

Agency Progress Report Capital Programs



South Bellevue Park and Ride opening

November | 2021



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 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

Link Light Rail

- Link 1 Line**
(Univ. of Washington – Angle Lake)
- Link T Line**
(Tacoma Dome – Theater District)

Souder

- Souder N Line**
(Everett–Seattle)
- Souder S Line**
(Lakewood/Tacoma–Seattle)

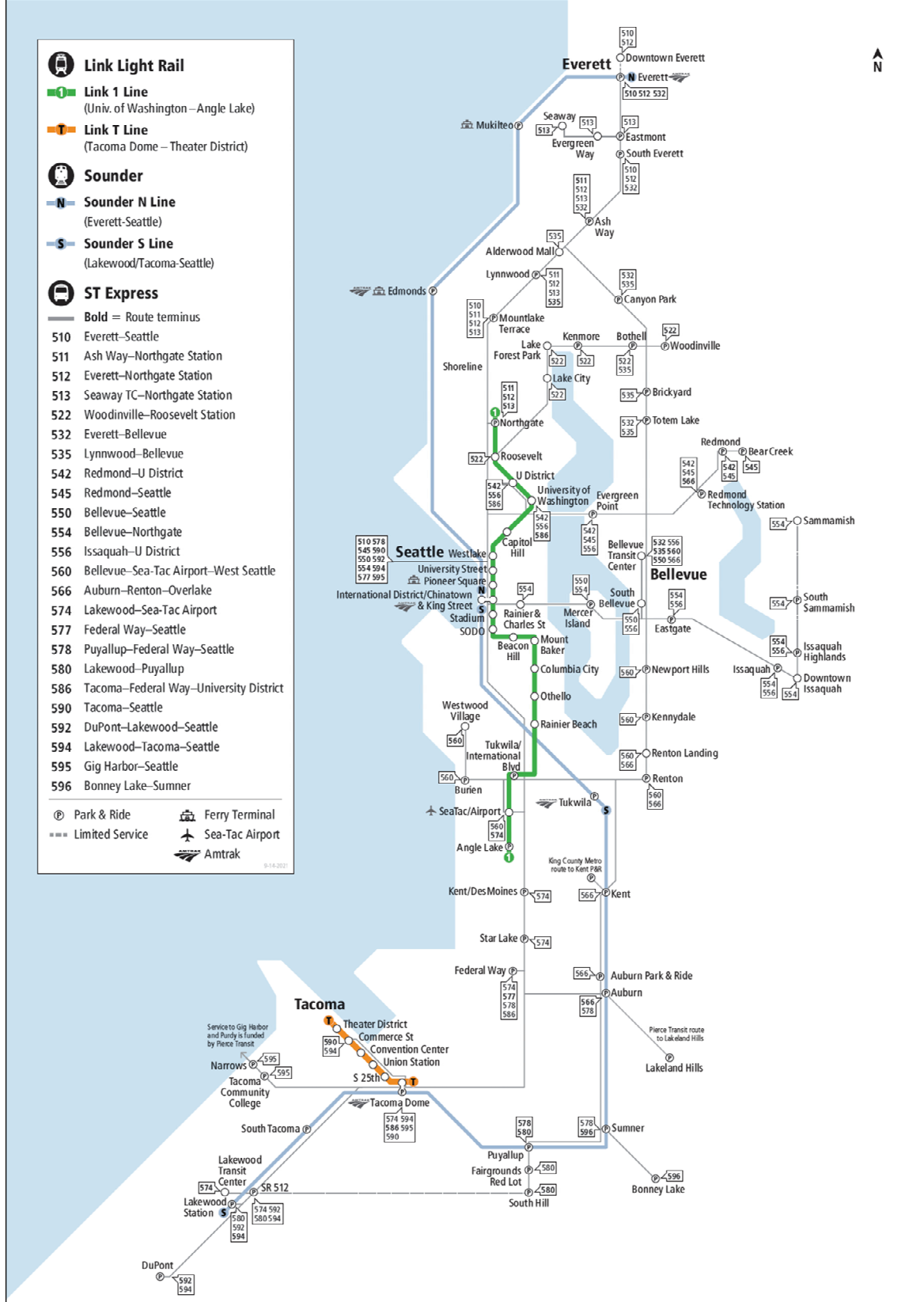
ST Express

Bold = Route terminus

- 510** Everett–Seattle
- 511** Ash Way–Northgate Station
- 512** Everett–Northgate Station
- 513** Seaway TC–Northgate Station
- 522** Woodinville–Roosevelt Station
- 532** Everett–Bellevue
- 535** Lynnwood–Bellevue
- 542** Redmond–U District
- 545** Redmond–Seattle
- 550** Bellevue–Seattle
- 554** Bellevue–Northgate
- 556** Issaquah–U District
- 560** Bellevue–Sea-Tac Airport–West Seattle
- 566** Auburn–Renton–Overlake
- 574** Lakewood–Sea-Tac Airport
- 577** Federal Way–Seattle
- 578** Puyallup–Federal Way–Seattle
- 580** Lakewood–Puyallup
- 586** Tacoma–Federal Way–University District
- 590** Tacoma–Seattle
- 592** DuPont–Lakewood–Seattle
- 594** Lakewood–Tacoma–Seattle
- 595** Gig Harbor–Seattle
- 596** Bonney Lake–Sumner

Park & Ride
 Limited Service
 Ferry Terminal
 Sea-Tac Airport
 Amtrak

9-18-2021



Sound Transit future service

Link light rail

Future service:

- 1 Line** Ballard–Tacoma
- 2 Line** Mariner–Redmond
- 3 Line** Everett–West Seattle
- 4 Line** South Kirkland–Issaquah
- T Line** Tacoma Dome–Tacoma Community College

In service:

- Northgate–Angle Lake
- Tacoma Dome–Theater District

Souder trains

Future service:

- S Line** DuPont–Lakewood

In service:

- N Line** Everett–Seattle
- S Line** DuPont–Seattle

Stride buses

Future service:

- S1 Line** Bellevue–Burien
- S2 Line** Lynnwood–Bellevue
- S3 Line** Shoreline–Bothell

ST Express buses

In service:

- Service re-evaluated annually

○ New station or bus facility
 P Added parking
 ⊕ Station improvements
 ⊕ Major transfer hub
 ○ Existing station or bus facility
 P Existing parking
 ○ Provisional light rail station
 20XX New service open date

Amtrak trains Monorail
 Ferry terminal Sea-Tac Airport
 Greyhound buses Streetcar

For more details, including current project schedules, go to:

soundtransit.org/system



President Biden signs infrastructure bill

The week before Thanksgiving, President Biden signed the \$1.2 trillion bipartisan Infrastructure Investment and Jobs Act into law. The bill includes the whole of the Surface Transportation Reauthorization Act of 2021, including the Capital Investments Grants Program.

These are both important funding sources for Sound Transit.

Over the next five years, if Congress fully appropriates the authorized amount, CIG funding will double over current levels thanks to \$8 billion in direct appropriations and a 30% increase in the CIG authorization levels; of the remaining \$9 billion in federal funding going forward on our project, \$6.3 billion is assumed from CIG funds.

Overall, the Surface Transportation Reauthorization Act of 2021 would authorize increases for transit by 75% over the previous five years. As our system continues to mature, this will result in increased formula funds to the agency.

Sound Transit Board approves transaction terms for \$500+ million transit-oriented development in Bellevue

At its Nov. 18 meeting, the Sound Transit Board of Directors approved key transaction terms with developers to build almost seven acres of transit-oriented development adjacent to the recently completed Operations and Maintenance Facility East and near the 2 Line Spring District/120th Station.

BRIDGE Housing and its partners were selected last year to develop the project, valued at more than \$500 million.

Sound Transit and the City of Bellevue worked together for many years on a creative plan to integrate the OMF East into the city's plans for the rapidly developing Bel-Red corridor. Their collaborative vision for the site, located across from the Spring District/120th Link light rail station that will open in 2023, features a vibrant mix of uses including affordable and market-rate housing, offices, retail and public space.

Specifically, the project will include:

- Approximately 500 units of housing, of which around 280 are affordable units serving a range of incomes between 30% and 80% of area median income.
- More than 400,000 square feet of office space.
- Active ground floor uses including retail and resident amenities.
- A public park.

The development team is pursuing a creative financing strategy for affordable housing that utilizes the recently announced Amazon Housing Equity Fund, which committed \$100 million to support affordable housing on Sound Transit property.

The City of Bellevue and Sound Transit each contributed approximately an acre of land at no cost, valued at around \$12 million to support the development of affordable housing.



Aerial photos of the TOD site at OMFE in Bellevue

Amtrak resumes service on the Point Defiance Bypass

On Nov. 18, Amtrak resumed its Cascades passenger service on the Point Defiance Bypass.

Rather than permitting service on its tracks according to any predetermined schedule, Sound Transit committed to approve resumed service only when compliance with stringently imposed safety requirements were fully met and verified. Safety measures implemented prior to testing and ultimate approval of resumed service included but were not limited to:

- Amtrak and all passenger rail agencies in the region now utilize a powerful automated safety system called Positive Train Control. Under PTC, trains are tracked by satellite. Should an engineer exceed a permitted speed, PTC automatically applies brakes and stops the train. Sound Transit has verified the proper functioning of PTC equipment on its tracks and on Amtrak trains that will use the tracks.
- Any train that is not under active PTC monitoring is limited to 30 mph over Sound Transit owned track — a standard which is stricter than current federal regulations.
- Leading into the curve where the December 2017 incident occurred, Sound Transit instituted step-down speed limits (from 79 mph to 50 mph to 30 mph), with additional signage; and
- Sound Transit instituted a “focus zone” in the railroad timetable that crews must follow when operating on the bypass. The timetable requires train crews to verbally note the speed step-down to each other.

Sound Transit has also exercised rigorous oversight of Amtrak's crew qualifications, which included Amtrak's training of engineers and supervisors on a simulator of the Point Defiance Bypass territory. Engineers were required to complete six round trips on the territory, and Amtrak conducted service to simulate actual operating conditions on the bypass. Additionally, Sound Transit measures included completing systems integration testing that verified operator sightlines of wayside signals and signage and re-testing the functionality of wayside signals and crossing systems.

Amtrak and the Washington State Department of Transportation have met all the requirements and conditions required by Sound Transit to enable passenger rail service to resume on the Point Defiance Bypass.

Sound Transit addressed all applicable requirements from the National Transportation Safety Board report as well as recommendations from Sound Transit's own third-party safety audit. The Federal Railroad Administration also approved the renewal of passenger service earlier this month.

South Bellevue park-and-ride garage opens

On Nov. 16, nearly two years prior to completing the 2 Line's East Link extension, Sound Transit opened the parking garage at the future South Bellevue Station, providing easy transit access to Eastside ST Express and Metro bus passengers.

ST Express 550 and 556 riders and King County Metro 241 and 249 riders who had to use alternative parking spaces when East Link construction began in 2017 can now return to the new garage at the same park-and-ride location.

With service to Seattle every 15 minutes on weekdays and Saturdays, and every 30 minutes on Sundays and late night/early morning hours, ST Express 550 riders can now use the garage for convenient transfers to Link light rail to destinations between Angle Lake and Northgate, including local sporting events. ST Express 556 serves the University of Washington and Husky Stadium.



South Bellevue Park and Ride opening November 15, 2021

The garage features:

- 1,500 stalls.
- A connection to the I-90 and Mercer Slough trails to facilitate non-motorized access to transit.
- Bicycle racks, including a bike cage for secure storage of up to 35 bikes, with additional racks and on-demand lockers to be added when East Link opens.
- A nature overlook of Mercer Slough, open to the public.
- Public art by artist Katy Stone.

In 2015, Sound Transit and the City of Bellevue agreed to evaluate early opening opportunities for the new parking garage in South Bellevue. Accordingly, contracts were executed in an order that would facilitate opening the parking garage prior light rail revenue service. Project contractors Shimmick/Parsons Joint Venture and Mass Electric Co. completed civil and systems work this year to enable the early opening. Construction continues on the adjacent light rail station and guideway, but these activities will not impact the parking garage and bus transit operations.

WSDOT previously oversaw the park-and-ride's operation and maintenance, in partnership with King County Metro. Sound Transit will maintain these partnerships as it takes over operation of the facility.

Andy Izquierdo joins Sound Transit as Chief Communications Officer

Sound Transit welcomed Andy Izquierdo as its new chief communications officer on Nov. 1.

Izquierdo comes to the agency from Waste Management, where he served as the Fortune 200 company's chief communications officer. Izquierdo managed both internal and external communications, as well as the company's social impact initiatives.

Prior to Waste Management, Izquierdo held communications leadership positions with Yum! Brands, PetSmart, AstraZeneca Pharmaceuticals and Belk, Inc. The Washington, D.C., native brings 20 years of government relations and advocacy experience, having also worked as a Congressional press secretary and a spokesperson for the Embassy of Ethiopia in D.C.

Izquierdo's priorities include maintaining strong public awareness of system expansions, promoting ridership and working to maintain high employee engagement as part of a work culture rooted in public service and performance. He is a longstanding leader of diversity, equity and inclusion programs who brings a strong commitment to Sound Transit's anti-racism work.

Izquierdo earned a bachelor's degree in journalism from the University of Maryland, College Park, graduating cum laude. A first generation Cuban American, he is fluent in Spanish and has considerable policy experience on issues affecting the nation's Latinx community.

Progress Report

Link Light Rail Program



Link Light Rail leaving Mount Baker Station

November | 2021



Prepared by Project Controls | Portfolio Services Office

Link Light Rail Program Overview



Link Light Rail Program Overview



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.

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).

Everett Link Extension: Everett Link Extension adds six Snohomish County stations to the growing light rail network. The 16.3-mile project extends Link service north from Lynnwood City Center to the SW Everett Industrial Center, SR 526/ Evergreen Way, and downtown Everett.

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.

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.

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 in April 2017 allowed for the procurement of 30 additional vehicles.

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.

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.

NE 130th Street Infill Station: This project will construct foundation and substructure elements for an elevated, side-platform infill light rail station at NE 130th Street and 5th Ave in Seattle.

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.

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.

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.

Link Light Rail Program Overview



Program Budget

Project figures for active projects are represented in millions below.

Project	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Downtown Redmond Link Extension	\$1,530.0	\$966.8	\$458.0	\$1,530.0	\$0.0
East Link Extension	\$3,677.2	\$3,205.0	\$3,043.2	\$3,677.2	\$0.0
Everett Link Extension	\$185.0	\$20.1	\$10.0	\$185.0	\$0.0
Federal Way Link Extension	\$2,451.5	\$1,820.7	\$957.1	\$2,451.5	\$0.0
Hilltop Tacoma Link Extension	\$252.7	\$223.8	\$201.3	\$252.7	\$0.0
I-90 Two-Way Transit & HOV Operations (Stage 3)	\$207.6	\$209.7	\$199.9	\$207.6	\$0.0
Light Rail Vehicle (LRV) Fleet Expansion	\$740.7	\$679.4	\$379.6	\$740.7	\$0.0
Link Operations and Maintenance Facility: East	\$449.2	\$379.5	\$377.0	\$449.2	\$0.0
Lynnwood Link Extension	\$2,771.6	\$2,441.9	\$1,569.6	\$2,771.6	\$0.0
NE 130th Street Infill Station	\$36.4	\$21.4	\$19.6	\$36.4	\$0.0
Northgate Link Extension	\$1,899.8	\$1,741.4	\$1,723.9	\$1,847.3	\$52.5
Tacoma Dome Link Extension	\$125.7	\$68.1	\$51.2	\$125.7	\$0.0
West Seattle and Ballard Link Extensions	\$285.9	\$122.8	\$113.2	\$285.9	\$0.0
Total	\$14,613.4	\$11,900.7	\$9,103.9	\$14,561.0	\$52.5

Link Light Rail Program Overview



Program Schedule

Schedules for active projects are summarized below. Projects from the realignment process are not shown. ST is currently updating schedules with ST Board of Director's R2021-05 Realignment Decision.

Activity ID	Activity Name	Original Duration	Start	Finish	2020				2021				2022				2023				2024				2025	
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Northgate Link Extension (BASELINED)																										
A1040	Final Design	1267	04-Oct-10 A	19-May-17 A																						
A1050	Civil/Systems Construction (incl Procurements)	2907	10-May-12 A	20-Apr-22																						
A1060	Systemwide Startup/Testing/Float	1020	13-Feb-19 A	06-Oct-22																						
A1070	Revenue Service Date	0		06-Oct-22																						
Lynnwood Link Extension (BASELINED)																										
A1260	NEPA/SEPA/Draft EIS	513	02-Jan-12 A	27-Dec-13 A																						
A1270	Preliminary Engineering/Final EIS/ROD	542	02-Jan-14 A	30-Jun-15 A																						
A1280	Final Design (incl Procurement)	1276	02-Jan-15 A	28-Feb-21 A																						
A1400	Civil/Early Work/Systems Construction	1689	08-Jan-19 A	09-Sep-23																						
A1540	Systemwide Startup/Testing/Float	312	10-Sep-23	17-Jul-24																						
A1550	Revenue Service Date	0		17-Jul-24																						
East Link Extension (BASELINED)																										
A1080	Final Design (incl Procurement)	1084	16-Sep-11 A	31-Jan-18 A																						
A1100	Civil/Systems Construction (incl GCCM Procure)	2766	03-Jun-14 A	31-Dec-21																						
A1380	Systemwide Startup/Testing/Float	546	01-Jan-22	30-Jun-23																						
A1160	Revenue Service Date	0		30-Jun-23																						
Downtown Redmond Link Extension (BASELINED)																										
A1560	Preliminary Engineering	574	03-Jan-17 A	30-Jul-18 A																						
A1570	Design-Build Procurement	457	25-May-18 A	24-Aug-19 A																						
A1580	Civil/Systems Construction	1553	25-Aug-19 A	24-Nov-23																						
A1590	Systemwide Startup/Testing/Float	361	25-Nov-23	19-Nov-24																						
A1600	Revenue Service Date	0		19-Nov-24																						
Federal Way Link Extension (BASELINED)																										
A1340	Phase 1/2 - Alternatives Analysis/DEIS/CE	1163	30-Jun-12 A	31-Dec-14 A																						
A1350	Phase 3 - FEIS and PE	269	30-Apr-15 A	03-Dec-18 A																						
A1360	Design-Build Procurement	477	12-Apr-18 A	07-Jun-19 A																						
A1370	Civil/Systems Construction	1649	04-May-20 A	19-Jan-24																						
A1610	Systemwide Startup/Testing/Float	347	20-Jan-24	31-Dec-24																						
A1620	Revenue Service Date	0		31-Dec-24																						
Tacoma Link Extension (BASELINED)																										
A1290	Preliminary Alternatives Analysis/Scoping/AA	322	25-Apr-10 A	13-Nov-13 A																						
A1320	EA/Preliminary Engineering	546	01-Apr-14 A	04-Nov-16 A																						
A1330	Final Design (incl Procurement)	731	04-Jan-16 A	31-May-18 A																						
A1630	Civil/Systems Construction (incl Procurement)	1649	23-Jan-18 A	20-May-22																						
A1640	Systemwide Startup/Testing/Float	488	21-Jan-22	23-May-23																						
A1650	Revenue Service Date	0		23-May-23																						
Link OMF-East (BASELINED)																										
A1410	NEPA/SEPA/Preliminary Engineering	542	02-Jan-14 A	17-Jun-16 A																						
A1420	Design-Build Procurement	741	18-Jun-16 A	18-Jun-17 A																						
A1430	Civil/Systems Construction	1078	19-Jun-17 A	28-Aug-20 A																						
A1720	Project Float	117	29-Aug-20	23-Dec-20 A																						
A1730	Project Completion Date	0		23-Dec-20 A																						
Light Rail Vehicles (BASELINED)																										
A1740	Vendor Procurement	741	24-Feb-15 A	11-Oct-16 A																						
A1750	LRV Design,Build,Deliver (thru 122nd LRV)	483	31-Aug-18 A	15-Apr-24																						
A1760	LRV Conditional Acceptance (thru 122nd LRV)	700	05-Jun-20 A	30-May-24																						

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.

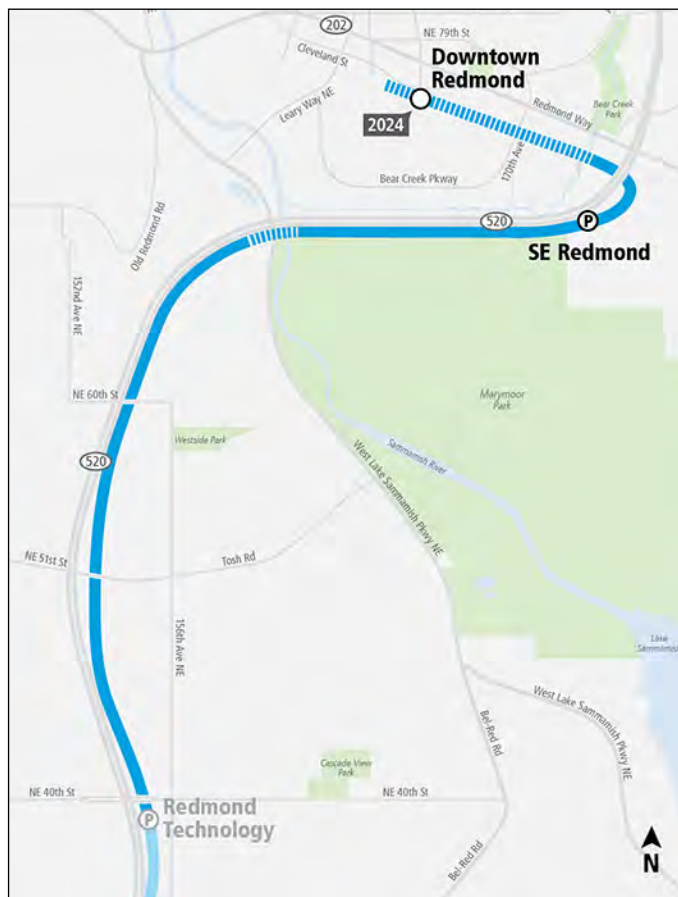
Stations Two Stations: SE Redmond (at Marymoor Park) and Downtown Redmond

Systems Signals, traction electrification, and communications (SCADA)

Phase Construction

Budget \$1.530 Billion (Baselined October 2018)

Schedule Revenue Service: December 31, 2024



Map of Downtown Redmond Link Extension

Key Project Activities

- Ongoing coordination with SWK Design Builder to closeout items in the Letters of Conformance for the Milestone Submittals.
- Ongoing review and response to Notice of Design Change/Field Design Changes (NDC/FDCs).
- Worked with Operations and Maintenance on camera locations at SE Redmond Traction Power Substation (TPSS) and Garage.
- Reviewed Design Alternatives for TPSS Grounding.
- Ongoing work to resolve the outstanding structural items on the SE Redmond Garage.
- Ongoing work to resolve outstanding comments on the Downtown Station structural calculations.
- Coordination and preparation for a long-term westbound SR 520 on-ramp closure scheduled to begin Q1 2022.

Closely Monitored Issues

- Timely implementation of third party utility relocations.
- TPSS grounding solution.
- Mitigation of schedule delay related to garage design issues.
- Future crew availability and supply chain impacts. L&I support for system building design review.

Link Light Rail Downtown Redmond Link Extension



Project Cost Summary

Voters approved funding for preliminary engineering for the Redmond Link Extension (DRLE) in 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 and 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 is in the FTA's Standard Cost Categories (SCC) format. The figures in both tables are shown in millions.

In this period, DRLE incurred approximately \$17.3M of expenditure. \$15.6M of the expenditure was incurred primarily in the Construction phase for progression of design build scope and construction services. The remaining work phases made up the balance. Total cumulative expenditure to date rose from \$440.7M to \$458.0M.

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	\$18.1	\$17.8	\$77.0	\$0.0
Preliminary Engineering	\$23.0	\$23.0	\$19.6	\$19.3	\$23.0	\$0.0
Final Design	\$4.5	\$4.5	\$1.0	\$0.8	\$4.5	\$0.0
Construction Services	\$58.0	\$63.6	\$49.4	\$21.6	\$63.6	\$0.0
Third Party Agreements	\$17.0	\$17.0	\$10.7	\$6.2	\$17.0	\$0.0
Construction	\$1,151.5	\$1,145.9	\$764.3	\$289.7	\$1,145.9	\$0.0
ROW	\$199.0	\$199.0	\$104.0	\$102.5	\$199.0	\$0.0
Total	\$1,530.0	\$1,530.0	\$966.8	\$458.0	\$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	\$236.2	\$106.9	\$332.4	\$0.0
20 Stations	\$261.9	\$261.9	\$187.5	\$44.8	\$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	\$287.7	\$197.7	\$48.9	\$287.7	\$0.0
50 Systems	\$108.6	\$103.6	\$66.8	\$16.0	\$103.6	\$0.0
Construction Subtotal (10 - 50)	\$990.0	\$985.6	\$688.2	\$216.1	\$985.6	\$0.0
60 Row, Land	\$168.5	\$168.5	\$103.7	\$102.4	\$168.5	\$0.0
70 Vehicles (Non-Revenue)	\$4.1	\$4.1	\$0.3	\$0.1	\$4.1	\$0.0
80 Professional Services	\$289.3	\$293.6	\$174.5	\$138.6	\$293.6	\$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	\$966.8	\$458.0	\$1,530.0	\$0.0

Risk Management

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

The project completed its quantitative risk assessment workshop as part of the project baseline process in Q4 2018. The quantitative risk assessment report supported with good probability the project baseline cost and schedule assumptions. The external conditions remain the same this period and may have reduced in some instances, but generally speaking the project's risk profile remains somewhat unchanged. The third quarterly qualitative register update has been finalized. The following are the current top project risk areas:

- COVID-19 pandemic - impact of COVID-19 this past year has been due to supply chain interruption, availability of labor as well as inefficiencies. Impacts are difficult to be pinned down and the situation continues to be fluid. ST continues to closely monitored this area.
- Agency staffing and labor capacity - developing and mobilizing resources and coordinating system integration and start up activities across multiple extensions within a short time frame; market shortage of qualified construction labor.
- Unanticipated and differing site conditions such as grounding solution for TPSS; geotechnical conditions could increase cost and delay schedule.
- 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; interfacing with private utilities for utility relocations.
- Change during finalization of design and during construction—late discovery of sensitive receptors; utilities; threat and vulnerability; and preliminary hazard designs.



Artist rendering of Downtown Redmond Station platform

Link Light Rail Downtown Redmond Link Extension



Contingency Management

DRLE project budget was baselined with a total contingency of \$435.8M. The Design Build contract has been procured and the total project contingency balance stands at \$269.2M (previously \$270.2M). 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 at \$4.2. DA is expected to be fully drawn down at the end of the project.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC balance shows a net draw of about \$1M bringing the balance to approximately \$186.8M.

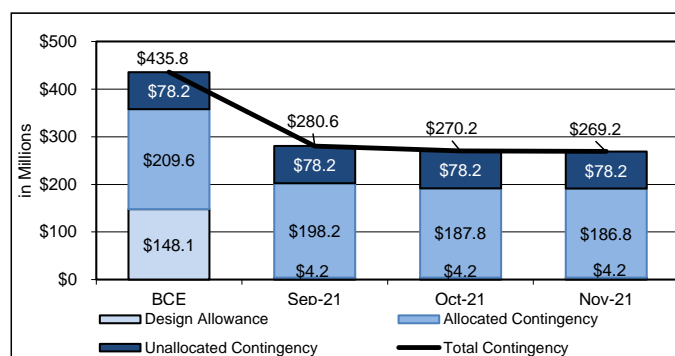
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$78.2M.

Contingency Status

Contingency Type	Baseline		Current Status	
	Amount	% of Total Budget	Amount Remaining	% of Work Remaining
Design Allowance	\$148.1	9.7%	\$4.2	0.4%
Allocated Contingency	\$209.6	13.7%	\$186.8	17.4%
Unallocated Contingency	\$78.2	5.1%	\$78.2	7.3%
Total	\$435.8	28.5%	\$269.2	25.1%

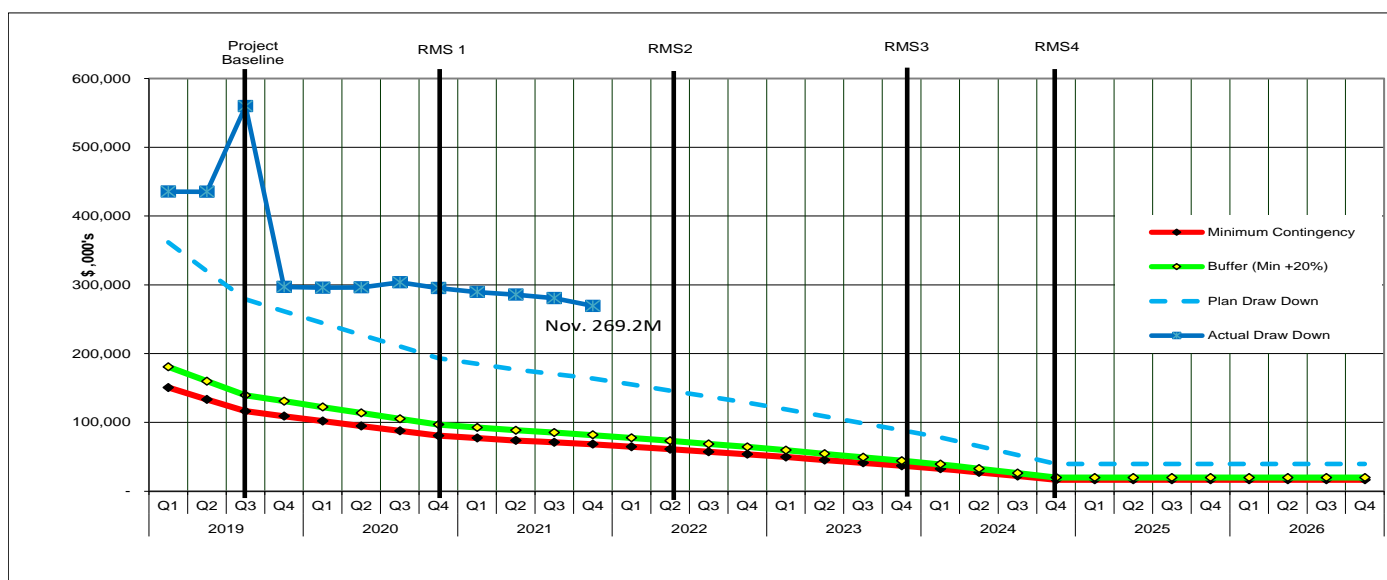
Table figures are shown in millions.

Contingency by Type



Contingency Drawdown

DRLE project's total contingency drawdown trends better than plan with an overall contingency balance at approximately \$269.2M (previously \$270.2M) and remains above the baseline drawdown projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. September's contingency draw down netted change of approximately \$10.4M due to construction changes.



Contingency Drawdown as of November 30, 2021

Link Light Rail Downtown Redmond Link Extension



Project Schedule

Weighted percent complete of the major construction contracts is calculated at 43.3%

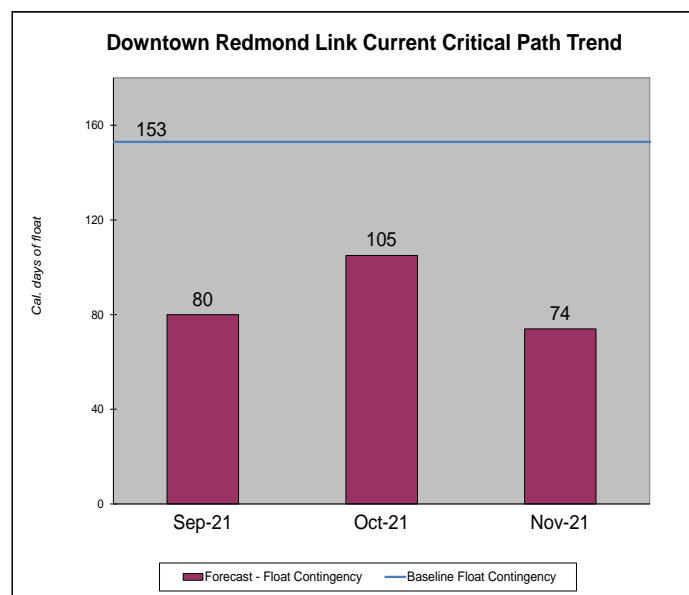
The current project schedule is presented below. All design packages have been issued for construction. Ongoing work includes all cut & cover tunnels, wall construction along the at-grade guideway, substructures for both the Sammamish and Downtown Guideways, site restoration at Bear Creek, SR 520 ramp work at the SR 202 interchange, and wall construction at SR202/SR520. The project is forecast for completion by the end of 2024.

This month's schedule submittal reflects 60 days of negative float to the completion milestones due to the extended review of structural calculations for the garage, as well as some quality issues. This impact will likely be mitigated in the coming months, and the project completion forecast preserved.

Activity Name	Start	Finish	2022				2023				2024			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Downtown Redmond Link Extension - Construction	09-Sep-19 A	31-Dec-24												
R200 Downtown Redmond Link Extension - Design-Build Contract	09-Sep-19 A	18-Oct-24												
CONTRACT MILESTONES & INCENTIVES	09-Sep-19 A	18-Oct-24												
SWK Construction Complete		04-Jan-24												
MS-1 Project Ready for Pre-Revenue Operations (5/21/24)		20-Jul-24*												
MS-2 Acceptance of All Work - Ready for Revenue Service (8/19/24)		18-Oct-24												
OWNER FLOAT	09-Sep-19 A	18-Oct-24												
UNUSUALLY SEVERE WEATHER	21-May-24	21-May-24												
PRE-CONSTRUCTION	09-Sep-19 A	02-Sep-21 A												
CONSTRUCTION	09-Sep-19 A	03-Jul-24												
OCC	25-Aug-23	25-Aug-23												
PUNCHLIST	05-Jan-24	05-Mar-24												
TESTING INTEGRATION / REVENUE SERVICES	25-Jul-22	18-Sep-24												
SAFETY & SECURITY CERTIFICATION	03-Jul-20 A	18-Oct-24												
Downtown Redmond Link Extension - Rail Activation/Closeout	06-Oct-23	31-Dec-24												
Systems Integration & Testing	06-Oct-23	20-Jul-24												
Safety and Security Certification	05-Jan-24	19-Jul-24												
Pre-Revenue Service	21-Jul-24	18-Oct-24												
Pre-Revenue Operations	21-Jul-24	18-Oct-24												
Revenue Service/Project Float	19-Oct-24	31-Dec-24												
Project Float	19-Oct-24	31-Dec-24												
Revenue Service		31-Dec-24												

Project Float

DRLE was baselined with 153 days of project float. The project is currently forecasting 74 days of project float. As noted above, the current R200 update continues to forecast a delay, but anticipated mitigation could result in the restoration of some projected float.

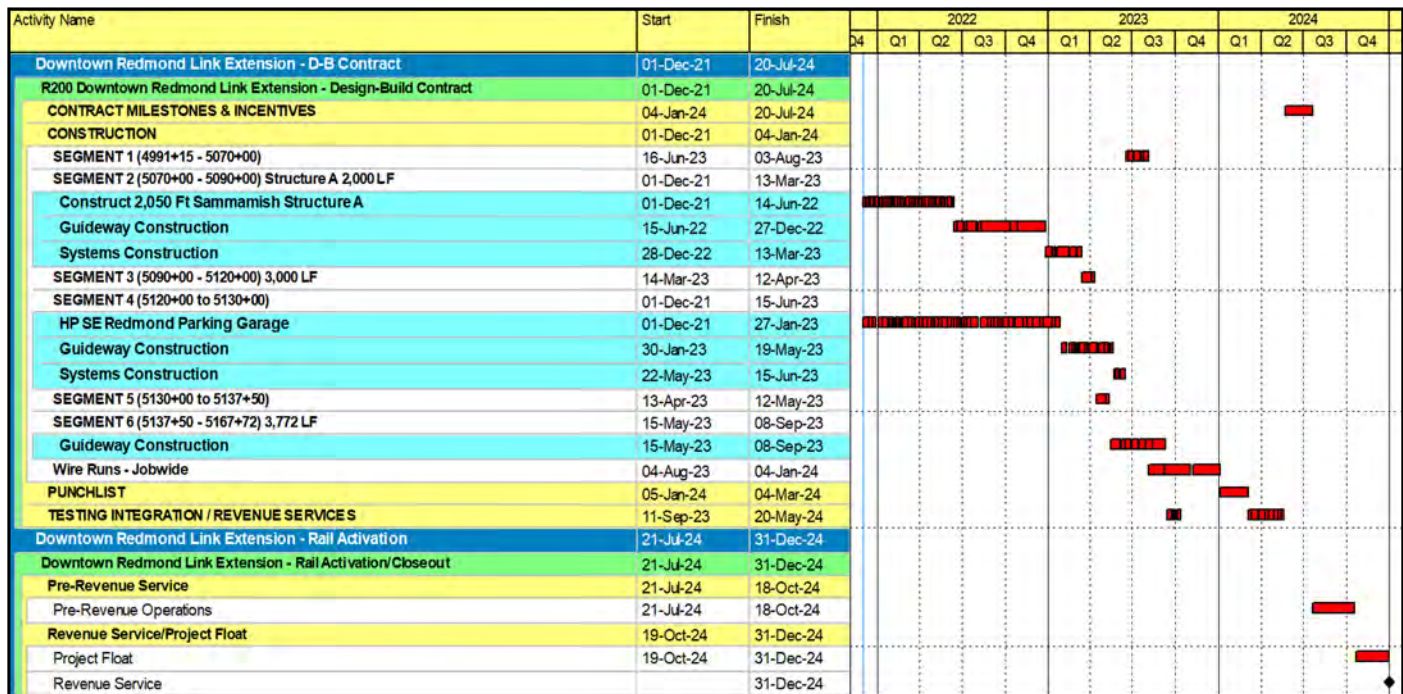


Link Light Rail Downtown Redmond Link Extension



Critical Path Analysis

The critical path for R200 currently runs through the parking garage deck due to an extended review of some structural calculations and concrete quality issues. From there, the critical path moves to the guideway through the garage, followed by OCS installation in each segment and into testing and closeout.



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	72	1579	1572
<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>					

Community Engagement

- 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.
- Continued communication with regards to noise complaints from residents along SR520 corridor
- Continued coordination with WSDOT and City of Redmond on public messaging about SR 520/202 West Bound on ramp closure February—May 2022
- Continued issuance of traffic alerts for girder installation at West Sammamish Parkway NE

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 2021. 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 is hard to predict how the annual plan will unfold.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	27.2	21.5	(5.7)
Consultants	37.0	31.0	(6.0)
TOTAL	64.2	52.6	(11.6)

** 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 Downtown Redmond Link Extension



Construction Safety

Data/ Measure	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	8	8
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	2	13	14
Reported Near Mishaps	1	6	10
Average Number of Employees on Worksite	460	-	-
Total # of Hours (GC & Subs)	28,673	328,904	361,031
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	13.95	4.86	4.43
LTI Rate	0.00	0.00	0.00
Recordable National Average	2.80		
LTI National Average	1.10		
Recordable WA State Average	5.70		
LTI WA State Average	2.00		

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 R200 - DRLE Design Build

Current Progress

Design:

- Participated in the Critical Work Elements Coordination Meetings to help facilitate efficient resolution.
- Reviewed and responded to Notice of Design Change / Final Design as appropriate for systems issues.

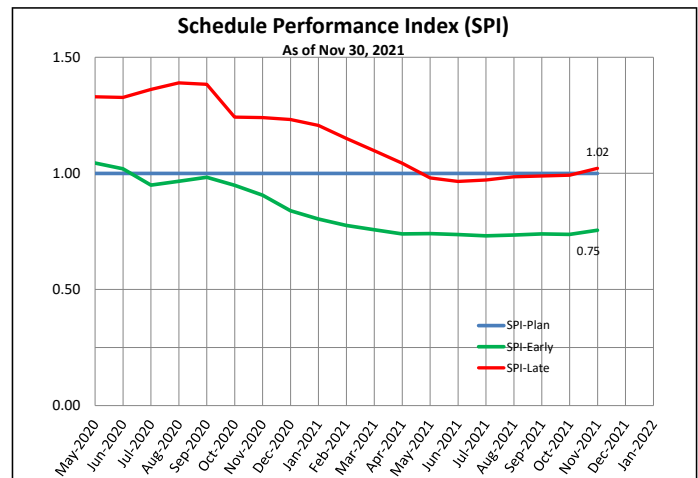
Construction:

- Continued Concrete In Drilled Hole (CIDH) piles on the south side at NE 40th St.
- Worked with Puget Sound Energy (PSE) to coordinate a potential boring pit location at 51st Street. Supported the negotiation with adjacent property owners for work zone rights.
- Excavation and soil nail installation at 60th Street cut and cover in preparation for cast-in-place structure construction.

Schedule Performance Index

The Early Schedule Performance Index (SPI) for the project is at 0.75 for this period, and the Late SPI is at 1.02. The index under 1.0 indicates that the contractor is behind. The late start to construction is heading according to plan. The Early SPI continues to lag the early finish plans.

The schedule continues to show some time impacts due to design & quality issues on the garage, extreme weather delays and supply chain delays due to COVID-19. The Contractor is working diligently to identify as many opportunities as possible to recapture float on future work by performing tasks in more beneficial ways to the project, constructive acceleration and resequencing where feasible.



Next Period's Activities

- 40th Street phase 2 cut and cover construction. Cap beam construction to follow.
- Continue superstructure work at Downtown Redmond Station area.
- Continue with the installation of access of Unnamed Tributary Bridge and vertical elements for soil nail wall.
- 51st Street off-ramp closure (night time) for drainage installation.

Closely Monitored Issues

- Supply chain impacts: information from various industry and news sources regarding supply chain impacts continue to affect the project.
- Labor challenges due to the pandemic as well as Washington State COVID-19 protocol.
- Continue working with the Utility Owners and Contractor to accommodate utility relocations in support of the project schedule.

Link Light Rail Downtown Redmond Link Extension

Cost Summary

Present Financial Status	Amount
R200 Contractor – Stacy Witbeck Kuney, a Joint Venture	
Original Contract Value	\$719,396,000
Change Order Value	\$22,999,155
Current Contract Value	\$742,395,155
Total Actual Cost (Incurred to Date)	\$279,248,118
Percent Complete	43.3%
Alternative Concept Allowance	\$46,381,197
Authorized Contingency	\$78,875,403
Contingency Drawdown	\$22,999,155
*Contingency Index	1.48

**Excludes Betterments*



Parking garage deck formwork.

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.

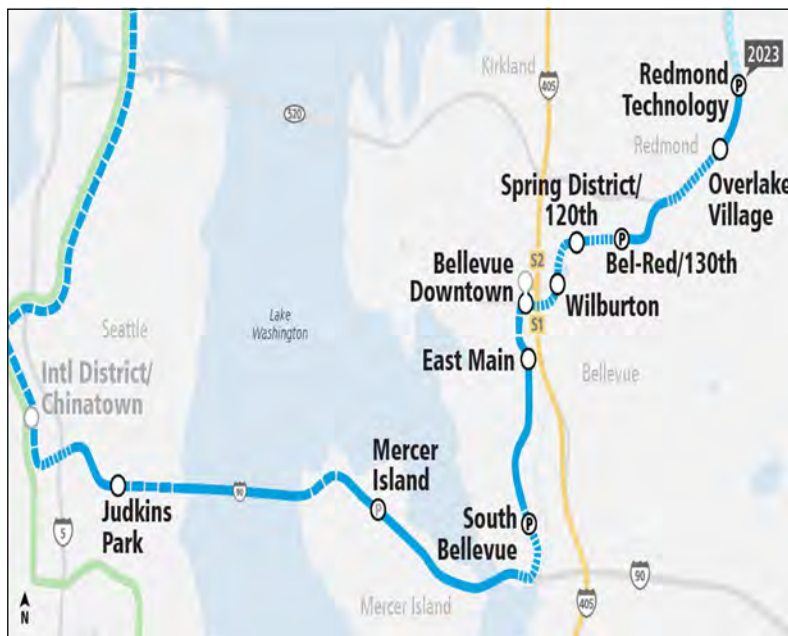
Stations Judkins Park (JPS), Mercer Island (MIS), South Bellevue, East Main, Bellevue Downtown (BDS), Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village (OVS) and Redmond Technology (RTS).

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

- **I-90 West Segment (E130):** ongoing punch list and commissioning at JPS and MBT; progress plinth grout pad remediation; progressed power upgrade work for WSDOT system
- **I-90 Center Segment (E130):** Continued sliding rail expansion joint work; progress fabrication of spare dual precast blocks; ongoing plinth grout pad remediation; investigation to power outage on floating bridge
- **I-90 East Segment (E130):** Continue 80th Ave clearing/grubbing for MITI early work; ongoing punch list work at MI Station; progress non-conforming plinth grout pad remediation
- **South Bellevue (E320):** SB Parking garage opened; continued landscaping installation and maintenance; punch list and site security work.
- **Downtown Bellevue to Spring District (E335):** Ongoing Commissioning at East Main, BDS and Wilburton Stations. Continue installations of soffit panels, trim on plaza canopies, wall panels and windscreen trim at Wilburton Station platform. Installed guard rails panel, way finder tiles and complete adjustment and wiring for elevators at BDS Station.
- **Bel-Red (E340):** Installed mitigation plant material at Kelsey Creek. Pour back rail-to-earth repair at 130th Ave station and NE Spring Blvd areas. Installed systems conductors along the guideway. Ongoing completion of punch list items.
- **SR520 to Redmond Technology Station (E360):** Ongoing Overlake Village Station (OVS) punch list, NCR repair, and decorative seat wall finishes. OVS Ped Bridge sand blasting decorative concrete panels, paper stair finishes, and handrail adjustments completed. Redmond Technology Station garage columns, level 2/3 beams, and deck rebar work accomplished.
- **Systems (E750):** Continued submittals, component design/manufacturing/fabrication. Progressed communication and signaling equipment installations at E130 and E360; Signal house delivered at E320, installation of feeder cables for energization and testing. Ongoing installation of OCS wire throughout the alignment.

