

Link LRT: Extension of Tacoma Link to Tacoma Community College with Tacoma Link Technology

Project Number	S7
Subarea	Pierce
Primary Mode Impacted	Link
Facility Type	Link Service
Version Number	2.0
Date Last Modified	3/17/2006

Project Locator Map



Short Project Description

Construct a 5.5 mile at-grade extension of the existing Tacoma Link system from the 9th Street/Theater District Station in Downtown Tacoma to Tacoma Community College. Operations will use similar vehicles as existing Tacoma Link service - modern low floor streetcars.

Project Purpose:

To extend Tacoma Link rail service to West Tacoma with a terminus at Tacoma Community College.

Cost and Schedule

Cost (In Millions of 2005\$)

Schedule

	Low	High
Agency Admin	\$31.0	\$35.7
Environmental Clearance and PE	\$15.5	\$17.8
Final Design, Specs, Permitting	\$38.8	\$44.6
ROW Acquisition	\$52.8	\$60.7
Construction	\$336.8	\$387.3
Vehicles	\$73.5	\$84.5
Contingency	\$31.0	\$35.7
Total	\$579.5	\$666.4

Proposed Schedule Not Yet Developed

Design Basis

Conceptual

Annual O+M*	\$13.7
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* In Millions of 2005 dollars

Environmental Documentation Required

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

Relationships to Other Projects

Relationship	Project
Impacts	The Link extension could generate additional parking demand at the Tacoma Dome Station garage; the estimated demand at this garage is included in the West Tacoma extension. - Project definition and cost estimates for the expanded garage at the Tacoma Dome Station are addressed under Project S16

Project Partners

Agency

City of Tacoma	
Pierce Transit	
Tacoma 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.

Description:

This project would construct a 5.5 mile at-grade extension of the existing Tacoma Link system from its northern terminus at 9th Street/Theater District Station in Downtown Tacoma to Tacoma Community College. The project will include all necessary components such as infrastructure and systems, expanded operations and maintenance capacity, stations, and vehicles (modern low floor streetcars).

Project Elements Included:

- At grade in-street rail using modern low-floor streetcars currently operating on the existing Tacoma Link system.
- 5.5-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)
- Entire extension will be double-track
- Existing on-street parking would be eliminated to accommodate the light rail tracks in addition to a single general purpose travel lane in each direction
- Exclusive left turn lanes at some signalized intersections would be eliminated. Left turning vehicles would either be combined with the adjacent through traffic lane, or be prohibited in portions of the corridor where the street right-of-way is 80 feet or less.
- 7 new center-island platform stations, including shelters, signage, lighting, seating, ticket vending machines, CCTV's
- Lengthening platforms at the five existing Tacoma Link Stations to accommodate potential future two-car Central Link type LRV trains
- Maintenance and operations base capacity to accommodate 25 Tacoma Link modern low floor streetcars
- Active signal control to minimize delay at signalized intersections
- All signalized intersections (20) along the alignment would require some reconstruction. One new traffic signal is also assumed.
- 1 percent for art per ST policy
- 6 minute peak headways; 12 minutes off-peak and weekends
- 2-car trains (modern low floor streetcars)
- ROW at maintenance base and for construction staging
- 500 space parking garage at Tacoma Community College (400 new, and 100 to replace existing surface parking capacity)
- 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

- 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 at Tacoma Community College Station

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Permits Required

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

Agreements Required:

• City of Tacoma, Pierce Transit, Tacoma Community College

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	8,000	
Capital Cost	\$579.5 - \$666.4	in Millions of 2005\$
Annual Operating Cost	\$13.7	in Millions of 2005\$
Travel Time & Reliability	Medium	
Connectivity & Integration	High	# transit routes: 2 ST, 8 PT
Land Use & Development	High	
Customer Experience	High	
Risk Avoidance	Low	

Key Issues and Benefits

Issues:

- Demand requires use of trained Tacoma Link vehicles (two vehicles coupled.) Existing vehicles would require modification for coupling.
- Traffic impacts along Division Street and 6th Street would occur due to the loss of exclusive left turn lanes.
- Loss of on-street parking along 6th Avenue would impact commercial and other activity.
- Steep grade on Stadium Way and reduction of general traffic to one lane in each direction.
- Extension would generally duplicate portions PT Route 1 operating between Tacoma Community College. Route would likely be restructured.
- Some right of way may be required on Division Street and 6th 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 will have to be reduced in size or relocated to allow trackage to transition from Commerce Street to St. Helens Street. Would also require relocation of Commerce/9th St. Station.
- Compared to current Tacoma Link service, higher operating speeds along the extension segment will be expected due to longer station spacing and more exclusive operations.
- Current Tacoma Link maintenance facility would need to be expanded.
- Ability to limit use of parking facility to transit users is dependent on an unspecified enforcement program.

Benefits:

- Greatly 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, Tacoma General Hospital, University of Puget Sound, Tacoma Community College, and the 6th Avenue Mixed Use Center.