

Agency Progress Report Capital Programs



Electrical Rough-in Work on Platform Canopy (East Link Extension)

November | 2020



Editor's Note

Sound Transit's Monthly Agency Progress Report summarizes projects and major contracts status, risk, and performance for capital projects.

Due to timing differences in the production of the APR and the ST financial statements, actual cost data presented in the APR may not match the quarterly financial statements. However, the actual cost data is reconciled to the financial statements on a monthly basis.

We always appreciate any suggestions you might have for future refinements to this document. To be added to the distribution list for this report or to make suggestions, please contact Julie Parker at (206) 398-5000.

The Agency Progress Report can also be found on the web at <http://www.soundtransit.org/get-to-know-us/documents-reports/agency-progress-reports>.

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Agency Progress Report

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SOUND TRANSIT CURRENT SERVICE



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November construction updates

Puyallup Station

On Nov. 18, Sound Transit kicked off construction on the Puyallup Station Parking and Access Improvements project. A new five-level garage and added surface parking will provide 610 new parking spaces. The project also includes a pedestrian bridge crossing at 5th Street NW, a new traffic signal at 7th Street NW and new sidewalks, curb ramps and street lighting.

The project is scheduled to open in 2022, and Sound Transit is holding an online open house to share information on construction impacts and improvements to local intersections around the Puyallup Sounder station. The open house will be available through Dec. 3.

Lynnwood Link Extension

Meanwhile, we completed a project milestone this month on the Lynnwood Link Extension. ST contractor Skanska crews closed the southbound lanes of I-5 South from 220th Street SW to SR 104 in Mountlake Terrace to erect falsework, stringer beams that will support our Lynnwood Link bridge over I-5 at Mountlake Terrace. The safety sensitivity of this work can't be overstated and will be even more so when work continues on the bridge while traffic resumes underneath. There is no room for error here, and we can thank our construction managers, safety staff and WSDOT partners for ensuring safety informs every action and decision.



L-300 contractor (Skanska) installing stringer beams that will support our Lynnwood Link bridge over I-5

Near-term project actions

At its November meeting, the Board approved the final set of near-term actions for projects identified in September as part of our iterative and deliberative approach to expansion construction in light of the pandemic recession. These near-term actions help projects maintain shovel-ready status ahead of realignment.

Those near-term actions included unpausing and authorizing an agreement with the City of Seattle and King County Metro for a contribution to improve speed and reliability along the RapidRide C line, and approving budget amendments to start alternative analysis for the South Tacoma and Lakewood Access Improvements Projects. Similar actions moved forward at November's System Expansion Committee meeting, including a General Engineering Consultant contract for bus rapid transit to help look at phasing options, and a contract modification to start alternative analysis for the South Tacoma and Lakewood Access Improvements Projects, pending approval of the budget amendment.

Service changes

In response to an increase in ridership, Sound Transit increased weekday service on four ST Express routes in the coming weeks.

On Nov. 16, we added two morning trips and one afternoon trip to Route 522.

In keeping with heightened safety protocols during the COVID-19 pandemic, all Sound Transit passengers were directed to wear face coverings consistent with expanded public health directives. Riders were also expected to follow social distancing and other critical health guidelines to protect the community.

Anticipating our Northgate Link Extension opening next year, at its November meeting, the Board also approved a broader range of service changes for 2021.

The new service plan incorporated input from 1,900 people who responded to a public engagement survey about proposed changes. It maintains the reduced service levels implemented in response to the COVID-19 pandemic. Under the new service plan, when Northgate Link opens, light rail will operate every eight minutes during rush hour, every 10 minutes mid-day and weekends, and every 15 minutes late night.

In addition, the Northgate Link opening will drive a bus service restructure from Snohomish and North King County. ST Express Route 510 will continue direct service to downtown Seattle, while Routes 511, 512 and 513 will truncate at Northgate Station. ST Express Route 522 will truncate at Roosevelt Station and increase service levels. Improved frequency for Link will result in a better transfer experience for passengers on the changed routes.

ST Express Route 586 will add a stop at Federal Way Transit Center to improve ridership and support regional travel. ST Express Route 555, which was originally proposed to be restored, will remain suspended. Other ST Express routes that will remain suspended are routes 541, 544 and 567.

No changes were made to the current levels of Sounder or Tacoma Link service.

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Progress Report

Link Light Rail Program



Guideway Light Testing (Northgate Link Extension)

November | 2020



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



Northgate Link Extension: The University of Washington Station (UWS) to Northgate project is a 4.3-mile extension of light rail from the UWS north under campus via twin-bored tunnels to an underground station at NE 45th Street continuing to an underground station at NE 65th Street and via tunnel, retained cut and elevated sections to Northgate. Revenue Service date is September 2021. The Sound Transit Board adopted the baseline capital budget of \$2.13B originally in 2012 and revised the baseline budget to \$1.89B in October 2015.

Lynnwood Link Extension: Lynnwood Link Extension extends light rail 8.5 miles to Snohomish County along I-5 from Northgate Mall in Seattle to the Lynnwood Transit Center, with four new light rail stations. The configuration includes at-grade, elevated, and retained cut/fill alignment. The Sound Transit Board adopted the baseline capital budget of \$2.77B on May 24, 2018.

East Link Extension: East Link Extension expands light rail to East King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond, with stations serving Rainier Avenue/I-90, Mercer Island, South Bellevue, Downtown Bellevue, Overlake Hospital, the Bel-Red corridor, Overlake Village and the Redmond Technology Center (formerly Overlake Transit Center). Revenue service to the Redmond Technology Station is forecast for June 2023 with a tunnel route in Downtown Bellevue. The Sound Transit Board adopted the baseline capital budget of \$3.67B in April 2015.

Downtown Redmond Link Extension: This project builds a new light rail from the Redmond Technology Station to downtown Redmond by 2024. Light rail will travel along SR-520 with two new stations in southeast Redmond, at Marymoor Park, and downtown Redmond. The ST Board adopted the baseline capital budget of \$1.53B on October 25, 2018.

West Seattle and Ballard Link Extensions: The West Seattle & Ballard Link Extensions are voter-approved projects under the ST3 Plan. West Seattle segment includes 4.7 miles of light rail from downtown Seattle to West Seattle's Junction neighborhood. It includes five light rail stations. The route will run primarily on elevated guideway with a new rail-only bridge over Duwamish River. The Ballard segment includes 7.1 miles of light rail from downtown Seattle to Ballard's Market Street area. It includes nine light rail stations. The route will run through a new downtown Seattle rail-only tunnel, elevated guideway, and a rail-only bridge over Salmon Bay. The current budget for these projects through completion of Preliminary Engineering is \$286M.

Federal Way Link Extension: The Federal Way Link Extension adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center. The extension generally parallels SR 99 and I-5 freeway with stations at Kent/Des Moines, South 272nd Star Lake park-and-ride and the Federal Way Transit Center. The Sound Transit Board adopted the baseline capital budget of \$2.45B on September 27, 2018.

Hilltop Tacoma Link Extension: The Hilltop Tacoma Link Extension is a 2.4 mile extension of the existing Tacoma Link system from the Theater District in downtown Tacoma to the Hilltop neighborhood. The extension will travel at-grade along Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr. Way. The Sound Transit Board adopted the baseline capital budget of \$217.3M originally in September 2017. The Board approved a revised baseline of \$252.7M in June 2020.

Tacoma Dome Link Extension: This project will extend light rail from the Federal Way Transit Center in the City of Federal Way to the Tacoma Dome area in the City of Tacoma a total distance of approximately 9.7 miles, generally along or near I-5 with three elevated stations at South Federal Way, Fife, and East Tacoma, and one at-grade/retained station at the Tacoma Dome. The budget for this project through completion of Preliminary Engineering in June 2019 is \$125.7M.

Link Operations and Maintenance Facility East: This project located in the City of Bellevue, includes a 160,000 square foot operations and maintenance facility that will maintain, store and deploy and expand light rail fleet, including seven LRV service bays, a LRV wash facility and storage for up to 96 light rail vehicles. The ST Board adopted the baseline capital budget of \$449.2M in July 2016.

Light Rail Vehicle (LRV) Fleet Expansion: This project includes the design, manufacturing, inspection, testing and delivery of 152 low floor LRVs for service requirements of Northgate, East Link and Lynnwood Link Extensions. The Sound Transit Board adopted the baseline capital budget of \$733M originally in 2015 and revised the baseline budget to \$740.7M in April 2017 to allow for the procurement of 30 additional vehicles.

Program Budget

Project figures for active projects are represented in millions below.

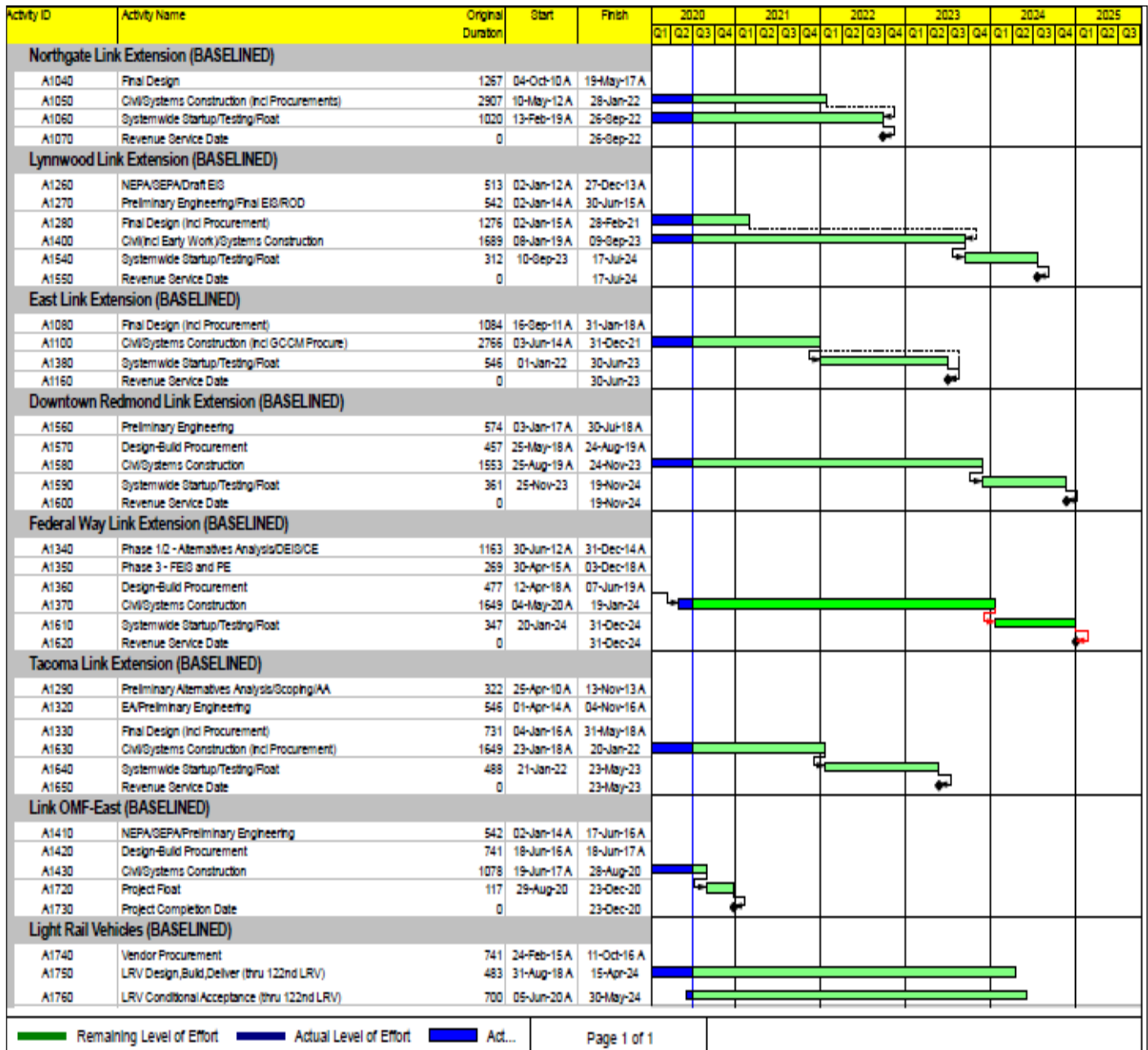
Project	Authorized Project Allocation	Commitment to Date	Incurred to Date	Forecast to Complete	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Northgate Link Extension	\$1,899.8	\$1,719.9	\$1,679.4	\$127.4	\$1,847.3	\$52.5
Lynnwood Link Extension	\$2,771.6	\$2,403.3	\$1,013.8	\$368.3	\$2,771.6	\$0.0
NE 130th Infill Station	\$28.9	\$17.5	\$8.2	\$11.4	\$28.9	\$0.0
I-90 Two-Way Transit & HOV	\$225.6	\$209.6	\$199.6	\$16.0	\$225.6	\$0.0
East Link Extension	\$3,677.2	\$3,136.9	\$2,759.8	\$539.3	\$3,677.1	\$0.0
Downtown Redmond Link Ext.	\$1,530.0	\$914.0	\$268.3	\$616.1	\$1,530.0	\$0.0
West Seattle and Ballard Link Ext.	\$285.9	\$105.6	\$90.1	\$180.2	\$285.9	\$0.0
Federal Way Link Extension	\$2,451.5	\$1,723.6	\$640.3	\$727.9	\$2,451.5	\$0.0
Hilltop Tacoma Link Extension	\$252.7	\$203.7	\$149.7	\$49.1	\$252.7	\$0.0
Tacoma Dome Link Extension	\$125.7	\$60.3	\$39.4	\$65.3	\$125.7	\$0.0
Link O & M Facility: East	\$449.2	\$368.2	\$362.5	\$81.0	\$449.2	\$0.0
LRV Fleet Expansion	\$740.7	\$672.0	\$250.9	\$68.7	\$740.7	\$0.0
Total Link	\$14,438.9	\$11,534.7	\$7,462.1	\$2,850.7	\$14,386.4	\$52.5

Link Light Rail Program Overview



Program Schedule

Schedules for active projects are summarized below. Projects in the re-alignment process are not shown.



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Link Light Rail Northgate Link Extension

Project Summary

Scope

Limits The Northgate Link Extension consists of 4.3 miles of light rail extending from the University of Washington to Northgate.

Alignment The extension begins at UW Station, continues under UW campus, then north to a portal at NE 94th Street, then transitioning to an aerial structure north to Northgate Mall.

Stations U District Station (UDS)
Roosevelt Station (RVS)
Northgate Station and Parking Garage

Systems Signals, track electrification, and SCADA communications

Phase Construction

Budget \$1.899 Billion

Schedule Revenue Service: September 2021



Map of Project Alignment

Key Project Activities

- **U District Station/UW Campus (N140):** Testing on the Fire Access Control Panel and Access Control is pending completion of N830 work. The escalator balustrade lighting change is expected to be complete mid-January. Final testing on the escalator will take place after the installation of balustrade lighting.
- **Roosevelt Station (N150):** Contactor continues with escalator lighting modifications.
- **Northgate Station (N160): Station:** Absher installing guardrails above fire valve and electrical room area while cleaning rust and repairing galvanizing at Platform edge angle. The Electrical subs are working on Plaza level and Stair 3 platform punchlist items and conducted emergency power testing taking light readings at all stairs and escalators.
- **Systems (N830):** Communication Installation continues at all stations. Live wire testing and adjustments continue from University of Washington Station to U District Station. Overhead Catenary Systems punchlist inspections completed in all segments. Readiness to Start Live Wire testing in the remainder of the tunnel is being reviewed. Signal Houses have been shipped to California to be fitted with Signaling Racks.
- **Environmental:** Environmental and safety site walks conducted on all Northgate contracts.

Closely Monitored Issues

N140 U District Station – Hoffman Construction is continuing with the proper protocols in accordance with the Governor’s guidelines on COVID. ST construction management is working closely with Hoffman to monitor safety protocols.

N830 Systems – Coordination of Testing in Non-Revenue hours between University of Washington Station and U District Station between all groups remains critical and is being closely monitored, reviewed and updated.

Project Cost Summary

The project cost is summarized in two cost categories. The first table summarizes cost in accordance with Sound Transit’s budget Work Breakdown Structure (WBS). The second table summarizes the project in accordance with the FTA’s Standard Cost Category (SCC) format. The figures in both tables are shown in millions.

The Estimated Final Cost (EFC) for the project as of this reporting period is \$1,847.3 M, which is \$52.5 M below the current project budget, unchanged since last period. This period approximately \$6.0 M was incurred, primarily on the major construction and construction support contracts.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$144.9	\$130.4	\$89.6	\$89.4	\$125.4	\$4.9
Preliminary Engineering	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
Final Design	\$132.2	\$137.2	\$126.2	\$123.0	\$132.0	\$5.2
Construction Services	\$118.3	\$118.3	\$103.7	\$99.7	\$111.8	\$6.6
3rd Party Agreements	\$11.8	\$11.8	\$8.6	\$7.6	\$11.4	\$0.4
Construction	\$1,343.0	\$1,352.5	\$1,275.0	\$1,242.8	\$1,340.8	\$11.7
ROW	\$112.3	\$112.3	\$101.7	\$101.7	\$110.9	\$1.4
Project Contingency	\$22.2	\$22.2	\$0.0	\$0.0	\$0.0	\$22.2
Total	\$1,899.8	\$1,899.8	\$1,719.9	\$1,679.4	\$1,847.3	\$52.5

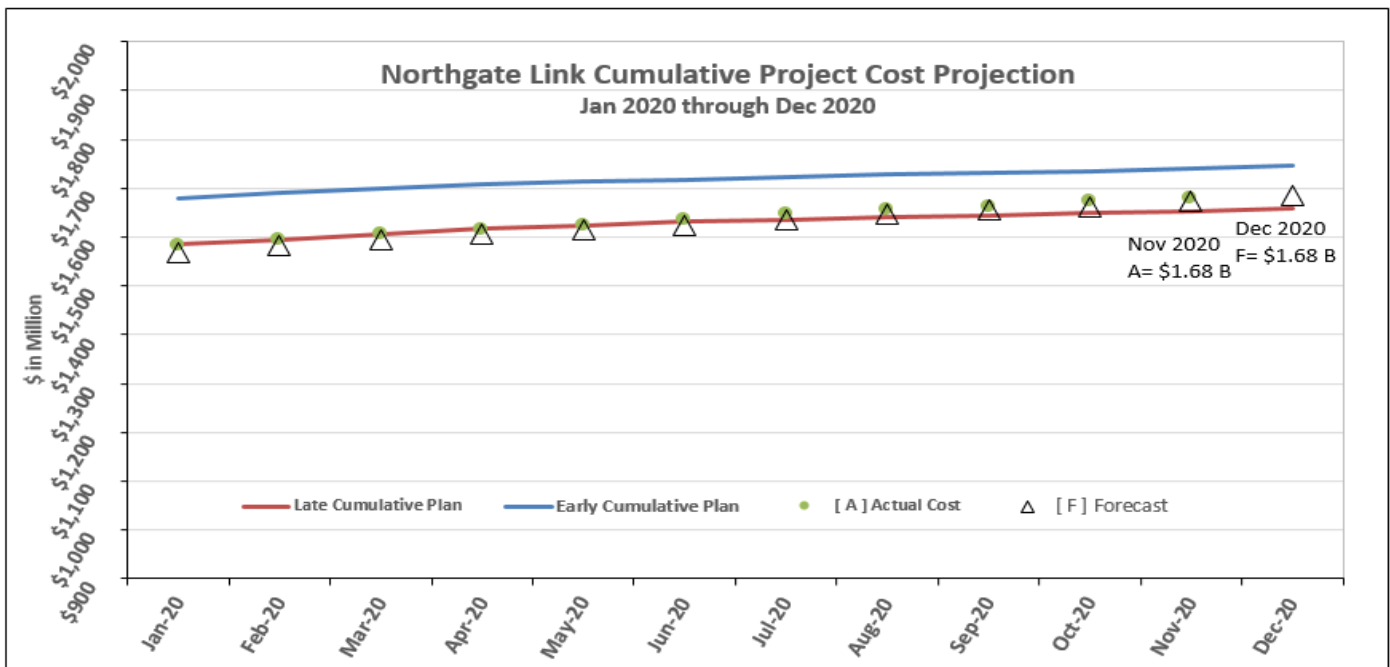
Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$595.6	\$523.2	\$517.2	\$511.9	\$530.7	-\$7.5
20 Stations	\$376.1	\$439.6	\$450.7	\$446.1	\$461.9	-\$22.3
30 Support Facilities: Yard, Shop	\$5.3	\$6.1	\$6.5	\$6.5	\$6.5	-\$0.3
40 Sitework & Special Conditions	\$140.8	\$232.2	\$179.9	\$173.0	\$189.3	\$42.9
50 Systems	\$110.9	\$101.5	\$107.5	\$93.9	\$117.2	-\$15.7
Construction Subtotal (10 - 50)	\$1,228.7	\$1,302.6	\$1,261.8	\$1,231.4	\$1,305.6	-\$3.0
60 Row, Land, Improvements	\$119.9	\$110.9	\$101.7	\$101.7	\$110.9	\$0.0
80 Professional Services	\$420.7	\$424.9	\$356.3	\$346.3	\$424.9	\$0.0
90 Contingency	\$130.4	\$61.4	\$0.0	\$0.0	\$5.9	\$55.5
Total (10 - 90)	\$1,899.8	\$1,899.8	\$1,719.9	\$1,679.4	\$1,847.3	\$52.5

Project Cash Flow Projection

The Northgate Link cost aligns with the planned expenditures as construction activities continue.

Total project cost to date reached \$1.68B of which about \$1.24B (74%) is attributed to construction. The project cost is forecast to level out just below \$1.69B by December 2020, reflecting the winding down of active construction activities as the remaining civil contracts reach Substantial Completion or Closeout.



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 to continuously monitor project status and associated risks. The top project-wide risks are:

- Project-wide: As a result of pandemic conditions related to outbreak of COVID-19, activities on one or more construction projects are impacted.
- N140: Seattle Department of Construction and Inspections (SDCI, or formerly DPD) or Seattle Fire Department will revise fire and life safety codes, or there may be other issues such as different code interpretations that result in additional ventilation, egress, or mechanical and electrical requirements at stations.
- N160: Electrical progress slower than expected (including overcurrent protection issues).
- Project-wide: ST decides to make universal changes to station entrances to create a Fare Paid Zone. This would require substantial demolition/remodel at each station entrance.
- N160: Risk of changes to station design and/or existing transit center operation resulting from various issues with Operations or Facilities.
- N830: Long-lead procurement items or supplier relationships such as signal bungalows, may not be delivered on time.
- Project-wide: Live wire testing of the OCS is experiencing delays which could impact noise and vibration testing and ultimately, the revenue service date.

Contingency Management

The Northgate Link project budget was baselined in 2012 with a total contingency of \$396.2M.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA has been fully depleted and all major contracts have been awarded.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties.

In January 2020, a change was made to how \$22.2M in project contingency is counted. Previously counted as AC, it is now counted as UAC. In addition, \$18.0M in AC was transferred to UAC as part of the 2020 budget update.

In this period, AC decreased by \$0.9M due to change orders on construction contracts. The overall contingency balance remains well above both the minimum and the buffer zone contingency levels.

Contingency Status (Monthly)

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$113.9	6.0%	\$0.0	0.0%
Allocated Contingency	\$184.0	9.7%	\$72.2	43.0%
Unallocated Contingency	\$98.3	5.2%	\$60.1	35.8%
Total:	\$396.2	20.9%	\$132.3	78.8%

Contingency by Type

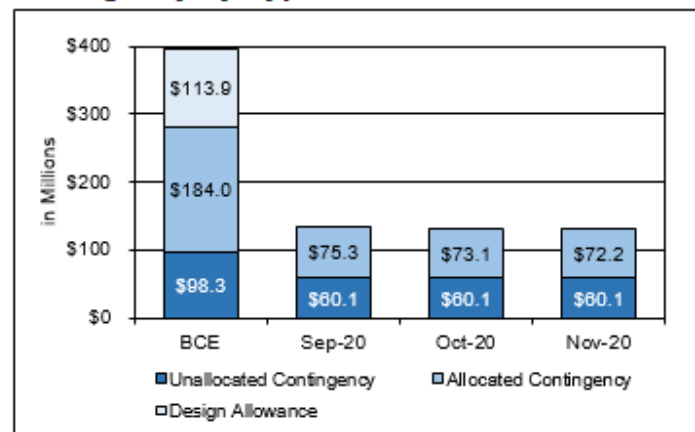
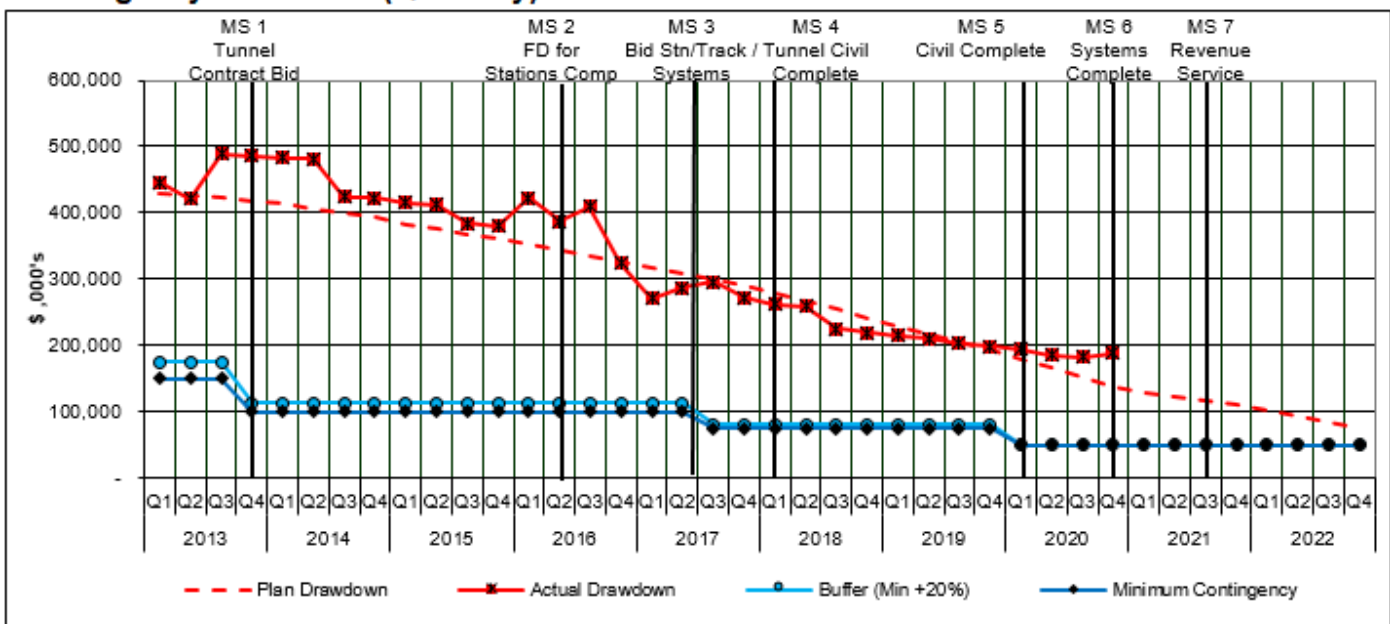


Table figures are shown in millions.

Contingency Drawdown (Quarterly)



Link Light Rail Northgate Link Extension



Project Schedule

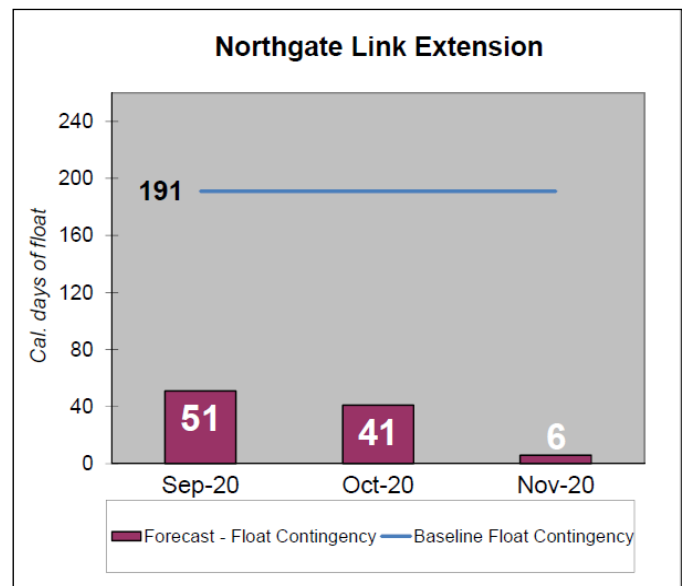
In November 2020, the physical percent complete for all Northgate Link construction contracts is 97.6%, up from 97.4% in October. As the contracts move toward completion, the incremental advance in Percent Complete will slow. The driving factors in the schedule now are the ST led Floating Slab Vibration, EMI, and VAE testing. This work was planned to start in December but is moving to early January. Project float as a result, is being reduced to a minimum. The amount remaining will be dependent on a detailed testing planning effort that is currently underway.

Activity Name	Start	Finish	2015				2016				2017				2018				2019				2020				2021			
			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	Q4
Northgate Link Extension Master Schedule - V																														
Final Design	24-Dec-10 A	05-Nov-21																												
Construction	01-Aug-12 A	27-Jul-21																												
N105 Advanced Demolition & Site Prep - DBB	04-Aug-14 A	28-Nov-16 A																												
N110 Construction Advanced Utility Relocation - DBB	06-Mar-13 A	28-May-13 A																												
N111 Advance Utility Relocation, Northgate Area - DBB	17-Feb-14 A	22-Jun-16 A																												
N112 Advanced Demolition & Site Prep, U District & Roosevelt - DBB	01-Aug-12 A	31-Aug-13 A																												
N113 115kV Relocation at Northgate - DBB	31-May-16 A	21-Feb-17 A																												
N125 TBM Tunnels (UW Station to Maple Leaf Portal) - DBB	30-Sep-13 A	26-Feb-18 A																												
N140 U District Station Finishes - GC/CM	07-Apr-17 A	01-Jul-20 A																												
N150 Roosevelt Station Finishes - GC/CM	02-Dec-16 A	24-Oct-19 A																												
N160 Northgate Station and Elevated Guideway - DBB	02-Sep-16 A	02-Dec-20																												
N180 Trackwork - DBB	25-Aug-16 A	31-Oct-19 A																												
N830 Traction Electrification, Signal & Communications - GC/CM	12-Jun-17 A	05-Apr-21																												
Vibration & EMI Testing	04-Aug-17 A	27-Jul-21																												
Testing & Startup	20-Feb-18 A	05-Nov-21																												
Lvl 1 - 2 Testing - Civil Contracts	20-Feb-18 A	02-Dec-20																												
Lvl 1 - 3 Testing - Systems Contract	13-Feb-19 A	05-Nov-21																												
NLE Rail Activation																														
Pre-Revenue Service	15-Apr-21	09-Aug-21																												
Pre-Revenue Preparation	15-Apr-21	12-May-21																												
Pre-Revenue Operations	13-May-21	09-Aug-21																												
Revenue Service	17-Aug-21	26-Sep-21																												
Project Float & Revenue Service	17-Aug-21	26-Sep-21																												
Revenue Service - Float	17-Aug-21	26-Sep-21																												
Northgate Link Extension - Revenue Service		26-Sep-21*																												

Project Float

Project float for the Northgate Extension decreased from 41 days to a potential 6 days. The decrease was driven by the addition of detailed ST led floating slab and EMI testing. The testing was anticipated to be completed prior to Revenue Service, but must be completed prior to the start of Pre-Revenue service. Challenges with OCS testing are contributing to the loss of float.

Continued detailed test planning and coordination with Operations will more definitively determine the status of project float in subsequent updates.



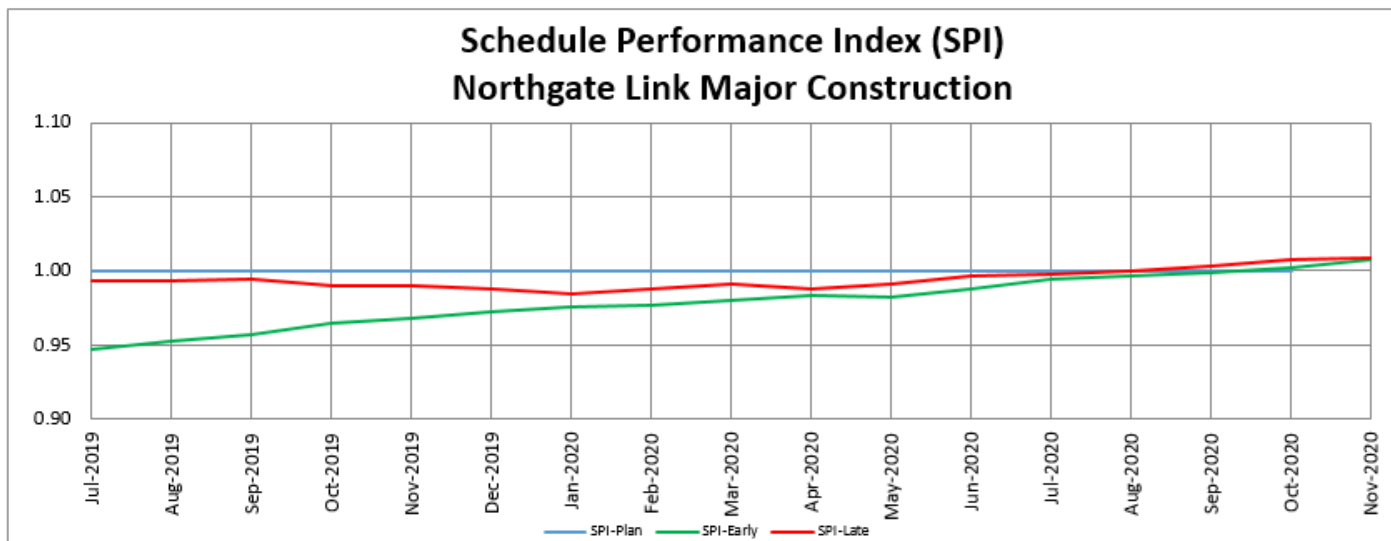
Critical Path Analysis

The critical path for Northgate Link has changed from N830 signals installations and testing to ST led testing for the Floating Slabs, EMI, and VAE systems. The change is a result of three factors: completion of the inspections and approvals for the Signal Houses, a detailed planning effort for the Floating Slab and EMI pre-certification and certification testing, and continuing challenges with the OCS Live Wire testing, which necessitated moving the start of the testing from early December to the beginning of January. The project is currently forecasting a minimum of float, which will be better assessed once the ST testing schedule has been finalized.

Activity ID	Activity Name	Start	Finish	2021											
				Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Northgate Link Extension Master Schedule - V1		13-Feb-19 A	05-Nov-21												
Construction		10-Dec-20	16-Jun-21												
Vibration & EMI Testing		10-Dec-20	16-Jun-21												
Floating Slab Performance		10-Dec-20	16-Jun-21												
Electro-Magnetic Interference (EMI)		04-Jan-21	16-Jun-21												
Testing & Startup		13-Feb-19 A	05-Nov-21												
Lvl 1 - 3 Testing - Systems Contract		13-Feb-19 A	05-Nov-21												
NLE Rail Activation		20-May-21	26-Sep-21												
Pre-Revenue Service		20-May-21	13-Sep-21												
Pre-Revenue Preparation		20-May-21	16-Jun-21												
Pre-Revenue Operations		17-Jun-21	13-Sep-21												
Operator Preparation		17-Jun-21	15-Jul-21												
Simulated Revenue Service/Drills/Upsets		16-Jul-21	13-Sep-21												
Revenue Service		24-Aug-21	26-Sep-21												
Revenue Service Preparation		24-Aug-21	21-Sep-21												
Project Float & Revenue Service		26-Sep-21	26-Sep-21												

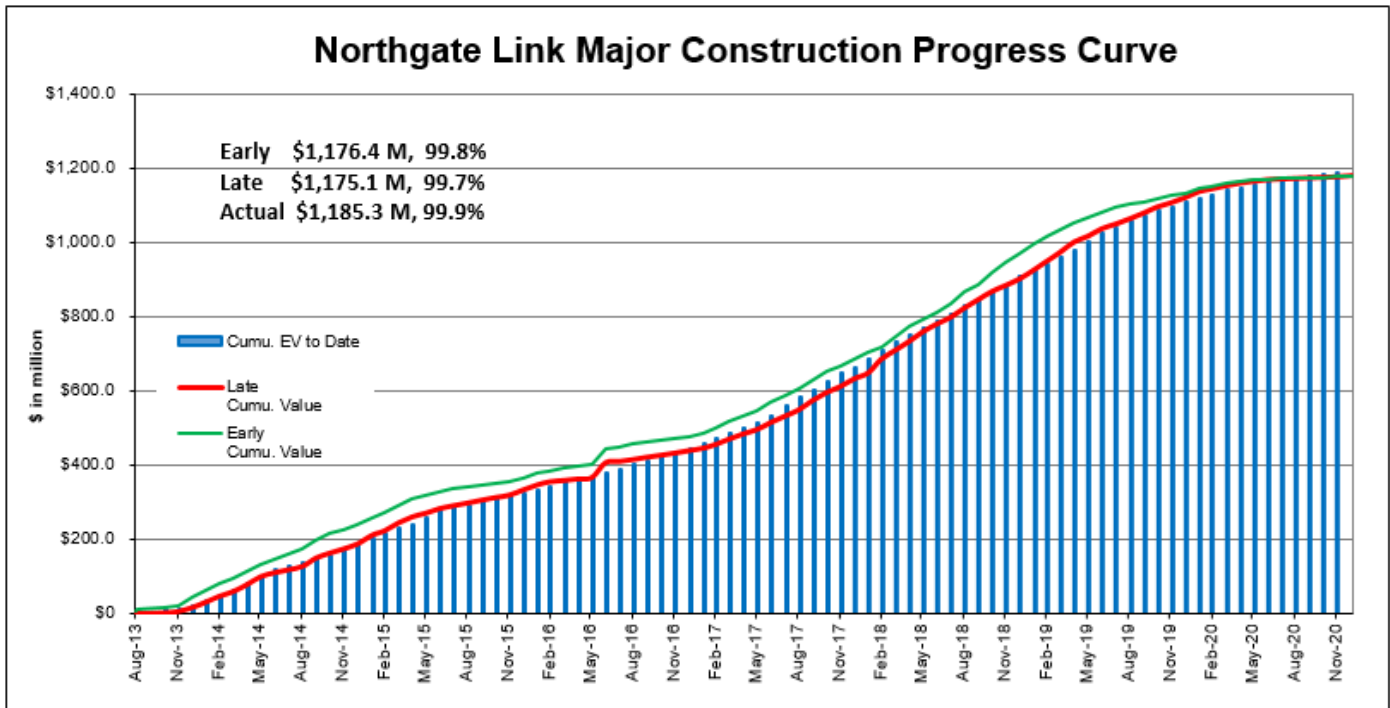
Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 1.01 for this period, and the late SPI is at 1.01, showing that in general, performance remains on, or very close to plan.



Cost Progress Analysis

Overall Northgate Link major construction percent complete analysis is based on a weighted measurement among the six major construction contracts' schedules, durations and costs. The graph below shows the aggregate cost progression for these construction contracts is trending toward the early projection as drawn from the master schedule.



Community Outreach

- Worked with University Manor Apartments and Neptune Theater to remove monitoring equipment in the U District.
- Sent notification of work near Varsity Arms Apartments.
- Worked with Varsity Arms management to prune shrubs abutting the project area.
- Met with Northgate Link Opening Racial Equity Toolkit (RET) team.
- Responded to questions regarding system testing and the opening date.
- Gave presentation on Northgate Link to Seattle and Shoreline Mobility Network.
- Gave presentation on Northgate Link to the Mercer Stakeholders community group.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average takes peaks and valleys in activity into account; whereas the YTD monthly average only reflects actuals from January 2020 till the current month. Project staff support has scaled down faster than anticipated as major civil construction contracts near completion. For the 29 consultant FTEs, we planned for 4 design (including Design Services during Construction) and 25 for construction management. The overrun in YTD is driven by the extension in Civil Substantial Completion dates.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	42	32	(10)
Consultants	29	43	14
TOTAL	71	75	4
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Link Light Rail Northgate Link Extension



Construction Safety

Construction Safety: Northgate Link Extension September 2020

Data/Measure	Nov-20	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	1	114
Days Away From Work Cases	0	0	6
Total Days Away From Work	0	0	397
First Aid Cases	0	7	187
Reported Near Mishaps	0	3	146
Average Number of Employees on Worksite	57	-	-
Total # of Hours (GC & Subs)	9,456	277,480	5,185,642
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0	0.72	4.4
LTI Rate	0	0	0.23
Recordable National Average	3		
LTI National Average	1.2		
Recordable WA State Average	6		
LTI WA State Average	1.9		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals.

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Major Construction Contract Packages

Below are the major construction contract packages for the project with a brief scope description of each.

N105 Advance Demolition and Site Prep - Demolition of Key Bank Building, removal of underground storage tanks and remediation of contaminated soil at UDS. Demolition site and site prep at strip mall near the NG Station. (Complete)

N111 Advanced Utility Relocation at Northgate Area - Relocation of 26kV and communication lines at the Northgate Station vicinity. (Complete)

N113 115kV Relocation at Northgate Station Area - Relocation of overhead electrical facilities at the Northgate Station area. (Complete)

N125 TBM Tunnels UW Station to Maple Leaf Portal - Tunneling work and support of excavation of station boxes for the U District and Roosevelt stations. (Complete)

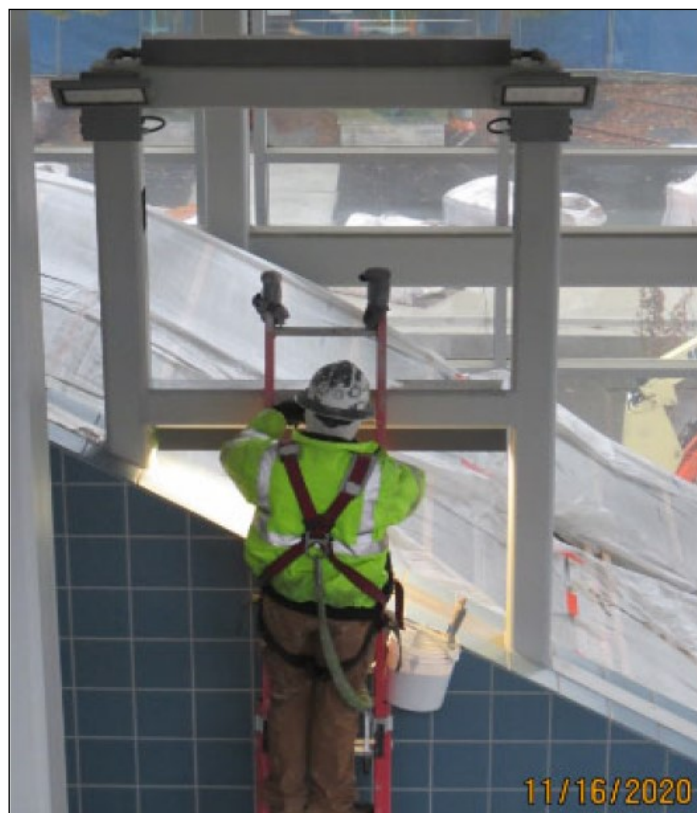
N140 U District Station Finishes - Civil and architectural finishes work for the U District Station (Substantially Complete)

N150 Roosevelt Station Finishes – Civil and architectural finishes work for the Roosevelt Station (Substantially Complete)

N160 Northgate Station & Elevated Guideway & Parking Garage - Civil and architectural finishes work for the Maple Leaf Portal, the aerial guideway, and the Northgate Station and Tail Track. Construction of a 450 stall parking garage to be located at the south corner of the existing Northgate Mall surface parking lot at NE 103rd St. near 1st Avenue NE.

N180 Trackwork - Installation of all trackwork through two tunnels and three stations between UW Station and Northgate Station, including tail track. (Substantially Complete)

N830 Track Electrification, Signals, Communication System - Installation of the major system elements – Traction Electrification, 26kV Distribution, Signals, and Communications.



N160—Worker applying finishing paint touches above stairway at Northgate Station.

Contract N140—U District Station Finishes

Current Progress

The N140 Contractor, Hoffman Construction, achieved Substantial Completion on April 3, 2020. Hoffman focused on the following activities through the end of November:

- Continued working on punch list items.
- Continued change management activities.
- Continued preparations for articulated lift enclosure for Operations.
- Continued installing drainage trough at the tunnel egress to control water from the walkway and adjusting fixtures.

Next Period's Activities

- Continue working on punchlist items.
- Commence escalator balustrade lighting change.
- Continue working on change management items.

Closely Monitored Issues

- Nothing to report.

Cost Summary

Present Financial Status	Amount
N140 Contractor—Hoffman Construction	
Original Contract Value	\$159,836,688
Change Order Value	\$ 12,088,452
Current Contract Value	\$171,925,140
Total Actual Cost (Incurred to Date)	\$167,935,841
Percent Complete	99.4%
Authorized Contingency	\$ 15,491,834
Contingency Drawdown	\$ 12,088,452
Contingency Index	1.3



University District Station - Trench backfill progress

Link Light Rail Northgate Link Extension



Contract N150 – Roosevelt Station Finishes

Current Progress

The N150 Contractor, Hoffman Construction, achieved Substantial Completion on September 24, 2019. Hoffman focused on the following activities through the end of November:

- Continued preventative maintenance activities.
- Completed Escalator 1-8 lighting modifications.
- Completed removing temporary sump drainage piping from tunnels

Next Period's Activities

- Continue punchlist items.
- Continue preventative maintenance activities.
- Continue work on change management and close-out documentation.

Closely Monitored Issues

- Nothing to report.

Cost Summary

Present Financial Status	Amount
N150 Contractor—Hoffman Construction	
Original Contract Value	\$152,291,184
Change Order Value	\$17,305,613
Current Contract Value	\$169,596,797
Total Actual Cost (Incurred to Date)	\$168,158,106
Percent Complete	99.9%
Authorized Contingency	\$18,914,559
Contingency Drawdown	\$17,305,613
Contingency Index	1.1

Contract N160 – Northgate Station, Elevated Guideway, and Parking Garage

Current Progress

The N160 prime contractor, Absher Construction, and its various subcontractors are continuing work in all areas of the project. Accomplishments through the end of November include:

- Weekly Environmental site walk, safety walk were conducted.
- Completed track edge angle survey. Handrail/guardrail painting to continue.
- Work on garage-crack sealing work completed, continuing to work on water leak injections.
- Continued with main station work including continuing with cleanup, chipped around fire valve piping through floor, placed pea gravel, welding work, installed bike rack, etc.

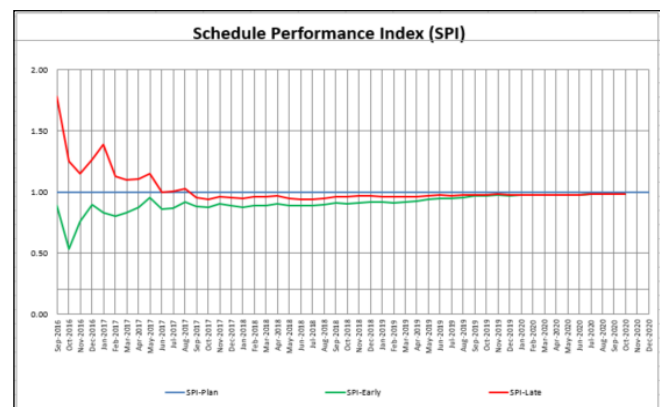
Schedule Summary

The project schedule for October forecasts a Substantial Completion date of December 18, 2020, negative 155 days beyond the current contract date of July 16, 2020. The critical path is now driven by completion of Commissioning at MLP and pre-punchlist corrections. Substantial Completion is forecast for mid-December. The November update has been submitted and is under review.

Activity Name	OD	RD	Start	Finish	2017				2018				2019				2020							
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
N160 - Northgate Station Finishes	1106	33	01-Sep-16 A	18-Jan-21																				
1.00 - General Requirements	1087	0	01-Sep-16 A	18-Dec-20																				
1.10 - Project Start-up	0	0	01-Sep-16 A	01-Sep-16 A																				
Contract Award/NTP (See Site Access Dates)	0	0	01-Sep-16 A																					
1.20 - Contractual Milestones	0	0	18-Dec-20	18-Dec-20																				
Absher Contract Milestones	0	0	18-Dec-20	18-Dec-20																				
MS08 - Substantial Completion [Site Access+1201d; 10/17/16, then by 1/30/20] Rev to 5/23/20 (CO-271) Rev	0	0		18-Dec-20																				
2.00 - Procurement	791	1	02-Sep-16 A	01-Dec-20																				
3.00 - Preparatory Work	861	14	17-Oct-16 A	18-Dec-20																				
4.00 - Earthwork & Utilities	874	1	04-Jan-17 A	01-Dec-20																				
5.00 - Guideway (inc. Station Unit)	929	0	03-Jan-17 A	06-Nov-20 A																				
6.00 - Station Finishes	790	10	27-Mar-18 A	14-Dec-20																				
7.00 - Garage	790	0	27-Jun-17 A	30-Nov-20 A																				
8.00 - At-Grade Restoration	823	17	22-Sep-17 A	23-Dec-20																				
9.00 - Transition to Operations	5	0	14-Jan-19 A	22-Jan-19 A																				
10.00 - Project Close-out	224	33	26-Feb-20 A	18-Jan-21																				

Schedule Performance Index

This period, the SPI early is 0.99 (same as last period) and the SPI late is at 0.99 (same as last period), indicating no major change in performance since last month. However, the indices indicate that the contractor continues performing slightly behind plan when compared to the baseline schedule. Overall work progress has remained within 0.01 of its current trend over the last year.



Next Period's Activities

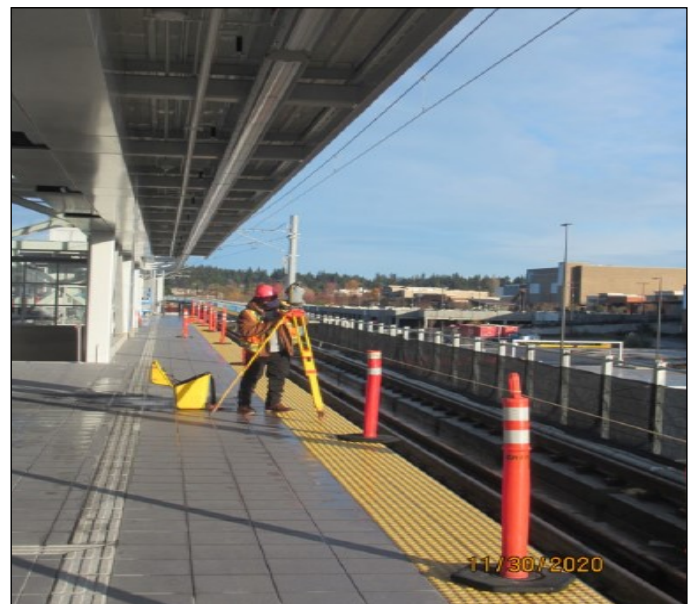
- Continue injects to stem water infiltration in fire valve room.
- Continue with handrail/guardrail painting, placement of bottom landing at Stair 4 steps.
- Installation of guardrail extensions to guideway from stair tower.
- Continue punchlist work, installation of curtain wall trim pieces.
- Installation of door hardware/thresholds to retest.
- Continue guideway sealants and station paint touch-up.
- To finish concrete pavement repair of unacceptable cracks.
- Substantial completion walks scheduled.
- Complete fencing along west perimeter along WSDOT slope.
- Continue finalizing BMS testing in Stair tower and Ancillary buildings.

