

Progress Report

Sounder Program



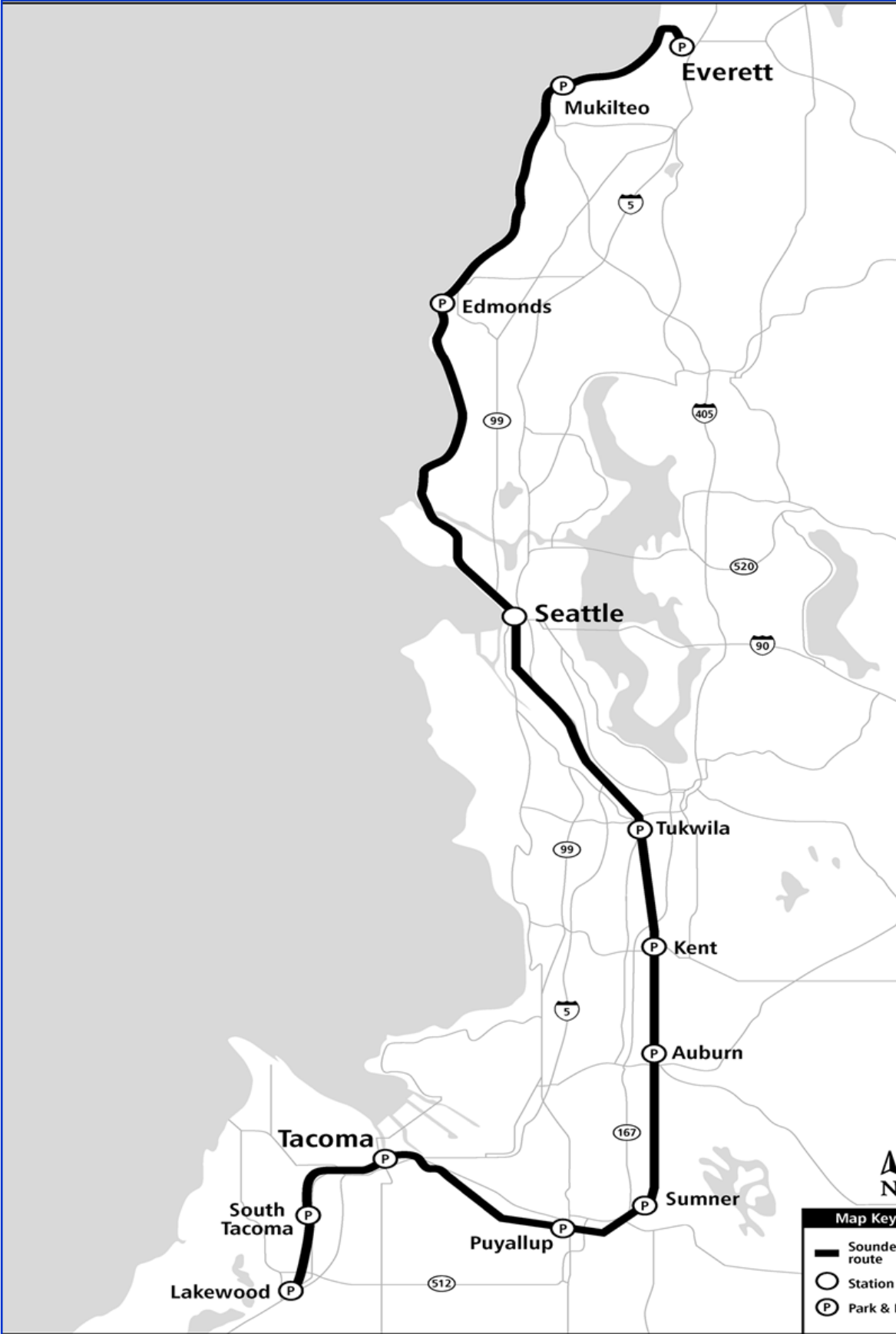
Sounder trains travel between Lakewood and Seattle with regularly runs weekday morning and afternoons only. Sounder Also serves select major weekend events such as Mariners and Seahawk games

June | 2018



Prepared by Project Control & VE | Design, Engineering & Construction Management

Sounder Commuter Rail Program Overview



Sounder Commuter Rail Program Overview



Auburn Station Access Improvements: Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Auburn Station. The purpose of the project is to improve access to the existing Auburn Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

Kent Station Access Improvements: Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Kent Station. The purpose of the project is to improve access to the existing Kent Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

Mukilteo Station, South Platform: Full build-out of this station included construction of a second platform, overhead pedestrian bridge, elevators, stair tower, and passenger shelters. Sounder service at the south platform began on April 11, 2016. The project page for this project has been removed. Only follow-on work remains. Cost status can be found on the Program Cost Summary table.

Point Defiance Bypass: Sound Transit administered the construction of the Point Defiance Bypass Track & Signal contract, which constructed a new second track adjacent to Sound Transit's existing main line between South Tacoma (66th Street Bridge) and Lakewood (Bridgeport Way) and installed new rails, ties, and ballast on Sound Transit's existing track between Lakewood and Nisqually with associated signal and PTC safety systems. The work was funded by a FRA-administered federal grant to WSDOT for improvements along the Pacific Northwest High Speed Intercity Passenger Rail corridor. Construction was completed 3Q 2017, and the track is in service. The project page for this project has been removed. Cost Status can be found on the Program Cost Summary Table.

Positive Train Control: Federal regulations require all passenger train routes be equipped with PTC systems before January 2019. This necessitated upgrades to Sounder wayside signals, communications, and information management systems along with additional on-board equipment. BNSF has installed wayside elements within the Everett-to-Tacoma corridor. This project includes wayside elements along the Tacoma-to-Lakewood corridor and modifications of locomotives and cab cars for installation of on-board equipment. BNSF dispatches all Sounder trains and operates the back office server (BOS) portion of Sound Transit's PTC system. Sound Transit will implement PTC operations as early as FRA approvals of its Revenue Service Demonstration Plan and completion of testing with BNSF will allow.

