

Sounder: Track and Structure Upgrades between Tacoma Dome Station and Reservation Junction

Project Number	S25
Subarea	Pierce
Primary Mode Impacted	Sounder
Facility Type	Sounder Service
Version Number	2.0
Date Last Modified	4/24/2008

Project Locator Map



Short Project Description

Provide track and structure upgrades along a 0.65 mile section from Freighthouse Square to M Street, including replacement of the single-track wooden trestle and bridge. (See Note 1)

Project Purpose:

To upgrade track, enhance freight capacity, and support potential future expansion and extensions of Sounder service in Pierce County.

Cost

In Millions of 2007\$

	Low	High
Agency Admin	\$3.1	\$3.5
Enviro, Engr, Permits	\$3.5	\$4.1
Final Design	\$3.5	\$4.1
ROW Acquisition	\$9.9	\$11.4
Construction	\$29.7	\$34.1
Vehicles	\$0.0	\$0.0
Contingency	\$4.7	\$5.4
Total (See Note 1)	\$54.3	\$62.5

Environmental Documentation Required

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

Relationships to Other Projects

Relationship	Project
Impacts	Potential extension of light rail from Port of Tacoma to Tacoma Dome Station (see Project S42T6) could affect scope and timing of this project.

Project Partners

Agency

BNSF	
City of Tacoma	
City of Tacoma	
WSDOT	

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Long Description (See Note 1)

This project scope and accompanying capital cost estimate are intended to include the entire project development cycle (administration, environmental clearance, design, all aspects of property acquisition, construction, testing, commissioning, and contingencies) from project initiation through start-up of operations.

Description:

Construct additional track and new structures along an approximately 0.65 mile section of track between the existing Tacoma Dome Sounder Station and the vicinity of M Street. The improvements will occur within the City of Tacoma's right-of-way and represent the second phase of track improvements that were initiated under *Sound Move*. The improvements (Phases 1 and 2) were identified in the Sound Transit/City of Tacoma agreement of June 2002.

Project Elements Included:

- Preliminary and final design for project elements
- Environmental assessment, including investigation of potential soils stability
- Upgrade embankment along G Street Bridge approach
- Track removal along G Street Bridge and Trestle
- Demolish G Street Bridge and Trestle
- Build two new tracks between L Street and G Street
- Build 2 new single crossovers, one in vicinity of Freighthouse Square and the second east of L Street
- Construct mechanically stabilized earth walls between K Street and I Street
- Construct new G Street steel/concrete trestle
- Construct new G Street Bridge steel deck girder
- Provide signal upgrades
- Temporary erosion control
- Detours and traffic control
- Tacoma Rail flagging (50 days)
- Freight rail and commuter rail service disruption: Mitigation of impacts to Tacoma Rail and Sounder operations (through compensation and/or temporary alternative service).

Utilities:

Right of Way

- Allowances for potential ROW items

Mitigation:

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

Exclusions:

- Non-structural architectural and aesthetic elements in excess of the ST art program
 - Right-of-way (except for staging areas)
- Utility relocation or installation

Permits Required:

Demolition, building, electrical, mechanical, utility, land use, and construction-related

Agreements Required:

City of Tacoma

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.

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Evaluation Measures

<i>Measure</i>	<i>Measurement/ Rating</i>	<i>Notes</i>
Average Weekday Ridership	N/A	
Capital Cost <i>(See Note 1)</i>	\$54.3 - \$62.5	in Millions of 2007\$
Annual Operating Cost	\$0.0	in Millions of 2007\$
Travel Time & Reliability	N/A	
Connectivity & Integration	High	N/A
Land Use & Development	High	
Customer Experience	High	
Risk Avoidance	Low	

Key Issues and Benefits

Issues:

- Schedule of funding for improvements per agreement with City of Tacoma.
- Right of way along segment where second track is required is narrow and limits the construction engineering options.
- Final design and construction technique will depend on results of geotechnical evaluation (yet to be performed).
- Minimizing operating services interruptions during construction of the new track and structures.

Benefits:

- Project permits expansion of Seattle-Lakewood Sounder service beyond *Sound Move* levels, and/or extension of service in Pierce County.
- Project increases rail capacity (both passenger rail and freight) along critical rail corridor in region.

Note 1 - Project Scope Alternatives: Potential alternatives to the project scope, as described here, were considered. Examination of certain alternatives shows that they could result in lower construction costs and reduced construction impacts to Sounder service, while still achieving the project goals. One such possible approach would be construction of a new single elevated track parallel to the existing track between Tacoma Dome Station and M Street, along with replacement of the existing rail bridge over G Street.