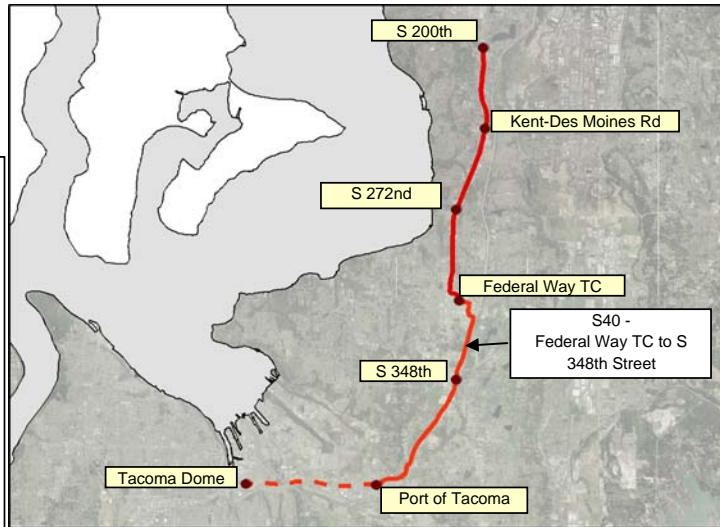


# Link LRT: Extension from Federal Way Transit Center to S 348th Street via I-5

Project Number	S40
Subarea	South King
Primary Mode Impacted	Link
Facility Type	Link Service
Version Number	3.0
Date Last Modified	12/14/2006

**Project Locator Map**



### Short Project Description

Extension of the Link light rail system for approximately 2.1 miles from Federal Way Transit Center to S 348th Street, including a new station. The project will include all necessary components such as infrastructure, systems, and stations.

For prototypical costing purposes, the alignment is assumed to be a mix of aerial, at-grade and retained cut and fill primarily along the western edge of I-5. The S 348th Street Station will include a new 500 stall regional park-and-ride. The final alignment and station locations will be determined through project level design and environmental review. Prototypical cost estimates for the alignment are presented here. This project is a 2.1 mile (approx) component of the total proposed 17.5 mile LRT line extension from S. 200th to Tacoma Dome Station.

**Project Purpose:** To extend reliable high capacity transit service farther south from Federal Way Transit Center to South Federal Way.

### Cost and Schedule

**Cost (In Millions of 2006\$); conceptual estimate only**

	Low	High
Agency Admin	\$16.0	\$18.4
Environmental Clearance and PE	\$10.0	\$11.5
Final Design, Specs, and	\$25.1	\$28.8
ROW Acquisition	\$14.0	\$16.1
Construction	\$217.7	\$250.3
Vehicles	n/a	n/a
Contingency	\$20.1	\$23.1
<b>Total</b>	<b>\$302.8</b>	<b>\$348.2</b>

### Schedule

**Proposed  
Schedule Not Yet Developed**

### Design Basis

Conceptual

\* In Millions of 2005 dollars

### Environmental Documentation Required

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

### Relationships to Other Projects

Relationship	Project
Dependent on	Link LRT Extension from S 200th to Kent-Des Moines and all associated projects that this project is dependent on or impacted by.
Dependent on	Link LRT: Extension from Kent-Des Moines Road to S. 272nd St and all associated projects that this project is dependent on or impacted by.
Dependent on	Link LRT: Extension from S. 272nd St to Federal Way Transit Center and all associated projects that this project is dependent on or impacted by.
Dependent on	Construction of the Maintenance Facility and Vehicle Purchase (separate project)

## Link LRT: Extension from Federal Way Transit Center to S 348th Street via I-5

### Project Partners

#### Agency

WSDOT	
KC Metro	
Pierce Transit	
Bonneville Power Administration	
City of Federal Way	

### Long Description:

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

At this stage of project development, a representative alignment was used to develop a cost estimate. The final alignment and station locations would be determined through project level design and environmental review. The base cost estimate includes design allowance contingency, construction change order contingency, and unallocated contingency.

### Project Description:

Construct an extension of Link light rail transit from Federal Way (vicinity of the existing Federal Way Transit Center) to South Federal Way. For prototypical cost estimation purposes, the line is assumed to be a mix of aerial, at-grade and retained cut and fill primarily along the western edge of I-5, and would include a new station in the vicinity of I-5 and S 348th Street.

### Assumptions:

- 10-minute headways in peaks; 15 minutes in base period
- 4-car trains in peak; 3-car trains in base

### Project Elements Included:

- Link LRT service extended approximately 2.1 miles to South Federal Way from Federal Way Transit Center Station (extensions of Link light rail from S. 200th Station to Federal Way Transit Center have been defined and costed separately).
- Alignment is assumed to be a mix of at-grade, retained cut and fill, and aerial.
- After leaving the Federal Way Transit Center Station, the representative alignment would continue in a southerly manner along the west side of I-5.
- The alignment would continue along the west side of I-5 to the vicinity of S 348th Street.
- To address the existing transmission lines south of the Federal Way Transit Center Station, an allowance has been identified. This allowance relates to necessary modifications to the transmission lines to allow the aerial transitway.
- A new station in South Federal Way would be provided in the vicinity of I-5 and S 348th Street. This station would serve the immediate, primarily commercial area.
- New 500-stall parking garage adjacent to the Link station; compensation for loss of parking during construction.
- New pedestrian bridge connecting the South Federal Way Station with the parking structure
- Passenger drop-off facilities at station (20 bays)
- Local bus transfer facilities at station (4 bays)
- 1 percent for art per ST policy

Other design features assumed in the cost estimate include:

- One track crossover - north of the South Federal Way Station

### Utilities

- Utility investigations have not been carried out. Relocation of standard utilities along the alignment has been assumed as part of the scope and has been estimated using an average per route-foot allowance.

### Right-of-Way

Property interests required for the prototypical alignment include fee acquisitions, partial takes, easements and interagency agreements. Right-of-way requirements include construction staging and contractor laydown areas. No specific provisions are made for contractor parking. Cost estimates include associated relocation, administration and legal costs, and contingency.

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### Mitigation

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

### Exclusions

- Major roadway reconstruction to accommodate support columns for the aerial track (only minor pavement reconstruction has been costed - up to 6 feet wide including striping and sidewalk replacement on one side of the street)
- Non-structural architectural and aesthetic elements in excess of the ST art program
- LRT vehicles, maintenance base, and operations have been costed separately (refer to Project SYS-LRT description for systemwide elements)
- Public restrooms
- Track improvements
- Undergrounding of overhead utilities
- Community development funding
- Non-structural architectural and aesthetic elements in excess of the ST art program
- Central command and control for operations

### Permits Required

- Building, electrical, mechanical, utility, construction-related

### Agreements Required

City of Federal Way

- Station Permits
- Transitway agreement to operate within city streets

*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	See light rail system ridership forecasts
Capital Cost	\$302.8 - \$348.2	in Millions of 2006\$
Annual Operating Cost	n/a	See project description for systemwide elements
Travel Time & Reliability	High	
Connectivity & Integration	High	# transit routes: 5 Metro
Land Use & Development	High	
Customer Experience	High	
Risk Avoidance	Low	

### Key Issues and Benefits

#### Issues:

- The design of the guideway in the vicinity of the existing Federal Way Transit Center will require close coordination with the City of Federal Way and WSDOT.
- ROW along the alignment.

#### Benefits:

- Extends light rail service farther south; consistent with Sound Transit's Long-Range Plan.
- Serves the central area of Federal Way.
- New light rail station in South Federal Way (S. 348th St).
- Increases job accessibility.