Puyallup Station Access Improvements: Project includes environmental documentation, design and construction of station access improvements at or around Puyallup Station. The purpose of this project is to accommodate and encourage future demand for Sounder ridership in an economically efficient and environmentally sustainable manner.

Sounder Maintenance Base: Sound Transit will construct a new railroad maintenance facility to service Sounder commuter trains at its expanded Century Yard facility in the City of Lakewood. The building will contain maintenance bays, materials storage areas, offices, and facilities for employees.

Sounder South Expanded Service: Sound Transit purchased four additional round trip easements from BNSF to expand service between Seattle and Tacoma/Lakewood. Sound Transit is responsible for completing environmental documentation, permitting, and mitigation associated with BNSF construction activities necessary to support those additional round trips.

Sounder Yard Expansion: Increased Sounder service in the Everett-to-Lakewood corridor will require additional train sets and a location to store the added trains overnight. The Century Yard facility was expanded with a third storage track to accommodate 8-car trains, the new train sets, and permanent crew reporting facilities, eliminating the need to lease space for train and engine crews.

Sumner Station Access Improvements: Project includes environmental documentation, design, and construction of station access improvements at or around Sumner Sounder Station. The purpose of this project is to accommodate and encourage future demands for Sounder ridership in an economically efficient and environmentally sustainable manner.

Tukwila Station: Construction of a permanent station and platforms to replace the temporary wooden structure has been completed. This project included the construction of an expanded parking lot, bus loop with passenger shelters, bicycle storage area, and new concrete platforms with improved passenger shelters, all sited to accommodate BNSF's new third mainline, now under construction. The project page for this project has been removed. Only follow-on work remains. Cost status can be found on the Program Cost Summary table.

Tacoma Trestle Track & Signal: Replacement of existing wooden trestle that has reached the end of its functional service life with a double track concrete structure. This project will improve overall safety, capacity, and speed in this section of the Sounder Tacoma-to-Lakewood corridor.

Program Budget

The Authorized Project Allocation reflects the budget for each project through the approved project phase, meaning that for projects approved for Final Design activities only, the project budget will be amended at some point to add budget for construction activities.

SOUNDER	Authorized Project Allocation	Commitment to Date	Incurred to Date	Forecast to Complete	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
AUBURN STATION ACCESS IMPRVMT	\$4.2	\$2.9	\$1.0	\$1.3	\$4.2	\$0
KENT STATION ACCESS IMPRVMTS	\$4.2	\$3.1	\$1.0	\$1.1	\$4.2	\$0
MUKILTEO STATION-S PLATFORM	\$18.3	\$16.3	\$16.3	\$2.0	\$18.3	\$0
POSITIVE TRAIN CONTROL	\$53.1	\$44.0	\$40.5	\$0.5	\$44.4	\$8.6
PT DEFIANCE BYPASS	\$83.7	\$76.5	\$75.2	\$2.4	\$78.8	\$4.9
PUYALLUP STATION IMPROVEMENTS	\$11.0	\$6.3	\$5.9	\$4.7	\$11.0	\$0
SOUNDER MAINTENANCE BASE	\$9.0	\$3.4	\$3.3	\$5.5	\$9.0	\$0
SOUNDER SOUTH EXPANDED SERVICE	\$205.6	\$195.2	\$195.1	\$10.4	\$205.6	\$0
SOUNDER YARD EXPANSION	\$20.6	\$18.0	\$17.4	\$1.2	\$19.2	\$1.3
SUMNER STATION IMPROVEMENTS	\$17.0	\$14.1	\$6.7	\$2.9	\$17.0	\$0
TACOMA TRESTLE TRACK & SIGNAL	\$161.0	\$123.1	\$119.2	\$38.0	\$161.0	\$0
TUKWILA STATION	\$46.0	\$37.3	\$37.3	\$1.4	\$38.7	\$7.3
Total SOUNDER	\$633.5	\$540.1	\$518.9	\$71.3	\$611.4	\$22.1

Figures are shown in millions below

Program Schedule

06-Aug-18 14:58		Sounder APR Update												Sounder_APR Layout																
Activity Name	Start	Finish	2018				2019				2020				2021				2022				2023				2024			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sound Transit 2	01-Apr-13 A	31-Dec-23																												
Sounder Commuter Rail - South	01-Apr-13 A	31-Dec-23																												
Operations/Facilities - South	01-Apr-13 A	31-Dec-23																												
S300004 - Sounder Maintenance Base - DB	01-Apr-13 A	31-Dec-23																												
S300011 - Positive Train Control	16-Jul-13 A	28-Dec-16																												
Station Access - South	01-May-15 A	29-Dec-23																												
S300017 - Puyallup Station Access Improvements - DB	01-May-15 A	28-Dec-21																												
S300018 - Sumner Station Access Improvements - DB	01-May-15 A	28-Dec-21																												
S300036 - Kent Station Access Improvements - DB	24-Feb-16 A	29-Dec-23																												
S300041 - Auburn Station Access Improvement - DB	24-Feb-16 A	29-Dec-23																												

Construction Safety

Construction and System Safety provide systematic and comprehensive oversight, resources, and guidance to eliminate recognized hazards, promote a safety culture and achieve an integrated system of compliance and continuous improvement of safety on both construction projects and transit system elements.

Agency-led active construction contracts under the Sounder program are as follows:

- Tacoma Trestle Track & Signal Project
- Sounder Yard Expansion

No reportable injury incidents in Q2 2018.