Closely Monitored Issues

- Contractors continuing to investigate Mezzanine roof leak.
- Some NCR issues were not acknowledged, and is being disputed. This will potentially cause close-out delays.
- Electrical progress including overcurrent protection issues slower than expected due to delay in systems integration, startup and testing.
- Delay to substantial completion delaying start up and commissioning.
- Pandemic conditions related to outbreak of COVID-19 impacts on delayed construction activities and delays to Substantial Completion and/or Acceptance.
- Risk of changes to station design and/or existing transit center operation resulting from various issues with King County (Metro bus), Operations or Facilities.
- Inspection of escalators has identified lighting deficiencies and pinch point concerns.
- Overcurrent Protection Studies - Station and MLP submittals were returned for Siemen's response.

Cost Summary

Present Financial Status	Amount
N160 Contractor - Absher Construction	
Original Contract Value	\$ 174,000,000
Change Order Value	\$ 14,502,972
Current Contract Value	\$ 188,502,972
Total Actual Cost (Incurred to Date)	\$ 185,849,508
Percent Complete	98.6%
Authorized Contingency	\$ 17,400,000
Contingency Drawdown	\$ 14,502,972
Contingency Index	1.2



Station Platform - ST surveyor crew measuring elevation of edge of platform to track.

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Contract N180 – Trackwork UWS to Northgate Station

Current Progress

The N180 Contractor, Stacy and Witbeck, Inc. (SWI) achieved Substantial Completion of all Milestones on October 31, 2019.

Remaining work includes punch list items for all work areas and documentation prior to closeout, which is almost complete with the exception of a few remaining documents currently in process.

Next Period's Activities

- Issue the final change order for the credit of unused provisional sums, which is reflected in the Cost Summary table below.
- Approval of the final invoice, payment and closure of this Contract.

Closely Monitored Issues

- Communication and coordination between contracts is ongoing, monitoring related activities to bring the contract to a successful close-out.

Cost Summary

Present Financial Status	Amount
N180 Contractor - Stacy and Witbeck, Inc.	
Original Contract Value	\$ 71,455,950
Change Order Value	\$ 4,017,015
Current Contract Value	\$ 75,472,965
Total Actual Cost (Incurred to Date)	\$ 75,472,965
Physical Percent Complete	100.0%
Authorized Contingency	\$ 10,718,393
Contingency Drawdown	\$ 4,017,015
Contingency Index	\$ 2.67



Closeout activities continue

Contract N830 – Northgate Link Systems, Heavy Civil GC/CM

Current Progress

The N830 Contractor, Mass Electric Construction Co. (MEC), continued to carry out the work as follows:

- Installed radio racks and communications devices at Roosevelt Station (RVS).
- Installed radio racks, communication devices and performed DCAM testing at U District Station (UDS).
- Installed feeder cabling, cameras, speakers, communication cables, radio equipment and performed cable pulling at Northgate Station.

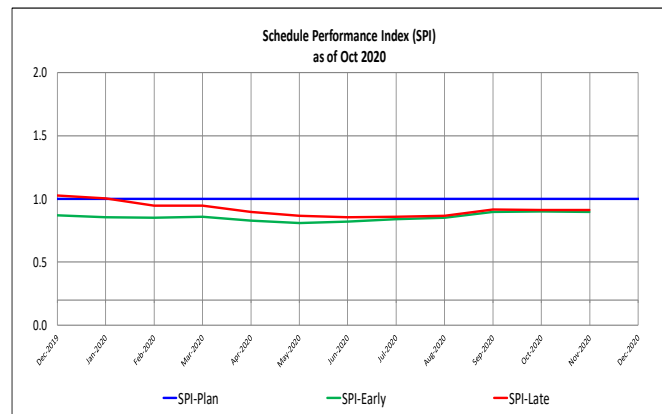
Schedule Summary

The N830 November schedule update forecasts a *Substantial Completion* of May 7, 2021. The critical path for the contract is driven by the delivery and installation Train Control (TC) House to be installed at the Northgate Station. This installation drives the final testing of the SCADA system and subsequent As-Built drawings. The schedule update has been reviewed, and comments resolved. *Milestone 10—Completion of Tunnel* work between UWS and UDS is now forecast for December 4, 2020. Floating Slab pre-certification testing is now planned to start in January.

Activity Name	OD	RD	Start	Finish	017	2018				2019				2020				2021			
						Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
N830/E750 - Systems	966	109	12-Jun-17 A	07-May-21																	
General	0	0	12-Jun-17 A	12-Jun-17 A																	
Key Dates	0	0	12-Jun-17 A	12-Jun-17 A																	
NTP - Notice to Proceed (NTP) Northgate and East Link	0	0	12-Jun-17 A																		
N830 Project	834	109	20-Dec-17 A	07-May-21																	
N830 Construction	834	109	20-Dec-17 A	07-May-21																	
N830 Milestones	0	0	07-May-21	07-May-21																	
MS#05 Northgate: Substantial completion of Northgate Link systems (12/31/20)	0	0		07-May-21																	
N830 OCS	558	6	10-Sep-18 A	08-Dec-20																	
N830 Traction Power / Substations Procurement	746	21	20-Dec-17 A	06-Jan-21																	
N830 Signals	587	35	15-Aug-18 A	25-Jan-21																	
N830 Communications	717	23	10-Feb-18 A	08-Jan-21																	
N830 Radio	580	5	09-Jul-18 A	07-Dec-20																	
N830 Trunk Fiber	574	22	28-Sep-18 A	07-Jan-21																	
N830 Testing and Commissioning	639	91	07-Sep-18 A	13-Apr-21																	

Schedule Performance Index

Performance for October is shown as the November invoice has been submitted but not approved. October SPI-Early is 0.9 (same as last period) and the SPI-Late is 0.91 (same as last period). Activities decreased in response to the COVID-19 pandemic. On April 3rd, Sound Transit issued a Stop Work order until May 4, 2020, which limited work that was allowed on site. October performance data has been submitted and is under review by ST.



Link Light Rail Northgate Link Extension

Next Period's Activities

- Continue development and reviews of engineering submittals covering all disciplines: Traction Power Substations (TPSS), Overhead Catenary Systems (OCS), Train Control Signal Systems, and Communications.
- Ongoing coordination meetings between systems and civil contractors for interface and access points for respective contracts.
- Ongoing installation of TPSS equipment in train control room, and signal racks in train control equipment room and communication cables/devices at University District Station.
- Ongoing installation of TPSS wiring, cables and conduit. Continue device testing and energize systems at Roosevelt Station.
- Ongoing installation of cabling, testing and inspection at Northgate Station.

Closely Monitored Issues

- ST and CMC closely monitoring conduit handover from Civil to Systems contractor; mitigation steps have been taken by the Systems CMC surveying all conduits and to work closely with the Civil Contractors to rectify the situation.
- Sound Transit and CMC are concerned contractor's ramp-up of labor is not sufficient to meet the planned construction activities. Sound Transit and CMC are closely tracking the planned ramp-up of labor in comparison to actual progress.
- Ongoing impacts to worker productivity due to the COVID-19 pandemic and the necessity to wear masks and practice social distancing on the jobsite are being closely monitored and will be further assessed once better characterized.

Cost Summary

Present Financial Status	Amount
N830 Contractor - Mass Electric Construction Co.	
Original Contract Value	\$104,660,444
Change Order Value	\$1,450,412
Current Contract Value	\$106,110,856
Total Actual Cost (Incurred to Date)	\$88,251,072
Percent Complete	88%
Authorized Contingency	\$5,233,022
Contingency Drawdown	\$1,450,412
Contingency Index	3.11

**The N830 and E750 Systems is a joint procurement. The Cost Summary table above represents N830 Systems only.*



Installing feeder cabling south of Northgate Station.

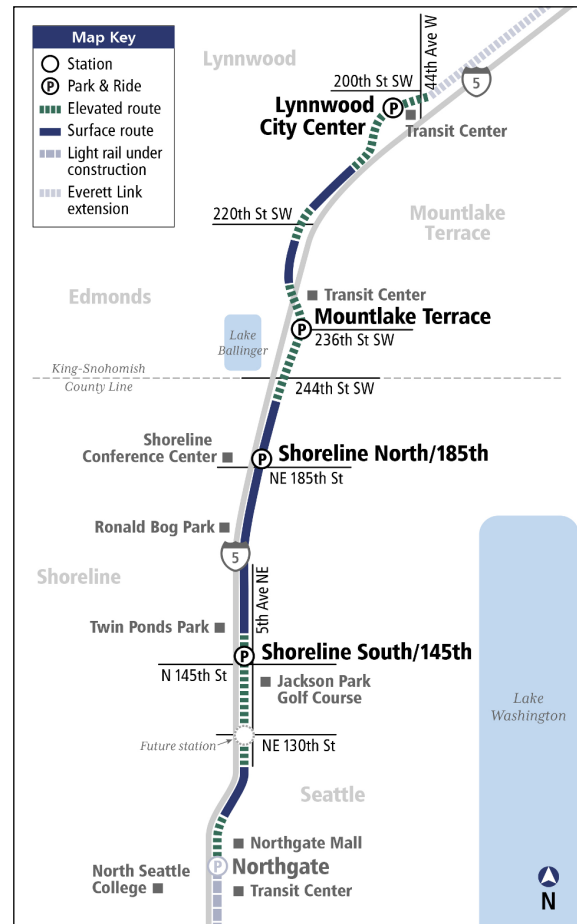
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Link Light Rail Lynnwood Link Extension

Project Summary

Scope

Limits	North Seattle to Shoreline, Mountlake Terrace, and Lynnwood Transit Center
Alignment	Lynnwood Link extends light rail 8.5 miles to Snohomish County along I-5 from Northgate Mall in Seattle to the Lynnwood Transit Center, with four new light rail stations. The configuration includes at-grade, elevated, and retained cut/fill guideway.
Stations	Shoreline South/145th Shoreline North/185th Mountlake Terrace Lynnwood City Center
Systems	Signals, traction power, communications, and SCADA.
Phase	Construction
Budget	\$2.772 Billion (Baseline May 2018)
Schedule	Revenue Service: July 2024



Map of Lynnwood Link Extension Alignment.

Key Project Activities

- Continued drilled shaft work on L300.
- Continued concrete placement for columns and caps and placement of prestressed concrete girders for the aerial guideway on both civil contracts. Continued wall construction work on both contracts.
- Commenced placement of aerial guideway elevated deck concrete on both civil contracts.
- Continued construction of the Shoreline South / 148th Parking Garage with wall concrete placements and elevated deck formwork (L200).
- Continued construction of the Shoreline North / 185th Station and Parking Garage with excavation for foundations and below-grade utility activities (L200).
- Continued construction of ancillary support buildings for the future Mountlake Terrace Station (L300).
- Continued construction of the Lynnwood City Center Station and Parking Garage with below-grade utilities and foundation reinforcing steel. Completed demolition of strip mall building along 200th St SW (L300).
- Completed falsework erection over southbound I-5 for the long span overcrossing structure (L300).
- Continued final design work for widening 200th Street SW in the City of Lynnwood.
- Executed the Lynnwood option to integrate the L800 Systems GC/CM scope into the existing N830/E750 contract following late July Board authorization.
- Continued final design and integrated structure construction for the future 130th Station, as authorized in the February Board meeting. (Note: NE 130th Street Station is a separate project from Lynnwood Link, funded under the ST3 program)

Project Cost Summary

The project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

In November 2020, \$38.6 M was incurred. The major project expenditures were for civil construction, construction management, and design services during construction. The remaining expenditures were for right-of-way, third party coordination, permitting, staff, legal and other direct charges.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$98.2	\$98.2	\$43.7	\$43.6	\$98.2	\$0.0
Preliminary Engineering	\$39.1	\$39.1	\$39.1	\$39.1	\$39.1	\$0.0
Final Design	\$164.2	\$164.2	\$141.9	\$125.1	\$164.2	\$0.0
Construction Services	\$128.4	\$128.4	\$110.8	\$47.5	\$128.4	\$0.0
3rd Party Agreements	\$14.6	\$14.6	\$10.5	\$9.5	\$14.6	\$0.0
Construction	\$1,921.4	\$2,091.6	\$1,875.6	\$582.5	\$2,091.5	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$235.7	\$235.7	\$181.7	\$166.7	\$235.7	\$0.0
Project Contingency	\$170.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$2,771.6	\$2,771.6	\$2,403.3	\$1,013.8	\$2,771.6	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$791.8	\$1,002.2	\$677.0	\$182.4	\$803.6	\$198.6
20 Stations	\$333.8	\$333.8	\$409.3	\$91.4	\$430.8	-\$97.1
30 Support Facilities	\$2.0	\$2.0	\$0.0	\$0.0	\$2.0	\$0.0
40 Sitework & Special Conditions	\$421.1	\$426.2	\$585.1	\$294.4	\$558.6	-\$132.4
50 Systems	\$244.4	\$244.4	\$194.1	\$10.4	\$213.5	\$30.9
Construction Subtotal (10 - 50)	\$1,793.0	\$2,008.5	\$1,865.5	\$578.5	\$2,008.5	\$0.0
60 ROW, Land	\$235.7	\$235.7	\$181.7	\$166.7	\$235.7	\$0.0
70 Vehicles (Non-Revenue)	\$1.4	\$1.4	\$0.0	\$0.0	\$1.4	\$0.0
80 Professional Services	\$449.3	\$447.4	\$356.1	\$268.6	\$448.0	-\$0.6
90 Unallocated Contingency	\$292.2	\$78.6	\$0.0	\$0.0	\$78.0	\$0.6
Total (10 - 90)	\$2,771.6	\$2,771.6	\$2,403.3	\$1,013.8	\$2,771.6	\$0.0

Link Light Rail Lynnwood Link Extension

Contingency Management

The Lynnwood Link project budget was baselined in May 2018 with a total contingency of \$737.7 M.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA was fully drawn down when all construction contract packages reached the 100% design level.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties.

Following a significant drawdown in project contingency in Q2/Q3 2019, Sound Transit revised the contingency forecast to align with the cash flow forecast of the major civil contracts.

During the current period there was no change to contingency.

Contingency Status

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$247.9	8.9%	\$0.0	0.0%
Allocated Contingency	\$197.6	7.1%	\$164.5	9.4%
Unallocated Contingency	\$292.2	10.5%	\$78.0	4.4%
Total:	\$737.7	26.6%	\$242.5	13.8%

Contingency by Type

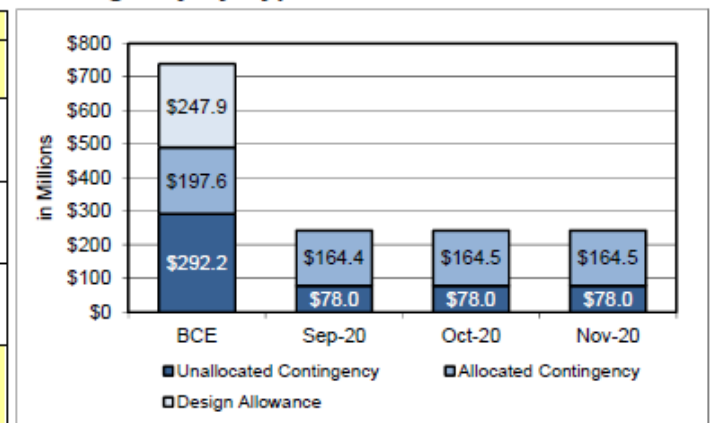
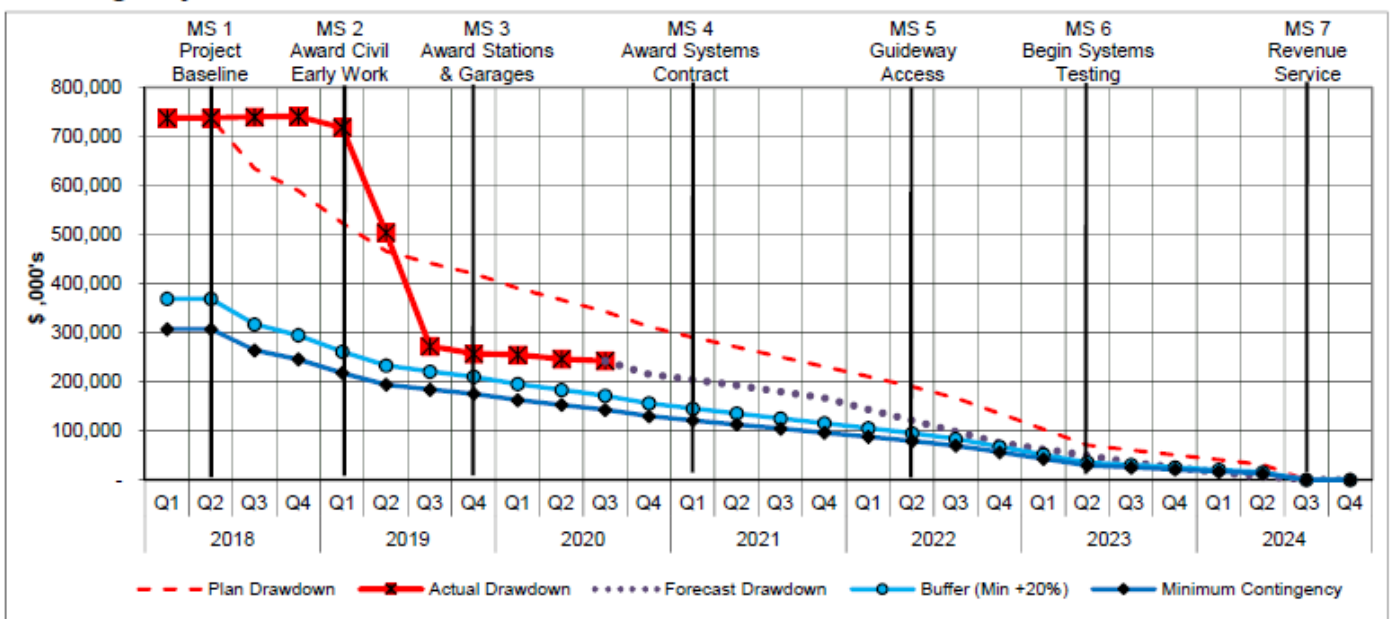


Table figures are shown in millions.

Contingency Drawdown



Risk Management

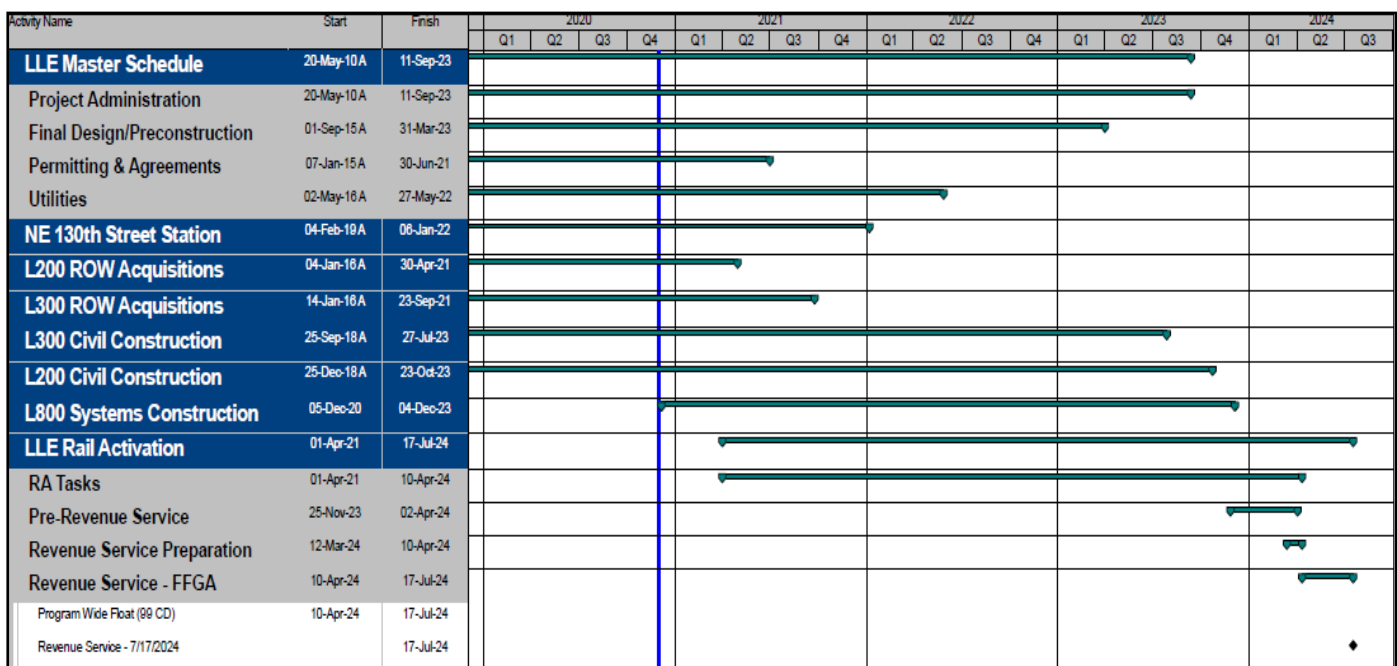
The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks. It is Sound Transit's responsibility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

The following are the top project risks:

- Inefficiencies in construction resulting from ongoing safety protocols instituted in response to the COVID-19 pandemic, including long lead material supplier delays and/or delays in permit inspections.
- Maintaining positive relationships with GC/CM contractors and culture of collaboration for each contract.
- Tight budget, limited contingency, and changes during construction that impact cost and schedule.
- Adequacy and consistency of design documents for the civil contracts.
- Quality of CPM schedule submittals from the civil contractors impairs master schedule clarity and reliability.
- Delays in long lead procurement of girders, elevators, escalators and other key material/equipment/resources.
- Timely completion of necessary utility relocations, ROW acquisition and ROW relocations.
- Coordination of civil/systems interface and potential for civil construction delays to systems construction.
- Increase in elevated work activity as girders are placed and I-5 overcrossing work continues, along with the associated night work and safety implications that come with the increase.

Project Schedule

The November update maintains the July 2024 revenue service date. Program-wide float decreased to 99 days, driven by logic and sequencing in the L200 schedule. Recent changes to the L200 schedule are currently under review. Absent these changes, the driving path of the program remains construction of the Shoreline South/148th Station. The L800 contractor has continued work on the baseline schedule for the Systems installations. This schedule is expected to be submitted in early December, after issuance of the Notice to Proceed.



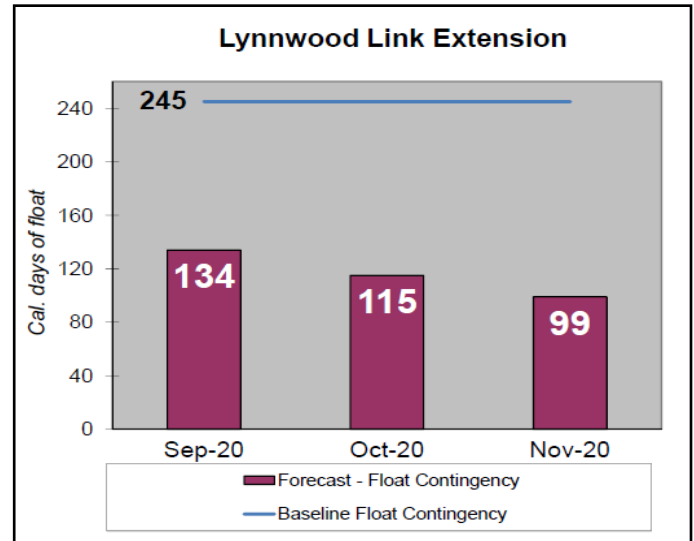
Link Light Rail Lynnwood Link Extension



Project Float

The Lynnwood Link Extension was baselined with 245 days of project float. Currently, the project is calculated to have 99 days remaining between completion of work and the 17-Jul-2024 revenue service date. The change in float is due to recent changes made within the L200 schedule that ST is reviewing and has not accepted at this time. Absent those changes, project float would remain at 134 days.

The impact of the COVID-19 shutdown has yet to be assessed, as well.



Critical Path Analysis

The critical path for the Lynnwood Link Extension continues to be the L200 contract. The contractors' re-sequenced construction of a utility protection slab increased in duration and remains a predecessor to Wall 2500. This results in the continuing negative shift in the Work Zone 2 at-grade track segment pushing L200's Milestone 2 track handover to L800. ST is conducting a detailed review and field validation of the changes at this time. This path remains subject to change with the assessment of COVID-19 impacts.

Activity ID	Activity Name	CO	RO	Start	Finish	2021				2022				2023				2024				
						Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
L200 Civil Construction																						
	Project Wide	373	365	06-Nov-20A	10-May-22																	
	Milestones	67	67	07-Feb-22	10-May-22																	
	Punchlist & Commissioning	15	15	28-Apr-22	10-May-22																	
	WZ-2 At Grade - Fill (1458+63 to 1492+45)	58	58	07-Feb-22	25-Apr-22																	
	Utilities	308	298	06-Nov-20A	04-Feb-22																	
	Excavation	28	20	06-Nov-20A	29-Dec-20																	
	Retaining Walls	32	32	21-May-21	07-Jul-21																	
	Trackwork	110	110	30-Dec-20	04-Jun-21																	
	Systems	148	148	08-Jul-21	04-Feb-22																	
		15	15	07-Jun-21	25-Jun-21																	
L800 Systems Construction																						
	L800 Milestones	385	385	11-May-22	20-Nov-23																	
	L800 Engineering	0	0	11-May-22	11-May-22																	
	L800 Submittals	201	201	11-May-22	01-Mar-23																	
	L800 Construction	201	201	11-May-22	01-Mar-23																	
	L800 OCS	280	280	11-May-22	21-Jun-23																	
	L800 Testing and Commissioning	280	280	11-May-22	21-Jun-23																	
		105	105	22-Jun-23	20-Nov-23																	
LLE Rail Activation																						
	RA Tasks	929	929	01-Jan-22	17-Jul-24																	
	TASK 01 - Rail Activation Management	734	734	01-Jan-22	04-Jan-24																	
	TASK 04 - Rail Operations	22	22	01-Jan-22	22-Jan-22																	
	TASK 07 - Safety and Security	1	1	02-Feb-22	02-Feb-22																	
	TASK 09 - External Agreements	30	30	21-Nov-23	04-Jan-24																	
	Pre-Revenue Service	60	60	10-Jan-22	11-Mar-22																	
	Pre-Revenue Preparation	98	98	28-Dec-23	02-Apr-24																	
	Operator Preparation	7	7	28-Dec-23	04-Jan-24																	
	Simulated Revenue Service/Drills/Upsets	29	29	04-Jan-24	02-Feb-24																	
	Revenue Service Preparation	60	60	02-Feb-24	02-Apr-24																	
	Revenue Service	29	29	12-Mar-24	10-Apr-24																	
	Project Float & Revenue Service	99	99	09-Apr-24	17-Jul-24																	
	Revenue Service - FFQA	99	99	10-Apr-24	17-Jul-24																	

Community Engagement

Distributed construction alerts via project page, .gov list server, email and door to door for the following activities around the project site, including:

- Lane and shoulder closures along northbound and southbound I-5, and full overnight southbound closure.
- Virtual presentation at a Shoreline Neighborhood Council meeting.
- Night closure for work at 1st Ave. NE and Northgate Way.
- Notification of outage at the Seattle Latvian Evangelical Lutheran Church.
- Worked with North Seattle Church of the Nazarene to respond to and resolve concern.
- Night work and closures near NE 130th St. and NE 145th St.
- Aldercrest staging yard construction.
- Closures of I-5 on and off-ramps State Route (SR) 104 for night work.
- Night work and closures of 212th St SW and 220th St. SW.
- Night work along 60th Ave. W.
- Closure at 46th Ave W/HOV ramps to Lynnwood Transit Center.

Right-of-Way

The Right-of-Way effort for this project involves the acquisition of a range of property interests which includes compensable (e.g. fee acquisitions, guideway easements, permanent and temporary construction easements) and non-compensable rights (e.g. rights of entry). These acquisitions will result in owner and tenant residential and commercial relocations. The Right-of-Way program status for this period is summarized in the following table.

Lynnwood Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date *	Relocations Required	Relocations Completed to date
363	400	776	725	440	369
All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods. The number of Offers Made are inclusive of offers made to separate owners or interest holders. These numbers will exceed the number of Board Approved parcels. *Total number of parcels available for construction = 322.					

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Link Light Rail Lynnwood Link Extension



Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual average FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Less staff than planned has been needed for civil final design, design services during construction, and construction management. The trends are being watched; all contracts still anticipate completion within budget.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	42.6	37.0	(5.6)
Consultants	87.0	81.0	(6.0)
TOTAL	129.6	118.0	(11.6)

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.

Construction Safety

Data/Measure	Nov 2020	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	10	11
Days Away From Work Cases	0	1	1
Total Days Away From Work	0	35	35
First Aid Cases	3	29	37
Reported Near Mishaps	1	12	21
Average Number of Employees on Worksite	445	-	-
Total # of Hours (GC & Subs)	111,863	836,990	1,043,019
OSHA Incident Rates	Nov. 2020	Year to Date	Project to Date
Recordable Injury Rate	3.6	2.4	2.1
LTI Rate	0.0	0.2	0.2
Recordable National Average	3.0		
LTI National Average	1.2		
Recordable WA State Average	6.0		
LTI WA State Average	1.9		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals. Data includes the L200 and L300 contracts.

Contract L200 GC/CM—Northgate to NE 200th Street

Current Progress

The L200 Contractor, Stacy & Witbeck– Kiewit– Hoffman JV (SKH), is continuing work on site as follows:

- Work Zone (WZ)-1: Completed form/concrete placement for deck span A10-A11.
- WZ-2: Completed Wall 2108 excavation and lagging installation.
- WZ-3: Completed transition zones, columns and caps at columns C22, C25, C37.
- WZ-4: Completed concrete placement and backfill for the south side of the 148th garage.
- WZ-10: Completed excavation and began formwork and rebar for 185th the garage footings.

Schedule Summary

The November update now forecasts a September 9, 2023 substantial completion date, 53 days later than the contractual milestone date of July 18, 2023. Within the L200 contract schedule, the critical path is driven by construction of the protection slab over a water line in Work Zone 2 and Wall 2500, placing this work on the project's critical path. These revisions are under review; without their integration, the critical path remains the delivery and placement of girders for the elevated guideway sections, then into the Shoreline South / 148th Station, eventually leading to L200 substantial completion.

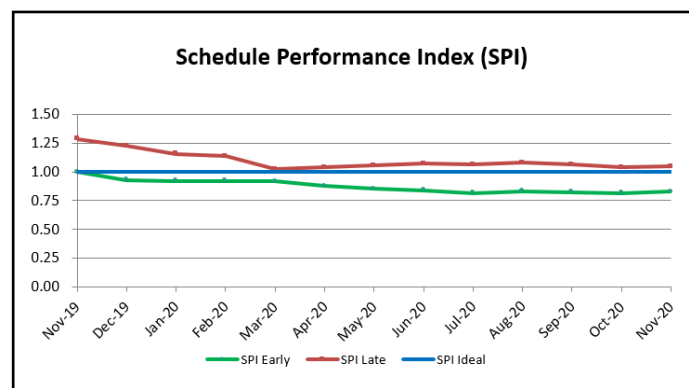
Activity Name	Start	Finish	2021					2022				2023			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L200 Civil Construction	25-Dec-18A	23-Oct-23													
Project Wide	25-Dec-18A	23-Oct-23													
Stations & Garages	20-Mar-20A	30-Dec-20													
WZ-1 Elevated (1437+00 to 1458+63)	15-May-19A	20-Dec-22													
WZ-2 At Grade - Fill (1458+63 to 1492+45)	21-Mar-19A	25-Aug-23													
WZ-3 Elevated Seattle (1492+45 to 1542+75)	23-Mar-19A	25-Aug-23													
WZ-3 Elevated Shoreline (1542+75 to 1559+17)	26-Mar-19A	25-Aug-23													
WZ-4 145th Station & Garage	08-Apr-19A	18-Aug-23													
WZ-5 At Grade - Fill (1559+17 to 1571+30)	26-Mar-19A	25-Aug-23													
WZ-6 155th Bridge (1571+30 to 1572+40)	17-Jun-19A	16-Aug-22													
WZ-7 At Grade - Retained (1572+40 to 1624+00)	27-Mar-19A	25-Aug-23													
WZ-8 175th Bridge (1624+00 to 1631+25)	25-Apr-19A	19-Jan-23													
WZ-9 At Grade - Cut (1631+25 to 1667+50)	15-Apr-19A	25-Aug-23													
WZ-10 185th Station & Garage	15-Apr-19A	25-May-23													
WZ-11 At Grade (1667+50 to 1694+01)	09-Apr-19A	25-Aug-23													
Ronald Bog	12-Jun-19A	01-Dec-20													

Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule (early dates). This period, the early SPI is 0.83 (increase from 0.82 last period).

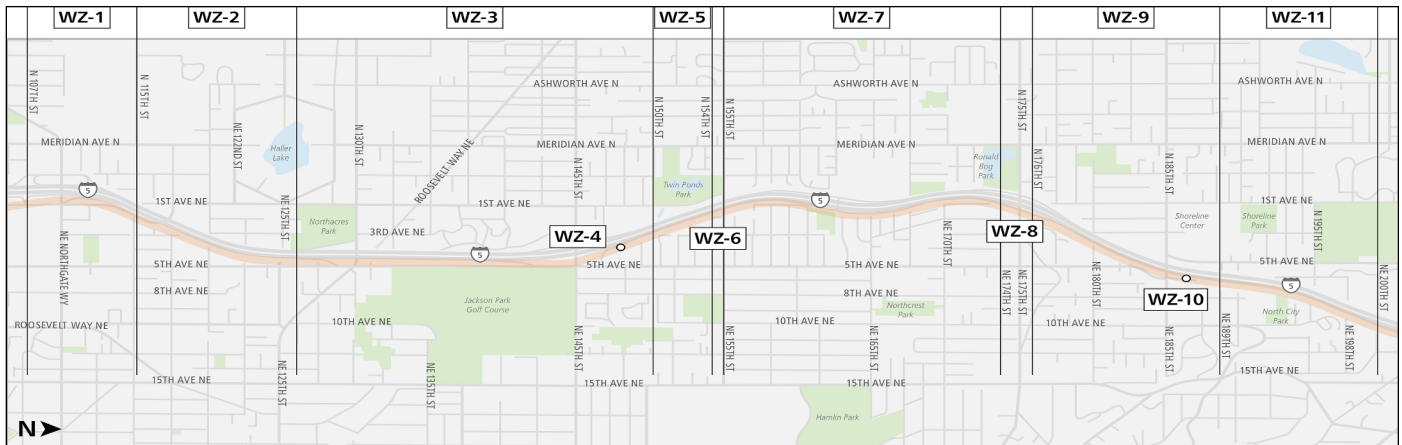
Late SPI represents progress against a more conservative schedule (late dates). This period, the late SPI is 1.05 (increase from 1.04 last period).

The SPI indicates progress is trending behind the optimistic schedule dates, but well compared to the late dates.



Link Light Rail Lynnwood Link Extension

Work Zone Overview



Next Period Activities:

- WZ-1: Place concrete at end diaphragms A06-A08.
- WZ-2: Complete Wall 2115 footings and backfill.
- WZ-3: Continue formwork and concrete placement for deck spans C02 & C05.
- WZ-7: Begin MSE Walls 2214 and 2614 for abutment D02.
- WZ-9: Continue formwork, rebar and placing concrete for Wall 2678 panels.
- WZ-10: Complete rebar, forming and placing concrete for Zone 1 footings at 185th garage.

Closely Monitored Issues:

- Monitoring impacts of COVID-19.
- Monitoring timing of receipt of all permits necessary for construction.
- Erosion and sediment control during the wet season.

Cost Summary

Financial Status	Amount
L200 Contractor - SKH <i>Includes NE 130th St Station scope</i>	
Original Contract Value	\$ 88,147,258
Change Order Value	\$ 760,307,840
Current Contract Value	\$ 848,455,098
Total Actual Cost (Incurred to Date)	\$ 305,916,324
Percent Complete	35.2%
Authorized Contingency	\$ 44,552,739
Contingency Drawdown	\$ 3,456,834
Contingency Index	4.6



Shoreline South/148th parking garage slab

Contract L300 GC/CM—NE 200th Street to Lynnwood Transit Center

Current Progress

The L300 Contractor, Skanska, is continuing work on site as follows:

- Completed weekend night time full closures to set falsework girders and decking over SB I-5.
- Completed demolition of strip mall building along 200th St SW in Lynnwood.
- Completed the abutment work at Bridge K and opened the roadway.
- Placed girder spans over 52nd Ave and 220th Street.
- Continued guideway decking and concrete placement for spans in the station area at Lynnwood City Center.
- Continued decking installation at the Mountlake Terrace Station.
- Continued soil nail and cast-in-place for retaining walls between K02 and L01.
- Continued drilled shafts at Scriber Creek.

Schedule Summary

Skanska's November update forecasts an early completion of the project with Substantial Completion on July 14, 2023, 32 days early. The critical path remains the Lynnwood Parking Garage, followed by the installation of the final drainage, utilities, and sitework at the station site.

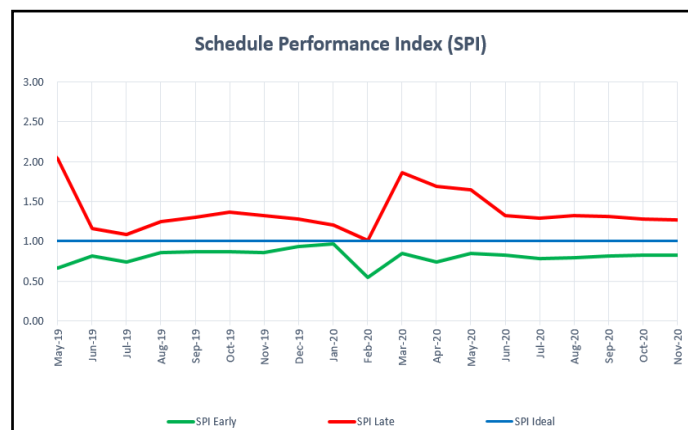
Activity Name	Start	Finish	2021					2022				2023		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
L300 Civil Construction	25-Sep-18A	27-Jul-23												
L300 Civil Construction	25-Sep-18A	27-Jul-23												
MILESTONES	25-Sep-18A	15-Jul-23												
PERMITTING	01-Feb-19A	03-Mar-21												
SUBMITTALS	12-Apr-19A	20-Dec-21												
MATERIAL PROCUREMENT	07-Aug-19A	21-Dec-21												
EARLY WORK	20-Feb-19A	27-Jul-23												
3RD PARTY UTILITIES	22-Jul-19 A	14-Dec-20												
CONSTRUCTION	25-Oct-19A	06-Jul-23												
Main Package Construction Contract Elements	25-Oct-19A	06-Jul-23												
Mobilizations	25-Oct-19A	21-Nov-22												
L200 to 236th St. (Sta. 1684+00 to 1739+00)	17-Dec-19A	21-Nov-22												
236th St. to 220th St. (Sta. 1739+00 to 1791+00)	21-Jan-20A	30-Jan-23												
220th St. to 52nd Ave (Sta. 1791+00 to 1840+00)	23-Dec-19A	21-Mar-23												
52nd Ave. to EOL (Sta. 1840+00 to 1884+00)	15-Jan-20A	14-Jun-23												

Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.83 (increase from 0.82 last period).

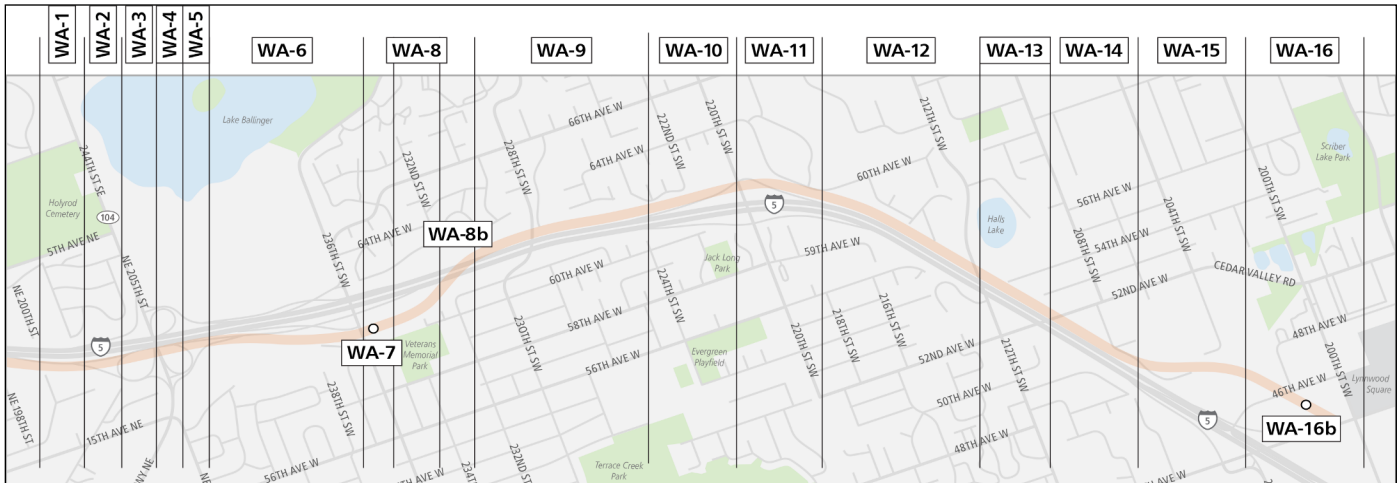
Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.26 (decrease from 1.28 last period).

The SPI trends indicate progress is trending behind the optimistic schedule dates, but work is progressing well compared to the conservative version of the schedule.



Link Light Rail Lynnwood Link Extension

Work Zone Overview



Next Period's Activities

- Complete drilled shafts.
- Continue setting girders on H and F bridges.
- Continue platform decking and track slab pours at the Mountlake Terrace and Lynnwood Station.
- Ongoing soil nail and cast-in-place wall construction.
- Begin the mass excavation between J and K Bridge.
- Begin grading at the Aldercrest Site.

Closely Monitored Issues

- Monitoring work-site safety and culture.
- Monitoring impacts of COVID-19.
- Evaluating cost impact of plan set revision between the early work pricing and Issue for Construction (IFC) sets.
- Quality control and assurance of work performed.
- Erosion and sediment control during the wet season.

Cost Summary

Present Financial Status	Amount
L300 Contractor—Skanska	
Original Contract Value	\$ 56,886,631
Change Order Value	\$ 787,600,746
Current Contract Value	\$ 844,487,377
Total Actual Cost (Incurred to Date)	\$ 254,748,591
Percent Complete	32.0%
Authorized Contingency	\$ 42,888,048
Contingency Drawdown	\$ 9,487,377
Contingency Index	1.4



Setting girders between pier H03 and H04 across 220th St.

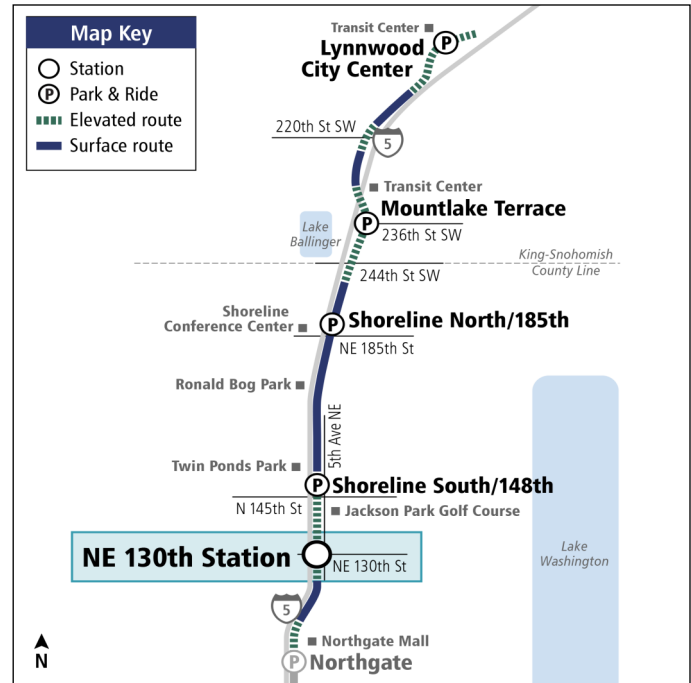
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Link Light Rail NE 130th St Infill Station



Project Summary

Scope	Construct an elevated, side-platform infill light rail station at NE 130th Street and 5th Ave in Seattle.
Phase	Final Design / Early Construction
Budget	\$28.9 Million
Schedule	Open for Service date will depend on Board direction from realignment process.



Map of Project Alignment

Key Project Activities

- Advanced Final Design to 60% completion.
- Cast in place columns completed.
- Falsework erected on pier C10 & C11.
- Rebar and formwork on C10 & C11 crossbeams in progress.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures in both tables are shown in millions. In November 2020, \$0.9M was incurred. The major project expenditures were for civil construction, civil CM, and design.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$3.6	\$1.1	\$1.1	\$3.6	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$2.7	\$2.7	\$0.0
Final Design	\$10.8	\$7.1	\$2.0	\$10.8	\$0.0
Construction Services	\$2.1	\$1.0	\$0.3	\$2.1	\$0.0
3rd Party Agreements	\$1.0	\$0.2	\$0.1	\$0.9	\$0.0
Construction	\$8.5	\$5.4	\$2.0	\$8.5	\$0.0
ROW	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Project Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$28.9	\$17.5	\$8.2	\$28.9	\$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. It is Sound Transit's responsibility to continuously monitor project status and associated risks.

The following are the top project risks:

- Alignment of the station construction schedule with the LLE construction schedule.
- City of Seattle may require additional right-of-way improvements that require time to incorporate.
- Delays in permitting review resulting in schedule extension.
- Seattle City Light may need to construct additional upgrades to the power infrastructure to supply the station.

Project Schedule

Design for the Station remains on schedule for delivery of the 100% designs. Permitting activities for the Building and Street Improvement (SIP) permits continue to be refined and have been expanded. No significant changes occurred in this period.

Construction of the initial construction package for columns & girders is ongoing. The next major milestone is the ST Board decision to continue early advancement of the project, planned in Q4 2021, with a Board check-in/briefing in Q1 2022.

Activity Name	Start	Finish	2020				2021				2022
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
NE 130th Street Station	04-Feb-19 A	06-Jan-22									
NE 130th Street Station	04-Feb-19 A	06-Jan-22									
Preliminary Design	04-Feb-19 A	14-Nov-19 A									
Project Milestones	04-Feb-19 A	27-Sep-19 A									
Project Mgmt	04-Feb-19 A	25-Oct-19 A									
Prelim. Design	04-Feb-19 A	14-Nov-19 A									
Final Design	30-Sep-19 A	15-Oct-21									
Civil FD	30-Sep-19 A	08-Sep-21									
Systems Final Design	30-Mar-20 A	15-Oct-21									
Permitting	16-Mar-20 A	06-Jan-22									
Seattle Design Commission	16-Mar-20 A	06-Apr-21									
Development Permits	28-Sep-20 A	06-Jan-22									
WSDOT Permits	20-Apr-20 A	14-Dec-20									
Estimating/Negotiations/Ar	23-Dec-19 A	09-Sep-21									
Estimating & Negotiations	23-Dec-19 A	09-Sep-21									
Estimate & Negotiations - Guideway	23-Dec-19 A	27-Mar-20 A									
Contract Amendment - Guideway	30-Mar-20 A	28-May-20 A									
Estimate & Negotiations - Station PI	23-Jun-21	09-Sep-21									
Estimate & Negotiations - Station Fi	22-Jun-21	08-Sep-21									

Community Outreach

- Sent out over 12,000 postcards and uploaded Facebook advertisements.
- Completed online open house for the NE 130th Infill Station.
- Received community comments on landscape and art for the station.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The YTD Actual FTE Monthly Average through the end of November is slightly above the Planned FTE Monthly Average, with more ST staff than originally planned, and bringing on more CM staff.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	1.0	3.0	2.0
Consultants	10.0	13.0	3.0
TOTAL	11.0	16.0	5.0

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	



Bent cap reinforcing steel

Civil Final Design Overview

Sound Transit executed an amendment with HNTB Jacobs to perform civil final design for NE 130th station in the Lynnwood Link corridor to investigate the possibility of integrating the 130th St Infill Station into Lynnwood Link. Design services include preparation of comprehensive civil contract documents for construction, design coordination and cooperation with the GC/CM contractors, permit support, survey, geotechnical investigations, right-of-way planning and acquisition support, third party coordination support, risk assessment support, value engineering and constructability support, building and station systems design, and sustainability reports.

Present Financial Status	Amount
HNTB Jacobs– Civil Final Design	
Original Contract Value	\$1,570,864
Change Order Value	\$4,377,595
Current Contract Value	\$5,948,459
Total Actual Cost (Incurred to Date)	\$1,902,921
Financial Percent Complete	32%
Authorized Contingency	\$596,337
Contingency Drawdown	\$0
Contingency Index	0.0

Systems Final Design Overview

Sound Transit executed an amendment with LTK Engineering to perform systems final design for NE 130th station in the Lynnwood Link corridor to investigate the possibility of integrating the 130th St Infill Station into Lynnwood Link. Design services include preparation of comprehensive contract documents for construction, design coordination and cooperation with the civil final designer, permit support, third party coordination support, risk assessment support, value engineering and constructability support, schedules and cost estimating.

Present Financial Status	Amount
LTK– Systems Final Design	
Original Contract Value	\$299,332
Change Order Value	\$823,076
Current Contract Value	\$1,122,408
Total Actual Cost (Incurred to Date)	\$133,537
Financial Percent Complete	12%
Authorized Contingency	\$110,310
Contingency Drawdown	\$0
Contingency Index	0.0

Link Light Rail I-90 Two-Way Transit & HOV Operations (Stage 3)

Project Summary

Scope

The I-90 Two-Way Transit and HOV Operations (Stage 3) project provides approximately four miles of HOV lanes in each direction of the outer roadway between 80th Avenue South on Mercer Island and Rainier Avenue in Seattle. The project includes upgrades and retrofits to the fire, life, safety, and other systems in the Mount Baker and Mercer Island/First Hill tunnels. The project also includes remaining dowel bar retrofit work on the west side of Lake Washington, and the installation of screening on the shared-use pathway on the I-90 floating bridge.



Since June 2017, the project has provided 24/7 HOV access on I-90 between Seattle, Mercer Island and Bellevue.

