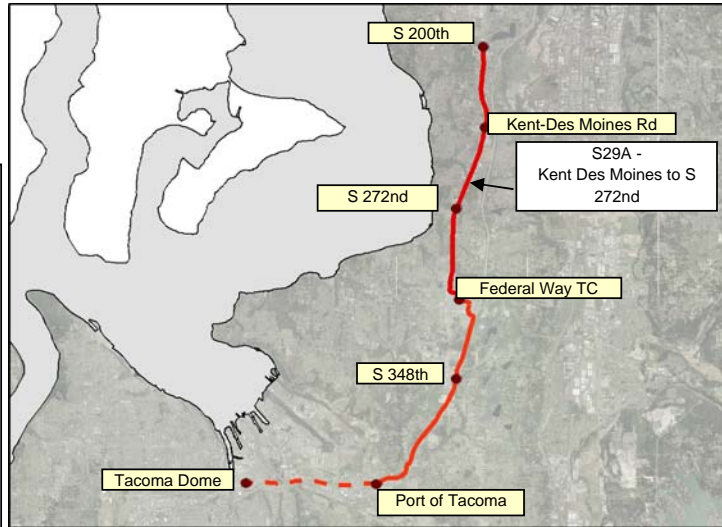


## Link LRT: Extension from Kent-Des Moines Road to S 272nd Street via SR 99

Project Number	S29A
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

Continue extension of the Central Link light rail system for 2.5 miles (approx) from Kent-Des Moines Station (S. 240th St) to S. 272nd Street (at existing Redondo Heights Park-and-Ride lot), including a new station at S. 272nd Street. The project will include all necessary components such as infrastructure, systems, and stations. For prototypical costing purposes, the alignment is assumed to be aerial along SR 99. The S. 272nd St Station will include a new 500 stall garage (within Redondo Heights 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.

**Project Purpose:** To extend reliable high capacity transit service farther south from S 240th St to S 272nd Street.

### Cost and Schedule

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

	Low	High
Agency Admin	\$18.9	\$21.7
Environmental Clearance and PE	\$10.7	\$12.3
Final Design, Specs, and	\$26.7	\$30.7
ROW Acquisition	\$45.4	\$52.2
Construction	\$231.6	\$266.3
Vehicles	\$0.0	\$0.0
Contingency	\$21.4	\$24.6
<b>Total</b>	<b>\$354.6</b>	<b>\$407.7</b>

### Schedule

**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
Dependent on	Project S28: Link LRT: Extension from South 200th to Kent-Des Moines Road via SR 99 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 Kent-Des Moines Road to S 272nd Street via SR 99

### Project Partners

#### Agency

KC Metro	
WSDOT	
City of Kent	
City of Des Moines	
Highline Community College	
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 the Kent-Des Moines area/Highline Community College (see Project S28) to S. 272nd Street (vicinity of existing Redondo Heights Park-and-Ride). For cost estimation purposes, the line is assumed to be elevated, primarily following an SR 99 alignment, and would include one new light rail station in Federal Way at S. 272nd Street and SR 99.

#### Assumptions

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

#### Representative Alignment - Project Elements Included:

- Link LRT service extended approximately 2.5 miles south from Kent-Des Moines Station to S. 272nd Street at the existing Redondo Heights Park-and-Ride lot (an extension of Link light rail from S. 200th Station to Kent-Des Moines Station has been defined and costed separately; Project S28).
  - Alignment is assumed to be aerial.
  - After leaving Kent-Des Moines Station, the representative alignment would continue along the west side of SR 99/Pacific Highway with an aerial profile.
  - Column placement in the west side of the SR 99 100-foot right-of-way is assumed to require realigning the sidewalks to the west of the column. Modification to driveway access will also be required
  - A station would be provided on Pacific Highway south of S 272nd Street to serve the existing Redondo Heights Park-and-Ride facility. The aerial station is assumed to be center platform with ground level plaza.
  - New 500-space parking structure for use by light rail patrons using the S. 272nd Street Station. It is proposed that the new parking structure will be constructed within the existing Redondo Heights Park-and-Ride right-of-way. (The existing surface park-and-ride lot has 714 stalls)
  - New pedestrian bridge across SR 99, connecting the S. 272nd Street Station with the parking structure
  - 1 percent for art per ST policy
  - Passenger Drop Off facilities at station (20 bays)
- Other design features assumed in the cost estimate include:
- One track crossover in the vicinity of the S. 272nd 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.

#### Mitigation

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

## Link LRT: Extension from Kent-Des Moines Road to S 272nd Street via SR 99

### 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)
- LRT vehicles, maintenance base, and operations have been costed separately (refer to Project SYS-LRT description for systemwide elements)
- Non-structural architectural and aesthetic elements in excess of the ST art program
- Public restrooms
- Track improvements
- Undergrounding of overhead utilities
- Community development funding
- Central command and control for operations

### Permits Required

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

### Agreements Required

City of Kent agreements:

- Transitway agreement to operate within city streets

City of Federal Way

- Station Permits

- Transitway agreement to operate within city streets

King County Metro

Parking Structure within the existing Redondo Heights Park-and-Ride right-of-way

*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	\$354.6 - \$407.7	in Millions of 2006\$
Annual Operating Cost	n/a	See project description for systemwide elements
Travel Time & Reliability	High	
Connectivity & Integration	High	# of transit routes: 5 Metro
Land Use & Development	High	
Customer Experience	High	
Risk Avoidance	Low	

### Key Issues and Benefits

#### Issues:

- An aerial alignment along SR 99 was selected as the representative alignment for estimation purposes in order to account for the potentially greater impacts and costs of constructing a light rail system along a highly developed and urbanized traffic corridor.
- Due to column placement, aerial alignment along SR 99/Pacific Highway would impact property access and parking.
- Alternative alignment following I-5 would reduce impacts to SR 99 but would make serving communities along SR 99 more difficult.
- Some costs associated with rebuilding sidewalks and curbs to shift the street centerline to the east are included; costs associated with major street reconstruction are not included.
- ROW along the alignment

#### Benefits:

- Extends light rail service farther south; consistent with Sound Transit's Long Range Plan.
- Serves the north area of Federal Way.
- New light rail station at S. 272nd St
- Increases job accessibility