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Project Summary

Scope	Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Auburn Station. The purpose of the project is to improve access to the existing Auburn Sounder station for Sounder riders, bicyclists, bus riders, and drivers.
Phase	Conceptual Engineering and Environmental Review
Budget	\$4.2 Million
Schedule	Revenue Services: 2023



Improving access to Auburn Station

Key Project Activities

- Held project team kickoff meeting for Phase II - Conceptual Engineering & Environmental.
- Held the following coordination meetings with the City of Auburn: 1) Project Kick-Off Meeting; 2) Transportation Coordination and 4) Programmatic Requirements.
- Began initial work for the draft technical reports: design criteria, transportation methodology, noise & vibration; geotechnical site investigations.
- Started developing the Phase II - Conceptual Engineering & Environmental External Engagement Plan.

Project Cost Summary

The Auburn Station Improvement project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

Since March 2018, the project to date costs increased by \$291K. The incurred cost increased from \$705K to \$1M. The majority of this period’s expenditures are attributed to staff costs, preparing draft PMP, and preparing technical memos.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.8	\$0.3	\$0.3	\$0.8	\$0.0
Preliminary Engineering	\$3.2	\$2.6	\$0.7	\$3.2	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Total	\$4.2	\$2.9	\$1.0	\$4.2	\$0.0

Sounder Commuter Rail Auburn Station Improvements



Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitor project status and assesses associated risks.

- The Auburn Station Access Improvements Project Team will develop a risk register during the Phase II—Conceptual Engineering & Environmental phase of the project.
- The Auburn Station Access Improvements Project Team will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team to conduct a risk management workshop to identify all the potential risks during design and construction 2nd QTR 2019.

Project Schedule

The project has initiated the Phase II—Conceptual Engineering and Environmental activities. The project forecasts to complete the environmental assessment in 2nd QTR 2019. Construction NTP is forecast for 2nd QTR 2021. Revenue service is forecast for 4th QTR 2023.

Activity Name	Start	Finish	2018																											
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Sound Transit	24-Feb-16 A	29-Dec-23	[Green bar]																											
Sound Transit 2	24-Feb-16 A	29-Dec-23	[Green bar]																											
South Corridor	24-Feb-16 A	29-Dec-23	[Green bar]																											
Sounder Commuter Rail - South	24-Feb-16 A	29-Dec-23	[Green bar]																											
Station Access - South	24-Feb-16 A	29-Dec-23	[Green bar]																											
S300041 - Auburn Station Access Improvement - DB	24-Feb-16 A	29-Dec-23	[Green bar]																											
S300040 - Auburn Station Access Improvements - DB	24-Feb-16 A	29-Dec-23	[Green bar]																											
Alternative Analysis (Phase I)	24-Feb-16 A	15-Nov-17 A	[Green bar]																											
Conceptual Engineering (Phase II)	22-Mar-18 A	05-Sep-19	[Green bar]																											
Preliminary Engineering (Phase III)	28-Jun-19	23-Jul-20	[Green bar]																											
Permits and Agreements	03-Jan-20	15-Apr-22	[Green bar]																											
Right of Way	03-Jan-20	23-Dec-21	[Green bar]																											
Design-Build Project Management Consultant	03-Jan-20	25-May-20	[Green bar]																											
Design/Build Contract	03-Jan-20	29-Dec-23	[Green bar]																											
Design/Build Contract Procurement	03-Jan-20	25-Feb-21	[Green bar]																											
Design	25-Feb-21	19-Apr-23	[Green bar]																											
Construction	20-Oct-21	29-Dec-23	[Green bar]																											

Community Outreach

- CDM Smith to develop a community outreach plan to outline the community outreach activities to begin to support the CE/Environmental phase for the project.

Sound Transit Board Actions

Board Action	Description	Date
	None to report	

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Sounder Commuter Rail Kent Station Improvements



Project Summary

Scope	Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Kent Station. The purpose of the project is to improve access to the existing Kent Sounder station for Sounder riders, bicyclists, bus riders, and drivers.
Phase	Conceptual Engineering & Environmental Review
Budget	\$4.2 Million
Schedule	Revenue Service: 2023



Improving Access to Kent Station

Key Project Activities

- Held project team kick-off meeting for the Phase II - Conceptual Engineering & Environmental project team kick-off meeting.
- Held the following coordination meetings with the City of Kent: 1) Project Kick-Off Meeting; 2) Transportation Coordination and 3) Programmatic Requirements.
- Held coordination meetings with King County Metro to discuss the proposed conceptual layout of the garage and roadway re-alignment. King County Metro has commented on their request for additional active bays and layover bays that are currently not scoped in the project.
- Started developing the Phase II—Conceptual Engineering & Environmental External Engagement Plan.
- Met with potentially affected property owners and business owners to provide status update of the project.

Project Cost Summary

The Kent Station Improvements project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

Since March 2018, the project to date costs increased by \$302K. The incurred cost increased from \$744K to \$1M. The majority of this period’s expenditures are attributed to staff costs, preparing draft PMP, and preparing technical memos.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.8	\$0.3	\$0.3	\$0.8	\$0.0
Preliminary Engineering	\$3.2	\$2.8	\$0.7	\$3.2	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Total	\$4.2	\$3.1	\$1.0	\$4.2	\$0.0

Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. It is Sound Transit’s responsibility for continuously monitoring project status and associated risks.

- The Kent Station Access Improvements Project Team will develop a risk register during the Phase II—Conceptual Engineering & Environmental phase of the project.
- The Kent Station Access Improvements Project Team will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team to conduct a risk assessment workshop to identify all the potential risks during design and construction 2nd QTR 2019.

Project Schedule

The project has initiated the Phase II—Conceptual Engineering and Environmental activities. The project forecasts to complete the environmental assessment in 2nd quarter 2019. Construction NTP is forecast for 2nd QTR 2021. Revenue service is forecast for 4th QTR 2023.

