RESOLUTION NO. R2013-06 Amending the Adopted 2013 Budget for the Positive Train Control Project

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:	PHONE:
Capital Committee	3/14/13	Recommendation to Board	Ahmad Fazel, DECM Executive Director	206-398-5389
Board	3/28/13	Final Action	Eric Beckman, Project Director	206-398-5251

PROPOSED ACTION

(1) Amends the Adopted 2013 Budget to increase it by \$13,829,279, from \$39,225,000 to \$53,054,279 for the Positive Train Control project on the Sounder Tacoma to Lakewood rail segment, (2) amends the 2013 Annual Budget from \$10,632,313 to \$18,743,000 and (3) approves Gate 4 within Sound Transit's Phase Gate process.

KEY FEATURES SUMMARY

- This action provides sufficient funding for the positive train control project based on a
 negotiated contract. The proposed work includes designing a system consistent with the
 Positive Train Control (PTC) implementation plan Sound Transit has filed with the FRA,
 outfitting rolling stock with PTC equipment, and installing wayside equipment along the
 Lakeview Subdivision owned by Sound Transit.
- This action resolves the estimated funding shortfall for the project allowing design and construction to proceed.
- This action authorizes Gate 4 enter final design. The project is ready to begin design. During the initial phase of work, necessary environmental review will be completed.

BACKGROUND

The Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with PTC technology that is tested, commissioned, and certified by December 31, 2015.

The first step in meeting the deadline for implementation was to file a PTC Implementation Plan with the FRA for review and approval. The PTCIP outlines the strategy and approach of the Agency for meeting the objectives and timeline of the legislation. Sound Transit completed this plan in 2010 consistent with the FRA timeline for doing so and has an approved PTCIP on file. This action for moving forward with PTC on Sounder equipment and Sound Transit owned railway is wholly consistent with that Plan.

PTC systems are integrated command, control, communications and information systems for controlling train movements with safety, security, precision, efficiency, issuing movement authorization to train and maintenance-of-way crews and track the location of the trains. They improve railroad safety by reducing the probability of collisions between trains, casualties to roadway workers, damage to equipment, and over speed accidents. They have the capability to stop a train should the locomotive crew be incapacitated. In addition to providing a greater level of safety and security, PTC systems also enable railroad companies to run scheduled operations and provide improved running time, greater schedule reliability, higher asset utilization and greater track capacity.

Sound Transit issued a Request for Proposal to design, install, test, and commission a PTC system for the Sound Transit-owned Lakeview Subdivision of the Sounder commuter rail Tacoma to Lakewood segment. The proposed work will design a Federal Railroad Administration (FRA) compliant system consistent with the PTC implementation plan Sound Transit has filed with the FRA. The project will outfit rolling stock including locomotives and cab cars as well as install wayside equipment along the Lakeview Subdivision owned by Sound Transit. A single proposal was received.

Railroads across the country are in the process of procuring PTC systems, and resources, and firms with expertise in the field of design and installing PTC systems are limited. Because PTC technology is relatively new, there are a limited number of resources available with the expertise to perform this work. The design/install services were competitively bid in 2012 but only a single proposal was received. A post bid discussion with contractors who showed interest but did not bid found that they were either too busy to take on additional work or unable to receive sub quotes. Negotiations with the sole bidder were successful in bringing the price within 6% of the revised engineer's estimate of \$32,168,688.

Staff performed a cost analysis of the proposal and determined that the proposal is in-line with similar PTC projects in other parts of the country. Also, staff used an outside party to review the scope of work, clarifications, proposal, and assumptions to identify and make recommendations on issues that could result in future change orders.

Overall, there is insufficient budget to fund the project need - a shortfall of \$13,829,279. The proposed budget amendment will provide sufficient funding to allow design and construction to proceed. The project has gone through Phase Gate 4 Enter Final Design in November 2011 and is ready to begin design; during the initial phase of work any necessary environmental review will be completed. Staff will return to the Board at the 60% design level, following appropriate environmental review, verification of third party costs and a qualitative risk assessment of the budget and schedule to report on Phase Gate 5 Establish Baseline for the project cost and schedule.

FISCAL IMPACT

The table below displays the budget amendment in and how it affects the 2013 cash flow for this project. This action provides sufficient funds to complete the scope of work presented above. Note that the project has not yet been baselined. Board action will be sought once the criteria to complete the project elements required to baseline the project have been met.

	20	2013 Annual Budget				Lifetime Budget	
Phase	2013 TIP	2013 Revision	Revised 2013 TIP		Lifetime Budget	Requested Amendment	Revised Lifetime Budget
Agency Administration	690	-	690		2,238	-	2,238
Preliminary Engineering	-	-	-		-	-	-
Final Design	4,884	7,917	12,801		5,139	9,736	14,875
3rd Party	1,050	-	1,050		6,348	30	6,378
Right of Way	-	-	-		-	-	-
Construction	3,408	202	3,610		23,585	4,116	27,701
Construction Management	600	(8)	592		1,915	(53)	1,863
Vehicles	-	-	-		-	-	-
Contingency	-	-	-		-	-	-
Total Project Budget	\$ 10,632	\$ 8,111	\$ 18,743		\$ 39,225	\$ 13,829	\$ 53,054

Project Budget

Notes:

Amounts are expressed in Year of Expenditure \$000s.