Closely Monitored Issues

- Redmond Technology Station Garage's structural repairs.
- Civil segments continue to trend late in handing over access to follow on Systems contractor and System Integrated Testing.
- COVID-19 pandemic remains challenging at all levels of project activities.
- Resolution to commercial issues with contractors.
- Staff and consultant attrition at late stage of project and lost of continuity and project knowledge.

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 estimated expenditure effectively netted out to \$10M, the total expenditure to date increase from \$3.03B to 3.04B. Project commitment remains at approximately \$3.2B with all major construction contracts in place. The pace of civil construction expenditures has slow down considerably and is further exacerbated by the discovery of latent quality issues as we transition into commissioning phase of the project. COVID-19 cases remains fluid, assessment of impacts continues as well as ongoing monitoring of downstream supply chain interruptions.

Cost Summary by Phase

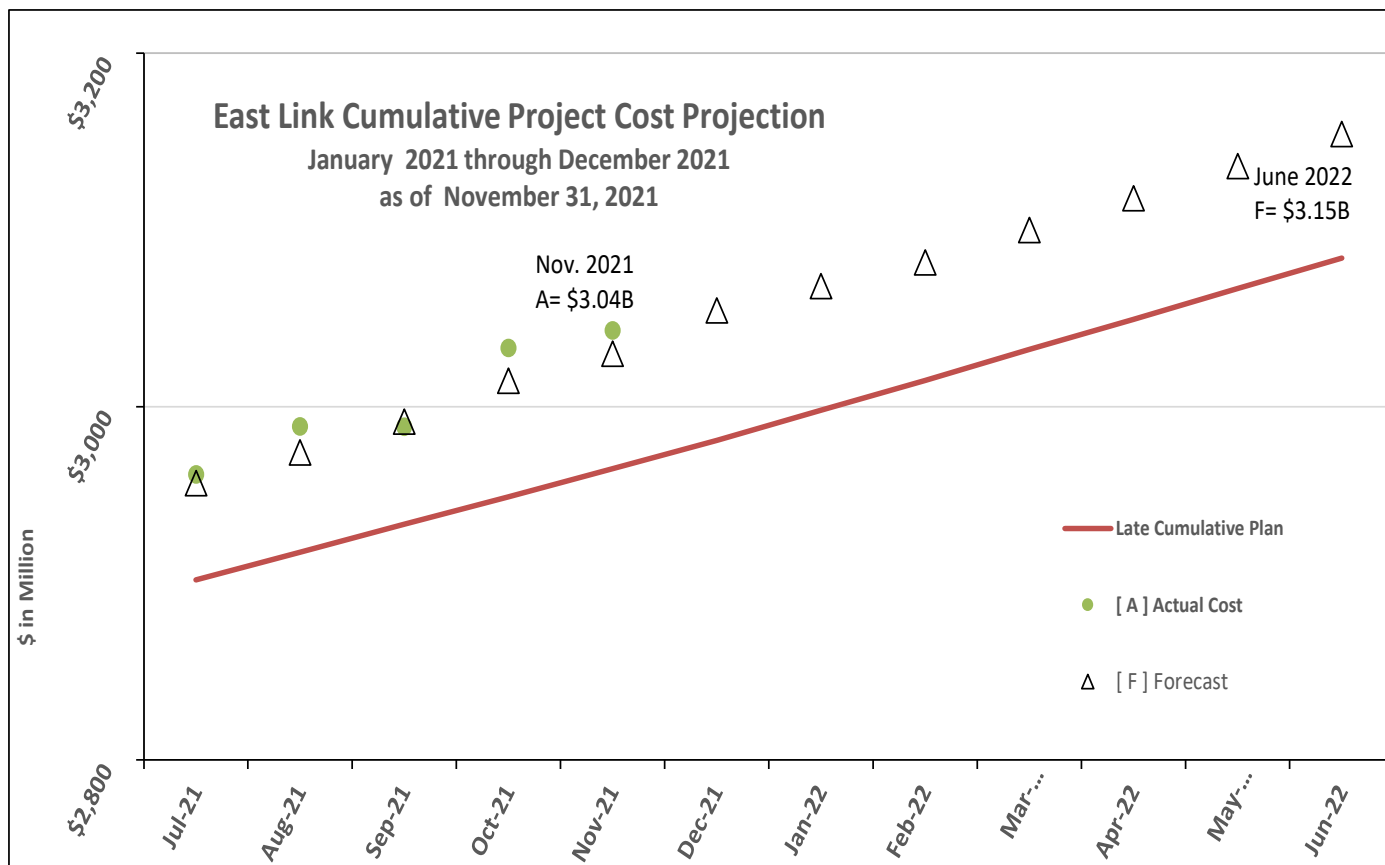
Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$186.2	\$186.2	\$115.7	\$116.1	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.8	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$250.4	\$239.7	\$283.0	\$0.0
Construction Services	\$257.5	\$257.5	\$208.5	\$191.1	\$257.5	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$38.4	\$34.5	\$52.2	\$0.0
Construction	\$2,544.3	\$2,544.3	\$2,257.4	\$2,127.8	\$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	\$279.9	\$279.2	\$298.2	(\$0.0)
Total	\$3,677.2	\$3,677.2	\$3,205.0	\$3,043.2	\$3,677.2	\$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	\$744.6	\$945.7	\$908.4	\$905.2	\$942.3	(\$197.7)
20 Stations	\$397.7	\$478.2	\$463.4	\$443.2	\$483.4	(\$85.7)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$574.9	\$501.9	\$467.7	\$569.0	\$239.5
50 Systems	\$353.8	\$367.9	\$347.5	\$279.1	\$371.3	(\$17.5)
Construction Subtotal (10 - 50)	\$2,304.6	\$2,366.7	\$2,221.2	\$2,095.3	\$2,365.9	(\$61.3)
60 Row, Land	\$288.5	\$288.5	\$279.9	\$279.2	\$288.5	\$0.0
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$1.0	\$0.6	\$2.8	\$0.0
80 Professional Services	\$898.4	\$889.1	\$702.9	\$668.1	\$889.9	\$8.5
90 Unallocated Contingency	\$182.9	\$130.0	\$0.0	\$0.0	\$130.0	\$52.8
Total (10 - 90)	\$3,677.2	\$3,677.2	\$3,205.0	\$3,043.2	\$3,677.2	\$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 expenditure netted out at \$10M. Total project cost incurred progressed to \$3.04B, of which the Construction Phase's share is now a little over \$2B. The project expenditures continue to pick up and is predicted to rise to approximately \$3.11B by March 2022.



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.

A Quantitative Risk Assessment workshop was completed in October 2020. The QRA Report was finalized with results documenting a good confidence that ELE will complete within the baseline cost and scheduled Revenue Service Date. The project is Q3 qualitative risk register updates is complete.

The following are the top project risk and risk areas:

- Civil turnovers to Systems construction continues to take longer than anticipated due to discover of latent quality issues
- Interfaces between contracts, agency supplied equipment and third party jurisdictions continues to put pressure on cost
- COVID-19 pandemic cost and schedule impacts continues to loom over the project
- Resolution to Redmond Technology Station Garage's structural elements repairs
- Scope gaps between Construction and Operations as well as readiness for Startup

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 \$310.9M (previously \$313.5M). 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 at \$1.3M. DA is expected to be fully drawn down at the end of the project.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC was balance shows a net decrease of approximately \$2.6M due to construction and construction support changes.

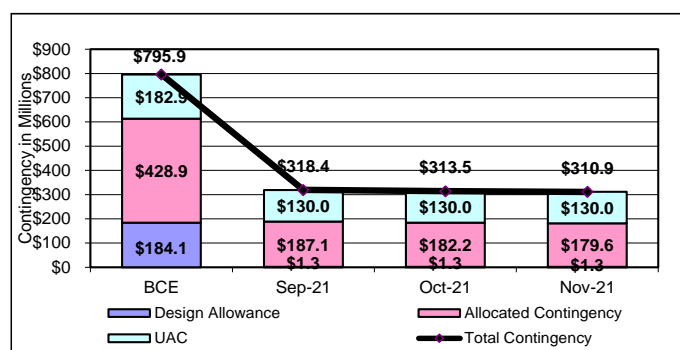
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$130.0M.

Contingency Status

Contingency Type	Baseline		Current Status	
	Amount	% of Total Budget	Amount Remaining	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$1.3	0.2%
Allocated Contingency	\$428.9	11.7%	\$179.6	28.3%
Unallocated Contingency	\$182.9	5.0%	\$130.0	20.5%
Total	\$795.9	21.6%	\$310.9	49.0%

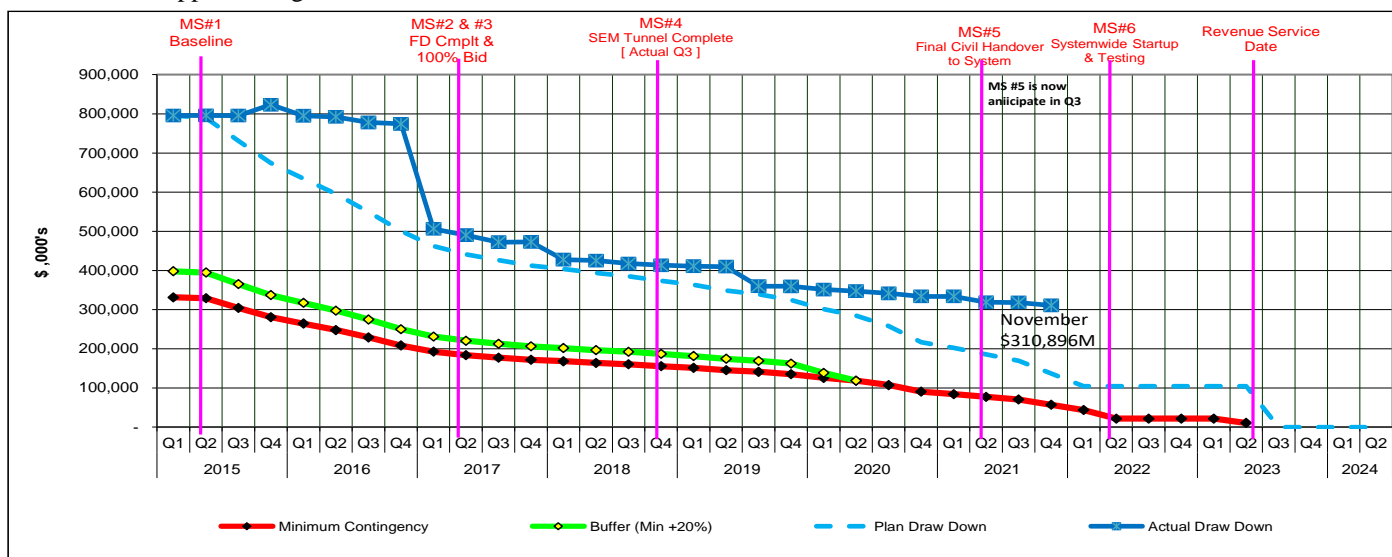
Table figures are shown in millions.

Contingency by Type



Contingency Drawdown

East Link Project's total contingency drawdown continues to trend within plan with an overall contingency balance at approximately at \$310.9M (previously \$313.5M) 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 net decrease about \$2.6M due to various construction and construction support changes.



Contingency Drawdown as of November 30, 2021

Link Light Rail East Link Extension



Project Schedule

The Integrated Master Schedule is presented below. Weighted percent complete of the major construction contracts is calculated at 95.2%.

E130 continued track plinth grout pad remediation; commissioning and punch list work; clearing & grubbing for MITI.

E320 continued landscaping and irrigation; corrective work at station platform; station commissioning; closeout work.

E330 has achieved final acceptance.

E335 continued finish work at E. Main & Bellevue Downtown Station; commissioning at Wilburton.

E340 performed testing and punch list, repair, and closeout work throughout the alignment.

E360 continued punch list and repair work all along the alignment; continued RTS garage crack repair.

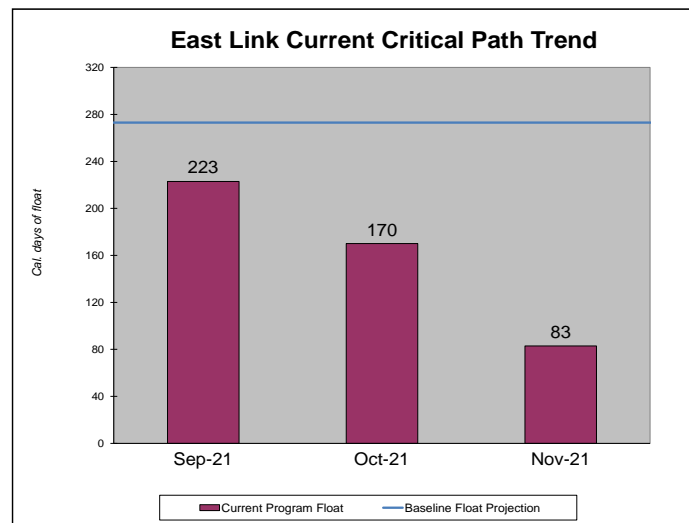
E750 continued installation of communications systems at most stations; set OCS poles, and strung messenger wire; set and tested several signal houses; continued local testing in multiple segments.

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

Activity Name	Start	Finish	2022				2023		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sound Transit	18-Jan-15 A	30-Jun-23							
Sound Transit 2	18-Jan-15 A	30-Jun-23							
East Corridor	18-Jan-15 A	30-Jun-23							
LRT Extension - East	18-Jan-15 A	30-Jun-23							
East Link	18-Jan-15 A	30-Jun-23							
East Link Construction	18-Jan-15 A	30-Jun-23							
EL 130 - Seattle to I-90 Overpass (GC/CM)	10-Mar-17 A	22-Jun-22							
EL 135 - Mercer Island Transit Interchange (DBB)	17-May-18 A	26-Mar-23							
EL 320 - I-90 Overpass to S. Bellevue (DBB)	05-Dec-16 A	29-Jan-22							
EL 330 - Downtown Bellevue Tunnel (DBB)	18-Jan-15 A	12-Oct-20							
EL 335 - Downtown Bellevue to Spring District (GC/CM)	24-Apr-17 A	03-Jun-22							
EL 340 - Spring District to SR 520 (DBB)	24-Feb-17 A	03-Sep-21							
EL 360 - SR 520 to Overlake Transit Center (DB)	13-Jul-16 A	09-Dec-22							
EL 750 - Systems	12-Jun-17 A	06-Apr-23							
East Link Master Schedule - Construction Interfaces	14-Jun-17 A	07-Jan-23							
ELRACT - East Link Rail Activation/System Integration/Project Close out	20-Aug-21 A	30-Jun-23							
East Link Rail Activation/System Integration/Project Close out	20-Aug-21 A	30-Jun-23							
Pre-Revenue Testing & Start Up	20-Aug-21 A	08-Apr-23							
East Link System Integration Testing (LOE Summary)	20-Aug-21 A	06-Jan-23							
East Link Pre Revenue Operations (3 Mo)	07-Jan-23	08-Apr-23							
Revenue Service Window	09-Apr-23	30-Jun-23							
East Link Program Float (Baseline 273 Days)	09-Apr-23	30-Jun-23							
East Link Revenue Service Date (Baseline 30-Jun-23)		30-Jun-23*							

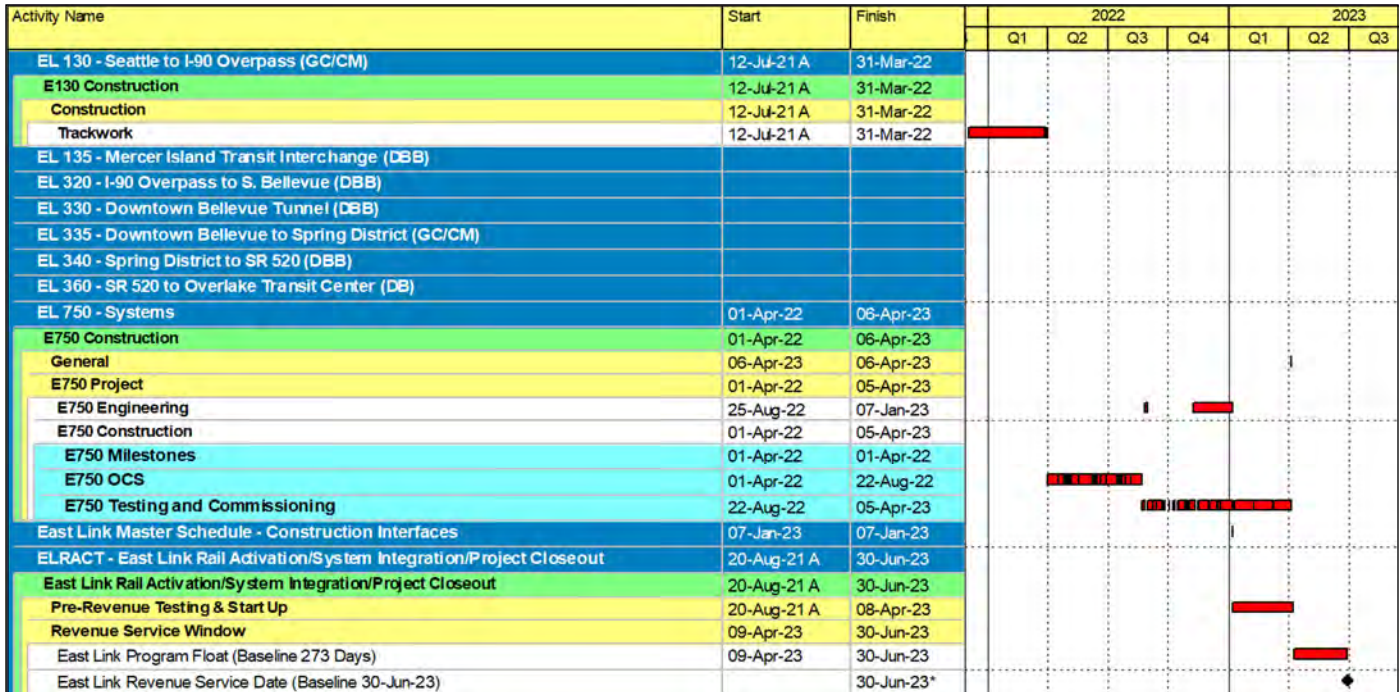
Project Float

East Link was baselined with 273 days of program float, and is currently forecast to use 190 days. The full procedure for repairing track plinths on E130 was formally approved and incorporated into the schedule this month, which has resulted in a loss of an additional 87 days of float from the previous month. Sound Transit is working closely with both the E130 and E750 contractors to mitigate this impact wherever possible.



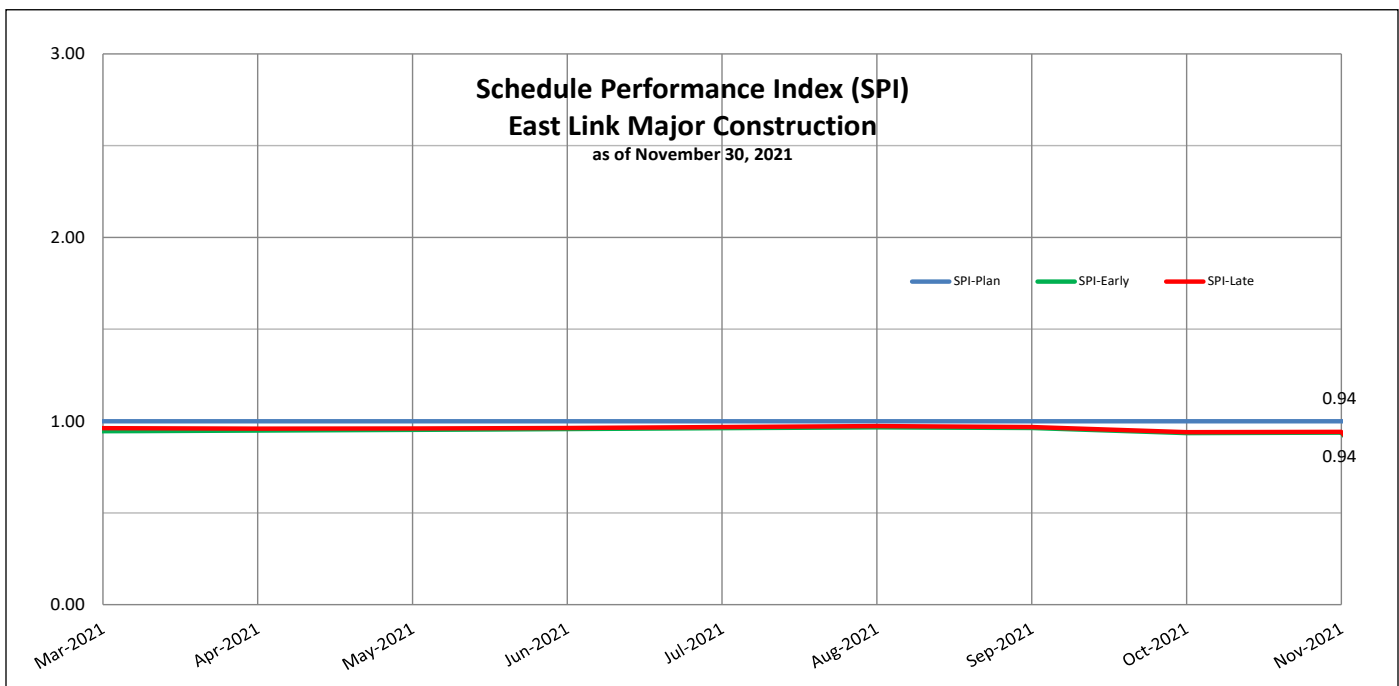
Critical Path Analysis

The East Link critical path this month continues to run through track remediation on E130, which is holding up E750 access to complete OCS and signal installation. The extent of the repair work is still being determined, which may result in an even longer path to completion. East Link civil contracts continue to be closely monitored for potential impacts to the E750 schedule.



Schedule Performance Index

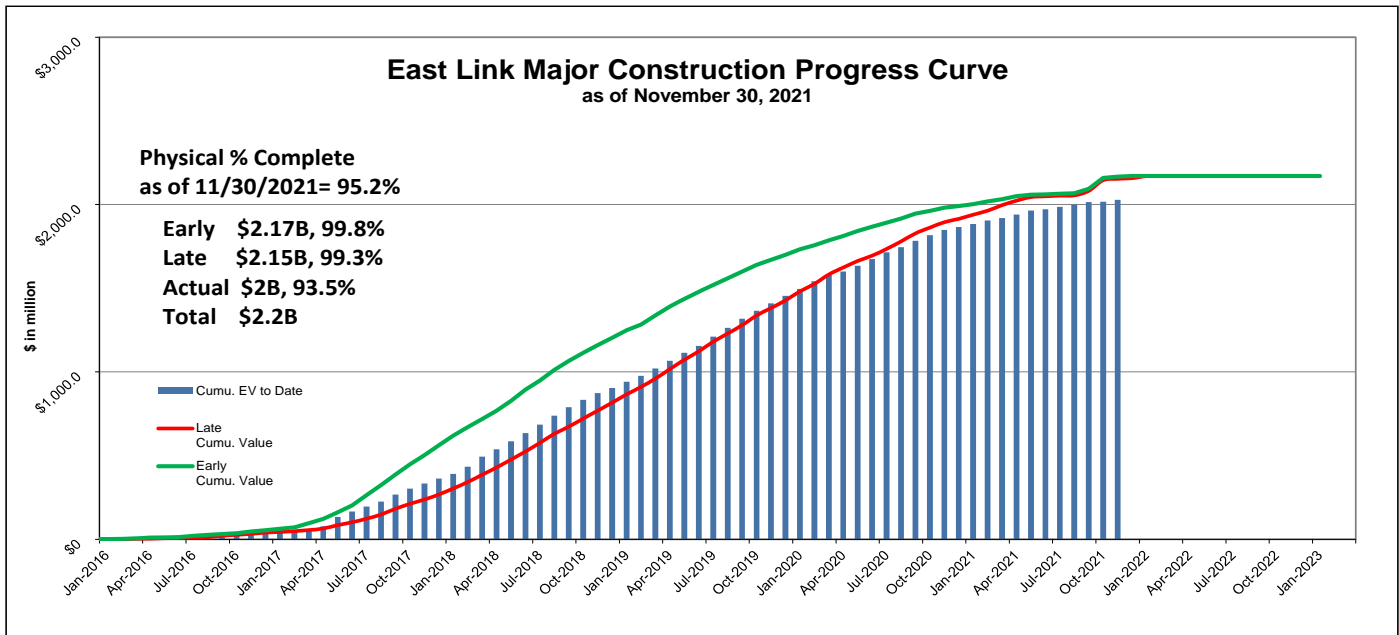
The Schedule Performance Index (SPI) for East Link's Major Construction Packages remains at 0.94 (both early and late), as contractors focus on repairs, punch lists, and closeout. This number will trend steadily towards 1 in the coming months.



Major Construction Progress Curve

The overall physical percent complete for East Link construction is 95.2%.

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. Progress is trending behind the planned curves, but continues at a steady pace. The rate of progress is slowing slightly as all civil contracts are above 95% complete and most remaining work is repairs and closeout.



E320 South Bellevue: Final touches on the Parking Garage prior to public opening in November.

Community Engagement

- 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. November's focus includes but limited to the continuation of lane closures in the E335 segments (110th Ave NE, 112th and NE 6th); outreach on System Integration Testing, clearance testing to live wire testing, TPSS delivery, collaborated with ST TOD for second phase of community engagement for parcel near OVS.
- 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	239	229	229
* 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 2021. Consultants utilization, currently, are dependent on the efforts to manage construction. The monthly average is trending over the plan and is predicted to decline. The current overage is not indicative of budget overage. That said, the longer than anticipated construction duration coupled with the prolonged COVID-19 pandemic makes it hard to predict how the annual plan will unfold.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	52.8	45.2	(7.6)
Consultants	91.5	155.7	64.2
TOTAL	144.3	200.9	56.6
* 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
M2021-67	Authorizes the CEO to execute a contract with Johansen Construction Company for the Construction of the Mercer Island Transit Integration project as part of East Link Extension in the amount of \$5,922,391, with a 15% contingency of \$890,000 for a total authorized contract amount not to exceed \$6,812,391	11/10/2021

Construction Safety

Data/ Measure	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	5	90
Days Away From Work Cases	0	0	15
Total Days Away From Work	0	0	1,337
First Aid Cases	0	24	293
Reported Near Mishaps	1	15	293
Average Number of Employees on Worksite	374	-	-
Total # of Hours (GC & Subs)	50,322	887,938	7,454,860
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	1.13	2.41
LTI Rate	0.00	0.00	0.40
Recordable National Average	2.80		
LTI National Average	1.10		
Recordable WA State Average	5.70		
LTI WA State Average	2.00		

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.

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: Substantial Completion on July 13th, 2020. Acceptance Issued on November 17th 2020.

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: Commencement of Systems Integration testing with dead tow LRV clearance

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

Current Progress

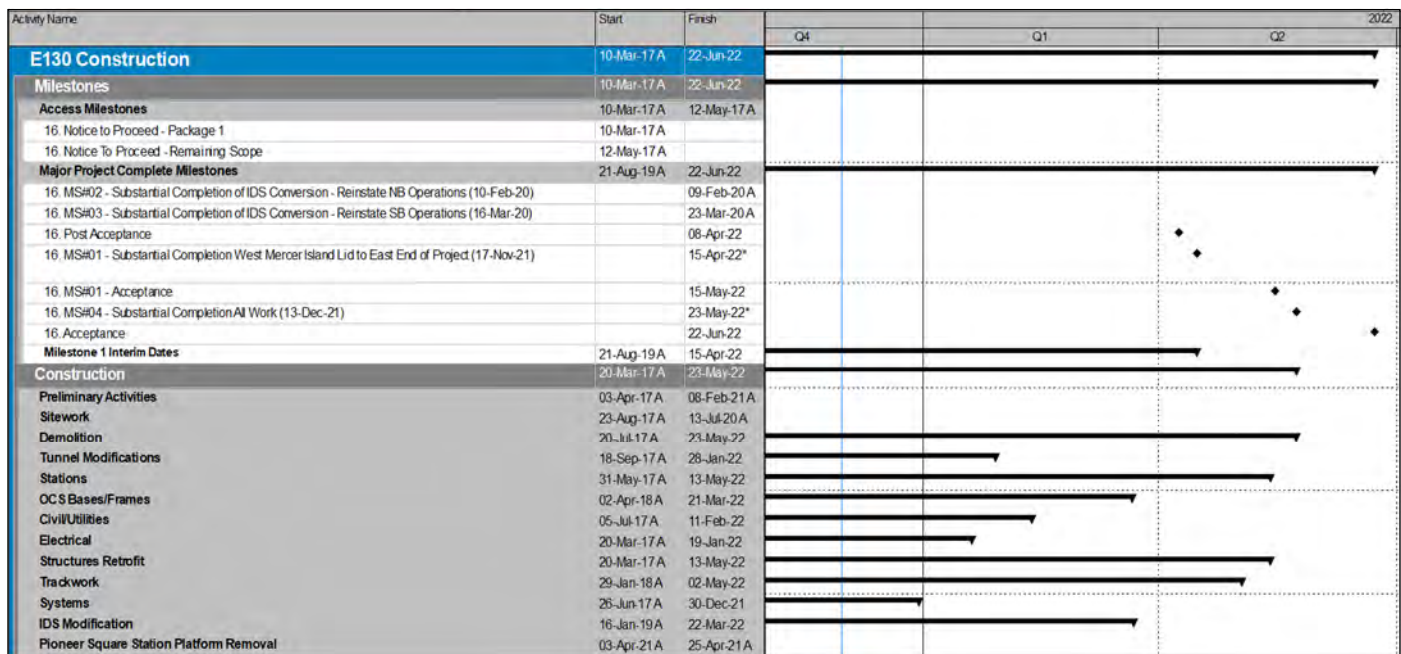
West Segment: Continue coordination of TPSS 2 power upgrade work; ongoing punchlist and commissioning at JPS and MBT; advance concrete sidewalk placement at Rainier Ave; progress non-conforming track plinth grout pad remediation

Center Segment: Continued investigation into power outage on floating bridge; advance fabrication of spare dual precast blocks; progress non-conforming track plinth grout pad remediation

East Segment: Continue 80th Ave clearing/grubbing for MITI early work; ongoing E750 integration work at MI Station platform; progress non-conforming track plinth grout pad remediation

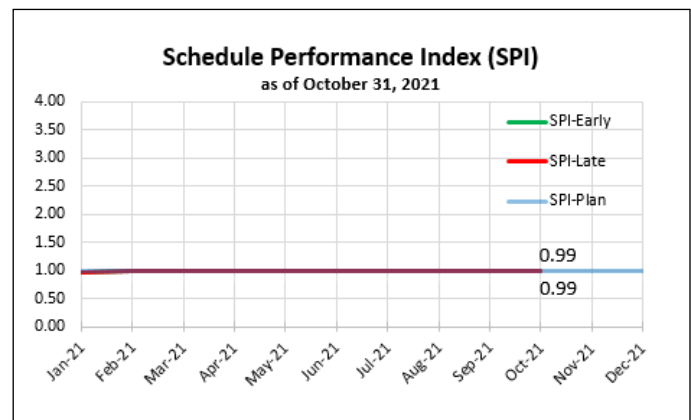
Schedule Summary

The November update forecasts an May 23, 2022, Substantial Completion date, 161 calendar days later than the contractual milestone date of December 13, 2021. Within the E130 contract schedule, the critical path is driven by track remediation scope on the floating bridge. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.



Schedule Performance Index

The contractor has not submitted their November payment request; SPI values are from last month. Through October, reported cumulative SPI (both early and late) is at 0.99. The E130 planned Substantial Completion (SC) for All Work (Milestone 4) is September 2021, although the contract now projects SC at Q2 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1.0. Remaining work is primarily focused on track remediation scope, commissioning, and other punch list items.



Next Period's Activities

- **West Segment:** Judkins Park Station interior painting; Mt Baker Tunnel fire alarm sensor installation; continue plinth grout pad remediation
- **Center Segment:** Cathodic Protection rectifier power up; continue plinth grout pad & rail insulator remediation
- **East Segment:** Ongoing waterproofing at Mercer Island Station plaza, E750 integration activities; progress irrigation & landscaping activities; continue plinth grout pad remediation

Closely Monitored Issues

- Activity progress to reach Milestones 1, 3 & 4; resultant impacts to E750
- Direct COVID-19 impacts
- NCR mitigation timeline for track plinth grout pads
- IDS: rail grinding, Milestone 3 resolution

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	\$41,617,217
Current Contract Value*	\$705,649,030
Total Actual Cost (Incurred to Date)	\$697,328,546
Percent Complete	96.7%
Authorized Contingency	\$56,660,541
Contingency Drawdown	\$41,617,217
Contingency Index	1.3

* Contract Value excludes Betterments



Crews install rigid conduit expansion joints along the above ground ductbank, east approach to floating bridge

Contract E320 – South Bellevue

Current Progress

I-90 Flyover: Ongoing landscaping, punch list items, and clean out at pier table

Bellevue Way SE: Continue maintenance of Trench Area B, punch list items

S. Bellevue Sta./P&R: Advance installation of landscaping, commissioning activities

Wye-to-East Main: Progress remaining landscaping activities; motorized gate installation in fencing along 112th St

Track Work: Ongoing installation of direct fixation emergency guard rail shims, rail lubricators; continued NCR remediation for S Bellevue station platform encroachment

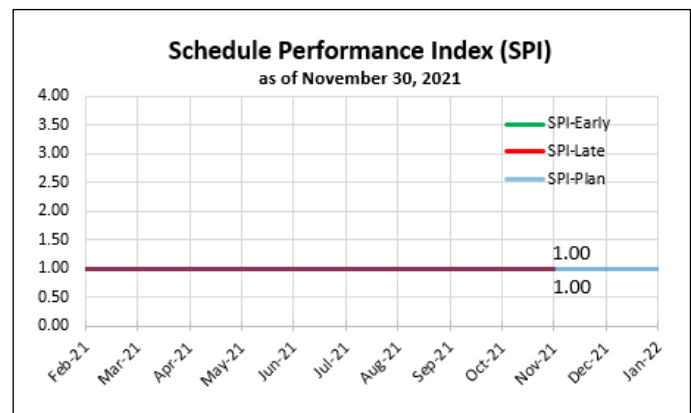
Schedule Summary

The November update forecasts a January 28, 2022, Substantial Completion date, 385 calendar days later than the contractual milestone date of January 8, 2021. Within the E320 contract schedule, the critical path is driven by commissioning at South Bellevue Station. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.

Activity Name	Start	Finish	2021
			Q4
E320 Construction	05-Dec-16 A	28-Jan-22	
Milestones and Summary	05-Dec-16 A	28-Jan-22	
Contract Milestones	05-Dec-16 A	28-Jan-22	
Limited Notice to Proceed	05-Dec-16 A		
Notice to Proceed	13-Feb-17 A		
Milestone 3A - Clear & Grub Swaylocken (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)		01-Dec-21*	
Milestone 5 - Acceptance of South Bellevue Station (NTP+1225D)		14-Jan-22*	
Milestone 6 - Required Substantial Completion (NTP+1364D)		28-Jan-22*	
Construction-1	21-Apr-17 A	14-Jan-22	
Mobilization	21-Apr-17 A	16-Jul-18 A	
Area A - I-90 Mainline to Bellevue Interchange - Sta EB405+54 to EB438+20	16-Jun-17 A	01-Dec-21	
Area B - Bellevue Way SE, SE 30th St to 112th Ave SE Wye - Sta EB438+20 to EB476+75	30-May-17 A	14-Jan-22	
Area C - 112th Ave SE, 112th Ave SE Wye to SE 8th - Sta EB476+75 to EB508+00	13-Jun-17 A	03-Jan-22	
Area D - 112th Ave SE to SE 8th St to Main St - Sta 508+00 to EB528+25	22-May-17 A	10-Jan-22	
Area E - Coal Creek Stream Enhancement	09-Jul-18 A	22-Nov-19 A	
Area F - Swaylocken Mitigation	23-Apr-18 A	21-Dec-18 A	

Schedule Performance Index

E320 base plan called for a Substantial Completion date of November 2020. The contract is now projecting a Substantial Completion of Q4 2021. At this final stage of the project, the SPI calculation tends to converge to an index of 1. South Bellevue Garage is effectively complete. Remaining work is primarily focused on rework of track issues that require remediation, landscaping, irrigation, commissioning, and miscellaneous punch list items.



Link Light Rail East Link Extension

Next Period's Activities

- **I-90 Flyover:** Ongoing area maintenance & planting
- **Bellevue Way SE:** Ongoing area maintenance and punch list
- **S. Bellevue Sta./P&R:** Continue elevator L&I inspections
- **Wye-to-East Main:** Continue remaining landscaping, maintenance, fencing (gates)
- **Track Work:** Direct fixation rail shims and lubricators

Closely Monitored Issues

- COVID-19 impacts
- Resolution to Substantial Completion date
- E750 contractor access



Cost Summary

Present Financial Status	Amount
E320 Contractor - Shimmick/Parsons JV.	
Original Contract Value	\$319,859,000
Change Order Value	\$11,197,431
Current Contract Value*	\$331,022,178
Total Actual Cost (Incurred to Date)	\$326,629,085
Percent Complete	98.5%
Authorized Contingency	\$38,532,000
Contingency Drawdown	\$11,197,431
Contingency Index	3.4

*Contract Value excludes betterments and START



Landscaping at Winter's House landing

Contract E330 – Downtown Bellevue Tunnel – Completed & Accepted

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



Cost Summary

Final Financial Status	Amount
E330 Contractor– Guy F Atkinson Construction, LLC.	
Original Contract Value	\$121,446,551
Change Order Value	(\$1,109,096)
Current Contract Value	\$120,337,455
Total Actual Cost	\$120,337,455
Percent Complete	100%
Authorized Contingency	\$13,256,330
Contingency Drawdown	(\$1,109,096)
Contingency Index	N/A



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

Current Progress

East Main Station: Continued installing doors, signage and lean rails, Electrical commissioning. Completed pouring the stairs and egress ramps at South Portal Electrical Building. Commenced Install track crossing spring gate and Station cleanup.

Bellevue Downtown Station (BDS): Installed Guard Rails metal panel, lower level way finder tiles, Completed surface level angle frames at bike shelters and terracotta installation and adjustment and wiring for elevators. Continued painting bike shelters, planting and irrigation at 6th street side.

Wilburton Station: Continued fire alarm commissioning activities, metal panel installation on west side of escalator. Continued install soffit panels and trim on plaza level canopies, wall panels and windscreen trim at platform level. Installed handrail for public and egress stairs. Commenced grading at Lincoln Centre.

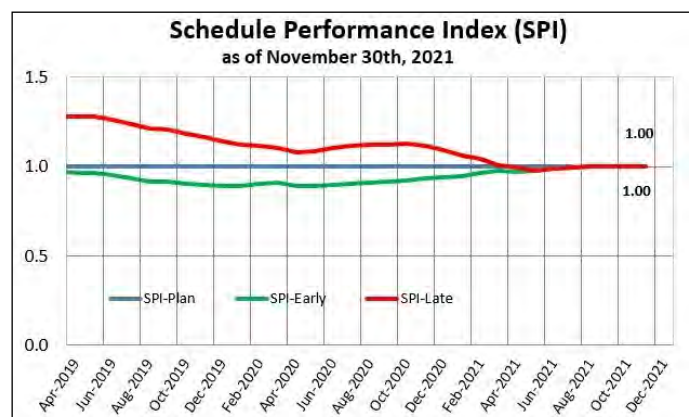
Schedule Summary

The November update forecasts a June 03, 2022, Substantial Completion date, 383 calendar days later than the contractual milestone date of May 16, 2021. Within the E335 contract schedule, the critical path is driven by switchgear at BDS, followed by tunnel commissioning. The E750 contractor has access to most work areas.

Activity Name	Start	Finish	Q4	Q1	Q2
E335 Construction	24-Apr-17 A	03-Jun-22			
Milestones	04-May-18 A	03-Jun-22			
Contract Milestones	30-Sep-18 A	03-Jun-22			
Milestone #1 - Complete North Portal Headwall Temporary Shoring		30-Sep-18 A			
Milestone #2 - Complete SIDs for Interface to SCADA		14-Jan-20 A			
Milestone #3 - Complete Trackway and Stations for Primary Systems Access- BTC to EOP (18-Jul-21)		08-Jan-22*			
Milestone #4 - Complete SEM Tunnel Trackwork for Primary Systems Access (16-Jan-21)		04-May-22*			
Milestone #5 - Complete All Trackway and Stations for Primary Systems Access (16-Mar-21)		04-May-22*			
Milestone #6 - Substantial Completion of all Work (16-May-21)		03-Jun-22*			
Calculated Milestones	04-May-18 A	21-May-22			
Mobilization	24-Apr-17 A	24-Apr-17 A			
Construction	24-Apr-17 A	21-Apr-22			
Area 1: E. Main Station to South Portal (531+55 - 538+00)	11-Oct-17 A	14-Dec-21			
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91)	24-Aug-18 A	21-Apr-22			
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)	24-Apr-17 A	15-Apr-22			
Area 4: Aerial Guideway (568+45 - 606+59)	24-Apr-17 A	04-Mar-22			
Area 5: Pine Forest to 120th (606+59 - 619+00)	07-Jul-17 A	08-Oct-21 A			
Area 6: 120th - End of Project (619+00 - 634+99)	01-Aug-17 A	29-Dec-21			
Testing and Commissioning	01-Jun-20 A	02-Dec-21			

Schedule Performance Index

E335's base plan called for a Substantial Completion date of May 2021. The contract is now projecting a Substantial Completion of Q2 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1.0. Remaining work is primarily focused on the delayed base work at BDS and Wilburton stations, the wiring and termination of the mid-tunnel fans, and the follow-on commissioning and punch list work.



Link Light Rail East Link Extension

Next Period's Activities

- **BDS:** Continue spread top soil, planting and install irrigation at plaza. Install bike shelter metal panels, Install wiring and test elevator, escalators.
- **Wilburton Station:** Continue grading at Lincoln Centre, Commissioning activities. Install remaining stair handrails and doors hardware, shims and notch anchor rods for elevators. Paint Hospital Path Wall.
- **120th Station:** Repair plaza sidewalk. Continue final inspection and testing Elevators, electrical equipment and continue on punch list items.

Closely Monitored Issues

- Continued inefficiencies in adhering to COVID-19 safety requirements will continue to impact progress.
- Contractor has confirmed the procurement of switchgear at BDS; however, the related delays continue to impact the project schedule and continue to impede E750 access. While permanent power has been connected to the switchgear and submittals have been returned to the Contractor for the transformer, snubber, and other associated equipment, various scopes or rework and red tag inspections continue to delay the schedule.



East Link– E335 alignment Downtown Bellevue to Spring Blvd.

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	\$23,306,002
Current Contract Value	\$417,104,212
Total Actual Cost (Incurred to Date)	\$406,854,084
Percent Complete	98.8%
Authorized Contingency	\$29,689,911
Contingency Drawdown	\$23,306,002
Contingency Index	1.3



Contract E340 – Bel-Red

Current Progress

Kelsey Creek Mitigation Area: Install mitigation plant material. Conduct punch list work at the mitigation area.

130th Ave Station: Pour back rail-to-earth (RTE) repair areas. Address station punch list. Pre-commissioning test of plumbing fixtures.

136th Ave: As-built surveying of storm drain utilities.

System Scope: Install system conductors along the guideway.

Schedule Summary

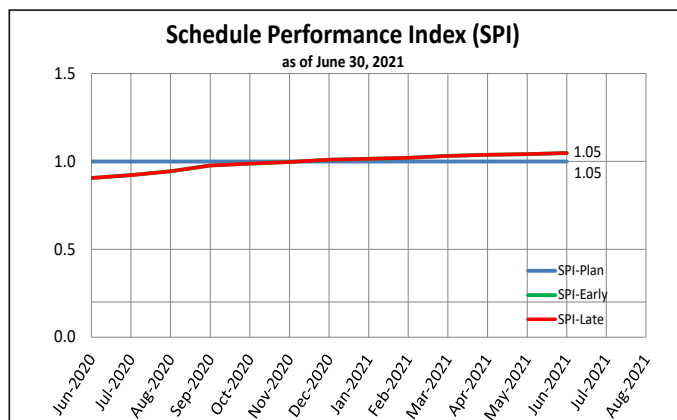
The June update forecasts a September 03, 2021 Substantial Completion date, 456 calendar days later than the contractual milestone date of June 05, 2020. Subsequent updates have not yet been received. The contractor is working on remediation to complete rail-to-earth testing, which could be complete by January 2022. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.