Activity Name	Start	Finish	2018												2019				2020				2021				2022				2023				2024
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1					
Sound Transit	24-Feb-16 A	29-Dec-23																																	
Sound Transit 2	24-Feb-16 A	29-Dec-23																																	
South Corridor	24-Feb-16 A	29-Dec-23																																	
Sounder Commuter Rail - South	24-Feb-16 A	29-Dec-23																																	
Station Access - South	24-Feb-16 A	29-Dec-23																																	
S300036 - Kent Station Access Improvements - DB	24-Feb-16 A	29-Dec-23																																	
S300035 - Kent Station Access Improvements - DB	24-Feb-16 A	29-Dec-23																																	
Alternative Analysis (Phase I)	24-Feb-16 A	15-Nov-17 A																																	
Conceptual Engineering (Phase II)	22-Mar-18 A	18-Jun-19																																	
Preliminary Engineering (Phase III)	29-Mar-19	23-Jul-20																																	
Permits and Agreements	19-Jun-19	28-Sep-21																																	
Right of Way	19-Jun-19	13-Jul-21																																	
Design-Build Project Management Consultant	03-Jan-20	25-May-20																																	
Design/Build Contract	03-Jan-20	29-Dec-23																																	
Design/Build Contract Procurement	03-Jan-20	25-Feb-21																																	
Design	25-Feb-21	14-Apr-23																																	
Construction	15-Oct-21	29-Dec-23																																	

Community Outreach

- CDM Smith to develop a community outreach plan to outline the community outreach activities to begin to support the CE/Environmental phase for the project.

Sound Transit Board Actions

Board Action	Description	Date
	None to report	

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Project Summary

Scope Positive Train Control (PTC) systems are integrated command, control, communications, and information systems for controlling train movements. The systems improve railroad safety by significantly reducing the probability of collisions between trains, casualties to railway workers, and over speed accidents.

Phase Construction

Budget \$53.1 Million

Schedule Project Implementation: 2018



Improving safety along the Tacoma-to-Lakewood corridor

Key Project Activities

- Continued work to resolve technical issues involving system initialization and braking enforcements.
- Completed equipping nine new Crash Energy Management (CEM) cab cars.

Project Cost Summary

The Positive Train Control project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

Since March 2018, total project cost incurred increased by \$131K. The incurred costs are primarily attributed to performing final system testing and resolving technical issues.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.2	\$1.5	\$1.5	\$1.6	\$0.6
Preliminary Engineering	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Final Design	\$0.3	\$0.2	\$0.2	\$0.2	\$0.1
Construction Services	\$4.1	\$2.3	\$0.9	\$1.7	\$2.3
3rd Party Agreements	\$4.3	\$3.9	\$2.5	\$3.9	\$0.4
Construction	\$40.5	\$36.0	\$35.4	\$37.0	\$3.5
ROW	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Contingency	\$1.7	\$0.0	\$0.0	\$0.0	\$1.7
Total	\$53.1	\$44.0	\$40.5	\$44.4	\$8.6

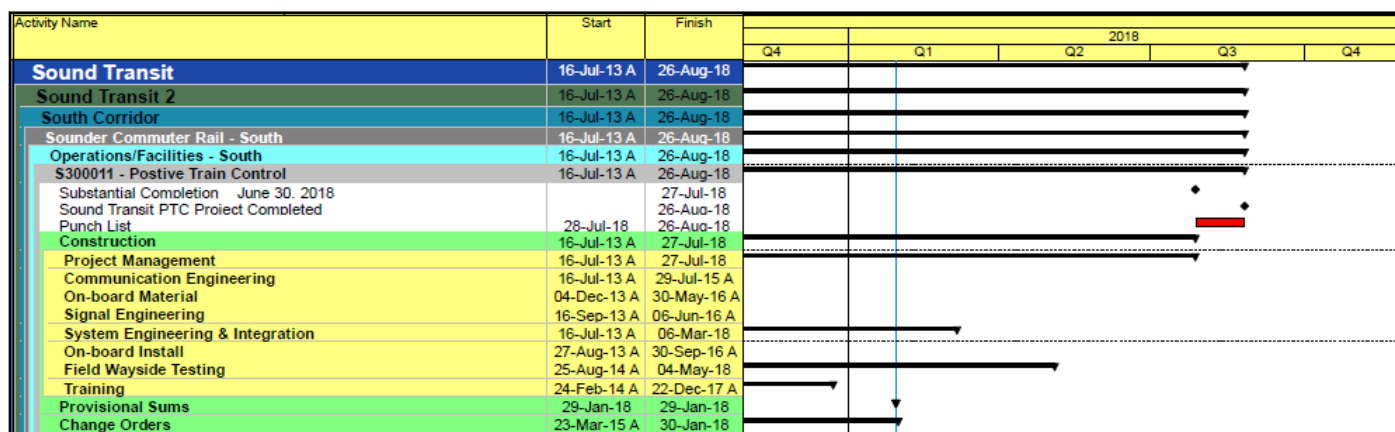
Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

- Top project risk: External contractor technical resources are limited either technically or by workload.
- Proposed mitigation: Maintain adequate budget to reach additional resources when needed.

Project Schedule

PTC is scheduled to be Operational December 2018.



Sounder Commuter Rail Puyallup Station Access Improvements

Scope	Improving access to Puyallup Station to pedestrians, bicyclists and drivers, including construction of a new garage (503 spaces), new surface parking (166 spaces), and pedestrian and bicycle improvements.
Phase	Preliminary Engineering
Budget	\$11.0M
Schedule	Revenue Services: 2021



Improving access to Puyallup Station

Key Project Activities

- Continued drafting Design Build procurement documents.
- Continued with negotiation offers for parcel owners for relocation and acquisition.
- Pursuant to the SEPA checklist, an “Archaeological Resource Monitoring and Inadvertent Discovery Plan,” is being prepared during Final Design.

