

Link LRT: Extension of Tacoma Link to Tacoma General Hospital with Tacoma Link Technology

Project Number	S7B
Subarea	Pierce
Primary Mode Impacted	Link
Facility Type	Link Service
Version Number	3.0
Date Last Modified	4/24/2008

Project Locator Map



Short Project Description

Construct a 1.3 mile at-grade extension of the existing Tacoma Link system from the 9th Street/Theater District Station in Downtown Tacoma to Tacoma General Hospital. Operations will use similar vehicles as existing Tacoma Link service.

Project Purpose:
To extend Tacoma Link rail service to Division Street with a terminus at Tacoma General Hospital.

Cost and Schedule

Cost (In Millions of 2007\$)

Schedule

	Low	High
Agency Admin	\$7.3	\$8.4
Environmental Clearance and PE	\$3.9	\$4.4
Final Design, Specs, Permitting	\$9.7	\$11.1
ROW Acquisition	\$16.9	\$19.5
Construction	\$83.9	\$96.4
Vehicles	\$6.9	\$8.0
Contingency	\$7.7	\$8.9
Total	\$136.2	\$156.7

Proposed Schedule Not Yet Developed

Design Basis Conceptual

Annual O+M* \$6.4

* In Millions of 2006 dollars

Environmental Documentation Required

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

Relationships to Other Projects

<i>Relationship</i>	<i>Project</i>
Impacts	The Link extension could generate additional parking demand at the Tacoma Dome Station garage; the estimated demand at this garage includes ridership that would be generated by a West Tacoma Link extension.

Project Partners

<i>Agency</i>	
City of Tacoma	
Pierce Transit	

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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 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.

Description:

This project would construct a 1.3 mile at-grade extension of the existing Tacoma Link system from its northern terminus at Theater District/S 9th Street Station in Downtown Tacoma to Tacoma General Hospital. The project would include all necessary components such as infrastructure and systems, expanded operations and maintenance capacity, stations, and vehicles.

Project Elements Included:

- At grade in-street rail using vehicles currently operating on the existing Tacoma Link system
- 1.3-mile alignment at-grade profile, with center-running light rail in an exclusive right-of-way (except to allow crossing at intersections by general purpose traffic)
- Extension will be double-tracked
- Existing on-street parking would be eliminated to accommodate the light rail tracks as well as two general-purpose travel lanes
- Exclusive left turn lanes at some signalized intersections would be eliminated
- 2 new center-island platform stations, including shelters, signage, lighting, seating, ticket vending machines, CCTV's
- Modifications to existing maintenance and operations base capacity to accommodate 2 additional Tacoma Link vehicles
- Active signal control to minimize delay at signalized intersections
- All signalized intersections (5) along the alignment would require some reconstruction
- 1 percent for art per ST policy
- 6 minute peak headways; 12 minutes off-peak and weekends
- Single-car trains; 2 additional vehicles
- ROW at maintenance base and for construction staging
- Residential noise abatement program

Utilities

- Undergrounding of overhead utilities
- Electrical, water, sewer

Right-of-Way and Property Acquisition

- ROW at stations and maintenance base only

Mitigation

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

Exclusions

- Lengthening of existing Tacoma Link stations; single car operations can be accommodated at existing Link stations
- Public restrooms
- Non-structural architectural and aesthetic elements in excess of the ST art program
- Grade separated pedestrian crossings
- Community development funding
- Replacement of parking due to any removal of on-street parking
- Parking at stations (except existing parking at Tacoma Dome Station)

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Permits Required

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

Agreements Required:

- City of Tacoma, Pierce Transit

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	2,000	
Capital Cost	\$136.2 - \$156.7	in Millions of 2007\$
Annual Operating Cost	\$6.4	in Millions of 2007\$
Travel Time & Reliability	Medium	
Connectivity & Integration	High	# transit routes: 2 ST, 5 PT
Land Use & Development	High	
Customer Experience	High	
Risk Avoidance	Low	

Key Issues and Benefits

Issues:

- Impacts to traffic along Division Street would occur due to loss of exclusive left turn lanes.
- Steep grade on Stadium Way will result in slow operating speeds for Tacoma Link vehicles.
- Reduction to one lane in each direction will impact traffic.
- Extension would generally duplicate portions of PT Routes 16 and 26 operating between Tacoma General Hospital and Downtown Tacoma. These routes could be restructured.
- Some right-of-way may be required on Division Street at station areas.
- Using St. Helens Street as an alternative to Stadium Way from 9th/Theater District Station extension will impact the existing Pierce Transit transit center. This transit center would have to be reduced in size or relocated to allow trackway to transition from Commerce Street to St. Helens Street. This alternative would also require relocation of the existing Commerce/9th St. Station and resulting additional funding.
- Compared to current Tacoma Link service, higher operating speeds along the extension segment would be expected due to longer station spacing and more exclusive operations.
- Current Tacoma Link maintenance facility would need to be expanded.

Benefits:

- Expands the coverage and length of the existing Tacoma Link system, consistent with ST Long-Range Plan.
- Serves several key destinations with faster, more reliable rail transit service including Stadium High School, Mary Bridge Children's Hospital, and Tacoma General Hospital.