Activity Name	Start	Finish	
E340 Construction	24-Feb-17 A	03-Sep-21	
CONSTRUCTION	24-Feb-17 A	03-Sep-21	
~MILESTONES/EASEMENTS~	24-Feb-17 A	03-Sep-21	
~Milestones	24-Feb-17 A	03-Sep-21	
Contract Milestones	24-Feb-17 A	03-Sep-21	
Limited Notice to Proceed (LNTTP - 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. CO 063		10-Jun-19 A	
MS #3 Acceptance of SDIT - NTP + 976 DAYS- (Nov 27, 2019)		26-Nov-19 A	
MS #4 Substantial Completion - NTP + 1166 DAYS - (June 05, 2020)		03-Sep-21*	
Float	24-Mar-20 A	04-May-20 A	
~SUBMITTALS/PRELIMINARY ACTIVITIES~	24-Feb-17 A	09-Jun-21 A	
~MOBILIZATION~	24-Feb-17 A	29-Jul-19 A	
~SITEWORK~	04-Apr-17 A	02-Jul-21	
~RETAINING WALLS~	12-Feb-18 A	07-Apr-21 A	
~AERIAL STRUCTURES~	15-May-17 A	01-Dec-20 A	
~STATIONS~	01-Aug-18 A	29-Jul-21	
~ELECTRICALITS~	02-Jan-18 A	07-Jun-21 A	
~FINISHES~	31-Dec-19 A	04-May-21 A	
~TRACKWORK~	13-Jul-18 A	29-Jul-21	
~LANDSCAPING/FLATWORK~	22-May-18 A	20-Aug-21	
~TESTING AND COMMISSIONING~	27-Aug-19 A	05-Aug-21	
~DEMOBILIZATION~	01-Aug-18 A	08-Sep-20 A	

Schedule Performance Index

E340's base plan called for a Substantial Completion date of June 2020. The contract is now a year past the plan date. At this stage, the SPI calculation has a mathematical tendency of convergence to an index of 1.0 at late stage project.

Remaining work in E340 are limited to the lower costs close-out scope including commissioning work and punch lists. The project team is diligently monitoring completion despite contractor being late with their schedule submittal.



Next Period's Activities

Kelsey Creek Mitigation Area: Install mitigation plant material. Conduct punch list work.

130th Ave Station: Pour back RTE repair areas. Flow test aerial guideway fire suppression system.

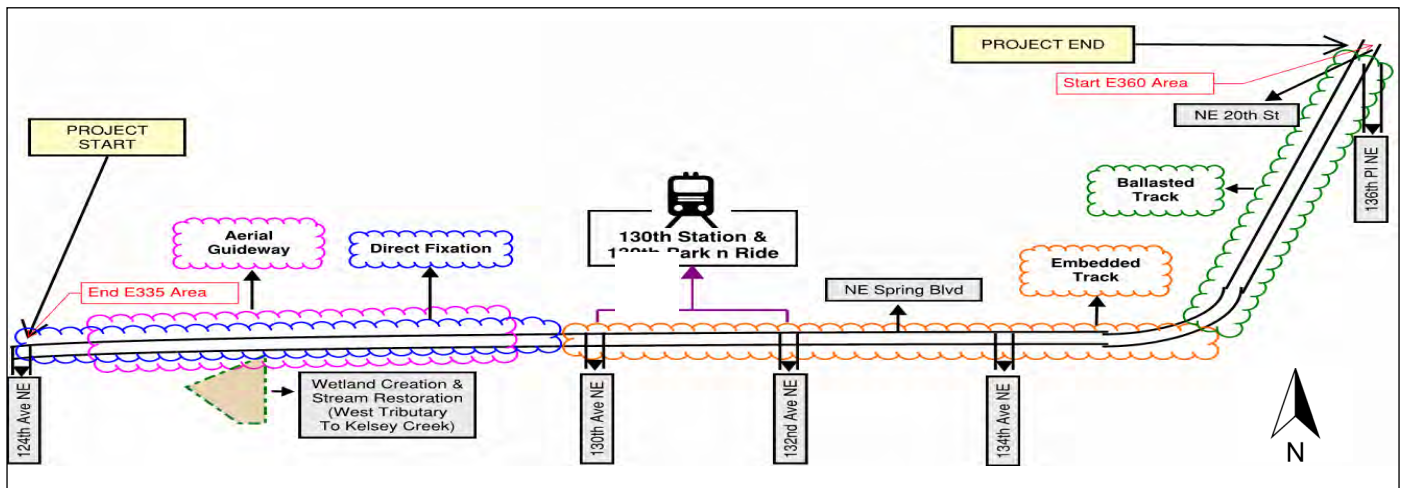
NE Spring Blvd: Address City of Bellevue planting punch list. Install pavers adjacent to T-Mobile driveway.

System Scope: Install system conductors along the guideway.

Closely Monitored Issues

- There are non-compliant track in various stages of construction. Sound Transit is monitoring contractor's corrective method action plan to bring the rail alignment back within specified tolerances.
- There are several Temporary Construction Easements (TCE) with upcoming expiration dates. The contractor needs to work out an agreement with the property owners where extensions are not granted and work has not been completed.

E340 Construction Work Areas



Cost Summary

Present Financial Status	Amount
E340 Contractor– Max J Kuney	
Original Contract Value	\$93,170,012
Change Order Value	\$7,945,425
Current Contract Value	\$101,115,437
Total Actual Cost (Incurred to Date)	\$97,491,303
Percent Complete	97.8%
Authorized Contingency	\$14,317,000
Contingency Drawdown	\$7,945,425
Contingency Index	1.76



Safety delineation installed prior to RTE testing facing west

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

Current Progress

Design: Notice of Design Change work includes Sweeper Site Access Road and Redmond Technology Station Garage.

Construction:

- Work Area (WA)#1: Park Place and Sweeper Site Vaults punch list work is ongoing.
- WA #2: Aerial Guideway punch list work advancing.
- WA #3/4: Overlake Village Station punch list and NCR repair work progressing. Decorative seat wall finishes completed.
- WA #6: Redmond Technology Station punch list and NCR repair work continues. Garage formwork, garage columns, L2/L3 beams, and deck rebar. Stop Work issued on 11/06 at RTS garage after a near miss, work resumed on 11/15.
- WA #7: OVS Ped Bridge paperclip stairs finishes, handrails adjusted on bridge & stairs, and sand blasting of decorative concrete panels.

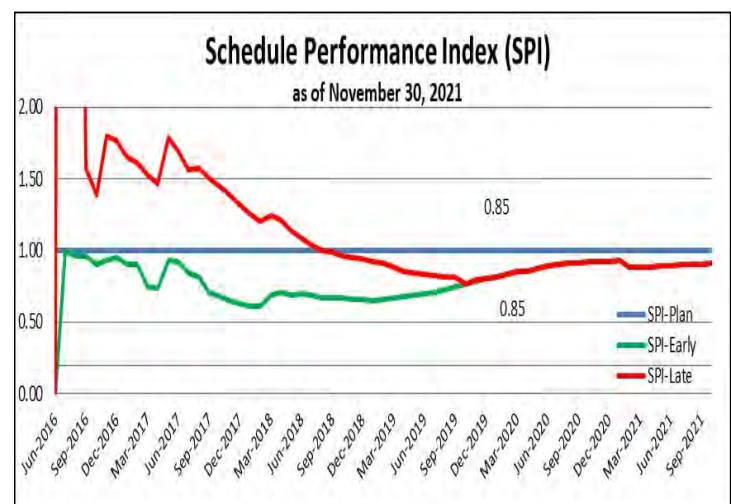
Schedule Summary

The November update forecasts a November 09, 2022, Substantial Completion date, 831 calendar days later than the contractual milestone date of July 31, 2020. Within the E360 contract schedule, the critical path is driven by repairs to the RTS garage. E750 has been granted access to all critical work areas.

Activity Name	Start	Finish	Q4	Q1	Q2	Q3	Q4
E360 Construction	13-Jul-16 A	10-Nov-22					
Base Contract	13-Jul-16 A	10-Nov-22					
Design	13-Jul-16 A	11-May-21 A					
Construction	13-Jul-16 A	10-Nov-22					
General	13-Jul-16 A	09-Nov-22					
Project Milestones	13-Jul-16 A	09-Nov-22					
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)		09-Nov-22*					
WA #1 - Track Slab Guideway	22-May-17 A	08-Dec-20 A					
WA #2 - Aerial Guideway	01-Jun-17 A	20-Nov-20 A					
WA #3 - Ballasted Guideway Block #1	01-May-17 A	29-Sep-20 A					
WA #4 - Overlake Village Station	14-Jul-16 A	23-Dec-21					
WA #5 - Ballasted Guideway Block #2	15-Aug-17 A	23-Jul-21 A					
WA #6 - Overlake Transit Center	01-May-17 A	23-Sep-22					
WA #7 - OVS Pedestrian Bridge	09-Jul-18 A	18-Aug-21 A					
WA #8 - OTC Pedestrian Bridge	10-Aug-20 A	10-Nov-22					

Schedule Performance Index

E360 base plan called for a Substantial Completion date of July 2020. The contract is now projecting a Substantial Completion of Q4 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1. The lagging in the SPI is primarily due to the impasse on the commercial resolution of the deleted RTS Pedestrian Bridge work that is still part of the EV plan. Also, the Substantial Completion has been held back due to the necessity of the partial rebuild of the RTS Garage. Remaining EV work on the contracted work ranges commissioning to miscellaneous punch list. Project team are diligently monitoring completion and Systems have access to this segment of their work.



Link Light Rail East Link Extension

Next Period's Activities

- **WA #1:** Park Place and Sweeper Site punch list
- **WA #2:** Aerial Guideway punch list work
- **WA #3/4:** Punch list work/NCR Repair Work
- **WA #5:** All major construction work complete
- **WA #6:** Punch list items. RTS Garage Repair Work
- **WA #7:** Pedestrian Bridge stair finishes and waterproofing.

Closely Monitored Issues

- Commercial issues for RTS Pedestrian Bridge, City of Redmond CDF Trench Backfill
- Schedule delays for Building Management Systems E340/E360 Interface, Jan & Feb weather events
- RTS Garage Repair
- Milestone 3A and 3B delays
- COVID Impacts

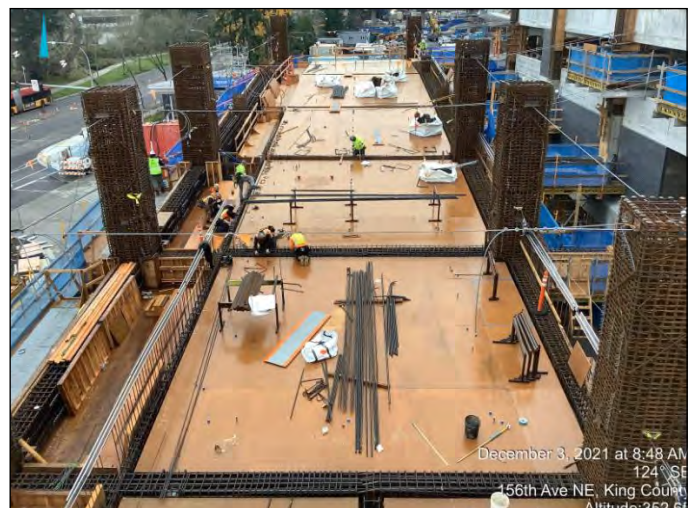
E360 Construction Work Areas



Cost Summary

Present Financial Status	Amount
E360 Contractor— Kiewit-Hoffman	
Original Contract Value	\$225,336,088
Change Order Value	\$9,742,989
Current Contract Value	\$235,079,077
Total Actual Cost (Incurred to Date)	\$214,885,660
Percent Complete	95.30%
Authorized Contingency	\$22,533,609
Contingency Drawdown	\$9,742,989
Contingency Index	2.2

Table Excludes Betterment



WA 6— RTS Garage Rebar for Level 2 to 3 Ramp Beam

Contract E750 – Systems Heavy Civil GC/CM

Current Progress

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

- Continued 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.
- Installed cable, devices, PA devices, conduit, VMS, CCTV, and pulled cable at E130 and E360 civil segment.
- Signal house prep and performed testing at E130 and E360 civil segments. Signal House Delivered at E360 civil segment.
- Installed OCS equipment, wire and performed testing at E130 and E360 civil segment.
- House prep work and pulled cable at E130 and E360 civil segment.

Schedule Summary

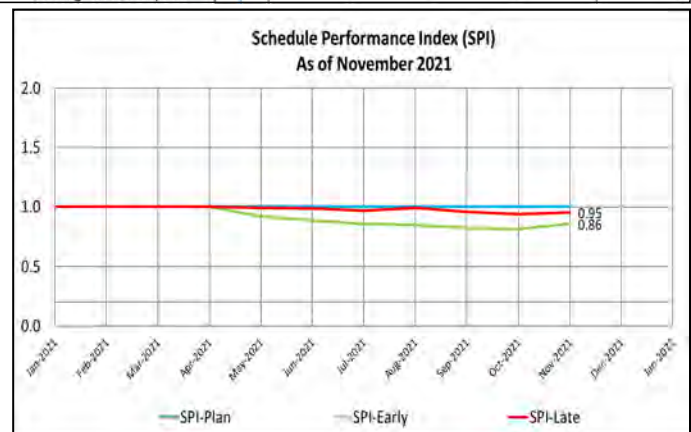
The November update forecasts a March 08, 2023, Substantial Completion date, 283 calendar days later than the contractual milestone date of May 30, 2022. Currently, the critical path is driven by track handover from the E130 contractor. ST and the contractor are actively working to mitigate delays in access to critical work areas.

Activity Name	Start	Finish	Q4	Q1	Q2	Q3	Q4	Q1
E750 Construction	12-Jun-17 A	05-Apr-23						
General	12-Jun-17 A	12-Jun-17 A						
Key Dates	12-Jun-17 A	12-Jun-17 A						
NTP - Notice to Proceed (NTP) Northingate and East Link	12-Jun-17 A							
E750 Project	11-Jul-17 A	05-Apr-23						
E750 Engineering	11-Jul-17 A	07-Jan-23						
E750 Construction	12-Sep-18 A	05-Apr-23						
E750 Construction (General)	15-Mar-19 A	19-Mar-19 A						
E750 Milestones	12-Mar-19 A	08-Mar-23						
E750 Project Milestones	30-Apr-21 A	23-Mar-22						
E750 Access Dates	12-Mar-19 A	26-Apr-22						
E750 Contract Milestones	09-Feb-20 A	08-Mar-23						
MS#06a East Link: Substantial completion of IDS Station Tie-in Work For North Bound (3/9/20)		09-Feb-20 A						
MS#06b East Link: Substantial completion of IDS Station Tie-in Work (CNRFP 27)		22-Mar-20 A						
MS#07 East Link: Limited systems, South Bellevue parking garage (CCTV, Telephone) (08/02/21)		20-Oct-21 A						
MS#08 East Link: Limited systems, Redmond Techtransit center parking garage (CCTV, Tele) (09/30/21)		18-Jul-22*						
MS#09a East Link: Install & Test completion of East Link Systems (03/31/22)		07-Jan-23*						
MS#09B East Link: Substantial completion of East Link Systems (05/30/22)		08-Mar-23*						
E750 SCCCCRM	25-Jan-19 A	16-Feb-22						
E750 OCS	14-Feb-19 A	10-Nov-22						
E750 Traction Power/ Substations	01-Oct-18 A	02-Aug-22						
E750 Signals	12-Sep-18 A	20-Jul-22						
E750 Communications	13-Nov-18 A	28-Feb-22						
E750 Radio	28-Jan-19 A	18-Jul-22						
E750 SCADA	05-May-22	12-May-22						
E750 Trunk Fiber	19-Dec-18 A	21-Jan-22						
E750 Testing and Commissioning	14-Aug-20 A	05-Apr-23						

Schedule Performance Index

Performance is for November 2021. The SPI-Early is 0.86 and SPI-Late is 0.95. The SPI index indicates the contractor is behind early planned work and is starting to somewhat slip on the late plans compared to the baseline plans.

The lagging is due to challenges in expected access to civil segments, especially with E130 and access to the floating bridge as well as the contractor's own delays in procuring long-lead items. The ELE team continues to monitor and is evaluating various mitigation option should the late plans continue to slip future.



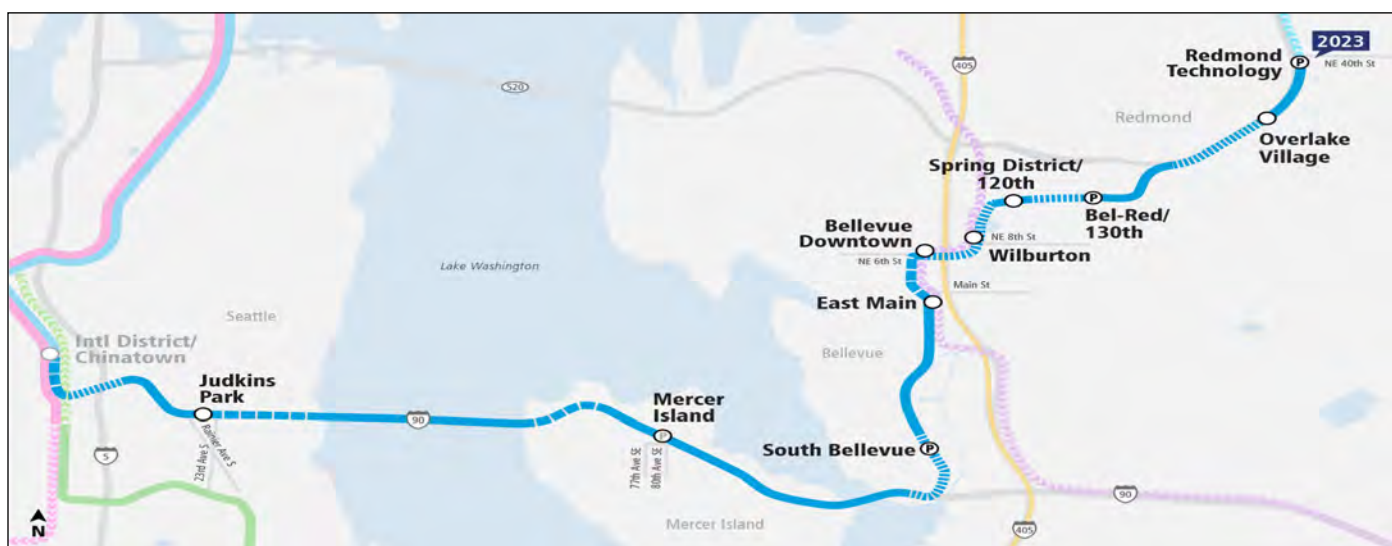
Link Light Rail East Link Extension

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 of feeder cables for energization and local testing.
- Ongoing installation of OCS cabling and pole installation throughout the alignment.

Closely Monitored Issues

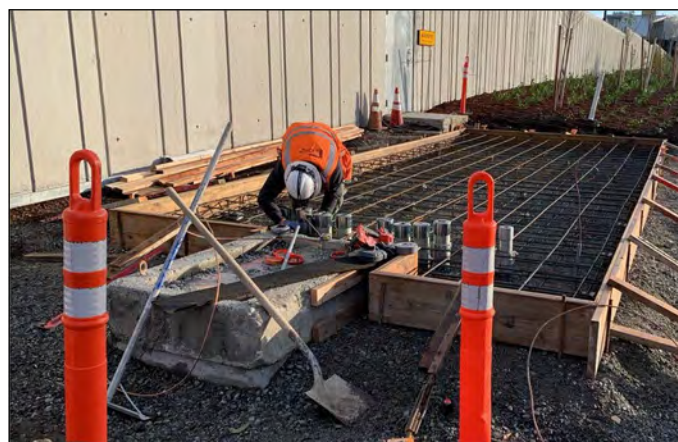
- Monitoring conduit handover from civil to systems contractor; mitigation steps have been taken to survey all conduits and to work closely to rectify the situation.
- Civil contractors are currently reporting some form of delay or partial completion on the System Access Dates.
- Contractor's labor ramp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



Cost Summary

Present Financial Status	Amount
E750 Contractor - Mass Electric Construction Co.	
Original Contract Value	\$255,768,128
Change Order Value	(\$3,111,006)
Current Contract Value	\$252,657,121
Total Actual Cost (Incurred to Date)	\$188,492,164
Percent Complete	80.4%
Authorized Contingency	\$12,788,406
Contingency Drawdown	(\$3,111,006)
Contingency Index	-3.3

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



Signal House preparation at Judkin's Park Station.

Link Light Rail

Everett Link Extension

Project Summary

Scope

Limits The Everett Link Extension consists of 16.3 miles of light rail from Lynnwood Transit Center to Everett Station.

Alignment The project extends Link service north from Lynnwood City Center to the SW Everett Industrial Center, SR 526/ Evergreen Way, and Everett Station.

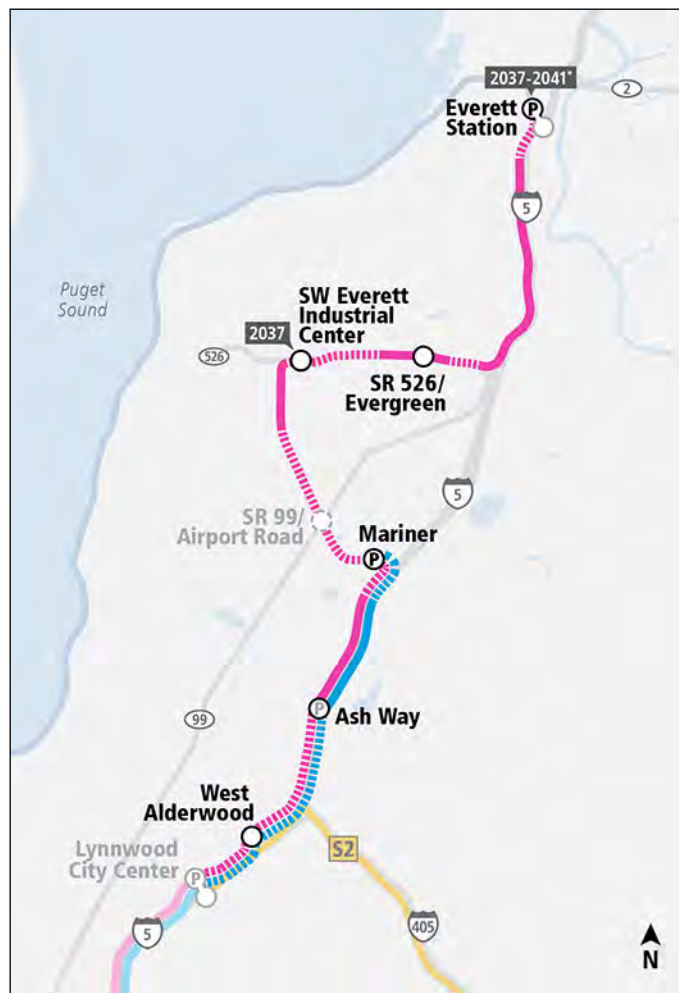
Stations The project includes six new stations at West Alderwood Mall, Ash Way, 128th / Mariner, Southwest Everett Industrial Center, SR 526/ Evergreen and Everett Station. The project also includes one provisional station, at SR 99/Airport Road.

Systems Signals, track electrification, SCADA communication, Operations and Maintenance Facility North (OMF North)

Phase Planning

Budget \$185 Million (Project Development—Phase 1 Alternatives Development)

Schedule Target Dates:
SW Everett Industrial Station, 2037
Everett Station, 2037
Parking at Mariner & Everett, 2046



Map of Everett Link Extension

Key Project Activities

- Initiated NEPA/SEPA early scoping and public comment period from November 1 through December 10.
- Convened the first Elected Leadership Group meeting.
- Continued monthly meetings with FTA.
- Coordinated with partner agencies including City of Lynnwood, City of Everett, Snohomish County, Snohomish County PUD, Community Transit, Puget Sound Regional Council and WSDOT regarding Alternatives Development process.

Link Light Rail Everett Link Extension



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 current Authorized Project Allocation is for completion of preliminary engineering. The figures in the table are shown in millions. In November 2021, \$0.72M was incurred. The major project expenditures were for administration and preliminary engineering.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$34.2	\$3.0	\$2.8	\$34.2	\$0.0
Preliminary Engineering	\$125.5	\$15.8	\$6.3	\$125.5	\$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	\$13.2	\$0.4	\$0.1	\$13.2	\$0.0
Construction	\$1.0	\$0.6	\$0.6	\$1.0	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$11.1	\$0.3	\$0.2	\$11.1	\$0.0
Total	\$185.0	\$20.1	\$10.0	\$185.0	\$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	\$1.0	\$0.6	\$0.6	\$1.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$1.0	\$0.6	\$0.6	\$1.0	\$0.0
60 Row, Land	\$10.0	\$0.3	\$0.2	\$10.0	\$0.0
80 Professional Services	\$157.9	\$19.2	\$9.2	\$157.9	\$0.0
90 Unallocated Contingency	\$16.1	\$0.0	\$0.0	\$16.1	\$0.0
Total (10 - 90)	\$185.0	\$20.1	\$10.0	\$185.0	\$0.0

Risk Management

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

The most recent Quarterly Risk Review Workshop was held in Sept 2021. The following are the top project wide risks:

- ST3 estimate did not account for all potential capital component and programming needs.
- Unknown engineering challenges over lengthy and varied geography.
- Unknown ROW needs at current level of planning/design.
- Site selection for OMF North and consensus with partners may be challenging.

Project Schedule

The Board of Directors announced their realignment decision in August. A target date for the extension to SW Everett Industrial Station has been set for 2037. The extension to Everett Station has a target date of 2037. Parking at Mariner and Everett has a target date of 2046. ST is currently making schedule adjustments in accordance with this direction, a schedule graphic will be provided in a future update.

Community Engagement

- Launched the early scoping online site, open November 1 through December 10, in English, Korean, Russian and Spanish.
- Held two early scoping public webinars and one early scoping agency webinar.
- For early scoping, sent out information via mail, email and social media to the general public and community and agency partners.
- Continued coordination with partner agencies including City of Lynnwood, City of Everett, Snohomish County and Community Transit regarding community engagement.

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 planned and actual FTE average is expected to continue thru the end of 2021 in accordance with the consultant schedule extension and ST realignment decisions.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	18.5	9.5	(9.0)
Consultants	34.0	16.7	(17.3)
TOTAL	52.5	26.2	(26.3)
* 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

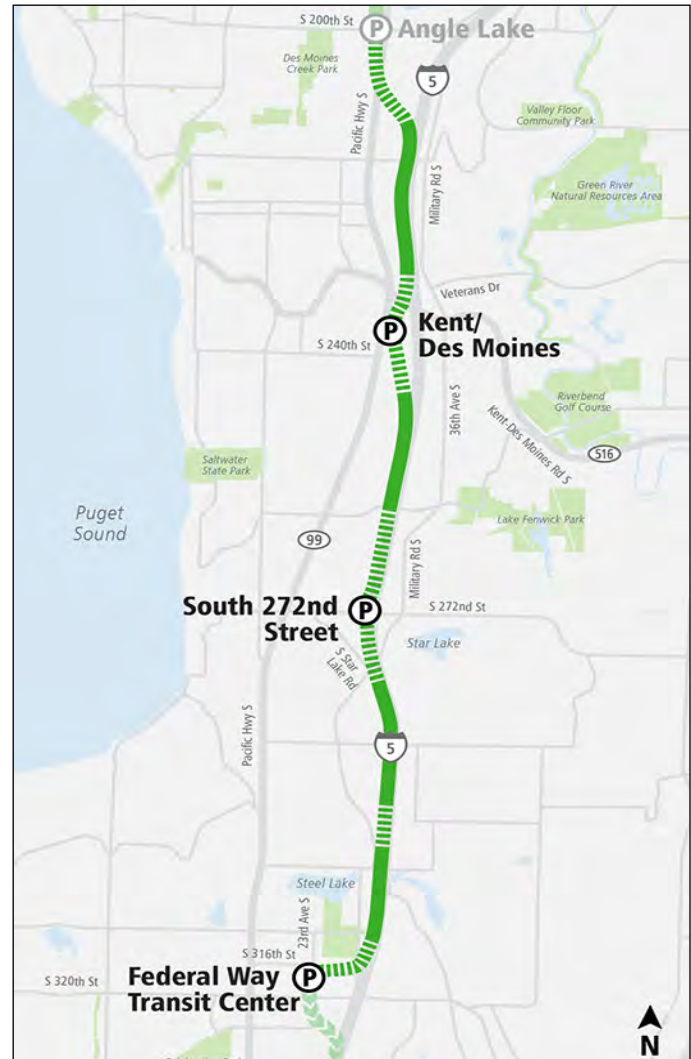
Board Action	Description	Date
	<i>There were no board actions in November 2021</i>	

Link Light Rail Federal Way Link Extension

Project Summary

Scope

Limits	The Federal Way Link Extension (FWLE) 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	Station and garages at Kent/Des Moines, South 272nd Star Lake Park-and-Ride and the Federal Way Transit Center (FWTC)
Systems	Signals, traction power, and communications (SCADA)
Phase	Final Design/Construction
Budget	\$2.451 Billion (ST Baseline Sep 2018)
Schedule	Revenue Service: December 2024



Map of Federal Way Link Extension

Key Project Activities

- F200 progress detail highlights are reflected on last two pages of FWLE section.
- Sound Transit and the Contractor continue working on potential modifications to environmental permits to allow construction for the solution to the liquefaction area at Structure C.
- TCAL amendment for Structure C Redesign was completed.
- Advanced Utility Relocation work by others is anticipated to be completed by end of 2021.
- Traffic Mitigation Final Design contract was executed and NTP was issued.
- Project team continued coordinating utility relocations that are necessary to avoid conflicts with Kiewit's drill shaft work.
- Continued project site wide safety audit.

Link Light Rail Federal Way Link Extension



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 \$30M was incurred of which \$0.3M was for Right-of-Way; \$2.4M for Construction Services; and \$26.3M for Construction phase comprised mainly of \$25.9M for F200 Design Build construction contract and \$0.4M for Utility Relocation by Others. 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	\$36.3	\$36.5	\$96.5	\$0.0
Preliminary Engineering	\$46.5	\$49.0	\$45.5	\$45.1	\$49.0	\$0.0
Final Design	\$3.1	\$3.1	\$2.6	\$1.1	\$3.1	\$0.0
Construction Services	\$107.0	\$107.0	\$97.2	\$48.3	\$107.0	\$0.0
3rd Party Agreements	\$27.7	\$27.7	\$24.9	\$12.9	\$27.7	\$0.0
Construction	\$1,831.9	\$1,829.4	\$1,404.3	\$604.3	\$1,829.4	\$0.0
ROW	\$338.8	\$338.8	\$209.9	\$209.0	\$338.8	\$0.0
Total	\$2,451.5	\$2,451.5	\$1,820.7	\$957.1	\$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	\$395.3	\$149.2	\$513.4	(\$62.4)
20 Stations	\$318.9	\$297.7	\$296.5	\$101.0	\$333.7	(\$36.0)
30 Support Facilities	\$5.3	\$11.8	\$11.5	\$4.4	\$5.1	\$6.7
40 Sitework & Special Conditions	\$558.4	\$489.5	\$469.9	\$205.1	\$649.0	(\$57.5)
50 Systems	\$153.8	\$170.4	\$117.2	\$43.8	\$150.9	\$19.5
Construction Subtotal (10 - 50)	\$1,559.4	\$1,420.4	\$1,290.4	\$503.5	\$1,652.0	(\$129.6)
60 Row, Land	\$341.6	\$338.8	\$209.9	\$209.0	\$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	\$320.4	\$244.6	\$294.1	\$120.6
90 Unallocated Contingency	\$178.1	\$176.3	\$0.0	\$0.0	\$164.9	\$9.0
Total (10 - 90)	\$2,451.5	\$2,451.5	\$1,820.7	\$957.1	\$2,451.5	\$0.0

Note: The tables above represent the Board-authorized FWLE project budget. Vehicles, P65 contingency, and finance charges included in the FTA FFGA budget of \$3.1B are not shown.

Contingency Management

The FWLE project budget was baselined in September 2018 with a total contingency of \$549.9M. The current contingency balance is \$418M.

Design Allowance (DA) has been used and is 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 reduced by \$0.5M due to a few F200 executed change orders and Network Switches procurement.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. During this period the UAC reduced by \$0.1M to cover a shortfall to the Network Switches WBS.

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%	\$253.4	17.0%
Unallocated Contingency	\$178.1	7.3%	\$164.9	11.0%
Total:	\$549.9	22.4%	\$418.3	28.0%

Contingency by Type

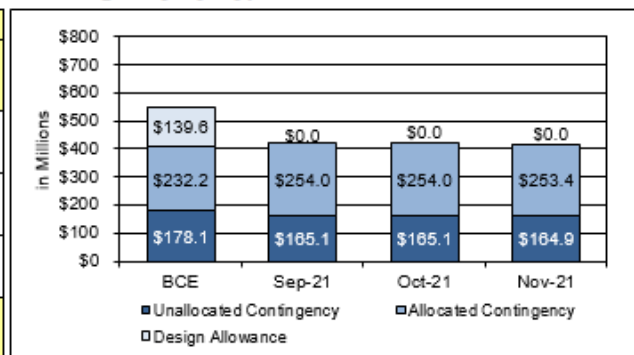
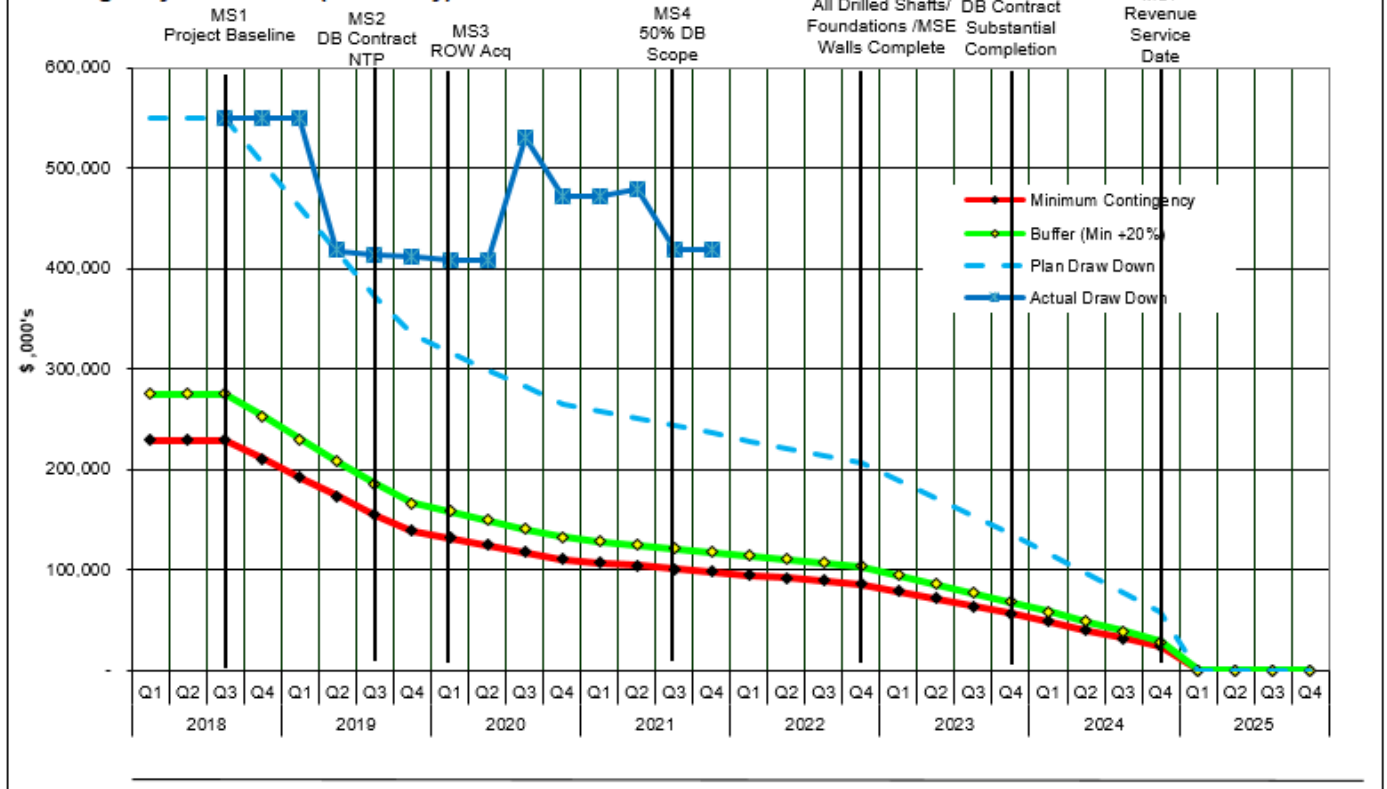


Table figures are shown in millions.

Contingency Drawdown (Quarterly)



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:

- Final commissioning overlap for DRLE, LLE, and FWLE may constrain resources and result in delays to Final Acceptance.
- A liquefaction zone identified at Structure C and the identified design solution could potentially result in additional cost and schedule impacts.
- Several ST projects will be competing for resources to oversee pre-revenue testing, operator training, and safety certification potentially delaying revenue service.
- As a result of limited resource availability (L&I inspectors) to achieve Gold Seal certification, certification may be delayed, impacting RSD.
- PSE substation damage from a storm event is hindering Kiewit outage requests that could impact cost and schedule.
- Design and construction change requests are not implemented in a timely manner, causing cost and schedule impacts, and/or are implemented in a manner that deviates from Operational requirements and reliability standards.
- Fabrication and delivery of TPSS units is pushed out impacting construction schedule.
- Items may be needed at the end of construction above current expectations and scope, impacting construction progress.
- Operational deficiencies may arise after Revenue Service.
- PSE easements may cause delays of utility work.



WA 3.8 FWTC Storm Sewer Excavation



WA 2.4 SL Garage Waterproofing for Elevator Foundations

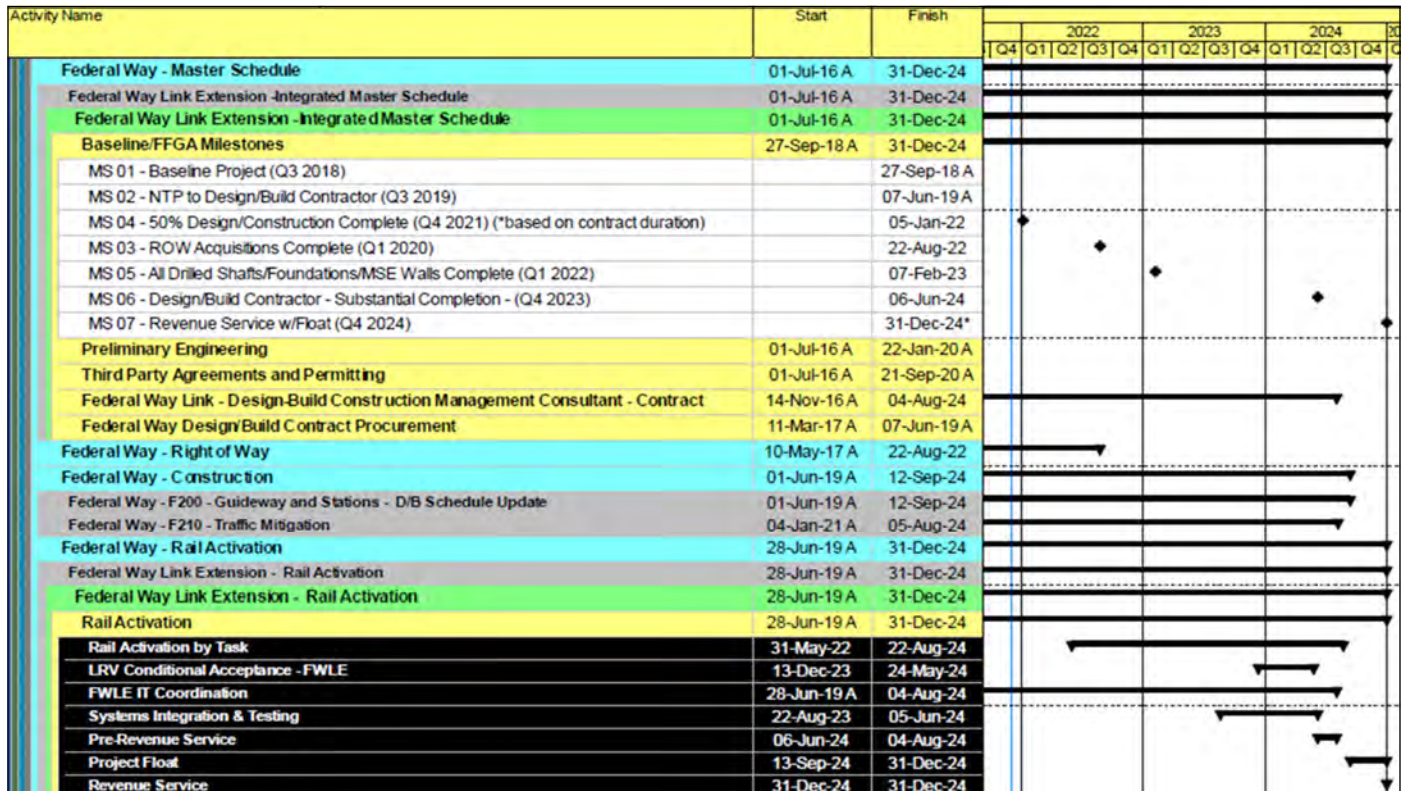
Link Light Rail Federal Way Link Extension



Project Schedule

Weighted percent complete of the major construction contracts is calculated at 43.7%

The project schedule presented below is currently under review. Right-of-Way acquisitions are nearly complete. LNTTP was issued on Jun. 7, 2019. The baseline schedule submittal was approved in January 2020. Construction NTP was issued in early May 2020. FWLE Special Provision indicated that the EOL facility is needed one year before the opening of the FWTC Station; this is not a Contract Milestone but is currently impacting the F200 contract. The schedule impact is due to easement FL-368 and lack of access. Access to FL-668 is anticipated in January 2022. A solution to the EOL facility is currently under discussion with key stakeholders. Revenue Service remains on schedule for Q4 2024.

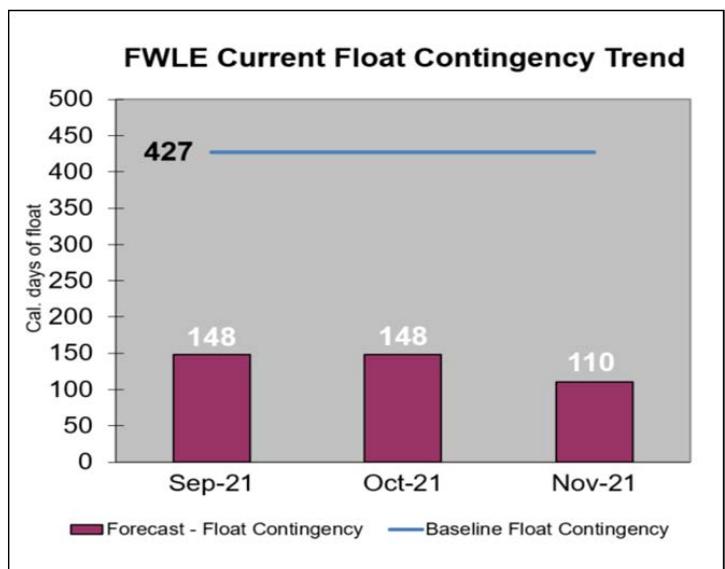


Project Float

Federal Way Link Extension was baselined with 427 days of project float. Currently the project is reporting 110 calendar days of project float remaining between Pre-Revenue Service and Revenue Service in December 2024.

Current schedule pressure from EOL facility. FWLE Special Provision indicated that the End Of Line (EOL) facility is needed one year before the opening of the FWTC Station; this is not a Contract Milestone. The current schedule under review is showing a 38 day delay to the EOL turnover date. A time impact analysis will be conducted to verify the delay.

A solution to the EOL facility is currently under discussion with key stakeholders. The schedule is being monitored closely for any further schedule delays or impacts.