Project Cost Summary

The Puyallup Station Access Improvement project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

Since March 2018, the project to date costs increased by \$2.1M. The incurred cost increased from \$3.8 to \$5.9M. This period’s expenditures are attributed to property acquisition, staff costs, engineering design work, utility coordination and drafting the construction RFP.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.2	\$1.0	\$1.1	\$1.2	\$0.0
Preliminary Engineering	\$3.0	\$2.4	\$2.2	\$3.0	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
3rd Party Agreements	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$6.6	\$2.9	\$2.6	\$6.6	\$0.0
Total	\$11.0	\$6.3	\$5.9	\$11.0	\$0.0

Sounder Commuter Rail Puyallup Station Access Improvements



Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitor project status and assesses associated risks.

The qualitative risk profile will be updated on July 20th 2018. The project will to complete a full quantitative risk assessment workshop will be held 3rd/4th QTR 2018.

The following are the top project wide risks:

- **Environmental**– Contamination (Soil &/or Water). Risk mitigation- Inclusion of a work plan has been included in the set of procurement documents in order to mitigate and address contaminated materials. This will be the first line of work the DB will perform when they are approved to proceed with Construction.
- **Real Estate / Right Of Way**– Parcels in-hand before contract award. Risk mitigation- Real Property representative and Project Manager regularly monitor progress and discuss status of all ROW acquisitions.
- **Development Agreement (DA) process.** As a result of the still undefined development agreement language and process, the permit could be delayed. Risk mitigation – The DA document will be finalized and included in the RFP. A final meeting with the City is set for early 3rd QTR 2018 in order finalize the draft DA.

Project Schedule

The project team is continuing work on Preliminary Engineering to be completed in Q2 2020. Right of way acquisitions are in progress and are forecast to be completed 3rd QTR 2019. Procurement of the design-build contractor is forecast to start in 3rd QTR 2018.

		2018			2019				2020				2021				2022
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Sound Transit	01-May-15 A 28-Dec-21																
Sound Transit 2	01-May-15 A 28-Dec-21																
South Corridor	01-May-15 A 28-Dec-21																
Sounder Commuter Rail - South	01-May-15 A 28-Dec-21																
Station Access - South	01-May-15 A 28-Dec-21																
S300017 - Puyallup Station Access Improvements - DB	01-May-15 A 28-Dec-21																
S300017 - Puyallup Station Access and Expansion - DB	01-May-15 A 28-Dec-21																
Preliminary Engineering (Phase III)	01-May-15 A 28-Feb-19																
Right of Way	26-May-16 A 25-Aug-19																
Design-Build Project Management Consultant	23-Jul-18 01-Mar-19																
Permits and Agreements	15-Jul-16 A 27-Apr-20																
Design/Build Contract	23-Jul-18 28-Dec-21																
Design/Build Contract Procurement	23-Jul-18 22-Aug-19																
Design	22-Aug-19 01-Jul-21																
Construction	29-Jan-20 28-Dec-21																

Community Outreach

- Community Outreach has updated the project page on Sound Transit’s website.
- The SEPA Checklist has been posted.

Sound Transit Board Actions

Board Action	Description	Date
	None to report	

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Sounder Commuter Rail Sounder Maintenance Base

Project Summary

Scope Sound Transit to design and construct approximately 60,000 Sounder commuter rail maintenance facility for repair operations and train yard facility elements, that will include maintenance shops, repair positions, storage areas and offices as well as employee welfare facilities.

Located in Lakewood, WA on Sound Transit's railroad right of way between Steilacoom Boulevard and 100th Street

Phase Phase II—Conceptual Engineering & Environmental

Budget \$9.0 Million

Schedule Revenue Service: Q4 2023



Map of Project Alignment

Key Project Activities

- Transmitted the final conceptual engineering design submittals and cost estimate, by the design consultant, WSP Engineers.
- Met with Tacoma Power, Puget Sound Energy and Lakeview Light & Power to discuss utility conflicts on the project site.
- Closed right of way acquisition of the Burgess parcel. Sound Transit's Property Management to secure the site until construction begins.
- Continued real estate negotiations of the Paige parcel.
- Received approval of the NEPA Re-Evaluation by the Federal Transit Administration.
- Issued the SEPA Checklist by Sound Transit.

Project Cost Summary

The Sounder Maintenance Base project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS), shown in millions.

This period approximately \$0.4M was incurred, of which \$0.1M was for staff (Admin) and \$0.3M for PE services to procure the final conceptual engineering design submittals and cost estimate. An additional \$1.2M for an acquisition was mistakenly incurred in the Right-of-Way phase of the Sounder Yard Expansion project. This will be corrected and recoded to the Sounder Maintenance Base project the following month.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	0.9	\$0.8	\$0.9	\$0.9	\$0.0
Preliminary Engineering	\$5.0	\$2.3	\$2.2	\$5.0	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$3.0	\$0.3	\$0.2	\$3.0	\$0.0
Total	\$9.0	\$3.4	\$3.3	\$9.0	\$0.0

Risk Management

The Sounder Maintenance Base Project Team will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team to conduct a risk management workshop to identify all the potential risks during design and construction.

The first risk review workshop is anticipated to be scheduled in 3QTR 2018.

The following are the top project risks and proposed mitigations:

- Advanced utility relocation delays—Execute agreements with the utility companies in advance of the design-build team on site and/or issue notice to relocate letter to utility companies by 2018 year end.
- Potential differing site conditions—Complete additional geotechnical investigations.
- Design-Build bids come in too high—Monitor other Sound Transit design-build bids.
- ROW acquisition delay—Monitor Sound Transit Real Estate negotiations in 2019 and obtain possession and use of property.

Sounder Commuter Rail Sounder Maintenance Base



Project Schedule

Sounder Maintenance Base is expected to open for Service in 4th Qtr. 2023. The revised conceptual engineering (10%) design submittal and cost estimate have been completed. The project team is scheduled to begin the development of the design-build project requirements in Fall 2018.