Phase

Construction

Budget

\$225.6 Million

Schedule

Construction Complete: December 2020 for Primary work; Q2 2021 for all remaining ancillary construction

Major Contracts

	Scope	Agreement/Contract Amount
WSDOT	PE	\$ 1,549,003
WSDOT	Final Design	\$ 22,120,999
WSDOT	CM Services	\$ 43,192,664
IMCO	Construction	\$132,409,000
City of Mercer Island	Transportation Mitigation	\$10,050,000

Key Project Activities/Milestones

- **Civil Construction** – Ancillary construction: I-90 Catch Basin Lid & Frame Replacement: Substantial Completion granted 21-Aug-19; MBT Hydrant Cover Safety Restriping Substantial Completion granted 5-Jun-20
- **Physical Completion, IMCO Contract** – Notification to be issued by WSDOT (pending)
- **Third Party Oversight (City of Mercer Island)** – Ongoing obligation through December 2025
- Final invoice for the R8A CM Services task order has been submitted by WSDOT, with payment anticipated before the end of 2020.

Closely Monitored Issues

WSDOT executed a clear-all settlement change order with their contractor in May for the major construction contract work; Substantial Completion for that work was retroactively granted June 2017. All ancillary WSDOT construction work is substantially complete; the following items continue to be monitored at this time:

- Final payment received by WSDOT for all Task Order construction obligations
- City of Mercer Island litigation, Mercer Island Transportation Mitigation Agreement

Project Cost Summary

The following tables summarize the cost information for the I-90 Two-Way Transit and HOV Operations (Stage 3) project. Expenditures for the month of November were (\$8.1K), due to a WSDOT invoice accrued in October that was incorrect; the invoice was corrected and recently resubmitted. Tables below are in millions.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$3.6	\$3.6	\$2.4	\$2.4	\$3.6	\$0.0
Preliminary Engineering	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$0.0
Final Design	\$22.1	\$22.1	\$18.7	\$18.4	\$22.1	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$198.3	\$198.3	\$187.0	\$177.2	\$198.3	\$0.0
Total	\$225.6	\$225.6	\$209.6	\$199.6	\$225.6	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
40 Sitework & Special Conditions	\$180.6	\$190.7	\$187.0	\$177.2	\$190.7	\$0.0
80 Professional Services	\$26.3	\$26.3	\$22.7	\$22.4	\$26.3	\$0.0
90 Unallocated Contingency	\$18.7	\$8.7	\$0.0	\$0.0	\$8.7	\$0.0
Total	\$225.6	\$225.6	\$209.6	\$199.6	\$225.6	\$0.0

Tables in millions; totals may not equal column sums due to rounding of line entries.

Cost Contingency Management

In the table below, the Allocated Contingency includes WSDOT-controlled construction contingency and total ST controlled allocated contingencies. Payment to WSDOT and the City of Mercer Island for administrative, ancillary construction, and coordination costs resulted in a reduction to the remaining Project budget; as a result, the percent of overall Current Contingency, when compared to the Remaining Work Budgeted, remains relatively unchanged from October's percentage.

Contingency Status	Baseline Amount	Baseline % of Total	Current Amount	CTG as % of Remaining Work Budgeted
Design Allowance	\$0.0	0.0%	\$0.0	0.0%
Committed Allocated Contingency	\$17.0	7.5%	\$1.1	4.4%
Unallocated Contingency	\$18.7	8.3%	\$8.7	33.2%
Total	\$35.7	15.8%	\$9.8	37.6%

Note: Totals may not equal column sums due to rounding of line entries.

Link Light Rail East Link Extension

Project Summary

Scope

Limits Fourteen-mile extension from Downtown Seattle to Mercer Island, Bellevue and the Overlake area of Redmond.

Alignment East Link Extension expands light rail to East King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond.

Stations Judkins Park, Mercer Island, South Bellevue, East Main, Bellevue Downtown, Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village (OVS) and Redmond Technology (RTS).

Systems Signals, traction electrification, and communications (SCADA).

Phase Construction

Budget \$3.677 Billion (Baseline April 2015)

Schedule Revenue Service: June 2023



Map of East Link Extension Alignment.

Key Project Activities

- **Floating Bridge Retrofit (E130):** Advanced installation of sliding rail expansion joints at approaches; continue final alignment of east approach double crossover track; progressed commissioning activities
- **Mercer Island (E130):** Ongoing landscaping at Mercer Island Station plaza & TPSS #4 area; progressed installation of stray current collector cable in Mercer Island Tunnel & East Channel Bridge
- **IDS to Mt. Baker Tunnel (E130):** Progress installation OCS foundations at IDS; continued commissioning of Fire/Life Safety systems in Mt. Baker Tunnel (MBT); advanced elevator installations, interior/exterior finishes, pedestrian access bridge structural steel erection, at Judkins Park Station; ongoing track installation at MBT.
- **E320 South Bellevue:** Continued on guideway emergency walkway, garage and station finishes and landscaping, sidewalk and landscape work along Bellevue Way SE.
- **Downtown Bellevue Tunnel (E330):** Substantially completed. Punch list completed Final Acceptance letter issued to contractor on November 17th, 2020.
- **Downtown Bellevue to Spring District (E335):** Continued tile installation and mechanical/electrical rough-ins on stations. Continued finishes such as door paints, handrails and anti-graffiti wall coat on 120th Station.
- **Bel-Red (E340):** Installed emergency walkway and duct bank; guideway storm drainage on aerial guideway area. Installed entry canopy conduit and lighting, continued site grading at the station. Installed landscaping on 136th Place NE.
- **SR520 to Redmond Technology Station (E360):** Commenced perimeter fencing at Park Place. RTS site wide grading for paving sidewalks and roadways; lease office building punch list work continued. OVS Pedestrian Bridge lighting installation, art installation prep, and load 1 of 4 art louvers received.
- **Systems (E750):** Continued with submittals, component design/manufacturing/fabrication. Continued installation of communication and signaling equipment, and OCS pole fabrications and installations.

Closely Monitored Issues

- Redmond Technology Station Garage's structural repairs.
- Design change during construction phase particularly at our most technically challenging stations.
- Quality, construction safety and environment compliances.
- Civil segments continue to trend schedule delay in handing over access to follow on Systems contractor.
- COVID-19 pandemic remains fluid and challenging at all levels of project activities.

Project Cost Summary

The project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

The Estimated Final Cost (EFC) remains the same at approximately \$3.68B. This period's expenditure is a little over \$36.6M, increasing the total expenditure to date from \$2.72B to \$2.76B. Project commitment is approximately \$3.1B with all major construction contracts in place. While this period's expenditures shows recovery from post work suspension, there are still needs to be cautionary on the projection. Impacts from COVID-19 continue to be assessed as well as ongoing monitoring due to the fluid situation of the pandemic.

Cost Summary by Phase

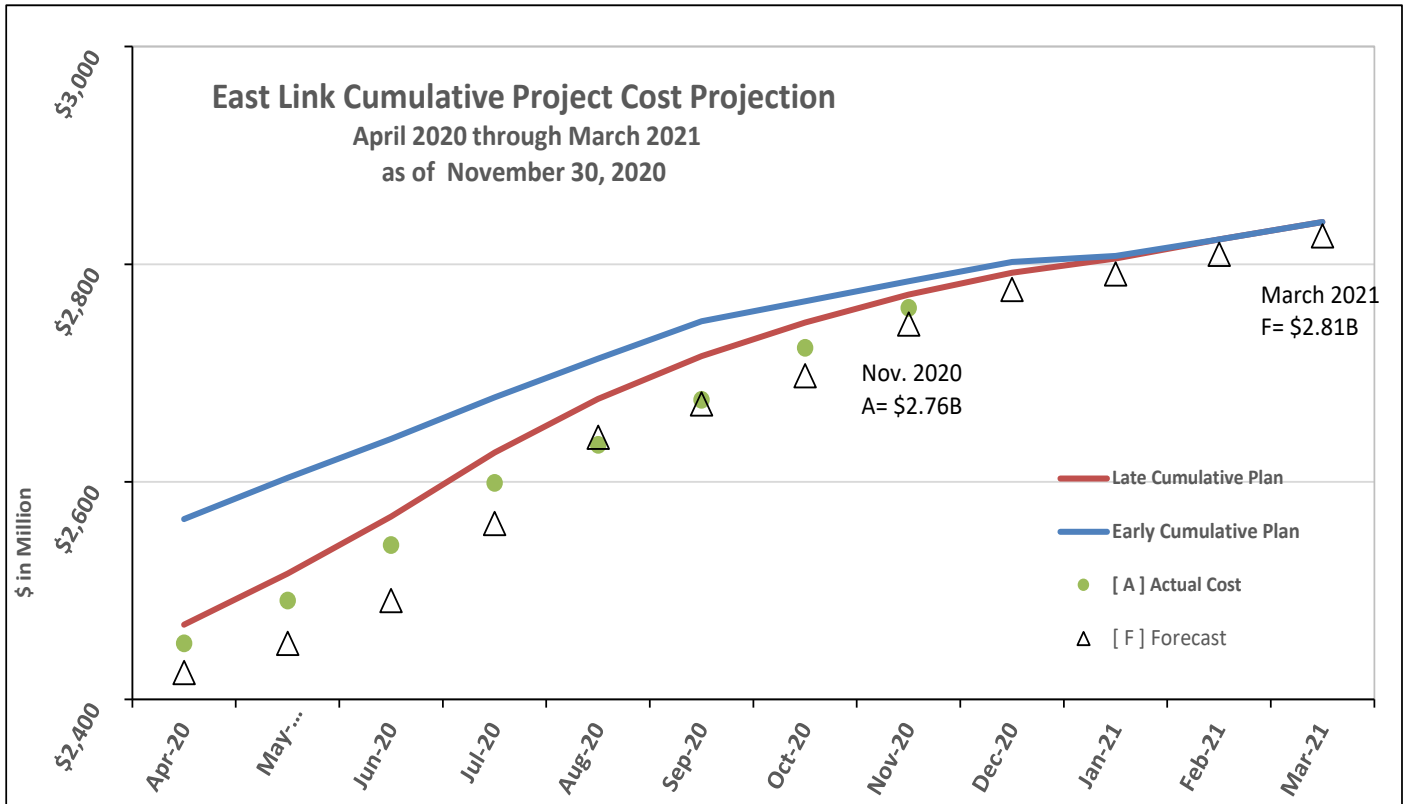
Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$186.2	\$186.2	\$101.6	\$101.1	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.8	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$248.1	\$232.5	\$283.0	\$0.0
Construction Services	\$257.5	\$257.5	\$196.7	\$154.5	\$257.5	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$38.3	\$31.8	\$52.2	\$0.0
Construction	\$2,544.3	\$2,544.3	\$2,220.7	\$1,909.4	\$2,544.3	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$298.2	\$298.2	\$276.7	\$275.9	\$298.2	\$0.0
Total	\$3,677.2	\$3,677.2	\$3,136.9	\$2,759.8	\$3,677.1	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$744.6	\$949.7	\$902.9	\$864.8	\$954.7	(\$210.1)
20 Stations	\$397.7	\$474.2	\$448.3	\$379.9	\$468.6	(\$70.9)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$574.9	\$494.7	\$450.8	\$567.3	\$241.2
50 Systems	\$353.8	\$367.9	\$349.6	\$192.1	\$369.0	(\$15.2)
Construction Subtotal (10 - 50)	\$2,304.6	\$2,366.7	\$2,195.5	\$1,887.7	\$2,359.6	(\$55.0)
60 Row, Land	\$288.5	\$288.5	\$276.7	\$275.9	\$288.5	(\$0.0)
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$0.2	\$0.0	\$2.8	\$0.0
80 Professional Services	\$898.4	\$889.1	\$664.5	\$596.3	\$889.5	\$8.9
90 Unallocated Contingency	\$182.9	\$130.0	\$0.0	\$0.0	\$136.6	\$46.2
Total (10 - 90)	\$3,677.2	\$3,677.2	\$3,136.9	\$2,759.8	\$3,677.1	(\$0.0)

Project Cash Flow Projection

The East Link cost projection continues to progress within the planned expenditure as construction activities continue to pickup. This period's project to date expenditure topped out at approximately \$36.6M where Construction Phase is responsible for about 87.1% or approximately \$32M of November's expenditure. Total project cost incurred to date topped \$2.76B, to which about \$1.9B were recorded in the Construction Phase. The project expenditures continue to pick up and is predicted to rise to approximately \$2.81B by March 2021.



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 Risk Mitigation Milestone #4 (Completion of SEM Tunneling) completed in 2018/19 predicted that given the risk profile in the project, there are sufficient schedule and budget in the project to complete in accordance to baseline. The next risk mitigation milestone is in 2021 but an interim risk "milestone" has been added for 2020. The Quantitative Risk Assessment workshop for the interim milestone took place in October. The QRA Report is currently being finalized while the preliminary results showed some confidence level in maintaining the baseline cost and schedule Revenue Service date. The following are the top project risk and risk areas:

- Compliance with quality, safety and environmental requirements
- Civil turnovers to Systems construction
- Interfaces between contracts, agency supplied equipment and third party jurisdictions
- COVID-19 pandemic impacts
- Resolution to Redmond Technology Station Garage's structural elements repairs

Contingency Management

East Link project budget was baselined on April 2015 with a total contingency of \$795.9M. All major construction contracts have been procured and the total contingency balance stands at \$334.1M (previously \$336.3M). The current contingency balance is consistent with the project's planned contingency drawdown.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA remains unchanged in this period at \$2.7M and is expected to be fully drawn when all construction scope are executed.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC was drawn down for an aggregate of approximately \$2.2M due to predominantly construction and construction services changes.

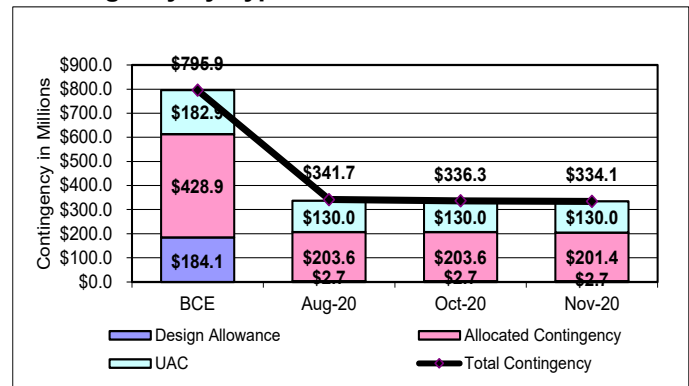
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$130.0M.

Contingency Status

Contingency Type	Baseline		Current Status	
	Amount	% of Total Budget	Amount Remaining	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$2.7	0.3%
Allocated Contingency	\$428.9	11.7%	\$201.4	22.0%
Unallocated Contingency	\$182.9	5.0%	\$130.0	14.2%
Total	\$795.9	21.6%	\$334.1	36.4%

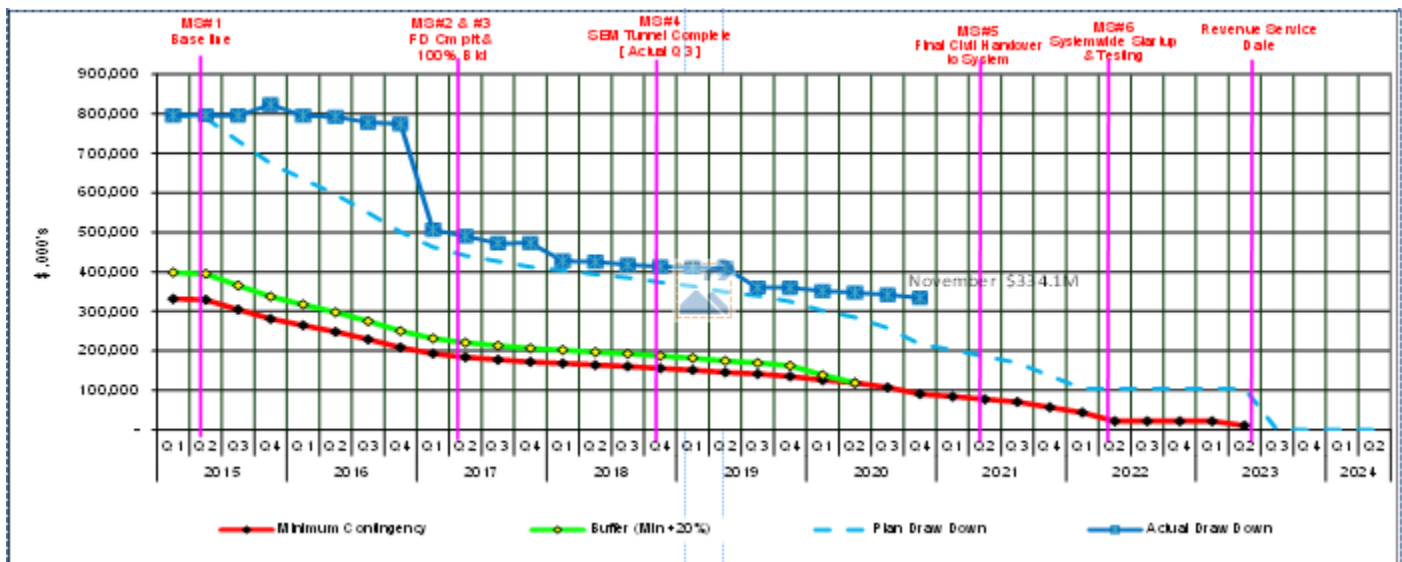
Table figures are shown in millions.

Contingency by Type



Contingency Drawdown

East Link Project's total contingency drawdown continues to trend within plan with an overall contingency balance at approximately \$334.1M (previously \$336.3M) and with all major construction contracts procured, remains above the baseline draw down projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. The contingencies at the end of November represented the monthly draw of about \$2.2M due to various construction change orders.



Contingency Drawdown as of November 30, 2020

Link Light Rail East Link Extension



Project Schedule

The Integrated Master Schedule is presented below.

E130 continued Fire/Life Safety commissioning in Mt. Baker tunnel; finish work and pedestrian bridge at Judkins Park Station; commissioning of both stations; final alignment of crossover track; wax tape removal.

E320 continued installing acoustical panels along guideway; finish work at the station and parking garage; rail welding and double crossover work at railroad crossings.

E330 continued working toward final acceptance and contract closeout.

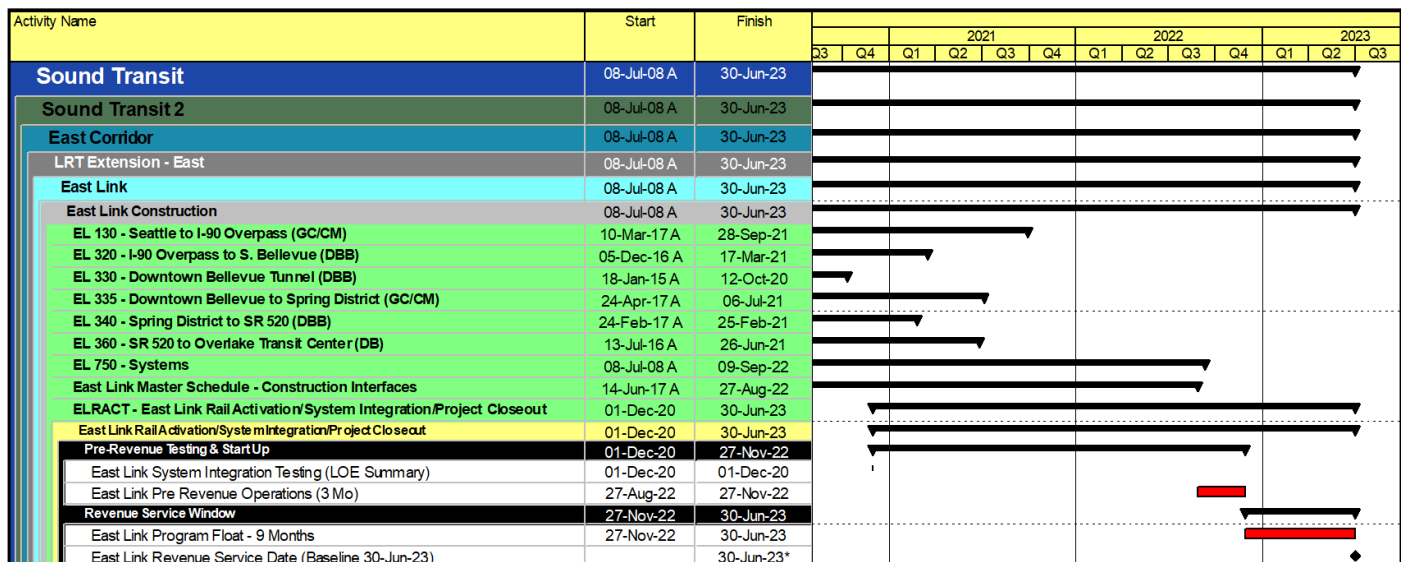
E335 continued platform work at E. Main Station; rough-in work at the South Portal Electrical Building; canopy work and wire pulling at Bellevue Downtown Station; finish work at 120th station; rough-ins and elevator installation at Wilburton.

E340 installed fire suppression and emergency walkway along the aerial guideway; continued canopy work at the station; landscaping, safety railing, and signage along Spring Blvd.

E360 continued landscaping and fencing for the Sweeper Site; punchlist work along the guideway; continued RTS garage crack repair; ramp handrails and lighting for the OVS pedestrian bridge.

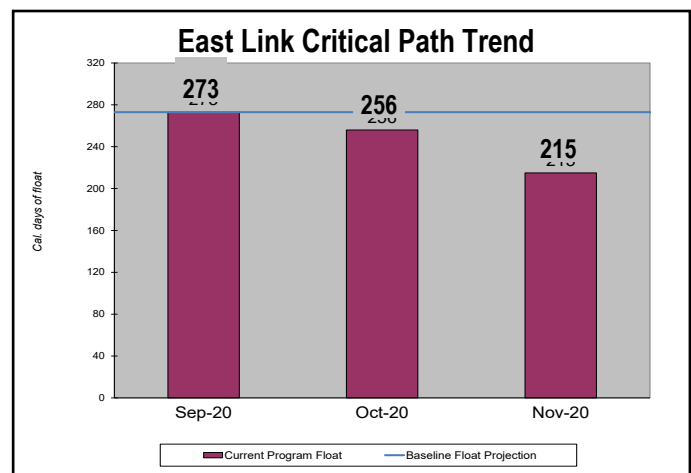
E750 continued installation of communications systems at MIS, 120th, OVS, and RTS; set OCS poles along E130 and E360 civil segments; long-lead procurement continues.

Work is forecast to complete in time to perform pre-revenue simulation as planned and open for Revenue Service by June 2023.



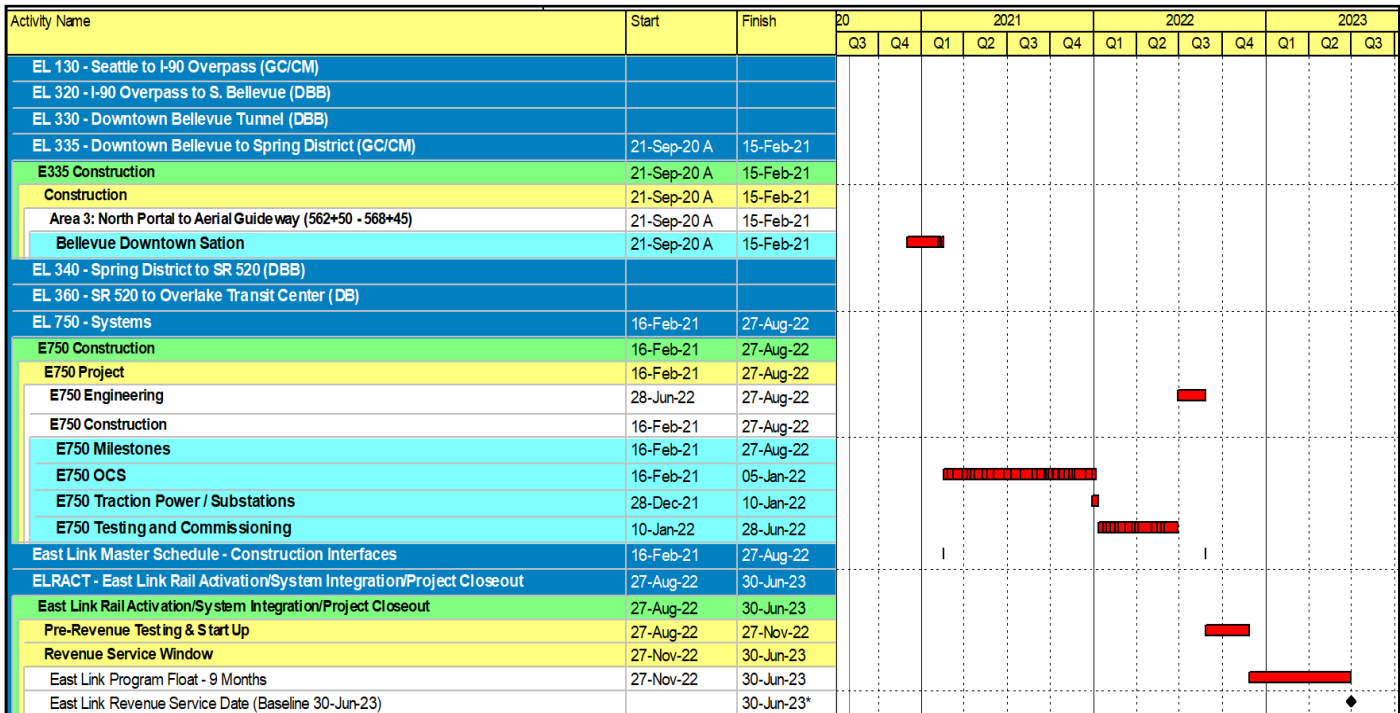
Project Float

East Link was baselined with 273 days of program float. The current projected use of 58 days of float is a result of cumulative impacts from all contracts throughout 2020, currently reflected through an unmitigated late completion for E750. No change has been issued to formally allocate float on the project; this is merely a forecast based on current performance trends. Negotiations are underway with the E750 contractor to revise their plan based on delayed access to work areas throughout the alignment, which may result in some time savings.



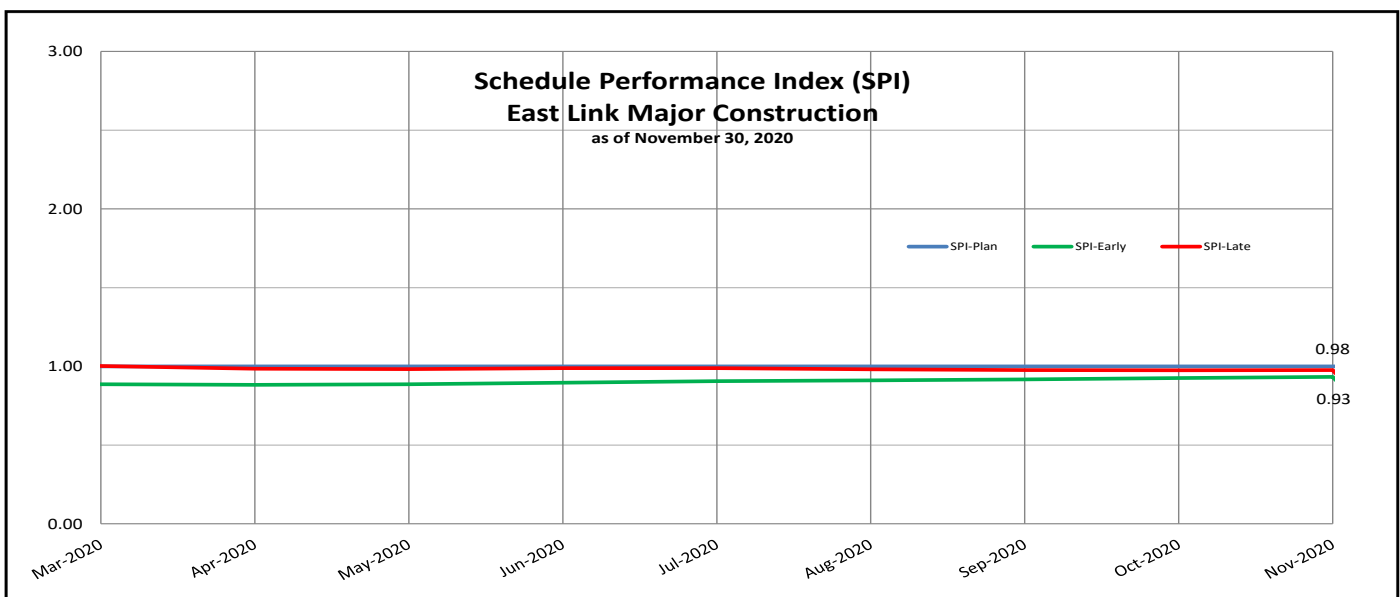
Critical Path Analysis

The East Link critical path is currently driven by the E335 handover of Bellevue Downtown Station, followed by E750 OCS work. East Link civil contracts continue to be closely monitored for potential impacts to the E750 schedule.



Schedule Performance Index

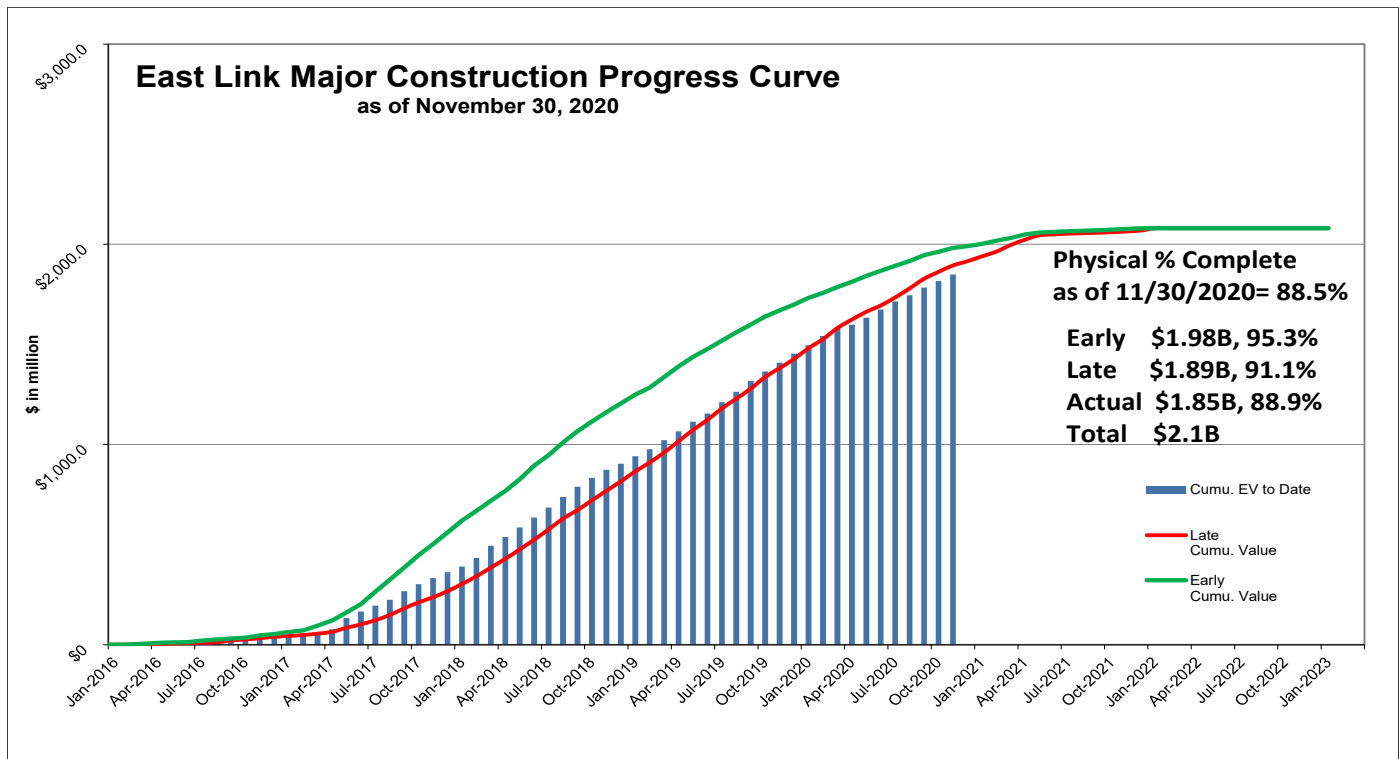
The early Schedule Performance Index (SPI) for East Link's Major Construction Packages remains at 0.93 for this period, which indicates continued steady performance. The late SPI remains at 0.98 as contractors continue to respond to COVID-related disruptions and attempt to finalize work areas for handover to interfacing contracts.



Project Cash Flow Projection

The overall physical percent complete for East Link construction is 88.5%.

The percent complete analysis is based on a weighted measurement among the seven major construction contracts' schedule, duration and cost. The graph below shows the aggregate cost progression for these construction contracts. Performance remains slightly below the late projection as civil-system interfaces continue to slip. Although progress is likely to continue to trend below the late curve, performance is steady and the project is still anticipated to finish within the original baseline projection.



E360 SR520 to Redmond Technology Station : Preparations for repair work at RTS Garage.

Community Outreach

- Ongoing distribution of weekly construction alerts for maintenance of traffic activities for Mercer Island, Bellevue and Redmond. While maintaining proper social distancing, communicated with numerous neighbors about upcoming major traffic changes, including full closures. November's focus: adequacy of signage and wayfinders on work on Rainier Avenue under I-90; responding to Mercer Island resident concern on the Transit Integration construction; various impacts relating to Bellefield Offices and Residential areas; homeless encampment along SR520 to southbound 148th Ave. NE.
- Ongoing engagement with individual property owners, members of the public and impacted neighbors on a variety of concerns including property acquisition, construction easements, night time noise, traffic, access, maintenance of traffic.

Right-of-Way

The East Link Extension involves the acquisition of a range of property interests including fee acquisitions for stations, guideway, staging areas, support facilities, and tunnel and guideway easements as well as permanent and temporary easements for construction. These acquisitions resulted in owner and tenant residential and commercial relocations. Property acquisition and relocations are mostly complete, with limited processing of relocation claims and coordination of property transfers with the City of Bellevue remaining. The right-of-way program status for this period is summarized in the following table:

East Link Extension Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
239	246	239	237	229	227
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average is the monthly annualized average of 12 months; whereas the YTD monthly average only reflects actuals through November of 2020. Consultants utilization, currently, are dependent on the efforts to manage construction. The monthly average is trending over the plan and is predicted to stay over but it is not indicative of budget overage. That said, with COVID-19 remaining a fluid situation, it is hard to predict how the annual plan will unfold accordingly.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	57.5	51.9	(5.6)
Consultants	106.8	170.3	63.6
TOTAL	164.3	222.3	58.0
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Construction Safety

Data/ Measure	November 2020	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	13	85
Days Away From Work Cases	0	1	15
Total Days Away From Work	0	248	1337
First Aid Cases	1	50	267
Reported Near Mishaps	3	30	276
Average Number of Employees on Worksite	768	-	-
Total # of Hours (GC & Subs)	124,317	1,696,244	6,460,459
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	1.61	1.53	2.63
LTI Rate	0.00	0.18	0.46
Recordable National Average	3.00		
LTI National Average	1.20		
Recordable WA State Average	6.00		
LTI WA State Average	1.90		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals.

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Major Construction Contract Packages

Below are the major construction contract packages for the project with a brief scope description of each.

R8A Stage 3A – Modification of HOV Ramp between I-90 and Bellevue Way SE. [Design-bid-build].

Status: Completed and Closed.

E130 Seattle to South Bellevue – International District Station (IDS) modification, Retrofit of existing WSDOT structures, I-90 Center Roadway and two light rail stations. [Heavy Civil GC/CM]

Status: See following pages under Contract E130.

E320 South Bellevue – One light rail station and a parking garage at South Bellevue P&R; aerial, at-grade and retained-cut guideway along Bellevue Way SE and 112th Avenue SE. [Design-bid-build]

Status: See following pages under Contract E320.

E330 Downtown Bellevue Tunnel – SEM Tunneling along 110th Ave. NE in Downtown Bellevue. [Design-bid-build]

Status: See following pages under Contract E330.

E335 Downtown Bellevue to Spring District – Four light rail stations; aerial, at-grade and retained-cut guideway from Downtown Bellevue, over I-405 to 124th Ave. NE. [Heavy Civil GC/CM]

Status: See following pages under Contract E335.

E340 Bel-Red – One light rail station, aerial and at-grade guideway from 124th Ave. NE to NE 20th. [Design-bid-build]

Status: See following pages under Contract E340.

E360 SR520 to Redmond Technology Station – Two light rail stations; aerial and retained-cut guideway along SR-520 in the Overlake area of Bellevue and Redmond. [Design-Build]

Status: See following pages under Contract E360.

E750 Systems – Light rail systems elements, including Traction Power Electrification, Overhead Catenary System, Train Signals and Communication System. Combined with Northgate Link N830. [Heavy Civil GC/CM]

Status: See following pages under Contract E750



E750 Systems: OCS Pole Installation over E360's elevated guideway near Redmond Technology Station.

Contract E130 – Seattle to South Bellevue Heavy Civil GC/CM

Current Progress

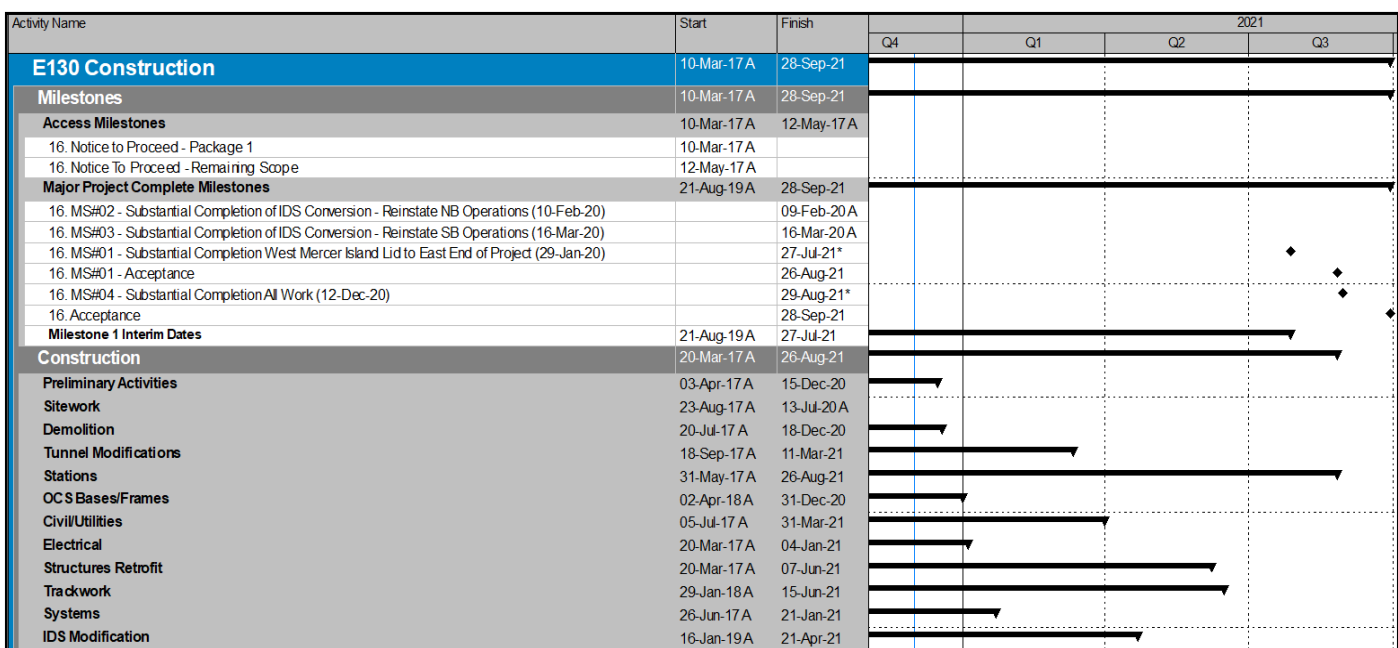
West Segment: Progress installation of drilled OCS foundations at Area I of IDS; continue commissioning of Fire/Life Safety systems in Mt Baker Tunnel; advance elevator installations, interior/exterior finishes, pedestrian access bridge structural steel erection, and commissioning activities at Judkins Park Station; ongoing track installation and final alignment in MBT

Center Segment: Advance installation of sliding rail expansion joints at approaches; continue final alignment of east approach double crossover track; progress commissioning activities; expand development of wax tape removal and replacement procedure

East Segment: Ongoing landscaping at Mercer Island Station plaza & TPSS #4; progress installation of stray current collector cable in Mercer Island Tunnel & East Channel Bridge

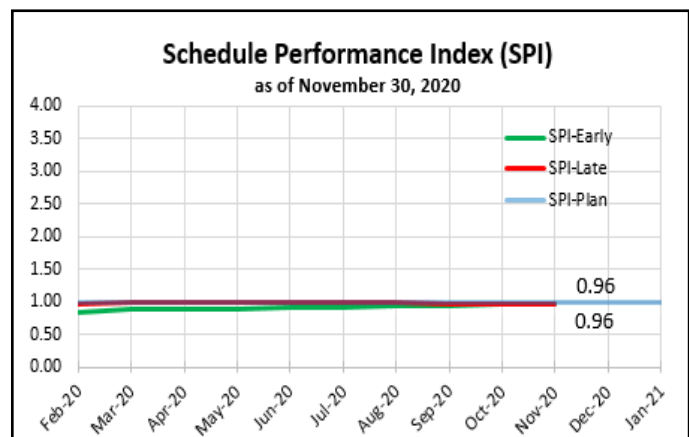
Schedule Summary

The critical path for this project currently runs through jet fan performance testing, which is dependent on work to be performed by the E750 contractor. The contractor's November update is presented below. The E750 Systems contractor has been granted access to all areas included under Milestone 1. Remaining work areas should be handed over within the next two months.



Schedule Performance Index

Through November, cumulative SPI-Early is reported at 0.96, with SPI-Late also at 0.96. This indicates that schedule performance is nearly on-time, although it is trending slightly behind. Delay impacts submitted by the Contractor continue to be evaluated; a plan to realign several lagging activities with Milestone 4 has been completed, and upcoming negotiations with KH are planned. Contract interface coordination with the E750 contractor is ongoing.



Link Light Rail East Link Extension

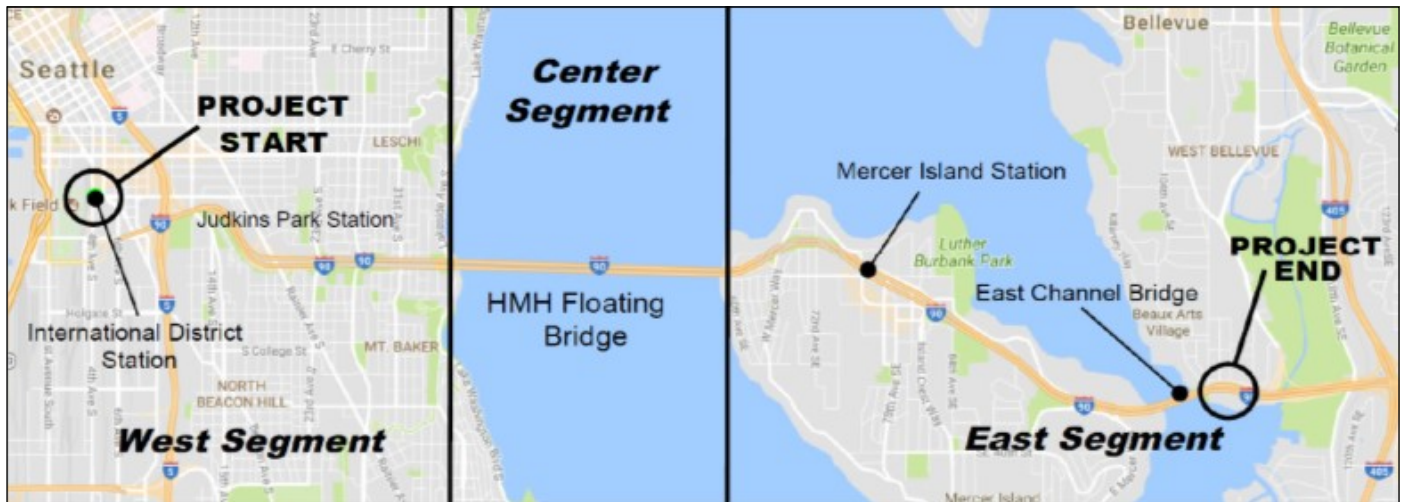
Next Period's Activities

- **West Segment:** Progress sign installation, fire/life/safety systems in Mt. Baker Tunnel; ongoing Judkins Park Station utilities, landscaping, and commissioning activities
- **Center Segment:** Continue installation of remaining OCS portal frames, emergency walkways on floating bridge
- **East Segment:** Advance fence, pedestrian ramp installation, Mercer Island Tunnel; continue interior/exterior finishes, commissioning activities at Mercer Island Station

Closely Monitored Issues

- Activity progress to reach Milestones 1 & 4 and resultant potential impacts to E750
- COVID-19 impacts
- Requirement for shielding non-conductive wires for the cathodic protection on floating bridge
- Wax-Tape Removal from Nylon Inserts on floating bridge
- IDS rail grinding

E130 Construction Segments



Cost Summary

Present Financial Status	Amount*
E130 Contractor - Kiewit-Hoffman	
Original Contract Value (incl. Phase 2 MACC)	\$665,000,000
Change Order Value	\$33,545,185
Current Contract Value*	\$697,567,022
Total Actual Cost (Incurred to Date)	\$648,221,935
Percent Complete	93.81%
Authorized Contingency	\$46,660,541
Contingency Drawdown	\$33,545,185
Contingency Index	1.3

* Contract Value excludes Betterments



Specialty turnaround track installed at Judkins Park Station

Contract E320 – South Bellevue

Current Progress

I-90 Flyover: Continued installation of acoustic panels along guideway and performed guideway emergency walkway work. Continued traction power substation (TPSS) and electrical work.

Bellevue Way SE: Continued buildout of Winters House parking and systems exposed raceway work; continued access road restoration to the Blueberry Farm, as well as form/rebar/pour (FRP) sidewalks and bus stop shelter.

S. Bellevue Sta./P&R: Continued garage and station finishes such as striping and sealing in the garage and continued north canopy work at station, as well as, site work including landscaping and commissioning activities in the station.

Wye-to-East Main and Track Work: Continued thermite weld and distress/survey work, as well as double crossover and work at railroad crossings.

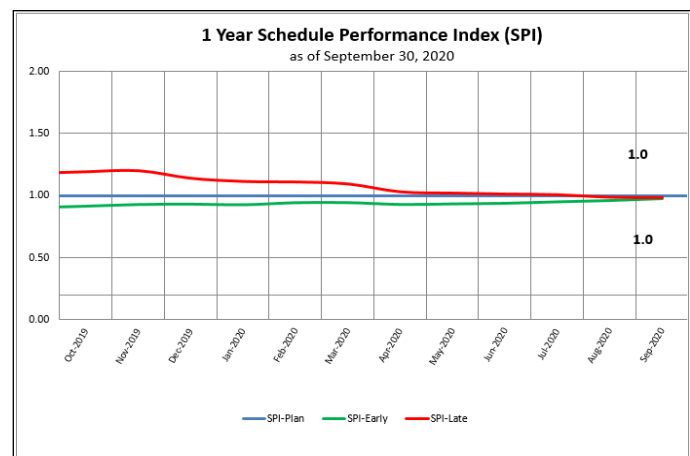
Schedule Summary

The critical path for this project currently runs through sidewalk paving along 112th and then final landscaping. The contractor's October update is presented below. An update for November has not yet been submitted. The contractor is currently forecast to provide station and guideway access to the E750 systems contractor ahead of substantial completion, in time to meet the overall program schedule.

Activity Name	Start	Finish	Q4	Q1
E320 Construction	05-Dec-16 A	16-Mar-21		
Milestones and Summary	05-Dec-16 A	16-Mar-21		
Contract Milestones	05-Dec-16 A	16-Mar-21		
Limited Notice to Proceed	05-Dec-16 A			
Notice to Proceed	13-Feb-17 A			
Milestone 3A - Clear & Grub Swayolocken (Start of "Wetland Fill" Work+365D)		21-Dec-18 A		
Milestone 1 - (Alternate) Phase B2.1 Not Used		31-May-19 A		
Milestone 3B - Clear & Grub Coal Creek		22-Nov-19 A		
Milestone 4 - SIDA & SCADA Complete (NTP+1160D)		27-Feb-20 A		
Milestone 2 - Final Restoration of Bellevue Way (Start+897D)		11-Sep-20 A		
Milestone 5 - Acceptance of South Bellevue Station (NTP+1225D)		25-Feb-21*		
Milestone 6 - Required Substantial Completion (NTP+1364D)		16-Mar-21*		
Construction-1	21-Apr-17 A	18-Feb-21		
Mobilization	21-Apr-17 A	18-Jul-18 A		
Area A - I-90 Main line to Bellevue Interchange - Sta EB405+54 to EB438+20	16-Jun-17 A	27-Jan-21		
Area B - Bellevue Way SE, SE 30th St to 112th Ave SE Wye - Sta EB438+20 to EB476+75	30-May-17 A	18-Feb-21		
Area C - 112th Ave SE, 112th Ave SE Wye to SE 8th - Sta EB476+75 to EB508+00	13-Jun-17 A	12-Jan-21		
Area D - 112th Ave SE to SE 8th St to Main St - Sta 508+00 to EB528+25	22-May-17 A	08-Feb-21		
Area E - Coal Creek Stream Enhancement	09-Jul-18 A	22-Nov-19 A		
Area F - Swayolocken Mitigation	23-Apr-18 A	21-Dec-18 A		

Schedule Performance Index

The SPI early is at 0.97 for September and the SPI late at 1.00 (there has been no update since September). The contractor continues to remain ahead of their late finish plan and are slightly behind their early plan. There has been a station delay due to System Interface Data Table changes ST implemented. Critical path remains the work on 112th, with ballasted track install, weld and de-stress and eastbound track wall work.



Link Light Rail East Link Extension

Next Period's Activities

- **I-90 Flyover:** Continue emergency walkway work and TPSS enclosure work.
- **Bellevue Way SE:** Continue restoration of Blueberry Farm access road and civil restoration.
- **S. Bellevue Sta./P&R:** Ongoing garage and station finish work including commissioning in station.
- **Wye-to-East Main and Track Work:** Progress with railroad crossing and thermite weld, distress and survey work.

Closely Monitored Issues

- COVID-19 impacts
- Working adjacent to wetland areas, environmental compliance concerns



Cost Summary

Present Financial Status	Amount*
E320 Contractor - Shimmick/Parsons JV.**	
Original Contract Value	\$319,859,000
Change Order Value	\$6,586,115
Current Contract Value	\$326,399,625
Total Actual Cost (Incurred to Date)	\$307,155,924
Percent Complete	91.56%
Authorized Contingency	\$38,532,000
Contingency Drawdown	\$6,586,115
Contingency Index	5.4

• \$ Amount excludes betterments and STArt.



Bellevue Way SE Bus Shelter Construction

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Link Light Rail East Link Extension

Contract E330 – Downtown Bellevue Tunnel

E330 Contractor achieved Substantial Completion on July 13, 2020. Sound Transit issued Final Acceptance to contractor on November 17, 2020.