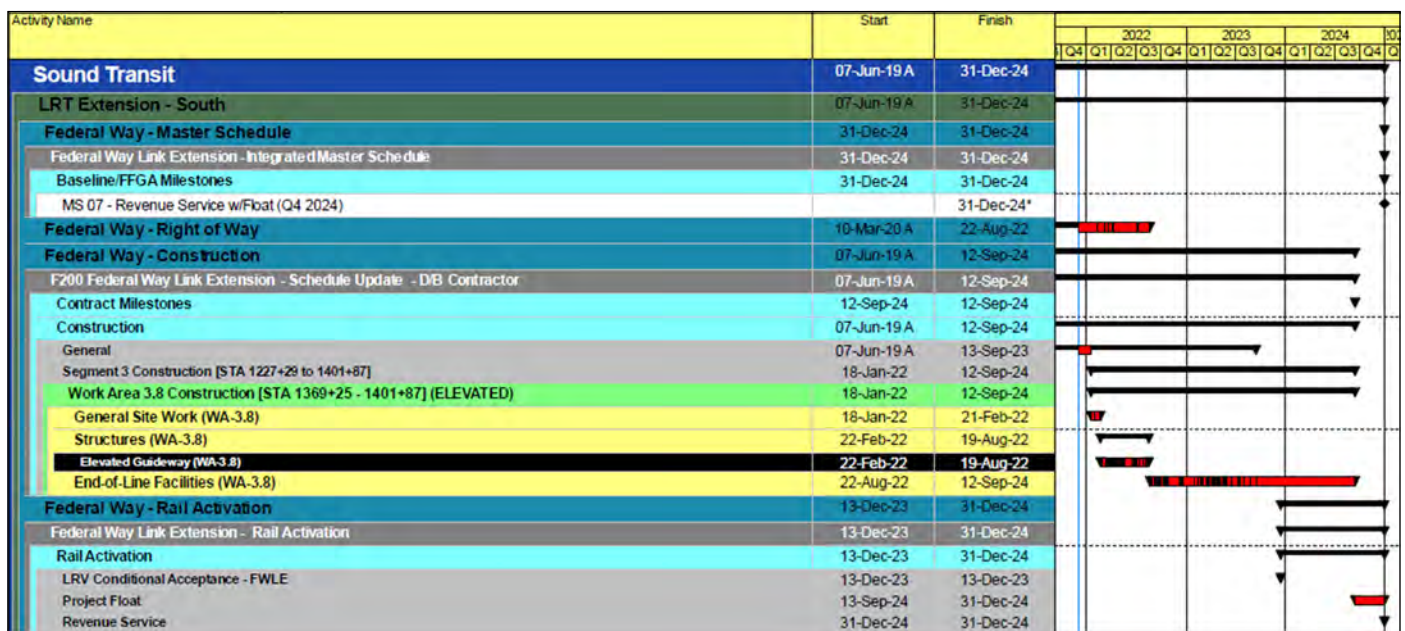
Link Light Rail Federal Way Link Extension



Critical Path Analysis

The critical path to Revenue Service commences with design, structural procurement, and steel erection at FWTC station. The change order for FWTC redesign has been incorporated in the schedule and was approved by ST Board in April. Negotiations were completed and signed by both parties in July. Kiewit is showing that F200 Milestone #3 Final Acceptance has changed from Aug. 5, 2024, to Sept. 12, 2024. This change is due to the availability of easement FL-368 and EOL facility one year special provision.

The near activities closest to the critical path include Structure A, SR 99 Long-Span, and SR 509/SR Overpass work. KDM station concrete also remains near-critical due to limited crew availability from the contractor and is seeing delays due to procurement and production issues. We will continue to work with Kiewit regarding the addition of more detail in the schedule. Also, please note that the F210 Traffic Mitigation contract has been incorporated and is expected to also be completed in August 2024.



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
259	353	345	313	441	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 Engagement

- Continued our Search Engine Optimization program with several impacted businesses. This led to an average 44% increase in direction requests to these businesses, which is a key indicator of foot traffic.
- Began developing the community engagement plan for Mansion Hill's covenants removal, including developing an event plan for a public hearing, and neighborhood communications.
- Provided public communication, including construction alerts and flyers for closing the Federal Way Park and Ride west entrance.
- Provided notifications to numerous residents along the alignment of upcoming night work and work hour variances.
- The City of SeaTac used trees from a tree giveaway at a volunteer tree planting event.



Sound Transit Conducting Tree Giveaways

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 13.1 below the staffing plan for this period. DBPM Services is over plan slightly as they address Design-Build contractor activities for change management, design and major construction oversight that involves drill shafts, demo, utility relocations, garage work, station work and various civil site work throughout the alignment. ST staffing is trending approximately 14.7 under plan, however there are a few vacancies in the project that are in process of being filled.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	43.9	29.2	14.7
Consultants	57.3	58.9	(1.6)
TOTAL	101.2	88.2	13.1
<i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.</i>			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Construction Safety

Data/ Measure	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	4	4
Days Away From Work Cases	0	1	1
Total Days Away From Work	0	2	2
First Aid Cases	2	9	12
Reported Near Mishaps	0	4	6
Average Number of Employees on Worksite	489	-	-
Total # of Hours (GC & Subs)	53,799	523,047	743,979
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	0.00	1.53	1.08
Lost Time Injury (LTI) Rate	0.00	0.38	0.27
Recordable National Average	2.8		
LTI National Average	1.10		
Recordable WA State Average	5.70		
LTI WA State Average	2.00		

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.

F200 Design Build Contract

Current Progress

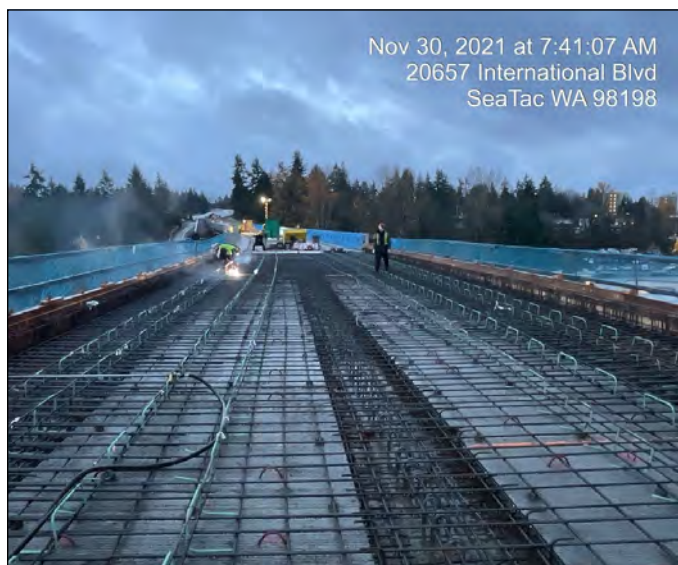
Status at the close of November 2021, the F200 Design-Build (DB) Contractor, Kiewit, established and conducted Design Task Force meetings, completed 39 of 46 design packages and 14 of 17 final specification packages. A review of the baseline schedule for design delivery identified eight late items: six design packages and two specification packages. Significant construction progress occurred on: Segment 1 & 3 Guideway, SR99 Bridge, KDM Station and Garage construction, Star Lake Station & Garage foundations, and FWTC & EOL Facility.

Design:

- During the month, 12 RFIs, 64 Shop drawings, and 41 FDC/NDCs were received.
- Review completed and returned: 90/100% CW.08 Fire Protection, 60% S2.02b Structure C Rigid Pier, 60% Structure C Abutment, 90/100% CW.02 Systems Designs, and IFC CW.07 IFC Non-station Landscaping packages.
- Structure C soil liquefaction task force meetings were ongoing: GIR resubmittal was rejected.
- Sidings Track: Project Requirements (PR) modified by ST; DB designing to latest PRs.

Construction:

- Quality: NTP to date = 40 NCRs (project total), 18 open at the end of November.
- Guideway structures % completeness (all Segments): Drilled shafts = 87%; Columns = 68%; Caps and Straddles = 65%; Girder erection = 35%; and Decks = 19%. Extensive superstructure (deck and diaphragms) construction in work areas 1.1, 1.3, 2.1, and 3.8. Set girders in WA 2.1 (night work). Completed all shafts at Structure E.
- Extensive noise wall, MSE, and CIP wall construction in work areas 1.2 2.2 and 3.3.
- SR99 Bridge effort included: fascia walls, pier caps, and shotcrete walls.
- KDM Garage: completed L3 deck pours and started L4 decks and vertical elements, electrical and plumbing rough in.
- Midway landfill: embank above liner, created girder access. Significant progress on MSE and Noise Walls.



WA1.1 A14 Deck Rebar Installation



WA3.8 Guideway Deck Reinforcement at Span G20L

Link Light Rail Federal Way Link Extension



Schedule Summary

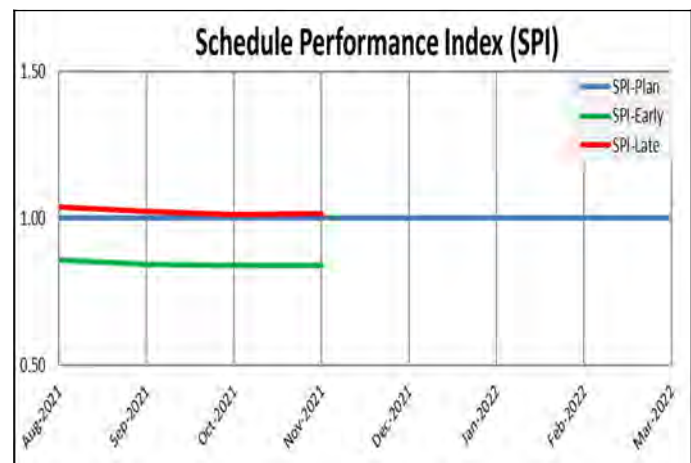
The progress schedule for November 2021 is currently under review. Construction NTP was issued in May 2020. The availability of easement FL-368 and EOL facility one year special provision this milestone has changed from Aug. 5, 2024, to Sept. 12, 2024. This change has not been accepted and is under discussion with key stakeholders. ST will continue to work with Kiewit regarding ongoing schedule impacts and adding additional detail.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	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	12-Sep-24													
Contract Milestones	07-Jun-19 A	12-Sep-24													
Limited Notice to Proceed	07-Jun-19 A														
Contractual Notice to Proceed	28-Feb-20 A														
Notice to Proceed	04-May-20 A														
Issuance of Full Notice to Proceed (REC-01802, 07-Dec-2020)	07-Dec-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)		25-Feb-22*													
MS 2 - Civil Work in WSDOT ROW from Start of FWLE to S 208th Street (VA-1) (01-Nov-22)		01-Nov-22*													
MS 3 - LRV Early Storage (2,000 feet of Track) (01-Jun-23)		31-May-23*													
MS 4 - Work in WSDOT ROW from I-5 (Sta. L 2260+00) to S 272nd Street (VA-3) (01-Nov-23)		05-Oct-23*													
Substantial Completion		05-Jun-24													
60-Day Pre-Revenue Operations	06-Jun-24	04-Aug-24													
30-Day Sound Transit-Controlled Float	05-Aug-24	05-Aug-24													
MS 5 - Acceptance of All Work (05-Aug-24)		12-Sep-24													
Design	07-Jun-19 A	30-Jun-23													
Design Milestones	07-Jun-19 A	30-Jun-23													
Corridor Wide	07-Jun-19 A	18-Apr-22													
Design Packages - Kent Des Moines Segment 1	07-Jun-19 A	15-Jul-21 A													
Design Packages - Star Lake Segment 2	07-Jun-19 A	27-Jun-22													
Design Packages - Federal Way Transit Segment 3	07-Jun-19 A	02-Feb-22													
Construction	01-Jun-19 A	12-Sep-24													
General	01-Jun-19 A	05-Jun-24													
Segment 1 Construction [STA 990+10 to 1112+99]	28-Jun-19 A	15-Apr-24													
Segment 2 Construction [STA 1112+99 to 1227+29]	28-Jun-19 A	05-Jun-24													
Segment 3 Construction [STA 1227+29 to 1401+87]	28-Jun-19 A	12-Sep-24													
Commissioning	25-Jan-22	12-Dec-23													
Provisional Sums	01-Dec-19 A	08-Feb-24													
Change Orders	01-Jul-19 A	03-Aug-24													

Schedule Performance Index

For the November period, the Early SPI is 0.84 and Late SPI is 1.02 (previously: 0.84 and 1.01 respectively). November cumulative actuals were in between the Cumulative Early and Late date planned value. Kiewit performance on monthly basis is in between early and late revised planned value.

Kiewit continues to remain within acceptable performance tolerances for cumulative early and late curves.



Next Period's Activities

Design:

- Continue effort on FDC/NDC, RFIs, product data submittals and shop drawings; Systems to increase.
- Return IFC S3.14a Mark Twain Elementary Landscaping, 60 Pct S2.02B Structure C Rigid Piers
- FWTC design progression: FWTC Garage Prelim Design Review, IFC S3.15B FWTC MOT, IFC S3.15B FWTC MOT.

Construction:

- Return WSDOT Handover Staging Plan - Milestone 1
- Guideway substructure and superstructure construction continues (all segments). Extensive superstructure (deck and diaphragms) construction in segment 1 and 3.
- SR99 Bridge: start pier 1 shotcrete wall, and finish pier 3 wall fascia.
- KDM Garage: L4 decks, electrical and plumbing rough in continued.
- KDM Station: hang plaza level steel.
- Midway landfill: continue effort on noise wall construction and start L1135MSE wall coping.
- Star Lake: MSE walls construction and backfill. Install footings at garage and station. Starting on walls at garage.

Closely Monitored Issues (F200)

- Load flow analysis (LFA): Flaws, technical issues, and ambiguous contract terms plagued initial LFA studies resulting in approval delay. A technical resolution meeting the ST standard was reached. An additional TPSS will be added via CO to correspond to the pre-bid configuration and study.
- Structure C soil liquefaction was identified requiring an updated structure design. A technical resolution meeting the ST standard was reached. The contractor submitted a differing site condition claim which is currently under ST review.
- Sidings Track: original Project Requirements did not meet the needs of Operations. Operation needs were confirmed, and redesign is being finalized.
- Test & Commissioning: a delay in testing & commissioning plan approval was identified as project delivery risk. A coordinated effort between ST and DB was tasked to prepare and submit updated plan.
- Blocked drainage pipe in I-5; the DB likely damaged the median drainage pipe near Midway Landfill. Expected resolution to be submitted for SPU/WSDOT/ST review this month.

Cost Summary

Present Financial Status	Amount
F200 Contractor - Kiewit Infrastructure West Co	
Original Contract Value	\$1,285,200,000
Change Order Value	\$142,785,169
Current Contract Value	\$1,427,985,169
Total Actual Cost (Incurred to Date)	\$589,505,135
Percent Complete	43.7%
Authorized Contingency + Add'l Ctg	\$248,297,519
Contingency Drawdown	\$142,785,169
Contingency Index	0.76



WA3.3 Span 29 30 Erected Overnight

Link Light Rail

Hilltop Tacoma Link Extension

Project Summary

Scope

Limits City of Tacoma

Alignment The Hilltop Tacoma Link Extension (HTLE) 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 (MLK).

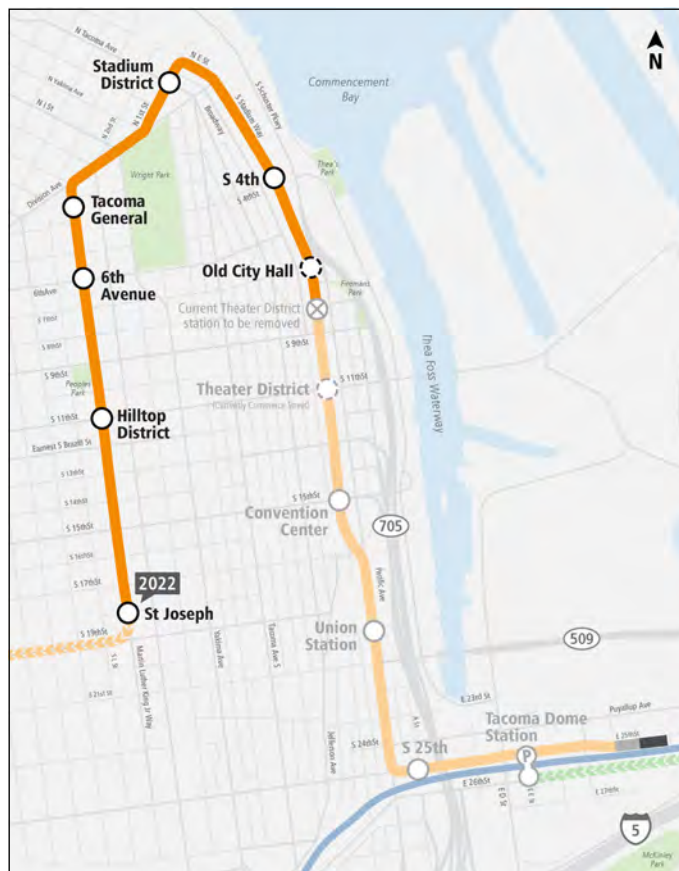
Stations Old City Hall, S. 4th, Stadium District, Tacoma General, 6th Avenue, Hilltop District, and St. Joseph.

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

Phase Construction

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

Schedule Revenue Service: May—September 2022



Map of Hilltop Tacoma Link Extension.

Key Project Activities

Final Design: Design consultant continued design services during construction.

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

- **Heading 1:** Performed roadway striping on Commerce between S. 7th and I-705.
- **Heading 2:** Continued underground signalization and OCS wire installation along Division Ave.
- **Heading 3:** Continued OCS wire runs on MLK. Continued station platform, curb, gutter and ADA ramps on MLK.
- **OMF: Yard:** Completed installation of fencing and gates. **Interior:** Continued testing and commissioning.

Closely Monitored Issues

- Staff continue to monitor supply chain interruptions for material availability as they affect LRV manufacturing schedule.
- Staff continue to assess and quantify schedule impacts to revenue service date and refine project estimate at completion cost in advance of January 2022 Quantitative Risk Assessment.

Link Light Rail Hilltop Tacoma Link Extension



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 \$9.0M was incurred. The majority of the expenditures were incurred in the Vehicles phase for the Vehicle procurement contract (\$6.7M) and Construction phase for T100 construction contract and startup activities (\$1.5M).

Cost Summary by Phase

Project Phase	Baseline Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$21.7	\$18.4	\$18.3	\$21.7	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$14.1	\$13.7	\$13.6	\$14.1	\$0.0
Construction Services	\$12.4	\$11.5	\$10.9	\$12.4	\$0.0
Third Party Agreements	\$1.5	\$1.3	\$1.0	\$1.5	\$0.0
Construction	\$162.0	\$139.3	\$131.6	\$162.0	\$0.0
Vehicles	\$33.4	\$31.9	\$18.4	\$33.4	\$0.0
ROW	\$2.2	\$2.2	\$1.9	\$2.2	\$0.0
Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$252.7	\$223.8	\$201.3	\$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	\$26.7	\$25.2	\$31.0	\$0.0
20 Stations	\$3.5	\$3.0	\$2.8	\$3.5	\$0.0
30 Support Facilities	\$41.2	\$35.4	\$33.4	\$41.2	\$0.0
40 Sitework & Special Conditions	\$51.7	\$44.6	\$42.1	\$51.8	\$0.1
50 Systems	\$34.6	\$29.7	\$28.1	\$34.6	\$0.0
Construction Subtotal (10 - 50)	\$161.9	\$139.3	\$131.6	\$162.0	-\$0.1
60 Row, Land	\$2.0	\$2.2	\$1.9	\$2.2	\$0.2
70 Vehicles (non-revenue)	\$33.1	\$31.9	\$18.4	\$33.4	\$0.3
80 Professional Services	\$53.8	\$50.4	\$49.4	\$55.2	\$1.4
90 Unallocated Contingency	\$2.0	\$0.0	\$0.0	\$0.0	-\$2.0
Total (10 - 90)	\$252.7	\$223.8	\$201.3	\$252.7	\$0.0

Link Light Rail Hilltop Tacoma Link Extension



Contingency Management

Hilltop Tacoma Link Extension was baselined in 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 \$0, 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 the AC was reduced by approximately \$1.1M due to executed change orders on the T100 contract. The current balance is \$21.5M.

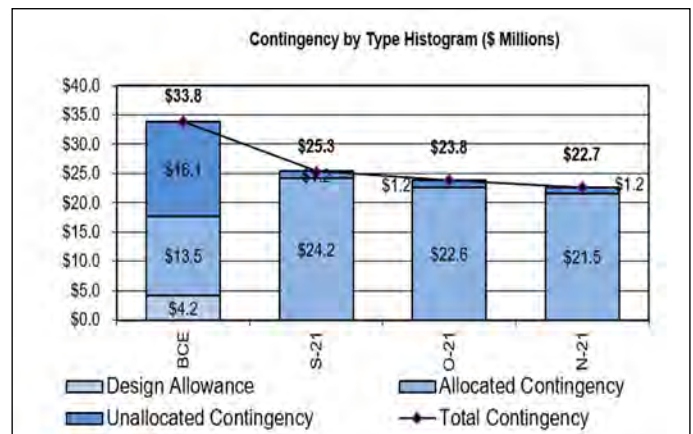
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance of \$1.2M remains unchanged this period.

Contingency Status (Monthly)

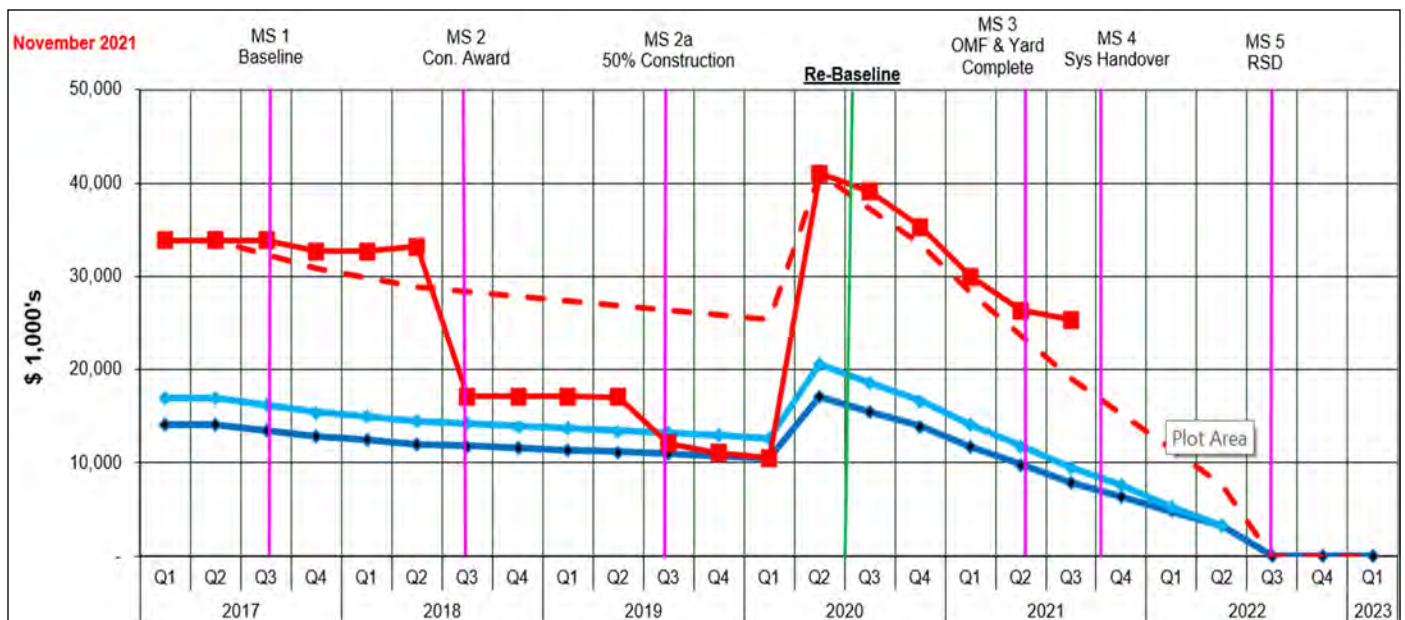
Type	Baseline		Re-Baseline	
	Amount	% of Total	Amount	% of Work
Design Allowance	\$4.2	2.2%	\$0.0	0.0%
Allocated Contingency	\$13.5	6.8%	\$21.5	41.8%
Unallocated Contingency	\$16.1	8.2%	\$1.2	2.3%
Total	\$33.8	17.2%	\$22.7	44.1%

Table figures are shown in millions.

Contingency by Type (\$ Millions)



Contingency Drawdown (Quarterly)



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 last risk workshop was held in May 2021 and the next one will occur in Q1 2022. Below are the top risks from most recent risk register meeting.

- The T100 contractor will submit a cumulative impact claim to ST, which exceeds available budget.
- LRV testing complications after delivery may delay conditional acceptance of the vehicle which is a prerequisite for pre-revenue and revenue service.
- Vehicle Delivery Schedule - Continued delays to vehicle delivery schedule impact timely testing and commissioning of the vehicle and increase risk of fewer vehicles available for pre-revenue and revenue service.
- Lack of detail in T100 construction schedule impedes adequate resource planning for rail activation, safety certification, SIT, and vehicle testing and commissioning.
- Water ponding is occurring more than anticipated and beyond acceptable thresholds due to lowering track slab for ADA crossing re-design.
- ST internal resources, System Integration Testing (SIT), may be constrained if schedule slips and/or does not align with other ST projects needing SMEs and other SIT staff to perform testing.

Link Light Rail Hilltop Tacoma Link Extension



Project Schedule

The master schedule was updated through the end of November 2021. Overall physical percent complete is 89.0%.

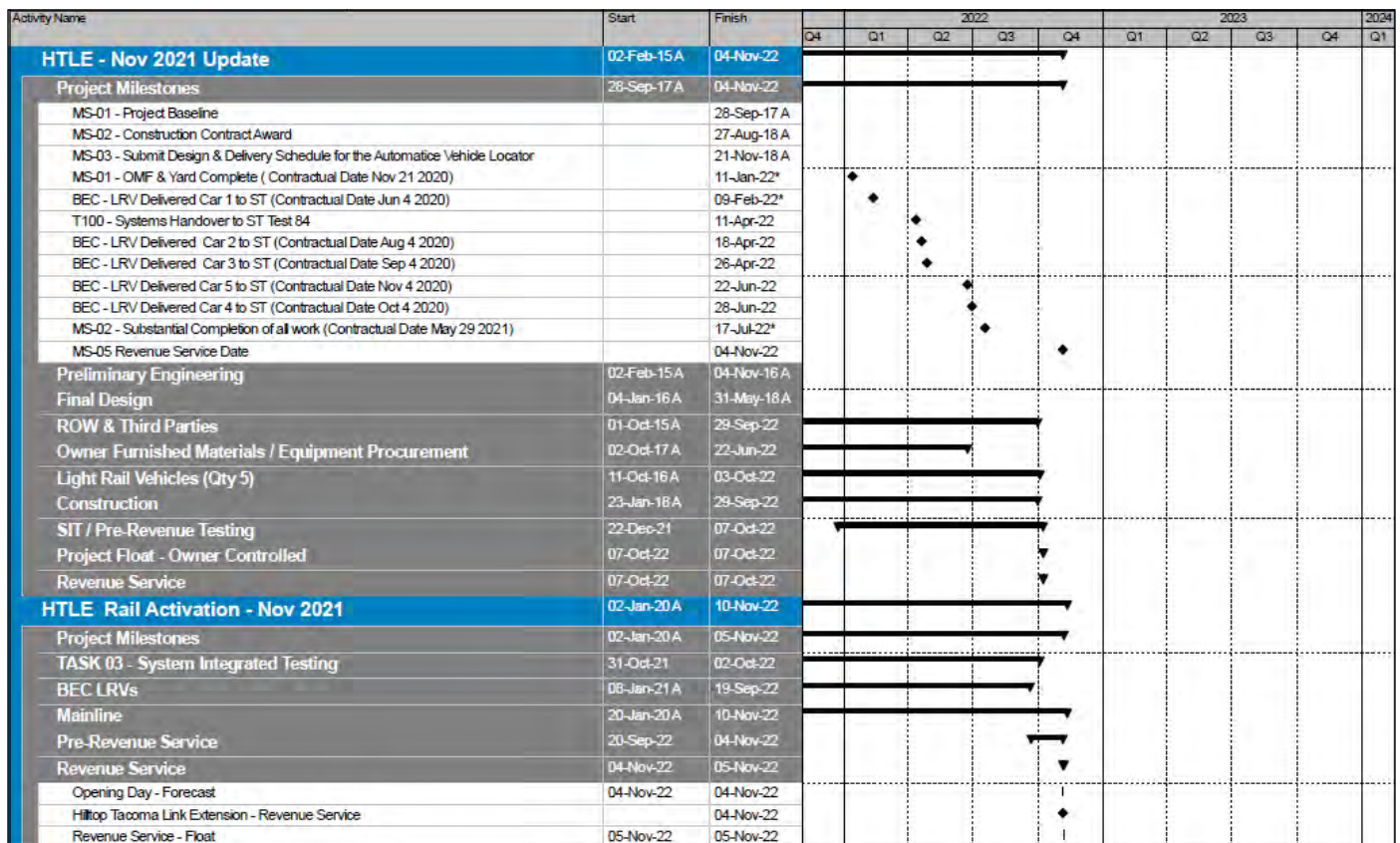
LRV: The delivery of the first car is forecasted in Q1 2022 and the last two cars in Q2 2022. The car builder's schedule estimates two of five cars will be delivered and conditionally accepted to support the pre-revenue service date in Q3 2022.

T100: Project staff continue implementation of mitigations to prevent further delays to revenue service date.

Sound Transit directed the contractor to mitigate further delays by utilizing additional resources. Executive leadership commitments from ST, the contractor and City of Tacoma have resulted in support for extraordinary mitigation measures to recover schedule.

Rail Activation: Various ST departments have provided input into the draft rail activation schedule and it will be updated to incorporate any mitigation measures associated with the T100 and BEC LRV schedules.

Quantitative Risk Analysis (QRA) Review will be held in late January 2022 to help establish a probabilistic revenue service date



Link Light Rail Hilltop Tacoma Link Extension

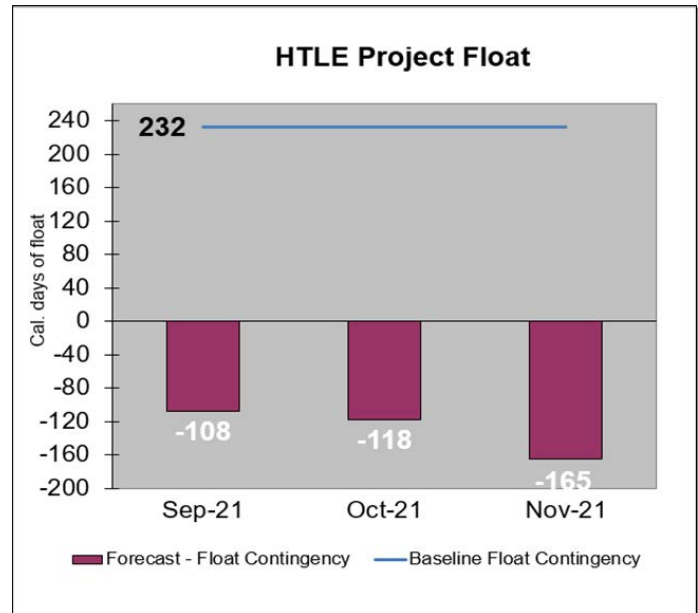
Project Float

Hilltop Tacoma Link Extension baseline schedule included 232 days of project float to support revenue service on May 23, 2022.

The current HTLE master schedule forecasts there is a negative 165 days of project float indicating that the project is approximately six months behind schedule.

Staff continue to assess time impacts related to change orders on the T100 construction contract and anticipate delays to the baseline revenue service date. Mitigations to reduce impact of schedule delays have been implemented with a revenue service date to be determined.

To better monitor schedule contingency, the Project Float Graphic shown in this report represents data from the HTLE master schedule float analysis.



Critical Path Analysis

The analysis for Nov 2021 shows the main critical path for the T100 contract in the OCS Wire Runs Registration; Job Wide ITS testing and Testing and Commissioning, 9th Commerce intersection work in Heading 1 before pre-revenue service begins. LRV deliveries and conditional acceptance are near critical activities which could influence the completion of pre-revenue service tests. Current forecast completion is Q3 2022 which represents a delay to the May 2022 revenue service date. ST and the T100 and LRV contractors continue to identify mitigations to address schedule impacts.

Activity Name	Start	Finish	2022					2023
			Q4	Q1	Q2	Q3	Q4	
HTLE - Nov 2021 Update	05-Dec-17 A	04-Nov-22						
Project Milestones	28-Jun-22	04-Nov-22						
BEC - LRV Delivered Car 4 to ST (Contractual Date Oct 4 2020)		28-Jun-22						
MS-05 Revenue Service Date		04-Nov-22						
Light Rail Vehicles (Qty 5)	05-Dec-17 A	03-Oct-22						
HTLE Rail Activation - Nov 2021	29-Jun-22	10-Nov-22						
BEC LRVs	29-Jun-22	19-Sep-22						
TASK 05- Vehicles Commissioning	29-Jun-22	25-Aug-22						
TASK 07- Safety and Security	01-Aug-22	19-Sep-22						
Mainline	05-Nov-22	10-Nov-22						
TASK 00- Transition To Operations - Project Delivery	08-Nov-22	10-Nov-22						
TASK 01- Rail Activation Management	05-Nov-22	05-Nov-22						
Pre Revenue Service	20-Sep-22	20-Sep-22						
Readiness Review Meeting #2- Prior to Revenue Service	20-Sep-22	20-Sep-22						
Revenue Service	04-Nov-22	04-Nov-22						
Opening Day - Forecast	04-Nov-22	04-Nov-22						

Community Engagement

- Conducted extensive outreach about construction in all three business districts during the holiday moratorium (Thanksgiving to New Year's Day). Called and met with businesses and business associations in person, obtained alternate parking in two church parking lots as mitigation in the Hilltop and Stadium Districts, and sponsored five community events. Wrote a project update as well as an article for the Hilltop Action Journal about construction in the business districts during the holiday moratorium, supporting local businesses during the holidays, and applying for jobs with Tacoma Link.
- Produced and distributed notifications about: curb and gutter work on the west side of MLK Jr. Way from S. 13th St. to S. 16th St.; overhead wire installation on N. 1st St. and Stadium Way; curb and gutter on the north side of Division Avenue; fiber optic wires along the route; and the two-week notice to MultiCare about the Tacoma General Station. Produced and distributed the weekly construction alert about traffic impacts.
- Gave an update on the HTLE project to Downtown on the Go and the Hilltop Business Association. Coordinated with the Old City Hall Renovation project on construction on Commerce St. and with the Tacoma Police Department about the TPSS 4 delivery. Coordinated with businesses on Loyal to the Local videos and managed the Hilltop Tacoma Link's Facebook group page.
- Responded to questions and complaints about a car crash in the Stadium curve that damaged school and City property, a damaged vehicle near Jackson Hall, a closed driveway at a Hilltop medical facility, a towed vehicle, and services at a funeral home in Hilltop.

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 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. Consultant FTEs are slightly under plan.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	24.1	13.5	(10.6)
Consultants	15.5	12.9	(2.6)
TOTAL	39.6	26.4	(13.2)
* 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
	None to report this period.	

Construction Safety

Data/ Measure	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	4	12
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	1	5	23
Reported Near Mishaps	0	21	68
Average Number of Employees on Worksite	180	-	-
Total # of Hours (GC & Subs)	6,034	86,592	332,196
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	33.15	9.24	7.22
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
Recordable National Average	2.80		
LTI National Average	1.10		
Recordable WA State Average	5.70		
LTI WA State Average	2.00		

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 Hilltop Tacoma Link Extension



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: Began installation of TPSS #1 equipment installation.
- Heading 2: Began installation of TPSS #2 equipment installation. Completed southern side flatwork and underground traffic signalization at the Division Ave and MLK intersection. Registered wire runs on Division Ave.
- Heading 3: Poured 6th Ave Station platform. Graded for ADA ramps between S. 8th and S. 9th Street. Registered wire runs 9 and 10 on MLK Ave.
- OMF Yard: Finished OMF perimeter fencing and installed gate controllers in yard Started wash facility plumbing.
- OMF Building : Continue testing and commissioning of the OMF.

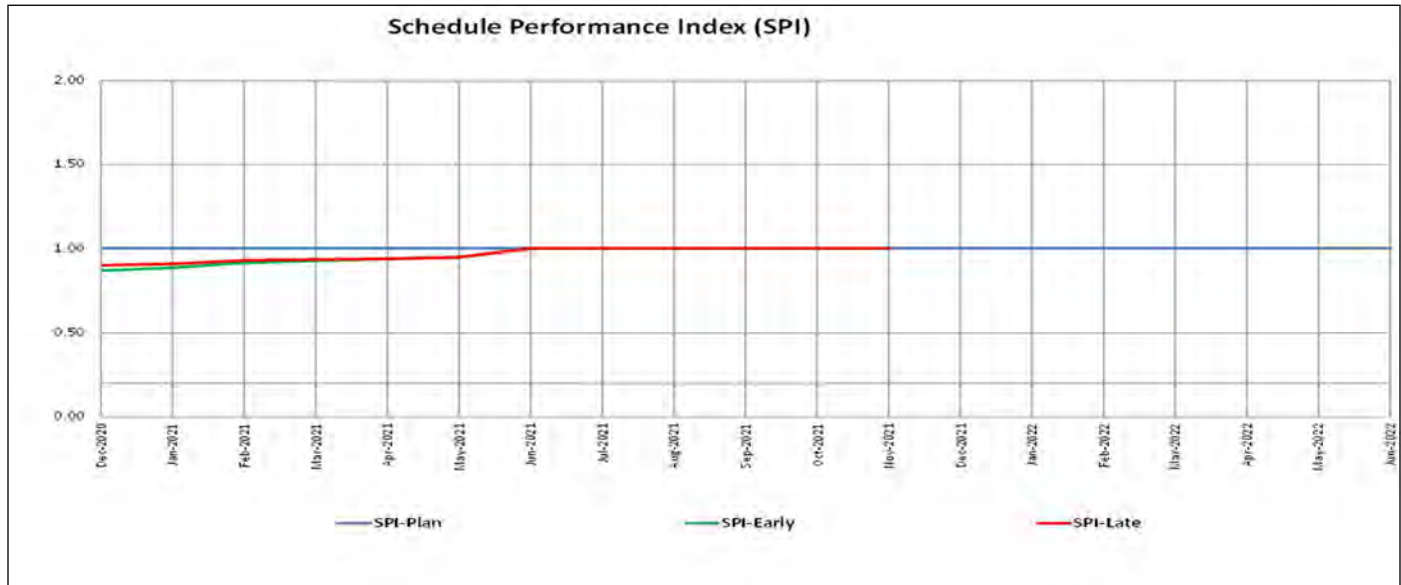
Schedule Summary

The T100 November 2021 monthly schedule submittal is still under review and though the current update does not support a Q1 2022 pre-revenue startup date, it is still being used for planning purposes. ST, the City of Tacoma and Walsh management continue to work collaboratively to identify and implement mitigations to reduce schedule impacts.

Activity Name	Start	Finish	2022					2023
			Q1	Q2	Q3	Q4		Q1
T100 Monthly Update Nov 21 Revision	31-May-18 A	15-Aug-22						
Tacoma Links Baseline Schedule	31-May-18 A	15-Aug-22						
Milestones	29-Jun-18 A	15-Aug-22						
Job Milestones	29-Jun-18 A	15-Aug-22						
Contractual Milestones	21-Nov-18 A	14-Aug-22						
Contr. MILESTONE 3: Submit and Design of and Delivery Schedule for AVL (NTP+90 = 11/25/18)		21-Nov-18 A						
Contr. MILESTONE 1: Substantial Completion of OMF & Yard (NTP+817+56 = 1/16/21)		08-Feb-22*						
Contr. MILESTONE 2: Substantial Completion of All Work (NTP+1005+138 = 10/13/21)		14-Aug-22*						
PreConstruction	31-May-18 A	27-Jul-22						
Heading 1: 7th & Commerce to Stadium Way & Division	15-Oct-18 A	14-Aug-22						
Heading 2: Stadium Way & Division to Division St and MLK	23-Oct-18 A	17-Jun-22						
Heading 3: Division St and MLK to MLK & 19th	15-Oct-18 A	12-Jul-22						
OCS Wire Runs	19-Jul-21 A	07-Aug-22						
Train Signal System	19-Dec-20 A	09-Feb-22						
Job Wide ITS	23-Dec-21	11-May-22						
OMF Facility	29-Aug-18 A	31-Jan-22						
Testing & Commissioning	11-Mar-19 A	13-Aug-22						
Change Orders	07-Jan-19 A	09-Aug-22						
Provisional Sum Time Impacts	01-Feb-19 A	30-Dec-21						
Other Time Impacts	04-Mar-19 A	15-Jul-22						
RFCs	09-Jan-19 A	25-May-22						
Provisional Sums	03-Dec-18 A	18-Apr-22						
Weather Days	04-Feb-19 A	27-Jan-20 A						

Schedule Performance Index

This period the early SPI and late SPI were 1.0, the same as last month. Note: The SPI shown is relative to the project baseline and does not incorporate executed change orders and time extensions. Upon receipt from the Contractor of planned values to completion, ST will incorporate that data into the SPI and report accordingly. Until such time, SPI will remain at 1.0.



Next Period's Activities

- Heading 1: Finish installing TPU duct bank on the west of Commerce.
- Heading 2: Finish registering wire runs on Division; begin installing above ground signalization at I Street and continue flatwork on the northern portion of Division Ave.
- Heading 3: Pour 6th Ave station curbs; install station canopy steel and pour ADA ramps and infills.
- OMF Building: Continue testing and commissioning
- Yard: Complete wash facility plumbing, install OMF gate controller and security screen on fencing.

Closely Monitored Issues

- ST continues to monitor contractor compliance to protocols identified in their COVID-19 safety plan.
- ST continues to refine cost and schedule forecasts ahead of January 2022 risk workshop.
- The contractor added additional systems and flatwork resources in an effort to improve schedule performance.
- 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 feedback from these businesses assisted the project team with developing the robust Commerce Street plan.
- 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.

Link Light Rail Hilltop Tacoma Link Extension

Cost Summary

Present Financial Status	Amount
T100 Contractor— Walsh Construction Company	
Original Contract Value	\$108,295,000
Change Order Value	\$16,435,914
Current Contract Value	\$124,730,914
Total Actual Cost (Incurred to Date)	\$118,188,182
Percent Complete	95%
Authorized Contingency	\$37,114,750
Contingency Drawdown	\$16,435,914
Contingency Index (CI = % Complete/%	2.1



Finishing sidewalk at S. 11th – H3

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

Current Progress

- LRV #1 delivery remains in Feb 2022 but LRV #2 and LRV #3 delivery dates have slipped from March to April 2022. LRV #4 and LRV #5 delivery and ship dates remain in June 2022.
- Finalize FAI inspections and reports.
- Continue to submit testing procedures.
- BEC is drafting technical manuals for maintenance, heavy repair and special equipment for ST review in Jan 2022.

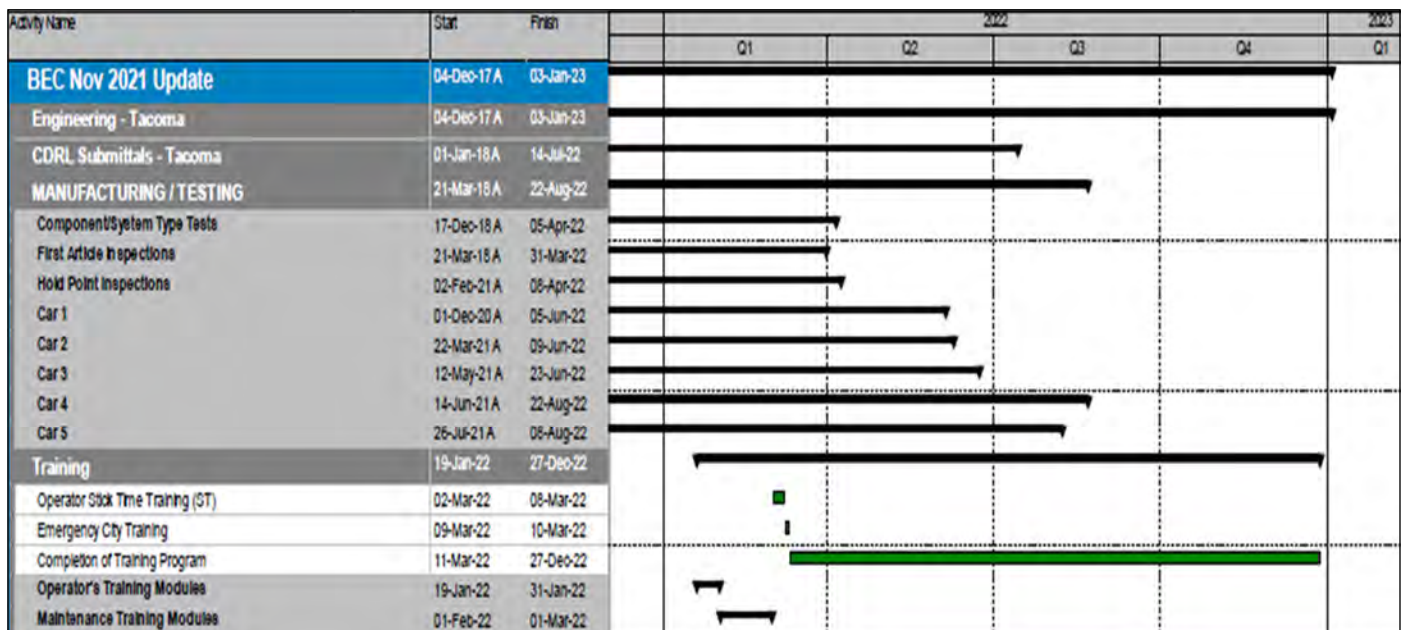
Schedule Summary

Brookville's November 2021 schedule update submittal is represented in this reporting period. Car deliveries have slipped 2 weeks to one month since the last schedule submittal due to materials/component availability issues and resources to help support the final assembly activities.