Activity Name	Start	Finish	2018				2019				2020				2021				2022				2023				2024
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
Sound Transit	01-Apr-13 A	31-Dec-23																									
Sound Transit 2	01-Apr-13 A	31-Dec-23																									
South Corridor	01-Apr-13 A	31-Dec-23																									
S300004 - Sounder Maintenance Base - Design/Build	01-Apr-13 A	31-Dec-23																									
Conceptual Engineering	29-Jul-13 A	12-May-14																									
Conceptual Engineering - Revised	21-Nov-17 A	22-May-18																									
Preliminary Engineering	01-Apr-13 A	25-Jul-19																									
Right of Way	26-Jan-16 A	26-Apr-20																									
Design Build Project Management Services	27-Jul-18	03-Oct-22																									
Procurement	27-Jul-18	15-Jul-19																									
DBPM - Contract Duration	16-Jul-19	03-Oct-22																									
Design/Build Construction	01-Aug-18	03-Oct-22																									
NTP - Design	20-Feb-20																										
Substantial Completion		03-Oct-22																									
Design/Build Procurement	01-Aug-18	20-Feb-20																									
Design	20-Feb-20	09-Oct-20																									
Construction	18-Jun-20	03-Oct-22																									
Project Float	04-Oct-22	31-Dec-23																									
Project Completion w/o float	04-Oct-22																										
Project Float	04-Oct-22	31-Dec-23																									
Project Completion with Float (December 31, 2023)		31-Dec-23*																									

Community Outreach

- Community Outreach has updated the project page on Sound Transit’s website.
- The SEPA Checklist has been posted.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

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Sounder Commuter Rail

Sounder South Expanded Service



Project Summary

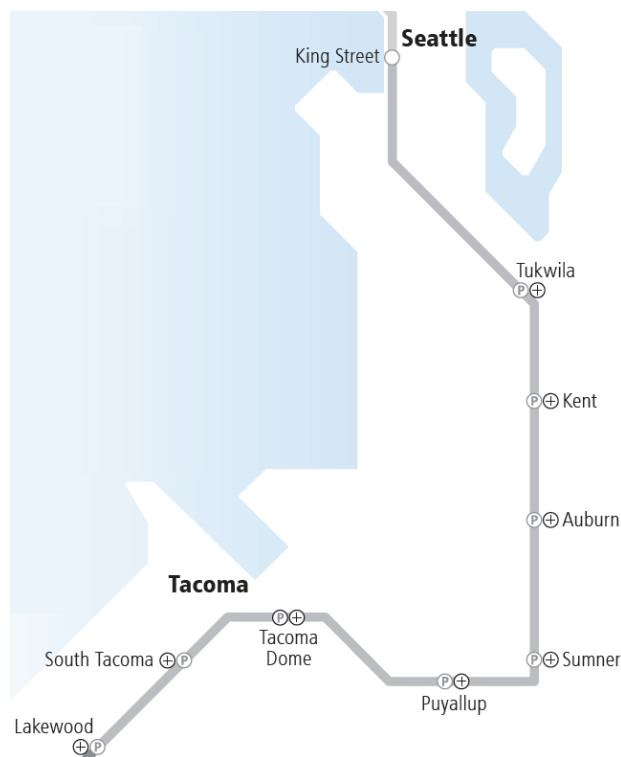
Scope Purchase of four additional commuter rail easements from BNSF for expanding Sounder service between Seattle and Lakewood. Additional Sounder South Service was implemented in 2016 and two more round trips were added in 2017 bringing the total to 13.

As part of environmental mitigation requirements, Sound Transit is partnering with King County to replace an existing fish culvert in the Auburn area with a larger structure that will permit to pass through it.

Phase Planning

Budget \$205.6 Million

Schedule Project Completion: Fall 2019



Map of Project Alignment

Key Project Activities

- Received Hydraulic project approval by Washington Department of Fish and Wildlife.
- Secured all temporary construction easements from private property owners.
- Designer completed archeological shovel probes in project area; no significant discoveries, technical memo documenting work and findings is forth coming.
- Project team reviewed and commented on 95% plans for Fish Passage Mitigation culvert.
- Environmental Compliance staff met with King County Permitting regarding the Grading Application review process to inform schedule for permit submittal.
- Executed the construction and maintenance agreement with King County for the culvert replacement project.

Project Cost Summary

The Sounder South Expanded Service project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

The project cost incurred to date increased by \$109K. from \$194.9M to 195.0M. The cost incurred can primarily be attributed to staff salaries, fish passage design, and King County design review.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.7	\$1.3	\$1.3	\$1.7	\$0.0
Preliminary Engineering	\$0.5	\$0.5	\$0.5	\$0.5	\$0.0
Final Design	\$0.9	\$0.6	\$0.5	\$0.9	\$0.0
Construction Services	\$0.1	\$0	\$12.1	\$0.1	\$0.0
3rd Party Agreements	\$3.8	\$0.1	\$0	\$3.8	\$0.0
Construction	\$12.1	\$7.4	\$7.4	\$12.1	\$0.0
ROW	\$186.5	\$185.2	\$185.2	\$185.5	\$0.0
Total	\$205.6	\$195.2	\$195.1	\$205.6	\$0.0

Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The following are the top project wide risks:

- **Schedule risk**—King County’s process for obtaining a required grading permit can take up to eight months. Project team is coordinating a pre-application meeting with County staff and seeking possible use of expedited review process for obtaining permit.
- **Schedule risk**—In-water construction can only take place during the months of July - September due to presence of fish in the creek. Close coordination with King County staff is taking place in order for the design to be completed in time for King County to be able to procure a contractor and order box culvert structure in time.
- **Schedule risk** - Puget Sound Energy has high-pressure gas line that is in conflict with the project and needs to be removed/relocated in time before the contractor can complete its work. Close coordination between ST, its design consultant, King County, and PSE is taking place in order to ensure that PSE can complete its relocation work and leave sufficient time for the contractor to complete its work within the fish construction window.

