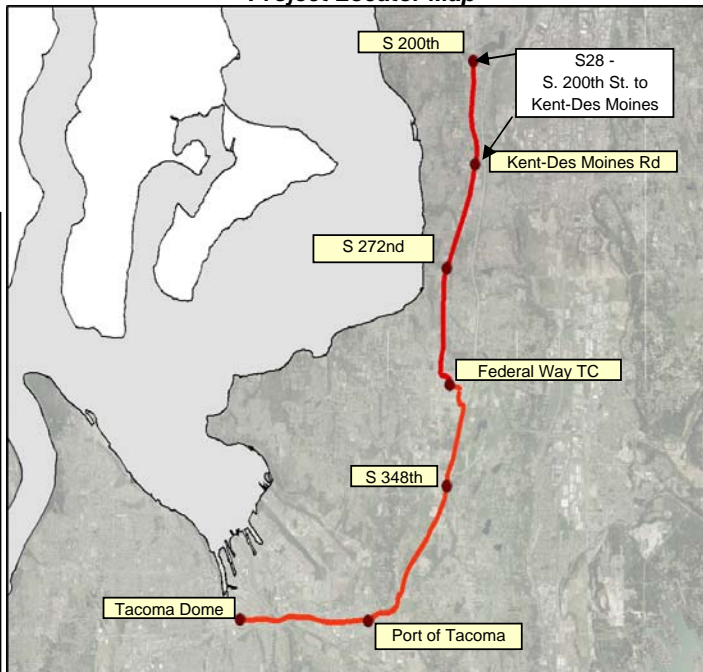


## Link LRT: Extension from South 200th to Kent-Des Moines Road via SR 99

|                              |              |
|------------------------------|--------------|
| <b>Project Number</b>        | S28          |
| <b>Subarea</b>               | South King   |
| <b>Primary Mode Impacted</b> | Link         |
| <b>Facility Type</b>         | Link Service |
| <b>Version Number</b>        | 4.0          |
| <b>Date Last Modified</b>    | 4/24/2008    |

**Project Locator Map**



### Short Project Description

Construct an approximately 2.3 mile extension of the Central Link light rail system from S. 200th Street to a new station near Kent-Des Moines Road (S. 240th St). The project will include all necessary components such as infrastructure, systems, and stations. For prototypical cost estimating purposes, the alignment is assumed to be aerial structure primarily along SR-99. The Kent-Des Moines Station will include a new 500 stall regional park-and-ride. The final alignment and station location 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 connection from Sea-Tac Airport farther into South King County.

### Cost

*In Millions of 2007\$*

|                                | Low            | High           |
|--------------------------------|----------------|----------------|
| Agency Admin                   | \$18.7         | \$21.5         |
| Environmental Clearance and PE | \$10.6         | \$12.2         |
| Final Design, Specs, and       | \$26.5         | \$30.5         |
| ROW Acquisition                | \$44.7         | \$51.4         |
| Construction                   | \$230.0        | \$264.5        |
| Vehicles                       | \$0.0          | \$0.0          |
| Contingency                    | \$21.2         | \$24.4         |
| <b>Total</b>                   | <b>\$351.7</b> | <b>\$404.4</b> |

### Design Basis

Conceptual

### Environmental Documentation Required

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

### Relationships to Other Projects

| <b>Relationship</b> | <b>Project</b>  |
|---------------------|---|
| Dependent on        | Project S27: Link LRT Extension from Sea-Tac Airport to S. 200th Station 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)  |
| Impacted by         | Alignment crosses route of planned extension of SR 509. Need to coordinate with WSDOT on use of right-of-way.   |

# Link LRT: Extension from South 200th to Kent-Des Moines Road via SR 99

## Project Partners

### Agency

|                             |  |
|-----------------------------|--|
| KC Metro                    |  |
| WSDOT UCO                   |  |
| WSDOT Public Transportation |  |
| City of SeaTac              |  |
| City of Kent                |  |
| City of Des Moines          |  |
| Highline Community College  |  |

## 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:

Extend Link LRT service south from S. 200th Station to Kent-Des Moines Road Station along SR-99 to a station located adjacent to Highline Community College (between SR 516 and S. 240th).

This project is related and similar to project S28-T1 (terminal station scenario at Kent-Des Moines Station).