Positive Train Control Project page in on page 111 of 198 in the Proposed Transit Improvement Plan.

SMALL BUSINESS PARTICIPATION

Not applicable to this action.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

Federal regulations mandate that PTC be operational on passenger rail systems by December 31, 2015. A one-month delay in Board action could have an impact on the project schedule.

PRIOR BOARD/COMMITTEE ACTIONS

Not applicable to this action.

ENVIRONMENTAL REVIEW

JI 3/6/2013

LEGAL REVIEW

JW 3/8/2013



RESOLUTION NO. R2013-06

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority 1) amending the Adopted 2013 Lifetime Budget to increase it by \$13,829,279, from \$39,225,000 to \$53,054,279 for the Positive Train Control project on the Sounder Tacoma to Lakewood rail segment, (2) amending the 2013 Annual Budget from \$10,632,313 to \$18,743,000 and (3) approving Gate 4 within Sound Transit's Phase Gate process.

WHEREAS, the Central Puget Sound Regional Transit Authority, commonly known as Sound Transit, was formed under RCW Chapters 81.104 and 81.112 for the Pierce, King, and Snohomish Counties region by action of their respective county councils pursuant to RCW

81.112.030; and

WHEREAS, Sound Transit is authorized to plan, construct, and permanently operate a

high-capacity system of transportation infrastructure and services to meet regional public

transportation needs in the Central Puget Sound region; and

WHEREAS, in general elections held within the Central Puget Sound Regional Transit Authority district on November 5, 1996 and November 4, 2008, voters approved local funding to implement a regional high-capacity transportation system for the Central Puget Sound region; and

WHEREAS, the Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with Positive Train Control (PTC) technology, and that these railroads must be in compliance by December 31, 2015; and

WHEREAS, by Resolution No. R2012-25, the Sound Transit Board adopted the 2013 Budget on December 20, 2012; and

WHEREAS, there is insufficient budget to fund the project need, which includes designing, installing, testing, commissioning, and certifying the PTC equipment and proposed contingencies in the amount of \$13,829,279; and

WHEREAS, said budget amendment is consistent with and affordable under Boardadopted financial policies as established by Resolution No. R72-2; and WHEREAS, a two-thirds affirmative vote of the entire membership of the Sound Transit Board is required to amend the Adopted 2013 Budget.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that:

Section 1: The Positive Train Control Project Lifetime Budget is amended from \$39,225,000

to \$53,054,279.

Section 2: The Positive Train Control Project Annual Budget is amended from \$10,623,313

to \$18,743,000.

<u>Section 3</u>: The Positive Train Control Project is authorized to enter Gate 4 – enter final

design.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 28, 2013.

Pat McCarthy

Board Chair

ATTEST:

Jacker

Marcia Walker Board Administrator



PHASE GATE ACTION

Positive Train Control

Board 3/28/13 Final Action Ahmad Fazel, DECM Executive Director GATE 1 GATE 2 GATE 3 GATE 4 GATE 5 GATE 6 GATE 7 Enter Breiset ID Breferred Enter Final Enter Final Enter Final Enter Final	MEETING DATE		TYPE OF AC	TION	STAFF CONTACT Ahmad Fazel, DECM Executive Director Eric Beckman, Project Director			
GATE 1 GATE 2 GATE 3 GATE 4 GATE 5 GATE 6 GATE 7	Board	3/28/13	Final Action					
Development Alternatives Alternative Design Baseline Construction Operations	GATE 1 Enter Project Development	GATE 2 GATE 3 Identify ID Preferred Alternatives Alternative	GATE 4 Enter Final Design	GATE 5 Establish Baseline	GATE 6 Proceed to Construction	GATE 7 Transition to Operations	GATE Close Or Project	

ACTION REQUESTED

Authorize the Positive Train Control project on the Sounder Tacoma to Lakewood rail segment to enter into final design.

BUDGET

Adopted 2013 Lifetime Budget: \$ 39.2M Adopted 2013 Final Design Phase Budget: \$ 5.1M

SCHEDULE

Scheduled Project Completion: December 2015

PROJECT DESCRIPTION

The Rail Safety Improvement Act of 2008 and other federal regulations require all railroads that carry passenger trains and certain toxic materials to be equipped with Positive Train Control (PTC) technology that is tested, commissioned, and certified by December 31, 2015.

PTC systems are integrated command, control, communications and information systems for controlling train movements with safety, security, precision and efficiency, issuing movement authorization to train and maintenance-of-way crews and track the location of the trains. They improve railroad safety by reducing the probability of collisions between trains, casualties to roadway workers, damage to equipment, and overspeed accidents. PTC systems have the ability to automatically enforce movement authorization and continually update operating data systems with information on the location of trains, locomotives, cars and crews. They have the capability to stop a train should the locomotive crew be incapacitated. In addition to providing a greater level of safety and security, PTC systems also enable railroad companies to run scheduled operations and provide improved running time, greater running time reliability, higher asset utilization and greater track capacity.

The project has gone through Phase Gate 4 Enter Final Design and is ready to begin design; during the initial phase of work any necessary environmental review will be completed. Staff will return to the Board at the 60% design level, following appropriate environmental review, verification of third party costs and a qualitative risk assessment of the budget and schedule to report on Phase Gate 5 Establish Baseline for the project cost and schedule.

ON APPROVED Pat McCarthy, Board Chair

March 28, 2013 Date