Project Schedule

- Permitting: Fall 2018
- Final Design: Winter 2019
- Construction: Fall 2019

The critical path of the culvert replacement is the approval of the King County grading permit. Once approved, Final Design can be completed and then the construction contract package will be turned over to the County to advertise and construct.

Community Outreach

- Assisted King County Dept. of Transportation, Road Services Division with the acquisition of Temporary Construction Easements (TCE) from private property owners.
- Worked with designer to assist the County in responding to private property owner's questions regarding TCE's and Construction zones.
- Updated Sound Transit Community Outreach Draft Public Involvement Plan with key Project Stakeholder contact information (School District Transportation Departments, Local High School and Colleges, TCE Property Owner's addresses) and inclusion of foreign language speaking stakeholders to be considered in the plan.

Sound Transit Board Actions

Board Action	Description	Date
	None to report	

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Sounder Commuter Rail Sounder Yard Expansion



Project Summary

Scope	Project includes design and construction of a third storage track and civil improvements in order to store seven (7) train sets needed for additional Sounder train service that began in late 2016.
Phase	Construction Close Out
Budget	\$20.6 Million
Schedule	Substantial Completion: June 20, 2017



Sounder Yard Expansion will increase storage capacity for Sounder seven train sets

Key Project Activities

The original LEED application has been reviewed and comments have been forwarded to ST to be addressed by the DB Contractor. The Contractor addressed the comments and resubmitted the LEED Silver application to the United States Green Building Council (USGBC).

Project Cost Summary

The Sounder Yard Expansion project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS), shown in millions.

The overall project Estimated Final Cost (EFC) for this period reflects \$19.2M, a savings projection of \$1.3M. This period approximately \$1.2M was mistakenly incurred in the Right-of-Way phase of this project, bringing the total project expenditures from \$16.1M to \$17.4M. This will be corrected and recoded to the Sounder Maintenance Base project the following month.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.4	\$1.3	\$1.3	\$1.4	\$0.0
Preliminary Engineering	\$1.8	\$1.8	\$1.2	\$1.8	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$1.4	\$1.2	\$1.2	\$1.4	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$15.5	\$12.3	\$12.3	\$14.2	\$1.3
ROW	\$0.4	\$1.4	\$1.4	\$0.4	\$0.0
Total	\$20.6	\$18.0	\$17.4	\$19.2	\$1.3

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Sounder Commuter Rail Sumner Station Access Improvements



Project Summary

Scope	Improving access to Sumner Station for pedestrians, bicyclists and drivers, including construction of a new garage adding 505 parking spaces, along with sidewalk and lighting enhancements.
Phase	Preliminary Engineering
Budget	\$17.0 Million
Schedule	Revenue Service: 2021



Improving access to Sumner Station

Key Project Activities

- Continued drafting Design Build procurement documents.
- Continued negotiation offers with parcel owners for relocation and acquisition.

Project Cost Summary

The Sumner Station Access Improvement project cost is summarized below in accordance with Sound Transit’s budget Work Breakdown Structure (WBS), shown in millions.

Since March 2018, the project to date costs increased by \$34K. The incurred cost increased from \$6.6M to \$6.7M. This period’s expenditures are attributed to staff costs, engineering design work, utility coordination and drafting the construction RFP.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.4	\$1.0	\$1.0	\$1.4	\$0.0
Preliminary Engineering	\$3.0	\$2.4	\$2.2	\$3.0	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
3rd Party Agreements	\$7.7	\$7.6	\$0.5	\$7.7	\$0.0
Construction	\$0.1	\$0.1	\$0.1	\$0.1	\$0.0
ROW	\$4.4	\$3.0	\$2.9	\$4.4	\$0.0
Total	\$17.0	\$14.1	\$6.7	\$17.0	\$0.0

Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitor project status and assesses associated risks.

The following are the top project wide risks:

- Third Party Agreements finalized before contract award. Risk mitigation- ST staff has finalized a draft of the CUP; readying for a meeting with the City once key open issues have been addressed.
- Environmental-Contamination (Soil &/or Water). Risk mitigation- Inclusion of a work plan has been included in the set of procurement documents in order to mitigate and address contaminated materials. This will be the first line of work the DB will perform when they are approved to proceed with Construction.

Project Schedule

The project team is continuing work on Preliminary Engineering to be completed in 1st QTR 2019. Right of way acquisitions are in progress and are forecast to be completed 4th QTR 2018. Procurement of the design-build contractor is forecast to start in 3rd QTR 2018.

Activity Name	Start	Finish	2018				2019				2020				2021				2022
			Q2	Q3	Q4		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Sound Transit	01-Aug-16 A	28-Dec-21																	
Sound Transit 2	01-Aug-16 A	28-Dec-21																	
South Corridor	01-Aug-16 A	28-Dec-21																	
Sounder Commuter Rail - South	01-Aug-16 A	28-Dec-21																	
Station Access - South	01-Aug-16 A	28-Dec-21																	
S300018 - Sumner Station Access Improvements - DB	01-Aug-16 A	28-Dec-21																	
S300018 - Sumner Station Access and Expansion - DB	01-Aug-16 A	28-Dec-21																	
Preliminary Engineering (Phase III)	21-Sep-18	28-Feb-19																	
Permits and Agreements	01-Feb-18 A	18-Jan-20																	
Right of Way	12-May-17 A	29-Dec-18																	
Design-Build Project Management Consultant	23-Jul-18	01-Mar-19																	
Design/Build Contract	01-Aug-16 A	28-Dec-21																	
Design/Build Contract Procurement	23-Jul-18	22-Aug-19																	
Design	22-Aug-19	01-Dec-20																	
Construction	19-Jan-20	28-Dec-21																	
Traffic Avenue Overpass	01-Aug-16 A	01-Jan-20																	

Community Outreach

- None to Report

Sound Transit Board Actions

Board Action	Description	Date
	None to report	

Sounder Commuter Rail Tacoma Trestle Track & Signal

Project Summary

Scope Sound Transit has replaced the wooden, single-track railroad trestle east of Freight-house Square with a new concrete, double-track bridge. The new bridge supports increased passenger service and rail capacity along the corridor and improves passenger service reliability.