Cost Summary

Final Financial Status	Amount
E330 Contractor– Guy F Atkinson Construction, LLC.	
Original Contract Value	\$121,446,551
Change Order Value	(\$1,111,675)
Current Contract Value	\$120,334,876
Total Actual Cost	\$120,334,876
Percent Complete	100%
Authorized Contingency	\$13,256,330
Contingency Drawdown	(\$1,111,675)
Contingency Index	N/A



Contract E335 – Bellevue to Spring District Heavy Civil GC/CM

Current Progress

East Main Station: Downtown Bellevue Tunnel: Continued tile and paver installation; storm and waterline; landscape planting and soil cells. Continued Mechanical and Electrical rough-ins at South Portal Electrical Building (SPEB).

Bellevue Downtown Station (BDS): Continued install canopy metal panels on platform and walls and installation tile and roof glazing. Continued wire pulling in electrical and main rooms on mid and platform level.

Wilburton Station: Completed platform Tile installation. Continued ME rough-ins, conduit rough-ins, tile installation on platforms, install elevator cabs, doors and hardware and entrances roofing. Commenced station driveway base grading and paving.

120th Station: Commenced door paints, install coil doors, sprinkles heads and trim North and South lobby. Installed handrails and hard lid for public stairs and applied anti-graffiti coat on walls. Continued wire pulling for branch systems.

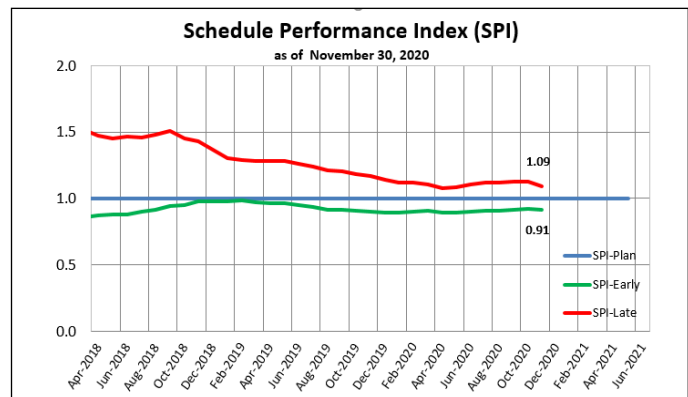
Schedule Summary

There are two primary critical paths on this contract, corresponding to the two handovers to the E750 Systems Contractor. One critical path runs through the Bellevue Downtown Station (BDS) and the other path goes through the South Portal and its electrical building. The contractor's October update is presented below. Work is currently progressing in all areas; phased handovers of work areas to the E750 contractor have begun.

Activity Name	Start	Finish	2021			
			Q4	Q1	Q2	Q3
E335 Construction	24-Apr-17 A	06-Jul-21				
Milestones	04-May-18 A	24-Jun-21				
Contract Milestones	30-Sep-18 A	16-May-21				
Milestone #1 - Complete North Portal Headwall Temporary Shoring		30-Sep-18 A				
Milestone #2 - Complete SIFT's for Interface to SCADA		14-Jan-20 A				
Milestone #4 - Complete SEM Tunnel Trackwork for Primary Systems Access		16-Jan-21*				
Milestone #3 - Complete Trackway and Stations for Primary Systems Access - BTC to EOP		14-Mar-21*				
Milestone #5 - Complete All Trackway and Stations for Primary Systems Access		16-Mar-21*				
Milestone #6 - Substantial Completion of all Work		16-May-21*				
Calculated Milestones	04-May-18 A	24-Jun-21				
E335 Achieves Milestone #1		04-May-18 A				
E335 Achieves Milestone #2		14-Jan-20 A				
E335 Achieves Milestone #3		14-Mar-21				
E335 Achieves Milestone #4		08-May-21				
E335 Achieves Milestone #5		08-May-21				
E335 Achieves Milestone #6		24-Jun-21				
Mobilization	24-Apr-17 A	24-Apr-17 A				
Construction	24-Apr-17 A	06-Jul-21				
Area 1: E. Main Station to South Portal (531+55 - 538+00)		11-Oct-17 A				
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91)		24-Aug-18 A				
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)		24-Apr-17 A				
Area 4: Aerial Guideway (568+45 - 606+59)		24-Apr-17 A				
Area 5: Pine Forest to 120th (606+59 - 619+00)		07-Jul-17 A				
Area 6: 120th - End of Project (619+00 - 634+99)		01-Aug-17 A				
Testing and Commissioning	01-Jun-20 A	11-Dec-20				

Schedule Performance Index

This period, the SPI-Early is at 0.91 and the SPI-Late is at 1.09. The variance is primarily due to Delay on 3 stations in progress – BDS, Wilburton, and 120th and Landscaping work has pushed out due to stations being late. In addition, Delay in Switch Gear Procurement and delivery has delayed establishment of permanent power at the SPEB, which impacts the ability to complete the testing and commissioning of the Emergency Ventilation Fans in the tunnel.



Link Light Rail East Link Extension

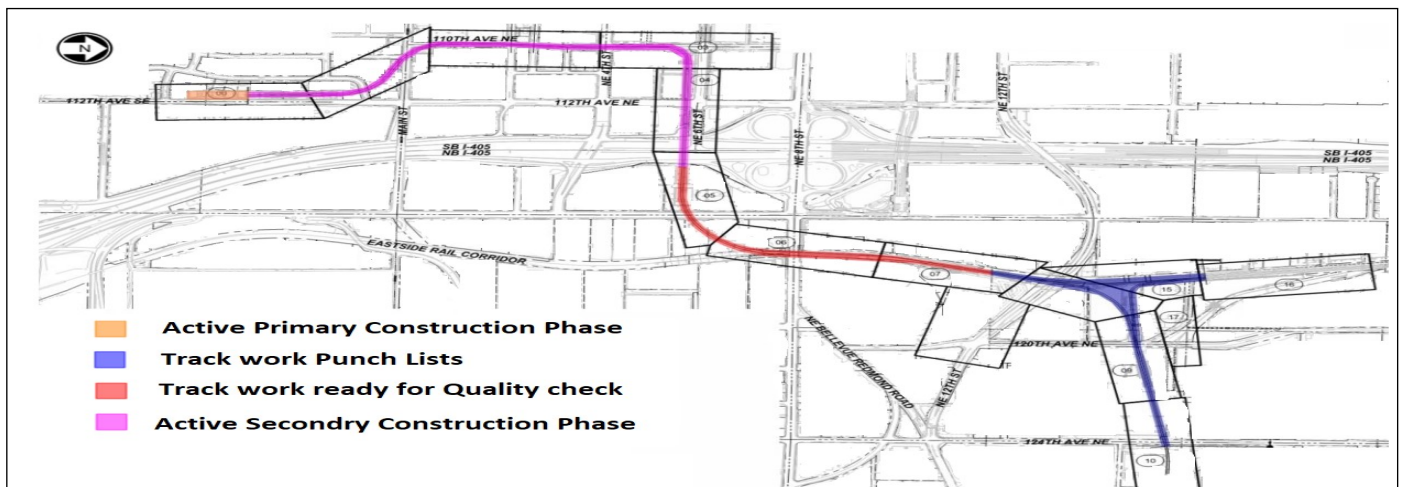
Next Period's Activities

- **East Main Station:** Continue Electrical rough-ins, tile and paver installation, landscaping and install track walls.
- **BDS:** Continue install east bound platform tile, curtain wall framing, wire pulling, surface level terracotta, elevators and lightings.
- **Wilburton Station:** Continue Conduit and ME rough-ins, install granite accent paver in plaza, install elevators and doors.
- **Track Work:** Commence installation of rail lubricators. Continue drill for restraining rails with SEM tunnel and aerial guideway repairs.

Closely Monitored Issues

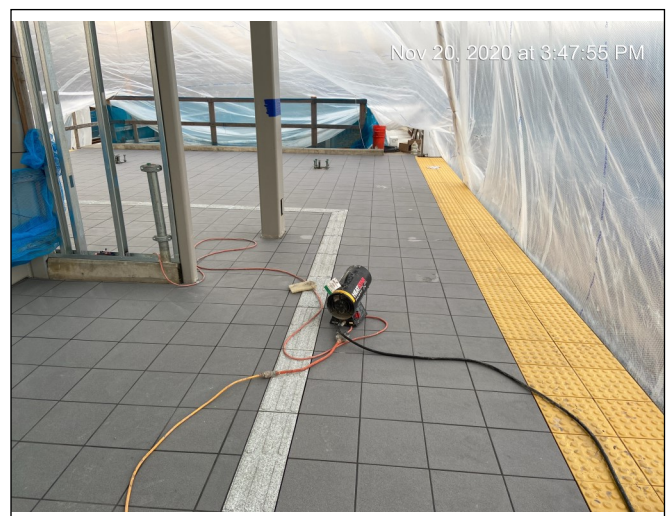
- Continued inefficiencies in adhering to COVID-19 safety requirements will continue to impact progress. Contractor is working diligently to sequence work within the stations to minimize these impacts.
- Procurement of switchgear equipment has impacted project schedule and delayed E750 access. This switchgear may not be delivered until Feb 2021, and PSE will not connect power until this equipment are installed and tested. ST closely monitor the procurement process, while contractor confirmed procurement of switchgear and working towards transformer, snubber and other details.

Track work progress map



Cost Summary

Present Financial Status	Amount
E335 Contractor– Stacy & Witbeck/Atkinson Joint Venture (SWA-JV).	
Original Contract Value (includes station scope)	\$393,798,210
Change Order Value	\$14,263,483
Current Contract Value	\$408,061,693
Total Actual Cost (Incurred to Date)	\$349,829,868
Percent Complete	90.45%
Authorized Contingency	\$19,689,911
Contingency Drawdown	\$14,263,483
Contingency Index	1.2



Wilburton Station: Install tile at platform level.

Contract E340 – Bel-Red

Current Progress

Aerial Guideway area: Installed fire suppression standpipes. Installed emergency walkway and systems duct bank.

130th Ave Station: Installed entry canopy conduit and lighting. Installed mortar bed tile and pavers. Installed entry canopy soffit panels and glazing. Installed storm drain structures.

Spring Blvd: Installed metal safety railing, landscaping, permanent signing and decorative sidewalk bands. Installed rebar and forms for center track slab and headers on embedded track.

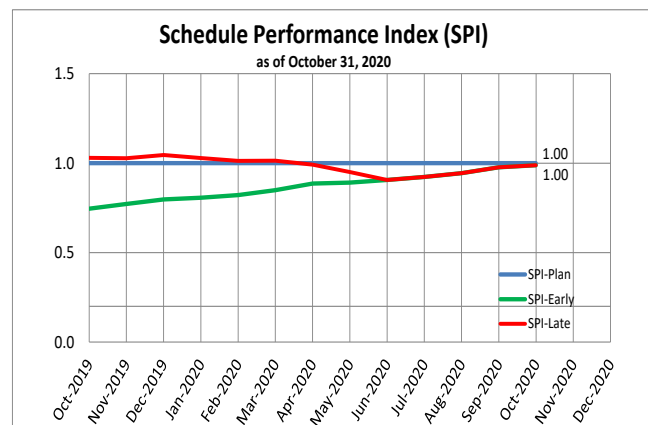
Schedule Summary

Critical path of this project segment now runs through electrical work at 130th Station. The contractor's October update is presented below. The November update has not been submitted. ST and the contractor continue to negotiate recovery options in order to preserve the interface with the E750 systems contractor, currently anticipated near the end of the year.

Activity Name	Start	Finish	Q4	Q1
E340 Construction	24-Feb-17 A	25-Feb-21		
CONSTRUCTION	24-Feb-17 A	25-Feb-21		
~MILESTONES/EASEMENTS~	24-Feb-17 A	25-Feb-21		
~Milestones	24-Feb-17 A	25-Feb-21		
Contract Milestones	24-Feb-17 A	25-Feb-21		
Limited Notice to Proceed (LNTP - Feb 24 2017)	24-Feb-17 A			
Notice to Proceed (NTP - March 27, 2017)	27-Mar-17 A			
MS #1 West Tributary Mitigation Site - NTP + 537 DAYS (September 15, 2018)		14-Sep-18 A		
MS #2 Substantial West Tributary Mitigation Site - NTP + 826 DAYS (July 1, 2019) Ref. C		10-Jun-19 A		
MS #3 Acceptance of SDIT - NTP + 976 DAYS (Nov 27, 2019)		26-Nov-19 A		
MS #4 Substantial Completion - NTP + 1156 DAY S - (May 26, 2020)		25-Feb-21*		
Float	24-Mar-20 A	04-May-20 A		
~SUBMITTALS/PRELIMINARY ACTIVITIES~	24-Feb-17 A	23-Dec-20		
~MOBILIZATION~	24-Feb-17 A	29-Jul-19 A		
~SITWORK~	04-Apr-17 A	15-Jan-21		
~RETAINING WALLS~	12-Feb-18 A	14-Dec-20		
~AERIAL STRUCTURES~	15-May-17 A	02-Nov-20		
~STATIONS~	01-Aug-18 A	31-Dec-20		
~ELECTRICAL/ITS~	02-Jan-18 A	10-Dec-20		
~FINISHES~	31-Dec-19 A	24-Nov-20		
~TRACKWORK~	13-Jul-18 A	29-Dec-20		
~LANDSCAPING/FLATWORK~	22-May-18 A	31-Dec-20		
~TESTING AND COMMISSIONING~	27-Aug-19 A	25-Jan-21		
~DEMOBILIZATION~	01-Aug-18 A	08-Sep-20 A		

Schedule Performance Index

The Contractor is behind on their substantial completion date. This Schedule Performance Index chart has been updated as of October 2020 which is the latest schedule submittal. Contractor has been tardy with their schedule. The SPI-Early is at 1.00 and the SPI-Late is at 1.00. These numbers indicate that the contractor is right on track with their current early and late performances.



Link Light Rail East Link Extension

Next Period's Activities

Aerial Guideway area: Install mitigation plantings, emergency walkway and duct bank. Set and weld rail.

130th Ave Station: Pour embedded track slab. Install main canopy lighting. Install mortar bed tile and pavers. Install benches, signage and receptacles.

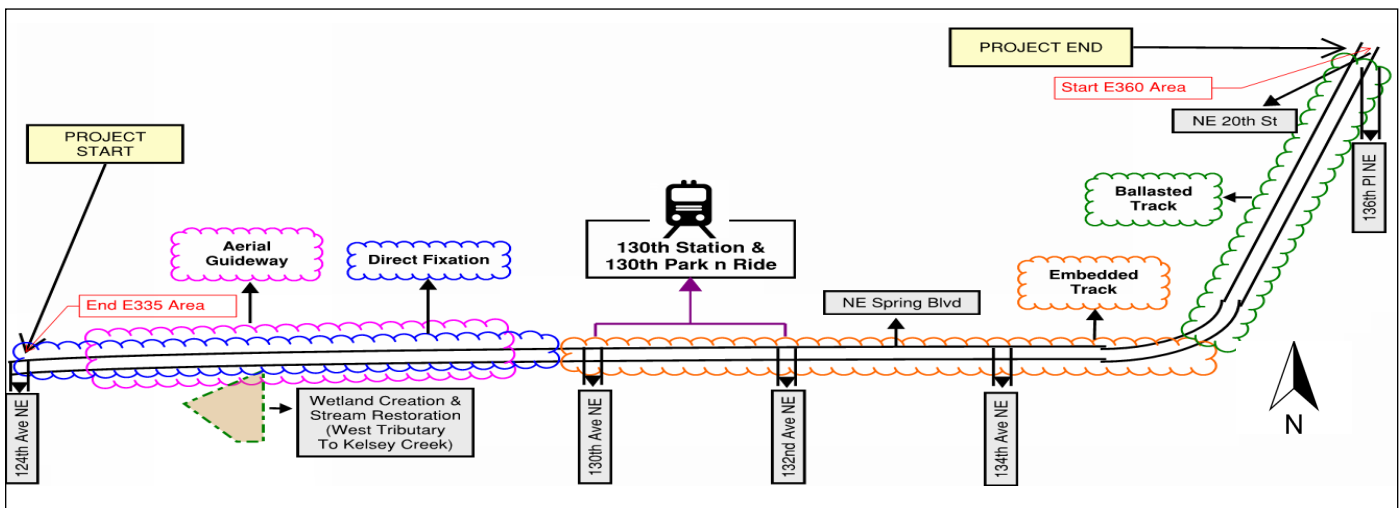
NE Spring Blvd: Install metal safety railing and landscaping. Apply pavement marking.

136th Place NE: Install landscaping, metal safety railing, permanent signing. Apply pavement marking.

Closely Monitored Issues

- Sound Transit is observing impacts to the Contractor's progress due to resource constraints, both labor and administrative. The Contractor indicated they are discussing acceleration opportunities with their subcontractors.
- There are several Temporary Construction Easements (TCE) with upcoming expiration dates. The Contractor has been advised that they need to work out an agreement with the property owners where extensions are not granted.

E340 Construction Work Areas



Cost Summary

Present Financial Status	Amount
E340 Contractor– Max J Kuney	
Original Contract Value	\$93,170,012
Change Order Value	\$5,486,036
Current Contract Value	\$98,656,048
Total Actual Cost (Incurred to Date)	\$94,685,391
Percent Complete	94.2%
Authorized Contingency	\$9,317,000
Contingency Drawdown	\$5,486,036
Contingency Index	1.60



LED lights and conduits installed at northeast entry canopy facing west.

Contract E360 – SR 520 to Redmond Technology Station (RTS)

Current Progress

Design: Notice of Design Change work is still ongoing to include ST and KH initiated changes. Design changes include Sweeper Site Access Road and Clear Zone Protection. KH has presented a garage repair design and ST has presented an additional peer review due to garage beam cracks being discovered and is under joint ST review.

Construction: Impacts due to COVID-19 are addressed in the Executive Summary. Work resumed on May 4, 2020.

- Work Area (WA)#1: Park Place perimeter fencing continued. Paving of Augusta way and prep access road.
- WA #2: Sweeper Site planting; WSDOT fencing installation; and Oakhurst landscape restoration. Aerial Guideway punchlist activities.
- WA #3/4: Light pole setting; barrier removal / pickup traffic control, striping and pot hole paving of 152nd; south kiosk stairs re-profiling; platform punchlist walk; OVS electrical equipment enclosure.
- WA #5: All major construction activities complete in this area.
- WA #6: Decorative paving sand blasting and sealing decorative concrete; commenced irrigation mainline; landscaping continues; punchlist work for the leased office building continued. Canopy work continuing— trim, fascia, and lighting. Site wide grading for paving sidewalks and road ways. Prepping garage concrete beams for repair.
- WA #7: Paperclip handrails and lighting installation; Prepping for art installation; received load 1 of 4 art louvers.

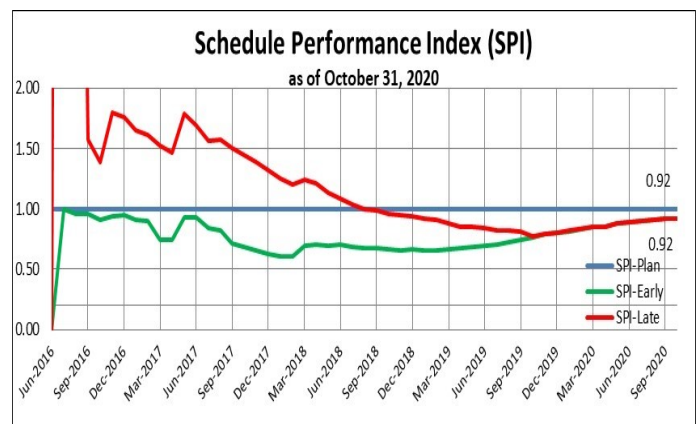
Schedule Summary

The critical path currently runs through the Sweeper Site in Work Area 2. The E750 contractor now has access to all work areas.

Activity Name	Start	Finish	2021			
			Q4	Q1	Q2	
E360 Construction	13-Jul-16 A	27-May-21				
Base Contract	13-Jul-16 A	27-May-21				
Design	13-Jul-16 A	20-Jan-21				
Construction	13-Jul-16 A	27-May-21				
General	13-Jul-16 A	27-May-21				
Project Milestones	13-Jul-16 A	27-May-21				
Notice to Proceed	13-Jul-16 A					
Civil/Systems 100% Design Submittal (NTP+300d) (09-May-2017)		10-Apr-17 A				
Milestone 3A for E750 Work (03-Feb-2020)		06-Mar-20 A				
Milestone 3B Substantial Completion (31-Jul-2020)		27-May-21*				
WA #1 - Track Slab Guideway	22-May-17 A	02-Dec-20				
WA #2 - Aerial Guideway	01-Jun-17 A	18-Dec-20				
WA #3 - Ballasted Guideway Block #1	01-May-17 A	22-Dec-20				
WA #4 - Overlake Village Station	14-Jul-16 A	05-Apr-21				
WA #5 - Ballasted Guideway Block #2	15-Aug-17 A	01-Apr-21				
WA #6 - Overlake Transit Center	01-May-17 A	25-Mar-21				
WA #7 - OVS Pedestrian Bridge	09-Jul-18 A	24-Feb-21				

Schedule Performance Index

The May/June/July pay apps are being withheld due to defective structural design and construction of the RTS garage. November Pay App/ Schedule is still under review. Schedule Performance Index chart has been updated per the latest schedule submittal. Early and late SPI are both 0.92. The lag on SPI curves are skewed to the late finish because of pending commercial resolution of the RTS pedestrian bridge scope that was terminated from the project.



Link Light Rail East Link Extension

Next Period's Activities

- **WA #1:** Water ponding/ Pave Augusta Way.
- **WA #2:** Dig PSE Conduits/ Sweeper Site Access Road.
- **WA #3/4:** Grind/ Overlay Paperclip landings/ Final plumbing testing
- **WA #5:** Plants and irrigation.
- **WA #6:** Punchlist items.
- **WA #7:** WSDOT Signage; Louvers delivery .

Closely Monitored Issues

- Commercial issues for RTS Pedestrian Bridge, City of Redmond CDF Trench Backfill, TOD Laydown Areas.
- Schedule delays for Building Management Systems E340/E360 Interface, Jan & Feb weather events.
- Design development and determination of commercial impacts for the access road to Valley Creek vault. No longer a sweeper site disposal area.
- RTS Garage cracking and 3rd party structural analysis.

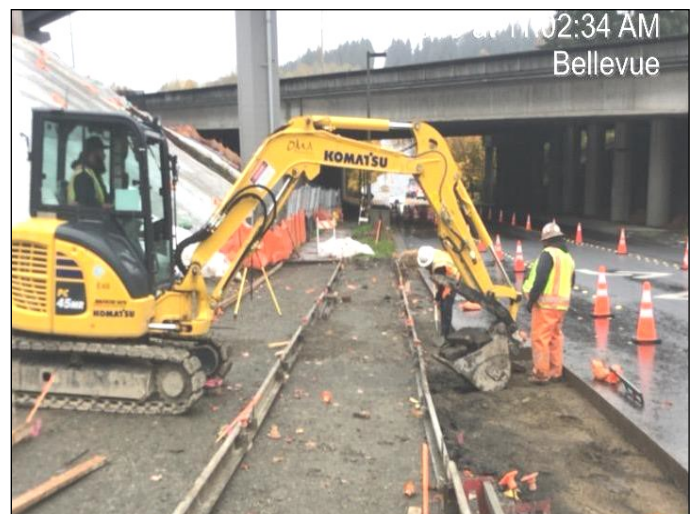
E360 Construction Work Areas



Cost Summary

Present Financial Status	Amount
E360 Contractor— Kiewit-Hoffman	
Original Contract Value	\$225,336,088
Change Order Value	\$8,746,750
Current Contract Value	\$234,082,838
Total Actual Cost (Incurred to Date)	\$212,916,731
Percent Complete	95.57%
Authorized Contingency	\$22,533,609
Contingency Drawdown	\$8,746,750
Contingency Index	2.4

Excludes Betterment



WA 2 — Oak Hurst Driveway Restoration

Contract E750 – Systems Heavy Civil GC/CM

Current Progress

The E750 Contractor, Mass Electric Construction Co. (MEC), continued to prosecute the work as follows:

- Continue development and reviews of engineering submittals covering all disciplines: Traction Power Substations (TPSS), Overhead Catenary Systems (OCS), Train Control Signal Systems and Communications.
- Ongoing coordination meetings for interface and access points for respective contracts.
- Installation of communication PA systems and testing radio cables at E130 and installed PA System at E360 civil segments.
- Installed equipment and cable pulling at E130 civil segments.
- Installed cantilevers and OCS poles at the E130 and set OCS poles and installed comm devices at E360 civil segments.
- Installation of signaling conduit and cable pulling at E130 and E360 civil segments.

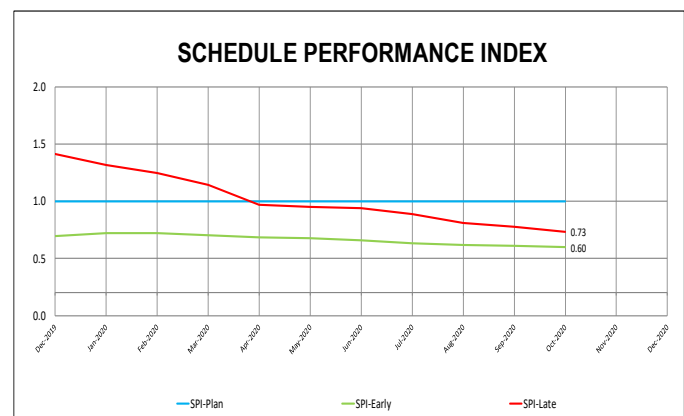
Schedule Summary

The contractor's October update is presented below. The critical path for this project is driven by access to Bellevue Downtown Station, followed by OCS installation. The contractor has experienced some delays in access to work areas, but is still forecast to achieve substantial completion in time to meet Sound Transit's post-construction schedule.

Activity Name	Start	Finish	2021							2022
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	
E750 Construction	08-Jul-08 A	02-Jun-22								
General	12-Jun-17 A	12-Jun-17 A								
Key Dates	12-Jun-17 A	12-Jun-17 A								
NTP - Notice to Proceed (NTP) Northgate and East Link	12-Jun-17 A									
E750 Project	08-Jul-08 A	02-Jun-22								
E750 Engineering	08-Jul-08 A	23-May-22								
E750 Construction	12-Sep-18 A	02-Jun-22								
E750 Construction (General)	15-Mar-19 A	19-Mar-19 A								
E750 Milestones	12-Mar-19 A	22-May-22								
E750 Access Dates	12-Mar-19 A	15-Jul-21								
E750 Contract Milestones	09-Feb-20 A	22-May-22								
MS#08a East Link: Substantial completion of IDS Station Tie-in Work For North Bound (3/9/20)		09-Feb-20 A								
MS#08b East Link: Substantial completion of IDS Station Tie-in Work (CNRFP 27)		22-Mar-20 A								
MS#08 East Link: Limited systems, Redmond Tech transit center parking garage (CCTV, Tele) (7/29/20)		18-Nov-20*								
MS#07 East Link: Limited systems, South Bellevue parking garage (CCTV, Telephone) (3/13/21)		12-Mar-21*								
MS#09 East Link: Substantial completion of East Link Systems (12/31/21)		22-May-22*								
E750 SCCRIM	25-Jan-19 A	22-Mar-21								
E750 OCS	14-Feb-19 A	14-Oct-21								
E750 Traction Power / Substations	01-Oct-18 A	14-Oct-21								
E750 Signals	12-Sep-18 A	06-Oct-21								
E750 Communications	13-Nov-18 A	14-Oct-21								
E750 Radio	28-Jan-19 A	14-May-21								
E750 SCADA	28-Sep-21	27-Oct-21								
E750 Trunk Fiber	19-Dec-18 A	23-Jul-21								
E750 Testing and Commissioning	14-Aug-20 A	02-Jun-22								

Schedule Performance Index

Performance for October is shown as the November invoice has been submitted but not approved. October SPI-Early is 0.60 and SPI-Late is 0.73. Both figures indicates the contractor is behind the early and late plans. This lag is due to access issues on civil segments, especially E130 and E360, as well as from the April suspension of activities in response to COVID-19. While the suspension was lifted on May 4th the challenges to comply with pandemic protocols remains a challenge and directly impacts the efficiency of work. The trend is expected to persist in the near future.



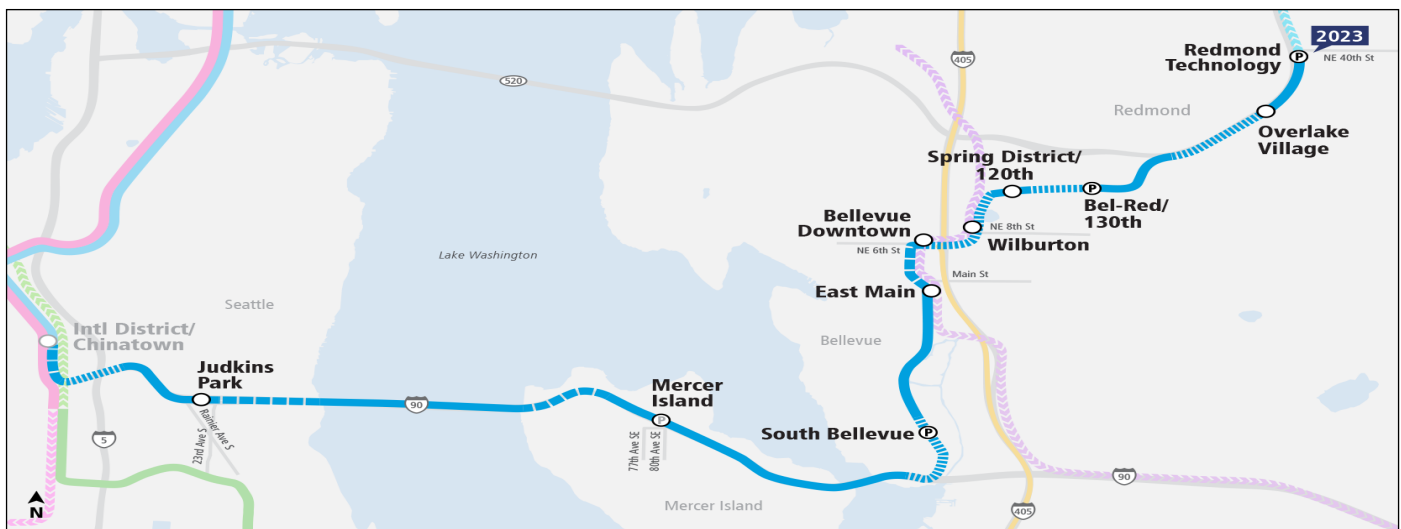
Link Light Rail East Link Extension

Next Period's Activities

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, OCS, Train Control Signal Systems and Communications.
- Ongoing meetings between systems and civil contractors for interface and access points for respective contracts.
- Ongoing installation and delivery of TPSS and Factory Acceptance Testing (FAT).
- Ongoing installation of OCS cabling and pole installation at the E130 and E360 civil segments.
- Delivery of TPSS unit for the E130 civil segment.

Closely Monitored Issues

- Monitoring conduit handover from civil to systems contractor; mitigation steps have been taken to survey all conduits and to work closely with the civil contractors to rectify the situation.
- Civil contractors are currently reporting some form of delay or partial completion on the System Access Dates.
- Contractor's labor ramp up is insufficient to meet the planned construction activities. The planned to actual labor ramp up is being monitored.
- COVID-19 impacts continue to be fluid and is being monitored.



Cost Summary

Present Financial Status	Amount
E750 Contractor - Mass Electric Construction Co.	
Original Contract Value	\$255,768,128
Change Order Value	\$540,174
Current Contract Value	\$256,308,302
Total Actual Cost (Incurred to Date)	\$107,827,555
Percent Complete	50.6%
Authorized Contingency	\$12,788,406
Contingency Drawdown	\$540,174
Contingency Index	11.74

**The N830 and E750 Systems is a joint procurement. The Cost Summary table above represents E750 Systems only.*



Installation of OCS pole near Overlake Transit Station.

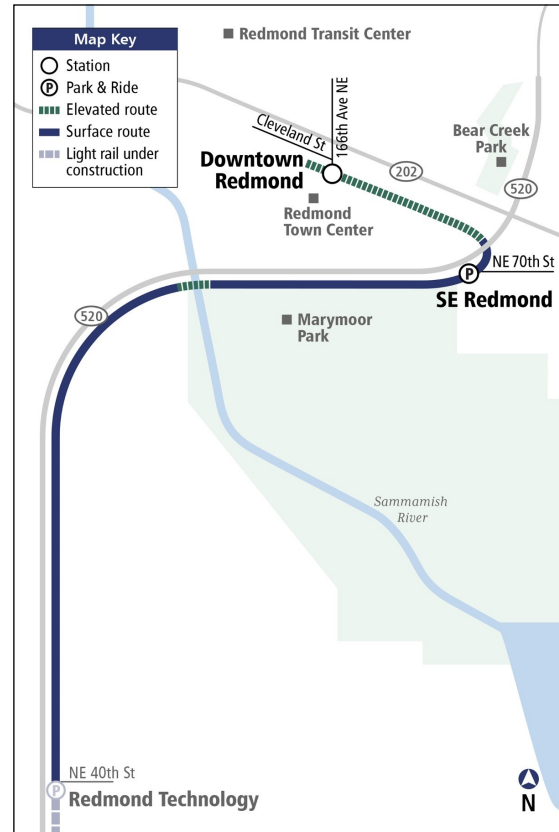
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Link Light Rail Downtown Redmond Link Extension

Project Summary

Scope

Limits	The Downtown Redmond Link Extension (DRLE) builds new light rail from the Redmond Technology Station to downtown Redmond.
Alignment	The extension starts at Redmond Technology Station and travels generally along SR-520 and SR-202 to downtown Redmond.
Stations	Two Stations—SE Redmond (at Marymoor Park) and Downtown Redmond
Systems	Signals, traction electrification, and communications (SCADA)
Phase	Design Build
Budget	\$1.530 Billion (Baselined October 2018)
Schedule	Revenue Service: December 31, 2024



Map of Downtown Redmond Link Extension

Key Project Activities

- Clearing in Marymoor Park; demolition of buildings in SE Redmond; site preparation work near NE 51st; and tree removals.
- Issue For Construction (IFC) issued for Early Work A package
- Progressing Bear Creek mitigation design.
- Reviewing 30% design of the 60th tributary crossing.
- A first update to the Areas of Potential Effect (APE) completed with FTA, and a second update is in process.
- Working with City of Redmond on design solutions for high ground water in the SE Redmond station area.
- Evaluating alternative options for construction staging in SE Redmond.

Closely Monitored Issues

- Private utility relocations – approximately 40 relocations by nine utility owners.
- Relocation of cell tower facilities.
- Timely right-of-way acquisitions and newly identified properties from contractor's need.
- Other potential inefficiencies due to COVID-19 public health and safety protocols and the remote work environment.

Project Cost Summary

Voters approved funding for preliminary engineering for the Redmond Link Extension (DRLE) in the 2008 in the Sound Transit 2 ballot measure. In response to the 2007-2009 Great Recession, the ST Board suspended the project. In February 2016, the ST Board restored funding to support preliminary engineering of the project prior to funding approval for final design and construction as part of the Sound Transit 3 Plan. Table (below) figures in millions. This project has now been baselined. The baseline budget has been incorporated into the tables below. The first table below summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS), while the second table in FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

In this period, DRLE incurred approximately \$12M of expenditure. This period expenditure incurred primarily in Construction phase (\$9.1M) for mostly progression of design build scope. The rest of the expenditures for about \$3M during this period are expended largely to ST staffing, Third Parties and Consultants in Administrative (\$2M) and Construction Services and ROW phase (\$1M). Total cumulative expenditure to date rose from \$256.3M to \$268.3M.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$77.0	\$77.0	\$12.8	\$12.6	\$77.0	\$0.0
Preliminary Engineering	\$23.0	\$23.0	\$19.4	\$18.8	\$23.0	\$0.0
Final Design	\$4.5	\$4.5	\$0.7	\$0.5	\$4.5	\$0.0
Construction Services	\$58.0	\$58.0	\$49.7	\$11.7	\$58.0	\$0.0
Third Party Agreements	\$17.0	\$17.0	\$10.7	\$4.3	\$17.0	\$0.0
Construction	\$1,151.5	\$1,151.5	\$736.2	\$139.6	\$1,151.5	\$0.0
ROW	\$199.0	\$199.0	\$84.5	\$80.9	\$199.0	\$0.0
Total	\$1,530.0	\$1,530.0	\$914.0	\$268.3	\$1,530.0	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$332.4	\$332.4	\$229.6	\$39.2	\$332.4	\$0.0
20 Stations	\$261.9	\$261.9	\$183.1	\$19.7	\$261.9	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$287.1	\$287.1	\$193.6	\$23.9	\$287.1	\$0.0
50 Systems	\$108.6	\$108.6	\$65.2	\$7.0	\$108.6	\$0.0
Construction Subtotal (10 - 50)	\$990.0	\$990.0	\$671.5	\$89.8	\$990.0	\$0.0
60 Row, Land	\$168.5	\$168.5	\$78.3	\$76.5	\$168.5	\$0.0
70 Vehicles (Non-Revenue)	\$4.1	\$4.1	\$0.0	\$0.0	\$4.1	\$0.0
80 Professional Services	\$289.3	\$289.3	\$164.2	\$102.0	\$289.3	\$0.0
90 Unallocated Contingency	\$78.2	\$78.2	\$0.0	\$0.0	\$78.2	\$0.0
Total (10 - 90)	\$1,530.0	\$1,530.0	\$914.0	\$268.3	\$1,530.0	\$0.0

Link Light Rail Downtown Redmond Link Extension



Risk Management

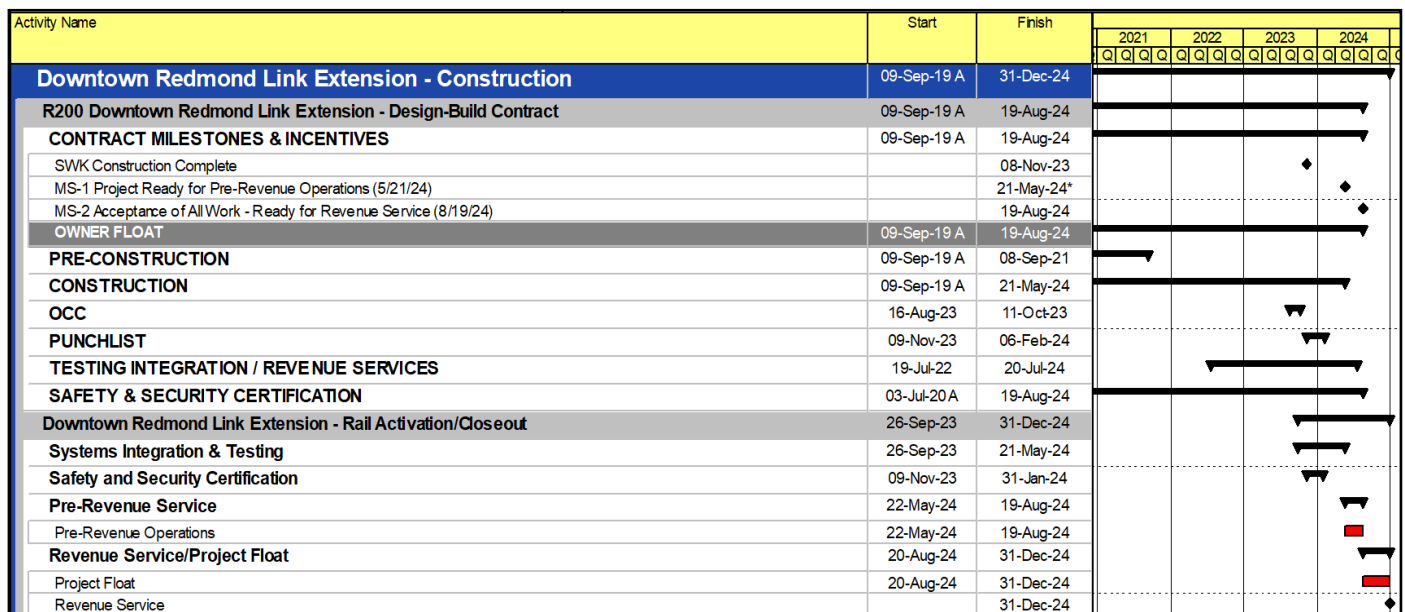
The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It is Sound Transit's responsibility to continuously monitor project status and associated risks.

The project completed its quantitative risk assessment risk workshop as part of the project baseline process in Q4 2018. The quantitative risk assessment report supported with good probability that the project baseline cost and schedule assumptions. The externality conditions remains the same this period and may have reduced in some instances, therefore, the project's risk profile remains unchanged. Q2/Q3 risk is currently being updated. The following are the current top project risk areas:

- Property acquisition - market conditions; protracted durations of attaining control of properties; evolving design impacts property needs; however, the current cost risk seems to be subsiding due to appraisals and offers aligning to the baseline budget assumptions.
- Permitting and third party requirements - construction adjacent to SR520; flood prone areas by Sammamish River and Bear Creek; archaeological discovery; permitting of stream crossings; betterment requests increases complexity of projects; construction impacts to traffic; protracted negotiation with third parties; interfaces with private utilities for utility relocations.
- Construction market conditions - inflationary pressure due to competitiveness for resources and labor; higher materials pricing due to demand as well as regulations (tariffs and taxes); However, since the DB contract bid and awarded for less than baseline estimate, a very significant cost pressure to this project has been averted.
- Agency staffing capacity - developing and mobilizing resources and coordinating start up activities across multiple extensions within a short time frame.
- COVID-19 pandemic - impact due to COVID-19 is unknown and this fluid situation is being closely monitored.

Project Schedule

The project schedule is presented below. Design, permitting and pre-construction submittals are ongoing. Early construction work (e.g. traffic control, demolition, and 3rd party utility relocation) is underway. The *Early Work A Issued For Construction (IFC) Design Package* and the *Early Work B 100% Design Package* are currently under review; major construction is expected to start toward the end of the year. The project is forecast for completion toward the end of 2024.



Right-of-Way

The Right-of-Way effort for this project involves the acquisition of a range of property interests which includes compensable (e.g. fee acquisitions, guideway easements, permanent and temporary construction easements) and non-compensable rights (e.g. rights of entry). These acquisitions will result in owner and tenant residential and commercial relocations. The right-of-way program status for this period is summarized in the following table.

Downtown Redmond Link Extension Property Acquisition Status*					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required **	Relocations Completed to date
84	88	91	53	1577	1498
<p>* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.</p> <p>** A large majority of the relocation count is due to the relocation of storage units.</p> <p>Note: The change in Board Approved was due to a correction. The WSDOT ASL/TCAL leases was being counted in the #of parcels needed and board authorized and they should have been included in the WSDOT tracking.</p>					

Community Outreach

- Ongoing engagement with the public and businesses on potential construction impacts, with specific focus on property owners and tenants regarding the start of construction this year and the increasing construction activities along SR520.
- Sent project update to residential contacts along SR 520 between NE 51st and NE 60th Streets related to night work.
- Continued engaging businesses along the Redmond Central Connector trail in advance of construction fencing (Jan 2021).

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average is the monthly annualized average of 12 months; whereas the YTD monthly average only reflects actuals through November of 2020. The consulting variance is due to the fact that the design build project management consultants are being prudently mobilized. Effectively the variance gap should trend closer to plan average as the year progresses; however, due to fluidity of the situation with COVID-19, it hard to predict how the annual plan will unfold accordingly.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	30.8	22.6	(8.2)
Consultants	25.9	27.4	1.5
TOTAL	56.7	50.0	(6.7)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this Period.	

Link Light Rail West Seattle and Ballard Link Extensions

Project Summary

Scope

West Seattle

The West Seattle Extension includes 4.7 miles of light rail from downtown Seattle to West Seattle's Alaska Junction neighborhood and includes a bridge across the Duwamish Waterway.

The Draft EIS includes alternatives on the south and north side of the West Seattle Bridge and elevated and tunnel guideway alternatives in West Seattle Junction.

Ballard

The Ballard Extension includes 7.1 miles of light rail from downtown Seattle to Ballard's Market Street area.

The Draft EIS includes alignment alternatives in Downtown, Interbay, and Ballard; different station depths in Chinatown-International District and Downtown; and bridge and tunnel alternatives across Salmon Bay.

Stations

See project map

Phase

Planning

Budget

\$285.9 M through completion of Preliminary Engineering

Schedule

Revenue Service Date(s) will depend on Board direction from realignment process.



Map of Project Alignment

Key Project Activities

- Continued production of the Draft EIS.
- Continued collecting data and conducting fieldwork for environmental and engineering evaluation in support of design.
- Launched Fall 2020 online open house and briefed community groups virtually as requested. Provided overview of outreach, project goals, agency roles and near-term opportunities for engagement.
- Continued engagement with partner and regulatory agencies, stakeholder groups and property owners regarding environmental process and next steps.
- Continued coordinating with partner agencies including City of Seattle, King County, Port of Seattle and other local, state and federal agencies.

Project Cost Summary

The West Seattle and Ballard Link Extensions are voter-approved projects under the ST3 Plan. The current Authorized Project Allocation (budget) for the project that has been approved by the Sound Transit Board allows staff to conduct alternatives development, followed by an Environmental Impact Statement, leading to ST Board selection of the project to be built and FTA issuance of a Record of Decision in 2023.

Out of the total Authorized Project Allocation, the project is authorized and planned to incur approximately \$47M in 2020 for coordinating Draft EIS development, conceptual engineering; project administration and stakeholder engagement.

The project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$63.1	\$16.5	\$16.3	\$63.1	\$0.0
Preliminary Engineering	\$205.4	\$85.0	\$71.7	\$205.4	\$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	\$11.4	\$1.5	\$0.7	\$11.4	\$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	\$6.0	\$2.7	\$1.4	\$6.0	\$0.0
Total	\$285.9	\$105.6	\$90.1	\$285.9	\$0.0

Cost Summary by SCC

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$5.0	\$2.7	\$1.4	\$5.0	\$0.0
80 Professional Services	\$263.4	\$103.0	\$88.7	\$263.4	\$0.0
90 Unallocated Contingency	\$17.5	\$0.0	\$0.0	\$17.5	\$0.0
Total (10 - 90)	\$285.9	\$105.6	\$90.1	\$285.9	\$0.0

Link Light Rail West Seattle and Ballard Link Extensions



Risk Management

Sound Transit has a vigorous risk management program and is committed to identifying, assessing, and monitoring risks and implementing risk reduction/mitigation actions. Risk Assessment for the West Seattle and Ballard Link Extensions Project was conducted as part of the ST3 Planning process.

Project issues and risks identified at this stage include:

- Reaching stakeholder consensus on a preferred alternative, including third party funding;
- Complexity of alignments in constrained environment with challenging topography and waterway crossings;
- Complexity associated with tunneling through a mature urban environment;
- Potential construction effects in a constrained environment;
- Potential effect on Central Link operations during construction;
- Right-of-way and property impacts;
- Potential budget risk due to higher current real estate costs and construction costs.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment. Through this period, the project has experienced three months of delay within the conceptual engineering phase of design which is associated with COVID-19 related impacts and which has the potential to delay the overall project schedule. Revenue Service Date for the different sections will depend on Board direction from the realignment process.

Activity Name	Start	Finish	2021				
			Q4	Q1	Q2	Q3	Q4
Sound Transit	17-Mar-17 A	30-Dec-22					
ST3 - Central Corridor	17-Mar-17 A	30-Dec-22					
West Seattle and Ballard Link Extension	17-Mar-17 A	30-Dec-22					
West Seattle and Ballard Link Extension	17-Mar-17 A	30-Dec-22					
West Seattle and Ballard Link Extensions	17-Mar-17 A	30-Dec-22					
Alternative Analysis - (Phase I)	17-Mar-17 A	23-May-19 A					
Conceptual Engineering - (Phase II)	24-May-19 A	16-Dec-21					
Conceptual Engineering - Milestones	16-Dec-21	16-Dec-21					
WSBLE - Board Reaffirms Preferred Alternative	16-Dec-21	16-Dec-21					
Conceptual Engineering	24-May-19 A	10-Sep-21					
Geotech Investigation - Phase II	24-May-19 A	30-Dec-20					
Preliminary Engineering - (Phase III)	17-Dec-21	30-Dec-22					

Community Outreach

- Prepared and staffed three community briefings in November 2020 for the communities to learn more about light rail route and station location options being studied in the Draft EIS. The specific dates of those events were:
 - Uptown Alliance – November 2, 2020
 - Ballard Alliance: Mike Stewart – November 2, 2020
 - Pigeon Point Neighborhood Council – November 9, 2020
- Prepared and staffed one property owner meeting
- Continued effort to contact stakeholders throughout project corridor to offer briefings.
- Launched Fall 2020 online open house, delivered project mailer to 98,310 addresses throughout the project corridor and offered briefings to key stakeholders.
- Developed and distributed fieldwork notifications regarding 1 geotechnical boring and a water pump test.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE is an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average takes peaks and valleys in activity into account; whereas the YTD monthly average only reflects January—November actuals. Staffing variance reflects extension of DEIS schedule to accommodate internal and external agency capacity in response to COVID.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	44.8	34.8	(10.0)
Consultants	125.0	99.9	(25.1)
TOTAL	169.8	134.7	(35.1)

** An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.*

Sound Transit Board Actions

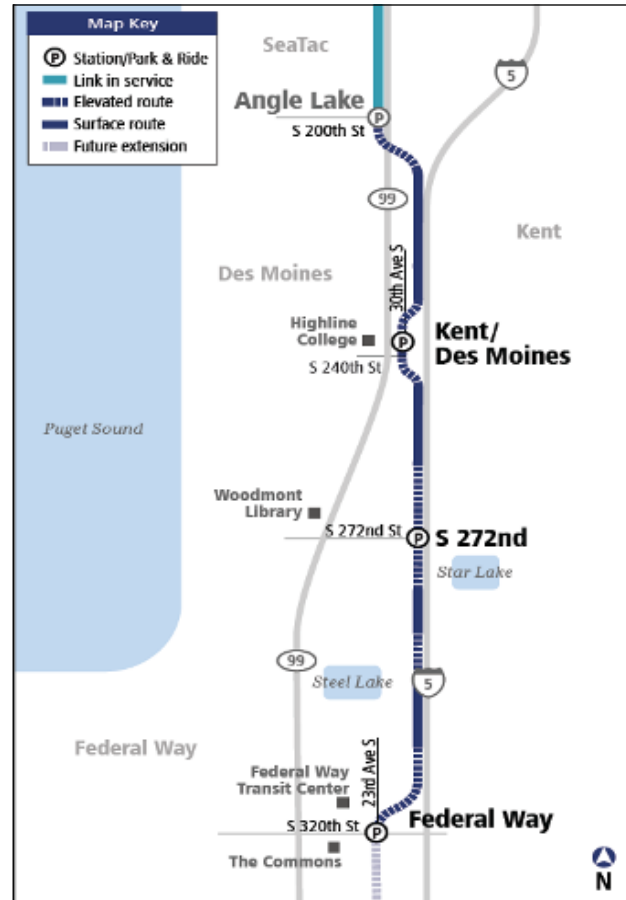
Board Action	Description	Date
	None to report this period.	

