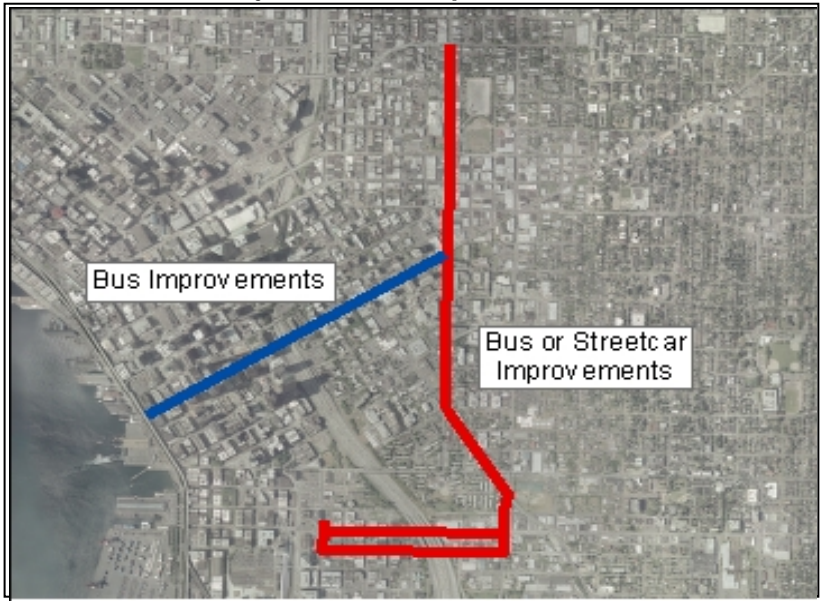


# Enhanced Transit: Connection between Downtown Seattle and Capitol Hill Station via First Hill (Seattle)

Project Number	N7
Subarea	North King
Primary Mode Impacted	Link
Facility Type	Link Service
Version Number	1.0
Date Last Modified	12/8/2005

**Project Locator Map**



### Short Project Description

Enhance transit service connections between First Hill, the Central Link light rail line, and downtown Seattle transit hubs.

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

### Cost and Schedule

Cost (in Millions of 2005\$)

Schedule

	Low	High
Agency Admin		
Environmental Clearance and PE		
Final Design, Specs, Permitting		
ROW Acquisition		
Construction		
Vehicles		
Contingency		
<b>Total</b>	<b>\$103.9</b>	<b>\$122.2</b>

Proposed Schedule Not Yet Developed

Annual O&M	\$3.8
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**Design Basis**      Conceptual

### Environmental Documentation Required

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

### Relationships to Other Projects

Relationship	Project
Dependent on	Elimination of First Hill LRT station from the University Link extension

### 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 the speed, reliability and capacity of transit service between First Hill, the Central Link light rail line, and downtown Seattle transit hubs. Subject to Sound Transit Board approval, specific investments may be selected from the following alternatives, which were identified through a joint Sound Transit/City of Seattle/King County Metro staff screening process, after further evaluation:

1. Physical street improvements to improve bus transit operations between the International District and Capitol Hill Stations along the S Jackson Street, 12th Avenue, Boren Avenue and Broadway corridor and between First Hill and downtown Seattle along the Madison Street corridor; and/or
2. A streetcar connection between International District Station and Capitol Hill station via S Jackson Street, 12th Avenue, Boren Avenue and Broadway; and/or
3. Restructuring and improving existing bus transit routes serving the First Hill area.

Since the specific nature and mix of transit enhancements have not yet been defined, the potentially most complex and expensive single alternative is assumed to define the maximum potential level of capital and operating investment in ST2. This scope will provide flexibility to consider any combination of these alternatives up to that level of investment. Alternative 2, the IDS to Capitol Hill streetcar, is likely the most complex and expensive alternative, assuming another option with rail in predominantly exclusive ROW is not developed. The project description and evaluation that follows is based on that alternative.

### Project Elements Included:

- At-grade in-street streetcar generally operating in curbside street lanes in mixed traffic
- Approximately 2 miles (approximately 10,000 feet)
- Double-track entire alignment or one-way couplets for a portion
- Up to 10 street car stops (Each stop is typically constructed as a curb bulb-out including shelters, signage, lighting, seating, TVM and customer information)
- Light maintenance base or provision for maintenance capacity at the new Waterfront Streetcar Maintenance Base in Pioneer Square
- A separate vehicle storage facility
- Removal and replacement of the top 12 to 18 inches of pavement in 12-foot streetcar lanes only
- Streetcar signal priority at up to 20 intersections
- 1% for art
- 10 minute peak headways, 10-15 minute off-peak and weekends, 20 hours per day, 7 days per week
- Skoda-type vehicles and associated traction power supply facilities including substations and OCS
- One-car trains
- 6 vehicles (including 2 spares)

### Utilities:

- Relocation of utility crossings in streetcar lanes, including water mains within five feet of track slab and casings of waterman and service crossings (as per South Lake Union Streetcar)
- Relocation of overhead trolleybus wires where necessary

### Right-of-Way and Property Acquisition:

- ROW for maintenance base and vehicle storage facilities only

### 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
- Transit signal priority for buses along the corridor
- Replacement of displaced on-street parking
- Grade-separated pedestrian crossings
- Other stop (station) and trackway components and amenities not specifically included
- Utility undergrounding
- Community development fund

# Enhanced Transit: Connection between Downtown Seattle and Capitol Hill Station via First Hill (Seattle)

## Permits Required:

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

## Agreements Required:

- City of Seattle
- WSDOT agreement for undercrossing of I-5
- 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.*

## Evaluation Measures

<b>Measure</b>	<b>Measurement/ Rating</b>	<b>Notes</b>
Average Weekday Ridership	3,000	
Capital Cost	\$103.9 - \$122.2	in Millions of 2005\$
Annual Operating Cost	\$3.8	in Millions of 2005\$
Travel Time & Reliability		
Connectivity & Integration	Medium	
Land Use & Development		
Customer Experience		
Consistency with Plans		
Public Support		
Risk Avoidance	Medium	

## Key Issues and Benefits

### Issues

- It is Sound Transit's policy that light rail lines are "provided primarily in separated rights-of-way with traffic signal preemption ..." (ST Long Range Plan, 07/2005). The streetcar option considered in this project would operate in mixed traffic with only signal priority.
- An exception to this policy to serve First Hill could re-open debate about whether or not Sound Transit should build and operate streetcars, and could call into question the scope of other light rail lines being considered for ST2
- A possible justification for an exception could be that the 1996 Sound Move plan intended for First Hill to be connected to the light rail system with a station, but the station was deleted due to high technical risk.

### Benefits

- Improves speed, reliability and capacity of transit connections between the First Hill neighborhood and downtown Seattle, in lieu of a station on the regional light rail line.