RESOLUTION NO. R2014-11

Baseline Budget and Schedule, and Approve Gates 5 Establish Base Line and 6 Proceed to Construction for the Positive Train Control Project

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Capital Committee	6/12/14	Recommend to Board	Ahmad Fazel, DECM Executive Director Eric Beckman, Deputy Executive Director,
Board	6/26/14	Final Action	Business and Construction Services Jodi Mitchell, Project Manager

PROPOSED ACTION

(1) Adopting the Positive Train Control baseline schedule for completion December 2015 and budget of \$53,054,279; and (2) approving Gates 5 Establish Base Line and 6 Proceed to Construction within Sound Transit's Phase Gate process.

KEY FEATURES SUMMARY

- The proposed action adopts the Positive Train Control project baseline schedule and budget; and approves Gate 5 Establish Base line within the agency's Phase Gate process.
- This action adopts the project completion milestone as December 2015. This completion date is federally-mandated for obtaining system certification from the Federal Railroad Administration.
- This action baselines the Positive Train Control project at \$53,054,279, which provides sufficient funds for final design, construction, testing, commissioning, and certification of the system along the Lakeview Sub-division, and Sound Transit's contribution toward Positive Train Control improvements for Sounder service along BNSF right-of-way from Tacoma to Everett.
- The proposed action also approves Gate 6 Proceed to Construction within the agency's Phase Gate process to allow the project to advance to construction.

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 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.

Sound Transit, through a competitive Request for Proposal process entered into a contract with Xorail, Inc. in July 2013 to design, test, install and commission a fully interoperable Positive Train Control system along Sound Transit right-of-way between Tacoma and Lakewood, WA. A Memorandum of Understanding between Sound Transit and the BNSF Railway Corp, was executed in January 2012 that capped Sound Transit's contribution at \$3.9M for the PTC improvements from Tacoma-Everett.

Pursuant to approval of Phase Gate 4 in March 2013, staff was directed to 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.

The environmental review for this project was completed with the State Environmental Policy Act (SEPA) Checklist and a Determination of Non-significance (DNS) was issued in April 2014 and completion of the Federal Communications Commission's (FCC) process under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act was also issued in April 2014.

PROJECT STATUS

Project Identification	Alternatives Identification	Conceptual Engineering	Preliminary Engineering	Final Design	Construction					

Projected Project Completion Date: December 2015

Project scope, schedule and budget summary is located in the March 2014 Agency Progress Report.

FISCAL INFORMATION

This action baselines the project. There is no change in the total lifetime budget for the project nor the annual budget component of the project. What does change is the total phase cost for Construction Services and the creation of a Contingency phase offset by reductions in the Construction and Third Party Agreement phases.

This action is affordable within the finance plan as there has been no change to the previously approved total lifetime budget.

Positivie Train Control	2014 Annual Budget Lifetime Budget												
	Adopted 2014			Budget Revised Project			Adopted 2014		Budget		Revised Project		
Phase	Project Budget		Transfer		Budget			Project Budget		Transfer		Budget	
Agency Administration	\$	745	\$	-	\$	745		\$	2,238	\$	-	\$	2,238
Preliminary Engineering	\$	-	\$	-	\$	-		\$	-	\$	-	\$	-
Final Design	\$	-	\$	-	\$	-		\$	279	\$	-	\$	279
Right of Way	\$	-	\$	-	\$	-		\$	-	\$	-	\$	-
Construction	\$	11,285	\$	-	\$	11,285		\$	41,396	\$	(911)	\$	40,484
Construction Services	\$	1,200	\$	-	\$	1,200		\$	2,794	\$	1,267	\$	4,062
Third Party Agreements	\$	1,740	\$	-	\$	1,740		\$	6,348	\$	(2,081)	\$	4,267
Vehicles	\$	-	\$	-	\$	-		\$	-	\$	-	\$	-
Contingency	\$	-	\$	-	\$	-		\$	-	\$	1,725	\$	1,725
Total	\$	14,970	\$	-	\$	14,970		\$	53,054	\$	0	\$	53,054

Notes:

Amounts are expressed in Year of Expenditure \$000.

The Positive Train Control project budget is located on page 112 of 198 of the 2014 Transit Improvement Plan (TIP).

SMALL BUSINESS/DBE PARTICIPATION, APPRENTICESHIP UTILIZATION, AND TITLE VI COMPLIANCE

Not applicable to this action.

PUBLIC INVOLVEMENT

Staff has participated in public open houses about the project, as well as providing fact sheets and other required environmental notifications to property owners around potential PTC radio tower locations.

TIME CONSTRAINTS

A one month delay would not create a significant impact to the project schedule.