LRV #1 is arriving at the OMF in Tacoma in February 2022 with LRV #4 and LRV#5 arriving in mid June 2022. The schedule graphic below indicates all vehicles will be conditionally accepted and ready for revenue service in Q3 2022.

FAI Packages and procedures delays due to suppliers are challenged due to late product delivery.

Brookville continues working on long lead time issues materials or components to prevent possible delays to raw material shortages from global impacts of COVID. Recent delays in obtaining the following materials/subcomponents are impacting final assembly and delivery dates of vehicles to Tacoma. These materials/subcomponents include: operator cab partition wall, ceilings panels, couplers, skirts, shrouds, bridge plates and ceiling cove enclosure.



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.

Phase Construction

Budget \$207.6 Million

Schedule Construction Complete: December 2020 for Primary work; Third Party oversight to continue through 2025



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

Major Contracts

Group	Scope	Agreement/Contract Amount
WSDOT	PE	\$ 1,549,003
WSDOT	Final Design	\$ 18,022,756
WSDOT	CM Services	\$ 43,192,664
IMCO	Construction	\$132,409,000
City of Mercer Island	Transportation Mitigation	\$10,050,000

Key Project Activities/Milestones

- **Physical Completion, IMCO Contract** – Granted by WSDOT 20-Sep-21
- **Other Civil 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
 - ♦ Final payment for R8A Construction & CM Services task order received by WSDOT; closeout of Construction Task Orders completed; Final Design task order closeout pending concurrence from WSDOT
- **Third Party Oversight (City of Mercer Island)** – Ongoing obligation through December 2025

Closely Monitored Issues

All WSDOT construction work is substantially complete; monitoring of the following item continues:

- City of Mercer Island's appeal of previous litigation dismissal, Mercer Island Transit Integration Agreement

Link Light Rail

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



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 \$3.6K, for ST staff charges and monthly utility costs (temporary traffic signal on Mercer Island). A Project budget reserve was realized, and \$18.0M de-committed from the Project; 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	\$2.8	\$2.5	\$2.5	\$2.8	\$0.0
Preliminary Engineering	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$0.0
Final Design	\$22.1	\$19.4	\$18.7	\$18.4	\$19.4	\$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	\$183.9	\$187.0	\$177.5	\$183.9	\$0.0
Total	\$225.6	\$207.6	\$209.7	\$199.9	\$207.6	\$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	\$183.9	\$187.0	\$177.5	\$183.9	\$0.0
80 Professional Services	\$26.3	\$23.6	\$22.8	\$22.5	\$23.6	\$0.0
90 Unallocated Contingency	\$18.7	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Total	\$225.6	\$207.6	\$209.7	\$199.9	\$207.6	\$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 Committed Allocated Contingency included WSDOT-controlled construction contingency plus total ST controlled allocated contingencies. Most of the remaining contingency was de-committed from the Project as the majority of work has been completed; current Total Contingency is just over \$725K. Due to this reduction & overall reduction of Project budget, the percent of overall Current Contingency now comprises 9.5% of remaining total project budget.

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%	\$0.6	7.1%
Unallocated Contingency	\$18.7	8.3%	\$0.2	2.3%
Total	\$35.7	15.8%	\$0.7	9.5%

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

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, Federal Way and Downtown Redmond Extensions.
Phase	Manufacturing
Budget	\$740.7 Million (Baseline September 2015, Amended April 2017)
Schedule	Project Completion: Q3 2024



Siemens Series 2 Link light rail vehicle

Key Project Activities

- Cars 287, 283, 281 & 286 were transferred from Operation & Maintenance Facility (OMF) East to OMF Central during November 2021 for mainline testing and prepare for Conditional Accepted/Acceptance (CA).
- Cars 277 & 273 were delivered to OMF East on 11/4/2021 & 11/18/2021 respectively.
- Cars 263 & 266 were CA on 11/10/2021.
- Car 271 was delivered to OMF Central on 11/12/2021.
- Car 201 was CA on 11/23/2021.
- 31 cars in final assembly & carshells in fabrication for up to number 106 at Siemens' Sacramento facilities.



Car 283 transferred from OMF East to OMF Central



Car 273 in receiving inspection at OMF East

Link Light Rail

Light Rail Vehicle Fleet Expansion



Closely Monitored Issues

- OMF Central yard LRV storage capacity continues to be an issue that may affect recovery schedule, preventive maintenance or spares available to support peak service. Siemens' LRVs delivery and ST onsite LRVs transportation between OMF East and OMF Central has been continuously manage & monitor.
- Competing demand for Extension's project simulated services, System Integration Testing and upcoming revenue service preparation reduces the availability of Operation's labor and vehicle maintenance personnel in supporting Series 2 LRV commissioning are continue to be monitored and managed with all stakeholders.
- Manufacturer continue reporting 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.
- Coordination and scheduling of Automatic Train Protection (ATP) retrofit on Series 1 LRVs is more challenging than anticipated.

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 total expenditure incurred to date is approximately \$379.4M to which a majority of the cost is attributed to the vehicles phase of \$363.3M. The current period expenditure is \$19.5M is largely attributed to Conditional Acceptance of LRV. The remaining expenditures were attributed to engineering and inspection and administrative efforts.

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	\$5.8	\$5.6	\$9.6	\$0.0
Construction Services	\$18.0	\$18.0	\$15.1	\$10.7	\$18.0	\$0.0
Vehicles	\$713.1	\$713.1	\$658.5	\$363.3	\$713.1	\$0.0
Total	\$740.7	\$740.7	\$679.4	\$379.6	\$740.7	\$0.0

Cost Summary by SCC

SCC Elements	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 Improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
70 Vehicles	\$705.3	\$705.3	\$669.3	\$369.7	\$705.3	\$0.0
80 Professional Services	\$23.2	\$23.2	\$10.1	\$9.9	\$23.2	\$0.0
90 Contingency	\$12.2	\$12.2	\$0.0	\$0.0	\$12.2	\$0.0
Capital Total (SCC 10 - 90)	\$740.7	\$740.7	\$679.4	\$379.6	\$740.7	\$0.0

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

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 risk register for the third quarter is completed.

The current top risks as listed below based on the last update:

- Competing demand for Extension's project simulated services, SIT and upcoming revenue service preparation reduces the availability of Operation labor and vehicle maintenance personnel in supporting Series 2 LRV commissioning.
- Series 1 LRV ATP retrofit schedule has substantial impact on shipping LRVs #42-100.
- Receiving LRVs at both OMF Central and OMF East create both cost inefficiency (now require two teams in two location to support commissioning activity) as well as increased risk of double handling of LRV as not all testing and commission activities can be performed at OMF East currently.
- COVID-19 remains a fluid situation, monitoring reported disruption to manufacturer'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 \$58.2M 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.

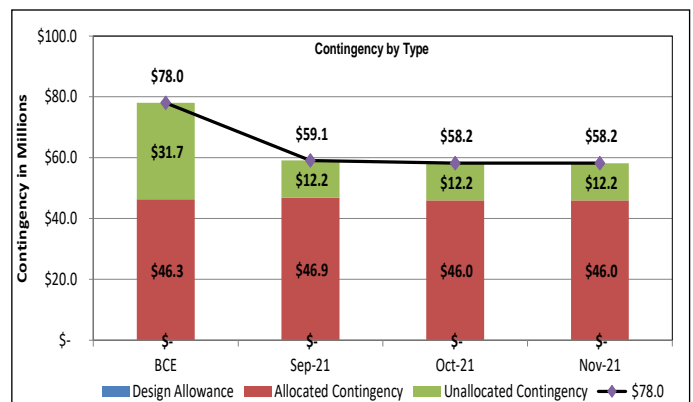
Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline's allocated contingency was \$46.3M. In October AC was unchanged \$46.0M.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC for September remains unchanged at \$12.2M.

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	6.3%	\$ 46.0	12.7%
Unallocated Contingency	\$ 31.7	4.3%	\$ 12.2	3.4%
Total	\$78.0	10.7%	\$ 58.2	16.1%

Contingency by Type



Link Light Rail Light Rail Vehicle Fleet Expansion



Project Schedule

Weighted percent complete of the major construction contracts is calculated at 54.8%

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 2021, all vehicles are expected to be available for Pre-Revenue Service testing at each of the projects identified below. Northgate Link has reduced the number of cars to commence revenue service to 28 cars based on current ridership. All 40 cars for Northgate are expected to be conditionally accepted in December 2021. A summary bar for the ATP retrofit of the Kinkisharyo cars has been added for monitoring. ATP retrofit installation and testing is not expected to complete until late Q3 2023.

Activity Name	Start	Finish																
			2022				2023				2024							
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
ST LRV Fleet Expansion - Siemens Summary by LINK Contract	31-Aug-18 A	19-Aug-24																
Northgate Link - LRV Summary (Car #1 - #40)	31-Aug-18 A	17-Dec-21																
LRV Factory Test - Northgate Summary	31-Aug-18 A	27-Feb-20 A																
LRV Delivery to OMF - Northgate Summary	29-Aug-19 A	26-Feb-21 A																
28 LRV's conditionally accepted	03-Sep-21 A	03-Sep-21 A																
LRV Conditional Acceptance - Northgate Summary	30-Mar-21 A	17-Dec-21																
East Link - LRV Summary (Car #41-#86)	28-Feb-20 A	20-Jan-23																
LRV Factory Test - East Link Summary	28-Feb-20 A	11-Jun-21 A																
LRV Delivery to OMF - East Link Summary	24-May-21 A	04-Aug-22																
LRV Conditional Acceptance - East Link Summary	10-Jan-22	20-Jan-23																
Lynnwood Link - LRV Summary (Car #87-#120)	19-Jul-21 A	16-Nov-23																
LRV Factory Test - Lynnwood Summary	19-Jul-21 A	14-Feb-23																
LRV Delivery to OMF - Lynnwood Summary	12-Aug-22	21-Apr-23																
LRV Conditional Acceptance - Lynnwood Summary	30-Jan-23	16-Nov-23																
Extra - LRV Summary (Car #121-#122)	08-Feb-23	04-Dec-23																
LRV Factory Test - Extra Summary	08-Feb-23	07-Mar-23																
LRV Delivery to OMF - Extra Summary	28-Apr-23	05-May-23																
LRV Conditional Acceptance - Extra Summary	27-Nov-23	04-Dec-23																
Federal Way Link- LRV Summary (Car #123-#142)	06-Mar-23	24-May-24																
LRV Factory Test - Federal Way Summary	06-Mar-23	03-Oct-23																
LRV Delivery to OMF - Federal Way Summary	23-May-23	10-Nov-23																
LRV Conditional Acceptance - Federal Way Summary	13-Dec-23	24-May-24																
Downtown Redmond Link- LRV Summary (Car #143-#152)	27-Sep-23	19-Aug-24																
LRV Factory Test - Downtown Redmond Summary	27-Sep-23	29-Jan-24																
LRV Delivery to OMF - Downtown Redmond Summary	29-Nov-23	27-Feb-24																
LRV Conditional Acceptance - Downtown Redmond Summary	05-Jun-24	19-Aug-24																
LRV ATP Retrofit Summary - Siemens	12-Jul-21 A	29-Sep-23																

LRV Delivery and Testing Progress as of November 30, 2021

LRV status	Received / Delivered	Testing in progress	Conditionally Accepted	Entered Revenue
Planned	94	21	73	73
Actual (Seattle)	46	10	36	36
Actual (Bellevue)	11	11	0	0

Link Light Rail Light Rail Vehicle Fleet Expansion



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. Delivery and Conditional Acceptance Testing of all 28 light rail vehicles required for Northgate Link has been completed to support the Revenue Service. The planned deliveries, commissioning and testing of light rail vehicles are anticipated to be complete by April of 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.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ST LRV Fleet Expansion - Siemens Summary by LINK Contract	30-Mar-21 A	19-Aug-24													
Northgate Link - LRV Summary (Car #1 - #40)	30-Mar-21 A	17-Dec-21													
LRV Conditional Acceptance - Northgate Summary	30-Mar-21 A	17-Dec-21													
East Link - LRV Summary (Car #41-#86)	10-Jan-22	20-Jan-23													
LRV Conditional Acceptance - East Link Summary	10-Jan-22	20-Jan-23													
Lynnwood Link - LRV Summary (Car #87-#120)	30-Jan-23	16-Nov-23													
LRV Conditional Acceptance - Lynnwood Summary	30-Jan-23	16-Nov-23													
Extra - LRV Summary (Car #121-#122)	27-Nov-23	04-Dec-23													
LRV Conditional Acceptance - Extra Summary	27-Nov-23	04-Dec-23													
Federal Way Link- LRV Summary (Car #123-#142)	13-Dec-23	24-May-24													
LRV Conditional Acceptance - Federal Way Summary	13-Dec-23	24-May-24													
Downtown Redmond Link- LRV Summary (Car #143-#152)	05-Jun-24	19-Aug-24													
LRV Conditional Acceptance - Downtown Redmond Summary	05-Jun-24	19-Aug-24													
LRV ATP Retrofit Summary - Siemens															

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 2021. 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 is challenging to predict how the annual plan will unfold.

Resource Type	Planned FTE Monthly Average*	YTD Actual FTE Monthly Average	Variance
ST Staff	7.3	5.6	(1.7)
Consultants	7.5	7.5	(0.0)
TOTAL	14.8	13.1	(1.7)

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

Link Operations & Maintenance Facility: East

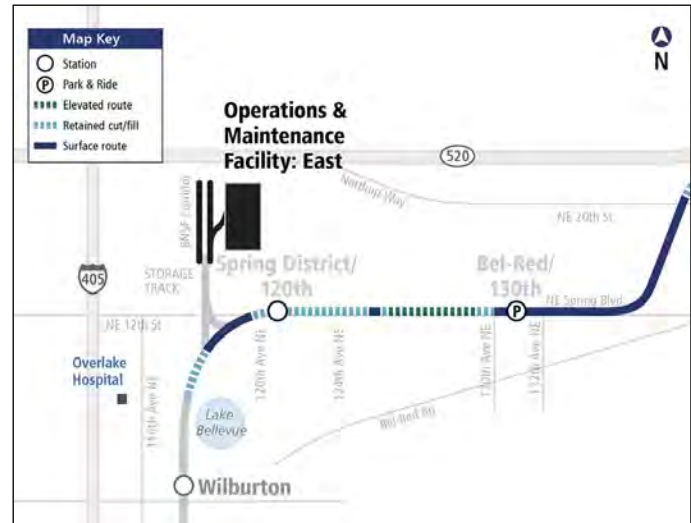
Project Summary

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 Operation / Warranty Period

Budget \$449.2 Million (Baselined July 2016)

Schedule Substantial Completion Achieved:
December 2020



Map of OMF East Site

Key Project Activities

- Post Acceptance monitoring of facilities.

Closely Monitored Issues

- Performance of the 2-year Measurement and Verification activities.

Risk Management

Substantial Completion was achieved in December 2020. OMFE has been turned over to Operations. Some residual risk remains within the project are actively monitored and others have been transferred over to Operations for their monitoring. The final risk register was last updated in June 2021. The residual risk on the project are as follows:

- **Scope:** Scope Interfaces with E750 Systems when ELE has to integrate OMF East with OMF Central through East Link.
- **Start Up:** Closure of open items and workarounds on and various punch list items, as well as miscellaneous follow on scope satisfactorily transition over to Operations as well as East Link tie in in 2022.



OMFE Site

Link Light Rail

Link Operations & Maintenance Facility: East



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 but there is high probability that there will be savings. The project is currently finalizing the anticipated savings. This period's project expenditure was offset by an inadvertent error to the accrual of remaining scope and net to \$374.5K. The total project cost incurred decreased from approximately \$376.7M to \$377M. The majority of the cost are driven by the continue close out of commercial issues in the Construction phase.

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	\$10.5	\$10.5	\$17.6	\$0.0
Preliminary Engineering	\$9.5	\$9.5	\$8.7	\$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	\$17.6	\$17.6	\$19.3	\$0.0
Third Party Agreements	\$3.1	\$3.1	\$0.3	\$0.1	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$239.6	\$237.6	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$102.7	\$102.6	\$134.5	\$0.0
Total	\$449.2	\$449.2	\$379.5	\$377.0	\$449.2	\$0.0

Cost Summary by SCC

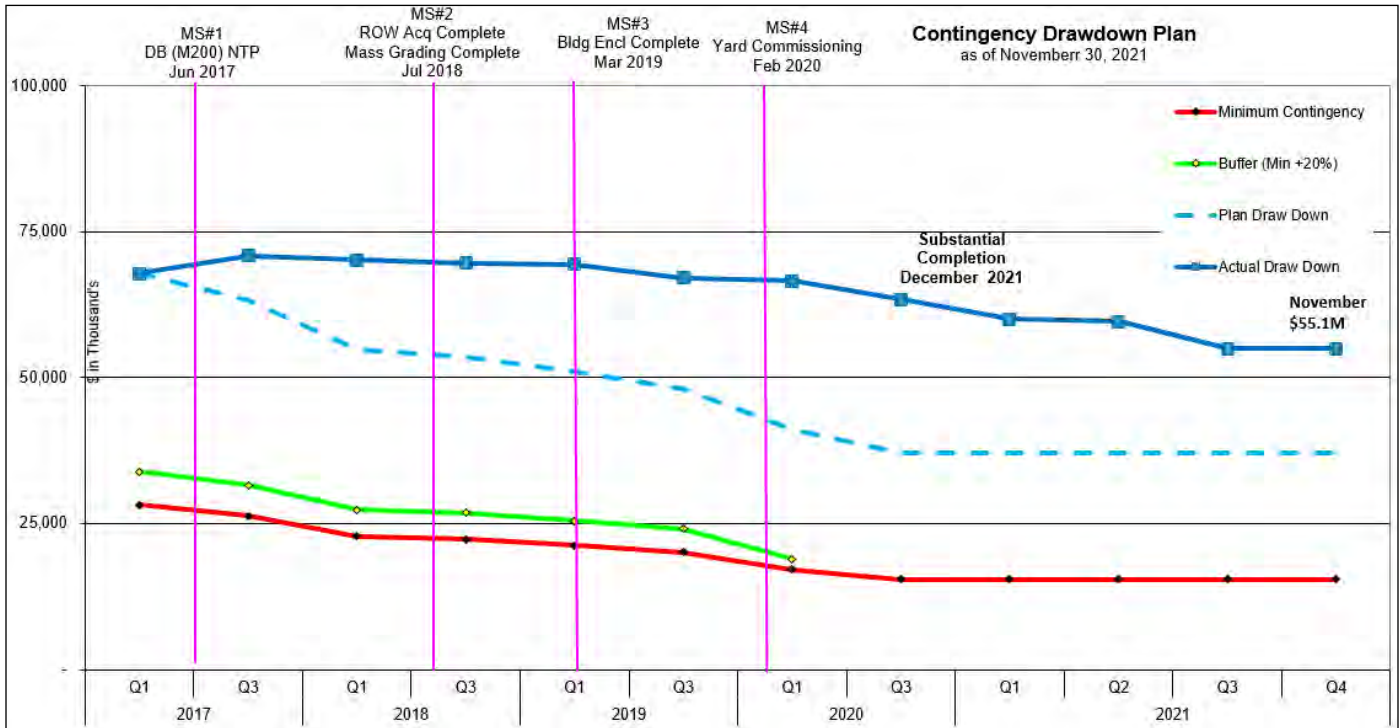
SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$2.6	\$4.4	\$4.3	\$4.3	\$4.3	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities: Yard, Shop	\$140.1	\$136.1	\$133.9	\$133.6	\$141.6	(\$5.5)
40 Sitework & Special Conditions	\$43.6	\$48.5	\$43.0	\$41.6	\$45.3	\$3.2
50 Systems	\$43.0	\$41.6	\$41.2	\$40.8	\$41.2	\$0.4
Construction Subtotal (10 - 50)	\$229.3	\$230.6	\$222.3	\$220.3	\$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	\$54.4	\$54.1	\$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	\$379.5	\$377.0	\$449.2	\$0.0

Link Light Rail

Link Operations & Maintenance Facility: East

Contingency Drawdown

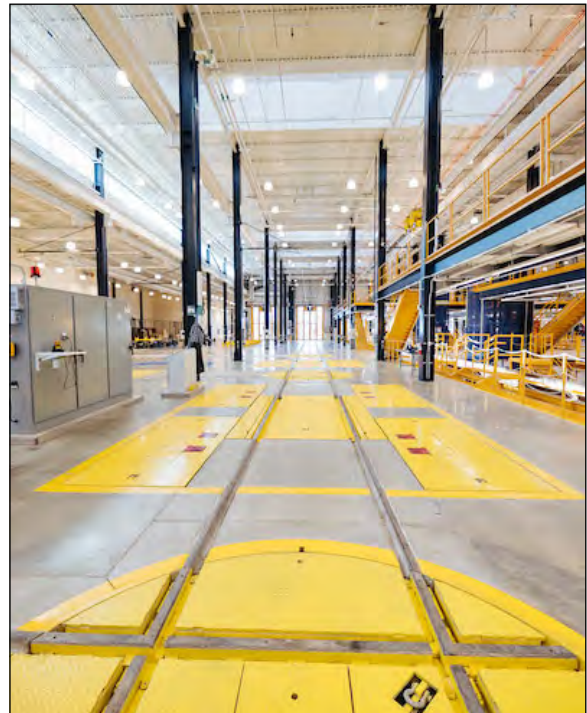
At Substantial Completion in December 2020, OMF East Project's total contingency drawdown plan remained positively. Project contingency at juncture are expected to remain positive with total contingencies balance in November 2021 at approximate \$55.1M (previous quarter at \$55.1M) and remains above all the baseline draw down projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. Surplus in this project is expected.



Contract M200 - OMF East Design Build Cost Summary

Present Financial Status	Amount
M200 Contractor – Hensel Phelps	
Original Contract Value	\$218,912,000
Change Order Value	\$15,804,628
Current Contract Value	\$234,716,628
Total Actual Cost (Incurred to Date)	\$233,106,213
Percent Complete	99.9%
Authorized Contingency	\$21,891,200
Contingency Drawdown	\$15,804,628
*Contingency Index	1.3

*Excludes Betterments



Operations and Maintenance Facility East in Bellevue

Staffing Summary

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

The planned FTE monthly average is the monthly annualized average; whereas, the YTD monthly average only reflects average actuals through November of 2021 and continues to average down as anticipated as the year progress ahead.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.2	5.6	0.3
Consultants	2.8	10.7	7.9
TOTAL	8.0	16.3	8.2
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

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

Sound Transit Board Actions

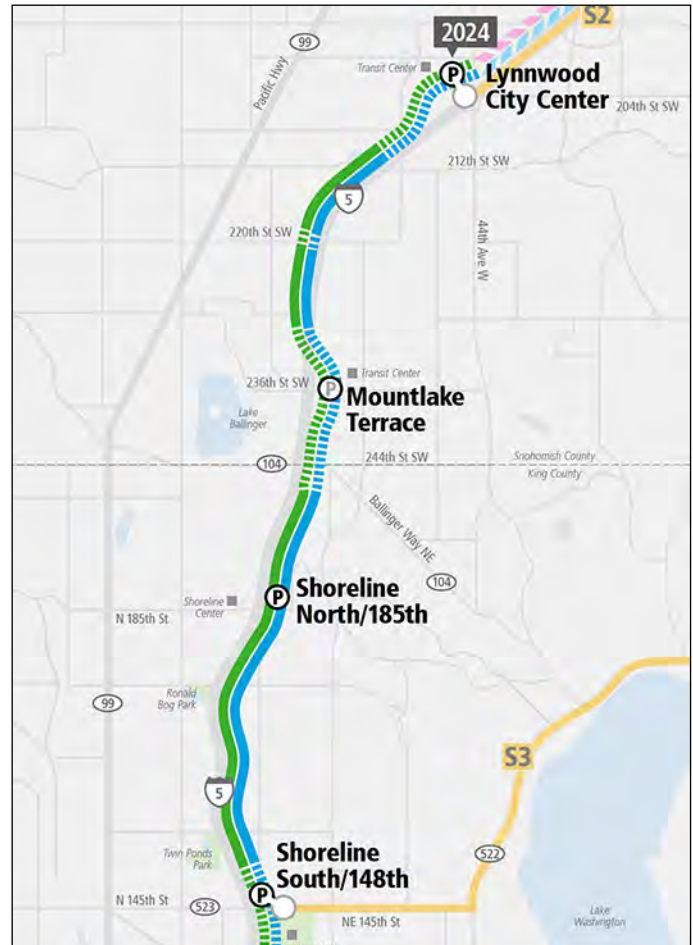
Board Action	Description	Date
	None to report this period.	

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/148th 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 construction of the Shoreline South / 148th Station structure and plaza level grading, as well as electrical and mechanical rough-in for the adjacent parking garage (L200).
- Continued construction of the Shoreline North / 185th Station including station canopy steel framing and continued concrete deck placements for the adjacent parking garage (L200).
- Continued construction of the Mountlake Terrace Station, including escalator truss installation (L300).
- Continued construction of the Lynnwood City Center Station, including platform canopy installation and deck concrete for the adjacent parking garage (L300).
- Completed placement of pre-stressed concrete girders for the aerial guideway.

Closely Monitored Issues

- Erosion/sediment control is being closely monitored on both civil contracts for compliance during the wet/winter season.
- Milestone dates for handovers to the L800 systems contractor are under review based on station, garage and wall progress.
- Projects for utility infrastructure, local roadway and street improvements, and private development near the station sites are being monitored for coordination purposes.

Link Light Rail Lynnwood Link Extension



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 2021, \$59.5M was incurred. The major project expenditures were for civil and systems construction, construction management, and design services during construction. The remaining expenditures were for right-of-way, third party coordination, and staff.

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	\$51.6	\$51.4	\$98.2	\$0.0
Preliminary Engineering	\$39.1	\$39.1	\$39.1	\$39.1	\$39.1	\$0.0
Final Design	\$164.2	\$164.2	\$142.4	\$136.6	\$164.2	\$0.0
Construction Services	\$128.4	\$128.4	\$110.2	\$70.6	\$128.4	\$0.0
3rd Party Agreements	\$14.6	\$17.6	\$12.8	\$10.4	\$17.6	\$0.0
Construction	\$1,921.4	\$2,094.6	\$1,906.9	\$1,088.4	\$2,094.6	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$235.7	\$229.7	\$179.0	\$173.1	\$229.7	\$0.0
Project Contingency	\$170.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$2,771.6	\$2,771.6	\$2,441.9	\$1,569.6	\$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	\$681.9	\$398.8	\$792.4	\$209.7
20 Stations	\$333.8	\$333.8	\$413.2	\$207.6	\$432.5	-\$98.7
30 Support Facilities	\$2.0	\$2.0	\$0.2	\$0.1	\$2.0	\$0.0
40 Sitework & Special Conditions	\$421.1	\$426.2	\$605.9	\$427.4	\$565.6	-\$139.5
50 Systems	\$244.4	\$244.4	\$195.7	\$47.8	\$216.0	\$28.4
Construction Subtotal (10 - 50)	\$1,793.0	\$2,008.5	\$1,896.8	\$1,081.7	\$2,008.5	\$0.0
60 ROW, Land	\$235.7	\$229.7	\$179.0	\$173.1	\$229.7	\$0.0
70 Vehicles (Non-Revenue)	\$1.4	\$1.4	\$0.0	\$0.0	\$1.4	\$0.0
80 Professional Services	\$449.3	\$448.6	\$366.1	\$314.8	\$448.6	\$0.0
90 Unallocated Contingency	\$292.2	\$83.4	\$0.0	\$0.0	\$83.4	\$0.0
Total (10 - 90)	\$2,771.6	\$2,771.6	\$2,441.9	\$1,569.6	\$2,771.6	\$0.0

Contingency Management

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

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, Allocated Contingency decreased by a net amount of \$1.5M due to construction change orders.

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%	\$146.5	12.2%
Unallocated Contingency	\$292.2	10.5%	\$83.4	6.9%
Total:	\$737.7	26.6%	\$230.0	19.1%

Contingency by Type

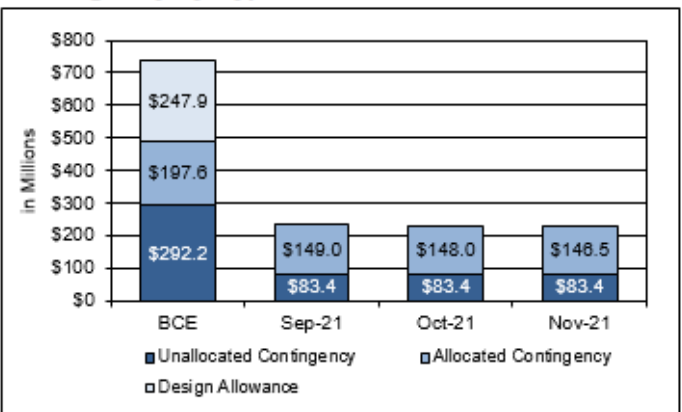
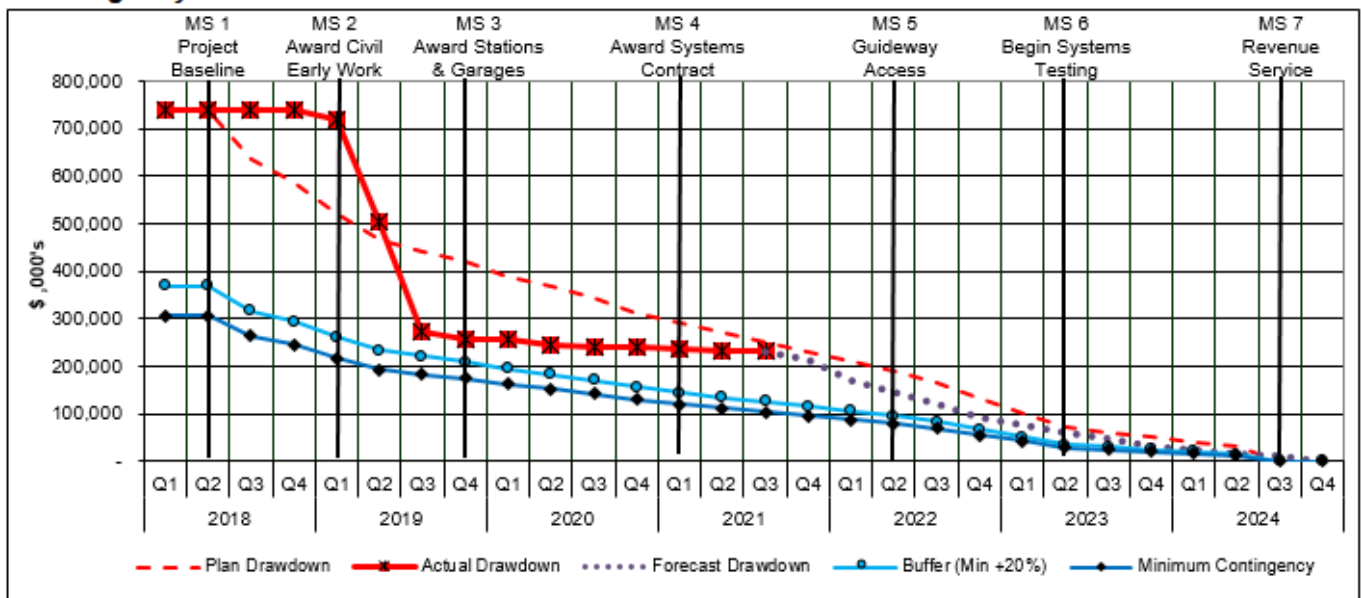


Table figures are shown in millions.

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 most recent quantitative risk workshop was held in Q1 2021; the next is planned for Q2 2022.

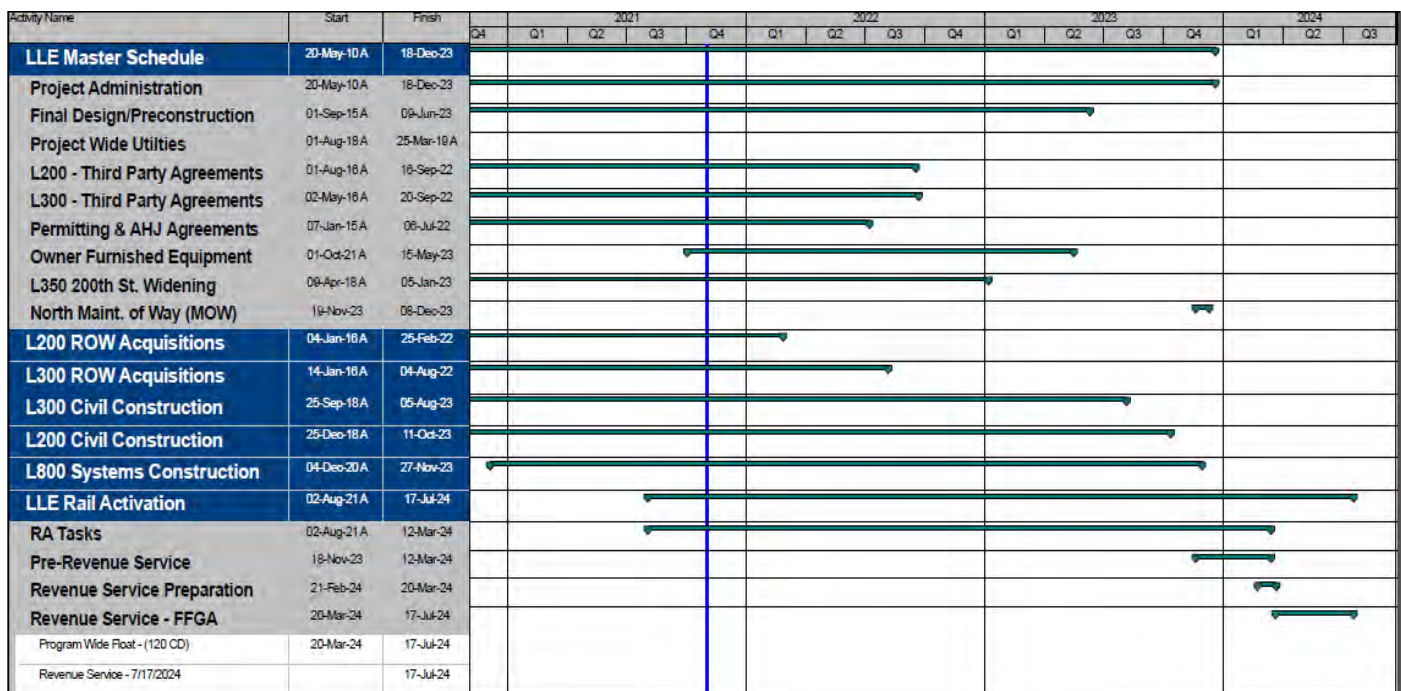
The following are the top project risks:

- Availability and budget for ongoing design support during the construction phase.
- Availability of adequate electrical power for the Shoreline South / 148th station, garage and nearby Traction Power Substation (TPSS) in time to support testing in Q1 2022.
- Systems subcontractor impacts on completion based on volume of work across multiple projects.
- Requests from third parties / Authorities Having Jurisdiction (AHJ) for additional scope as part of permit inspections / approvals.

Project Schedule

Weighted percent complete of the major construction contracts is calculated at 54.5%

The Master Schedule has been updated through November, with the exception of the L300 schedule, which was submitted on the date of this narrative and has not yet been reviewed. The L200 and L800 schedule updates are under review. The L200 civil work continues to be the driving element of the project with at-grade construction now driving. The project retains 120 days of project float. The L300 update is not expected to change either the critical path of the project, nor the project float level.



Link Light Rail Lynnwood Link Extension

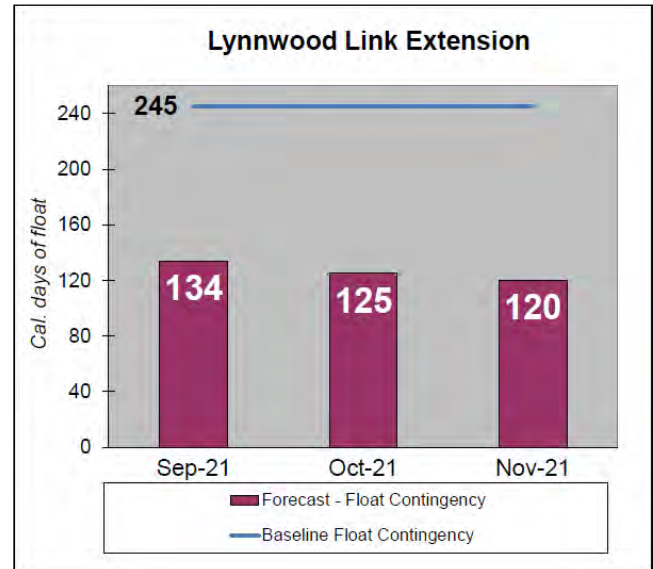


Project Float

The Lynnwood Link Extension was baselined with 245 days of project float. Currently, the project is calculated to have 120 days remaining between completion of work and the Jul. 17, 2024 revenue service date. ST is continuing to work with the L200 contractor to improve the accuracy of the forecast for the work.

The float reported is based in part on the L200 October update, which is still under review.

The impact of the COVID-19 shutdown continues to be assessed, and is not reflected in these figures.



Critical Path Analysis

The critical path for the Lynnwood Link Extension continues to be the L200 contract. Based on slower-than expected progress on ballasted track walls and transition slab construction, the path changed this period from the 148th Station to the transition slab and at-grade trackwork in Work Zone 2, and then to turnover of the guideway to the L800 contractor. Sound Transit is continuing to work with the L200 contractor to resolve outstanding issues noted in the prior schedule submittals. This path remains subject to change with the assessment of COVID-19 impacts and the resolution of outstanding planning issues.

Activity Name	Start	Finish	2022				2023				2024			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
L200 Civil Construction	29-Oct-21 A	13-May-22	<div></div>											
Project Wide	28-Feb-22	13-May-22	<div></div>											
Milestones	29-Apr-22	13-May-22	<div></div>											
Punchlist & Commissioning	28-Feb-22	28-Apr-22	<div></div>											
WZ-2 At Grade - Fill (1458+63 to 1492+)	29-Oct-21 A	25-Feb-22	<div></div>											
Trackwork	29-Oct-21 A	25-Feb-22	<div></div>											
L800 Systems Construction	14-May-22	13-Nov-23	<div></div>											
Sound Transit L800 90% Engineering	14-May-22	13-Nov-23	<div></div>											
L800 Engineering	14-May-22	13-Nov-23	<div></div>											
L800 Construction	16-May-22	13-Nov-23	<div></div>											
LLE Rail Activation	13-Nov-23	17-Jul-24	<div></div>											
RA Tasks	13-Nov-23	08-Dec-23	<div></div>											
TASK 00 - Transition To Operations - Project	13-Nov-23	13-Nov-23	<div></div>											
TASK 07 - Safety and Security	14-Nov-23	08-Dec-23	<div></div>											
Pre-Revenue Service	18-Nov-23	12-Mar-24	<div></div>											
Pre-Revenue Preparation	18-Nov-23	15-Dec-23	<div></div>											
Operator Preparation	14-Dec-23	12-Jan-24	<div></div>											
Simulated Revenue Service/Drills/Upsets	13-Jan-24	12-Mar-24	<div></div>											
Revenue Service Preparation	21-Feb-24	20-Mar-24	<div></div>											
Revenue Service - FFGA	20-Mar-24	17-Jul-24	<div></div>											

Community Engagement

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

- Coordinated night time off-ramp closures, including 1st Avenue NE, NE Northgate Way, NE 103rd Street, NE 107th Street, NE 130th Street, and northbound I-5 to NE 145th Street off-ramp (Exit 175) in Seattle, and NE 175th Street in Shoreline.
- Night work on NE 185th Street from 8th Avenue NE to 5th Avenue NE, near Shoreline Stadium in Shoreline.
- Closures on NE 189th Street, NE 185th Street and 5th Avenue NE, and at NE 183rd Court and NE 182nd Court in Shoreline; full closures at NE 130th, NE 145th Street and 1st Avenue NE.
- Night time closure of the SR 104 and I-5 Interchange in Shoreline.

Community Engagement staff also began the comment period for the Lynnwood City Center Station Transit Oriented Development (TOD) via a community survey, distributed a 50% completion Lynnwood Link press release, and held two property owner meetings.

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	783	748	387	381
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. Number of relocations exclude moves that are personal property only. *Total number of parcels available for construction = 339.					

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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 ST staff, but more consultant staff than planned has been needed for civil final design, design services during construction, and construction management.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	42.5	35.0	(7.5)
Consultants	89.0	109.5	20.5
TOTAL	131.5	144.5	13.0
* 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	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	17	31
Days Away From Work Cases	0	2	4
Total Days Away From Work	0	25	60
First Aid Cases	1	30	66
Reported Near Mishaps	2	34	56
Average Number of Employees on Worksite	755	-	-
Total # of Hours (GC & Subs)	188,596	1,849,031	3,015,049
OSHA Incident Rates	November 2021	Year to Date	Project to Date
Recordable Injury Rate	2.12	1.84	2.06
LTI Rate	0.00	0.22	0.27
Recordable National Average	2.8		
LTI National Average	1.1		
Recordable WA State Average	5.7		
LTI WA State Average	2.0		
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 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:

- Continued Mechanically Stabilized Earth (MSE) retaining wall construction.
- Continued installation of concrete decks, curbs and end diaphragms for the elevated guideway.
- Continued direct fixation trackwork and sub-ballast installation.
- 148th Station - Began erection of canopy steel. Continued concrete placement of stairway walls.
- 148th Garage - Continued elevator steel frame welding. Continued mechanical room CMU wall erection.
- 185th Station - Continued platform canopy installation. Placed concrete for northbound station platform.
- 185th Garage - Continued decking concrete on level 2 and continued plumbing pipe installation.

Schedule Summary

The November update forecasts an Aug. 26, 2023 substantial completion date, 39 calendar days later than the contractual milestone date of Jul. 18, 2023. Within the L200 contract schedule, the critical path is driven by construction of the transition slab and at-grade trackwork in Work Zone 2. The current update, submitted for November, is under review. ST continues to work with SKH toward an acceptable schedule.

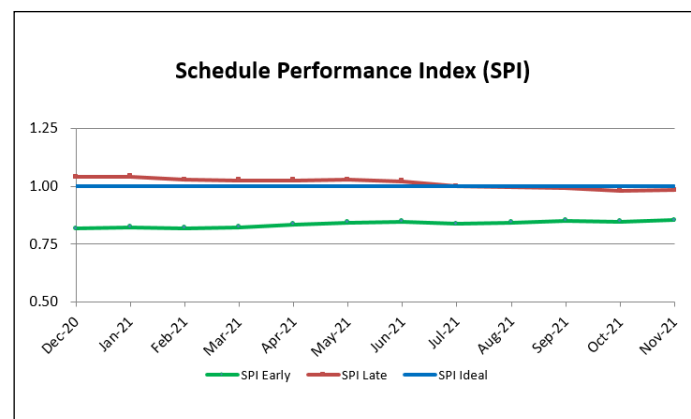
Activity Name	Start	Finish	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L200 Civil Construction	25-Dec-18 A	11-Oct-23									
L200 Civil Construction	25-Dec-18 A	11-Oct-23									
Project Wide	25-Dec-18 A	11-Oct-23									
WZ-1 Elevated (1437+00 to 1458+63)	15-May-19 A	12-Jan-23									
WZ-2 At Grade - Fill (1458+63 to 1492+45)	21-Mar-19 A	27-Dec-22									
WZ-3 Elevated (1492+45 to 1559+17)	23-Mar-19 A	17-Jul-23									
WZ-4 145th Station & Garage	08-Apr-19 A	09-May-23									
WZ-5 At Grade - Fill (1559+17 to 1571+30)	26-Mar-19 A	01-May-23									
WZ-6 155th Bridge (1571+30 to 1572+40)	17-Jun-19 A	15-Aug-22									
WZ-7 At Grade - Retained (1572+40 to 1624+00)	27-Mar-19 A	24-Jul-23									
WZ-8 175th Bridge (1624+00 to 1631+25)	25-Apr-19 A	29-Sep-22									
WZ-9 At Grade - Cut (1631+25 to 1661+78)	15-Apr-19 A	14-Jun-23									
WZ-10 185th Station & Garage	15-Apr-19 A	14-Apr-23									
WZ-11 At Grade (1661+78 to 1694+01)	09-Apr-19 A	01-May-23									

Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.85 (no change from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 0.98 (decrease from last period).

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



Work Zone Overview



Next Period Activities:

- Continue concrete placement of deck spans and curbs.
- Continue MSE wall construction.
- Continue installing 148th station canopy steel and MSE walls
- Continue 185th garage level 2 concrete placement and 185th station platform canopy installation.
- Continue ballasted trackwork installation.

Closely Monitored Issues:

- Electrical utility crew availability to supply power feeds on schedule for systems testing.
- Timing of receipt of all permits necessary for construction from third parties.
- Number of field changes due to design inconsistencies.
- Regional and local labor availability is being monitored to ensure the resources necessary to execute the scope of the civil projects are available.