## 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:

- Link LRT service extended approximately 2.3 miles south from S. 200th Station to south of Kent-Des Moines Road
- Alignment is assumed to be aerial
- After leaving S. 200th St Station, the alignment would continue along the west side of SR 99 with an aerial profile
- Column placement in the west side of the SR 99/ International Boulevard 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
- In the Kent-Des Moines area, a center platform aerial station with a ground level plaza (similar to Airport Station) would be located near the Highline Community College site
- Park-and-ride capacity of 500 spaces for use by light rail patrons
- Features at the park-and-ride garage to limit use of the facility to Link riders
- Passenger Drop Off facilities at station (20 bays)
- Local bus transfer facilities at station (four bays)
- Elevated pedestrian walkway between the parking garage and station
- 1 percent for art per ST policy
- Vehicular access improvements at the Kent-Des Moines Station including one new traffic signal and one upgrade of an existing traffic signal.
- Road widening and traffic signal modifications at four SR 99 intersections at S. 208th St., S. 216th St., S. 220th St., and Kent-Des Moines Road

Other design features assumed in the cost estimate include:

- One track crossover in the vicinity of the Kent-Des Moines 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.

## Link LRT: Extension from South 200th to Kent-Des Moines Road via SR 99

### 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)
- Additional maintenance facility capacity
- 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
- Underground of utilities
- Community development funding
- Central command and control for operations

### Permits Required

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

### Agreements Required

City of SeaTac

- Transitway agreement to operate within city streets

City of Kent agreements:

- Transitway agreement to operate within city streets

- Station Permits

City of Des Moines agreements:

- Transitway agreement to operate within city streets

Highline Community College

- Parking Structure within Highline Community College property

WSDOT:

- Transitway agreement to cross over the proposed SR 509 project

### Flexible Access to ST Facilities:

The goal of this project is to accommodate the future demand for ridership on transit services available at the station/center, by improving access/egress for this location. The scope of the transit parking components included in this project could be revised to include a range of strategies for providing rider access to the transit facility. Along with, or instead of parking for private vehicles or van pools, a mix of other investments could be accomplished through the budget for this project. These other strategies include:

- Pedestrian improvements within one-quarter mile of the Kent-Des Moines Road Station,
- Additional bus/transfer facilities at Kent-Des Moines Road Station,
- Bicycle improvements within one-half mile,
- Transit speed and reliability improvements on routes connecting to the facility,
- Expanded or new kiss-&-ride areas at Kent-Des Moines Road Station and/or
- Off-site parking along an existing bus route that connects frequently (20-minute or shorter headway) to Kent-Des Moines Road Station during the peak periods.

This flexible approach would permit ST staff to examine alternatives to expanded parking and could lead to even lower GHG emissions and less land consumed by parking. ST's highest priority for this project budget would remain meeting demand and riders' needs. The budget for flexible access will not exceed the Board-adopted budget for this project. Access and demand studies would be required prior to changing this project's scope. Determination of what level and mixture of investments would be most effective and affordable within the project's budget would be done through a planning effort that includes a more-detailed examination of demand and use, as well as coordination with affected jurisdictions and partner agencies, the community surrounding the station/center, and the users of the transit services available at the location. ST Board action is required to change a project's scope in this manner.

*ST has developed scope definitions for ST2 project proposals for the purposes of developing cost estimates, phasing of investments, 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.*

## Link LRT: Extension from South 200th to Kent-Des Moines Road via SR 99

### Evaluation Measures

| <i>Measure</i>             | <i>Measurement/<br/>Rating</i> | <i>Notes</i>  |
|----------------------------|--------------------------------|---|
| Average Weekday Ridership  | N/A                            | See light rail system ridership forecasts.                          |
| Capital Cost               | \$351.7 - \$404.4              | in Millions of 2007\$   |
| Annual Operating Cost      | N/A                            | See LRT maintenance base, vehicles and operations project (SYS-LRT) |
| Travel Time & Reliability  | High                           |   |
| Connectivity & Integration | High                           | # transit routes: 1 ST; 7 Metro                                     |
| Land Use & Development     | High                           |   |
| Customer Experience        | High                           |   |
| Risk Avoidance             | Medium                         |   |

### 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 corridor.
- Due to column placement, aerial alignment along SR 99/Pacific Highway would impact property access and parking
- Alternative alignment following SR 509 and I-5 would reduce impacts to SR 99, but make serving Highline Community College more difficult.
- Ability to limit use of the park-and-ride spaces to Sound Transit users is dependent on an unspecified enforcement program.
- ROW along the alignment

#### Benefits:

- Provides connection between Seattle and Kent-Des Moines area with light rail transit, consistent with Sound Transit's Long-Range Plan.
- New light rail station near Highline Community College increases transit accessibility to a large activity center and traffic generator.
- Increases job accessibility