

# Enhanced Transit: Streetcar Extension John Street to Aloha Street (Seattle)

Project Number	N7c
Subarea	North King
Primary Mode Impacted	Link
Facility Type	Link Service
Version Number	2.0
Date Last Modified	5/23/2006

Project Locator Map



## Short Project Description

Enhance transit service connections between First Hill, the Central Link light rail line, and downtown Seattle transit hubs with extension of streetcar from John Street to Aloha street along the Jackson Street / Broadway Avenue corridor.

**Project Purpose:** increase regional transit accessibility to First Hill.

## Cost and Schedule

Cost (in Millions of 2005\$)

Schedule

Streetcar	Low	High
Agency Admin	\$1.2	\$1.4
Environmental Clearance and PE	\$0.5	\$0.6
Final Design, Specs, Permitting	\$1.3	\$1.5
ROW Acquisition	\$0.4	\$0.4
Construction	\$13.0	\$15.0
Vehicles	\$5.5	\$6.4
Contingency	\$1.5	\$1.7
<b>Total</b>	<b>\$23.5</b>	<b>\$27.1</b>

Proposed Schedule Not Yet Developed

Annual O&M	\$1.5
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Design Basis	Conceptual
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## Environmental Documentation Required

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

## Relationships to Other Projects

Relationship	Project
Dependent on	N7a Enhanced Transit: Streetcar or Bus Connection between Downtown Seattle and Capitol Hill Station via First Hill (John Street) (Seattle)

## Project Partners

City of Seattle DOT
King County Metro

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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.*

This project would enhance transit service connections between First Hill, the Central Link light rail line, and downtown Seattle transit hubs with extension of streetcar from John Street to Aloha street along the Jackson Street / Broadway Avenue corridor.

### Project Elements Included:

- At-grade in-street streetcar operating in mixed traffic
- Approximately 0.6 miles in length
- Double-track entire alignment of extension except turnback between Roy and Aloha Streets
- 3 streetcar stops (2 constructed as a curb bulb-out, 1 fit into existing sidewalk. Amenities include shelters, signage, lighting, seating, and real time passenger information)
- Removal and replacement of the top 12 to 18 inches of pavement in streetcar lanes only
- Transit signal priority at up to 5 intersections
- 1 percent for art per ST policy
- 10 minute peak headways, 15 minute off-peak and weekends, 20 hours per day, 7 days per week
- Skoda-type low-floor vehicles and associated traction power supply facilities including 1 substation and OCS
- One-car trains
- 1 vehicle
- Pantograph overhead power supply

### Utilities:

- Relocation of overhead trolleybus wires where necessary
- Protection and bridging for major utility crossings where necessary
- Installation of new poles for pantograph overhead power supply

### Right of-Way and Property Acquisition:

- Miscellaneous easements

### Mitigation:

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

### Exclusions:

- Non-structural architectural and aesthetic elements in excess of the ST art program
- Replacement of displaced on-street parking
- Grade-separated pedestrian crossings
- Utility undergrounding
- Community development fund
- Street, sidewalk and utility upgrades or betterments not directly needed to support bus or streetcar facilities and operations
- Demolition of closed bus zones
- Other stop (station) and trackway components and amenities not specifically included
- Fare vending equipment
- Central radio communications
- Third party funding agreements

### Permits Required:

- Building, electrical, mechanical, utility, construction-related
- Master use
- Street use

### Agreements Required:

- City of Seattle
- King County Metro

*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	500	Incremental increase over estimate of 3,000 for IDS-John Street
Capital Cost	\$23.5 - \$27.1	in Millions of 2005\$
Annual Operating Cost	\$1.5	in Millions of 2005\$
Travel Time & Reliability	Medium	
Connectivity & Integration	Medium	
Land Use & Development	High	
Customer Experience	Medium	
Risk Avoidance	Medium	

## Key Issues and Benefits

### Issues

- The methodology and assumptions for the conceptual design and cost estimate are based on the example set by Seattle DOT's South Lake Union (SLU) Streetcar Project. The capital cost estimate developed for the First Hill streetcar is based on the assumption that a similar level of stakeholder coordination and cooperation during design and construction as seen for the SLU Streetcar Project will be achieved.
- Cost estimates are valid for simultaneous construction of this extension with Project N7a (First Hill Streetcar to John Street); additional costs would be encountered if extension were implemented at a later date.

### Benefits

- Improves speed, reliability and capacity of transit connections between the First Hill neighborhood and Capitol Hill.
- Enhances service between North Capitol Hill and University Link station at John Street.