Link Light Rail Federal Way Link Extension

Project Summary

Scope

Limits	The Federal Way Link Extension adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center.
Alignment	The extension generally parallels SR 99 and I-5 freeway.
Stations	Stations at Kent/Des Moines, South 272nd Star Lake Park –and-Ride and the Federal Way Transit Center
Systems	Signals, traction power, and communications (SCADA)
Phase	Proceed to Final Design/Construction
Budget	\$2.45 Billion (Baseline Sep 2018)
Schedule	Revenue Service: December 2024



Map of Federal Way Link Extension.

Key Project Activities

- **F200:** Continued task force meetings with project team: Federal Way Transit Center design at 60% and 90% design at Kent-Des Moines Station. Excavation at Midway Landfill concluded for the season.
- **F200:** Continued drill shafts for elevated guideway in SeaTac. Negotiations continued regarding FWTC and anticipates ST Board in February 2021.
- Project team encountered challenges coordinating PSE utility relocations and Kiewit's deep foundation drilled shaft work.
- Continued development of several future task orders for utility relocation agreements with PSE.
- Project team, PSE and WSDOT continued to secure time-sensitive outstanding WSDOT utility permits related to PSE utility relocation work in WSDOT ROW.
- ST and WSDOT will enter into a betterment agreement to include SR 509 Noise Walls into the project.
- Property rights and covenant issues are a schedule risk for drilled shaft work for Structure B at Lowe's property in the City of Kent. Project team worked with ST Fire Protection, Legal and Real Property in developing a proposed approach to resolve the issue and allow work to proceed.
- The cities have collectively issued 210 permits, of which 136 issued during remote working conditions due to COVID-19.

Project Cost Summary

The project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

This period approximately \$25M was incurred for November of which \$1.4M incurred was for Right-of-Way; \$2.2M incurred for Construction Services; \$20.6M for Construction phase comprised mainly of \$20.4M for Design Build construction contract, \$0.2M for Cities Construction Permits and Utility Relocations. Remaining major expenditures reside in Preliminary Engineering, Third Party and Administration. Overall the project Estimate at Completion continues to reflect \$2.45B .

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$96.5	\$96.5	\$28.1	\$28.1	\$96.5	\$0.0
Preliminary Engineering	\$46.5	\$49.0	\$45.5	\$45.0	\$49.0	\$0.0
Final Design	\$3.1	\$3.1	\$1.0	\$1.0	\$3.1	\$0.0
Construction Services	\$107.0	\$107.0	\$97.2	\$26.5	\$107.0	\$0.0
3rd Party Agreements	\$27.7	\$27.7	\$22.2	\$7.5	\$27.7	(\$0.0)
Construction	\$1,831.9	\$1,829.4	\$1,335.1	\$340.8	\$1,829.4	\$0.0
ROW	\$338.8	\$338.8	\$194.4	\$191.4	\$338.8	(\$0.0)
Total	\$2,451.5	\$2,451.5	\$1,723.6	\$640.3	\$2,451.5	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$523.0	\$451.1	\$388.4	\$72.8	\$513.4	(\$62.4)
20 Stations	\$318.9	\$297.7	\$249.8	\$45.5	\$333.7	(\$36.0)
30 Support Facilities	\$5.3	\$11.8	\$11.3	\$2.1	\$5.1	\$6.7
40 Sitework & Special Conditions	\$558.4	\$489.5	\$463.3	\$120.1	\$638.1	(\$148.6)
50 Systems	\$153.8	\$170.4	\$114.1	\$21.4	\$150.8	\$19.6
Construction Subtotal (10 - 50)	\$1,559.4	\$1,420.4	\$1,226.8	\$261.9	\$1,641.0	(\$220.6)
60 Row, Land	\$341.6	\$338.8	\$194.4	\$191.4	\$338.8	(\$0.0)
70 Vehicles	\$1.8	\$1.8	\$0.0	\$0.0	\$1.8	\$0.0
80 Professional Services	\$370.7	\$514.4	\$302.4	\$187.1	\$293.7	\$220.6
90 Unallocated Contingency	\$178.1	\$176.3	\$0.0	\$0.0	\$176.3	\$0.0
Total (10 - 90)	\$2,451.5	\$2,451.5	\$1,723.6	\$640.3	\$2,451.5	\$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.

Below are the top project risks:

- Federal Way Transit Center (FWTC) design changes as requested may impact cost and time higher than anticipated at time of issuance of RFP
- Current covenants on the FL247 (Lowes) property may result in design and construction modifications to the alignment of the aerial guideway
- PSE service connections & utility relocations impacting the construction schedule
- Sanding program and LRV storage requirements impacting permit issuance
- DB delays due to securing PSE Easements for advanced utility relocations
- Schedule impacts from Third Party utility relocations (Clink, Comcast, PSE, etc.)
- System adequacy for traction power
- Schedule impacts due to unanticipated property rights and acquisition issues
- FWTC change order may delay permit issuance and construction, due to conservative city code interpretation and City Council process associated with changes to the Development Agreement
- Untimely city permits (SeaTac, Kent and Des Moines) impacting the design & construction schedule
- Contaminated material encountered during construction
- Not meeting the property acquisition schedule provided in RFP
- Additional drainage improvements may be identified as design progresses potentially delaying design and increasing
- Requirements for facility/systems enhancements by AHJs
- PSE may request reimbursement to upgrade their electrical grid outside of known scope



Grading progress at South 288th St. (adjacent to Highway 5)



Column B11R (Structure B) concrete placement

Contingency Management

The Federal Way Link Extension project budget was baselined in September 2018 with a total contingency of \$549.9M. The current contingency balance is \$530.5M.

Design Allowance (DA) has been used and no longer reported.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. During this period the AC remains unchanged.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. During this period the UAC remained unchanged from the previous month.

Contingency Status (Monthly)

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$139.6	5.7%	\$0.0	0.0%
Allocated Contingency	\$232.2	9.5%	\$296.6	16.4%
Unallocated Contingency	\$178.1	7.3%	\$176.3	9.7%
Total:	\$549.9	22.4%	\$472.9	26.1%

Contingency by Type

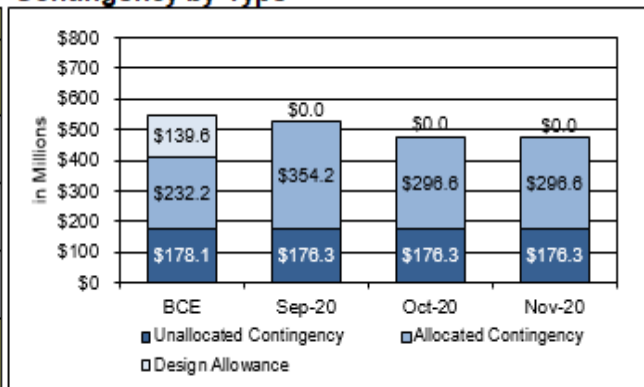
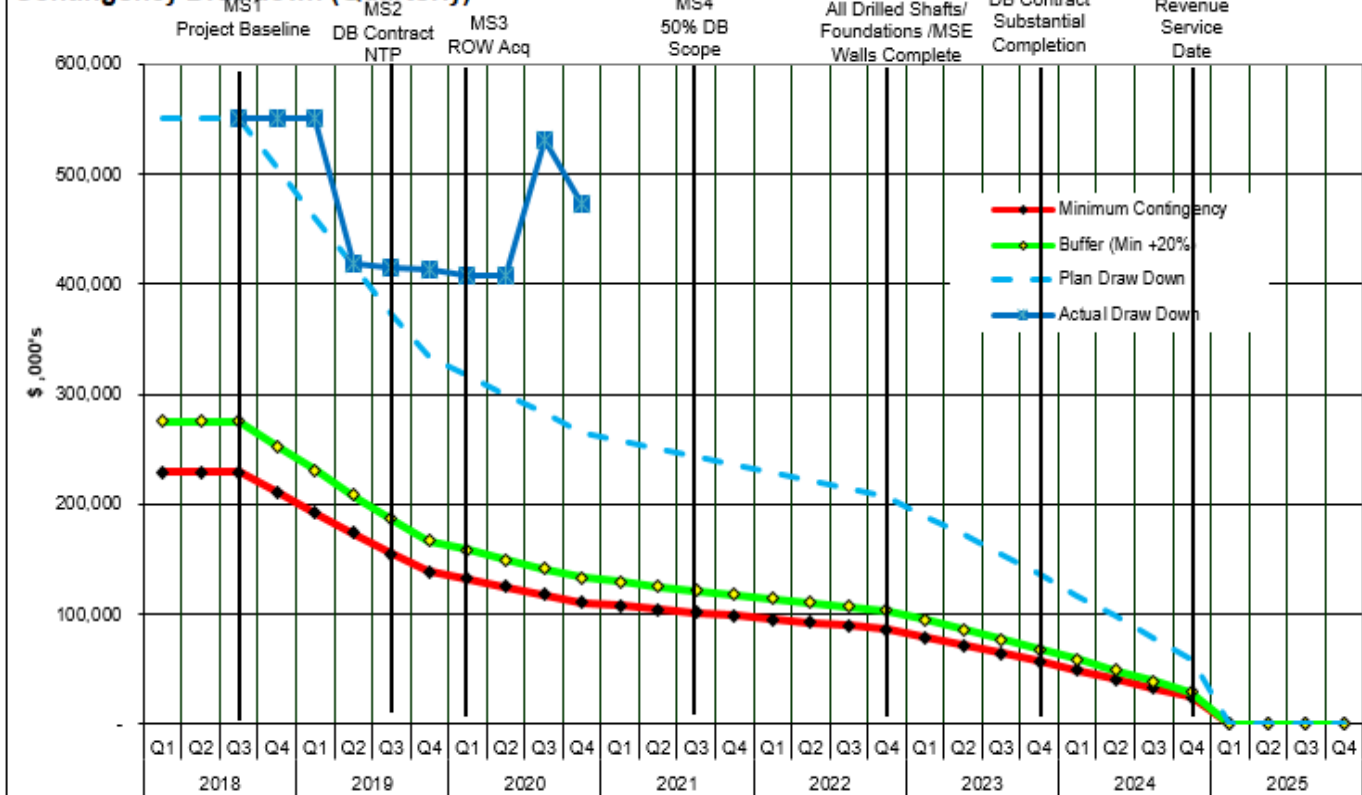


Table figures are shown in millions.

Contingency Drawdown (Quarterly)

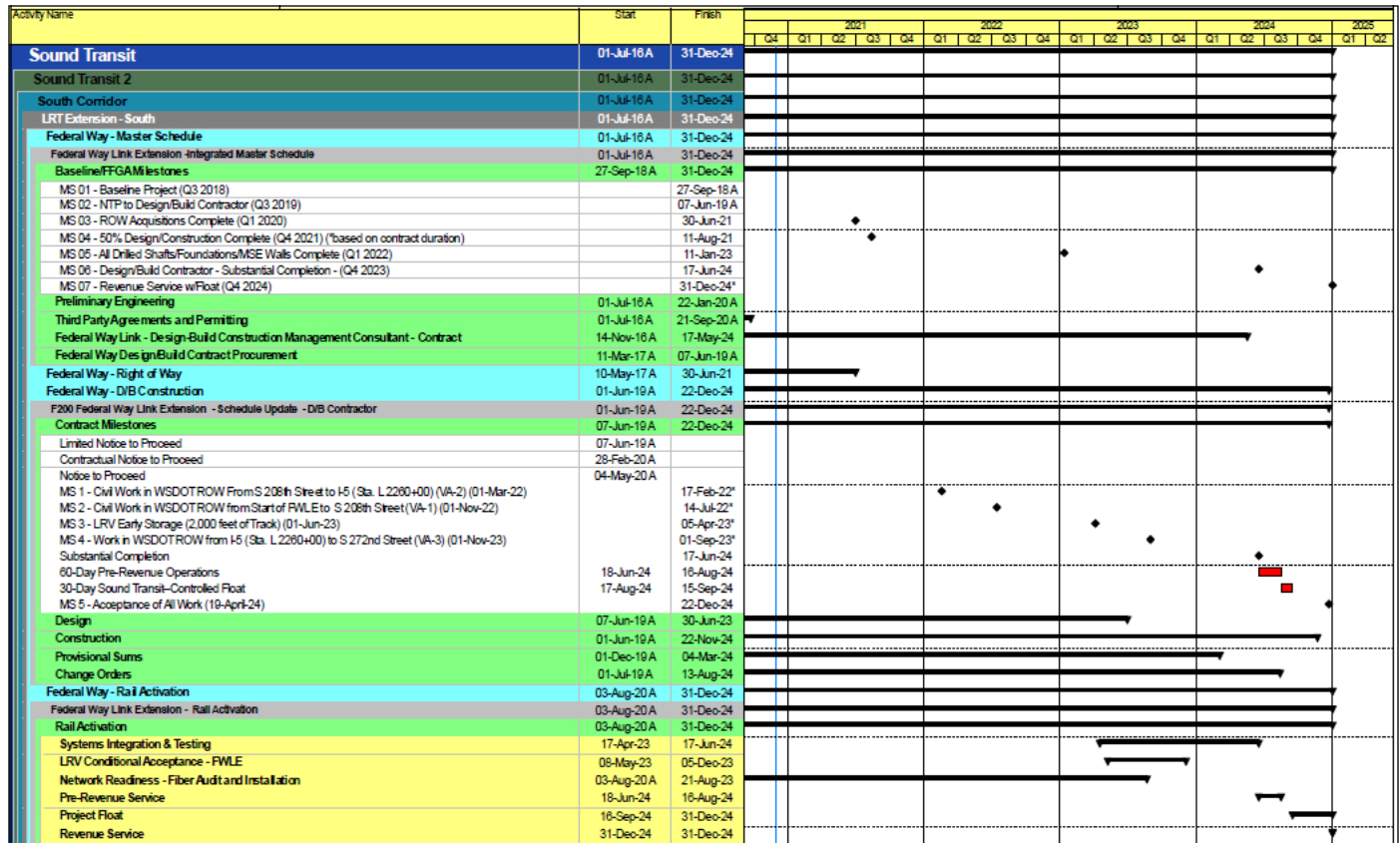


Link Light Rail Federal Way Link Extension



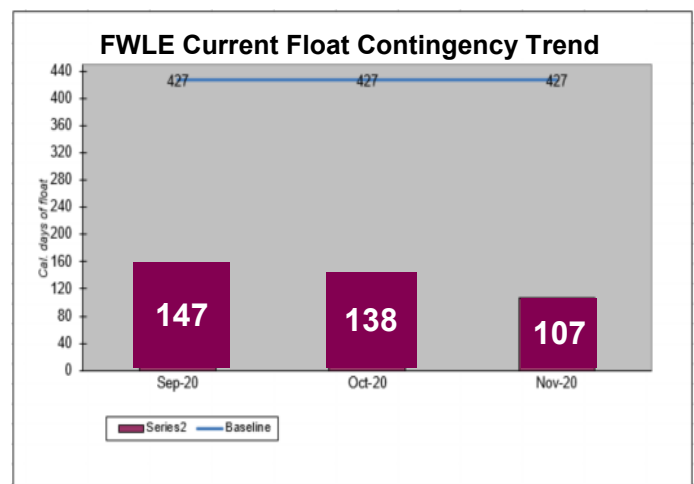
Project Schedule

The project schedule is presented below. Right-of-Way acquisitions continue and additional detail has been added to the master schedule to monitor impacts to the project. LNTP was issued June 7, 2019. The baseline schedule submittal was approved in January 2020. Our Full Funding Grant Agreement was awarded on January 22, 2020. A limited construction NTP was issued in early May 2020. Kiewit is currently assessing impacts from FWTC design changes, utility relocations and ST may need to reduce the project float contingency as this change order is negotiated. Revenue Service remains on schedule for Q4 2024 even as schedule pressures mount. The schedule submittal from the F200 contractor for November is currently under review and is shown below.



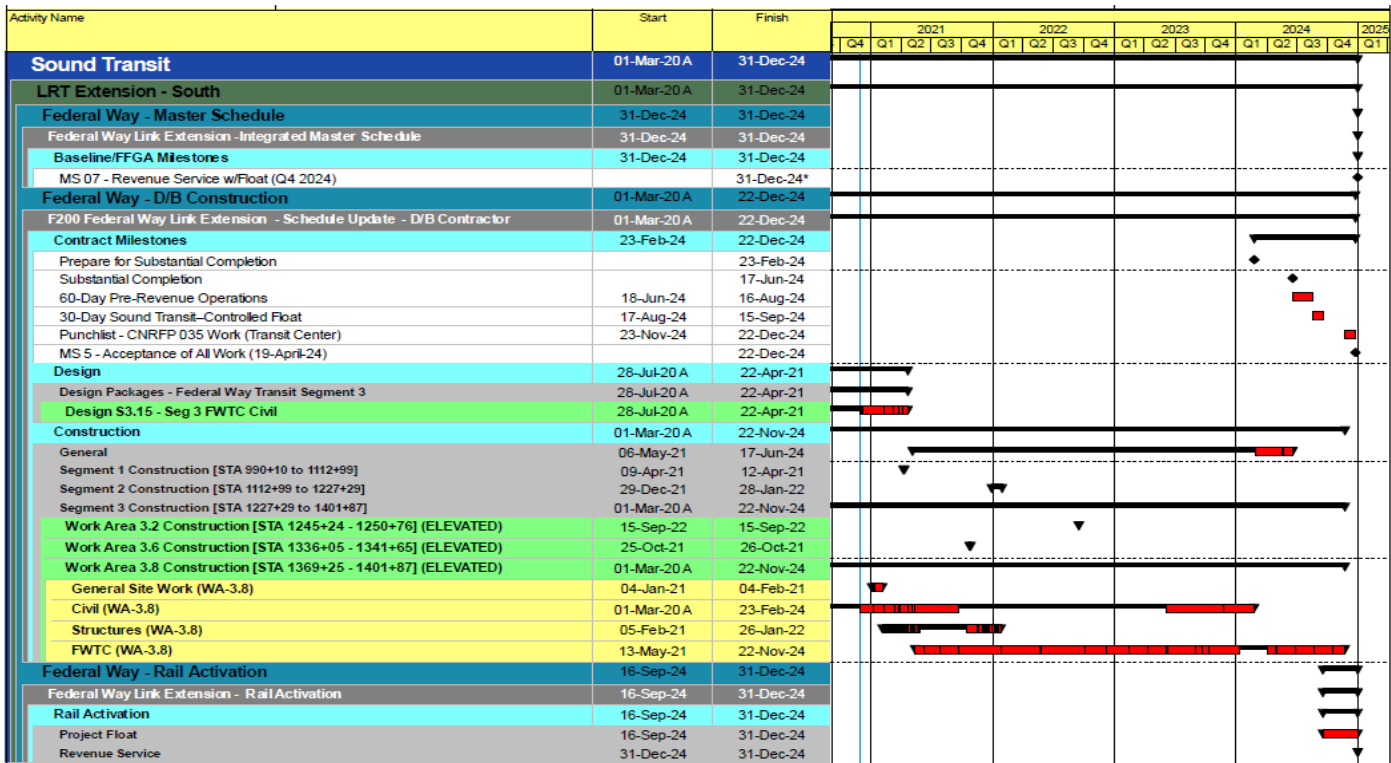
Project Float

Federal Way Link Extension was baselined with 427 days of project float. Currently the project is reporting 107 days of project float remaining between Pre-Revenue Service and Revenue Service in December 2024. Schedule Pressure from ST design revisions for FWTC, Utility Relocates, and delays to ROW acquisitions, may require the reduction of float contingency in the near future, if mitigation measures are exhausted. No change orders have been issued to adjust contract milestones or utilize project float contingency at this time. Note that work at FWTC will continue during the project float contingency time frame, Kiewit has found that this work is not important to opening for Revenue Service. ST will need to approve of this approach.



Critical Path Analysis

The critical path to Revenue Service currently runs through drilled shafts through Structure B to G and columns, piers and span erection, and FW Station, Station Commissioning, and Pre-Revenue and project float contingency. The second critical path is through FWTC design, utility installation, the FWTC construction and then Final Acceptance after Revenue Service. The scope for FWTC is still in early design and a change order for this redesign has not been incorporated in a change order at this time. Negotiations are expect to be completed near the end of 2020. We continue to focus on Pre-Revenue Service, but F200 Milestone #5 Final Acceptance is now showing impacts out into December 2024 for completion of the project at the FWTC. The schedule update for November is currently under review, but has been shown below. We continue to work with Kiewit regarding the schedule impacts of FWTC and have not accepted these impacts at this time.



Right-of-Way

Acquisitions for a range of property interests, includes compensable (e.g. fee acquisitions, guideway easements, permanent and temporary construction easements) and non-compensable rights (e.g. rights of entry). These acquisitions will result in owner and tenant residential and commercial relocations. The ROW status for this period is summarized in below table.

Federal Way Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
257	353	297	227	434	432
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Terminology: Total Acquisitions is defined as only parcels (recognizing only land not owners). Board Approved based on parcels and properties (multi-unit acquisitions). Relocation numbers are the number of affected individuals.

Community Outreach

- Communication with property owners and the public on FWLE route, station areas and property acquisition is ongoing.
- Developed social media plan and calendar for FWLE Facebook page, increasing membership and engagement.
- Presented to the Kent West Hill Neighborhood Association on 11/17.
- Conducted extensive outreach to enroll businesses in the Loyal to the Local business mitigation plan.
- Met with project neighbors around tree removal and replacement.
- Coordinated with WSDOT, City of SeaTac and internal staff on property owner issues at SR99 and S 208th.
- Developed fact sheet hand out around SR99 bypass installation, including translation into 5 top languages for the alignment.
- Created and displayed banners at station areas to inform the public of project progress and contact info for questions.



The first drilled shafts in SeaTac



Columns going up at KDM station area

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Overall the project FTE is 18.5 (or 27%) over the staffing plan. Although ST staff is underrun by 4.7 FTEs, the consultant staff is overrun by 23.2 FTEs. This year more DBPM services for overseeing the DB contractor was needed than anticipated. More consultant staff has been needed to address the increasing activities by the DB contractor in the areas of change management, design and major construction work involving demo, utility relocations and various civil site work throughout the alignment.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	39.8	35.1	(4.7)
Consultants	28.7	51.9	23.2
TOTAL	68.5	87.0	18.5
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

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Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Construction Safety

Data/ Measure	November 2020	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	0	0
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	1	3	3
Reported Near Mishaps	0	2	2
Average Number of Employees on Worksite	234	-	-
Total # of Hours (GC & Subs)	26,455	194,902	194,902
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	0.00	0.00	0.00
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
Recordable National Average	3.00		
LTI National Average	1.20		
Recordable WA State Average	6.00		
LTI WA State Average	1.90		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals.

Phase 3 Preliminary Engineering (PE)

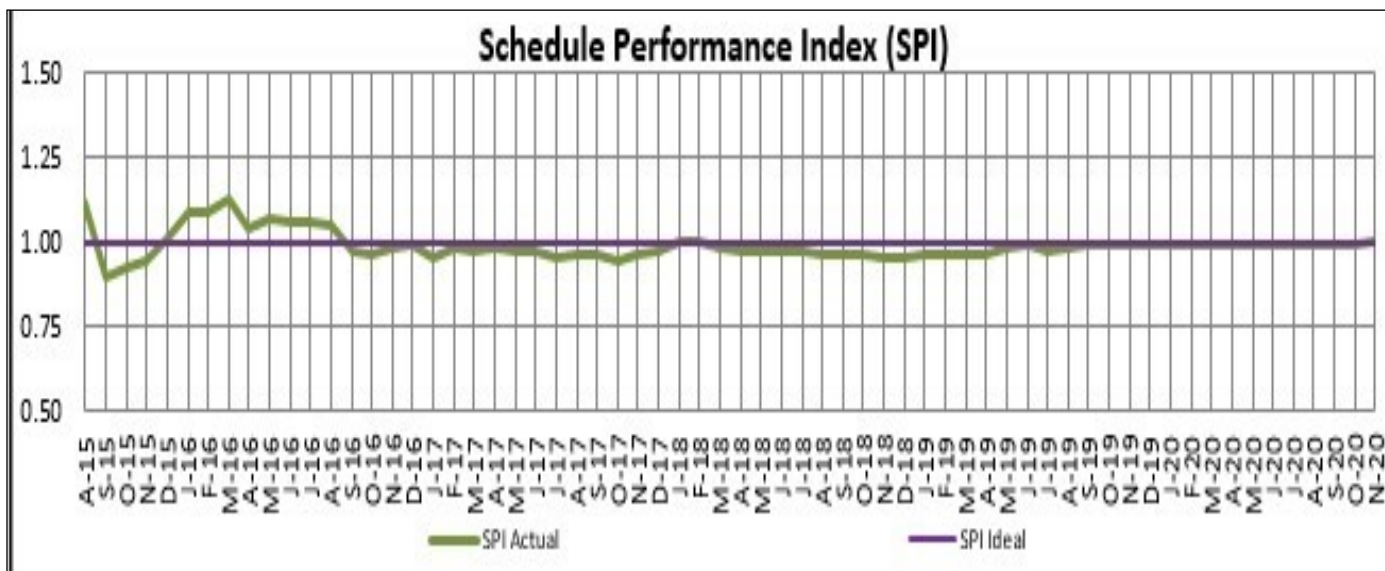
In July 2015, Sound Transit executed an amendment to the professional services agreement with HDR Engineering, Inc. for Phase 3 professional services, including completion of a Final Environmental Impact Statement (FEIS) using the preferred alternative and the other alternatives in the Draft EIS, preliminary engineering of the preferred alternative to Kent/Des Moines and additional engineering as needed to support receipt of environmental approvals. In February 2016, Sound Transit executed an amendment to extend the preliminary engineering effort from Kent/Des Moines to the Federal Way Transit Center.

Current Progress

- Provided support for property acquisition including ROW drawings, parcel maps, American Land Title Association (ALTA) maps and Temporary Construction Airspace Lease (TCALs).
- Various coordination works between Sound Transit, the DBPM and the design-builder (DB).
- Environmental works including updating the Traffic Analysis and noise study for proposed FWTC bus layover location.

Schedule Performance Index

The cumulative Schedule Performance Index (SPI) is 1.00 through November 2020, indicating the overall amount of work accomplished is as planned. The consultant (HDR) is fully engaged on coordination efforts with the DBPM consultant, and the design-builder, revisiting critical areas reports, NEPA/SEPA, property acquisition support with parcel maps, ALTA maps and TCALs.

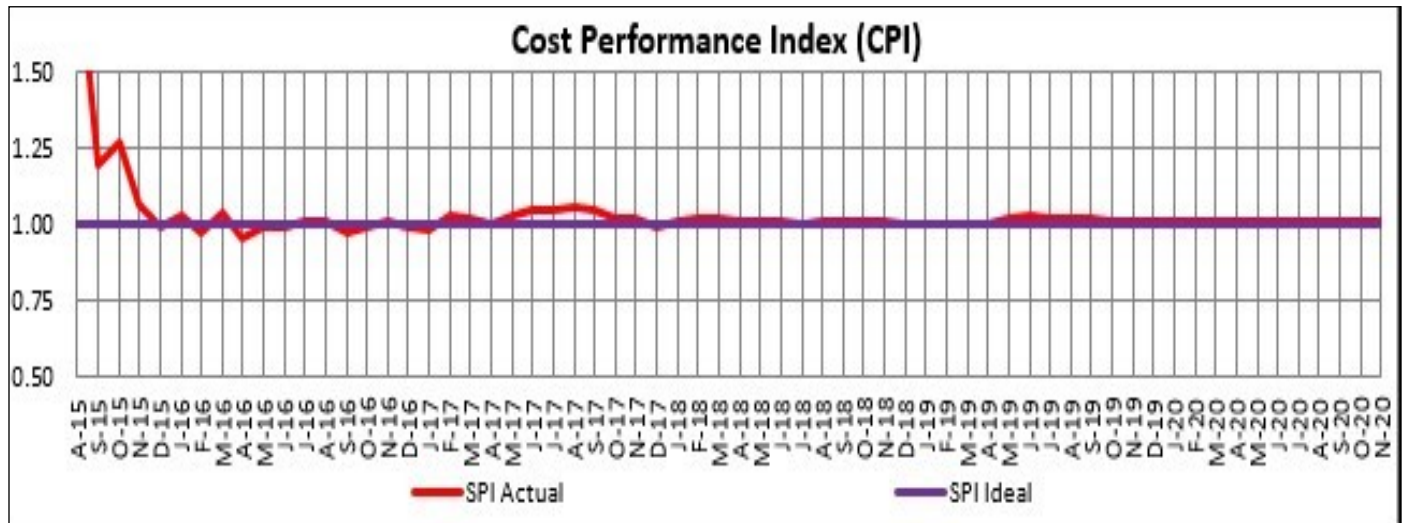


Link Light Rail Federal Way Link Extension



Cost Performance Index

Phase 3 expenditures through November 2020 totaled \$36.84M, approximately 99.0% of the amended total contract. The Phase 3 percent complete is reported at 99.6%, with an earned value of \$37.06M. The cumulative Cost Performance Index (CPI) is 1.01 showing costs are on track with work accomplished. The Consultant is engaged in coordinating efforts with the DBPM and the design-builder, environmental works, ROW acquisition support, parcel maps, ALTA maps and TCALs.



Cost Summary

Contract (Phase 3 portion)	Cumulative To-date
Amount Invoiced	\$36.84M
% Spent	99%
Earned Value	\$37.06M
% Complete	99.6%
SPI	1.00
CPI	1.01

F200 Design Build Contract

Current Progress

The F200 Design-Build Contractor, Kiewit, is continuing Design Task Force meetings and design package submittal reviews for S1 (Kent/Des Moines-KDM), S2 (Star Lake), S3 (Federal Way Transit Center-FWTC).

Design:

- 90/100% design submittals submitted in November include: CW.04g - Standard Drawings – Civil; S1.06a - KDM Station Early Package; S2.03 - Structure SL (Combined with S2.05); S2.05 - SL Station; S3.02 - Elevated Guideway - Structure E; S3.04a - Elevated Guideway - Structure Span G19-G28
- Issued-for-Construction (IFC) design packages submitted in November include: CW.03a - Systems Early Duct Banks; CW.03b - Systems Infrastructure

Construction:

- Major excavation activities continue across the project but have slowed due to seasonal weather conditions.
- A permitting delay with the City of Des Moines shifted planned demolition work to December.
- At Midway Landfill, mass excavation, trenching, and liner installation continues. Backfill operations are nearing completion, and all weather-critical excavation efforts were completed.
- Preparations continue for the SR-99 Detour with a focus on coordinating utility relocation work with PSE.
- Drilled shafts work for the elevated guideway (Structure A) at SeaTac commenced this month. Pre-construction potholing was performed in the area and identified a conflict with existing gas lines, which PSE was able to resolve.
- Columns for Structure B (near the Kent Des Moines station) continue to progress.
- PSE recommenced utility relocation work at the new duct bank along 30th Avenue South (Kent).

Schedule Summary

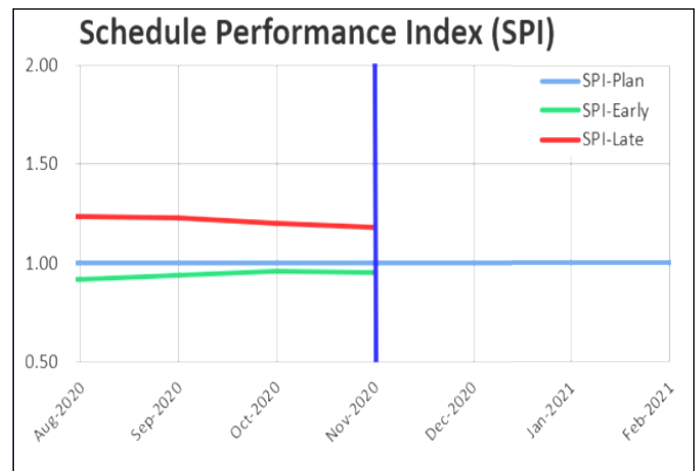
The progress schedule for November 2020 is currently under review and is shown below. Construction NTP was issued in May 2020. Revenue Service is expected in August 2024 based on Kiewit's schedule but please note *Milestone 5 - Final Acceptance* is reporting impacts due to FWTC redesign and is noted below in December of 2024. Kiewit has assumed and identified work that is not required for Revenue Service and is now tied to Final Acceptance. This will be considered during the negotiations for the FWTC redesign. ST continues to work with Kiewit regarding the schedule impacts of FWTC and have not accepted these impacts at this time.

Activity Name	Start	Finish												
			2021			2022			2023			2024		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
F200 Federal Way Link Extension - Schedule Update - D/B Contractor	01-Jun-19 A	22-Dec-24												
Contract Milestones	07-Jun-19 A	22-Dec-24												
Limited Notice to Proceed	07-Jun-19 A													
Contractual Notice to Proceed	28-Feb-20 A													
Notice to Proceed	04-May-20 A													
MS 1 - Civil Work in WSDOT ROW From S 208th Street to I-5 (Sta. L 2260+00) (VA-2) (01-Mar-22)		17-Feb-22*												
MS 2 - Civil Work in WSDOT ROW from Start of FWLE to S 208th Street (VA-1) (01-Nov-22)		14-Jul-22*												
MS 3 - LRV Early Storage (2,000 feet of Track) (01-Jun-23)		05-Apr-23*												
MS 4 - Work in WSDOT ROW from I-5 (Sta. L 2260+00) to S 272nd Street (VA-3) (01-Nov-23)		01-Sep-23*												
Substantial Completion		17-Jun-24												
60-Day Pre-Revenue Operations	18-Jun-24	16-Aug-24												
30-Day Sound Transit-Controlled Float	17-Aug-24	15-Sep-24												
MS 5 - Acceptance of All Work (19-April-24)		22-Dec-24												
Design	07-Jun-19 A	30-Jun-23												
Design Milestones	07-Jun-19 A	30-Jun-23												
Corridor Wide	07-Jun-19 A	27-May-21												
Design Packages - Kent Des Moines Segment 1	07-Jun-19 A	09-Mar-21												
Design Packages - Star Lake Segment 2	07-Jun-19 A	12-Mar-21												
Design Packages - Federal Way Transit Segment 3	07-Jun-19 A	14-Jul-21												
Construction	01-Jun-19 A	22-Nov-24												
General	01-Jun-19 A	17-Jun-24												
Segment 1 Construction [STA 990+10 to 1112+99]	28-Jun-19 A	28-Dec-23												
Segment 2 Construction [STA 1112+99 to 1227+29]	28-Jun-19 A	29-Dec-23												
Segment 3 Construction [STA 1227+29 to 1401+87]	28-Jun-19 A	22-Nov-24												
Provisional Sums	01-Dec-19 A	04-Mar-24												
Change Orders	01-Jul-19 A	13-Aug-24												

Link Light Rail Federal Way Link Extension

Schedule Performance Index

For the November period, the Early SPI is 0.95 and Late SPI is 1.18. Compared against revised cash flow projections, (incorporating both base contract and change orders executed to date), Kiewit is in line with projected amounts and good schedule performance is being maintained. The late SPI is expected to decrease as the contract progresses. The project earned value is progressing in line with forecasts, and is trending slightly ahead of current Planned Early values. Base contract design efforts are at 73.6% completion, while Civil work is 19.1% complete and Elevated Guideway work is 4.9% complete.



Next Period's Activities

- **General:** Continue design task force meetings.
- **Design:** Advancing the design towards 90/100% design packages and IFC sets, continuing the FWTC re-design efforts and obtaining permits.
- **Construction:** Drilled shaft work, utility relocations, Midway Landfill liner installation, geotechnical inspections and monitoring, roadway and paving, fencing, noise walls, soil remediation, SR-99 detour preparation and coordination of SR-99 bridge vicinity work.

Closely Monitored Issues

- **Substructure:** Maintaining drill rig planned sequencing and continuing efforts on Structures A and B.
- **Federal Way Transit Center (Redesign):** Design is underway. FWLE team hired an independent estimator, and negotiations began with Contractor.
- **COVID-19:** construction activities continue with appropriate oversight.

Cost Summary

Present Financial Status	Amount
F200 Contractor - Kiewit Infrastructure West Co	
Original Contract Value	\$1,285,200,000
Change Order Value	\$63,691,722
Current Contract Value	\$1,348,891,722
Total Actual Cost (Incurred to Date)	\$324,412,965
Percent Complete	25.97%
Authorized Contingency	\$228,520,000
Contingency Drawdown	(63,691,722)
Contingency Index	0.93



Drill rig mobilization to Structure A

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Link Light Rail Hilltop Tacoma Link Extension

Project Summary

Scope

Limits City of Tacoma

Alignment The Hilltop Tacoma Link Extension project is a 2.4-mile extension of the existing Tacoma Link system from the Theater District in downtown Tacoma to the Hilltop neighborhood. The extension will travel at-grade along Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr. Way.

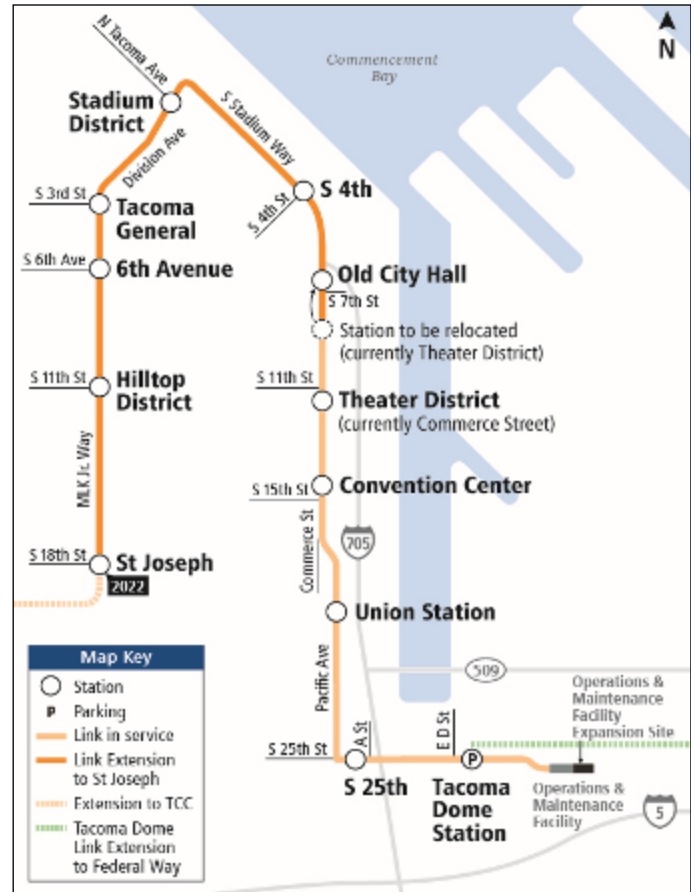
Stations Old City Hall, S. 4th, Stadium District, Tacoma General, 6th Avenue, Hilltop District, and St. Joseph.

Systems Expansion of the Operations and Maintenance Facility; The at-grade alignment will include additional signals, OCS, traction power, and communications infrastructure.

Phase Construction

Budget \$217.3 Million (Baselined September 2017)
\$252.7 Million (Re-Baselined June 2020)

Schedule Revenue Service: May 2022



Map of Hilltop Tacoma Link Extension.

Key Project Activities

Final Design: Design consultant continued design services during construction scope including review of construction contractor submittals and responded to requests for information.

Construction: November construction activities were performed in accordance with contractor COVID-19 safety training and protocols.

Heading 1: Stripped the foundation wall at TPSS No. 1. Installed sewer bypasses on the north side of the S. 9th and Commerce St. intersection. Installed OCS poles along Stadium Way.

Heading 2: Stadium High School: Completed work at the curve including installation of the median curb, gutter, infill and completed channelization of roadway. Stadium District – completed installation of conduits, vault and grounding for TPSS No. 2 on Division Ave. to N. I and N. 2nd St. Installed OCS foundations along Division Ave. and installed OCS poles along N. 1st and Division Ave.

Heading 3: Completed systems ductbank installation and poured outbound track slab from S. 8th to S. 6th on MLK. Began rail work at terminus between S. 18th and S. 19th including building tail track and turnout switch. Completed installation of conduits, systems vaults at TPSS No. 4 followed by footing and stem wall forming and pouring. Formed and poured TPSS No. 3 stem wall. Continued installation of OCS poles along MLK.

OMF Expansion: East 25th St: Poured OCS foundations on north and south side of E. 25th St. Saw cut and installed dewatering systems in preparation for systems vault and ductbank installation. Yard: Formed and poured north and south retaining walls. Graded NE yard for HMA. Poured the west yard Y2 and Y3 track slabs. *Interior:* Began installation of electrical trim on 1st Fl. and mezzanine. Began installing branch circuits at mezzanine. Completed ceramic tile and sink installation at 2nd fl. restrooms. Began excavation for turntables.

Project Cost Summary

In September 2017, Sound Transit Board adopted the Hilltop Tacoma Link Extension (HTLE) baseline schedule and budget. In June 2020 the Sound Transit Board approved an increase to the authorized project allocation from \$217.3M to \$252.7M. The project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

The T100 construction contract was executed in August 2018. Staff received ST Board approval in December 2019 to add contingency to this contract. Following the risk assessment in April 2020, staff recommended an additional \$35.4M budget for an Estimated Final Cost of \$252.7M of the project. The ST Board approved the recommendation for additional project budget in June 2020.

Approximately \$4.7M was incurred in the November 2020 period. A majority of the expenditures occurred in the Construction Phase and are related to the T100 contract and City of Tacoma Work Orders. Most expenditures to date have been from Administration, Construction, and Final Design.

Cost Summary by Phase

Project Phase	Baseline Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$21.6	\$14.1	\$14.0	\$21.6	(\$0.0)
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	(\$0.0)
Final Design	\$14.1	\$13.2	\$12.6	\$14.1	(\$0.0)
Construction Services	\$12.4	\$8.9	\$8.0	\$12.4	\$0.0
3rd Party Agreements	\$1.5	\$1.3	\$1.0	\$1.5	\$0.0
Construction	\$162.0	\$128.0	\$101.7	\$162.0	\$0.0
Vehicles	\$33.4	\$30.4	\$5.0	\$33.4	\$0.0
ROW	\$2.3	\$2.2	\$1.9	\$2.3	\$0.0
Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$252.7	\$203.7	\$149.7	\$252.7	(\$0.0)

Cost Summary by SCC

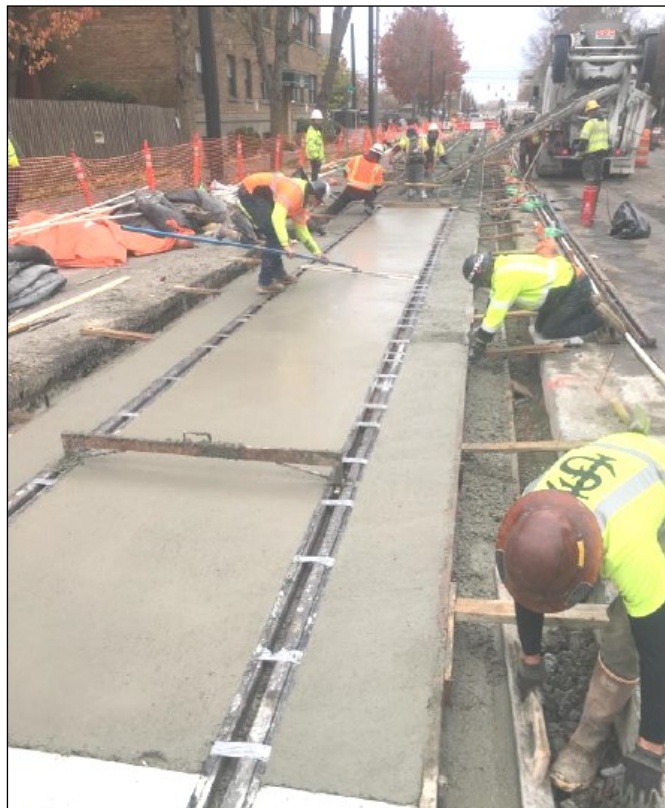
SCC Element	Baseline Budget	Commitment to Date	Incurred to Date	Estimated Final Cost	Adopted Budget vs.
10 Guideway & Track	\$31.0	\$24.5	\$19.5	\$31.0	\$0.0
20 Stations	\$3.5	\$2.7	\$2.2	\$3.5	(\$0.0)
30 Support Facilities	\$41.2	\$32.5	\$25.8	\$41.2	(\$0.0)
40 Sitework & Special Condi-	\$51.7	\$40.9	\$32.5	\$51.8	\$0.1
50 Systems	\$34.6	\$27.3	\$21.7	\$34.6	(\$0.0)
Construction Subtotal (10 - 50)	\$161.93	\$128.0	\$101.7	\$162.0	(\$0.1)
60 Row, Land	\$2.1	\$2.2	\$1.9	\$2.3	\$0.2
70 Vehicles (non-revenue)	\$33.1	\$30.4	\$5.0	\$33.4	\$0.3
80 Professional Services	\$53.7	\$43.1	\$41.2	\$55.1	\$1.4
90 Unallocated Contingency	\$2.0	\$0.0	\$0.0	\$0.0	(\$2.0)
Total (10 - 90)	\$252.7	\$203.7	\$149.7	\$252.7	(\$0.0)

Risk Management

The Hilltop Tacoma Link 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 will provide 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, taking mitigation actions for known risks identified on the risk register, and effectively responding in a timely manner to those risks that pose a significant impact to the project cost or schedule forecast.

The Baseline Risk Assessment was conducted in May 2017 and we conducted a Quantitative Risk Assessment in May 2019. A Recovery Action Workshop was conducted on October 24-25, 2019. An update to the risk model following review of secondary risk mitigations was done and updated the project's estimate at completion. The team implemented the mitigations for the top risks which are tracked via weekly status updates. The latest Risk Register was updated in November 2020. The next Risk Register update is planned for January 2021. As of the end of November 2020, the current top project risks include:

- Roadway Modifications - Curb and gutter - City of Tacoma enforcement of new curb and gutter standards in conflict with curb and gutter details in the contract require additional resources (time and labor).
- Roadway Modifications - Full depth restoration - Full depth restoration required in areas previously called out for grind and overlay.
- Unidentified utilities (Commerce St) under the proposed alignment lead to increased cost and schedule delays for mitigation during construction.
- Unidentified utilities at E 25th St area lead to increased cost and schedule delays for mitigation during construction.
- The schedule for the 9th and Commerce St. cutover occurs just prior to start of pre-revenue service and could impact revenue service date.



Pouring track slab across S. 7th

Contingency Management

Hilltop Tacoma Link Extension was baselined on September 2017 with a total contingency of \$33.8M. Since baselining, there were drawdowns on AC and UAC to address the Procurement of the Tacoma LRV and T100 Construction contracts, Design Services During Construction contract, and various construction change orders. The baseline contingency levels were insufficient and required an additional \$35.4M that was approved by the ST Board in June 2020.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA is at \$0M, as a result of completion of Final Design.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period no change orders were executed and the Total AC was the same at \$36.1M.

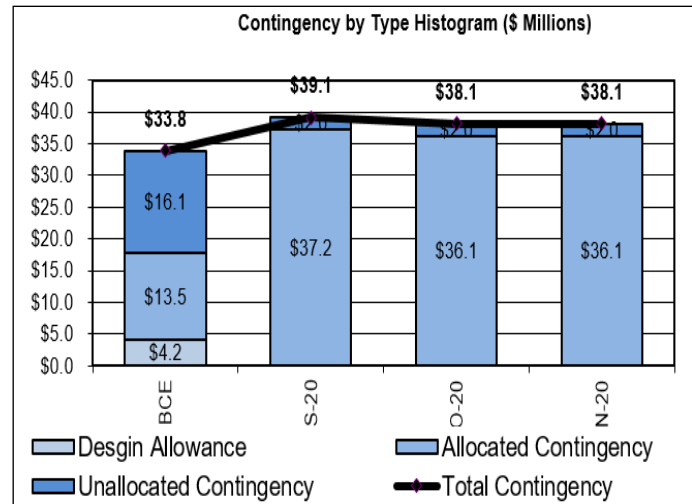
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remained the same as amount as last month at \$2.0M.

Contingency Status (Monthly)

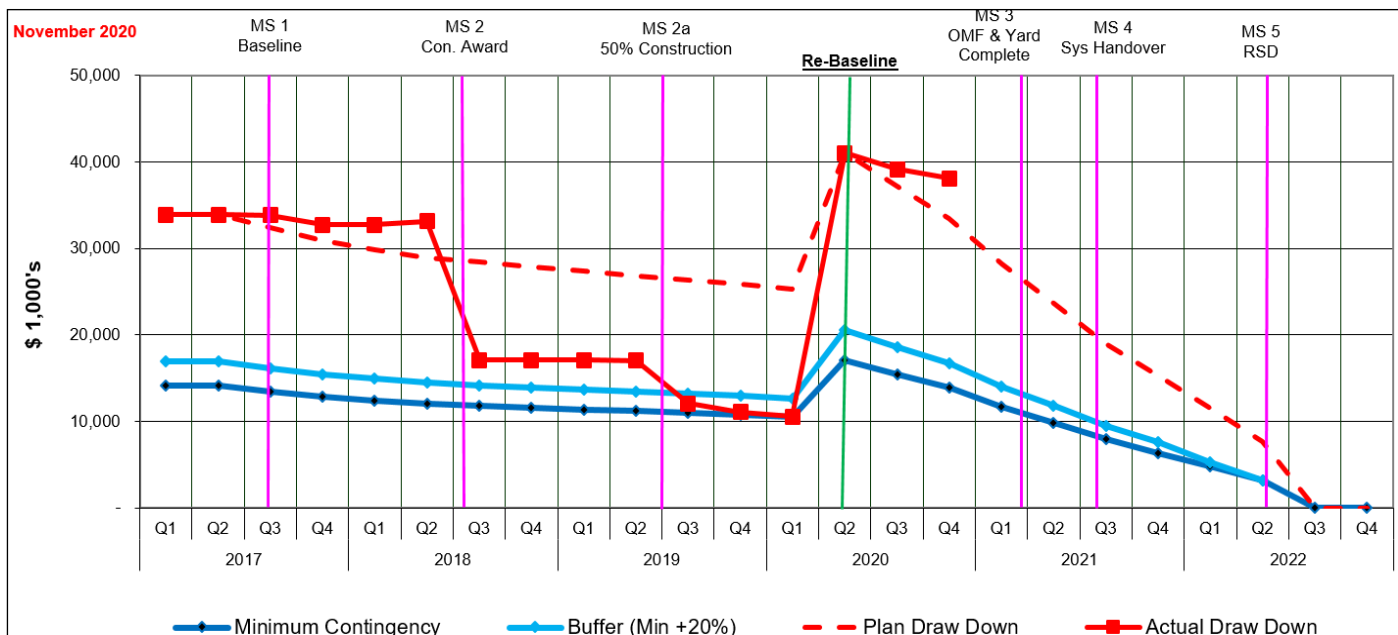
Type	Baseline		Re-Baseline	
	Amount	% of Total	Amount	% of Work
Design Allowance	\$4.2	2.2%	\$0.0	0.0%
Allocated Contingency	\$13.5	6.8%	\$36.1	35.1%
Unallocated Contingency	\$16.1	8.2%	\$2.0	1.9%
Total	\$33.8	17.2%	\$38.1	37.0%

Table figures are shown in millions.

