway width if centered on the centerline, assuming there are no existing curbs, gutters and sidewalk. With curb, gutter and sidewalk, 52 feet is required, based upon Seattle's typical street section for arterials. Seattle requires a minimum of a five-foot, six-inch planting strip, a six-foot sidewalk and two-foot setback from the back edge of the sidewalk to the right-of-way.

In Shoreline, the overall existing right-of-way (ROW) ranges from 90 to 110 feet. The proposed cross section generally fits within these dimensions. The eleven/twelve-foot wide two-way left turn lane will be replaced with a fifteen-foot wide raised median, which will include left turn/U turn pockets at key locations. The two general purpose lanes will remain in both directions. A four-foot "amenity/utility" zone separates the BAT lane from the seven-foot sidewalk.

Project Elements Included:

- Fourteen-foot asphalt Business Southbound Access/Transit (BAT) lane in Seattle
- Thirteen-foot BAT lanes in both directions in Shoreline
- Underground utilities where required by local ordinances
- Curb, gutter and sidewalks:
 - Seattle Street Standards: five-feet, 6-inches planting strip, minimum / five-foot sidewalk, minimum / two-foot setback between the edge of the sidewalk to right-of-way
 - Shoreline Aurora Corridor Plan: thirteen-foot bus lane / four-foot planting strip / seven-foot sidewalks, narrower sidewalks at specific locations to avoid impacts to buildings / four-foot amenity zone for bus stops, street and pedestrian lights, landscaping and pedestrian amenities such as benches and trash cans / contiguous street and pedestrian-level lighting at intersections / bus zone enhancements
- Landscaping
- ADA compliant bus shelters/stops
- "C"-curbing, raised planted medians, and/or left-turn pockets where required in the median
- 350-foot average spacing for left/U-turns within raised medians
- New traffic signals/pedestrian crossings at N 182nd and N 195th Streets
- Concrete bus pads at stops
- 1 percent for art per ST policy

Utilities:

- Underground utilities where required by local ordinances
- Power/communications conduit for Transit Signal Priority (TSP)
- Relocate utilities where needed
- Storm water facilities and water quality treatment that meets or exceeds city, county and state requirements

Right-of-Way and Property Acquisition:

- ROW acquisition where necessary to widen roadway

Mitigation:

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

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Exclusions:

- Non-structural architectural and aesthetic elements in excess of the ST art program
- No major changes to the two-way left turn lane in Seattle
- Displaced on-street parking will not be replaced
- No noise walls
- No separate accommodations for bicycles
- BRT stations or shelters
- Intelligent transportation systems
- Signal synchronization
- Operations and maintenance of facility

Permits Required:

- utility, construction-related

Agreements Required:

- City of Seattle, City of Shoreline, WSDOT

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.

Evaluation Measures

Measure	Measurement/ Rating	Notes
Average Weekday Ridership	N/A	
Capital Cost	\$87.3 - \$100.4	in Millions of 2005\$
Annual Operating Cost	\$0.0	in Millions of 2005\$
Travel Time & Reliability	Medium	
Connectivity & Integration	Medium	# transit routes: 3 KCM
Land Use & Development	High	
Customer Experience	Medium	
Risk Avoidance	Medium	

Key Issues and Benefits

Issues

- WSDOT and/or the City of Shoreline may require more significant access management improvements along SR-99 that are not part of this project's scope.
- This project would be designed to standards already agreed to by WSDOT and the City of Shoreline for a similar project under construction between N 145th and N 165th Streets and the City of Seattle's pending project between N 145th and N 137th Streets.
- Access to adjacent businesses and residences will be restricted during construction.
- Displaced on-street parking.
- Sound Transit would not operate BRT service in this corridor.
- The BRT service component that would benefit from these BAT lanes is not in place, and is dependent on agreement and funding from King County Metro.
- Timing and coordination with Shoreline and Seattle investment is not certain.
- Wider sidewalks may be required by Seattle in the vicinity of immediate capacity transit stations.

Benefits

- Leverages funding already committed by other parties.
- Provides a major capital component of the arterial BRT system envisioned for this corridor.
- Significant rider travel time and local transit agency operating cost savings.
- Fills a significant gap in the overall SR-99 BAT lane system; with project N 11, would complete an almost continuous BAT lane system from downtown Everett to north Seattle.
- Improves bus service reliability.