Cost Summary

Present Financial Status	Amount
L200 Contractor - SKH Excludes 130th and betterments	
Original Contract Value	\$88,147,258
Change Order Value	\$765,282,368
Current Contract Value	\$853,429,626
Total Actual Cost (Incurred to Date)	\$536,180,158
Percent Complete	57.4%
Authorized Contingency	\$43,762,892
Contingency Drawdown	\$13,431,362
Contingency Index	1.9



185th garage south wall rebar installation

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

Current Progress

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

- Continued concrete placements at the elevated deck level 2 of the Lynnwood City Center garage.
- Continued trackwork and plinth installation at the I-5 overcrossing, as well as rail installation along the alignment.
- Continued stairwell and elevator shaft construction at the Mountlake Terrace and Lynnwood stations.
- Continued installation of electrical vaults and TPSS.
- Continued soil nail and cast-in-place retaining wall construction.
- Continued MSE retaining wall construction.

Schedule Summary

As of this narrative, Skanska's November update has recently been submitted and ST's initial evaluation has not yet commenced. The summary shown below is based on the October update, which has been reviewed and comments returned. The project's critical path continues to be driven by the construction of the Lynnwood City Center Parking Garage. Currently, planning is continuing for the opening of the garage, anticipated in late 2022 prior to Light Rail service.

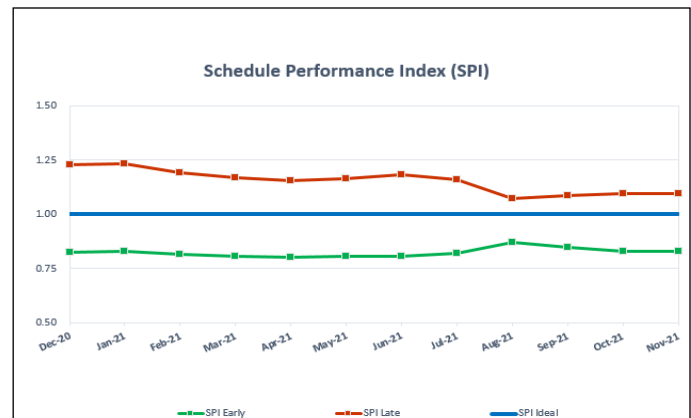
Activity Name	Start	Finish	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
L300 Civil Construction	25-Sep-18A	05-Aug-23								
L300 Civil Construction	25-Sep-18A	05-Aug-23								
MILESTONES	25-Sep-18A	05-Aug-23								
ROW ACQUISITIONS (PARCELS & TCE	04-Jun-19A	28-Jun-23								
PERMITTING	01-Feb-19A	07-Dec-21								
SUBMITTALS	12-Apr-19A	21-Apr-22								
MATERIAL PROCUREMENT	07-Aug-19A	28-May-22								
EARLY WORK	20-Feb-19A	28-May-23								
CONSTRUCTION	22-Jul-19A	26-Jul-23								
Main Package Construction Contract Elemer	25-Oct-19A	26-Jul-23								
Mobilizations	25-Oct-19A	16-Feb-23								
3rd Party Utilities	22-Jul-19A	16-Sep-20A								
L200 to 236th St. (Sta. 1694+00 to 1739+00)	17-Dec-19A	16-Feb-23								
236th St. to 220th St. (Sta. 1739+00 to 1791+00)	13-Jan-20A	07-Dec-22								
220th St. to 52nd Ave (Sta. 1791+00 to 1840+00)	23-Dec-19A	30-Jan-23								
52nd Ave to EOL (Sta. 1840+00 to 1884+00)	15-Jan-20A	05-Jul-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 (same from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.09 (same from last period).

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



Work Zone Overview



Next Period's Activities

- Continue stairwell and elevator shaft construction at the Mountlake Terrace and Lynnwood stations.
- Continue deck installation at all erected girder spans.
- Continue Lynnwood City Center parking garage work.
- Continue installation of Traction Power Substation (TPSS) foundations.
- Continue MSE and soil nail / cast-in-place retaining wall construction.

Closely Monitored Issues

- Potential unsuitable soil conditions at wall foundations based on initial excavations.
- Number of field changes due to design inconsistencies.
- Erosion and sediment control during the wet season.
- Regional and local labor availability is being monitored to ensure the resources necessary to execute the scope of the civil projects are available.

Cost Summary

Present Financial Status	Amount
L300 Contractor—Skanska	
Original Contract Value	\$56,886,631
Change Order Value	\$792,669,571
Current Contract Value	\$849,556,202
Total Actual Cost (Incurred to Date)	\$492,384,946
Percent Complete	57.2%
Authorized Contingency	\$42,888,048
Contingency Drawdown	\$14,544,136
Contingency Index	1.7



Trackwork and plinth installation.

Contract L800 Lynnwood Link Systems GC/CM

Current Progress

The L800 Contractor, Mass Electric Construction Company, is continuing work as follows:

- Continued development of engineering submittals and subcontract packages.

Schedule Summary

The L800 November schedule update forecasts a contract completion of August 5, 2023, ten days earlier than the contractual date. The critical path continues to be driven by TPSS submittals. ST is continuing to monitor the progress, as well as looking for opportunities to improve the overall work plan.

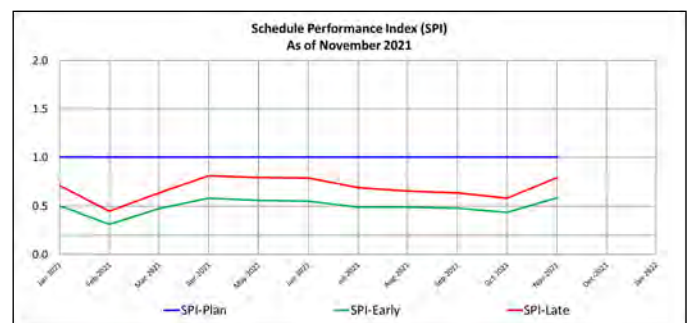
Activity Name	Start	Finish	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L800 Systems Construction	04-Dec-20 A	27-Nov-23									
L800 Systems Construction	04-Dec-20 A	27-Nov-23									
Sound Transit L800 90% Engin	04-Dec-20 A	27-Nov-23									
L800 Engineering	04-Dec-20 A	13-Nov-23									
L800 Milestones	04-Dec-20 A	13-Nov-23									
L800 Submittals	04-Dec-20 A	25-Oct-23									
L800 OCS	01-Jun-21 A	25-Oct-23									
L800 Traction Power/Substations	04-Dec-20 A	31-Aug-23									
L800 Signals	07-Dec-20 A	01-Oct-23									
L800 Communications	01-Feb-21 A	15-Sep-23									
L800 SCADA	30-Jun-22	23-Jun-23									
L800 Construction	04-Dec-20 A	27-Nov-23									
L800 OCS	01-Feb-21 A	23-Jun-23									
L800 Traction Power / Substations	04-Dec-20 A	31-May-23									
L800 Signals	04-Dec-20 A	07-Aug-23									
L800 Communications	04-Dec-20 A	21-Jun-23									
L800 SCADA	01-Jul-21 A	06-Jul-23									
L800 Testing and Commissioning	27-Jul-22	27-Nov-23									

Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.59 (increase from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 0.80 (increase from last period).

The SPI trends indicate progress is trending behind the optimistic and conservative schedule dates. Engineering submittals were planned very optimistically in the baseline schedule, and have not been completed as quickly as planned.



Next Period's Activities

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, Overhead Catenary Systems (OCS), train control signal systems, and communications.

Closely Monitored Issues

- Monitoring the manufacture and delivery of long lead equipment such as TPSS units and signal houses.
- Monitoring the completion of civil package work for potential delays in hand over to the systems contractor.

Cost Summary

Present Financial Status	Amount
L800 Contractor - Mass Electrical Construction Co.	
Original Contract Value	\$148,000,000
Change Order Value	\$72,801
Current Contract Value	\$148,072,801
Total Actual Cost (Incurred to Date)	\$24,167,120
Percent Complete	21.5%
Authorized Contingency	\$10,360,000
Contingency Drawdown	\$72,801
Contingency Index	30.6



Representative TPSS unit.

Link Light Rail

NE 130th St Infill Station

Project Summary

Scope Construct foundation and substructure elements and complete final design for an elevated, side-platform infill light rail station at NE 130th Street and 5th Ave in Seattle.

Phase Final Design / Early Construction

Budget \$36.4 Million

Schedule Target date for station opening: 2025



Map of Project Alignment & Rendering of Station

Key Project Activities

- Completed D3 systems package Issued for Construction (IFC) documents.
- Completed deck and diaphragm erection as part of the C1 construction package (foundation and substructure).

Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures in the table is shown in millions. In November 2021, \$289k was incurred. The major project expenditures were for construction services, final design and staffing.

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	\$1.9	\$1.9	\$3.6	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$2.7	\$2.7	\$0.0
Final Design	\$10.8	\$8.9	\$8.3	\$10.8	\$0.0
Construction Services	\$2.1	\$1.6	\$1.2	\$2.1	\$0.0
3rd Party Agreements	\$1.0	\$0.7	\$0.5	\$0.9	\$0.0
Construction	\$16.0	\$5.5	\$5.1	\$16.0	\$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	\$36.4	\$21.4	\$19.6	\$36.4	\$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. It is Sound Transit's responsibility to continuously monitor project status and associated risks.

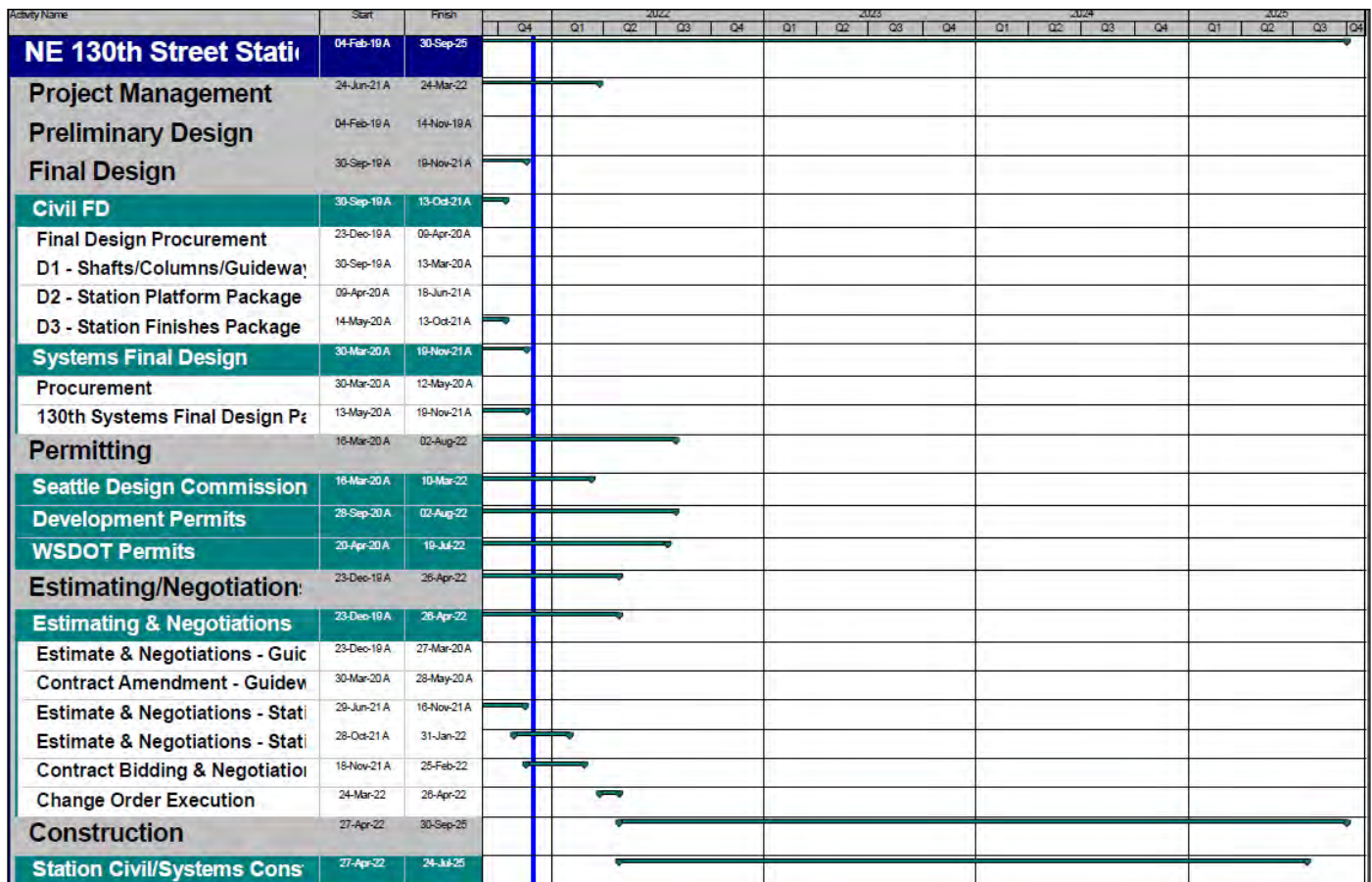
The following are the top project risks identified:

- Local permitting authorities may require additional right-of-way improvements beyond what was budgeted.
- Added cost savings measures require added re-design and major schedule impact to 2025 delivery.
- Potential challenges in synchronizing specific construction milestones with Lynnwood Link.

Project Schedule

Design for the station remains on schedule. The IFC package for Systems has been delivered and is in review. Permitting activities for the building, WSDOT utility and Street Improvement permits are ongoing. Development of construction and activation schedules also continues.

Construction of the initial C1 package Deck and Diaphragms is nearing completion. ST and the L200 Contractor are currently in the process of developing estimates in advance of negotiations.



Community Engagement

This period the Community Engagement team continued efforts to keep the community informed by:

- Creating a template for future online open house along with altering graphics/materials for 2025 project opening.
- Generating initial materials for a potential station naming process.

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 above the Planned FTE Monthly Average, with more design and CM staff than planned.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	4.5	4.0	(0.5)
Consultants	19.5	24.0	4.5
TOTAL	24.0	28.0	4.0
<i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.</i>			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Contract Cost Summary

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 design and sustainability reports. Work this period included incorporation of value engineering recommendations into the Issued for Construction (IFC) set for pricing.

Present Financial Status	Amount
HNTB Jacobs– Civil Final Design	
Original Contract Value	\$1,570,864
Change Order Value	\$5,924,474
Current Contract Value	\$7,495,338
Total Actual Cost (Incurred to Date)	\$7,242,405
Financial Percent Complete	97%
Authorized Contingency	\$1,551,541
Contingency Drawdown	\$1,546,879
Contingency Index	0.9

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. This period, the systems final design team issued the Issued for Construction (IFC) set of documents based on the civil deliverables.

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)	\$924,625
Financial Percent Complete	82%
Authorized Contingency	\$110,310
Contingency Drawdown	\$0
Contingency Index	N/A

Construction Overview

Sound Transit executed an amendment to the Lynnwood Link L200 contract with Stacy & Witbeck-Kiewit-Hoffman JV (SKH) for the addition of drilled shafts, columns and crossbeams required for incorporation of the 130th Street station structure into the L200 guideway structure as an “integrated structure.” This is consistent with direction received from Sound Transit Board to progressively advance the station. Work this period included commencement of quantity takeoffs and pricing based on the Issued for Construction (IFC) set for the remaining station elements.

Present Financial Status	Amount
SKH– Civil Construction	
Original Contract Value	\$5,000,000
Change Order Value	\$37,805
Current Contract Value	\$5,037,805
Total Actual Cost (Incurred to Date)	\$5,037,805
Percent Complete	100%
Authorized Contingency	\$500,000
Contingency Drawdown	\$37,805
Contingency Index	13.2

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 Revenue Service

Budget \$1.899 Billion

Schedule Revenue Service: October 2021



Map of Project Alignment

Key Project Activities

- **U District Station/UW Campus (N140) Roosevelt Station (N150) and Northgate Station (N160):** The project successfully opened for Revenue Service 10/2/21. The project is now in closeout phase, focusing on completion of remaining open project items and documentation of lessons learned.
- **Systems (N830):** The final Building Management System (BMS) update was successfully performed and off-hour verification testing continues through week of Nov 1st.

Closely Monitored Issues

- No issues impacting the overall project at this time. Please see contract pages for contract specific issues.

Link Light Rail Northgate Link Extension



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 \$1,847.3M, which is \$52.5M below the current project budget, unchanged since last period. This period, approximately \$3.1M was incurred, mostly on the active construction and construction management 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	\$98.3	\$98.0	\$124.1	\$6.2
Preliminary Engineering	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
Final Design	\$132.2	\$137.2	\$121.8	\$119.5	\$132.0	\$5.2
Construction Services	\$118.3	\$118.3	\$105.0	\$104.6	\$111.8	\$6.6
3rd Party Agreements	\$11.8	\$11.8	\$10.4	\$7.5	\$11.0	\$0.8
Construction	\$1,343.0	\$1,352.5	\$1,288.8	\$1,277.1	\$1,342.4	\$10.2
ROW	\$112.3	\$112.3	\$102.0	\$102.0	\$111.0	\$1.3
Project Contingency	\$22.2	\$22.2	\$0.0	\$0.0	\$0.0	\$22.2
Total	\$1,899.8	\$1,899.8	\$1,741.4	\$1,723.9	\$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	\$513.7	\$516.3	\$516.3	\$521.0	-\$7.2
20 Stations	\$376.1	\$441.2	\$461.1	\$459.5	\$465.5	-\$24.3
30 Support Facilities: Yard, Shop	\$5.3	\$6.1	\$6.5	\$6.5	\$6.5	-\$0.3
40 Sitework & Special Conditions	\$140.8	\$233.8	\$181.5	\$176.1	\$184.9	\$48.9
50 Systems	\$110.9	\$101.5	\$107.0	\$103.9	\$117.1	-\$15.6
Construction Subtotal (10 - 50)	\$1,228.7	\$1,296.4	\$1,272.4	\$1,262.2	\$1,295.0	\$1.4
60 Row, Land, Improvements	\$119.9	\$110.9	\$102.0	\$102.0	\$111.0	-\$0.1
70 Vehicles	\$0.0	\$0.0	\$0.2	\$0.2	\$0.2	-\$0.2
80 Professional Services	\$420.7	\$424.6	\$366.8	\$359.5	\$423.1	\$1.5
90 Contingency	\$130.4	\$67.9	\$0.0	\$0.0	\$18.0	\$49.9
Total (10 - 90)	\$1,899.8	\$1,899.8	\$1,741.4	\$1,723.9	\$1,847.3	\$52.5

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's final risk register update workshop was held on 6/21/21 and has been discontinued moving forward as the extension has now opened for Revenue Service.

The remaining top project-wide risks are:

- Follow-on Job Order Contractor (JOC) work may cost more or take longer than anticipated.
- Environmental monitoring and remediation at Key Bank and Silver Platters sites may cost more than anticipated.
- Additional requests from other ST departments may increase project costs and prevent timely closeout.

Community Engagement

- 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 planned FTE monthly average takes peaks and valleys in activity into account; whereas the YTD monthly average only reflects actuals from January 2021 till current reporting 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 four design (including design services during construction) and 25 for construction management.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	42	28	(14)
Consultants	29	25	(4)
TOTAL	71	53	(18)
* 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.	

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. (Substantially Complete)

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

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

Contract N140—U District Station Finishes

Current Progress

The N140 Contractor, Hoffman Construction, achieved Substantial Completion in April 2020. Hoffman focused on the following activities through the end of November 2021:

- Continued administrative closeout activities.

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	\$ 14,688,730
Current Contract Value	\$ 174,525,418
Total Actual Cost (Incurred to Date)	\$ 173,628,509
Percent Complete	100.0%
Authorized Contingency	\$ 15,491,834
Contingency Drawdown	\$ 14,688,730
Contingency Index	1.1

Contract N150 – Roosevelt Station Finishes

Current Progress

The N150 Contractor, Hoffman Construction, achieved Substantial Completion in September 2019. Hoffman focused on the following activities through the end of October 2021:

- Continued administrative closeout activities.

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	\$ 18,791,006
Current Contract Value	\$ 171,082,190
Total Actual Cost (Incurred to Date)	\$ 170,879,233
Percent Complete	100.0%
Authorized Contingency	\$ 18,914,559
Contingency Drawdown	\$ 18,791,006
Contingency Index	1.0

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

Current Progress

The N160 prime contractor, Absher Construction, achieved Substantial Completion in December 2020. Accomplishments through the end of November 2021 include:

- Continued closeout of open change management items.
- Absher demobilized from the site office. Station is under care and custody of Sound Transit Operations.

Closely Monitored Issues

- Nothing to report.

Cost Summary

Present Financial Status	Amount
N160 Contractor - Absher Construction	
Original Contract Value	\$ 174,000,000
Change Order Value	\$ 19,680,696
Current Contract Value	\$ 193,680,696
Total Actual Cost (Incurred to Date)	\$ 192,049,260
Percent Complete	99.6%
Authorized Contingency	\$ 20,400,000
Contingency Drawdown	\$ 19,680,696
Contingency Index	1.0

Contract N180 – Trackwork UWS to Northgate Station

Current Progress

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

Final contract change order is anticipated in December 2021. ST is currently awaiting final billing to proceed with closeout activities.

- Continue with the Final Acceptance process to fully meet the conditions of GC Article 9.08.A.(iii)
- Certification of the final invoice, process and payment to commence after the process stated above is completed

Closely Monitored Issues

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

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)	\$ 5,472,965
Percent Complete	100.0%
Authorized Contingency	\$ 10,718,393
Contingency Drawdown	\$ 4,017,015
Contingency Index	2.67

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

Current Progress

The N830 Contractor, Mass Electric Construction Co. (MEC) achieved substantial completion in August 2021. MEC is continuing work in the areas below:

- Completed SIT testing and preformed punch list work at U District Station (UDS).
- Completed SIT testing and preformed punch list work at Roosevelt Station (RVS).
- Completed SIT testing and preformed punch list work at Northgate Station (NGS).

Closely Monitored Issues

- Monitoring the completion of testing and commissioning the Train Control System (TCS).

Cost Summary

Present Financial Status	Amount
N830 Contractor - Mass Electric Construction Co.	
Original Contract Value	\$ 104,660,444
Change Order Value	\$ 969,132
Current Contract Value	\$ 105,629,576
Total Actual Cost (Incurred to Date)	\$ 102,421,875
Percent Complete	99.7%
Authorized Contingency	\$ 7,233,022
Contingency Drawdown	\$ 969,132
Contingency Index	7.45

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

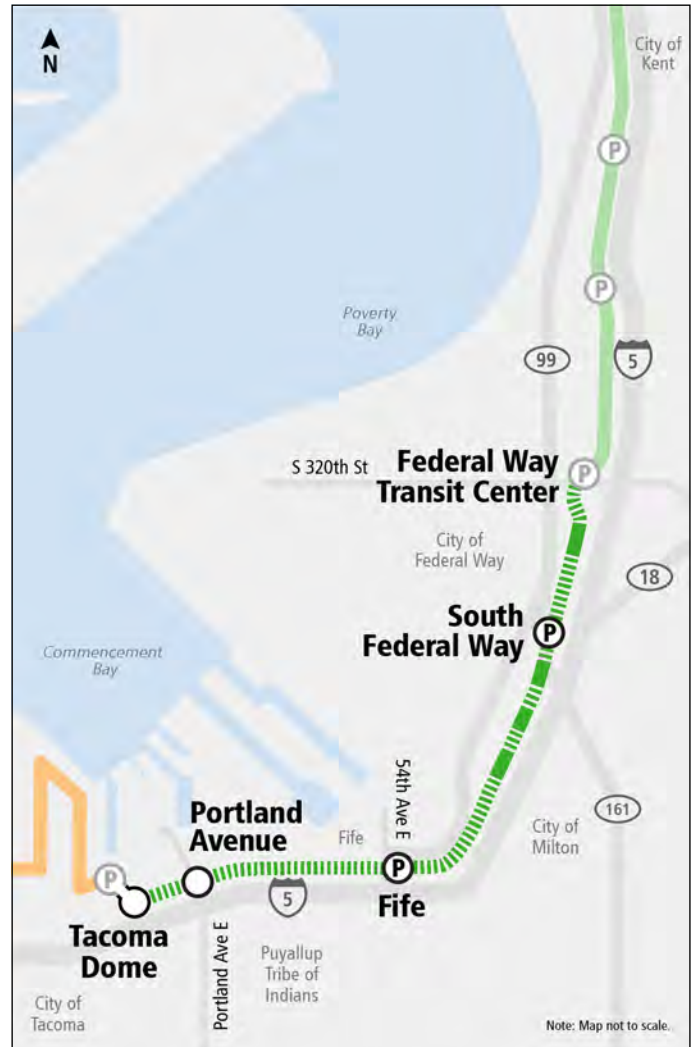
Link Light Rail

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/Project Development
Budget	\$125.7 Million for Preliminary Engineering Phase 1—Alternative Development Phase 2
Schedule	Target Dates: Tacoma Dome Station, 2032 Parking at South Federal Way & Fife, 2038



Map of Tacoma Dome Link Extension.

Key Project Activities

Major activities are highlighted below. Additional activities for this report period can be found on the following report pages.

Tacoma Dome Link Extension (TDLE)

- Continued production of the DEIS.

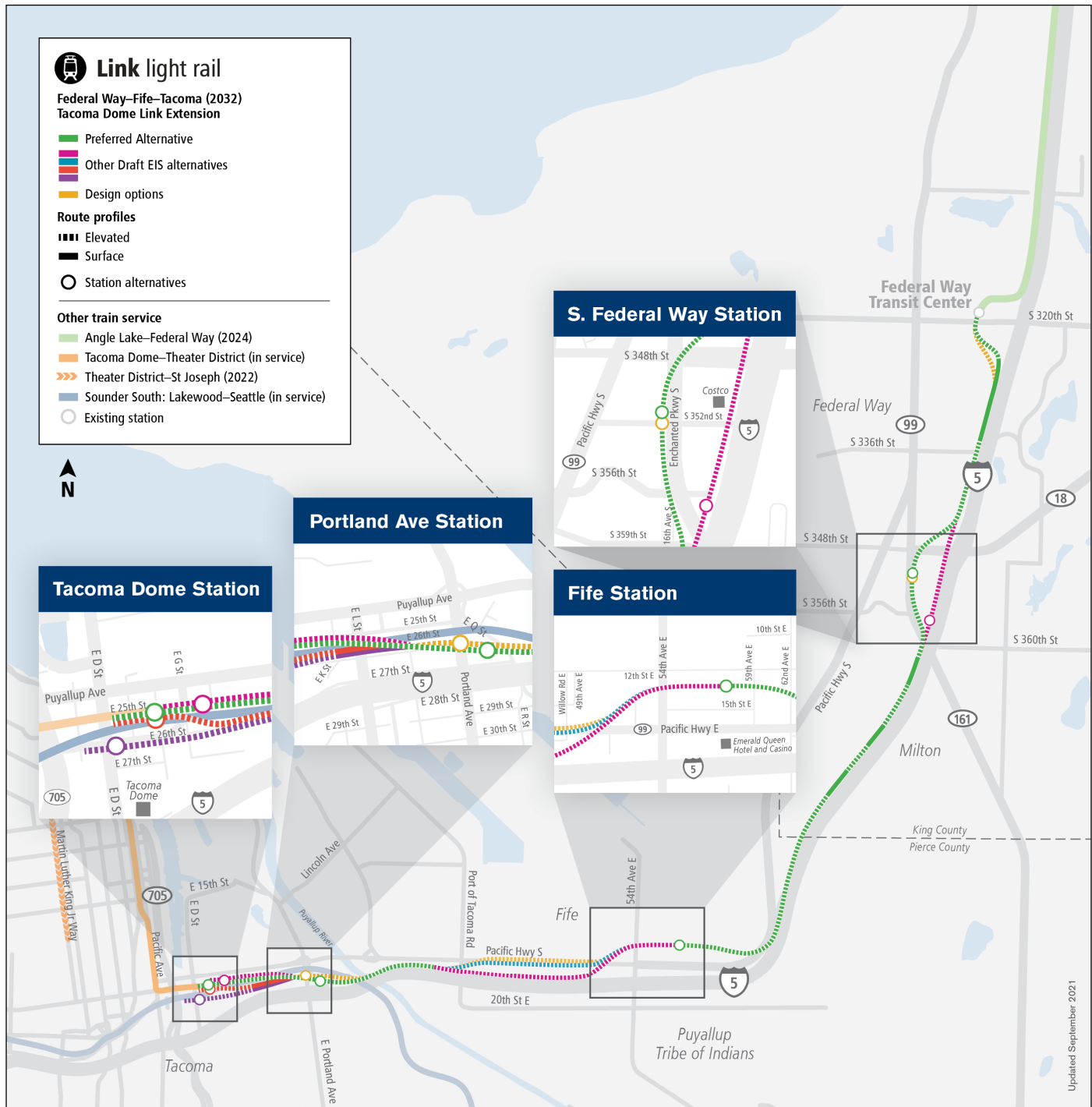
Operations and Maintenance Facility South (OMF South)

- Finalized System Expansion Committee (SEC) and Board presentations on DEIS findings for identification of preferred alternative
- Continued development of Phase 3 Scope of Work (SOW) and Independent Cost Estimate (ICE)
- Prepared materials in support of Board site tours of alternative sites

Link Light Rail Tacoma Dome Link Extension

Project Map

Graphic below depicts addition detail of the project route and station alignments being considered.



Link Light Rail Tacoma Dome Link Extension



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 expenditure year to date is 41% less than the planned budget year to November.

The major variances are observed in Administration, PE, and Third Party phases. Selection of a preferred alternative by the ST Board was pushed out from May to December 2021, and as a result of this postponement, ST staff and consultant burn rates were reduced, and planned Third Party review efforts were pushed back to align with the new deliverable dates. Also in ROW phase, fewer property owners were briefed than expected by Community Engagement.

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	\$14.5	\$14.4	\$26.8	\$0.0
Preliminary Engineering	\$87.1	\$50.4	\$35.5	\$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	\$6.4	\$2.2	\$0.9	\$6.4	\$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	\$5.4	\$1.0	\$0.4	\$5.4	\$0.0
Total	\$125.7	\$68.1	\$51.2	\$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	\$4.4	\$1.0	\$0.4	\$4.4	\$0.0
80 Professional Services	\$114.4	\$67.1	\$50.8	\$114.4	\$0.0
90 Unallocated Contingency	\$6.9	\$0.0	\$0.0	\$6.9	\$0.0
Total (10 - 90)	\$125.7	\$68.1	\$51.2	\$125.7	\$0.0

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. Sound Transit will continuously monitor project status and associated risks. ST will take mitigation actions for known risks identified on the risk register that pose a significant impact to the project cost or schedule forecast.

The Q4 2021 risk review workshop was held in December 2021. The following are the top project wide risks:

- Encounter artifacts and/or human remains (tribal) during construction causing major delays and/or need to change alignment.
- Contaminated soil and/or groundwater are discovered during OMF South construction resulting in increased costs (applies to all sites).
- Existing buildings below the proposed guideway/stations require upgrades/replacement to meet code requirements (i.e.- Construction type challenges), thus increasing project costs.
- OMF South can't be built in time for ST3 vehicle schedule. This schedule concern could happen during alternatives development, environmental, design, or construction phases.
- Right-of-way cost may increase more than projected escalation rates as a result of property value increases in the region.
- Close to Sounder alignment options have substantial impact on Tacoma Link, Sounder, Amtrak, PS Transit, ST Express, and Greyhound operations.
- Delays caused by local Authority Having Jurisdiction (AHJ) reviews.
- City of Tacoma requests pedestrian bridge crossing I5 in East Tacoma (Portland Ave. station) which was not included in ST3 scope assumption.
- Community concerns and comments result in delays to design approval.
- The two alternative sites in Federal Way may require multiple road vacations. The city may require exceptional public benefit.
- 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.
- Unknown utility conflicts may be discovered during construction that can increase cost and delay schedule.
- New commercial development on affected parcels drives the ROW cost higher.

Link Light Rail Tacoma Dome Link Extension



Tacoma Dome Link Extension

Current Progress

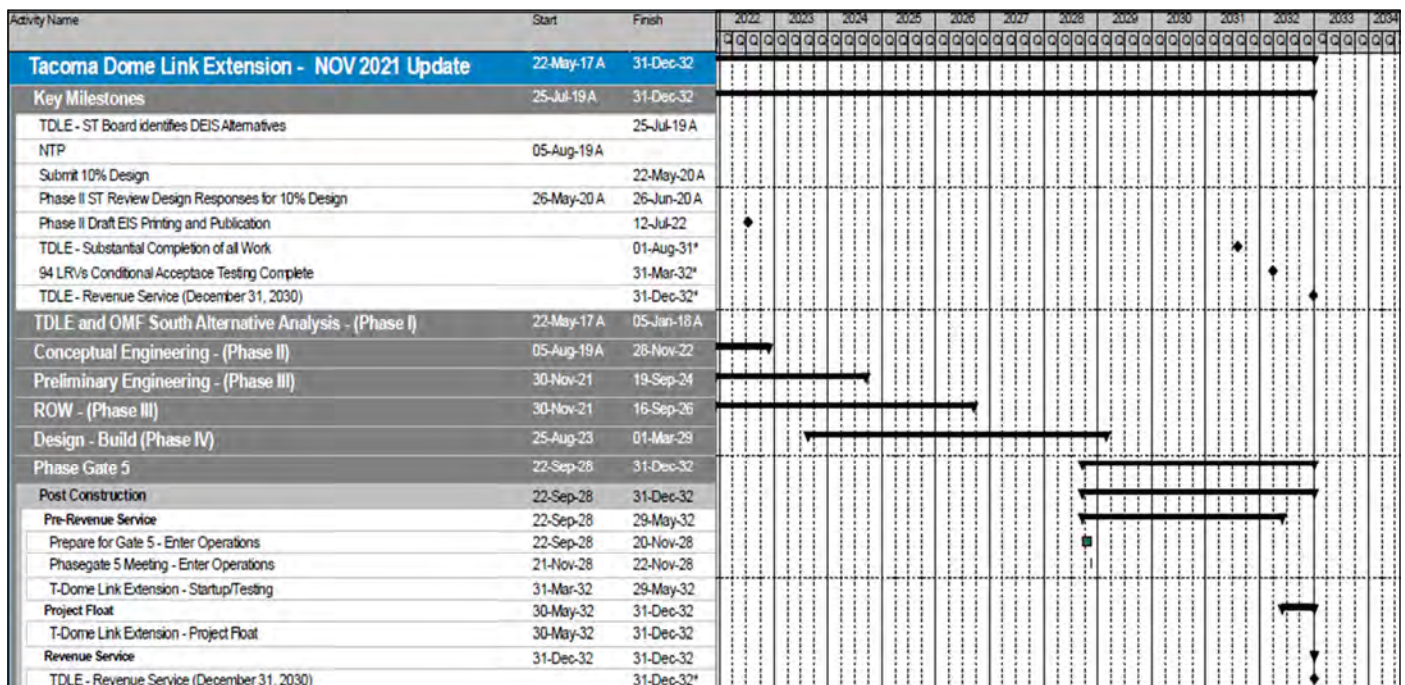
- Conducted inner-agency Passenger Persona Workshops, focusing on the passenger experience to inform design.
- Continued collaboration with the City of Federal Way regarding Code Amendment language related to parking requirements.
- Continued coordination with Bonneville Power Administration regarding reimbursement agreement.

Community Engagement

- Attended the Asia Pacific Cultural Center's 25th anniversary celebration at the Greater Tacoma Convention Center (In-person event on 11/6)
- Attended the monthly New Tacoma Neighborhood Council meeting (virtual meeting on 11/10)
- Provided an Alternative DEIS briefing to the City of Tacoma (virtual meeting on 11/15)
- Provided an Alternative DEIS briefing to Pierce County (virtual meeting on 11/22)
- Provided an Alternative DEIS briefing to the City of Fife (virtual meeting on 11/22)
- Provided an Alternative DEIS Transportation Report and 10% Design briefing to King County Metro (virtual meeting on 11/30)

TDLE Project Schedule

Below is the summary schedule as of November 30, 2021. The project continues to forecast a publication of the Draft Environmental Impact Statement in Q3 2022.

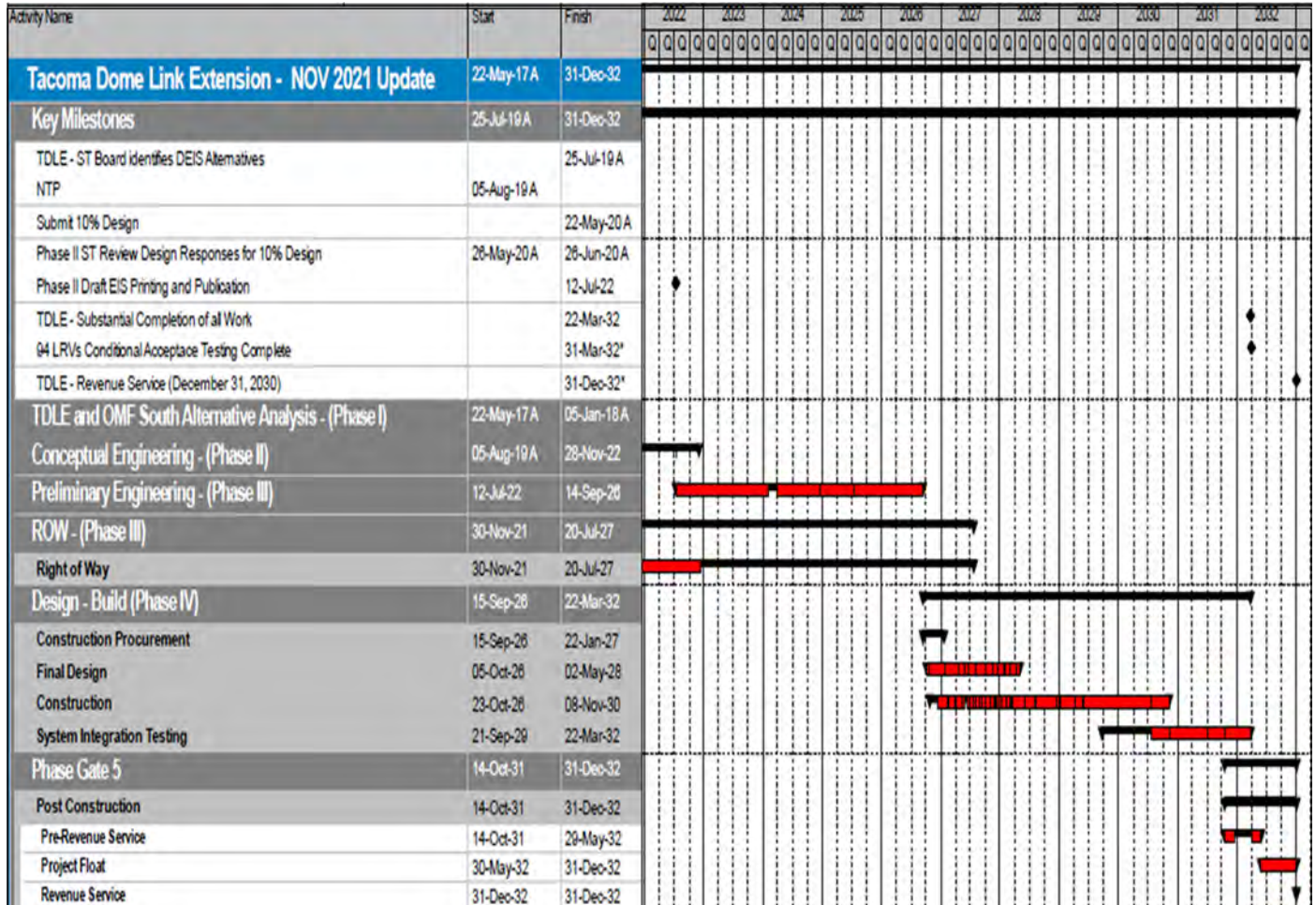


Link Light Rail Tacoma Dome Link Extension



TDLE Critical Path Analysis

This critical path for TDLE is running through Phase II publishing of the DEIS and ST Board Preferred Alternative identified, any slippage to Phase II and Phase III could impact the Revenue Service target date completion of 2032 for TDLE.



Link Light Rail Tacoma Dome Link Extension



Operations and Maintenance Facility South

Current Progress

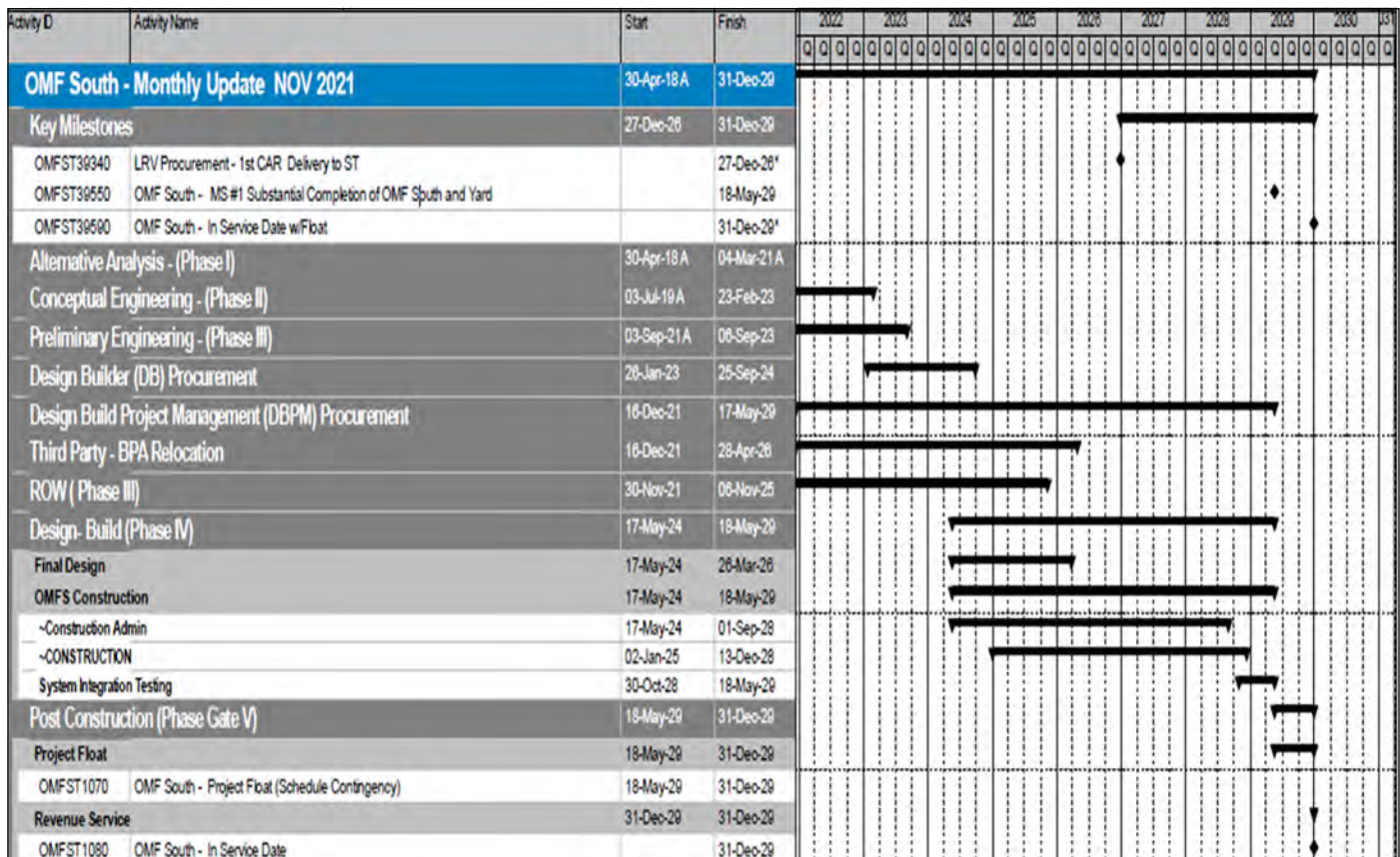
- Developed timing graphics for path to Phase 3 SOW and budget approval by Board in February 2022.
- Presented project scope and budget to PEPD Deputy Executive Director (DED) and Executive Director (ED), along with Operations and DECM DEDs.
- Held project meetings with partner Cities and Interagency Group (IAG).
- Drafted External communications responses to comments and answered Board questions on project.

Community Engagement

- Provided a project update briefing to cooperating agencies (virtual meeting on 11/8)
- Hosted an Interagency Group meeting (virtual meeting on 11/16)
- Provided interested Sound Transit Board members with a tour of site alternatives (virtual meeting on 11/17)
- Attended the monthly meeting with the City of Federal Way (virtual meeting on 11/29)

OMF South Project Schedule

Below is the summary schedule as of November 30, 2021. ST Board of Directors Selects Preferred Alternative is forecasted to happen in Q1 2022.