Contingency by Type Histogram (\$ Millions)



Contingency Drawdown (Quarterly)



Link Light Rail Hilltop Tacoma Link Extension



Project Schedule

The Master Schedule has been updated through the end of Nov 2020. Overall physical percent complete is 67%.

LRV: Forecast delivery of the first car arriving in early Q3 2021 and last car in Q1 2022. The car builder's schedule forecasts all cars will be delivered in time to support pre-revenue service startup in Q1 2022.

T100: Systems handover of OMF and Mainline testing to start of pre-revenue service in early April 2022. MS#2 Substantial Completion of all work is forecasted to be completed in April 2022.

Activity Name	Start	Finish	2021				2022			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Hilltop Tacoma Link Expansion - Nov 2020	02-Feb-15 A	23-May-22								
Project Milestones	28-Sep-17 A	23-May-22								
Preliminary Engineering	02-Feb-15 A	04-Nov-16 A								
ROW & Third Parties	01-Oct-15 A	14-Jun-17 A								
Owner Furnished Materials / Equipment Procurement	02-Oct-17 A	01-Apr-22								
Light Rail Vehicles (Qty 5)	11-Oct-18 A	25-Apr-22								
Construction	23-Jan-18 A	27-Jul-18 A								
T100 Construction	29-Jun-18 A	17-Apr-22								
Pre-Revenue Testing	01-Apr-22	16-May-22								
Simulated Revenue Service	01-Apr-22	16-May-22								
Project Float - Owner Controlled	16-May-22	23-May-22								
Project Float - Baseline Project Float	16-May-22*	23-May-22								
Revenue Service	23-May-22	23-May-22								
Revenue Service Begins (BL Date May 23, 2022)		23-May-22*								

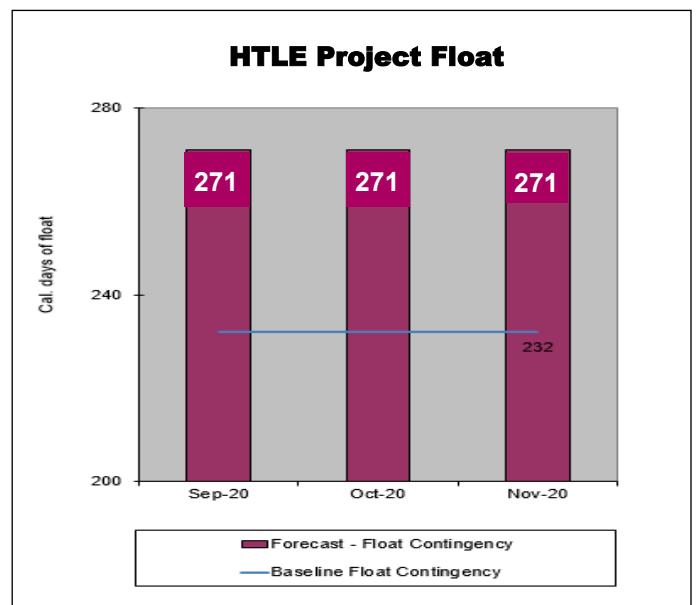
Project Float

Hilltop Tacoma Link Extension was baselined with 232 days of project float in the schedule in order to achieve Revenue Service on May 23, 2022.

RFC #148/ CO #37 was approved and awaiting for a 15 day time extension due to differing site conditions and design issues and is reflected in the current project float drawdown.

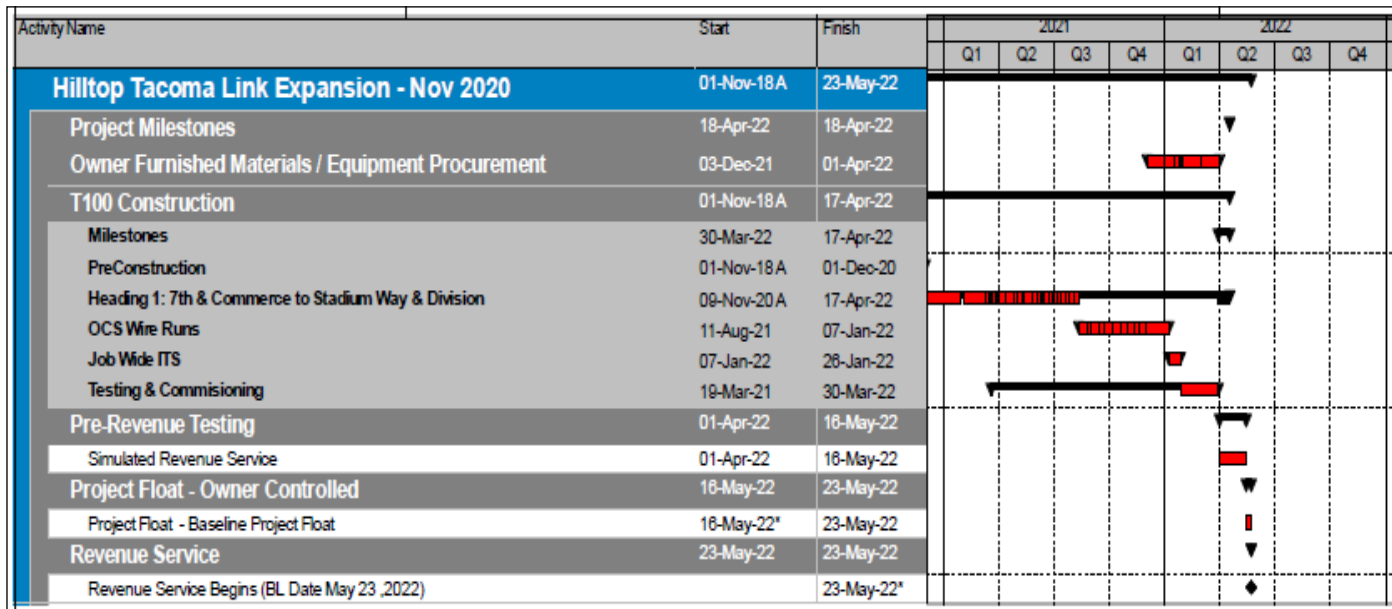
CO #35 , #46 and #14 were approved for seven day time extension due to weather delays and is reflected in the current project float drawdown.

RFC #251 was submitted by the Contract and is still in review with ST CM Team with a possible 105 day time extension that is not reflected in the current project float drawdown.



Critical Path Analysis

The analysis for Nov 2020 shows the main critical path runs through the T100 contract with the installation of the TPSSs in Heading 1, Heading 2 and Heading 3 followed by completing OCS wire runs; Job Wide ITS testing and Testing and Commissioning before pre-revenue service begins.



Right-of-Way

The Hilltop Tacoma Link Operations and Maintenance Facility will expand to the east and five new vehicles will be purchased. The Right-of-Way effort for this project involved the acquisition of a range of property interests which includes compensable (e.g. fee acquisitions, guideway easements, permanent and temporary construction easements) and non-compensable rights (e.g. rights of entry). These acquisitions resulted in owner and tenant residential and commercial relocations. The following table summarizes the right-of-way program status for this period. All project property acquisitions are complete.

Tacoma Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
20	20	20	20	1	1
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Community Outreach

- Informed Stadium businesses and residents about the contractor completing track installation in the Stadium curve, and both the Stadium curve and Stadium Way opening to two-way traffic on Nov. 6.
- Continued coordinating with MultiCare on construction near Tacoma General Hospital. Provided two-week notifications to Kaiser Permanente and MultiCare about installing OCS foundations and installing track on the east side of MLK Jr. Way from Division Ave to 5th St. Held site walks with MultiCare (Nov 6, 13 and 23).
- Produced and distributed notification to businesses and residents on Commerce St. about sewer work, including obtaining their input on the possibility of working during the holiday moratorium. Notified stakeholders about the contractor working on weekends at the 9th St. and Commerce St. intersection, and then notified them that the weekend work was cancelled. The project team had planned to do this sewer work during the holiday moratorium, but it is rescheduled for January.
- Continued informing businesses and residents about track installation along MLK Jr. Way from S. 15th St. to S. 19th St. Created signage for Fish House Cafe and Speed-E Mart.
- Produced and distributed notification to businesses and residents about track installation crossing 6th Avenue and track installation starting on E. 25th St. near the Operations and Maintenance Facility. Coordinated with Tacoma Medical Center about access during the concrete pour on MLK Jr. Way from S. 7th St. to 6th Ave. Coordinated with businesses on E. 25th St. about truck access and deliveries during track installation.
- Met with Mercy Housing twice: to review the construction schedule and to address a side sewer conflict.
- Gave an update on the HTLE project to Downtown on the Go's transit committee (Nov 16). Provided Loyal to the Local masks for Downtown on the Go's "Ride the Bus" event and more promotional opportunities.
- Produced and distributed the weekly construction alert about traffic impacts.
- Continued coordinating with Communications on the Loyal to the Local campaign, including Facebook ads, videos and a wrap on a Tacoma Link train. Continued posting to the HTLE Facebook group. Sponsored the Hilltop Action Coalition's Hilltop Holiday Crawl.
- Responded to questions/complaints about parking on Commerce St., access to the alley near Normanna Hall during a community event, construction workers parking in the Tacoma Medical Center's parking lot, restoration of property on S. 4th St., and the schedule for track installation on Stadium Way south of Division Ave. Unfortunately, the "Butterfly Monarch" mural on Commerce St. was vandalized.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

ST staff variance reflects shared design and engineering SME resources across multiple ST projects including South Corridor and Vehicles. Despite the variance in FTE levels project is sufficiently staffed for this period. ST will monitor project needs and adjust FTE levels as needed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	31.9	24.8	(7.1)
Consultants	19.7	21.2	1.5
TOTAL	51.6	46.0	(5.6)

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Link Light Rail Hilltop Tacoma Link Extension



Construction Safety

Data/ Measure	November 2020	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	4	7
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	2	10	18
Reported Near Mishaps	1	28	43
Average Number of Employees on Worksite	128	-	-
Total # of Hours (GC & Subs)	7,423	98,119	236,793
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	8.15	5.91
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
Recordable National Average	3.00		
LTI National Average	1.20		
Recordable WA State Average	6.00		
LTI WA State Average	1.90		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals.

Contract T100 — Hilltop Tacoma Link Extension

Current Progress

The construction contractor, Walsh Construction Company II, LLC, continues work at the interior and exterior of the OMF and in all three headings along the 2.4 mile extension.

- Heading 1: Installed and framed OCS poles along Stadium Way from I-705 to Division Ave.
- Heading 2A : Poured median curb and gutter and installed asphalt in the outbound travel and parking lanes.
- Heading 2B: Installed and framed OCS poles along Stadium Way from Yakima Ave to N. K Street.
- Heading 3: Poured OCS foundations from S. 3rd Street to S. 5th Street on the east side, poured TPSS#4 CIP Stem wall, installed OCS poles from S.9th Street to 6th Ave on the east side.
- OMF Yard: Grade northeast portion of yard and pour southern retaining wall, installing systems vault and ductbank on E. 25 Street. Demolished rail beams for turntables.
- OMF Building: Installed lockers and carpet tile on the 2nd floor, electrical trim on the 1st floor, and installing mezzanine branch circuits.

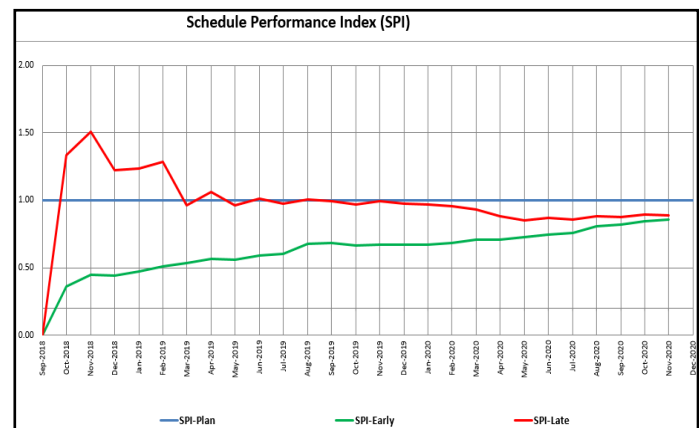
Schedule Summary

The T100 contractor schedule represented is the November 2020 Update Submittal. *MS#1 OMF & Yard Substantial Completion* is forecasting November 2021. *MS #2 Substantial Completion of All Work* is still forecasting for April 2022.

Activity Name	Start	Finish	2021				2022			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
T100 HTLE Schedule November 2020	29-Jun-18 A	17-Apr-22								
Tacoma Links Baseline Schedule	29-Jun-18 A	17-Apr-22								
Milestones	29-Jun-18 A	17-Apr-22								
Job Milestones	29-Jun-18 A	17-Apr-22								
Contractual Milestones	21-Nov-18 A	17-Apr-22								
Contr. MILESTONE 3: Submit and Design of and Delivery Schedule for A/L (NTP+90 = 11/25/18)		21-Nov-18 A								
Contr. MILESTONE 1: Substantial Completion of OMF & Yard (NTP + 835 = 12/16/20)		12-Nov-21*								
Contr. MILESTONE 2: Substantial Completion of All Work (NTP + 1020 = 6/12/21)		17-Apr-22*								
PreConstruction	09-Aug-18 A	13-Mar-22								
Heading 1: 7th & Commerce to Stadium Way & Division	15-Oct-18 A	17-Apr-22								
Heading 2: Stadium Way & Division to Division St and MLK	23-Oct-18 A	04-Feb-22								
Heading 3: Division St and MLK to MLK & 19th	15-Oct-18 A	21-Mar-22								
OCS Wire Runs	24-Jun-21	07-Jan-22								
Train Signal System	08-Dec-20	21-Jul-21								
Job Wide ITS	22-Sep-21	26-Jan-22								
OMF Facility	29-Aug-18 A	12-Nov-21								
Testing & Commissioning	10-Jan-20 A	30-Mar-22								
Change Orders	07-Jan-19 A	15-Dec-21								
Provisional Sum Time Impacts	01-Feb-19 A	21-Oct-21								
Other Time Impacts	04-Mar-19 A	15-Dec-21								
RPCs	29-Jan-19 A	30-Jul-21								
Provisional Sums	03-Dec-18 A	24-May-21								
Weather Days	04-Feb-19 A	27-Jan-20 A								

Schedule Performance Index

This period, the SPI-Early increased to 0.86 and the SPI-Late remained the same at 0.89. The early index indicates that the contractor continues to perform behind the plan when compared to the baseline schedule. Based on the current trends there will be schedule impacts to the current T100 contract milestones. Change Orders are in process to address the schedule delays.



Link Light Rail Hilltop Tacoma Link Extension

Next Period's Activities

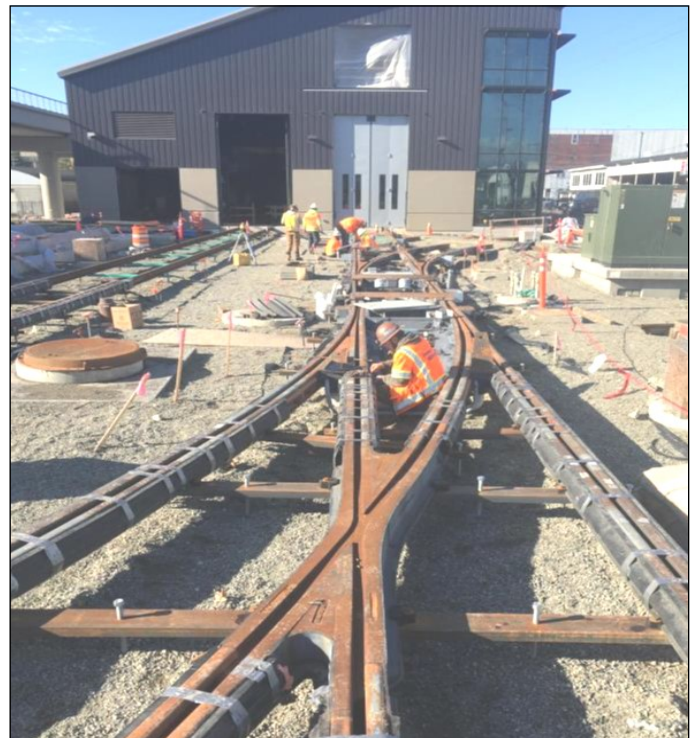
- Heading 1: No work scheduled until January 4th 2021 due to City of Tacoma Holiday Moratorium.
- Heading 2: No work scheduled until January 4th 2021 due to City of Tacoma Holiday Moratorium.
- Heading 3: Continue pouring OCS foundations from S. 3rd Street to S. 5th Street on the east side. Continue pouring outbound track slab and building and welding between S.18th and S. 19th Street.
- OMF Yard: Finish demolishing rail beams for turntables , begin constructing , continue grading northeastern section of the OMF yard for HMA. Complete all OCS foundations and installing systems vault and ductbank on E. 25 Street.
- OMF Building: Complete installation of lockers and carpet tiles on 2nd floor. Begin final paint and ceiling grid and tile on 1st floor.

Closely Monitored Issues

- ST continues to monitor contractor compliance to protocols identified in their COVID-19 safety plan.
- Redesign of curve at Stadium High School delayed the start of work in this area for seven weeks. ST CM assessing impacts to schedule.
- Notifications to the community of upcoming construction activities are ongoing. Business mitigation efforts are underway to support businesses impacted by construction activities. Community Outreach staff are managing this effort with the support of the contractor, City of Tacoma and ST field staff.
- The cutover at 9th and Commerce requires a series of planning workshops which began in January 2020. Participants include ST (including Operations), City of Tacoma and the contractor.

Cost Summary

Present Financial Status	Amount
T100 Contractor— Walsh Construction Company	
Original Contract Value	\$ 108,295,000
Change Order Value	\$ 8,707,602
Current Contract Value	\$ 117,002,602
Total Actual Cost (Incurred to Date)	\$ 91,438,767
Percent Complete	69.4%
Authorized Contingency	\$ 37,114,750
Contingency Drawdown	\$ 8,707,602
Contingency Index	3.0



Installing insulation on Y3 switches – H3

Contract RTA/RP 0014-16 — Tacoma Link Light Rail Vehicle (LRV) Procurement

Current Progress

- BEC facility is operating under an exemption approval which allows Brookville to work at limited operation capacity while maintaining compliance with the COVID mitigation measures set forth by the Commonwealth of Pennsylvania.
- Completed all internal design reviews.
- Reworking and resubmittal of Contract Data Requirements List (CDRLS) listed under: Sections 2– 16 and Section 19.
- Working on Phase 4: Final System Description reviews. Propulsion Arrangement has been completed and the remaining design reviews are to be completed by 1st QTR 2021.

Schedule Summary

- The November 2020 schedule indicates Brookville forecasts that FDR2 for Cab, Doors, HVAC, Electrical and Communications had started in Nov 2020 and will complete in December 2020, FDR4 is schedules for Mar 2021 and FDR5 Apr 2021.
- Current Forecast continues to show the shipping and delivery of the 1st car arriving to OMF in Tacoma in late July 2021. The second car will arrive approximately six weeks later in October 2021. Cars 3-5 are scheduled for delivery one per month from late October through January 2022. Conditional Acceptance testing for all 5 LRVs in Tacoma will be complete by March 2022.

Activity Name	Start	Finish	2021				2022				2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BEC Nov 2020 Update	04-Dec-17 A	12-Jul-22												
Tacoma NTP	04-Dec-17 A													
Kick Off/Schedule Creation	17-Apr-19 A	17-Apr-19 A												
Engineering - Tacoma	04-Dec-17 A	12-Jul-22												
CDRL Submittals - Tacoma	01-Jan-18 A	10-Sep-21												
MANUFACTURING / TESTING	21-Mar-18 A	03-Mar-22												
Component/System Type Tests	17-Dec-18 A	08-Apr-21												
First Article Inspections	21-Mar-18 A	10-Sep-21												
Hold Point Inspections	02-Feb-21	17-Dec-21												
Car 1	01-Dec-20	08-Oct-21												
Car 2	01-Dec-20	17-Nov-21												
Car 3	01-Dec-20	13-Dec-21												
Car 4	01-Dec-20	18-Jan-22												
Car 5	01-Dec-20	03-Mar-22												
SOUND TRANSIT PAYMENT MILESTONES	02-Jul-18 A	12-Jul-22												
Brookville Contract Milestones	04-Dec-17 A	12-Jul-22												

Link Light Rail Tacoma Dome Link Extension

Project Summary

Scope

Limits	Federal Way Transit Center to South Federal Way, Fife, East Tacoma, and Tacoma Dome
Alignment	The Tacoma Dome Link Extension (TDLE) expands light rail 9.7 miles from the Federal Way Transit Center to Tacoma. The representative alignment travels adjacent to I-5 with four stations.
Stations	South Federal Way, Fife, and East Tacoma (elevated stations) and Tacoma Dome (at-grade station)
Systems	Signals, traction power, communications (SCADA), Operations and Maintenance Facility South (OMF South)
Phase	Planning: Alternative Development
Budget	\$125.7 Million for Preliminary Engineering Phase 1—Alternative Development
Schedule	Revenue Service: Open for Service date will depend on Board direction from realignment process.



Map of Tacoma Dome Link Extension.

Key Project Activities

- Held TDLE North Value Engineering workshop virtually. Began planning for TDLE South Value Engineering workshop.
- Held monthly meeting with Tacoma, Fife, and Federal Way via virtual conference.
- Presented to Federal Way City Council for OMF South and TDLE virtually.

Project Cost Summary

The Tacoma Dome Link Extension and OMF South project cost is summarized below in two cost categories. The first table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The second table summarizes costs in accordance with the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

Project monthly expenditure is slightly more than planned budget. Although PE cost was gradually rising in the first quarter, it is declining moderately after submitting 10% design by the Consultant and bringing the current forecast on track to complete this phase within the authorized budgeted amount.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$26.8	\$10.3	\$10.2	\$26.8	\$0.0
Preliminary Engineering	\$87.1	\$48.0	\$28.6	\$87.1	\$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	\$5.8	\$1.6	\$0.6	\$5.8	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$6.0	\$0.4	\$0.0	\$6.0	\$0.0
Total	\$125.7	\$60.3	\$39.4	\$125.7	\$0.0

Cost Summary by SCC

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$5.0	\$0.4	\$0.0	\$5.0	\$0.0
80 Professional Services	\$110.9	\$59.9	\$39.4	\$110.9	\$0.0
90 Unallocated Contingency	\$9.8	\$0.0	\$0.0	\$9.8	\$0.0
Total (10 - 90)	\$125.7	\$60.3	\$39.4	\$125.7	\$0.0

Link Light Rail Tacoma Dome Link Extension



Risk Management

The Tacoma Dome Link Extension and OMF South Risk and Contingency Management Plan (RCMP) will establish a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It will provide 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, taking mitigation actions for known risks identified on the risk register, and effectively responding in a timely manner to those risks that pose a significant impact to the project cost or schedule forecast.

The Q4 2020 risk review workshop will be held in December 2020. The following are the top project wide risks:

- Puyallup Tribe may take longer than planned to provide cultural resources and/or fisheries, storm-water mitigation approvals.
- Impacts to partners due to COVID-19 pose potential schedule risk.
- Reduced revenue as a result of COVID-19 may impact schedule and cost.
- Other ST projects are experiencing baseline cost escalation, especially WSBL, resulting in insufficient funding available for TDLE and OMFS.
- Contaminated soil and/or groundwater maybe discovered during TDLE and OMF South construction, resulting in increased costs.
- OMF South may not be built in time for ST3 vehicle schedule.
- Right-of-way cost may increase more than projected escalation rates as a result of property value increases in the region.
- Complication to cross the Puyallup River due to cultural, geo-technical, structural, or ROW.
- Construction cost may increase more than the projected escalation rate as a result of general construction cost increases in the region.
- Lack of federal funding for public transit projects could delay the project.

TDLE Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment. During the realignment process only near-term schedule activities will be reported.

Below is the summary schedule as of November 30, 2020. At this time the project is estimating approximately 11 months of delay to the DEIS being published due to stakeholder reviews which can be associated with COVID-19 related impacts. These delays have the potential to impact the overall project schedule and are being assessed by the ST Board.

The project is forecasting a new completion of the Draft Environmental Impact Statement in Q1 2022.

Activity Name	Start	Finish	2021				2022			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Tacoma Dome Link Extension - Nov 2020	22-May-17 A	23-Jun-22								
Key Milestones	23-Jun-22	23-Jun-22								
Phase II - ST Board Confirms/Revises Preferred Alternative for TDLE		23-Jun-22								
TDLE and OMF South Alternative Analysis - (Phase I)	22-May-17 A	05-Jan-18 A								
Conceptual Engineering - (Phase II)	05-Aug-19 A	31-Dec-21								
Task 1 TDLE Project Management	05-Aug-19 A	31-Dec-21								
Task 2 Jurisdictional and Tribal Coordination and Agreements	05-Aug-19 A	30-Dec-21								
Task 3 Engineering	05-Aug-19 A	22-Sep-21								
Task 4 Station Planning and Conceptual Design	08-Apr-21	24-Jun-21								
Task 5 Preparation of TDLE Draft Environmental Impact Statement	05-Aug-19 A	30-Dec-21								
Task 6 External Engagement	05-Aug-19 A	30-Dec-21								
Task 7 Cost Estimating, Construction Planning and Value Engineering Support	05-Aug-19 A	30-Dec-21								
Task 8 GIS and Graphics	05-Aug-19 A	30-Dec-21								
Task 10 Supplemental Services	05-Aug-19 A	31-Dec-20								
Task 12 - Optional Tasks	11-Jan-21	21-Apr-21								

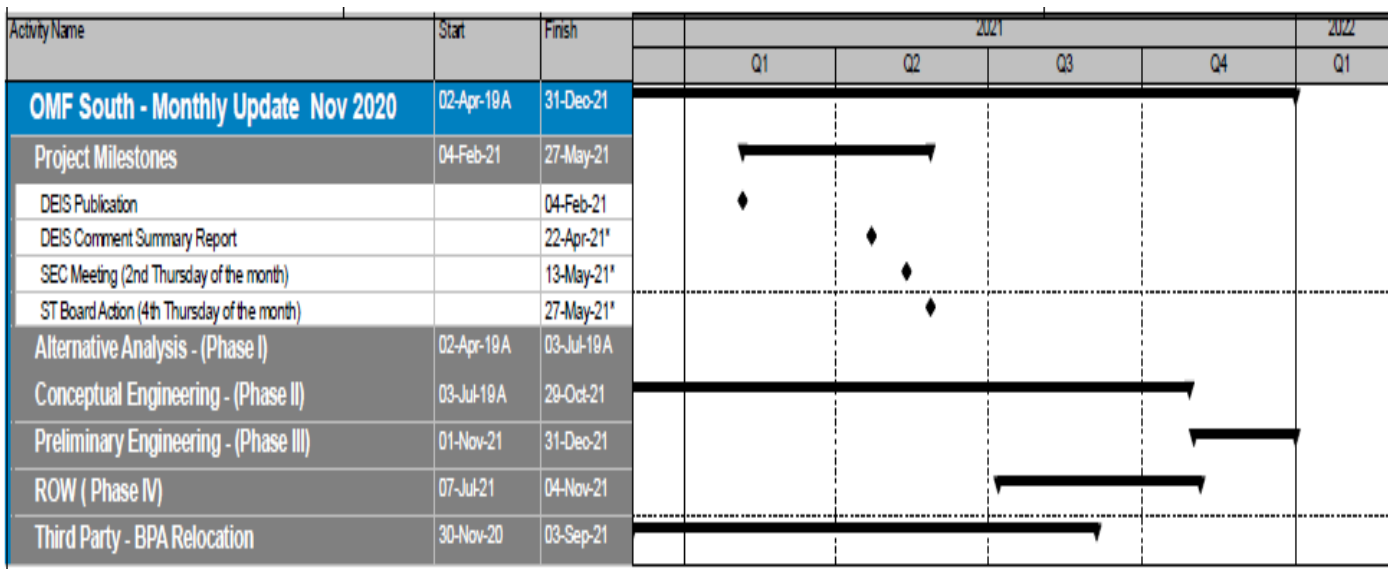
OMF South Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic but at this time the project is still forecasting a 5 month delay of the DEIS being published due to stakeholder reviews which can be associated with COVID-19 related impacts.

This project is part of the assessment. During the realignment process only near-term Phase II conceptual engineering schedule activities will be reported.

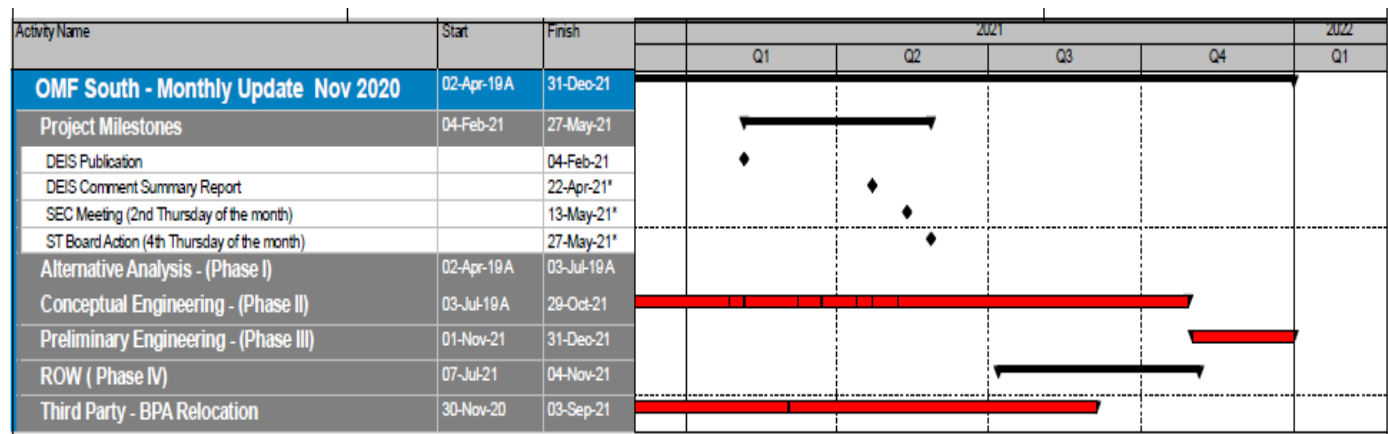
Below is the summary schedule as of November 30, 2020.

The project will complete the Draft Environmental Impact Statement in Q1 2021 and conceptual engineering in Q4 2021.



Critical Path Analysis

The critical path for the overall TDLE program continues to run through OMF South portion of the project. OMF South must complete conceptual engineering and environmental to produce the Draft EIS. The critical path then continues through the project life cycle of conceptual, preliminary design, final design, permitting, Right-of-Way acquisition, BPA relocation and construction.



Community Outreach

- TDLE - Provided briefing to PNW Dealers (virtual meeting on 11/2)
- TDLE - Participated in the bi-monthly City of Tacoma meeting (virtual meeting on 11/9)
- TDLE – Provided briefing to the Federal Way City Council (virtual meeting on 11/17)
- TDLE/OMF South – Provided briefing to the West Hills Cambridge Neighborhood Council (virtual meeting on 11/17)
- TDLE – Participated in the monthly City of Fife meeting (virtual meeting on 11/18)
- TDLE – Participated in the monthly City of Federal meeting (virtual meeting on 11/19)
- TDLE/OMF South – Provided briefing to a Belmor Park resident (virtual meeting on 11/20)

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Project has planned 81.3 average FTEs per month for the year 2020. ST staffing is projecting a negative variance as compared to planned FTE, and resource requirements are being covered by utilizing consultants. Impacts of COVID-19 on schedule of TDLE and OMFS also caused reduced resource loading on these projects for remainder of 2020.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	32.6	22.6	(10)
Consultants	48.7	45.3	(3.4)
TOTAL	81.3	67.9	(13.4)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Link Light Rail

Link Operations & Maintenance Facility: East

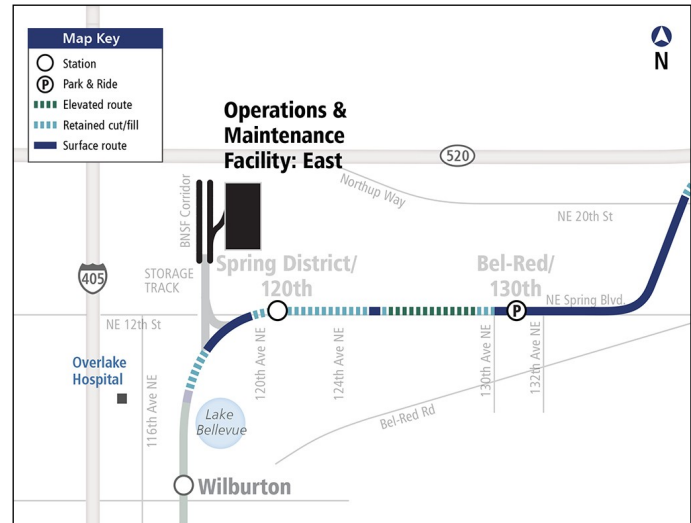
Project Summary

Scope The Link Operations and Maintenance Facility: East (OMF East) project, located in the City of Bellevue, includes a 145,000 SF OMF building plus a 35,000 SF MOW Building that will maintain, store and deploy and expanded light rail fleet, including seven LRV service bays, a LRV wash facility and storage for up to 96 LRVs.

Phase Proceed to Construction

Budget \$449.2 Million (Baselined July 2016)

Schedule Project Completion: December 2020



Map of OMF East Site

Key Project Activities

- OMF East Building: Punchlist resolution continues; installation of interlocking cables and termination of cranes;
- Maintenance of Way (MOW): Punchlist resolution continues; termination of remaining low voltage cables continued;
- Site Civil & Track Work: Concrete demolition for track corrections in south shop apron; continued track alignment in ballasted tracks.
- Systems: Yard monitoring system L1 and L2 testing performed; repaired TPSS floor gap with filler; corrected wiring at relays at shop contactors. Installed additional ground rods at three failed feeder surge arrestors in yard.
- Commissioning: Mechanical Action Log; Air Handling Units OMF; OMF 2 ton Cranes; Battery Room (OMF & MOW); and MOW 10 ton Cranes.

Closely Monitored Issues

- Monitoring commissioning and testing in support of project transition to Operations.
- Readiness of Operations to assume occupancy of the facilities.
- COVID-19 safety plan and requirements are being enforced and followed.
- Submittal of complete and acceptable as-built drawings.
- Push Cart Testing.
- OCS Poles/Surge to Ground.
- TPSS Level 2 SIT Preparation Progress.

Project Cost Summary

The Baseline Budget (July 2016) for the OMF East is \$449.2M. The OMF East cost is summarized into two cost tables. The first table is in accordance with Sound Transit's Work Breakdown Structure (WBS) displaying the cost summary by phase. The second table summarizes project cost by SCC, in accordance to the FTA Standard Cost Categories (SCC) format. Both tables show figures in millions.

The Estimated Final Costs (EFC) continues to be projected at approximately \$449.2M. This period's project's expenditure topped out at about \$3.2M. The total project cost incurred increased from approximately \$359.2M to \$362.5M. The primary cost drivers during this period on the OMF East project comes from the design build (construction) phase at \$2.5M or roughly 77% of the total monthly expenditures. The next cost driver in this period pertained to Construction Services expenditures at about \$534K.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$17.6	\$17.6	\$9.0	\$8.8	\$17.6	\$0.0
Preliminary Engineering	\$9.5	\$9.5	\$9.0	\$8.7	\$9.5	\$0.0
Final Design	\$0.4	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
Construction Services	\$19.3	\$19.3	\$17.5	\$15.2	\$19.3	\$0.0
3rd Party Agreements	\$3.1	\$3.1	\$0.3	\$0.1	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$229.7	\$227.1	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$102.7	\$102.6	\$134.5	\$0.0
Total	\$449.2	\$449.2	\$368.2	\$362.5	\$449.2	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$2.6	\$4.4	\$4.2	\$4.1	\$4.2	\$0.2
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities: Yard, Shop	\$140.1	\$136.1	\$128.2	\$129.4	\$145.0	-\$9.0
40 Sitework & Special Conditions	\$43.6	\$48.5	\$41.2	\$38.9	\$43.6	\$4.9
50 Systems	\$43.0	\$41.6	\$39.7	\$38.7	\$39.5	\$2.0
Construction Subtotal (10 - 50)	\$229.3	\$230.6	\$213.2	\$211.1	\$232.4	-\$1.8
60 ROW, Land, Improvements	\$134.5	\$134.5	\$102.7	\$102.6	\$134.5	\$0.0
70 Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
80 Professional Services	\$71.6	\$70.3	\$52.3	\$48.8	\$68.5	\$1.8
90 Unallocated Contingency	\$13.8	\$13.8	\$0.0	\$0.0	\$13.8	\$0.0
Total (10 - 90)	\$449.2	\$449.2	\$368.2	\$362.5	\$449.2	\$0.0

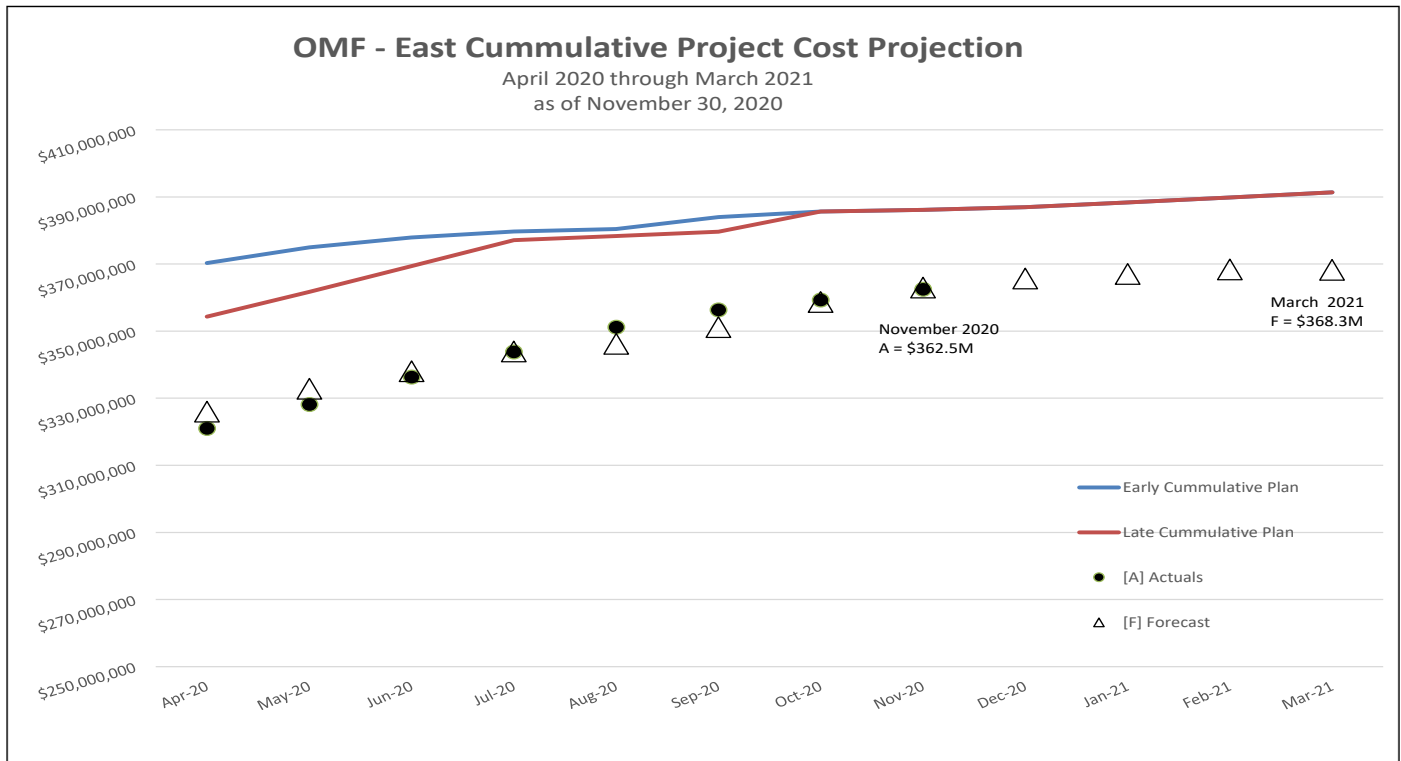
Link Light Rail

Link Operations & Maintenance Facility: East



Project Cash Flow Projection

The OMF East cost projection is trending late this period but anticipates to pick up. Total project expenditure incurred to date at approximated \$362.5M with Construction Phase at about 63% and Right-of-Way (ROW) phase at 28%. The project expenditure continues to trend a projection of \$368.3M by March of 2021 which is below the lower bounds of the late planned expenditures as shown in the graph below. The probability of the project to finish under the project budget of \$449.2M is high giving reason to the plateauing of the forecast curve shown below. That said, there continues to be considerable risk and uncertainties ahead of the project, particularly due to the COVID-19 pandemic, that may impacts the cost at completion.



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 project has reached Risk Mitigation Milestone (RMS) 3, the completion of building enclosure and performed a Quantitative Risk Assessment (QRA). The QRA assessed the current risk profile and predicts with a high probability the project to complete on schedule and within budget. The current top actively managed risk areas are as follows:

- **Design:** Late changes made to scope by 3rd Parties and Operations impact the project at this stage.
- **Scope:** Scope Interfaces with E750 Systems when ELE has integrate OMF East with OMF Central through East Link.
- **Construction:** COVID-19 virus pandemic is a fluid situation and the impacts are difficult to assess at this stage.
- **Start Up:** As the project continues progress, the need coordination for testing, acceptance and commissioning with ST Operations is critical. The virus pandemic complicates the preparation and the execution of this phase of the project scope.

Contingency Management

The Link Operations and Maintenance Facility: East was baselined and approved by Sound Transit Board in July 2016 with a total contingency of \$93.2M. The Project's starting contingency balance as of the Notice to Proceed for Construction was \$71.6M reflecting the inclusion of the Design Allowance in the Design Builder contract amount. In this period, change orders were related to various construction scope. The current contingency balance at the end of this period is approximately \$63.4M (previous period at \$63.4M).

Design Allowance (DA): N/A

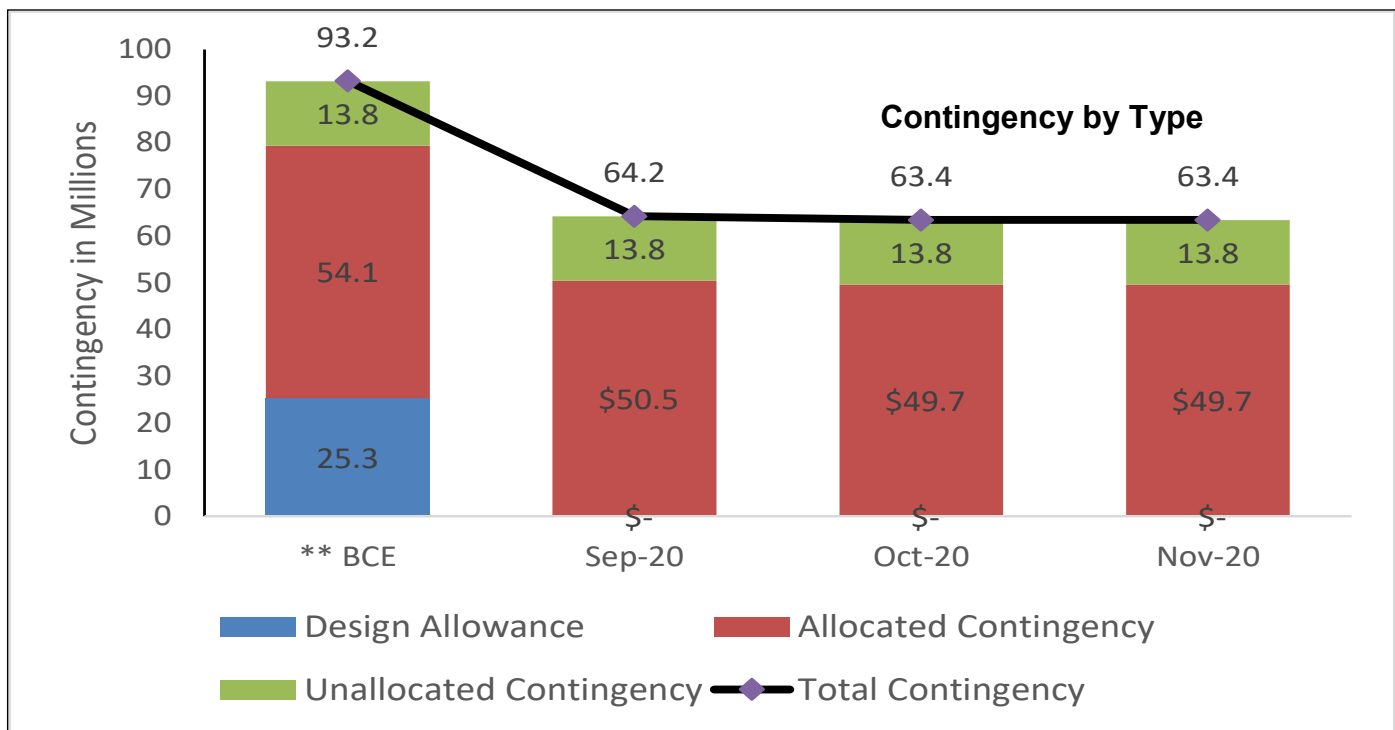
Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. Allocated contingency balance at the end of this period continues to be stable at \$49.7M (the previous period at \$49.7M). The approximately contingency draw were attributed to normal construction changes.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The baseline UAC amount of \$13.8M reflects no changes this period.

Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ 25.3	5.6%	\$ -	0.0%
Allocated Contingency	\$ 54.1	12.0%	\$ 49.7	57.3%
Unallocated Contingency	\$ 13.8	3.1%	\$ 13.8	15.9%
Total	\$ 93.2	20.7%	\$ 63.4	73.2%

Table figures are shown in millions.

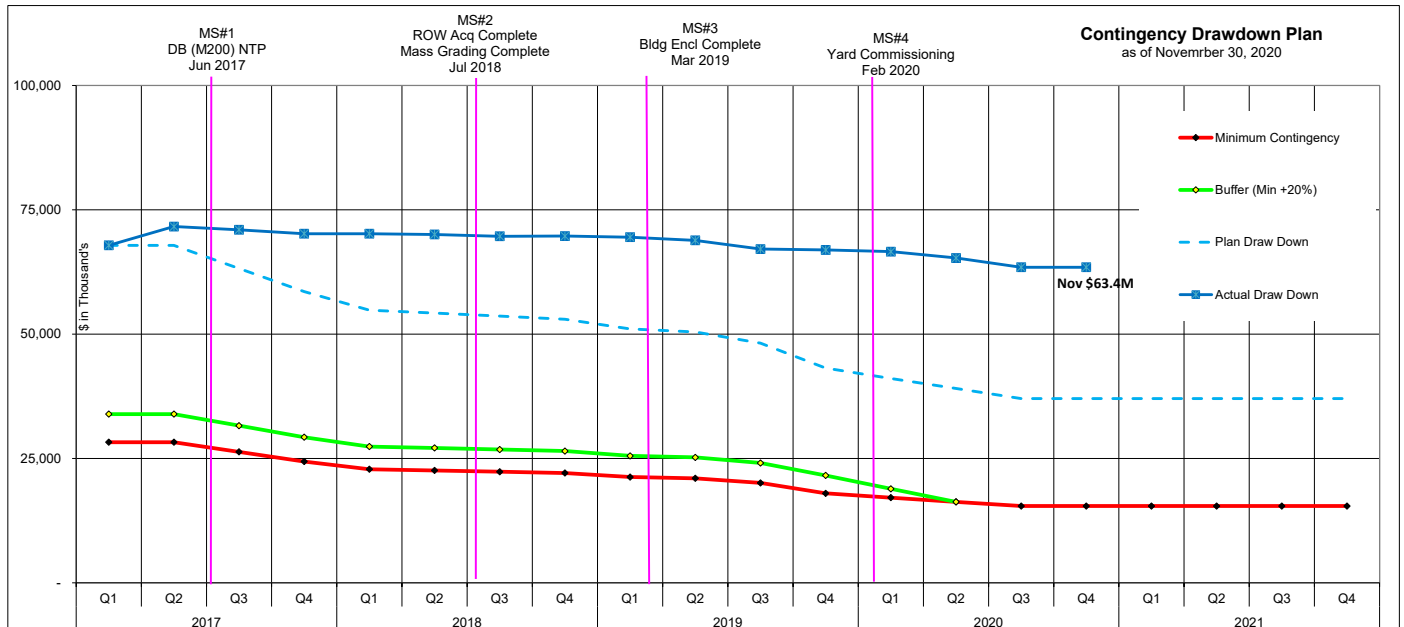


Link Light Rail

Link Operations & Maintenance Facility: East

Contingency Drawdown

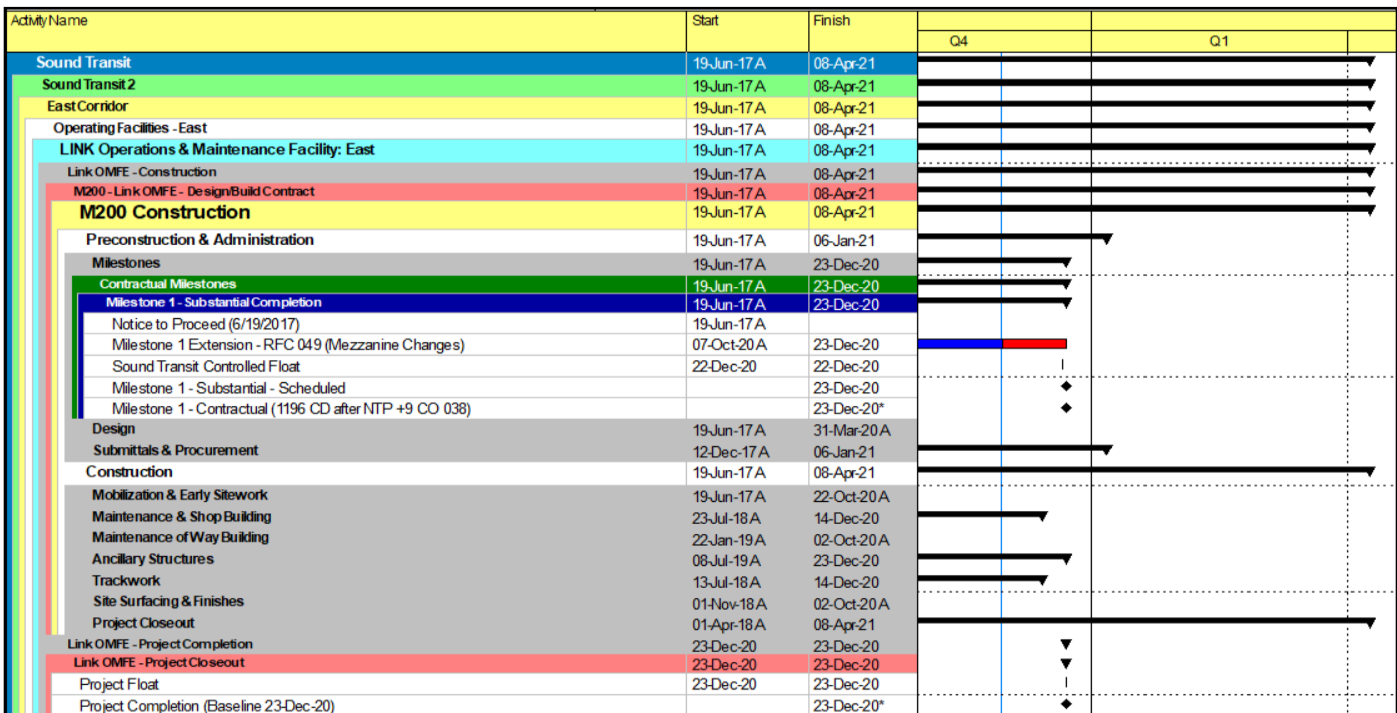
At the end of the Q3 2020, OMF East Project's total contingency drawdown plan is trending positively. Total contingencies balance is at approximate \$63.4M (previously quarter at \$63.4M) and remains above all the baseline draw down projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. The next update will be at end of the Q4 2020. Risk Mitigation Milestone #3 was revised and met in Q4 2019.