PRIOR BOARD/COMMITTEE ACTIONS

<u>Motion No. M2012-03</u>: Authorizes the chief executive officer to approve a provision in the memorandum of understanding with the BNSF Railway Company to cap Sound Transit's share of costs to install a positive train control system between Everett and Tacoma on BNSF right-of-way in an amount not to exceed \$3,900,000.

<u>Motion No. M2013-113</u>: Authorized the chief executive officer to assign a contract previously executed with Wabtec Corporation to its subsidiary Xorail, Inc. for the design and installation of a Positive Train Control system on Sounder vehicles and Sound Transit-owned rail right of way in the amount of \$34,064,839, with a 10% contingency of \$3,406,484, for a total authorized contract amount not to exceed \$37,471,323.

<u>Motion No. M2013-15</u>: Authorized the chief executive officer to execute a contract with Wabtec Corporation to design, install, test, and commission a Positive Train Control system on the Sounder vehicles and on the Sound Transit-owned Tacoma to Lakewood rail segment in the amount of \$34,064,839, with a 10% contingency of \$3,406,484, for a total authorized contract amount not to exceed \$37,471,323.

ENVIRONMENTAL REVIEW

JI 5/22/2014

LEGAL REVIEW

JW 6/6/2014

RESOLUTION NO. R2014-11

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority (1) adopting the Positive Train Control baseline schedule and budget of \$53,054,279; and (2) approving Gates 5 Establish Base Line and 6 Proceed to Construction 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;

WHEREAS, on March 28, 2013, the Sound Transit Board amended the Adopted 2013 Budget, increasing the Positive Train Control project budget for the Sounder Tacoma to Lakewood rail segment from \$39,225,000 to \$53,054,279, and approved Gate 4 (Enter Final Design) within Sound Transit's Phase Gate process.

WHEREAS, on March 28, 2013, Sound Transit entered into a contract with XoRail, Inc. (Motion Nos. M2013-15 and M2013-113) to design and install a PTC system for Sound Transit-

owned right-of-way on the Tacoma and Lakewood rail segment; that work is expected to be completed by December 2015.

WHEREAS, in accordance with Sound Transit's Phase Gate process, all requirements necessary to pass through Gate 5, establish project baseline schedule and budget, and Gate 6, to enter construction, have been met.

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

Section 1: The Positive Train Control baseline schedule and budget is adopted by

establishing the project completion milestone as December 2015, and confirming the Adopted

2014 Lifetime Budget for the project at \$53,054,279.

Section 2., Gates 5 and 6 within Sound Transit's Phase Gate process are hereby approved.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on June 26, 2014.

Dow Constantine Board Chair

ATTEST:

Walker

Marcia Walker Board Administrator



PHASE GATE ACTION Positive Train Control

MEETING DATE		STAFF CONTACT Ahmad Fazel, DECM Executive Director Eric Beckman, Deputy Executive Director, Business and Construction Services Jodi Mitchell, Project Manager			PHONE			
Capital Committee6/12/14Board6/26/14					(206) 398-5389 (206) 398-5251 (206) 398-5080			
GATE 1 Enter Project Development	GATE 2 Identify Alternatives	GATE 3 ID Preferred Alternative	GATE 4 Enter Final Design	GATE 5 Establish Baseline	GATE 6 Proceed to Construction	GATE 7 Transition to Operations	GATE 8 Close Out Project	
STR. 1-07/8	NY STATISTICS		No. 12 8 7 100			No. State Line	5.2.8 (mg	

ACTION REQUESTED

Approve Phase Gates 5 Establish Baseline and 6 Proceed to Construction for the Positive Train Control Project.

PROJECT BUDGET

Baseline Budget: \$53,054,279 Estimated Final Project Cost: \$53,054,279

PROJECT SCHEDULE

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.

Sound Transit's PTC project includes systems upgrades to its rolling stock and wayside signal equipment along the Lakewood to Tacoma corridor, and a funding contribution to BNSF for PTC improvements along its right-of-way from Tacoma to Everett. Both the upgrades to Sound Transit infrastructure and the funding contribution to BNSF are in support of Sounder service from Lakewood to Everett.

Environmental review for this project was completed in April 2014. BNSF is responsible for making PTC improvements to BNSF-owned track on the Seattle to Everett and Seattle to Tacoma corridors (Motion No. M2012-03). Sound Transit has entered into a contract with XoRail, Inc. (Motion No. M2013-15) to design and install a PTC system for the Sound Transit-owned right of way between Tacoma and Lakewood; that work is expected to be completed by December 2015.

ACTION APPROVED

Dow Constantine Board Chair June 26, 2014

Date