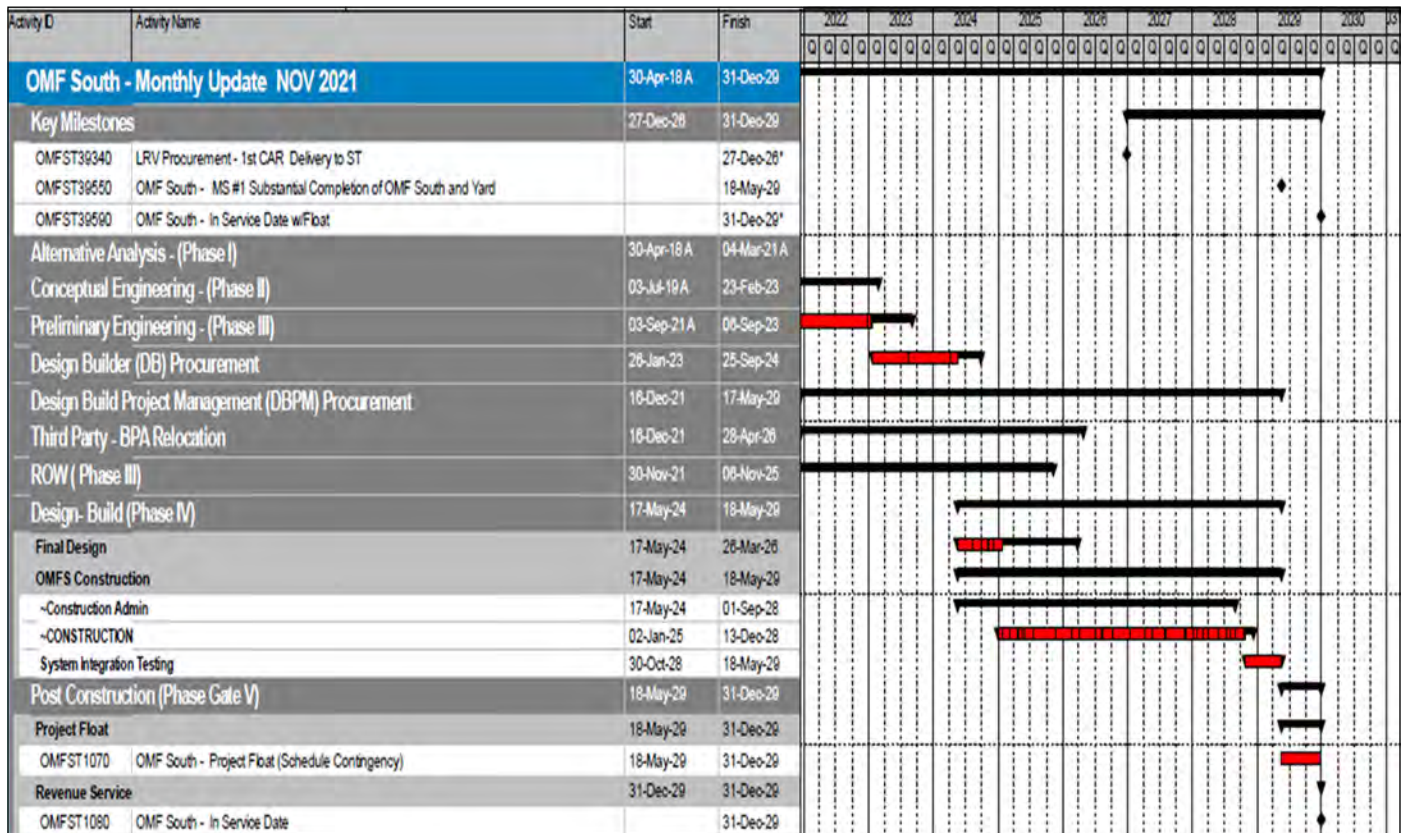


Link Light Rail Tacoma Dome Link Extension



OMF South Critical Path Analysis

This critical path for OMF South is running through Phase II getting to the ST Board Preferred Alternative identified, preparation for Phase Gate 2 to establish delivery method, and preparing the bridging documents required for Phase III Preliminary Engineering.



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.

Project Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
0	0	0	0	0	0
* 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.

Project has planned 58.5 average FTEs per month for the year 2021. To date, both ST and consultant actual staffing levels have recorded a negative variance (underrun) to the Planned Monthly FTE average. This underrun rate is expected to continue as board action on the preferred alternative was pushed out.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	30.0	19.4	(10.6)
Consultants	28.5	15.8	(12.7)
TOTAL	58.5	35.2	(23.3)
* 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.

Phase

Planning

Budget

\$285.9 M through completion of Preliminary Engineering

Schedule

Target dates:

West Seattle Extension: 2032

Ballard Extension: 2037



Map of Project Alignment

Key Project Activities

- Continued production of the Draft EIS.
- Continued collecting data and conducting fieldwork activities in support of environmental and engineering evaluation.
- Continued community engagement activities including kickoff meeting for Community Advisory Groups, property owner webinars, and briefings to community groups.
- Continued engagement with partner and regulatory agencies, stakeholder groups and property owners regarding environmental process and next steps.

Link Light Rail West Seattle and Ballard Link Extensions



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 \$25M in 2021 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	\$23.3	\$23.3	\$63.1	\$0.0
Preliminary Engineering	\$205.4	\$93.3	\$86.1	\$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	\$3.1	\$1.4	\$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	\$3.1	\$2.4	\$6.0	\$0.0
Total	\$285.9	\$122.8	\$113.2	\$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	\$3.1	\$2.4	\$5.0	\$0.0
80 Professional Services	\$263.4	\$119.7	\$110.8	\$263.4	\$0.0
90 Unallocated Contingency	\$17.5	\$0.0	\$0.0	\$17.5	\$0.0
Total (10 - 90)	\$285.9	\$122.8	\$113.2	\$285.9	\$0.0

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 is being conducted together with the Project Development 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 a 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;
- Budget risk due to higher current real estate costs and construction costs.

Community Engagement

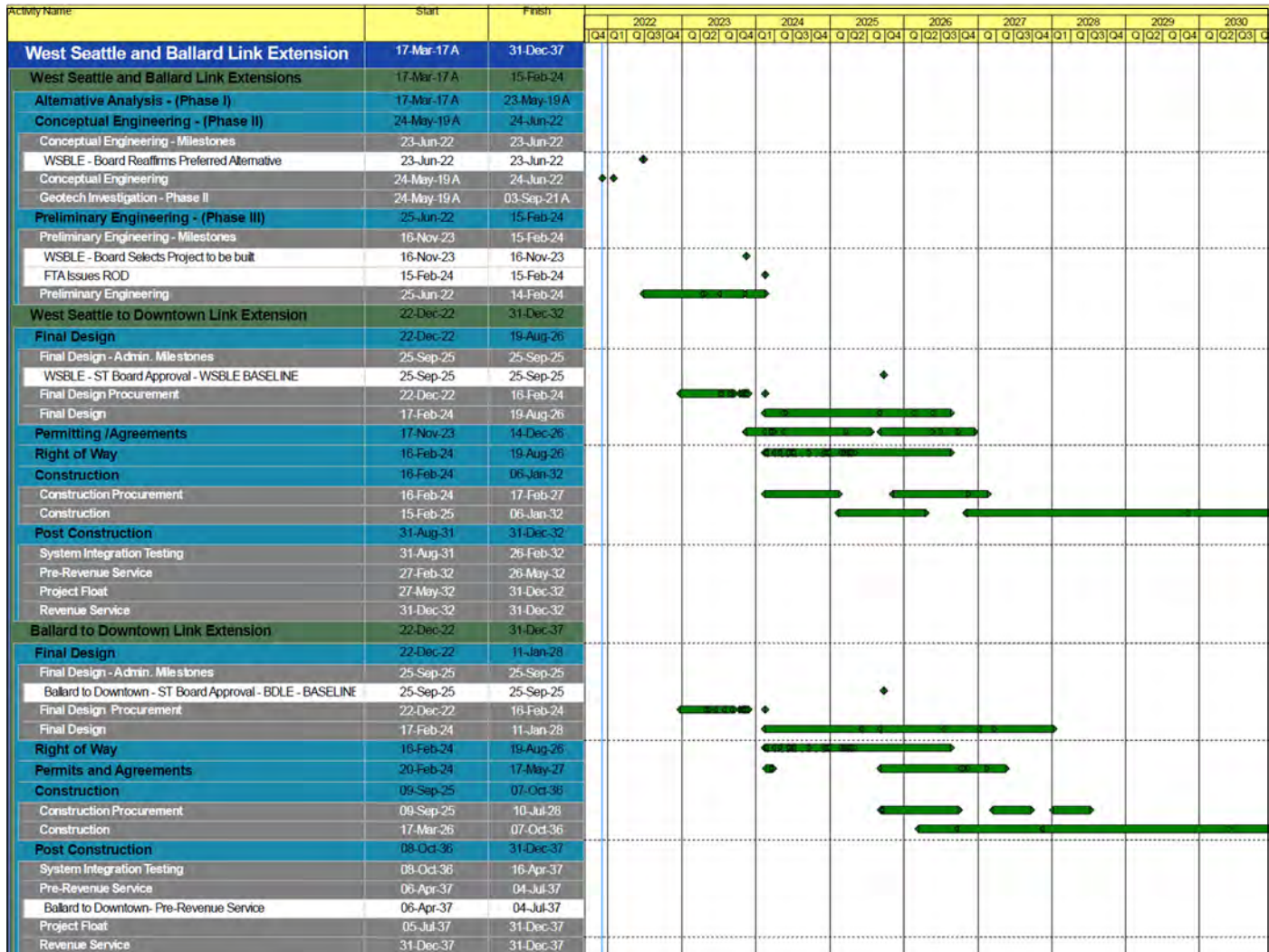
- Held kickoff meeting for Community Advisory Groups on November 16, 2021.
- Hosted eight webinars for property owners and continued outreach and briefings to individual property owners.
- Participated in two briefings/events with communities along the project corridor to provide opportunities to learn more about light rail route and station location options being studied in the Draft EIS. The specific dates of each event were:
 - Alliance for Pioneer Square Coffee Break in Occidental Square, November 10, 2021
 - CID Business Improvement Area Small Business Saturday Food Walk, November 27, 2021
- Continued effort to contact stakeholders throughout the project corridor to offer briefings regarding the project alternatives as well as information related to ongoing fieldwork activities.

Link Light Rail West Seattle and Ballard Link Extensions



Project Schedule

The Board of Directors announced their realignment decision in August which includes target dates of 2032 for the West Seattle Extension and 2037 for the Ballard Extension. The schedule below has been updated to represent these dates. Phase 3 Preliminary Engineering approval is expected in Q2 2022.



Link Light Rail West Seattle and Ballard Link Extensions



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	34.3	32.2	(2.1)
Consultants	50.0	35.4	(14.6)
TOTAL	84.3	67.5	(16.8)

** 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
	None to report this period	

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 | 2021



Prepared by Project Controls | Portfolio Services Office

Sounder Commuter Rail Program Overview



Auburn Station Parking and 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.

Kent Station Parking and Access Improvements: Project includes alter natives 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.

Lakewood Station Access Improvements: Project will plan, design, and construct a parking facility and provide access improvements to the existing station for bicyclists, bus riders and drivers. This could mean investments in safer walking, rolling and bicycling connections with surrounding neighborhoods; better pick-up and drop-off areas; additional station lighting and weather shelters; parking options and more.

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 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.

South Tacoma Station Access Improvements: Project will plan, design and construct a parking facility and provide access improvements to the existing station for bicyclists, bus riders, and drivers. This could mean investments in safer walking, rolling and bicycling connections between stations and surrounding neighborhoods; better pick-up and drop-off areas; additional station lighting and weather shelters; parking options and more.

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.

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.

Project	Authorized Allocation	Commitment To Date	Incurred to Date	Estimated Final Cost	Authorized Allocation vs EFC
Auburn Station Access Improvement	\$12.6	\$6.8	\$4.5	\$12.6	\$0.0
Kent Station Access Improvements	\$16.8	\$7.7	\$5.7	\$16.8	\$0.0
Lakewood Station Access Improvement	\$1.9	\$1.4	\$1.1	\$1.9	\$0.0
Puyallup Station Access Improvements	\$79.1	\$71.4	\$57.7	\$79.1	\$0.0
Sounder South Capacity Expansion	\$17.4	\$5.1	\$4.1	\$17.4	\$0.0
South Tacoma Station Access Improvements	\$1.5	\$1.0	\$0.8	\$1.5	\$0.0
Sumner Station Access Improvements	\$17.8	\$16.2	\$13.0	\$17.8	\$0.0
Total	\$147.1	\$109.7	\$87.0	\$147.1	\$0.0

Figures are shown in millions

Program Schedule

Schedule for select major Sounder projects are summarized below. Projects from the realignment process are not shown. ST is currently updating schedules with ST Board of Director's R2021-05 Realignment Decision.

Project Name	Start	Finish	2020					2021					2022			
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
South Corridor	01-May-15	16-Apr-22														
Sounder Commuter Rail - South	01-May-15	16-Apr-22														
Station Access - South	01-May-15	16-Apr-22														
S300017 - Puyallup Station Access Improvements	01-May-15	16-Apr-22														

Sounder Commuter Rail Auburn Station Parking and 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	Complete Environmental/Enter Design & Construction
Budget	\$12.6 Million
Schedule	Target Date: 2025



Improving access to Sounder Auburn Station

Key Project Activities

- Re-appraisals for full property acquisition complete and real estate is developing the condemnation package. Continued appraisals for Temporary Construction Easements (TCEs).
- Continue coordination with the City of Auburn to determine their level of involvement in the design-build procurement.

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 \$54K. The incurred cost increased from \$4.48M to \$4.54M. The majority of this period's costs are attributed to staff costs, design-build project management activities, 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	\$2.4	\$1.7	\$1.7	\$2.4	\$0.0
Preliminary Engineering	\$3.4	\$2.7	\$2.6	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$2.0	\$0.1	\$2.0	\$0.0
3rd Party Agreements	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
Construction	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
ROW	\$3.8	\$0.5	\$0.1	\$3.8	\$0.0
Total	\$12.6	\$6.8	\$4.5	\$12.6	\$0.0

Sounder Commuter Rail Auburn Station Parking and Access Improvements



Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. 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 next risk register update is scheduled for December 2021.

The following are the top project wide risks:

- Complexity of property acquisition resulting in a delay to the start of construction
- New building codes impact the project (seismic requirements)
- Additional scope and project change requests from stakeholders

Project Schedule

Sound Transit continues to work on some schedule adjustments and schedule activities with funding agreement, contract, statement of work, or similar commitment have been executed, are shown.

The project team has engaged the current design-build project management (DBPM) team to help development of the Design-Build Project Requirements, issuance of the Design-Build Procurement Request for Qualifications and Baselineing.

Other activities underway include initiating property appraisal and condemnation activities, expected Q3 2023.

Phase III Approval of Project Baseline - Phase Gate 4 is planned for Q2/2022.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<div><div></div><div>S300041 - Auburn Station Access Improvements</div></div>	24-Feb-16 A	31-Dec-25													
<div><div></div><div>Alternative Analysis (Phase I) - Auburn</div></div>	24-Feb-16 A	15-Nov-17 A													
<div><div></div><div>Conceptual Engineering (Phase II) - Auburn</div></div>	22-Mar-18 A	01-Jul-21 A													
<div><div></div><div>Preliminary Engineering (Phase III) - Auburn</div></div>	13-Dec-18 A	26-May-22													
<div><div></div><div>ST Board Approves Project Baseline - Phase Gate 4 - Auburn</div></div>	26-May-22	26-May-22													
<div><div></div><div>Administration</div></div>	05-Aug-21 A	12-May-22													
<div><div></div><div>VE Workshop</div></div>	01-Apr-22	09-May-22													
<div><div></div><div>Phase 3 Work Tasks - Preliminary Engineering</div></div>	13-Dec-18 A	01-Jul-21 A													
<div><div></div><div>Permits and Agreements - Auburn</div></div>	30-Sep-19 A	10-Mar-22													
<div><div></div><div>Right of Way - Auburn</div></div>	09-May-19 A	10-Oct-23													
<div><div></div><div>Design-Build Project Management (DBPM)/Construction S</div></div>	02-Jan-20 A	19-Jun-25													
<div><div></div><div>Design-Build Contract (DB) - Auburn</div></div>	05-Aug-21 A	19-Jun-25													
<div><div></div><div>Design-Build Contract-Procurement</div></div>	05-Aug-21 A	01-Jun-23													
<div><div></div><div>Design-Build Contract-Design and Construction</div></div>	02-Jun-23	19-Jun-25													
<div><div></div><div>Const - Misc / Other / Env Mitigation</div></div>	09-Mar-22	19-Jun-25													
<div><div></div><div>Post Construction - Auburn</div></div>	20-Jun-25	31-Dec-25													
<div><div></div><div>Transition to Operations</div></div>	20-Jun-25	19-Jul-25													
<div><div></div><div>Project Float</div></div>	20-Jun-25	31-Dec-25													
<div><div></div><div>Open For Service</div></div>	31-Dec-25	31-Dec-25													

Sounder Commuter Rail Auburn Station Parking and Access Improvements



Community Engagement

- Project team started planning for the Auburn visual design workshop in Q1 2022.

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.

This month the project focused on packaging and evaluating cost saving strategies regarding the Kent, Auburn, and Sumner Station garages. The variance between the planned and actual FTE figures is the result of the project being on hold pending Board Realignment process. The actual FTE monthly average will be ramping up to planned levels the remainder of this year and into 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	3.6	1.6	(2.0)
Consultants	3.0	0.3	(2.7)
TOTAL	6.6	1.9	(4.7)
<i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.</i>			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Sounder Commuter Rail Kent Station Parking and Access Improvements



Project Summary

Scope 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.

Project includes alternatives identification, screening environmental documentation, design, and construction of station parking and access improvements at or around Kent Station.

Phase Complete Environmental/Enter Design & Construction

Budget \$16.8 Million

Schedule Target Date: 2025



Improving access to Sounder Kent Station

Key Project Activities

- Continue negotiations with the city to execute a Development Agreement
- Continued coordination with King County Metro to determine the requirements for a bus layover to be incorporated into the project.

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 \$55K. The incurred cost increased from \$5.62M to \$5.68M. The majority of this period's costs are attributed to staff costs, design-build project management activities, 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	\$2.7	\$1.9	\$1.9	\$2.7	\$0.0
Preliminary Engineering	\$3.4	\$2.7	\$2.7	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$1.9	\$0.1	\$2.0	\$0.0
3rd Party Agreements	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Construction	\$0.5	\$0.0	\$0.0	\$0.5	\$0.0
ROW	\$8.2	\$1.2	\$1.0	\$8.2	\$0.0
Total	\$16.8	\$7.7	\$5.7	\$16.8	\$0.0

Sounder Commuter Rail

Kent Station Parking and Access Improvements



Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. 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 next risk register update is scheduled for December 2021.

The following are the top project wide risks:

- Real Estate: Higher than anticipated cost or time required to purchase specific parcels for the realigned of Railroad Avenue.
- Geotechnical: Discovery of previously unknown contaminated soils underneath existing building.

Project Schedule

Sound Transit continues to work on making some schedule adjustments and Schedule activities for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown below.

The project team has engaged the current design-build project management (DBPM) team to help develop Design-Build Project Requirements, issuance of the Design-Build Procurement Request for Qualifications and Baseline.

Other activities underway include initiating property appraisal and condemnation activities, negotiating the development agreement with the City of Kent. As well as negotiating the King County Metro agreement and contribution for bus layover accommodation expected in Q2 2022.

Phase III Board Approval of Baseline is planned for Q2/2022.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<div><div></div><div>S300035 - Kent Station Access Improvements</div></div>	01-Dec-21	31-Dec-25													
<div><div></div><div>Preliminary Engineering (Phase III)</div></div>	01-Dec-21	26-May-22													
<div><div></div><div>Administration</div></div>	01-Dec-21	26-May-22													
<div><div></div><div>ST Board Approves Project Baseline - Phase Gate 4</div></div>	26-May-22	26-May-22													
<div><div></div><div>Establish Project Baseline (Phase Gate 4)</div></div>	01-Dec-21	12-May-22													
<div><div></div><div>VE Workshop</div></div>	01-Apr-22	09-May-22													
<div><div></div><div>Permits and Agreements</div></div>	01-Dec-21	16-Sep-22													
<div><div></div><div>Right of Way</div></div>	02-Dec-21	28-Nov-23													
<div><div></div><div>Design/Build Project Management (DBPM)/Construction</div></div>	01-Dec-21	06-Nov-25													
<div><div></div><div>Design-Build Contract (DB) - Kent</div></div>	01-Dec-21	06-Nov-25													
<div><div></div><div>Design-Build Contract-Procurement - Kent</div></div>	01-Dec-21	01-Jun-23													
<div><div></div><div>Design-Build Contract-Design and Construction - Kent</div></div>	02-Jun-23	06-Nov-25													
<div><div></div><div>Post Construction</div></div>	07-Nov-25	31-Dec-25													
<div><div></div><div>Transition to Operations</div></div>	07-Nov-25	23-Dec-25													
<div><div></div><div>Project Float</div></div>	07-Nov-25	31-Dec-25													
<div><div></div><div>Open For Service</div></div>	31-Dec-25	31-Dec-25													

Sounder Commuter Rail

Kent Station Parking and Access Improvements



Community Engagement

- Project team started planning for the Kent visual design workshop in Q1 2022.

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.

This month the project focused on the review of the Development Agreement with the City of Kent. Work advanced on the review of the Development Agreement with the City of Kent. Staff also worked on evaluating cost saving strategies regarding the Kent, Auburn, and Sumner Station garages. The Variance between the planned and actual FTE figures is the result of the project being on hold pending Board Realignment process. The actual FTE monthly average will be ramping up to planned levels the remainder of this year and into 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.0	1.7	(3.3)
Consultants	3.0	0.3	(2.7)
TOTAL	8.0	2.0	(6.0)
* 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.	

Sounder Commuter Rail Lakewood Station Access Improvements

Project Summary

Scope This project will plan and design access improvements to the existing station. This could mean investments in safer walking, rolling and bicycling connections between stations and surrounding neighborhoods; better pick-up and drop-off areas; additional station lighting and weather shelters; parking options and more.

During Phase 1 the project will conduct an alternatives evaluation and screening process in order to help identify the Preferred Alternative package of access improvements.

Phase Planning Phase 1—Alternatives Analysis

Budget \$1.96 Million

Schedule Target Date: 2030



Lakewood Station in Pierce County.

Key Project Activities

- Drafted a final report for Phase 1—Alternatives Analysis
- Finalized a list of recommended potential improvements and possible alternates



Lakewood Station Garage



Lakewood Station Passenger Platform Access

Sounder Commuter Rail

Lakewood Station Access Improvements



Project Cost Summary

The project cost is summarized below. The table summarizes costs in accordance with Sound Transit's budget Work Breakdown Structure (WBS).

This period expenditures increased by \$68K with the majority of the amount coming from staff costs and alternative analysis.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.5	\$0.4	\$0.4	\$0.5	\$0.0
Preliminary Engineering	\$1.0	\$0.7	\$0.4	\$1.0	\$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	\$0.3	\$0.3	\$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	\$1.9	\$1.4	\$1.1	\$1.9	\$0.0

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

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 reviewed and updated the risk register in September 2021. The team will review and revise the register on a quarterly basis, the next risk register update is scheduled for January 2022. Since the project is in early planning, we will learn more about potential risks at the next phase of design.

The following are the top project wide risks:

- Third party, stakeholders or internal ST scope changes could lead to increased costs and delays to the schedule.
- There may be too many recommendations that exceed the financial plan budget and schedule.

Sounder Commuter Rail

Lakewood Station Access Improvements



Project Schedule

Sound Transit has made schedule adjustments and Schedule activities for which a funding agreement, contract, statement of work, or similar executed commitment are shown below.

Phase 1 - Alternative Development NTP was issued in December 2020. The consultant has completed Task 4 (Alternative Refinement and Identification of Preferred Alternatives) and is currently finalizing Task 3 (Public Involvement). Task 5 (Alternative Refinement & Identification of Preferred Alternatives) is in progress.

Board Identification of Preliminary Preferred Alternatives is expected end of Q1/2022.

Activity Name	Start	Finish	2022					2023				2024			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Lakewood Station Access Improvements	18-Feb-20 A	31-Dec-30													
Perliminary Engineering	18-Feb-20 A	27-Feb-25													
Phase I - Alternative Analysis	18-Feb-20 A	24-Mar-22													
Alternative Analysis Admin	18-Feb-20 A	05-Aug-21 A													
Alternative Analysis Procurement	25-Sep-20 A	04-Dec-20 A													
Alternative Analysis	01-Oct-20 A	24-Mar-22													
Prepare Cost Estimate	01-Oct-20 A	15-Oct-20 A													
Submit Cost Estimate	16-Oct-20 A	30-Oct-20 A													
Alignment and Parcel Maps - Submitted for Pricing - Not Applicable	04-Dec-20 A	04-Dec-20 A													
Alternatives Development	04-Dec-20 A	31-Jan-22													
Board Identifies DEIS Alts. & Prelim Preferred Alt.	24-Feb-22	24-Mar-22													
Phase II - Conceptual Engineering	24-Mar-22	25-Jan-24													
Phase III - Preliminary Engineering	26-Jan-24	27-Feb-25													
Right of Way	01-Dec-21	30-Nov-23													
Final Design	28-Feb-25	02-Jul-27													
Construction	03-Jul-27	28-Aug-29													
Post Construction	29-Aug-29	31-Dec-30													

Community Engagement

- Began drafting a Community Engagement Summary to share what we heard during the October outreach. We expect to finalize this and post on the Sound Transit website in December.

Sounder Commuter Rail

Lakewood Station Access Improvements



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.

Currently the project is trending under the planned staffing needs as the project initiation and initial identification of improvements took less effort than planned. Staffing is anticipated to grow to planned levels the evaluation of the improvements gets underway.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	2.2	1.5	(0.7)
Consultants	2.1	1.7	(0.4)
TOTAL	4.3	3.2	(1.1)

** 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.	

Sounder Commute Rail Puyallup Station Access Improvements

Project Summary

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

The project includes an new 500-space parking garage, new surface parking with approximately 165 spaces, and includes a pedestrian bridge over 5th Street Northwest.

Phase Final Design and Construction

Budget \$79.1 Million

Schedule Open for Service: Q2 2022



Improving access to Sounder Puyallup Station

Key Project Activities

- Update of project schedule is underway following City approval of design package.
- Fire protection/drainage pipes, electrical rough-in work, and installation of cable barriers continue.
- Continued paint application at the garage ceiling, stairs, east abutment, tension mesh support steel at the garage exterior, and the interior of the pedestrian bridge.
- Continued curtain wall installation at garage NE stair tower and installation of garage elevator shaft equipment.
- Operability Assessment (OA) workshop occurred last week of November.
- Planning for Phase Gate 5 Enter Operations action continue.

Closely Monitored Issues

- Coordination of work with BNSF and the City of Puyallup to execute off site intersection and signal improvements
- Replacement of intersection signal cabinet and signal pole fabrication and delivery timelines.
- Aligning internal ST resources to successfully complete close out process and turn over to Operations / Facilities.
- Project continues to track and monitor increasing cost and schedule pressures.

Sounder Commute Rail

Puyallup Station Access Improvements



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 expenditures increased by \$3.3M. The incurred cost increased from \$54.4M to \$57.7M. The majority of this period's costs are attributed to staff costs, construction management services, and \$3.2M for the Design-Build construction contract.

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	\$4.6	\$4.6	\$4.0	\$4.0	\$4.6	\$0.0
Preliminary Engineering	\$2.9	\$2.7	\$2.6	\$2.6	\$2.7	\$0.0
Final Design	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$5.2	\$5.1	\$4.6	\$3.8	\$5.1	\$0.0
3rd Party Agreements	\$2.2	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0
Construction	\$58.4	\$60.0	\$53.6	\$40.9	\$60.0	\$0.0
ROW	\$5.6	\$6.6	\$6.5	\$6.4	\$6.6	\$0.0
Total	\$79.1	\$79.1	\$71.4	\$57.7	\$79.1	\$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	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$47.1	\$31.2	\$29.1	\$24.3	\$31.2	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$1.0	\$10.0	\$8.6	\$5.2	\$10.0	\$0.0
50 Systems	\$0.0	\$4.3	\$2.3	\$1.4	\$4.3	\$0.0
Construction Subtotal (10 - 50)	\$48.0	\$45.5	\$40.0	\$30.9	\$45.5	\$0.0
60 Row, Land	\$5.4	\$6.6	\$6.5	\$6.4	\$6.6	\$0.0
80 Professional Services	\$22.0	\$25.8	\$24.8	\$20.3	\$25.8	\$0.0
90 Unallocated Contingency	\$3.7	\$1.2	\$0.0	\$0.0	\$1.2	\$0.0
Total (10 - 90)	\$79.1	\$79.1	\$71.4	\$57.7	\$79.1	\$0.0

Sounder Commute Rail

Puyallup Station Access Improvements



Contingency Management

The Puyallup project budget was baselined in February 2019 with a total contingency of \$14.6 M.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA was fully drawn down and no longer reported.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period the AC was decreased by \$60K due to an unanticipated task order for utility relocation.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. During this period the UAC reflects no change.

Contingency Status (Monthly)

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$4.6	5.8%	\$0.0	0.0%
Allocated Contingency	\$6.3	8.0%	\$4.7	21.9%
Unallocated Contingency	\$3.7	4.7%	\$1.0	4.9%
Total:	\$14.6	18.4%	\$5.7	26.8%

Contingency by Type

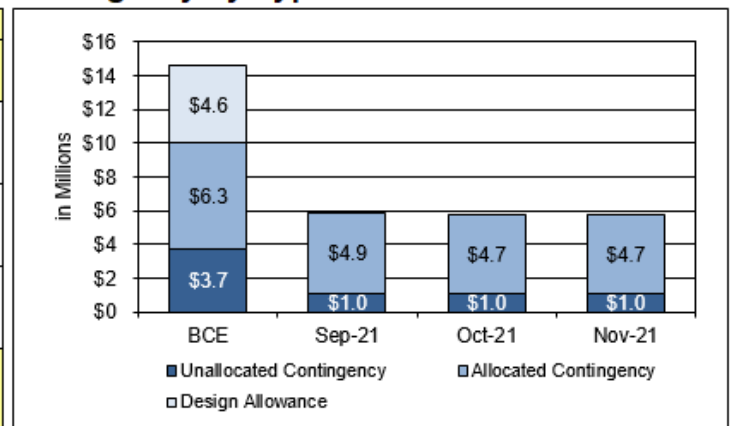


Table figures are shown in millions.

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 2021. The next risk register update is scheduled for February 2022.

The following are the top project wide risks:

- Additional unknown schedule impacts after ordering of long lead items required for the completion of off site intersection work (signal poles) was delayed by extended permit approval process.
- Coordination of the BNSF, Design Builder and City of Puyallup to execute off-site improvements (Intersection and Signal upgrades) in a timely manner.
- Transition to Operations is impacted by terms being negotiated over use of parking during off hours with City. Terms for parking during off hours need to be reached between parties before Transition to Operations/Garage Opening.

Sounder Commute Rail

Puyallup Station Access Improvements



Project Schedule

This month the weighted percent complete for the schedule is 78.9%. Notice to Proceed was issued to the contractor in the first quarter of 2020 to commence design and the contractor mobilized on site Q3 2020. The schedule update for this period is under review. The contractor is currently dealing with design delays due to changes to proposed traffic mitigation and is looking at possible mitigation for these impacts. Parking Garage completion is currently projected for August 2022 which is approx. 6 months behind but open for service may be constrained by the traffic mitigation design delays that are pushing project completion into Q4 2022.

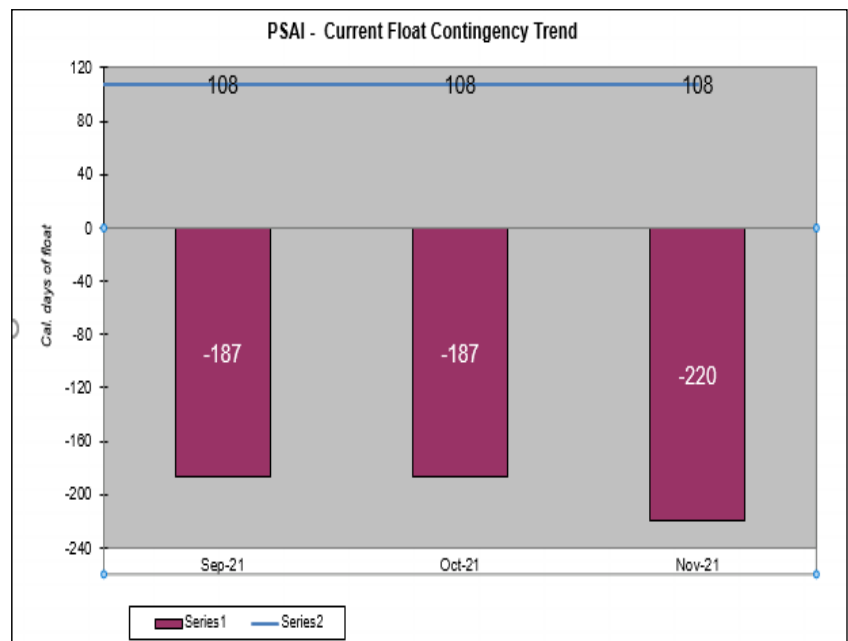
Activity Name	Start	Finish	2019				2020				2021				2022			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S300017-Puyallup Station Access Improvements - DB	01-May-15 A	19-Dec-22																
S300017-Puyallup Station Access Improvements - PE	01-May-15 A	20-Mar-19 A																
S300017-Puyallup Station Access Improvements - ROW	05-Jul-16 A	31-Mar-21 A																
S300017-Puyallup Station Access Improvements - Permits & Third Party Agreements	15-Jul-16 A	25-Mar-21 A																
S300017-Puyallup Station Access Improvements - Construction	17-Sep-18 A	19-Dec-22																
S300017-Puyallup Station Access Improvements - Design/Build Project Management	17-Sep-18 A	19-Dec-22																
S300017-Puyallup Station Access Improvements - Construction Procurement	17-Sep-18 A	26-Mar-20 A																
S300017-Puyallup Station Access Improvements - DB Construction	26-Mar-20 A	22-Nov-22																
S300017 - Puyallup Station Access and Improvements - Design/Build - Design and Construction	26-Mar-20 A	22-Nov-22																
Milestones	26-Mar-20 A	22-Nov-22																
Notice to Proceed	26-Mar-20 A	26-Mar-20 A																
Milestone 1 - Substantial Completion	19-Aug-22	19-Aug-22																
Milestone 2 - Acceptance of Work	18-Sep-22	18-Sep-22																
Milestone 3 - Final Acceptance	19-Sep-22	22-Nov-22																
Tentative Interim Milestones	25-Apr-22	25-May-22																
Design	27-Mar-20 A	10-Nov-21 A																
Construction	26-Mar-20 A	18-Sep-22																
Provisional Issues	08-Sep-20 A	22-Mar-22																
Requests For Change / Work Directives	13-Apr-20 A	19-Aug-22																
Change Orders	03-Apr-20 A	21-Feb-22																
S300017-Puyallup Station Access Improvements - Project Completion	01-Nov-21 A	18-Sep-22																
S300017 - Puyallup Station Access and Improvements - Project Completion	01-Nov-21 A	18-Sep-22																
Parking Garage Activation Tasks	01-Nov-21 A	15-Sep-22																
Post Construction	18-Sep-22	18-Sep-22																
Transition to Operations	18-Sep-22	18-Sep-22																
Project Final	18-Sep-22	18-Sep-22																
Open for Service	18-Sep-22	18-Sep-22																

Project Float

The Puyallup station access improvements was baselined with 108 days of project float.

Currently, the project is currently calculated to miss the February 10, 2022 open for service date by 220 calendar days due to delays to traffic mitigation design and is reporting a Q3 2022 completion.

ST and the contractor are working diligently to reduce these impacts to the project. The parking garage and surface parking on-site construction is also falling behind this period but the schedule update is currently under review.



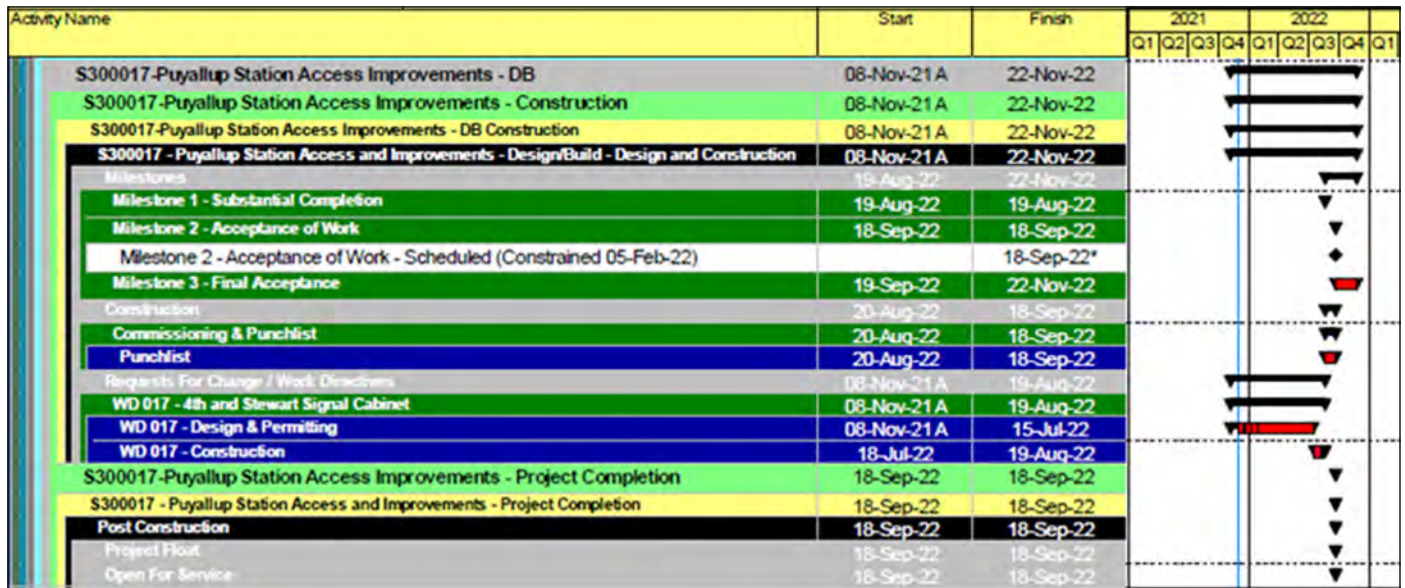
Sounder Commute Rail

Puyallup Station Access Improvements



Critical Path Analysis

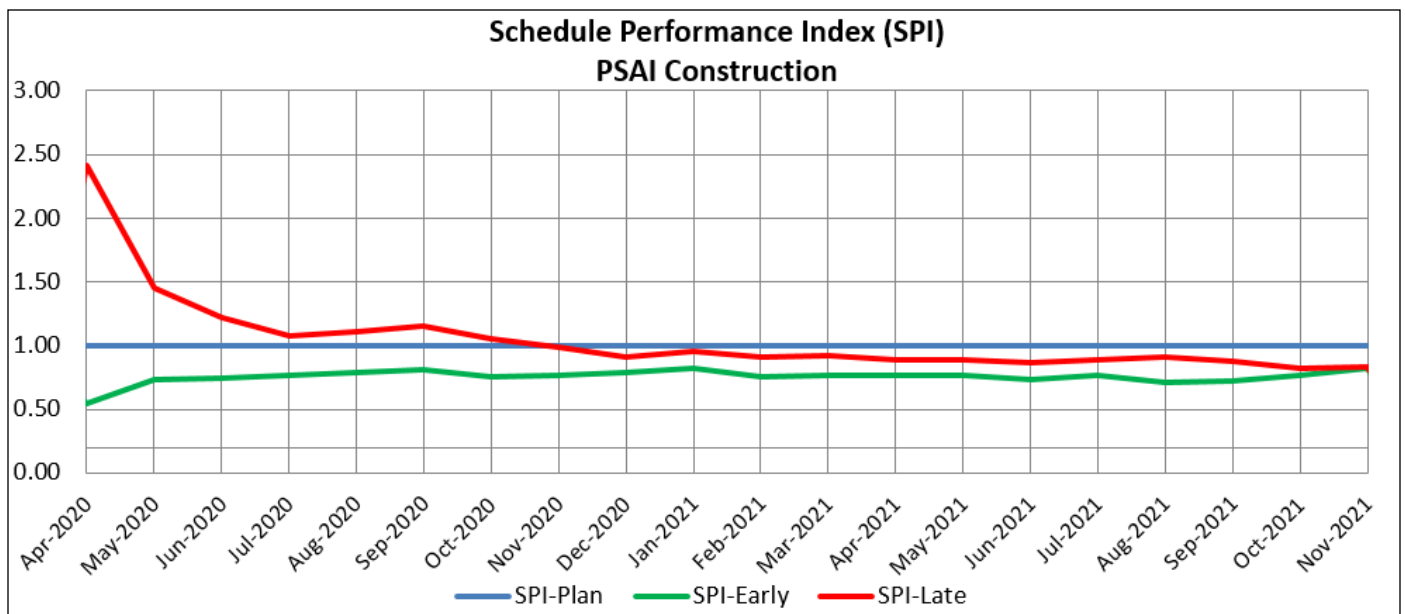
The critical path for the Puyallup is currently driven by the design delays to off site traffic mitigations. However, the work at the parking garage is forecasting completion in August of 2022. Delays due to supply chain issues are causing current impacts to the garage construction. We will continue to monitor the schedule and coordination with our Third Party partners on traffic mitigation.



Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.82 for this period, and the late SPI is at 0.83. The index under 1.0 indicates that the Contractor is behind.

The schedule continues to show some time impacts due to design and installation delays of off site traffic mitigations. The Contractor is working diligently to reduce these impacts to the project and identify as many opportunities as possible to try to recapture float on future work.



Sounder Commute Rail Puyallup Station Access Improvements



Community Engagement

- Monitored construction activities for impacts to community and issued one construction alert about nighttime work.

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.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	7.3	6.0	(1.3)
Consultants	7.5	6.9	(0.6)
TOTAL	14.8	12.9	(1.9)
* 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.	

Sounder Commute Rail

Puyallup Station Access Improvements



Construction Safety

Data/Measure	November 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	2	2
Days Away From Work Cases	0	1	1
Total Days Away From Work	0	32	32
First Aid Cases	0	4	4
Reported Near Mishaps	0	5	5
Average Number of Employees on Worksite	45	-	-
Total # of Hours (GC & Subs)	7,187	68,956	71,264
OSHA Incident Rates	November 2021	Year to Date	Project to Date
Recordable Injury Rate	0.00	5.80	5.61
LTI Rate	0.00	2.90	2.81
Recordable National Average	2.80		
LTI National Average	1.10		
Recordable WA State Average	5.70		
LTI WA State Average	2.00		
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.			

Sounder Commuter Rail

Sounder South Capacity Expansion

Program Summary

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

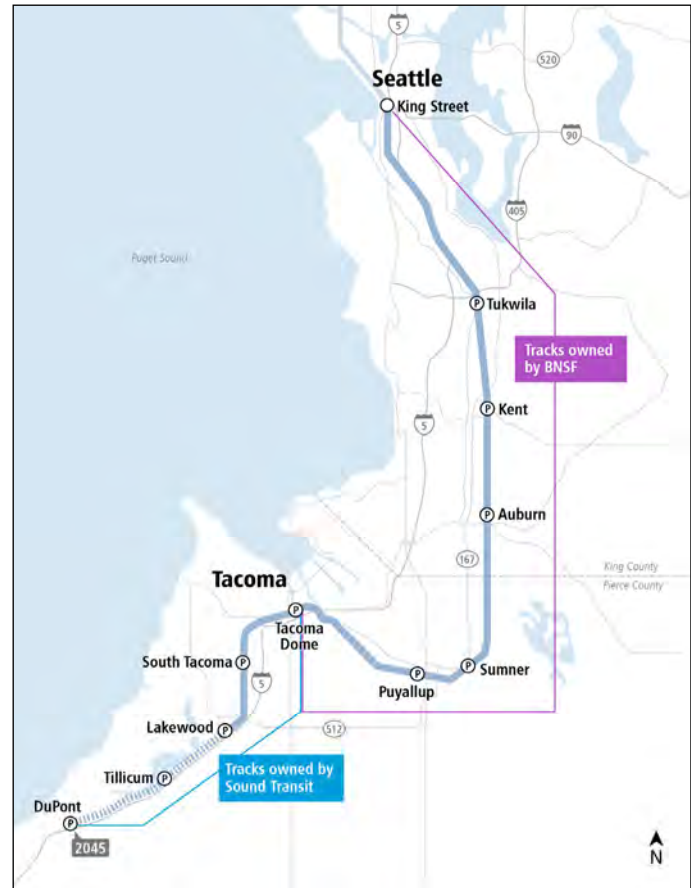
Program elements could include platform extensions, track and signal upgrades and other related infrastructure to facilitate additional capacity, and access elements such as improvements for pedestrians, bicyclists, buses, and private vehicles, prioritized per Sound Transit's System Access Policy.

The Sounder Strategic Development and Implementation Plan is complete and includes a program of proposed capital projects.

Phase Planning

Budget \$17.37 Million

Schedule Target Dates: 2036-2046, varies by Program Element



Sounder South Capacity map alignment

Program Key Activities

Program level activities are highlighted below. Project specific elements are detailed in their own sections on the following pages.