Kinkinsharyo Sandbos Fill—Sanding Equipment Commissioning Testing

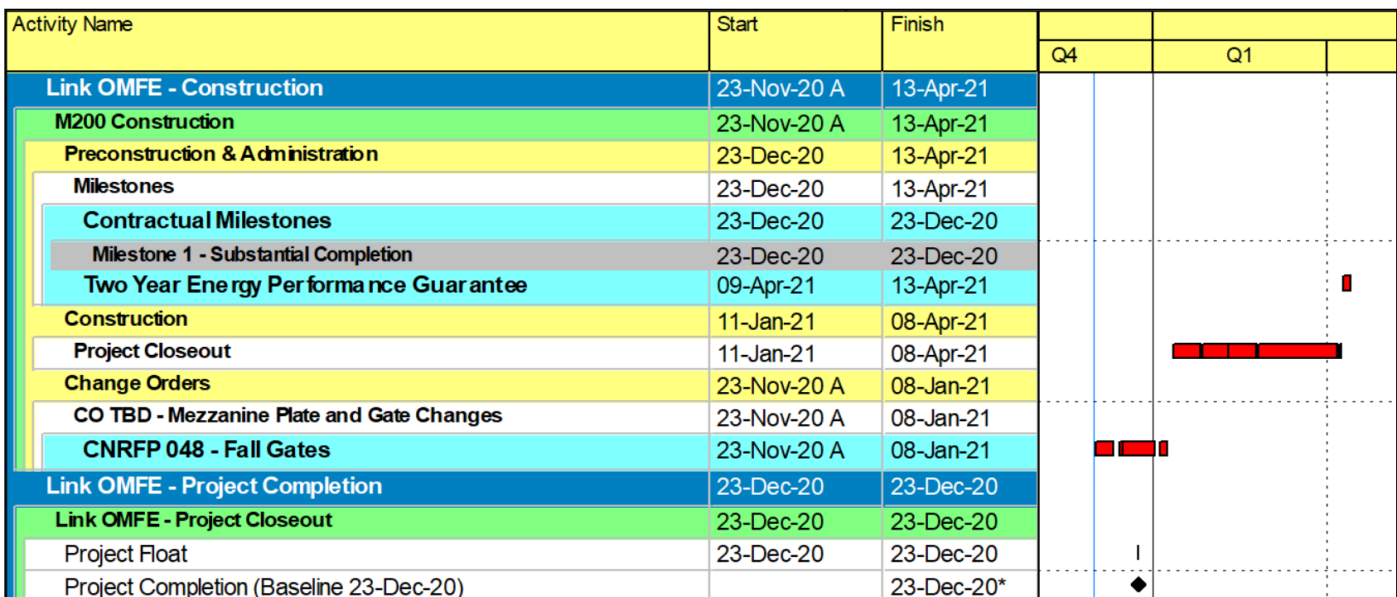
Project Schedule

The schedule for OMF East is now entirely within the M200 contract, which is presented below. Physical work is mostly complete; the contractor's primary focus is commissioning, System Integration Testing, and punchlist items. Sound Transit requested a modification to the mezzanine in the OMF to accommodate Siemens LRVs; that work is ongoing. The Substantial Completion milestone has been adjusted to account for this additional work, but it will be completed in time to meet Sound Transit's baselined completion target for the project.



Critical Path Analysis

The critical path this month continues to run through the mezzanine plate and fall gate change order work, and then through final commissioning and LEED certification.



Link Light Rail

Link Operations & Maintenance Facility: East

Community Outreach

- Ongoing engagement with the public on potential construction impacts to the neighborhood.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average is the monthly annualized average of 12 months; whereas the YTD monthly average only reflects actuals through November of 2020. Utilization of consultants are dependent on the level of effort and the sequence of construction events, the monthly average should trend closer to the plan as the year comes to a close. That said, with COVID-19 pandemic's fluid situation, it is hard to predict how the annual plan will unfold accordingly for the remainder of the year.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	13.2	9.6	(3.6)
Consultants	12.3	18.9	6.6
TOTAL	25.5	28.5	3.0

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.



Movement of the Shop OCS Dropper Cable

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Construction Safety

Data/ Measure	November 2020	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	3	9
Days Away From Work Cases	0	1	3
Total Days Away From Work	0	5	36
First Aid Cases	0	9	17
Reported Near Mishaps	0	11	27
Average Number of Employees on Worksite	60	-	-
Total # of Hours (GC & Subs)	12.000	276.501	599.136
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	2.17	3.00
LTI Rate	0.00	0.72	1.00
Recordable National Average	3.00		
LTI National Average	1.20		
Recordable WA State Average	6.00		
LTI WA State Average	1.90		

Note: Due to the timing of contractor's reporting periods, the current month's numbers above are a combination of actuals and estimates. All previous months' numbers are reconciled and replaced with actuals.

Link Light Rail

Link Operations & Maintenance Facility: East



Contract M200 - OMF East Design Build

Current Progress

Design: Hensel Phelps (HP) design administration for supporting construction activities.

Construction:

- OMF East Building: Punchlist resolution continues; installation of interlocking cables and termination of cranes;
- Maintenance of Way (MOW): Punchlist resolution continues; termination of remaining low voltage cables continued;
- Site Civil & Track Work: Concrete demolition for track corrections in south shop apron; continued track alignment in ballasted tracks.
- Systems: Yard monitoring system L1 and L2 testing performed; repaired TPSS floor gap with filler; corrected wiring at relays at shop contactors. Installed additional ground rods at three failed feeder surge arrestors in yard.
- Commissioning: Mechanical Action Log; Air Handling Units OMF; OMF 2 ton Cranes; Battery Room (OMF & MOW); and MOW 10 ton Cranes.

Next Period's Activities

In response to COVID-19, the contractor continues to enforce approved COVID safety work plan.

- OMF East Building: Punchlist items continue.
- MOW Building: Punchlist items continue.
- Systems: Systems integration testing continues.
- Commissioning: Activities continuing.

Closely Monitored Issues

- COVID-19 safety plan and requirements are being enforced and followed.
- Monitoring commissioning and testing in support of project transition to Operations.
- Submittal of complete and acceptable as-built drawings.
- Systems Integration Testing: OCS Level 2 & TPSS Level 2.

Cost Summary

Present Financial Status	Amount
M200 Contractor – Hensel Phelps	
Original Contract Value	\$218,912,000
Change Order Value	\$8,029,706
Current Contract Value	\$226,941,706
Total Actual Cost (Incurred to Date)	\$224,524,404
Percent Complete	97.77%
Authorized Contingency	\$21,891,200
Contingency Drawdown	\$8,029,706
*Contingency Index	2.5

**Excludes Betterments*



KI LRV on Lift Equipment for Equipment Commissioning.

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Link Light Rail Light Rail Vehicle Fleet Expansion

Project Summary

Scope	Design, manufacturing, assembly, inspection, testing and delivery of 152 low floor light rail vehicles for service requirements of Northgate, East Link and Lynnwood Link Extensions.
Phase	Manufacturing
Budget	\$740.7 Million (Baseline September 2015, Amended April 2017)
Schedule	Project Completion: 3Q 2024



Siemens' LRV on test track.

Key Project Activities

- Progressed safety certifiable items, critical Field Modification Items (FMI), operations requirements and ongoing qualification testing prior to the Conditionally Acceptance (CA) of the 1st Light Rail Vehicle (LRV) is planned to occur in the 1st Quarter 2021.
- Car # 261, 262 & 263 were delivered to Operation & Maintenance Facility (OMF) Central, Seattle in November 2020.
- Continued final assembly and fabrication of car shell at Siemens' Sacramento facilities.
- Ongoing operational conformance checks prior to the first LRV ready for revenue service are 94% completed.
- Held Sound Transit – Siemens special tools and spare parts coordination meetings.
- Held November 2020's monthly Safety & Security Certification Review Subcommittee (SSCRS) meeting.



Delivery of Car 263 at OMF Central, Seattle, WA



Car 266 in test at Sacramento, CA

Closely Monitored Issues

- OMF Central yard LRV storage capacity continues to be an issue. The timeframe for this concern remained in the 1st Quarter of 2021; LRVs delivery and transportation plan between OMF Central and OMF East has been established and closely monitor.
- Reducing number of documents on Certifiable Items List (CIL) pending approval: Design (6.7%), Qualification (55%).
- Manufacturer has reported supply chain interruptions impacting implementation of FMIs and submitted a general notice for COVID-19 pandemic impacts. Weekly production meeting with Siemens held to monitor progress.

Project Cost Summary

The LRV Fleet Expansion Project has an approved baseline budget of \$740.7M. The project cost is summarized into two cost tables. The first table is in accordance with Sound Transit's Work Breakdown Structure (WBS) displaying the cost summary by phase. The second table summarizes project cost by SCC, in accordance to the FTA Standard Cost Categories (SCC) format. Both tables show figures in millions.

The project expenditure incurred to date is approximately \$250.9M to which a majority of the cost is attributed to the vehicles phase of \$238.9M. The current period expenditure is \$5.8M mainly from light rail vehicles of \$5.5M comprised mainly of vehicles production milestone payments to Siemens. The other incurred cost was mostly attributed from engineering and inspection of \$184.3K and staff costs of \$122.5K.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$9.6	\$9.6	\$4.1	\$4.0	\$9.6	\$0.0
Construction Services	\$18.0	\$18.0	\$15.1	\$8.1	\$18.0	\$0.0
Vehicles	\$713.1	\$713.1	\$652.8	\$238.9	\$713.1	\$0.0
Total	\$740.7	\$740.7	\$672.0	\$250.9	\$740.7	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Construction Subtotal (SCC 10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 ROW, Land, Existing	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
70 Vehicles	\$706.3	\$706.3	\$666.1	\$245.1	\$704.5	\$1.8
80 Professional Services	\$8.2	\$8.2	\$5.9	\$5.8	\$10.0	(\$1.8)
90 Contingency	\$26.2	\$26.2	\$0.0	\$0.0	\$26.2	\$0.0
Capital Total (SCC 10 - 90)	\$740.7	\$740.7	\$672.0	\$250.9	\$740.7	\$0.0

**Totals may not equal column sums due to rounding of line entries.*

Link Light Rail Light Rail Vehicle Fleet Expansion



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 to continuously monitoring project status and associated risks.

The project's qualitative risk register reflects Q4 2019. The 2020 update is being coordinated. There are no changes to the current top risk as listed below based on the last update:

- Siemens slower than expected Safety Certification Process could possibly delays to revenue service dates on all programs.
- Special tools and test equipment must be identified, procured, delivered and commissioned prior to LRV conditional acceptance.
- Familiarization Training with local emergency responders has not yet started and the time table for completion.
- Siemens limited staff and equipment supporting testing and commissioning is a constrain on qualification testing and safety certification will remain open until complete.
- Automatic Train Protection interface between ST1 vehicle ATP system and new ST2 vehicle ATP causing potential interface with wayside signal and on-board systems under investigation. Qualification test postponed until completion of investigation.
- COVID-19 remains a fluid situation and disruption to Siemen's supply chain and assembly plant.

Contingency Management

The project's budget was baselined in September 2015 and was amended in April 2016 to exercise the option LRV contained a total of \$78.0M of Total Contingency. The project's Total Contingency is currently at \$64.3M or about 14.9% of remaining work in the project.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. This project contains \$0 design allowance.

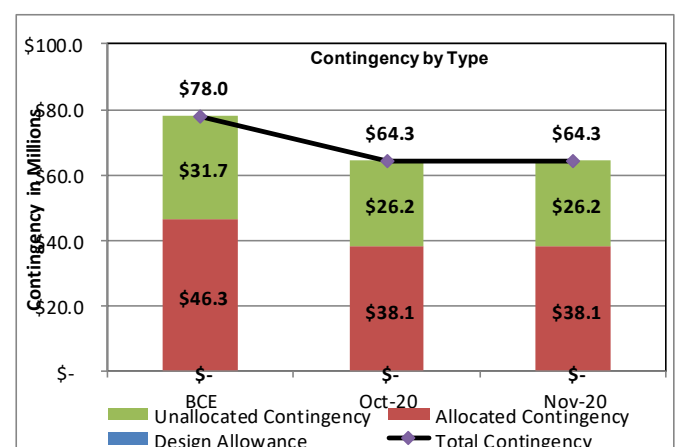
Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline's allocated contingency was \$46.3M. The AC for November remained unchanged at \$38.1M.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC for November remained unchanged at \$26.2M.

Contingency Status (Monthly)

Contingency Status	Baseline		Current	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$ -	0.0%	\$ -	0.0%
Allocated Contingency	\$ 46.3	6.4%	\$ 38.1	8.8%
Unallocated Contingency	\$ 31.7	4.3%	\$ 26.2	6.1%
Total	\$78.0	10.7%	\$ 64.3	14.9%

Contingency by Type



Project Schedule

The schedule below is a summary schedule identifying the factory testing, delivery and conditional acceptance testing of Light Rail Vehicles for each project as reported from the Siemens's monthly schedule update. As of November 2020, all vehicles are expected to be available for Pre-Revenue Service testing at each of the projects identified below but Northgate Link is also seeing schedule pressure as conditional acceptance complete for the 40th car slips into October of 2021. Mitigation measures are currently in place and being monitored closely by the team. A summary bar for the ATP retrofit of the Kinkisharyo cars was also added for monitoring this period.

Activity Name	Start	Finish																
			2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021
ST LRV Fleet Expansion - Siemens Summary by LINK Contract	31-Aug-18 A	30-May-24																
Northgate Link - LRV Summary (Car #1 - #40)	31-Aug-18 A	01-Oct-21																
LRV Factory Test - Northgate Summary	31-Aug-18 A	28-Jan-20 A																
LRV Delivery to OMF - Northgate Summary	29-Aug-19 A	03-Mar-21																
LRV Conditional Acceptance - Northgate Summary	21-Jan-21	01-Oct-21																
East Link - LRV Summary (Car #41-#86)	31-Jan-20 A	12-Sep-22																
LRV Factory Test - East Link Summary	31-Jan-20 A	09-Jun-21																
LRV Delivery to OMF - East Link Summary	10-Mar-21	07-Feb-22																
LRV Conditional Acceptance - East Link Summary	08-Oct-21	12-Sep-22																
Lynnwood Link - LRV Summary (Car #87-#120)	03-Jun-21	20-Apr-23																
LRV Factory Test - Lynnwood Summary	03-Jun-21	13-May-22																
LRV Delivery to OMF - Lynnwood Summary	14-Feb-22	02-Nov-22																
LRV Conditional Acceptance - Lynnwood Summary	19-Sep-22	20-Apr-23																
Extra - LRV Summary (Car #121-#122)	06-May-22	02-May-23																
LRV Factory Test - Extra Summary	06-May-22	01-Jun-22																
LRV Delivery to OMF - Extra Summary	09-Nov-22	16-Nov-22																
LRV Conditional Acceptance - Extra Summary	26-Apr-23	02-May-23																
Federal Way Link - LRV Summary (Car #123-#142)	23-Jun-22	05-Dec-23																
LRV Factory Test - Federal Way Summary	23-Jun-22	14-Jun-23																
LRV Delivery to OMF - Federal Way Summary	06-Dec-22	02-Aug-23																
LRV Conditional Acceptance - Federal Way Summary	08-May-23	05-Dec-23																
Downtown Redmond Link - LRV Summary (Car #143-#152)	15-Jun-23	30-May-24																
LRV Factory Test - Downtown Redmond Summary	15-Jun-23	22-Dec-23																
LRV Delivery to OMF - Downtown Redmond Summary	01-Sep-23	30-Jan-24																
LRV Conditional Acceptance - Downtown Redmond Summary	11-Jan-24	30-May-24																
LRV ATP Retrofit Summary - Siemens	03-May-21	10-Nov-22																
LRV ATP Retrofit Summary	03-May-21	10-Nov-22																

LRV Delivery and Testing Progress as of November 30, 2020				
LRV status	Received in Seattle	Testing in progress (Seattle)	Conditionally Accepted	Entered Revenue
Planned	53	53	38	38
Actual	28	28	0	0

Critical Path Analysis

The critical path is completing the on-site Vehicle Performance Qualification Test and Acceptance Testing and Burn-In of all LRVS that have been delivered to Sound Transit site. Car 214 is the main test vehicle and Car 204 is needed for test requiring multiple cars.

Delivery and Conditional Acceptance Testing of all 40 light rail vehicles required for Northgate Link is closely monitored to support the Pre-Revenue simulation period. The planned deliveries, commissioning and testing of light rail vehicles are anticipated to be complete by September 2024. As well as on time for the start of Pre-Revenue Service for each of the new extension lines: East Link, Lynnwood Link, Federal Way Link and Downtown Redmond Link.

Link Light Rail

Light Rail Vehicle Fleet Expansion



Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The planned FTE monthly average is the monthly annualized average of 12 months; whereas the YTD monthly average only reflects actuals through the end of November 2020. The variance between the planned ST Staff and the YTD Actual ST Staff is 3.4. This variance largely continues to be due to the cumulative fractions of estimated FTEs spread across various departments and cannot be attributed to any one main variance driver. That said, with COVID-19 pandemic's fluid situation, it is hard to predict how the annual plan will unfold.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	9.5	6.1	(3.4)
Consultants	7.8	8.6	0.8
TOTAL	17.3	14.7	(2.6)

** An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.*

Sound Transit Board Actions

Board Action	Description	Date
	None this period.	

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Progress Report

Sounder Program

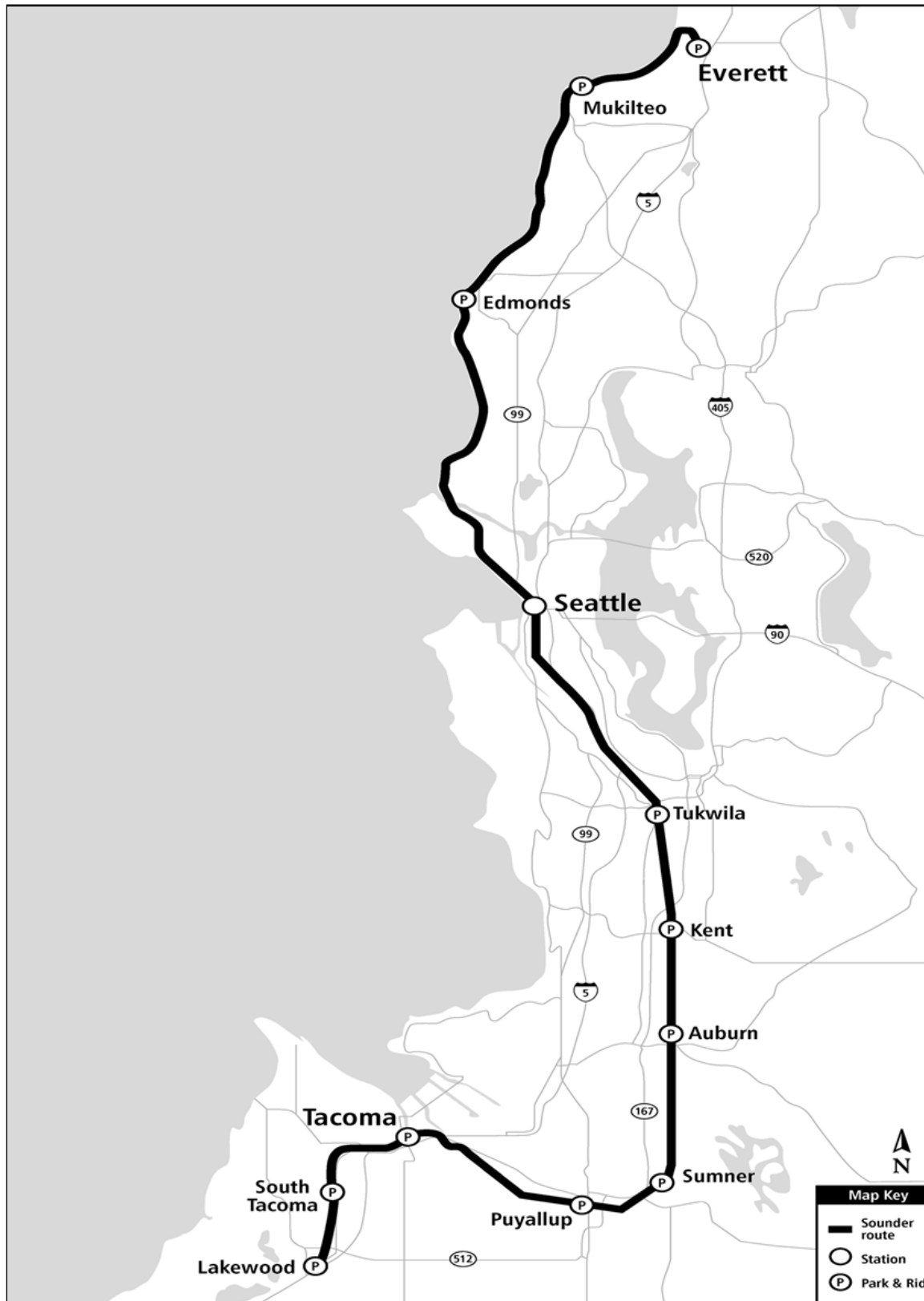


Sounder trains travel between Lakewood and Seattle with regular runs weekday morning and afternoons. Sounder also serves select major weekend events such as Mariners, Sounders, and Seahawk games.

November | 2020



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



Sounder Commuter Rail Routes

Auburn Station Parking & Access Improvements: Project includes alternatives identification, screening, environmental documentation, design and construction of station parking and 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.

Edmonds and Mukilteo Stations Parking & Access Improvements: The Edmonds and Mukilteo Stations Parking and Access Improvements Project will provide parking and access improvements to the Edmonds and Mukilteo Sounder Stations. A variety of access improvements will be considered for each station including bicycle and pedestrian access, pick up/drop off areas, transit integration, and parking.

Kent Station Parking & Access Improvements: Project includes alternatives identification, screening, environmental documentation, design and construction of station parking and 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.

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 Capacity Expansion: This project establishes a program of capital elements that will improve South Sounder access, capacity, and services in response to increase in demand. Program elements could include platform extensions, track and signal upgrades and other related infrastructure to facilitate additional capacity, and access improvements for pedestrians, bicyclists, buses, and private vehicles, prioritized per Sound Transit's System Access Policy. The elements included in this representative project will be refined during future phases of project development and are subject to change.

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 demand for Sounder ridership in an economically efficient and environmentally sustainable manner.

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Sounder Commuter Rail Program Overview



Program Budget

The Authorized Project Allocation reflects the budget for each project through the approved project phase. As projects advance through design into construction the budget will be amended to reflect Board approved actions.

SOUNDER	Authorized Allocation	Commitment To Date	Incurred to Date	Forecast to Complete	Estimated Final Cost	Authorized Allocation vs EFC
AUBURN STATION ACCESS IMPRVMT	\$11.4	\$4.7	\$4.0	\$6.8	\$11.4	\$0.0
EDMONDS & MUKILTEO STN P&A IMP	\$2.5	\$0.9	\$0.9	\$1.6	\$2.5	\$0.0
KENT STATION ACCESS IMPRVMTS	\$15.6	\$5.2	\$4.4	\$10.4	\$15.6	\$0.0
PUYALLUP STATION IMPROVEMENTS	\$79.1	\$69.3	\$26.1	\$9.8	\$79.1	\$0.0
SOUNDER MAINTENANCE BASE	\$12.9	\$10.6	\$9.8	\$2.3	\$12.9	\$0.0
SOUNDER SOUTH CAPACITY EXPN	\$3.6	\$3.3	\$2.5	\$0.3	\$3.6	\$0.0
SUMNER STATION IMPROVEMENTS	\$17.8	\$16.0	\$10.6	\$1.7	\$17.8	\$0.0
Total SOUNDER	\$142.9	\$110.0	\$58.4	\$33.0	\$142.9	\$0.0

Figures are shown in millions

Program Schedule

Schedule for select major Sounder projects are summarized below. Projects in the realignment process are not shown.

Project Name	Start	Finish	2020				2021				2022				2023				2024				2025			
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
◆ Sound Transit	01-May-15	11-Apr-22																								
◆ Sound Transit 2	01-May-15	11-Apr-22																								
◆ South Corridor	01-May-15	11-Apr-22																								
◆ Sounder Commuter Rail - South	01-May-15	11-Apr-22																								
◆ Station Access - South	01-May-15	11-Apr-22																								
◆ S300017-Puyallup Station Access Improvements - DB	01-May-15	11-Apr-22																								

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:

- None to report.

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Sounder Commuter Rail Auburn Station Parking & Access Improvements



Project Summary

Scope	<p>The purpose of the project is to improve parking and access to the existing Auburn Sounder Station for Sounder riders, bicyclist, bus riders, and drivers.</p> <p>Project includes alternatives identification, screening, environmental documentation, design, and construction of station parking and access improvements at or around Auburn Station.</p>
Phase	Conceptual Engineering and Environmental Review
Budget	\$11.4 Million
Schedule	Open for Service date will depend on ST Board direction from realignment process.



Improving access to Sounder Auburn Station

Key Project Activities

- Project team continued development of an agreement to provide funding to the City of Auburn for traffic mitigation and continues to address the city's comments on the conceptual engineering design.
- Project team also continued development of an agreement to provide funding to WSDOT for traffic mitigation.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$36K. The incurred cost increased from \$3.99M to \$4.03M. The majority of this period's costs is attributed to staff costs, conceptual engineering work and right-of-way activities.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.6	\$1.4	\$1.4	\$1.6	\$0.0
Preliminary Engineering	\$3.4	\$2.8	\$2.6	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$0.0	\$0.0	\$2.0	\$0.0
3rd Party Agreements	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$3.8	\$0.4	\$0.1	\$3.8	\$0.0
Total	\$11.4	\$4.7	\$4.0	\$11.4	\$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 to continuously monitor project status and associated risks.

- The project team will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team plans to conduct a risk assessment workshop to identify all the potential risks during design and construction in 2021.
- The project team reviewed and updated the risk register in September 2020. The team will review and revise the register on a quarterly basis, the next risk register update is scheduled for December 2020.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Open For Service Date will depend on Board direction from realignment process.

The project is nearing completion of Phase II—Conceptual Engineering and Environmental activities. The project completed the environmental assessment in Q1 2020.

Project team issued SEPA Checklist and SEPA Determination of Non-Significance (DNS) with conditions for public comment January 29, 2020 and the FTA approved the NEPA Documented Categorical Exclusion (DCE) in February 2020.

The Sound Transit Board action for “Select the Project to be Built” occurred in April 2020 with the Sound Transit Phase Gate 3: Enter Design and Construction currently on hold. The project's Threat Vulnerability Assessment (TVA) was performed in July 2020. Phase Gate 3—Enter Design & Construction, is currently planned for December 2020.

During the September Sound Transit Board Meeting, approval was received to un-pause a portion of the project to move forward with a change order (approved by the Board in February 2020) to current Design-Build Project Management (DBPM) team HNTB to prepare an analysis of potential multi-Sounder South Commuter Rail Station Parking and Access Improvement projects contract packaging options. This may potentially reduce overall project final design and construction costs as well help develop Project Requirements for the Design-Build Procurement RFQ and RFP. This will help project continue to pursue “shovel ready.” Approval to issue Design-Build Procurement RFQ and Baselineing will not occur until after Project Requirements are developed and ST Board realignment decisions are made regarding the project. Further ST Board realignment decisions are anticipated as part of the July 2021 ST Board Realignment.

Activity ID	Activity Name	Start	Finish	2019				2020				2021			
				Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Sound Transit		24-Feb-16 A	26-Jan-22												
Sound Transit 2		24-Feb-16 A	26-Jan-22												
South Corridor		24-Feb-16 A	26-Jan-22												
S300040 - Auburn Station Access Improvements - DB Master Sche		24-Feb-16 A	26-Jan-22												
Alternative Analysis (Phase I)		24-Feb-16 A	15-Nov-17 A												
Conceptual Engineering (Phase II)		22-Mar-18 A	19-Apr-21												
Preliminary Engineering (Phase III)		13-Dec-18 A	28-Oct-21												
Design-Build Project Management (DBPM)/Construction Services		02-Jan-20 A	26-Jan-22												
DBPM Contract Procurement		02-Jan-20 A	03-Dec-20												
DBPM Design/Construction Services/Support (Pre-Const and Const)		03-Dec-20	26-Jan-22												
DBPM Construction Services/Support - Phase 1 (Pre-Construction)		03-Dec-20	26-Jan-22												
DBPM Construction Services/Support - Phase 1a (Proj Req'ts->Issue DB RFP)		03-Dec-20	26-Jan-22												

Sounder Commuter Rail Auburn Station Parking & Access Improvements



Community Outreach

- We are monitoring outreach needs for the project and are available to answer any questions.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The project work in November was focused on advancing the development of a funding agreement for traffic mitigation with the City of Auburn and WSDOT. Staff also worked on responding to outstanding city comments on the conceptual design regarding the secondary stairwell location in the garage and storm water infrastructure.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.6	2.1	(3.5)
Consultants	2.3	0.7	(1.6)
TOTAL	7.9	2.8	(5.1)

** An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.*

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Sounder Commuter Rail Edmonds and Mukilteo Station Parking & Access Improvements



Project Summary

Scope

The purpose of the project is to provide parking and access improvements to the Edmonds and Mukilteo Sounder Stations, in order to increase ridership on Sounder North.

A variety of access improvements will be considered for each station including bicycle and pedestrian improvements, transit connections, vehicle access, parking and pickup/drop-off areas.

Phase

Planning—Phase 1: Project Definition and Screening

Budget

\$2.5 Million (Phase 1)

Schedule

Open for Service date will depend on ST Board direction from realignment process.



Sounder Mukilteo Station Access Improvements

Key Project Activities

- Finalized Phase 1 documents and shared with internal team, city partners and Community Transit for review.
- Conducting review to identify potential in-house project development activities within current budget resources.
- Next steps, including budget amendment to fund Phase 2 work and amendment of the consultant contract, are pending Board direction on realignment.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$250 due to ST staff costs.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.0	\$0.4	\$0.4	\$1.0	\$0.0
Preliminary Engineering	\$1.3	\$0.5	\$0.5	\$1.3	\$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	\$0.2	\$0.0	\$0.0	\$0.2	\$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	\$2.5	\$0.9	\$0.9	\$2.5	\$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 to continuously monitor project status and associated risks. The following are the top project wide risks:

- Challenge in allocating the \$40M project budget between two station areas. This is a decision the ST Board of Directors will make, likely during Phase 2, of the project.
- City partners have expressed interest in more parking, and/or more expensive parking, than appears affordable within the \$40M project budget.

Community Outreach

- Community outreach needs for the project will be developed and implemented consistent with the Board's realignment direction.

Sounder Commuter Rail Edmonds and Mukilteo Station Parking & Access Improvements



Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities through 2021 will be reported. As a result dates including Revenue Service Date will depend on Board direction from realignment process.

ActivityID	ActivityName	Start	Finish	2020			2021			
				Q2	Q3	Q4	Q1	Q2	Q3	Q4
S00087 - Edmonds & Mukilteo Stations Parking and Access		08-Jan-18 A	05-May-28							
Preliminary Engineering		08-Jan-18 A	13-Mar-23							
Alternative Analysis - (Phase I)		08-Jan-18 A	28-Jan-21							
Conceptual Engineering - (Phase II)		03-Dec-19 A	31-Dec-21							

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Planned FTE is an annual projection. The variance is explained by the fact that advance Phase 2 is on pause, waiting for realignment decision summer 2021.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.7	0.8	(4.9)
Consultants	4.0	0.3	(3.7)
TOTAL	9.7	1.1	(8.6)

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Sounder Commuter Rail

Kent Station Parking & Access Improvements

Project Summary

Scope	<p>The purpose of the project is to improve parking and access to the existing Kent Sounder Station for Sounder riders, bicyclists, bus riders, and drivers.</p> <p>Project includes alternatives identification, screening environmental documentation, design, and construction of station parking and access improvements at or around Kent Station.</p>
Phase	Conceptual Engineering and Environmental Review complete.
Budget	\$15.6 Million
Schedule	Open for Service date will depend on ST Board direction from realignment process.



Improving access to Sounder Kent Station

Key Project Activities

- Project team continued to advance the Development Agreement with the City of Kent.
- Project team continued work to advance a funding agreement with King County Metro for a bus layover area and electric charging stations.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditure increased by \$53K. The incurred cost increased from \$4.31M to \$4.36M. The majority of this period's costs is attributed to staff costs, ROW activities and conceptual engineering work.

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	\$1.6	\$1.6	\$1.7	\$0.0
Preliminary Engineering	\$3.4	\$3.1	\$2.6	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$0.0	\$0.0	\$2.0	\$0.0
3rd Party Agreements	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$7.9	\$0.5	\$0.2	\$7.9	\$0.0
Total	\$15.6	\$5.2	\$4.4	\$15.6	\$0.0

Risk Management

The project team conducts quarterly risk management workshops to identify, update, and monitor potential risks during design and construction. The next risk register update is scheduled for January 2021. The following are the top project wide risks:

- Real Estate: Potential challenge to purchase specific parcels for the realigned of Railroad Avenue.
- Geotechnical: Unknown contaminated soils underneath existing building.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Open For Service Date will depend on Board direction from realignment process.

The project continues working towards completing the Phase II—Conceptual Engineering and Environmental activities throughout Q4 2019 and completed the environmental evaluation in Q4 2019. Letter Of Concurrence (LOC) between Sound Transit and City of Kent was signed in January 2020.

In February 2020 the project team went to the ST Board and received approval for the “Select the Project to be Built.” The project team presented to the ST Phase Gate Committee “Phase Gate 3: Enter Design and Construction” on March 17, 2020 and received approval to enter the phase. The project’s Threat Vulnerability Assessment (TVA) was completed in July 2020.

During the September ST Board meeting, approval was received to un-pause a portion of the project to move forward with a change order (approved by the Board in February 2020) to current Design-Build Project Management (DBPM) team HNTB to prepare an analysis of potential multi-Sounder South Commuter Rail Station Parking and Access Improvement projects contract packaging options. Board September Re-Alignment Motion allows advancing DBPM option focusing on near term actions that can help inform the board in making better realignment choices next year. Paperwork with HNTB for signature. This will help project continue to pursue “shovel ready.” Approval to issue Design-Build Procurement RFQ and Baselineing will not occur until after Project Requirements are developed and ST Board realignment decisions are made regarding the project. Further ST Board realignment decisions are anticipated as part of the July 2021 ST Board Realignment. Other activities underway include initiating property appraisal and condemnation activities, negotiating Development Agreement with the City of Kent and negotiating King County Metro agreement and contribution for bus layover accommodation.

Activity ID	Activity Name	Start	Finish	2019					2020				2021					
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
Sound Transit		24-Feb-16 A	31-Jan-22															
Sound Transit 2		24-Feb-16 A	31-Jan-22															
South Corridor		24-Feb-16 A	31-Jan-22															
S300035 - Kent Station Access Improvements - DB Master Schedule		24-Feb-16 A	31-Jan-22															
Alternative Analysis (Phase I)		24-Feb-16 A	15-Nov-17 A															
Conceptual Engineering (Phase II)		22-Mar-18 A	04-Jun-21															
Preliminary Engineering (Phase III)		13-Dec-18 A	26-Aug-21															
Design/Build Project Management (DBPM)/Construction Services		02-Jan-20 A	31-Jan-22															
DBPM Contract Procurement		02-Jan-20 A	03-Dec-20															
DBPM Design/Construction Services/Support (Pre-Const and Const)		04-Dec-20	31-Jan-22															
DBPM Construction Services/Support - Phase 1 (Pre-Construction)		04-Dec-20	31-Jan-22															

Sounder Commuter Rail

Kent Station Parking & Access Improvements



Community Outreach

- We are monitoring outreach needs for the project and are available to answer any questions.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The project in November was focused on the review of the Development Agreement with the City of Kent and Funding Agreement with King County Metro. Work advanced on the review of the Development Agreement with the City of Kent and Funding Agreement with King County Metro.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.5	2.7	(2.8)
Consultants	3.8	0.7	(3.1)
TOTAL	9.3	3.4	(5.9)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Sounder Commuter Rail Puyallup Station Access Improvements

Project Summary

Scope

The purpose of the project is to improve access to the existing Puyallup Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

The proposed project includes an up to 5 level parking garage and an expansion of a surface lot; together both shall provide a minimum of 600 total stalls. The project also includes a pedestrian bridge over 5th Street Northwest.

Phase

Final Design and Construction

Budget

\$79.1 Million

Schedule

Open for Service: Q1 2022



Improving access to Sounder Puyallup Station

Key Project Activities

- Update of project schedule is underway due to recently completed negotiations with the City impacting previously forecast Design Build Notice To Proceed (NTP) date. Open For Service date may be delayed beyond February 2022.
- Design Builder continues with completion of design packages and obtaining the remainder of the construction permits.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$1.3M. The incurred cost increased from \$24.8M to \$26.1M. This period's costs are attributed to property acquisition and relocation, staff costs, construction management services and \$0.7M for the Design Build construction contract.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$4.6	\$2.8	\$2.8	\$4.6	\$0.0
Preliminary Engineering	\$2.7	\$2.6	\$2.6	\$2.9	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$5.1	\$4.6	\$1.7	\$5.2	\$0.0
3rd Party Agreements	\$0.3	\$0.1	\$0.0	\$2.2	\$0.0
Construction	\$60.2	\$53.0	\$12.9	\$58.4	\$0.0
ROW	\$6.2	\$6.2	\$6.2	\$5.6	\$0.0
Total	\$79.1	\$69.3	\$26.1	\$79.1	\$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 to continuously monitor project status and associated risks.

The project team conducts quarterly risk management workshops to identify, update, and monitor potential risks during design and construction. The project team reviewed and updated the risk register in November 2020. The following are the top project wide risks:

- **Real Property– Third Party Agreements.** Project revenue service date may be delayed if BNSF agreement with ST regarding the 7th and 5th Street crossing is not resolved by Q1 2021.
- **Rail Road Flaggers– Third Party Agreements.** As a result of needing to use the railroad right of way, unavailability of BNSF flaggers may occur, thereby leading to delays to the schedule and increased costs. Impact to 5th street and 7th street. Delay to DB construction.

Project Schedule

This period completed joint utility trench (PSE, CenturyLink, and Comcast infrastructure) and removal of underground storage tank. Clear and rough grade the site north of 3rd avenue, excavation, testing, and replacement of 2' of contaminated soil at the surface of the former Hurlow property, removal of contaminated soil from berm at NW corner of the site.

Next steps, finalizing 100% and Issued For Construction (IFC) Design Packages and Construction permits, commencement of full garage construction activities is planned for Q1 2021. Early 2021 Board action planned to seek Board authority to execute two Construction and Maintenance Agreements between Sound Transit, BNSF, and the City of Puyallup. Also planned for Board action are Real Property Rights Acquisitions with the Burlington Northern Santa Fe (BNSF) railroad.

Activity ID	Activity Name	Start	Finish	2019				2020				2021				2022
				Q4	Q1	Q	Q3	Q4	Q1	Q2	Q3	Q4	Q	Q2	Q3	
Sound Transit		01-May-15 A	11-Apr-22													
Sound Transit 2		01-May-15 A	11-Apr-22													
South Corridor		01-May-15 A	11-Apr-22													
Sounder Commuter Rail - South		01-May-15 A	11-Apr-22													
Station Access - South		01-May-15 A	11-Apr-22													
S300017-Puyallup Station Access Improvements - DB		01-May-15 A	11-Apr-22													
S300017-Puyallup Station Access Improvements - PE		01-May-15 A	20-Mar-19 A													
S300017-Puyallup Station Access Improvements - ROW		05-Jul-16 A	17-Mar-21													
S300017-Puyallup Station Access Improvements - Permits & Third Party Agreements		15-Jul-16 A	25-Feb-21													
S300017-Puyallup Station Access Improvements - Construction		17-Sep-18 A	11-Apr-22													
S300017-Puyallup Station Access Improvements - Project Completion		06-Jan-22	11-Apr-22													
S300017 - Puyallup Station Access and Improvements - Project Completion		06-Jan-22	11-Apr-22													
Post Construction		06-Jan-22	11-Apr-22													
Project Float		06-Jan-22	10-Feb-22													
Open For Service		10-Feb-22	10-Feb-22													
Transition to Operations		05-Feb-22	11-Apr-22													

Sounder Commuter Rail

Puyallup Station Access Improvements



Community Outreach

Held online open house to inform the community about updated garage designs and what to expect during construction. The website was launched on November 12, and publicized through a postcard mailing to all addresses within one-half mile, social media ads, a press release, and more. The website closed on December 3 and had over 2,800 visitors.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Project staffing is on track with planned projections. Minor variance attributed to earlier delay of NTP which was resolved this month.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.0	5.7	0.7
Consultants	4.7	4.1	(0.6)
TOTAL	9.7	9.8	0.1

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.

Sound Transit Board Actions

Board Action	Description	Date
	None this period.	

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Sounder Commuter Rail Sounder Maintenance Base

Project Summary

Scope Sound Transit will design and construct a Sounder Commuter Rail maintenance facility and train yard elements that will include: maintenance shops, repair positions, storage areas, office and employee welfare facilities.

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

Phase Design and Construction

Budget \$12.9 Million

Schedule Open for Service date will depend on ST Board direction from realignment process.



Sounder Maintenance Base Project Alignment

Key Project Activities

- The Design Build Project Management (DBPM) consultant developed the initial design build project requirements, building program and other procurement documents. Phase 2 of the DBPM Contract is on hold pending realignment discussions.
- Continued utility coordination with Tacoma Power and Puget Sound Energy to relocate their utilities off Sound Transit's railroad right of way. Puget Sound Energy to start construction in January 2021.
- Board baseline action is on hold pending realignment discussions. Procurement will proceed after Board baseline.



Brake pads are replaced on a Sounder car.



Air filters are changed at the Sounder maintenance base in Seattle

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$89K. The incurred cost increased from \$9.67M to \$9.76M. The majority of this period's costs are attributed to staff costs; geotechnical investigations in the Preliminary Engineering Phase; and right-of-way activities including temporary construction easement appraisals.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.5	\$2.6	\$2.5	\$2.5	\$0.0
Preliminary Engineering	\$3.5	\$3.2	\$3.0	\$3.5	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$1.9	\$1.7	\$2.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$2.0	\$0.3	\$0.1	\$2.0	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$3.0	\$2.6	\$2.4	\$3.0	\$0.0
Total	\$12.9	\$10.6	\$9.8	\$12.9	\$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 to continuously monitor project status and associated risks.

The project team conducts quarterly risk management workshops to identify, update and monitor potential risks during design and construction. The project team completed a quantitative risk analysis to evaluate confidence in the current budget and schedule. The analysis established contingency levels and schedule float for the project baseline. The analysis has identified the following as the top project risks and proposed mitigations:

- Advanced utility relocation delays - *Risk Mitigation:* Execute agreements with the utility companies in advance of the design-build team mobilizing. Monitor progress on a regular basis.
- Implementing new form of contracting: Design Build Guaranteed Maximum Price Contract. - *Risk Mitigation:* Work closely with Design Build Project Management and Sound Transit team to modify contract documents. Seek Sound Transit sponsorship to accomplish timely review and approval of changes.
- ROW acquisition delay - *Risk Mitigation:* Monitor Sound Transit Real Estate negotiations and obtain possession and use of property being acquired.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Open For Service Date will depend on Board direction from realignment process.

Sounder Maintenance Base initial draft Design/Build (D/B) Project Requirements (PR's) were completed in June 2020 and will be incorporated into the D/B Request For Qualifications (RFQ). Issuance of the D/B RFQ is currently on-hold. Approval of a change order for the Design-Build Project Management (DBPM) team to develop the final Project Requirements for the Design-Build Procurement RFP and Construction Services support is also currently on-hold.

Activity ID	Activity Name	Start	Finish	2019				2020				2021			
				Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Sound Transit		01-Apr-13 A	31-Dec-21												
Sound Transit 2		01-Apr-13 A	31-Dec-21												
South Corridor		01-Apr-13 A	31-Dec-21												
S300004 - Sounder Maintenance Base - Design/Build MS (Master)		01-Apr-13 A	31-Dec-21												
Conceptual Engineering		29-Jul-13 A	30-Jan-18 A												
Preliminary Engineering		01-Jun-14 A	26-Aug-21												
Environmental Assessment		01-Apr-13 A	13-Mar-20 A												
Third Party Utility Relocation and Misc Construction		02-Jan-19 A	31-Dec-21												
Third Party Utility Relocation		02-Jan-19 A	31-Dec-21												
TPU		02-Jan-19 A	31-Dec-21												
Phase 1 - Design		02-Jan-19 A	31-Dec-21												
TPU-ROW		31-Aug-21	31-Dec-21												
PSE		30-Aug-19 A	15-Mar-21												
Design Build Project Management Services +		01-Aug-18 A	30-Jun-20 A												
DBPM - Phase 1 - Const Services/Support - DB Project Req'ts (PRs)(Draft)/RF		01-Aug-18 A	30-Jun-20 A												

Community Outreach

- We are monitoring outreach needs for the project and are available to answer any questions.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The variance is due to limited availability of Sound Transit subject matter experts. This limited availability is being supplemented by the Design Build Project Management Consultant, therefore explaining the variance in the consultant projections.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	8.1	3.6	(4.5)
Consultants	2.3	3.3	1.0
TOTAL	10.4	6.9	(3.5)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Sounder Commuter Rail Sounder South Capacity Expansion

Project Summary

Scope

This project will establish a program of capital elements that will be used to enhance South Sounder access, capacity, and services in response to increased demand.

Program elements could include platform extensions, track and signal upgrades and other related infrastructure to facilitate additional capacity, and access elements such as improvements for pedestrians, bicyclists, buses, and private vehicles, prioritized per Sound Transit's System Access Policy.

Once the Sounder Strategic Development and Implementation Plan is complete then the capital projects included in this representative program will be refined.

Phase

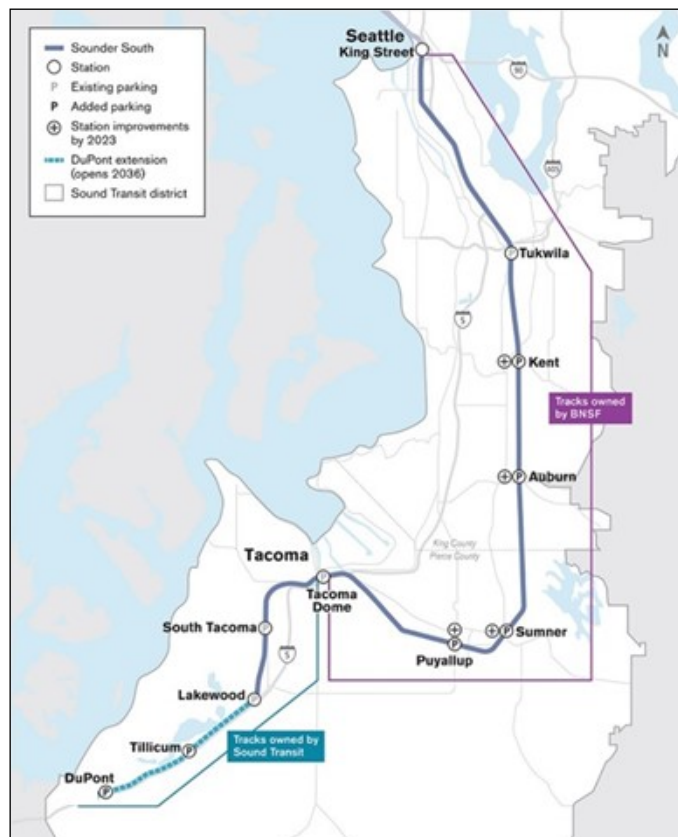
Planning

Budget

\$3.6 Million

Schedule

Open for Service date will depend on ST Board direction from realignment process.



Sounder South Capacity map alignment

Key Project Activities

- Due to the economic impacts from COVID-19 pandemic, the Sound Transit Board initiated conversations of conducting a capital program realignment of capital projects. The SSCE Program's anticipated major activities planned for Q2 2020 are on pause.
- Sound Transit and BNSF Railway initiated the Path Finding Study Technical Working Group meeting series in July 2020 and continues to meet bi-weekly.



Possible platform and track improvements



Sounder South Tukwila Station showing access elements

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$33K with the majority of the amount coming from staff costs.

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	\$1.1	\$1.1	\$1.2	\$0.0
Preliminary Engineering	\$2.0	\$1.8	\$1.4	\$2.0	\$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	\$0.4	\$0.4	\$0.0	\$0.4	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$3.6	\$3.3	\$2.5	\$3.6	\$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 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 to continuously monitor project status and associated risks.

There are no risks identified at this time.

Community Outreach

- We are monitoring any outreach needs for the project and are available to answer any questions.

Sounder Commuter Rail

Sounder South Capacity Expansion



Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment. The project is expecting about eight months of COVID-19 related delays. As a result, dates including Service Date, will depend on Board direction from realignment process.

Activity ID	Activity Name	Start	Finish	2020			2021			
				Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Sounder South - Platform Extensions	13-Jun-18A	05-Aug-37							
	Sounder South Platform Extensions	13-Jun-18A	05-Aug-37							
	Alternative Analysis - (Ph - I)	13-Jun-18A	28-Jan-21							
	Conceptual Engineering/Environmental - (Ph - II)	29-Jan-21	01-Feb-23							

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Due to the economic impacts from COVID-19 pandemic, the Sound Transit Board initiated conversations of conducting a capital program realignment of capital projects. The SSCE Program's anticipated major activities planned for Q2 2020 are on pause.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	13.4	2.2	(11.2)
Consultants	0.7	0.5	(0.2)
TOTAL	14.1	2.7	(11.4)

* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Sounder Commuter Rail

Sumner Station Access Improvements

Project Summary

Scope	<p>The purpose of the project is to provide increased access to parking by adding 505 net new spaces and new bus loop.</p> <p>Project includes alternative identification, screening, environmental documentation, design and construction of station access improvement at or around Sumner Station.</p>
Phase	Preliminary Engineering
Budget	\$17.8 Million
Schedule	Open for Service date will depend on ST Board direction from realignment process.