Other improvements include building an extended passenger platform to accommodate Amtrak long distance trains, making minor street repairs, replacing utilities, replacing retaining walls and upgrading railroad signals.

Phase Construction

Budget \$161.0 Million

Schedule Revenue Service: 2018



Replaced existing Tacoma Trestle

Key Project Activities

- Completed connection of the relocated sanitary sewer system.
- Installed drainage line and downspouts under the bridge, and installed insulation around the platform extension waterline.
- Corrected non-conforming work: replaced trench drain covers with traffic-rated grates and filled low spots on the south platform walking surface where ponding occurs.
- Completed fence installation.
- Sprint completed permanent fiber optic relocation work.
- Continued work to meet safety and security certification documentation requirements.

Project Cost Summary

The Tacoma Trestle Track & Signal project cost is summarized below in accordance with Sound Transit’s budget Work Break-down Structure (WBS). The figures are shown in millions.

Since March 2018, approximately \$1.9M was incurred, of which \$0.3M was for staff (Admin), \$0.1M for design support during construction, \$0.4 for construction management services, and \$1.1M for construction activities, bringing the total project expenditures from \$117.3M to \$119.2M.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$8.1	\$5.1	\$5.1	\$8.1	\$0.0
Preliminary Engineering	\$4.1	\$4.1	\$4.1	\$4.1	\$0.0
Final Design	\$15.2	\$12.3	\$11.0	\$15.2	\$0.0
Construction Services	\$7.6	\$5.7	\$5.3	\$7.6	\$0.0
3rd Party Agreements	\$1.8	\$0.4	\$0.3	\$1.8	\$0.0
Construction	\$114.2	\$88.6	\$86.7	\$114.2	\$0.0
ROW	\$10.1	\$6.9	\$6.7	\$10.1	\$0.0
Total	\$161.0	\$123.1	\$119.2	\$161.0	\$0.0

Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

- Top project risk: Contractor requesting time impact delays to be added to their schedule.
- Mitigation: CM/RE team, including claims consultant, is analyzing schedule impacts in preparation for negotiations with Contractor over its assertion that it incurred extended overhead and acceleration costs.

Sounder Commuter Rail Tacoma Trestle Track & Signal



Project Schedule

No project schedule update was received for June 2018. Milestone #1 Platform Acceptance was completed in April 2018 and Milestone #2 Substantial Completion was completed in May 2018. Both North and South Platforms and trestle are currently being utilized by Sound Transit customers and Sounder trains.

Substantial Completion was issued for Tacoma Trestle in May 2018, punch list work continues.

Activity Name	Remaining Duration	Start	Finish	2018			
				Q2	Q3	Q4	
Sound Transit		21-Mar-16 A	30-Jul-18				
Sound Transit 2	21d	21-Mar-16 A	30-Jul-18				
South Corridor	30d	21-Mar-16 A	30-Jul-18				
Sounder Commuter Rail - South	20d	21-Mar-16 A	30-Jul-18				
Operations/Facilities - South	20d	21-Mar-16 A	30-Jul-18				
S300021 - Tacoma Trestle - Master Schedule - DBB	20d	21-Mar-16 A	30-Jul-18				
Construction	20d	21-Mar-16 A	30-Jul-18				
S300021 - Tacoma Trestle Track and Signal Project	20d	21-Mar-16 A	30-Jul-18				
Construction	20d	21-Mar-16 A	30-Jul-18				
Project Administration	0d	21-Mar-16 A	30-Jul-18				
Summary	0d	21-Mar-16 A	21-Sep-17 A				
Major Milestones	0d	21-Mar-16 A	30-Jul-18				
NTP	0d	21-Mar-16 A					
Construction Start	0d	28-Mar-16 A					
Stage 1 Cutover	0d	07-Nov-17 A	08-Nov-17 A				
Stage 3 Cutover	0d	07-Nov-17 A	08-Nov-17 A				
Milestone 1 - Platform Acceptance (Revised August 6, 2017)	0d		15-Dec-17 A				
Milestone 2 - Substantial Completion (525 CD + 108 CD after NTP)	0d		21-May-18 A				
Contract Complete	0d		30-Jul-18				
Administrative	0d	21-Mar-16 A	21-Mar-16 A				
Submittals	0d	22-Mar-16 A	25-Oct-17 A				
Procurements (7 Day Calendar)	0d	19-Apr-16 A	08-Oct-17 A				
Stage 1	0d	28-Mar-16 A	02-Mar-18 A				
Stage 1: Retaining Wall 002	0d	02-Nov-16 A	01-Sep-17 A				
Stage 2	0d	10-Feb-17 A	21-Feb-17 A				
Stage 3	0d	06-Jun-16 A	21-May-18 A				
Stage 4	20d	11-Nov-17 A	30-Jul-18				
S300021 - Tacoma Trestle Master Schedule	0d	21-May-18 A	28-May-18 A				
S300021 - Tacoma Trestle Master Schedule	0d	21-May-18 A	28-May-18 A				
Project Float	0d	21-May-18 A	28-May-18 A				
Milestone #2 - Substantial Completion - Oct 1, 2017 revised	0d		21-May-18 A				
Project Completion Date with Float	0d		28-May-18 A				
Project Float	0d	21-May-18 A	28-May-18 A				

Community Outreach

- Working with property owners to close our temporary construction easements (TCE).
- Ongoing communication with Freighthouse Square owner regarding damage claim and TCE restoration.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	