Sounder South Project Development Key Activities

- The Sounder South Program is coordinating with the Tacoma Dome Link Extension team to identify potential conflict points with the representative alignments on both corridors.

The following Sounder South Capacity Expansion (SSCE) Program planning projects approved by the Sound Transit Board to move forward into Planning Phase 1 Alternative Analysis phase.

- King Street Station Platform Improvements
- BNSF Platform Extension at Auburn Station
- These priority projects are summarized next followed by the common program reporting elements.

King Street Station Platform Improvements

This project focuses on extending platforms and improving access and pedestrian flow at King Street Station to accommodate 10-car trains. Project elements may include improvements for vertical circulation of passengers to and from the platform, expanded pick up/drop-off areas, improvements to crossing 4th Ave South, and other improvements that would improve passenger experience at the station platform.

Key Activities

- Continue Level 1 evaluation of potential improvements to access and pedestrian flow.
- Working closely with the West Seattle Ballard Link Extension (WSBLE) team on the conceptual design phase of the Chinatown/International District Station which is in close vicinity of the King Street Station. Key members of the WSBLE team are invited to participate in the bi-weekly KSS project team meetings.

Community Engagement

- No community outreach activities to report this month.

BNSF Platform Extension

This project focuses on extending platforms at Sounder South stations on the BNSF right of way (Tukwila, Kent, Auburn, Sumner, Puyallup) to accommodate 10-car trains, up from the existing 7-car trains. Project elements may include 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.

While most stations have a logical path to extend platforms, Auburn Station is physically constrained with Main Street and a BNSF track connection to Stampede Pass restricting options to extend platforms, requiring additional alternatives evaluation to determine future improvements in the platform area.

Key Activities

- Developed draft alternatives analysis report to evaluate options to extend platforms at Auburn Station with an initial ranking by project feasibility.

Community Engagement

- No community outreach activities to report this month.

Sounder Commuter Rail

Sounder South Capacity Expansion



Program Reporting Elements

While in the Planning phase, priority projects are being managed under a shared budget, schedule and staffing plan.

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 \$88K with the majority of the amount coming from staff costs, alternative analysis and third party coordination.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$3.9	\$1.7	\$1.7	\$3.9	\$0.0
Preliminary Engineering	\$12.1	\$3.0	\$2.0	\$12.1	\$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
Third Party Agreements	\$1.1	\$0.4	\$0.4	\$1.1	\$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	\$17.4	\$5.1	\$4.1	\$17.4	\$0.0

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

Sounder Commuter Rail

Sounder South Capacity Expansion



Project Schedule

Sound Transit has made schedule adjustments and schedule activities with funding agreement, contract, statement of work, or similar executed commitment are shown below.

The second Mainline Track Study and Report was finalized and completed on July 28, 2021. The team is currently working on Task 3 - (Public Involvement), Task 4 - (Alternative Development & Screening) and on Task 5 - (Alternative Refinement).

Selecting and Approving Preferred Alternatives for King St. Station and Auburn are expected to be completed Q2/2022.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sounder South - Platform Extensions	13-Jun-18 A	31-Dec-36													
Sounder South Platform Extensions	13-Jun-18 A	31-Dec-36													
Alternative Analysis - (Ph - I)	13-Jun-18 A	26-May-22													
Alternative Analysis Procurement	13-Jun-18 A	18-Nov-18 A													
Alternative Analysis	18-Nov-18 A	26-May-22													
SDIP Second Mainline Feasibility Study	22-Jan-21 A	28-Jun-21 A													
Auburn Platfrm Alternative Analysis	15-Feb-21 A	31-Dec-21													
Phase I - CE and Scoping	18-Nov-18 A	12-May-22													
King St. Station - Platform Improvements	05-Feb-21 A	12-May-22													
Board Identifies NEPA/DCE Alternatives & Preliminary LPA	26-May-22	26-May-22													
Conceptual Engineering/Environmental - (Ph - II)	01-Dec-21	28-Jun-24													
Conceptual Engineering/Environmental	01-Dec-21	28-Jun-24													
Right of Way	25-Apr-25	21-Dec-26													
Right of Way Milestones	25-Apr-25	11-Jul-26													
Right of Way (ROW)	25-Apr-25	21-Dec-26													
Preliminary Engineering - (Ph - III)	29-Jun-24	22-May-25													
Preliminary Engineering	29-Jun-24	22-May-25													
Final Design	04-Feb-25	16-Mar-27													
Construction	17-Mar-27	20-Dec-30													
Post Construction	21-Dec-30	31-Dec-36													

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 program team held the second risk management workshop to identify potential risks to the projects currently in alternatives analysis (King Street Station Platform Improvements and BNSF Platform Extensions). The project team reviewed and updated the risk register in September 2021. The team will review and revise the register on a quarterly basis, the next risk register update will be in January 2022.

The following are the top project wide risks:

- Potential for increased scope of work to accommodate additional accessibility or safety features not originally included in the project template.
- Cost increases associated with right-of-way and potential mitigations resulting from negotiations with local jurisdictions and BNSF.

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 staffing variance is attributed to the majority of the SCCE Program's activities being on pause during the capital program realignment process.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	7.7	3.2	(4.5)
Consultants	28.6	1.6	(27.0)
TOTAL	36.3	4.8	(31.5)

* 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 South Tacoma Access Improvements

Project Summary

Scope This project will plan, design and construct a parking facility and provide access improvements to the existing station. This could mean investments in safer walking, rolling and bicycling connections between stations and surrounding neighborhoods; better pick-up and drop-off areas; additional station lighting, weather shelters; parking options and more.

During Phase 1 the project will conduct an alternatives evaluation and screening process in order to help identify the Preferred Alternative package of access improvements.

Phase Planning Phase 1—Alternatives Analysis

Budget \$1.5 Million

Schedule Target Date: 2030



South Tacoma Station in Pierce County

Key Project Activities

- Drafted a final report for Phase 1—Alternatives Analysis
- Finalized a list of recommended potential improvements and possible alternates



South Tacoma Station



South Tacoma Station Passenger Platform Access

Sounder Commuter Rail

South Tacoma Access Improvement



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).

This period expenditures increased by \$64K with the majority of the amount coming from staff costs, and alternative analysis.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.5	\$0.3	\$0.3	\$0.5	\$0.0
Preliminary Engineering	\$1.0	\$0.7	\$0.5	\$1.0	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$1.5	\$1.0	\$0.8	\$1.5	\$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 project team reviewed and updated the risk register in September 2021. The team will review and revise the register on a quarterly basis, the next risk register update is scheduled for January 2022. Since the project is in early planning, we will learn more about potential risks at the next phase of design.

The following are the top project wide risks:

- Third party, stakeholders or internal ST scope changes could lead to increased costs and delays to the schedule
- There may be too many recommendations that exceed the financial plan budget and schedule

Sounder Commuter Rail South Tacoma Access Improvement



Project Schedule

Sound Transit has made schedule adjustments and Schedule activities for which a funding agreement, contract, statement of work, or similar executed commitment are shown below.

Phase 1 - Alternative Development NTP was issued in Dec 2020. Task 4 (Alternative Development and Screening) has been completed. The consultant is currently working on Task 3 (Public Involvement) and on Task 5 (Alternative Refinement & Identification of Preferred Alternatives).

Board identification of Preliminary Preferred Alternatives is expected end of Q1/2022.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
South Tacoma Station Access Improvement	18-Feb-20 A	31-Dec-30													
Preliminary Engineering	18-Feb-20 A	27-Feb-25													
Phase 1 - Alternative Analysis	18-Feb-20 A	24-Mar-22													
Alternative Analysis Admin	18-Feb-20 A	05-Aug-21 A													
Alternative Analysis Procurement	25-Sep-20 A	04-Dec-20 A													
Alternative Analysis	01-Oct-20 A	24-Mar-22													
Prepare Cost Estimate	01-Oct-20 A	15-Oct-20 A													
Submit Cost Estimate	16-Oct-20 A	30-Oct-20 A													
Alignment and Parcel Maps - Submitted for Pricing - Not Applicable	04-Dec-20 A	04-Dec-20 A													
Alternatives Development	04-Dec-20 A	31-Jan-22													
Board Identifies DEIS Alts. & Prelim Preferred Alt.	24-Feb-22	24-Mar-22													
Phase II - Conceptual Engineering	24-Mar-22	25-Jan-24													
Phase III - Preliminary Engineering	26-Jan-24	27-Feb-25													
Right of Way	16-Sep-24	15-Sep-26													
Final Design	28-Feb-25	02-Jul-27													
Construction	03-Jul-27	02-Oct-29													
Post Construction	03-Oct-29	31-Dec-30													
Project Completion	03-Oct-29	24-Oct-29													
Project Float	24-Oct-29	31-Dec-30													
Project Closing	31-Dec-30	31-Dec-30													

Community Engagement

- Began drafting a Community Engagement Summary to share what we heard during the October outreach. We expect to finalize this and post on the Sound Transit website in December.

Sounder Commuter Rail South Tacoma Access Improvement



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.

Currently the project is trending under the planned staffing needs for the project as the project initiation and initial identification of improvements took less effort than planned. As the project gets underway and the evaluation of the improvements begins, we anticipate more staff will be needed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	1.8	1.7	(0.1)
Consultants	2.1	1.8	(0.3)
TOTAL	3.9	3.5	(0.4)
<i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.</i>			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

Sounder Commuter Rail

Sumner Station Access Improvements

Project Summary

Scope The purpose of the project is to provide increased access to parking by adding 505 net new spaces and new bus loop.

Project includes alternative identification, screening, environmental documentation, design and construction of station access improvement at or around Sumner Station.

Phase Complete Environmental/Enter Design & Construction

Budget \$17.8 Million

Schedule Target Date: 2025



Improving access to Sounder Sumner Station

Key Project Activities

- Updating design-build project requirements and preliminary plans.
- Identifying additional site investigation activities to support the design-build procurement.
- Preparing documents for the upcoming design-build procurement.

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's expenditures increased by \$39K. The majority of this period's costs are attributed to 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	\$2.5	\$1.9	\$1.9	\$2.5	\$0.0
Preliminary Engineering	\$2.7	\$2.6	\$2.6	\$2.7	\$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	\$7.6	\$7.6	\$4.6	\$7.6	\$0.0
Construction	\$0.4	\$0.1	\$0.1	\$0.4	\$0.0
ROW	\$4.6	\$4.1	\$3.9	\$4.6	\$0.0
Total	\$17.8	\$16.2	\$13.0	\$17.8	\$0.0

Sounder Commuter Rail

Sumner Station Access Improvements



Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk mitigation plans.

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 December 2021.

The following are the top project wide risks:

- Schedule impacts if Third Party Agreements not finalized before contract award.
- Remediation of contamination (Soil &/or Water) could impact project cost and schedule.
- Environmental-Risk of project delay due to Area of Potential Effect requiring updating before the start of construction.

Project Schedule

Schedule activities with funding agreement, contract, statement of work, or similar commitment has been executed are shown.

Project procurement documents are complete. Issuance of the Design-Build Request for Qualifications is anticipated in Q1 2022. Final agreements for parking construction are also expected Q1 2022.

The project is in the Preliminary Engineering Phase III, the primary remaining activities in this phase are to initiate design-build procurement and baseline the project. Right-of-Way acquisitions are in progress and are forecast to be completed in advance of the area needed for the design-build contractor's construction activities. Upcoming milestones include Gate 4 Establish Baseline expected Feb 2022 and Notice to Proceed Expected Feb 2023.

Activity Name	Start	Finish	2022				2023				2024				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S300018 - Sumner Station Parking and Access Improvements	01-Dec-21	31-Dec-25													
Preliminary Engineering (Phase III)	01-Dec-21	09-Mar-22													
Administration	01-Dec-21	24-Feb-22													
MS01 ST Board Approves Project (Baseline) - Phase Gate 4	24-Feb-22	24-Feb-22													
Phase Gate 4 and Establish Project Baseline	01-Dec-21	10-Feb-22													
Project Baseline	01-Dec-21	10-Feb-22													
VE Workshop	31-Jan-22	09-Mar-22													
Permits and Agreements	31-Jan-22	31-Jan-22													
Right of Way	26-Dec-21	08-Feb-23													
Design-Build Project Management	01-Dec-21	10-Mar-25													
Design-Build Contract (DB)	04-Jan-22	10-Mar-25													
Design-Build Contract-Procurement	04-Jan-22	21-Feb-23													
CCB Approvals	04-Jan-22	04-Jan-22													
PM Inputs	05-Jan-22	11-Jan-22													
Prepare and Finalize RFQ	12-Jan-22	18-Mar-22													
RFQ Solicitation Period	21-Mar-22	29-Apr-22													
SOQ Evaluation and Selection	02-May-22	28-Jun-22													
RFP Phase	12-May-22	06-Dec-22													
ST Board Path	15-Dec-22	21-Feb-23													
CCB	15-Dec-22	26-Jan-23													
Contract Award and Execution	27-Jan-23	21-Feb-23													
Design-Build - Design and Construction	22-Feb-23	10-Mar-25													
Const - Misc / Other / Env Mitigation	22-Feb-23	10-Mar-25													
Post Construction	10-Mar-25	31-Dec-25													

Sounder Commuter Rail

Sumner Station Access Improvements



Community Engagement

- 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.

This month the project was focused on evaluating cost saving strategies regarding the Kent, Auburn, and Sumner Station garages. The variance between the planned and actual FTE figures is the result of the project being on hold pending Board Realignment process. The actual FTE monthly average will be ramping up to planned levels the remainder of this year and into 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	6.2	0.8	(5.4)
Consultants	0.0	0.0	0.0
TOTAL	6.2	0.6	(5.4)
* 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.	

Progress Report

Regional Express & STRIDE Programs



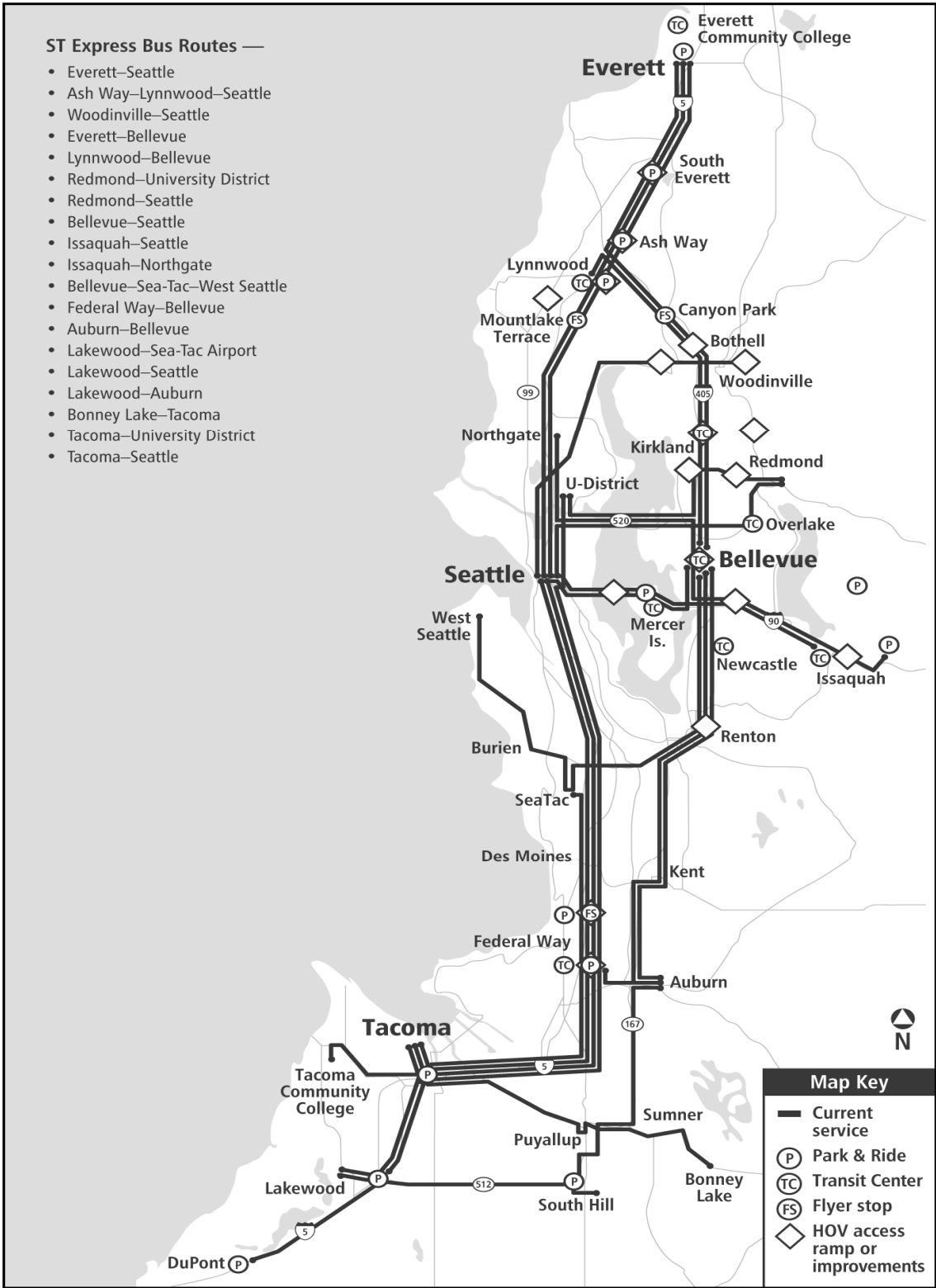
**ST Express Bus routes connects major regional hubs throughout the three counties
(King, Pierce, and Snohomish)**

November | 2021



Prepared by Project Controls | Portfolio Services Office

Regional Express & STRIDE Program Overview



ST Regional Express Bus Routes

Bus Base North: This project establishes the operations and maintenance facility necessary to support to support BRT operations. The Bus Base North will accommodate up to 120 buses to serve I-405 and SR 522/145th BRT and some ST Express routes.

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.

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.

Regional Express & STRIDE 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.

Project	Authorized Allocation	Commitment To Date	Incurred to Date	Estimated Final Cost	Authorized Allocation vs EFC
Bus Base North	\$48.7	\$40.0	\$38.5	\$48.7	\$0.0
I-405 Bus Rapid Transit	\$268.3	\$200.8	\$93.7	\$268.3	\$0.0
SR 522/NE 145th St Bus Rapid Transit	\$148.6	\$57.6	\$47.8	\$148.6	\$0.0
Total	\$465.6	\$298.4	\$180.0	\$465.6	\$0.0

Figures are shown in millions

Program Schedule

All projects within the Regional Express and STRIDE programs were part of the realignment process. Projects in the realignment process are not shown. *A graphic of the revised timelines will be displayed in a future update.*

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	Target Date: 2025



Map of Project Alignment

Key Project Activities

- Continued addressing Codes, Covenants and Restriction (CCRs) of the site that has been selected for the bus base at Canyon Park Business Center.
- Corps Environmental Permits submitted.
- The General Engineering Consultant (GEC) commenced work to bring the design toward 15%.
- Worked with ST Procurement and Contracts Division to begin planning on Operating System as well as Operators procurements.

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 the project cost incurred increased by around \$129K. This is primarily due to Sound Transit staff time for \$52K, some progress in Preliminary Engineering for \$17K, in Final Design for \$33K, and third party for \$34K.

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	\$2.1	\$2.0	\$4.4	\$0.0
Preliminary Engineering	\$2.3	\$1.7	\$1.4	\$2.3	\$0.0
Final Design	\$0.0	\$1.0	\$0.1	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.2	\$0.1	\$0.0	\$0.2	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Right-of-Way (ROW)	\$41.8	\$35.2	\$35.0	\$41.8	\$0.0
Total	\$48.7	\$40.0	\$38.5	\$48.7	\$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 the project team's responsibility to continuously monitor project status and associated risks. The team holds risk management workshop to identify and update the risk register on a quarterly basis.

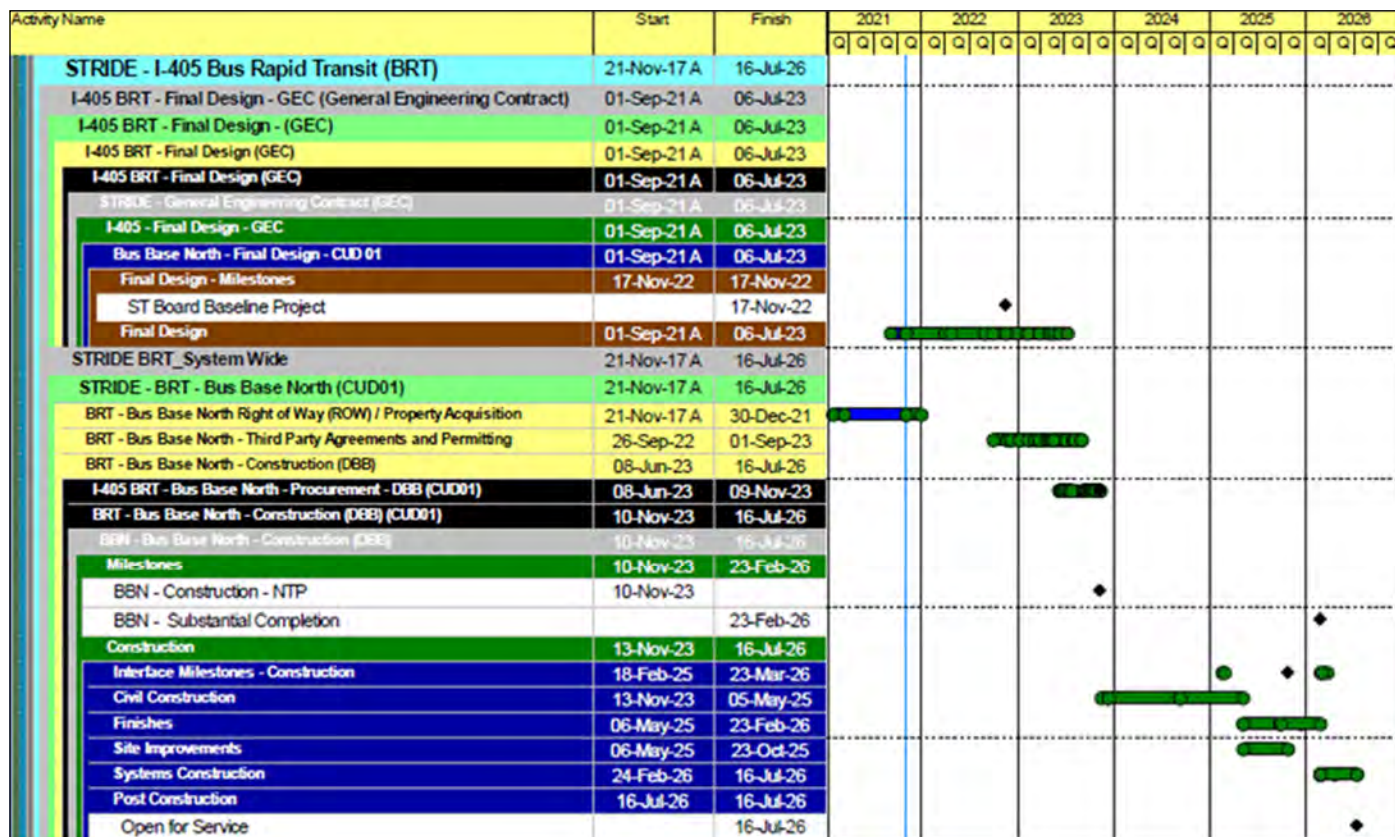
The top project risk and proposed mitigation is below:

- Soil conditions could require additional special foundations. Risk Mitigation: additional review of soil testing and borings, additional construction funds to address soil concerns are recommended to be budgeted.
- Addressing the Business Park Codes, Covenants and Restrictions: performing additional noise and vibration analysis.
- The project delivery method is being readdressed to align with the Board Realignment schedule.

Project Schedule

The Board of Directors announced their realignment decision in August 2021. ST has made schedule adjustments in accordance with this direction. A task order to the GEC Final Design team was issued at the end of October 2021 to progress the design.

The current critical path for Bus Base North is Final Design by the GEC, which commenced in October 2021 then construction procurement, civil construction and finishes then systems and testing. Activities that need to be monitored closely are acquiring rights to deviate from restrictive covenants that prohibit Sound Transit's proposed use for the property, developing project requirements, and permitting/agreements. The current forecast for completion is Q3 2026, 197 days past the ST Board realignment milestone.



Community Engagement

We are committed to proactively seeking public input during all stages of the project. The I-405 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. We 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.

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

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 in ST staff level of effort will reduce once final design accelerates with the GEC contract (DBPM option is not considered anymore).

Consultant staff are currently working on Phase 2 and Phase 3 of Preliminary Engineering and on Final Design

Capacity's increase of the GEC contract has been approved. First Task Order for Bus Base North was issued in October 2021.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	6.6	2.8	(3.8)
Consultants	1.0	0.5	(0.5)
TOTAL	7.6	3.3	(4.3)
<i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.</i>			

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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 and Phase 3 Preliminary Engineering.
Budget	I-405 BRT: \$268.3 Million Preliminary Engineering (Phases 1-3), GEC Contract in Final Design, Construction Improvement at the 522/405 Canyon Park interchange.
Schedule	Target Date: 2026, not including parking elements



Map of Project Alignment

Key Project Activities

- Continued developing partnering agreements and letters of concurrence with stakeholders.
- Reviewing draft Requests for Proposals with WSDOT to advance environmental and design at 85th, Brickyard, SR 522/I-405 Transit Hub, Canyon Park and Tukwila International Boulevard.
- Evaluating realignment impacts to project schedule and elements.
- Commenced demolition work at Sound Ford site in Renton.

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 \$1.6M, of which \$0.2M for staff time, \$1.2M for project refinement activities, preliminary engineering and environmental activities in the preliminary engineering phase, \$112K in the final design phase, \$21K in construction (building demolition in south Renton) and \$21K in third party agreement phase.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$11.0	\$9.7	\$9.8	\$11.0	\$0.0
Preliminary Engineering	\$50.2	\$41.6	\$31.0	\$50.2	\$0.0
Final Design	\$16.3	\$1.3	\$0.7	\$16.3	\$0.0
Construction Services	\$0.9	\$0.0	\$0.0	\$0.9	\$0.0
Third Party Agreements	\$1.5	\$0.9	\$0.6	\$1.5	\$0.0
Construction	\$152.2	\$119.0	\$24.4	\$152.2	\$0.0
Right-of-Way (ROW)	\$36.2	\$28.2	\$27.2	\$36.2	\$0.0
Total	\$268.3	\$200.8	\$93.7	\$268.3	\$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 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 ongoing to minimize or eliminate schedule gaps or slowdowns.
- The Tukwila International Boulevard station is on the critical path for a 2026 opening of S1 (Burien to Bellevue). ST and WSDOT staff are developing a Project Development Task Order.

Regional Express & STRIDE I-405 Bus Rapid Transit



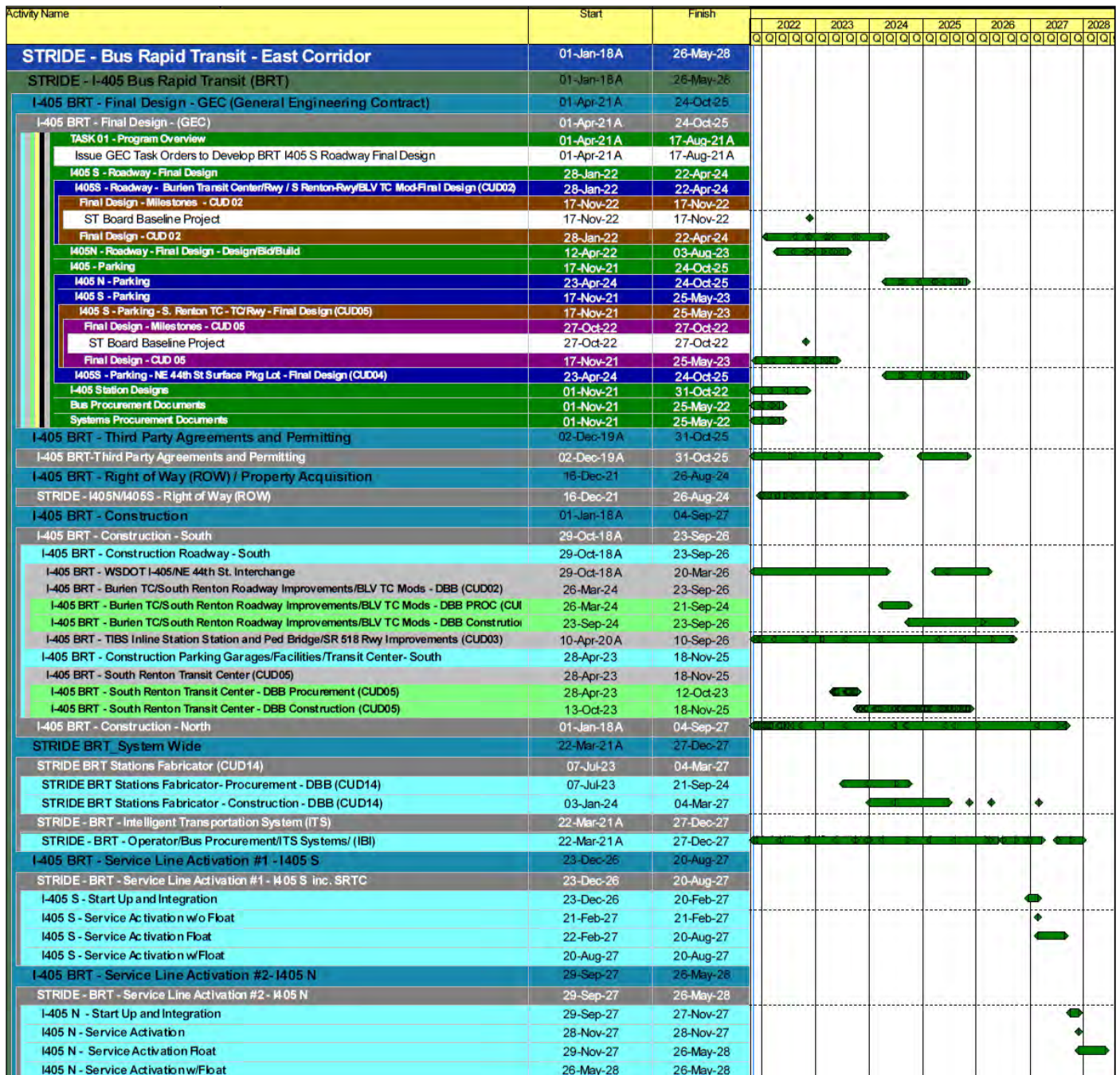
Project Schedule

The Board of Directors announced their realignment decision in August 2021. ST has made schedule adjustments in accordance with this direction. Project to be Built” was approved by ST Board in September 2021.

The current critical path for the I-405 BRT project is through Final Design by our General Engineering Contract (GEC) Construction Procurement, Civil Construction, commissioning and testing, project float contingency to service line activation. There are other near critical efforts which include ROW acquisition for CUD 02, Task Order for WSDOT on TIBS and SR518 improvements, permitting and agreements with local jurisdictions.*

I-405 S, Service Line #1 is currently forecasting 232 days beyond proposed ST Board Realignment dates. I-405 N, Service Line #2 is currently forecasting 147 days beyond proposed ST Board Realignment dates.

*There are 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 BRT stations that are part of WSDOT's I-405—SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project.



Community Engagement

We are committed to proactively seeking public input during all stages of the project. The I-405 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. We will collaborate with elected officials, partner staff and local communities throughout the project. Due to COVID-19 outreach efforts have shifted to virtual platforms.

- Accessibility issues near project sites
- Request for information in Renton
- Community dissatisfaction with ST/WADOT providing supportive transit

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 increases with Phase 3 ramps up. The consultant's variance is from the GEC contract late start due to realignment. Progress of GEC should accelerate as capacity's increase has been approved by ST Board in August 2021. 7 Task Orders are now executed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	17.0	13.7	(3.3)
Consultants	90.8	29.6	(61.2)
TOTAL	107.8	43.3	(64.5)
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.			

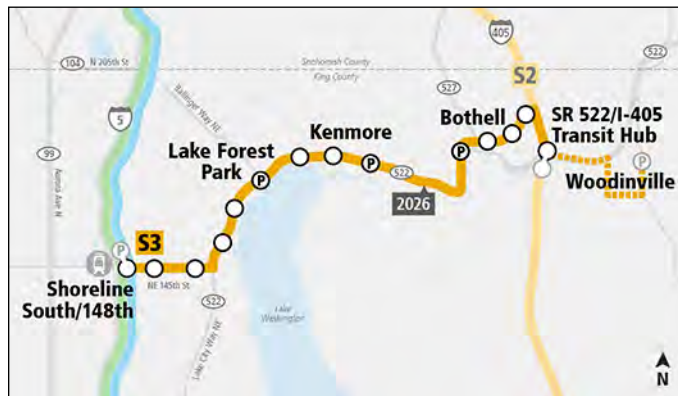
Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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/148th 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	Final Design
Budget	\$148.6 Million - Preliminary Engineering Phase (1-3), Bothell Stage 3, Shoreline agreement, Acquisition.
Schedule	Target Date: 2026, not including parking elements



Map of Project Alignment



Illustration of BRT station design in Bothell at NE 185th ST and 104th Ave NE

Key Project Activities

- Continuing stakeholder outreach focused on property owners and businesses.
- Coordinating 30% plans development with the City of Bothell for review.
- Sound Transit Board approved a funding agreement with the City Shoreline for the I5/145th Interchange Project
- Sound Transit Board approved a funding agreement with UW Bothell for BRT improvements on Beardsley Way.
- Continued to assess impacts to schedule and project elements due to the Board's decision on program realignment.

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 by \$1.5M. This is primarily due to progress on Bothell construction for \$0.9M. Sound Transit staff time accounts for \$161K, progress on preliminary engineering for \$157K, progress on final design for \$113K with the GEC contract and in ROW for \$112K.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$9.1	\$7.0	\$7.0	\$9.1	\$0.0
Preliminary Engineering	\$16.9	\$15.4	\$15.3	\$16.9	\$0.0
Final Design	\$19.8	\$8.2	\$0.5	\$19.8	\$0.0
Construction Services	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
3rd Party Agreements	16.4	\$0.8	\$0.5	\$11.4	\$0.0
Construction	\$33.7	\$25.0	\$23.7	\$38.7	\$0.0
Right-of-Way (ROW)	\$52.1	\$1.2	\$0.8	\$52.1	\$0.0
Total	\$148.6	\$57.6	\$47.8	\$148.6	\$0.0

Risk Management

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

The 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 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.
- 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. Letters of Concurrence are being developed with 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 solution.

Regional Express & STRIDE

SR 522/NE 145th Street Bus Rapid Transit



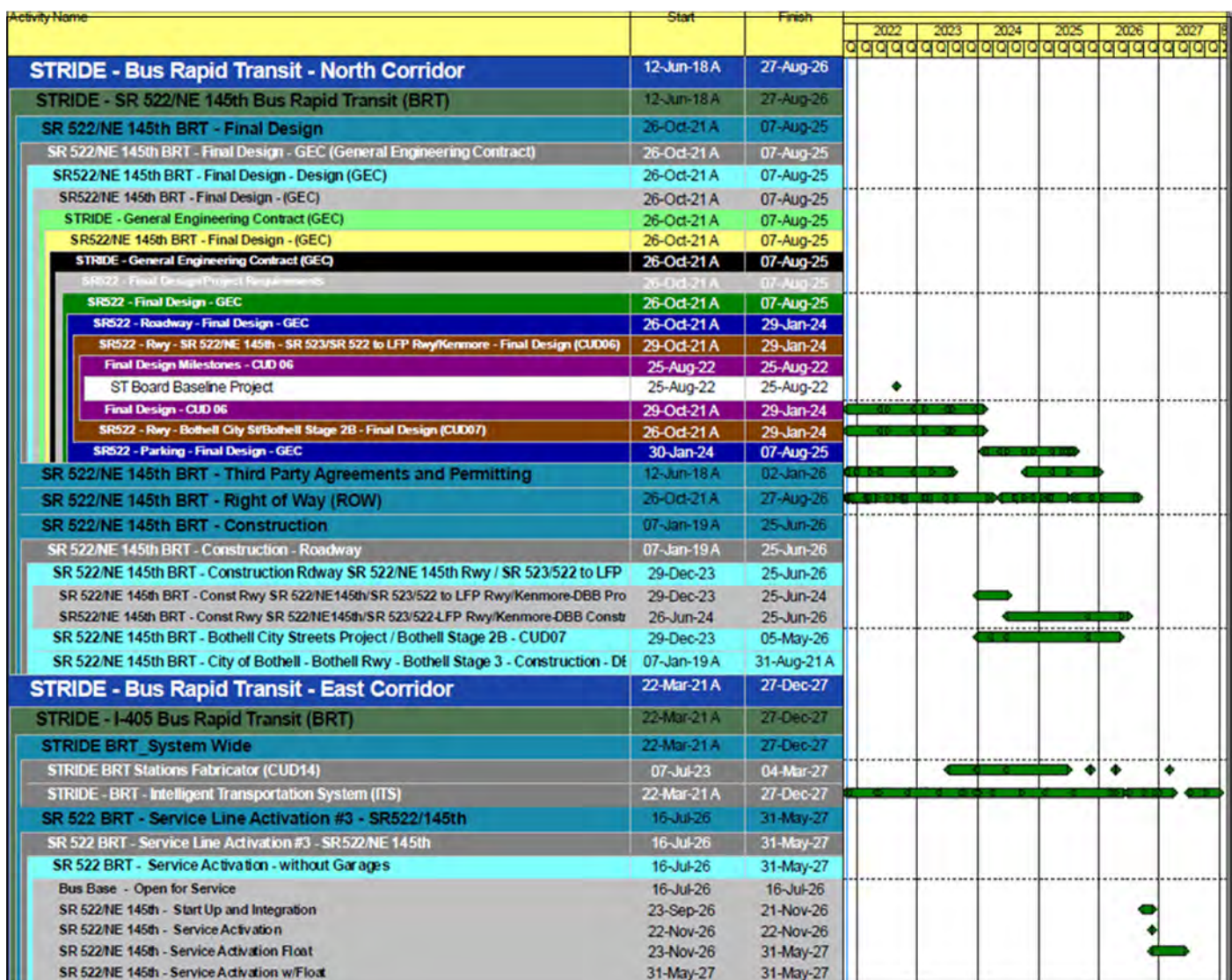
Project Schedule*

The Board of Directors announced their realignment decision in August 2021. ST has made schedule adjustments in accordance with this direction.

“Project to be Built” was approved by ST Board in September 2021.

The current critical path for the ST 522/NE 145th BRT project is Final Design by the GEC who was issued a task order in October 2021 to proceed with design for CUD 06 - SR522/NE145th Rdwy through construction procurement, civil construction, system testing and project float. Near critical is ROW acquisition which will be monitored closely along with permitting/agreements. The current forecast for completion is Q2 2027, 151 days past the ST Board realignment milestone.

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.



Community Engagement

We are 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. We will collaborate with elected officials, partner staff, and local communities throughout the project. Due to COVID-19 outreach efforts have shifted to virtual platforms.

- Lake City Neighborhood Alliance, Nov. 11
- Requests for construction impact/property impact information

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 were on pause during realignment. Consultant variance is from the GEC contract that started six months ago. Six task orders had been executed. Progress on GEC is slow as capacity's increase was only approved in August by the Board.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	15.2	10.2	(5.0)
Consultants	75.1	14.5	(60.6)
TOTAL	90.3	24.7	(65.6)

** 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
M2021-68	Authorized the CEO to execute an agreement with City of Shoreline for funding for right of way acquisition and construction of the NE 145th Street/I-5 Interchange Project in the amount not to exceed \$10,000,000.	11/18/2021
M2021-69	Authorized the CEO to execute an agreement with University of Washington (UW) for construction of UW Bothell BRT Station at the UW Bothell campus in the amount of \$1,124,200 including contingency.	11/18/2021

Progress Report

Capital Program Support



Capital Program Support Grants



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

Line of Business	Grant Number	Grant / Project Description	Award Amount	Date Executed	Balance Remaining
FEDERAL TRANSIT AUTHORITY					
LINK LIGHT RAIL	WA-03-0237	University Link Extension	684,370,641	09/16/2015	68,622,527
LINK LIGHT RAIL	WA-2018-013	Hilltop Tacoma Link Extension SYGA	74,999,999	05/15/2018	17,501,386
SOUNDER COMMUTER RAIL	WA-2018-015	Sounder Rolling Stock	7,800,002	12/30/2019	7,800,002
LINK LIGHT RAIL	WA-2018-024	Northgate Link Extension	74,574,536	08/14/2020	-1
SOUNDER COMMUTER RAIL	WA-2018-081	Puyallup Station Access Improvements	6,700,000	07/16/2019	25,792
LINK LIGHT RAIL	WA-2018-082	* East Lake Sammamish Trail North Extensio	2,318,683	04/29/2020	1,718,683
LINK LIGHT RAIL	WA-2019-001	Lynnwood Link Extension FFGA	497,710,967	03/19/2021	27,379,997
LINK LIGHT RAIL	WA-2020-001	Federal Way Link Extension	297,710,967	02/25/2021	106,557,455
SOUNDER COMMUTER RAIL	WA-2020-002	S Sounder Capacity Exansion	5,600,000	12/13/2019	5,206,175
REGIONAL EXPRESS	WA-2020-007	I-405 Bus Rapid Transit- Bus Procurement	5,400,000	12/21/2020	5,400,000
REGIONAL EXPRESS	WA-2020-080	HIMB Bus Prev Maint	14,898,460	09/08/2021	7,330,403
LINK LIGHT RAIL	WA-2020-086	HIFG Rail Prev Maint	38,937,648	09/18/2021	19,436,568
LINK LIGHT RAIL	WA-2021-002	Downtown Redmond Link Ext	31,668,475	09/10/2021	25,130,435
LINK LIGHT RAIL	WA-2021-004	Everett Link Extension Model Code Partne	2,000,000	12/31/2020	1,905,019
REGIONAL EXPRESS	WA-2021-012	SR 522/NE 145th BRT Vehicles	4,800,000	02/25/2021	4,800,000
REGIONAL FUND	WA-2021-032	CRRSAA Act - FY 2021	179,660,964	06/09/2021	-1
LINK LIGHT RAIL	WA-2021-044	ARP Act 2021- Lynnwood CIG	94,047,724	07/09/2021	-
LINK LIGHT RAIL	WA-2021-045	ARP Act 2021- Federal Way CIG	158,583,550	07/09/2021	-
LINK LIGHT RAIL	WA-2021-070	Hilltop Tacoma Link Ext - ARP CIG	20,704,007	08/30/2021	-
REGIONAL EXPRESS	WA-2021-083	Bus Replacements	1,494,561	09/07/2021	1,494,561
SOUNDER COMMUTER RAIL	WA-2021-085	Auburn Station Access Improvments	1,500,000	09/10/2021	1,500,000
Bus RAPID Transit	WA-2021-115	I-405 BRT Expansion Buses	7,255,465	09/18/2021	7,255,465
LINK LT RAIL & SOUNDER RAIL	WA-2021-123	Rail State of Good Repair - PIMS	3,612,229	09/24/2021	3,612,229
LINK LIGHT RAIL	WA-95-X061	Hilltop Tacoma Link Extension	5,599,943	08/27/2015	285,750
REGIONAL EXPRESS	WA-95-X073	Bellevue Way HOV - E Link	2,200,000	08/08/2014	132,817
TOTAL FEDERAL TRANSIT AUTHORITY			2,224,148,821		313,095,262
OTHER FEDERAL					
REGIONAL FUND	EMW-2017-RA-00018	Radio Communication Network	662,138	11/02/2017	662,138
REGIONAL FUND	EMW-2019-RA-00014	ATAT, Crit Evnt OT, Fac Hardening	1,315,813	09/01/2019	1,187,712
REGIONAL FUND	EMW-2020-RA-00022	Crit Evnt OT, CEDO	642,738	08/10/2020	619,570
TOTAL OTHER FEDERAL			2,620,689		2,469,420
STATE					
REGIONAL FUND	19-92501-015	Agency Energy Efficiency Project	197,000	06/03/2019	197,000
REGIONAL EXPRESS	PTD0164	Afford & Access Improv Low Income Riders	500,000	02/10/2020	-1
TOTAL STATE			697,000		196,999
TOTAL ALL GRANTS			2,227,466,510		315,761,681

Above table as of Q3 2021. This section is updated every quarter.

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 2021, 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 Accomplishments and Activities for Q3 2021

- Finalized annual Sustainability Inventory and Sustainability Progress Report, and presented to the Board of Directors.
- Finalized the ESMS general awareness training.
- Joined the FTA’s Healthy Planet Challenge.
- Presented at an FTA webinar on greenhouse gas accounting.
- Presented at AGC meeting on agency’s construction air emissions efforts.
- Attended the APTA Battery Electric Bus virtual study mission.
- Installed electric vehicle charging stations at Union Station for non-revenue vehicles.

Key Upcoming Activities for Q4 2021

- Present at Washington State Public Transportation Conference on sustainability strategic planning.
- Launch ESMS general awareness training.
- Complete ESMS external surveillance audit with registrar.
- Begin developing 2022 Environmental and Sustainability targets.

Progress Report Acronyms



Acronyms

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

Acronyms

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