Improving access to Sounder Sumner Station

Key Project Activities

- Design-Build procurement documents finalized. Project on hold pending Board re-alignment discussions.
- Continued negotiations with parcel owners for relocation and acquisition.
- Approach to baselining has received an exception from Project Controls to take place post Design-Builder selection.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

This period expenditures increased by \$26K. The incurred cost decreased from \$10.62M to \$10.65M. This period's costs are attributed to staff costs and right-of-way activities.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.1	\$1.7	\$1.7	\$2.1	\$0.0
Preliminary Engineering	\$2.8	\$2.6	\$2.6	\$2.8	\$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	\$7.6	\$7.6	\$2.4	\$7.6	\$0.0
Construction	\$0.3	\$0.1	\$0.1	\$0.3	\$0.0
ROW	\$4.6	\$4.0	\$3.8	\$4.6	\$0.0
Total	\$17.8	\$16.0	\$10.6	\$17.8	\$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 to continuously monitor project status and associated risks.

The project team conducts quarterly risk management workshops to identify, update, and monitor potential risks during design and construction. The project team reviewed and updated the risk register in November 2020. The following are the top project wide risks:

- Third Party Agreements to be finalized before contract award. Sound Transit staff have finalized a draft of the Conditional Use Permit; readying for a meeting with the city once key open issues have been addressed.
- Environmental-Contamination (Soil &/or Water: Inclusion of a work plan has been included in the procurement documents to mitigate and address remediation of contaminated materials. This will be the first line of work the contractor will perform once they are approved to proceed with construction.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Open For Service Date will depend on Board direction from realignment process.

Board September Re-Alignment Motion allowed advancing DBPM option focusing on near term actions that can help inform the board in making better realignment choices next year. Project Procurement documents are complete; Procurement for Issuance of the Design-Build Request For Qualifications (RFQ) is currently on hold pending Board level discussion on re-alignment. Finalizing agreements for replacement parking during construction. Board Re-Alignment action anticipated July 2021.

The project is in the Preliminary Engineering phase, the preliminary engineering work overall is complete, the primary remaining activities in this phase are to initiate Design-Build procurement and Baseline the project. Approach to Baseline received an exemption from Project Controls in February 2020 to take place post Design-Builder highest-ranked proposer selection. Right-of-Way acquisitions are in progress and are forecast to be completed in advance of the area of construction needed for the Design-Build contractor's construction activities.

Activity ID	Activity Name	Start	Finish	2019					2020				2021				Q1	Q2
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Sound Transit		01-May-15 A	28-Apr-22															
Sound Transit 2		01-May-15 A	28-Apr-22															
South Corridor		01-May-15 A	28-Apr-22															
S300018 - Sumner Station Parking and Access Improv		01-May-15 A	28-Apr-22															
Alternative Analysis (Phase I)		01-May-15 A	26-May-16 A															
Conceptual Engineering (Phase II)		01-May-15 A	14-Mar-16 A															
Preliminary Engineering (Phase III)		14-Jul-16 A	28-Apr-22															
Permits and Agreements		01-Mar-16 A	31-Jan-21															
Right of Way		22-Sep-16 A	13-Dec-21															

Sounder Commuter Rail

Sumner Station Access Improvements



Community Outreach

- Community Outreach is monitoring outreach needs for the project and is available to answer any questions.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Variance between the planned and actual FTE figures is the result of the project's baselining being delayed. Once the project has been baselined actual staffing numbers are expected to rise to meet the planned.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	6.0	1.4	(4.6)
Consultants	1.6	0.3	(1.3)
TOTAL	7.6	1.7	(5.9)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Progress Report

Regional Express & STRIDE Programs



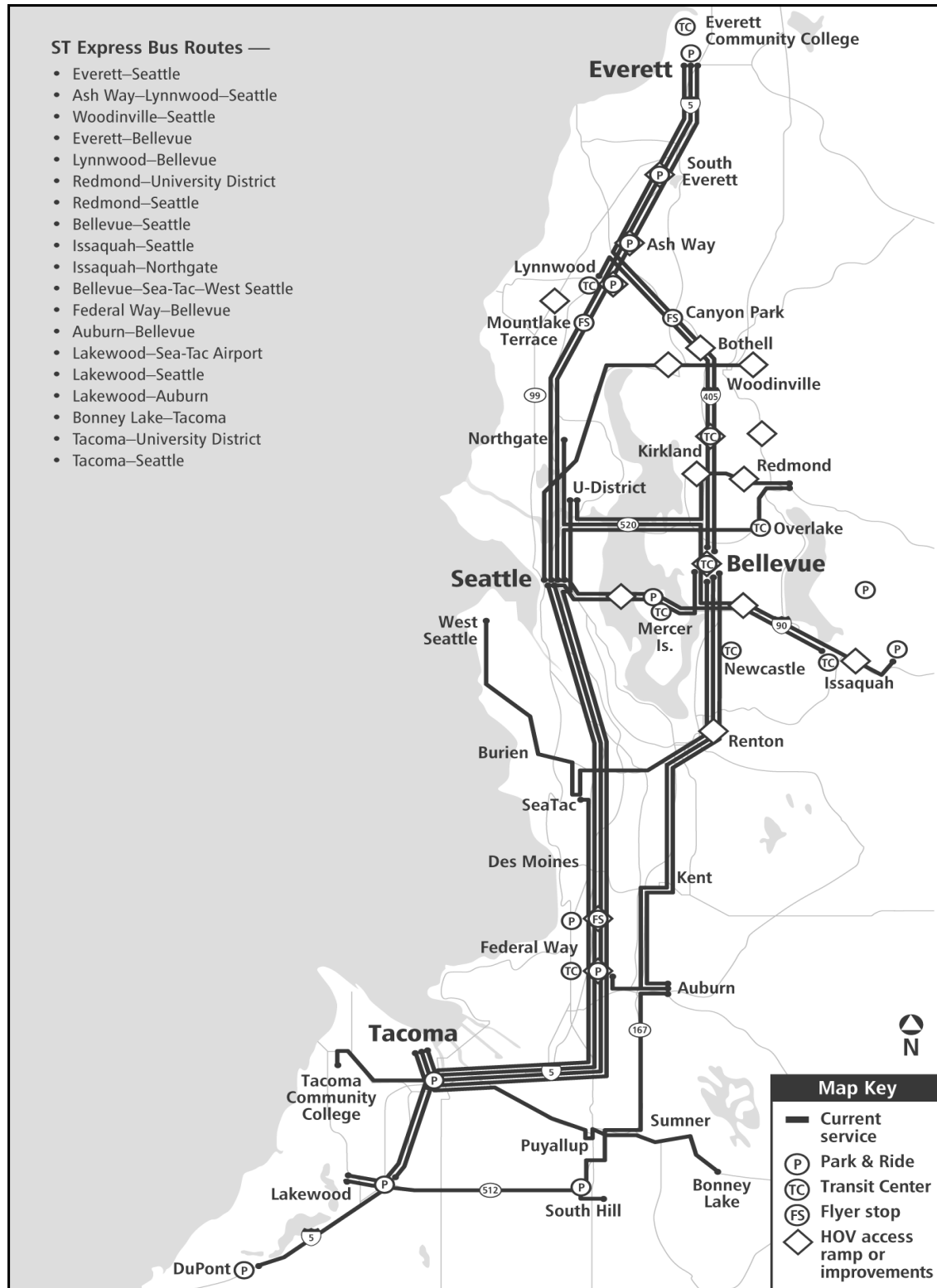
**ST Express Bus routes connects major regional hubs throughout the three counties
(King, Pierce, and Snohomish)**

November | 2020



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

Regional Express & STRIDE Program Overview



ST Regional Express Bus Routes

Regional Express & STRIDE Program Overview



ST Express Bus Base: Sound Transit is evaluating the need for an operations and maintenance base. Project development activities include confirmation of fleet operations; facilities and site programming; and identification of site alternatives. Project is currently on hold, but being re-evaluated by senior management.

I-405 Bus Rapid Transit: This project establishes Bus Rapid Transit (BRT) from the Lynnwood Transit Center to Bellevue Transit Center and Burien Transit Center via I-405 and SR 518. The project relies on the I-405 express toll lane system where available, and Business Access Transit (BAT) lanes on SR 518 from Tukwila to Burien. Project elements include parking, station access improvements, and 11 pairs of stations, including a new transit center in South Renton and new stations at Northeast 85th Street with connection to Downtown Kirkland and at Northeast 44th Street in Renton.

Bus Base North: This project establishes the operations and maintenance facility necessary to support to support BRT operations.

SR522 Bus Rapid Transit: This project establishes BRT from the Link station at I-5 and Northeast 145th Street to UW Bothell, with service continuing at lower frequencies to Woodinville. On Northeast 145th Street, this project includes transit priority spot treatments to facilitate BRT movement through corridor bottlenecks. On SR 522 the majority of the corridor through Lake Forest Park, Kenmore and Bothell will feature BAT lanes, with transit-supportive enhancements on arterials from downtown Bothell to UW Bothell. This project includes nine pairs of stations, with additional parking at Lake Forest Park, Kenmore and Bothell and an expanded transit center at UW Bothell.

Bus on Shoulder: This program provides opportunities for buses to use shoulders on freeway and state route facilities during periods of congestion in general traffic and/or HOV lanes. This program will require coordination and further study with transit partners, WSDOT and Federal Highway Administration in order to determine locations where Bus on Shoulder may be feasible.

North Sammamish Park & Ride: The project includes the planning, design and construction of a park and ride facility. The North Sammamish Park and Ride will provide up to 200 parking spaces in the north end of the City of Sammamish. The park and ride will be open for public access in 2024, improving access to transit service for Sammamish residents.

Program Budget

The Authorized Project Allocation reflects the budget for each project through the approved project phase. As projects advance through design into construction the budget will be amended to reflect Board approved actions.

Regional Express and STRIDE	Authorized Allocation	Commitment To Date	Incurred to Date	Forecast to Complete	Estimated Final Cost	Authorized Allocation vs EFC
ST EXPRESS BUS BASE	\$5.8	\$3.1	\$1.2	\$2.7	\$5.8	\$0.0
I-405 BRT	\$226.1	\$196.9	\$78.8	\$29.2	\$226.1	\$0.0
BUS BASE NORTH	\$48.7	\$27.9	\$27.2	\$20.9	\$48.7	\$0.0
SR 522-NE 145th ST BRT	\$69.4	\$45.8	\$33.5	\$23.9	\$69.4	\$0.0
BUS ON SHOULDER PROJECT	\$3.9	\$0.8	\$0.8	\$3.1	\$3.9	\$0.0
NORTH SAMMAMISH PARK & RIDE	\$2.1	\$0.3	\$0.3	\$1.8	\$2.1	\$0.0
TOTAL REX & STRIDE	\$356.0	\$274.8	\$141.8	\$81.5	\$356.0	\$0.0

Figures are shown in millions

Program Schedule

All projects within the Regional Express and STRIDE programs are part of the realignment process. *A graphic of the revised timelines will be displayed following the conclusion of the realignment process.*

Regional Express & STRIDE ST Express Bus Base

Project Summary

Scope Sound Transit is evaluating the need for an operations and maintenance base. Project development activities include confirmation of fleet operations, facilities and site programming, and identification of site alternative.

Phase Planning

Budget \$5.8 Million

Schedule Project is on hold



ST. Express bus maintenance performed by transit partners

Key Project Activities

- Sound Transit Executive Leadership is evaluating the need for an operations and maintenance base.
- Sustainability is completing a \$125K study of Battery-Electric Buses to develop an agency-wide implementation plan for future transition to Battery Electric Buses. Work anticipated to start in 2020 will be further delayed due to COVID-19 pandemic.
- Open for Service date will depend on Board direction from realignment process.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

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	\$0.4	\$0.4	\$0.8	\$0.0
Preliminary Engineering	\$4.8	\$2.7	\$0.8	\$4.8	\$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	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Total	\$5.8	\$3.1	\$1.2	\$5.8	\$0.0

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Regional Express & STRIDE I-405 Bus Rapid Transit

Project Summary

Scope	Launch a Bus Rapid Transit (BRT) system along the I-405 corridor.
Limits	Approximately 37 miles between Lynnwood and Burien
Alignment	I-405 BRT will extend along the I-5, I-405 and SR 518 corridors. BRT will serve Lynnwood, Bothell, Kirkland, Bellevue, Renton, SeaTac, Tukwila, and Burien. Buses will operate in high occupancy vehicle lanes, express toll lanes, bus only lanes and general purpose lanes.
Stations	Lynnwood City Center, Canyon Park, SR 522/I-405 Transit Hub, Brickyard, Totem Lake/Kingsgate, NE 85th, Bellevue Transit Center, NE 44th, South Renton Transit Center, Tukwila International Blvd Station, Burien Transit Center
Phase	Planning Phase 2: Environmental review and conceptual engineering
Budget	I-405 BRT: \$226.1 Million Preliminary Engineering (Phases 1-3)
Schedule	Open for Service date will depend on Board direction from realignment process.



Map of Project Alignment

Key Project Activities

- Developing partnering agreements and letters of concurrence.
- Help Interagency Group meeting.
- Working with WSDOT to advance environmental and design at 85th, Brickyard, SR 522/I-405 Transit Hub, and Canyon Park.
- Conducted field test with King County Metro at the Burien Transit Center .

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

This period expenditures are \$1.1M, of which \$0.2M for Staff time, \$0.8M for project refinement activities in the PE phase, \$20K for third party costs and \$130K for ROW activities. Project refinement activities include refining and analyzing multiple concepts for speed and reliability improvements, alternative routing options, and station locations throughout the system and various technical memorandums.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$8.3	\$6.9	\$6.9	\$8.3	\$0.0
Preliminary Engineering	\$49.7	\$45.1	\$21.4	\$49.7	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.8	\$0.0	\$0.0	\$0.8	\$0.0
3rd Party Agreements	\$1.0	\$0.6	\$0.5	\$1.0	\$0.0
Construction	\$130.2	\$118.4	\$24.4	\$130.2	\$0.0
ROW	\$36.2	\$25.9	\$25.6	\$36.2	\$0.0
Total	\$226.1	\$196.9	\$78.8	\$226.1	\$0.0

Risk Management

The project team continues to hold risk management workshops to identify all the potential risks during design and construction. The risk register will be updated and monitored quarterly.

The following are top project risks and proposed mitigations:

- Completion of WSDOT's I-405 Renton to Bellevue Widening and Express Toll Lanes (ETL) Project. *Risk Mitigation:* Sound Transit participated in WSDOT's Design-Build process for the I-405 Renton to Bellevue Project as a proposal evaluation member and integrated BRT milestones into the WSDOT schedule. Sound Transit staff is participating in design and constructability reviews for BRT related facilities.
- Coordination with WSDOT north-end I-405 Express Toll Lane schedule. Sound Transit and WSDOT staff coordination is on-going to minimize or eliminate schedule gaps or slowdowns.

Regional Express & STRIDE I-405 Bus Rapid Transit



Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Revenue Service Date will depend on Board direction from realignment process.

The current phase, Conceptual Engineering/Environmental Review (Phase 2), commenced in Q2 2019 and is anticipated to complete in Q4 2020/Q1 2021. In October 2020 the Sound Transit System Expansion Committee (SEC) authorized advancing the current Conceptual Engineering consultant's (WSP) Preliminary Engineering (Phase 3) SOW per Motion No. M2020-59: Authorizing the chief executive officer to execute a contract modification with WSP USA Inc. to exercise a contract option for Phase 3 preliminary engineering services for the I405 Bus Rapid Transit project. In November 2020 Notice to Proceed (NTP) was provided to WSP and they are in the process of developing their initial draft Preliminary Engineering (Phase 3) SOW schedule.

In November 2020, Motion No. M2020-67 authorized the chief executive officer to execute a five-year contract with three one-year options to extend with Jacobs Project Management Co. to provide on-call general engineering consultant services for the Stride Bus Rapid Transit program for an initial total authorized contract amount not to exceed \$2,000,000 was brought forth and approved by the System Expansion Committee Meeting. Notice to Proceed is planned for December 2020.

The current critical path for the I-405 BRT project is conceptual engineering, environmental review, preliminary engineering, permitting/agreements, final design, construction, intelligent transportation system (ITS) and service line activation. There are other critical design efforts and construction projects being managed by WSDOT*, with elements specific to Sound Transit, such as the I-405 Renton to Bellevue Widening and Express Toll Lanes, which includes the NE 44th Street interchange and BRT station, I-405 NE 85th interchange and BRT Station, and select planned elements of WSDOT's I-405—SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project.

**Sound Transit contributed construction funding to WSDOT for Sound Transit's portion of the I-405—Renton to Bellevue Widening and Express Toll Lanes project's Design-Build construction. WSDOT awarded this Design-Build contract in 2019 wherein the I-405 NE 44th Interchange will be constructed for the BRT inline station at that interchange. WSDOT is also currently conducting ST funded design efforts for I-405 NE 85th interchange and Brickyard.*

Activity ID	Activity Name	Start	Finish	2019				2020				2021				2022				2023			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sound Transit		01-Jan-18 A	31-Dec-23																				
Sound Transit 3		01-Jan-18 A	31-Dec-23																				
ST3 - East Corridor		01-Jan-18 A	31-Dec-23																				
STRIDE - Bus Rapid Transit - East Corridor		01-Jan-18 A	31-Dec-23																				
STRIDE - I-405 Bus Rapid Transit (BRT)		01-Jan-18 A	31-Dec-23																				
I-405 BRT - Preliminary Engineering		02-Mar-18 A	18-Nov-21																				
I-405 BRT - Alternatives Analysis - Phase I		02-Mar-18 A	28-May-19 A																				
I-405 BRT - Conceptual Engineering/Environmental Review - Phase II		08-Apr-19 A	16-Mar-21																				
I-405 BRT - Preliminary Engineering - Phase III		19-Nov-20	18-Nov-21																				
I-405 BRT - Final Design - GEC (General Engineering Contract)		31-Jul-19 A	07-Dec-20																				
I-405 BRT - Construction		01-Jan-18 A	31-Dec-23																				
I-405 BRT - Construction - South		29-Oct-18 A	31-Dec-23																				
I-405 BRT - WSDOT - I-405/NE 44th St. Interchange		29-Oct-18 A	31-Dec-23																				
Administration		29-Oct-18 A	25-Apr-19 A																				
Construction		01-Apr-19 A	31-Dec-23																				
WSDOT - Construction		01-Apr-19 A	31-Dec-23																				
D/B - Design & Construction		01-Apr-19 A	31-Dec-23																				
WSDOT I-405/NE 44th S. Interchange Ramps Available to ST		01-Apr-19 A	31-Dec-23																				
I-405 BRT - Construction - North		01-Jan-18 A	17-Dec-20																				
I-405 BRT - WSDOT - Brickyard Station		22-Aug-19 A	01-May-20 A																				
I-405 BRT - WSDOT - Brickyard		22-Aug-19 A	01-May-20 A																				
ST-WSDOT Agreement - Conceptual Engineering Design (15%)		22-Aug-19 A	01-May-20 A																				
I-405 BRT - WSDOT- NE 85th interchange and inline station		01-Jan-18 A	17-Dec-20																				
Preliminary Engineering		01-Jan-18 A	17-Dec-20																				

Community Outreach

Sound Transit is committed to proactively seeking public input during all stages of the I-405 BRT Project. The I-405 BRT Community Engagement Guide establishes a stakeholder engagement process that helps ensure priorities of local communities are heard and considered along with the project-wide goals. The BRT team will collaborate with elected officials, partner staff and local communities throughout the project.

- November 17th Interagency Group meeting (IAG)
- Planning for geotechnical boring for Tukwila/Seatac (mailings/scheduling)
- Planning for phase 3 outreach

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Planned FTE is annual projection. ST Staff level of effort will increase once Phase 3 starts this month. Consultant FTE is almost in line with FTE planned.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	16.6	13.6	(3.0)
Consultants	16.2	15.4	(0.8)
TOTAL	32.8	29.0	(3.8)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

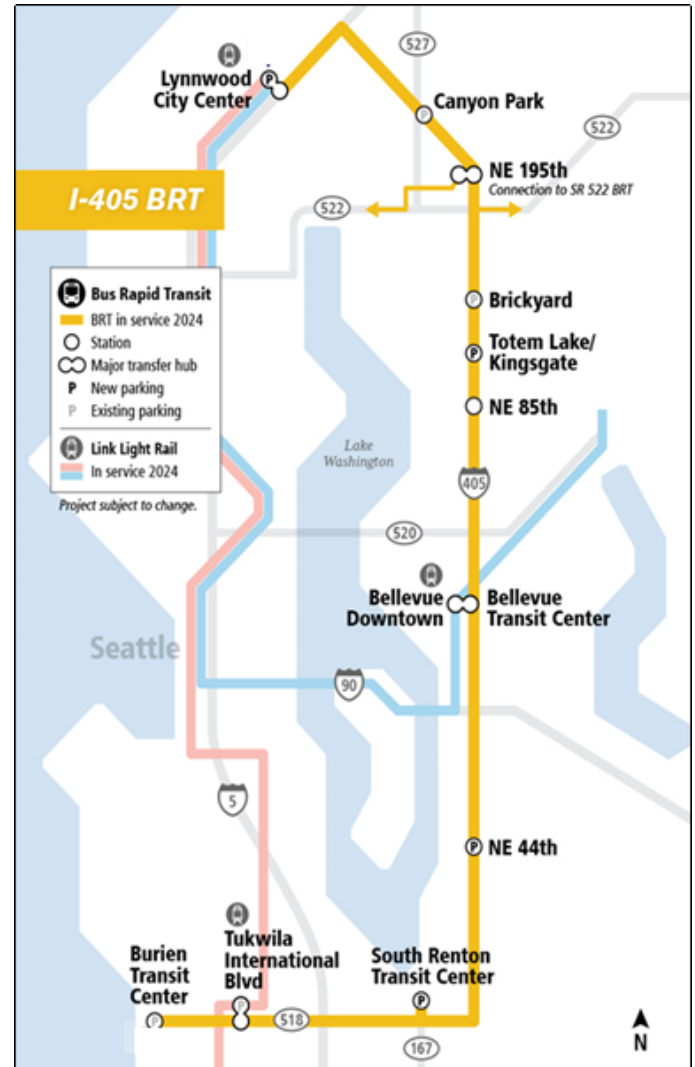
Sound Transit Board Actions

Board Action	Description	Date
M2020-67	On Call Contract for General Engineering Consultant Service Contract for STRIDE Bus Rapid Transit Program	11/12/2020

Regional Express & STRIDE Bus Base North

Project Summary

Scope	The Bus Base North will accommodate up to 120 buses to serve I-405 and SR 522/145th BRT and some ST Express routes.
Phase	Conceptual engineering/environmental review
Budget	\$48.7 Million
Schedule	Open for Service date will depend on Board direction from realignment process.



Map of Project Alignment

Key Project Activities

- State Environmental Policy Act (SEPA) Determination of Non-significance (DNS) issued August 10.
- Design-Build Project Management Contract: Award pending Capital Program realignment process by ST Board.
- Addressing the Business Park's Codes, Covenants and Restriction (CCRs).

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

This period expenditure increased by approximately \$5K. This is primarily due to progress made by the consultant on preliminary engineering and environmental for \$40K, by Sound Transit Staff time for \$55K and Legal costs for \$30K. Additionally, there was an accruals correction for ROW Administration that reduced period expenditure by \$120K.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$4.4	\$1.3	\$1.4	\$4.4	\$0.0
Preliminary Engineering	\$2.3	\$1.7	\$1.1	\$2.3	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$12.6	\$0.0	\$0.0	\$12.6	\$0.0
3rd Party Agreements	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$29.2	\$24.8	\$24.7	\$29.2	\$0.0
Total	\$48.7	\$27.9	\$27.2	\$48.7	\$0.0

Risk Management

The BRT Project Team will develop the Risk and Contingency Management Plan (RCMP) during the Design/Build phase of the project. The project team conducted a risk management workshop to identify all the potential risks during design and construction. The risk register will be updated and monitored quarterly.

The top project risk and proposed mitigation is below:

- Appeal of SEPA Checklist. *Risk Mitigation:* Sound Transit is responding to the appeal.
- Providing comment on the City's of Bothell's Update to the Canyon Park Sub-Area Plan and accompanying code amendments.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Revenue Service Date will depend on Board direction from realignment process.

The current phase, Conceptual Engineering/Environmental review, commenced in Q2 2019 and is now anticipated to complete in Q1 2021.

Sound Transit has prepared a State Environmental Policy Act (SEPA) environmental checklist for the Bus Base North project in Bothell. As part of the environmental checklist, Sound Transit developed technical reports and memos on the following topics: Noise and Vibration, Ecosystem Resources, Hazardous Materials, Transportation, Visual and Aesthetic Resources, Historic and Archaeological Resources.

Based on the checklist, technical reports and other information, Sound Transit has determined that the Bus Base North project does not have a probable significant adverse impact on the environment. A Determination of Non-significance (DNS) was issued on August 10, 2020. City of Bothell issued an appeal to Sound Transit's SEPA DNS determination, Sound Transit is responding to this SEPA appeal. The environmental analysis will inform the Sound Transit Board on future decisions about the project. Other, select, environmental permitting activities are underway and are planned to complete in Q3/Q4 2021.

Sound Transit presented to the November 2020 Sound Transit Board and the Board approved Resolution No. R2020-21: Amending the Adopted 2020 Budget for the Bus Base North project to support a property acquisition. Property owner allowed Sound Transit to take possession in May 2019, recent appraisals and mediation arrived at through a 3rd party resulted in an increased valuation of the property.

The current critical path for Bus Base North is conceptual engineering, environmental review, potential compensation to property owners related to acquiring rights to deviate from restrictive covenants that prohibit Sound Transit's proposed use for the property, developing project requirements, permitting/agreements, design-build procurement, design-builder final design, permitting, construction, integration with intelligent transportation system (ITS), preparation for and readiness of Bus Base North for new BRT bus fleet and service line activation.

Activity ID	Activity Name	Start	Finish	2019				2020				2021		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sound Transit		21-Nov-17 A	10-Sep-21											
Sound Transit 3		21-Nov-17 A	10-Sep-21											
ST3 - East Corridor		21-Nov-17 A	10-Sep-21											
STRIDE - Bus Rapid Transit - East Corridor		21-Nov-17 A	10-Sep-21											
STRIDE - I-405 Bus Rapid Transit (BRT)		21-Nov-17 A	10-Sep-21											
STRIDE - BRT - Bus Base North (CUD01)		21-Nov-17 A	10-Sep-21											
BRT - Bus Base North - Preliminary Engineering		08-Apr-19 A	10-Sep-21											
BRT - Bus Base North - Conceptual Engineering - Phase II		08-Apr-19 A	10-Sep-21											
BRT - Bus Base North Right of Way (ROW) / Property Acquisition		21-Nov-17 A	24-Jun-21											

Community Outreach

Sound Transit is committed to proactively seeking public input during all stages of the BRT Project. The I-405 BRT Community Engagement Guide establishes a stakeholder engagement process that helps ensure priorities of local communities are heard and considered along with the project-wide goals. The BRT team will collaborate with elected officials, partner staff and adjacent property owners during the project. Sound Transit is working closely with the City of Bothell on the Bus Base North project.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Planned FTE is annual projection. The variance in ST staff level of effort will reduce once DBPM (Design-Build Project Management contract) starts. However, award of Design-Build Project Management contract is on pause due to the Realignment Process. Consultant staff are currently working on Phase 2, Phase 3 starts this month.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.5	3.3	(2.2)
Consultants	2.7	2.0	(0.7)
TOTAL	8.2	5.3	(2.9)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
R2020-21	Budget Amendment for Bus Bas North	11/12/2020

Regional Express & STRIDE

SR 522/NE 145th Street Bus Rapid Transit

Project Summary

Scope Launch a Bus Rapid Transit (BRT) system from the Shoreline South/145th light rail station to UW Bothell campus with connecting service to Woodinville, including park and ride, access improvements, and transit centers.

Limits Approximately 8 miles between Shoreline and Bothell

Alignment The BRT route will travel via NE 145th Street and SR 522 serving Seattle, Shoreline, Lake Forest Park, Kenmore, and Bothell, including UW Bothell/Cascadia College area. The route will have a connection to I-405 BRT at the SR 522/I-405 interchange. Buses will operate primarily in Business Access and Transit (BAT) lanes, transit queue bypass lanes, and in general purpose lanes.

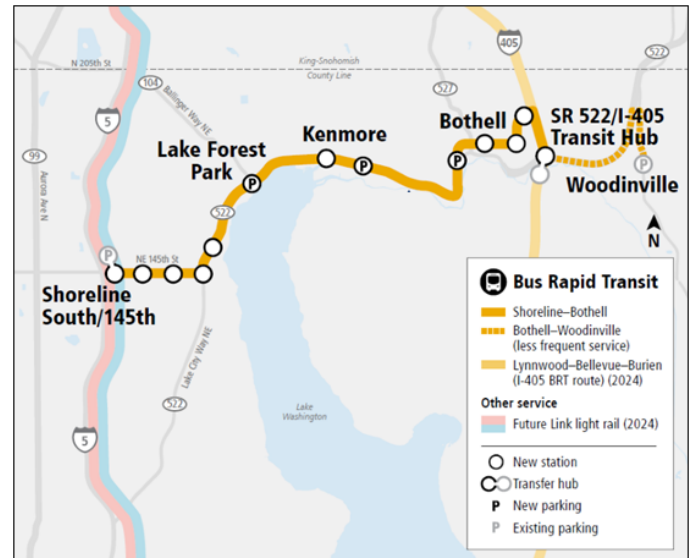
Stations Includes 14 BRT stations. Additional parking is included in Lake Forest Park, Kenmore, and Bothell.

Systems BRT Operations & Transit Signal Priority

Phase Planning Phase 2 Conceptual Engineering and Environmental Review

Budget \$69.4 Million - Preliminary Engineering Phase (1-3)

Schedule Open for Service date will depend on Board direction from realignment process.



Map of Project Alignment



Key Project Activities

- Conducting environmental review and advancing preliminary engineering design.
- Continuing stakeholder outreach focused on property owners and businesses.
- Interagency Group met to provide ideas and recommendations to the project team.
- Submitted the Lake Forest Park 30% plans for review.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

This period expenditures increased for \$1.7M, primarily due to progress made in construction for \$0.9M for construction in Bothell, progress by consultant on conceptual engineering and environmental for \$0.6M, Sound Transit staff time for \$0.2M, and ROW activities for \$13K.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$6.3	\$5.0	\$5.0	\$6.3	\$0.0
Preliminary Engineering	\$17.0	\$15.0	\$12.0	\$17	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.3	\$0.0	\$0.0	\$0.3	\$0.0
3rd Party Agreements	\$6.4	\$0.5	\$0.4	\$6.4	\$0.0
Construction	\$34.0	\$25.0	\$15.8	\$34.0	\$0.0
ROW	\$5.3	\$0.3	\$0.3	\$5.3	\$0.0
Total	\$69.4	\$45.8	\$33.5	\$69.4	\$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 risks and proposed mitigations:

- The SR 522/NE 145th Street BRT project is an early deliverable and involves close coordination with multiple project partners. Staff and consultants are continuing to coordinate closely with project partners.
- The timeline for property acquisition is a risk for this project. Key mitigation thus far has included advancing a change order in Phase 2 to perform work that supports property civil certification and acquisition, conducting focused property owner outreach in the fall/winter of Phase 2, and advancing Phase 3 contract to first quarter 2020 to further expedite design to support property acquisition.
- Early concurrence on project components is a key effort of project development though on-going coordination with the Project Interagency Coordination Group, City Managers Group and Elected Leadership Group. Letter of Concurrence are being developed with major jurisdictions on the SR 522/145th BRT alignment for the project advancing to 30 percent design.
- Coordination of project on NE 145th with WSDOT and the Cities of Seattle and Shoreline - complex jurisdictional situation and third partner expectation for ST capital investment. Partner Agency staff are actively working towards a multi-agreeable solution.
- Working with Agencies Having Jurisdiction (AHJ) to modify the project footprint throughout the corridor to minimize potential property impacts.

Regional Express & STRIDE

SR 522/NE 145th Street Bus Rapid Transit



Project Schedule*

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Revenue Service Date will depend on Board direction from realignment process.

The SR 522/NE 145th BRT Project Refinement Phase completed in Q2 2019. The current phase, Conceptual Engineering/Environmental Review, commenced in Q2 2019 and is anticipated to complete in Q4 2020/Q1 2021. Preliminary Engineering is anticipated to complete in Q2/Q3 2021.

In November 2020 Motion No. M2020-67 authorized the chief executive officer to execute a five-year contract with three one-year options to extend with Jacobs Project Management Co. to provide on-call general engineering consultant services for the Stride Bus Rapid Transit program for an initial total authorized contract amount not to exceed \$2,000,000 was brought forth and approved by the System Expansion Committee. Notice to Proceed (NTP) is planned for December 2020.

The current critical path for the ST 522/NE 145th BRT project is conceptual engineering, environmental review, Right-of-Way (ROW) civil certification, ROW acquisition, preliminary engineering, permitting/agreements, final design, construction, intelligent transportation system (ITS) and service line activation.

**Sound Transit contributed construction funding to certain city(s)/Authorities Having Jurisdiction (AHJ) where construction by contracts managed by those city(s) (e.g. City of Bothell) commenced in Q2 2019 allowing early construction of transit speed and reliability on roadways along the BRT corridor in advance of BRT service operation.*

Activity ID	Activity Name	Start	Finish	2019				2020				2021		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sound Transit		26-Feb-18 A	30-Jul-21											
Sound Transit 3		26-Feb-18 A	30-Jul-21											
ST3 - North Corridor		26-Feb-18 A	30-Jul-21											
STRIDE - Bus Rapid Transit - North Corridor		26-Feb-18 A	30-Jul-21											
STRIDE - SR 522/NE 145th Bus Rapid Transit (BRT)		26-Feb-18 A	30-Jul-21											
SR 522/NE 145th BRT - Preliminary Engineering		26-Feb-18 A	30-Jun-21											
SR 522/NE 145th BRT - Alternatives Analysis - Phase I		26-Feb-18 A	28-Mar-19 A											
SR 522/NE 145th BRT - Conceptual Engineering/Environmental Review - Phase II		26-Apr-19 A	09-Feb-21											
SR 522/NE 145th BRT - Preliminary Engineering - Phase III		03-Apr-20 A	30-Jun-21											
SR 522/NE 145th BRT - Final Design		31-Jul-19 A	07-Dec-20											
SR 522/NE 145th BRT - Final Design - GEC (General Engineering Contract)		31-Jul-19 A	07-Dec-20											
SR522/NE 145th BRT - Final Design - Procurement (GEC)		31-Jul-19 A	07-Dec-20											
SR 522/NE 145th BRT - Construction		07-Jan-19 A	30-Jul-21											
SR 522/NE 145th BRT - Construction - Roadway		07-Jan-19 A	30-Jul-21											
City of Bothell SR-522 BAT Lanes Project (Bothell Stage 3)		07-Jan-19 A	30-Jul-21											
Construction		07-Jan-19 A	30-Jul-21											

Community Outreach

Sound Transit is committed to proactively seeking public input during all stages of the Project. The SR522 BRT Community Engagement and Communication Guide establishes a stakeholder engagement process that helps ensure priorities of local communities are heard and considered along with the project-wide goals. The BRT team will collaborate with elected officials, partner staff, and local communities throughout project development. Due to COVID-19 outreach efforts have shifted to virtual platforms.

- November 12th Interagency Group meeting (IAG)
- Four property owner meetings
- Planning started for 30% design outreach (starting in March)
- Planning started for Bothell property owner outreach

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Planned FTE is an annual projection. ST staffing variance is less than planned as some of the activities of the project are on pause waiting for realignment decision. Consultant variance is explained by executed change orders due to change in design.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	13.8	11.2	(2.6)
Consultants	24.0	26.4	2.4
TOTAL	37.8	37.6	(0.2)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

Sound Transit Board Actions

Board Action	Description	Date
M2020-67	On Call Contract for General Engineering Consultant Service Contract for STRIDE Bus Rapid Transit Program	11/12/2020

Regional Express & STRIDE Bus on Shoulder

Project Summary

Scope This program provides opportunities for buses to use shoulders on freeway and state route facilities during periods of congestion in general traffic and/or HOV lanes. This program will require coordination and further study with transit partners, WSDOT and Federal Highway Administration in order to determine locations that may be feasible.

Phase Planning—Conceptual Engineering and Environmental Review

Budget \$3.6 Million—Planning Phase
\$0.3 Million—Construction Phase

Schedule Open for Service date will depend on Board direction from realignment process .



Examples of Bus-on-Shoulder facilities



Key Project Activities

- Investigating potential options for procuring conceptual engineering and environmental documentation work for BOS candidate segments.
- Further discussions with WSDOT and partner transit agencies are planned pending direction from the ST Board's realignment process. Discussions will verify and refine the expected benefits and early cost estimates for the candidate projects.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures shown are in millions.

Since October 2020, the project cost incurred to date increased by \$3K not enough to be seen in the rounded figures on the next page.

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	\$0.1	\$0.1	\$0.9	\$0.0
Preliminary Engineering	\$2.2	\$0.0	\$0.0	\$2.2	\$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	\$0.4	\$0.4	\$0.4	\$0.4	\$0.0
Construction	\$0.3	\$0.3	\$0.3	\$0.3	\$0.0
ROW	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Total	\$3.9	\$0.8	\$0.8	\$3.9	\$0.0

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment. The project is experiencing COVID-19 related delays. As a result dates including Revenue Service will depend on Board direction from the realignment process. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown

A feasibility study was completed in Q2 2019, identifying and evaluating an initial list of candidate BOS projects. Follow-up staff work to verify the initial projects, identify additional potential projects, develop potential evaluation criteria and lay out next steps for the program was completed in December 2019.

Bus on Shoulder improvement projects may be designed, constructed and brought into service over a multiple year period.

Potential candidate projects under consideration:

- I-5 - Ash Way HOV Direct Access to Lynnwood HOV Direct Access - SB inside
- SR 900 - I-5 off-ramp to S 129th St - SB outside
- I-5 - Michigan St S on-ramp to West Seattle Bridge/S Spokane St - NB outside
- SR 410 - 171st Ave Ct E to Veterans Memorial Dr E - EB outside
- I-5 - S 375th St to Port of Tacoma Rd - SB inside
- I-5 - S 84th St to SR 512 (including off-ramp & intersection) - SB outside

Activity Name	Start	Finish	2019					2020				2021		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sound Transit	05-Jun-18 A	31-Aug-21												
Sound Transit 3	05-Jun-18 A	31-Aug-21												
ST3 - East Corridor	05-Jun-18 A	31-Aug-21												
Bus on Shoulders	05-Jun-18 A	31-Aug-21												
Preliminary Engineering	05-Jun-18 A	31-Aug-21												
Alternative Analysis - Phase I	05-Jun-18 A	31-Dec-19 A												
Conceptual Engineering - Phase II	01-Jan-20 A	31-Aug-21												

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 to continuously monitor project status and associated risks. The following are the top project wide risks:

- The right combination of factors must be present to implement Bus on Shoulder operation: sufficient transit service and ridership along a roadway segment; service that is adversely affected by roadway congestion; and physical and operating conditions along a roadway segment's shoulder that can accommodate improvements to its length, width, pavement, etc.
- Candidate projects must benefit one or more of the three contributing subareas.
- Washington State Patrol and other emergency responders also use shoulders for enforcement and hazard response. Facilitating WSP and emergency responder needs may preclude bus operation on candidate roadway segments or require certain types of improvements beyond shoulder modifications.

Community Outreach

- Outreach activities are minimal at this time.
- We are monitoring outreach needs for the project and are available to answer any questions from the public.

Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

Variance is explained by the fact that project is on pause until realignment process is finalized.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	0.7	0.1	(0.6)
Consultants	n/a	n/a	n/a
TOTAL	0.7	0.1	(0.6)

** An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.*

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Regional Express & Bus Rapid Transit North Sammamish Park & Ride



Project Summary

Scope The North Sammamish Park-and-Ride is a planned parking facility with up to 200 spaces in the northern portion of the City of Sammamish.

Phase Conceptual Engineering and Environmental Review

Budget \$20 Million

Schedule Open for Service date will depend on Board direction from realignment process.



North Sammamish Park & Ride project area

Key Project Activities

- Coordination with City of Sammamish.
- Project is on hold from advancing to the next phase as due to the realignment process.

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

This month's expenditure is due to progress made by Sound Transit staff time.

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	\$1.1	\$0.0	\$0.0	\$1.1	\$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	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$2.1	\$0.3	\$0.3	\$2.1	\$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 to continuously monitor project status and associated risks.

The following are the top project wide risks:

- City Staff and councilmembers have vocalized interest in a joint parking/City services facility. There is a risk that the City will request additional time to explore and propose a joint development that would involve a structured park and ride.
- Constructing a structured lot would likely pose schedule and budgetary risks to the project. Prolonging the decision on project scope and delivery method may also pose a risk to delivering the project on time.

Project Schedule

The Board of Directors is conducting a capital program realignment of project schedules to meet lower revenue levels caused by the COVID-19 pandemic. This project is part of the assessment and is experiencing COVID-19 related delays. During the realignment process only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. As a result dates including Open For Service Date will depend on Board direction from realignment process.

Following board realignment and further discussions with the City, the project team will advance toward Phase Gate 2 Select Delivery Method. Once there is agreement on project delivery method, the team will proceed with procuring consultants to conduct conceptual engineering and environmental review, followed by preliminary engineering, final design and construction.

Activity ID	Activity Name	Start	Finish	2019				2020				2021			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sound Transit		03-Aug-18 A	14-Oct-21												
Sound Transit 3		03-Aug-18 A	14-Oct-21												
ST3 - East Corridor		03-Aug-18 A	14-Oct-21												
North Sammamish Park-and-Ride Master Schedule		03-Aug-18 A	14-Oct-21												
Preliminary Engineering		03-Aug-18 A	14-Oct-21												
Alternative Analysis - Phase I		03-Aug-18 A	14-Oct-21												

Community Outreach

- Outreach activities are minimal at this time.
- We are monitoring outreach needs for the project and are available to answer any questions from the public.

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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Progress Report

Capital Program Support



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Capital Program Support Grants



Current Grant Funding *(Includes only Active Executed Grants)*

Line of Service	Grant ID	Project	Award Amount	Date Executed	Life to Date Drawdowns (thru Sept. 2019)
Federal Transit Administration (FTA)					
Link	WA-03-0237	University Link FFGA	\$ 684,370,641	9/16/15	\$ 612,915,262
Link	WA-95-X061	Tacoma Link Expansion	\$ 5,599,943	8/27/15	\$ 5,312,208
Link	WA-95-X067	East Link: Overlake Village Ped Bridge	\$ 6,606,585	8/8/14	\$ 6,606,566
Link	WA-95-X073	East Link: Bellevue Way HOV Improvements (S Bell P&R to I-90)	\$ 2,200,000	8/8/14	\$ 444,950
Link	WA-2016-007	Links to Opportunity: Enhancements to Tacoma Link	\$ 2,000,000	8/11/16	\$ 1,589,328
Link	WA-2016-012	Tacoma Link Expansion light rail vehicles	\$ 6,000,000	5/17/17	\$ 1,239,493
Sounder	WA-2018-015	Sounder Rolling Stock	\$ 3,700,363	3/8/18	\$ -
Link	WA-2018-024	Northgate Link Extension	\$ 25,758,494	5/9/18	\$ 25,758,494
Link	WA-2018-030	Federal Way Link Extension	\$ 4,509,494	6/5/18	\$ 4,509,494
Link	WA-2017-006	Tacoma Link Expansion (TIGER)	\$ 15,000,000	3/28/17	\$ 15,000,000
Link	WA-2018-013	Tacoma Link Extension	\$ 74,999,999	5/15/18	\$ 18,221,696
Sounder	WA-2018-081	Puyallup Station Access Improvements	\$ 6,700,000	11/16/18	\$ 1,542,126
Link	WA-2018-082	Downtown Redmond Link Ext	\$ 600,000	11/16/18	\$ -
Link	WA-2019-001	Linkwood Link Extension	\$ 300,000,000	12/19/18	\$ 158,260,613
REX	WA-2019-023	Bus Replacements	\$ 1,375,000	4/19/19	\$ -
REX	WA-2019-024	Bus Replacements	\$ 4,920,406	4/19/19	\$ 4,920,406
REX	WA-2019-018	HIMB Bus Preventative Maintenance	\$ 9,241,266	4/16/19	\$ 9,241,266
Link	WA-2019-025	HIFG Rail Prev Maint	\$ 20,756,842	4/20/19	\$ 20,756,842
Other Federal					
Systemwide	EMW-2017-RA-00018	Video Monitoring System and Security Program	\$ 662,238	11/2/17	\$ -
Systemwide	EMW-2019-RA-00014	Systemwide Security	\$ 1,315,813	9/1/19	\$ -
State					
Link	GCB2114	Tacoma Link Expansion	\$ 5,000,000	3/28/17	\$ 4,999,999
TOTAL ALL GRANTS			\$ 1,062,899,717		\$ 813,571,344

Above table as of 3rd QTR 2020. This section is updated every quarter.

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Sustainability

Sustainability is at the core of Sound Transit’s mission to connect more people to more places efficiently, affordably, reliably and in an environmentally friendly manner. Investing in transit builds a better future, maintains a clean environment, and supports both healthy communities and vibrant economies. At Sound Transit, sustainability is about more than the natural environment – it is a holistic goal that protects and enhances people, planet and prosperity.

In 2020, Sound Transit continues to carry out a wide range of projects, with increased focus on integrating sustainable design into capital expansion – from planning and final design to construction. With the passage of the ST3 Plan, a fully funded Sustainability Program will integrate green building and infrastructure in projects across all phases of development.

Sound Transit continues to implement our Sustainability Initiative through our internationally certified (ISO 14001) Environmental and Sustainability Management System (ESMS). The agency also continues to be a transit industry leader through our ongoing participation in APTA’s Sustainability Commitment at the platinum recognition level.

Key Q3 2020 Accomplishments and Activities

- Completed Environmental and Sustainability Management System internal audit.
- Conducted internal staff engagement on Sustainability Progress Report.
- Presented Sustainability Progress Report to the Sound Transit Board of Directors.
- Attended and presented at APTA Sustainability Workshop.
- Attended and presented at Seattle Go Green conference.
- Held sustainability charrette for West Seattle to Ballard Link Extension.

Key Upcoming Activities for Q4 2020

- Conduct ISO 14001 Registration Audit.
- Conduct staff outreach on Efficiency and Sustainability Program.
- Begin developing Environmental and Sustainability targets for 2021.

Progress Report

Acronyms



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

AA	Alternative Analysis	FHWA	Federal Highway Administration
AHU	Air Handling Units	FSEIS	Final Supplemental Environmental Impact Statement
ALTA	American Land Title Association	FFGA	Full Funding Grant Agreement
BCE	Baseline Cost Estimate	FTA	Federal Transit Administration
BCWS	Budgeted Cost of Work	FTE	Full Time Employee
BIM	Building Information Modeling	GC/CM	General Contractor /Construction Management
BNSF	Burlington Northern Santa Fe Railway	GEC	General Engineering Contract
BOS	Bus on Shoulder	HVAC	Heating, Ventilation and Air Conditioning
BRT	Bus Rapid Transit	ICD	Integration Control Document
CCB	Change Control Board	IFB	Issue for Bids
CDF	Controlled Density Fill	IFC	Issue for Construction, also Industry Foundation Classes
CHS	Capitol Hill Station	IRT	Independent Review Team
CM	Construction Management	IWP	Industrial Waste Permit
CMU	Concrete Masonry Unit	JA	Jacobs Associates
CO	Change Order	JARPA	Joint Aquatic Resource Permit Application
CPI	Cost Performance Index	KCM	King County Metro
CPM	Critical Path Method	LNTP	Limited Notice to Proceed
DAHP	Department of Archaeology & History Preservation	LRRP	Light Rail Review Panel
DART	Days Away, Restricted or Modified	LRT	Light Rail Transit
DB	Design -Build	LRV	Light Rail Vehicle
DBPM	Design-Build Project Management	LTK	LTK Engineering Services
DCE	Document Categorical Exclusion	MACC	Maximum Allowable Construction Cost
DECM	Design, Engineering and Construction Management	MEPF	Mechanical/Electrical/Plumbing/Fire Sprinkler
DEIS	Draft Environmental Impact Statement	MLK	Martin Luther King, Jr. Way
DP	Design Package	MOA	Memorandum of Agreement
DPD	Seattle Department of Planning and Development	MOU	Memorandum of Understanding
DSC	Differing Site Conditions	MOW	Maintenance of Way
DSDC	Design Support During Construction	MPPCV	Major Public Project Construction Variance
DSTT	Downtown Seattle Transit Tunnel	MRB	Material Review Board
EFC	Estimated Final Cost	MUP	Master Use Permit
EMI	Electro Magnetic Interference	NB	Northbound
ERC	East Rail Corridor	NCR	Notification of Change Report
FAT	Factory Acceptance Test	NCTP	North Corridor Transit Partners
FD	Final Design	NEPA	National Environmental Policy Act

NOAA	National Oceanic and Atmospheric Administration	TBM	Tunnel Boring Machine
NPDES	National Pollutant Discharge Elimination System	TCAL	Temporary Construction Airspace Lease
NTP	Notice to Proceed	TCE	Temporary Construction Easement
OCS	Overhead Catenary System	TE	Traction Electrification
OMF	Operations and Maintenance Facility	TFK	Traylor Frontier Kemper Joint Venture
OMSF	Operations and Maintenance Satellite Facility	TOD	Transit Oriented Development
PE	Preliminary Engineering	TVM	Ticket Vending Machine
PEP	Project Execution Plan	UAC	Unallocated Contingency
PEPD	Planning, Environment and Project Development	U-Link	University Link project
PMOC	Project Management Oversight Consultant	UDS	University District Station
PSST	Pine Street Stub Tunnel	USFWS	U.S. Fish and Wildlife Service
QA	Quality Assurance	UW	University Of Washington
QC	Quality Control	UST	Underground Storage Tank
QTR	Quarter	UWS	University of Washington Station
RE	Resident Engineer	VAV	Variable Air Volume
RFC	Request for Change	VE	Value Engineering
RFD	Request for Deviation	VECP	Value Engineering Cost Proposal
RFI	Request for Information	WBS	Work Breakdown Structure
RFP	Request for Proposal	WDFW	Washington Department of Fish and Wildlife
RFQ	Request for Qualifications	WSDOT	Washington Department of Transportation
RIR	Recordable Injury Rates		
RMP	Risk Management Plan		
ROD	Record of Decision		
ROW	Right -of -Way		
SB	Southbound		
SCADA	Supervisory Central and Data Acquisition		
SCC	Standard Cost Categories		
SCL	Seattle City Light		
SDEIS	Supplemental Draft Environmental Impact Statement		
SEPA	State Environmental Policy Act		
SIP	Street Improvement Permitting		
SPI	Schedule Performance Index		
SR	State Route		
ST	Sound Transit		
START	Seattle Tunnel and Rail Team		
SWI	Stacy and Witbeck, Inc.		