

# Agency Progress Report Capital Programs



Construction progress on the Federal Way Link Extension Kent/Des Moines Station

September | 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 be added to the distribution list for this report or to make suggestions, please contact Julie Parker at (206) 398-5000.

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

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# Agency Progress Report

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Peter M. Rogoff

## SOUND TRANSIT CURRENT SERVICE





## SOUND TRANSIT FUTURE SERVICE



### **Board selects Bus Rapid Transit routes**

Late this month, the Sound Transit Board selected the routes, station locations and roadway improvements for Stride bus rapid transit on I-405 and SR-522/NE 145th. Stride BRT lines are scheduled to open in 2026 and 2027.

Stride BRT will include three lines:

- S1 – I-405 South from Burien to Bellevue, service scheduled to begin in 2026
- S2 – I-405 North from Bellevue to Lynnwood, service scheduled to begin in 2027
- S3 – SR 522/145th from Shoreline to Bothell, service scheduled to begin in 2026

On I-405, Stride’s S1 and S2 lines will operate along a 37-mile corridor, primarily in the I-405 Express Toll Lanes from Bothell to Renton, with additional routing on general purpose lanes of I-5, SR 518, and local streets in Burien, Renton and Lynnwood.

The two lines will have a combined 11 stations across eight cities, with a transfer point at the Bellevue Transit Center. Passengers will be able to transfer to Link light rail at Tukwila, Bellevue and Lynnwood, as well as to the Stride S3 line at a new transit hub in Bothell.

The S1 and S2 stations include:

- Burien Transit Center
- Tukwila International Boulevard, connection to Link
- South Renton Transit Center
- NE 44th
- Bellevue Transit Center, Stride S1/S2 transfer point and connection to Link
- NE 85th
- Totem Lake/Kingsgate
- Brickyard
- SR 522/I-405 Transit Hub, connection to Stride S3
- Canyon Park
- Lynnwood City Center, connection to Link

The project includes parking, which was deferred in the Board's realignment process:

- Expanded parking at the existing Kingsgate Park and Ride – scheduled for 2035
- New parking at NE 44th – scheduled for 2034
- New parking at South Renton Transit Center – 2034

The SR 522/NE and 145th BRT Stride S3 line will operate along a nine-mile corridor between the Shoreline South/148th Link light rail station and the SR 522/I-405 Transit Hub, with separate connecting service options to Woodinville. Buses will use Business Access and Transit (BAT) lanes on SR 522, and BAT lanes, general purpose lanes and bus queue bypass lanes on SR 523/NE 145th Street.

S3 will have 12 stations across five cities, including:

- NE 145th Street at 15th Avenue NE
- NE 145th Street at 30th Avenue NE
- SR 522 at NE 153rd Street
- SR 522 at NE 165th Street
- SR 522 at Ballinger Way
- SR 522 at 61st Avenue NE
- SR 522 at 68th Avenue NE
- SR 522 at 73rd Avenue NE/Kenmore Park-and-Ride
- 98th Avenue NE at NE 182nd Street
- NE 185th Street at 104th Avenue NE
- Beardslee Boulevard at University of Washington Bothell/Cascadia College
- Beardslee Boulevard at NE 195th Street

We will do roadway improvements, including sidewalk improvement and widening the roadway in Shoreline/Seattle, Lake Forest Park and Bothell.

In order to focus available financial capacity on expediting the opening of the new Stride lines, three planned park-and-ride facilities are scheduled to open later:

- New parking at the Lake Forest Park Town Center – scheduled for 2044
- Additional parking at the Kenmore Park-and-Ride lot, potentially delivered by King County Metro – scheduled for 2034
- New parking in downtown Bothell – scheduled for 2034

Sound Transit issued State Environmental Policy Act (SEPA) Determinations of Nonsignificance (DNS) for both projects, I-405 on Sept. 30, 2020 and SR 522/NE 145th on March 25, 2021.

Sound Transit has partnered with WSDOT on some components of the I-405 BRT design, environmental review and delivery.

Sound Transit is coordinating with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to prepare National Environmental Policy Act (NEPA) documentation to inform federal approval and/or grant funding decisions for elements of the project.

Both projects are now approaching 30% design. Construction of some elements of the project have already begun.

## **CEO Steps Down**

At the Sept. 24 Sound Transit Board meeting, I informed the Chair and Board that I did not foresee remaining in my role beyond 2022.

Appropriately and accordingly, given the major workload facing the agency, the Board decided to proceed immediately with a national search to select a new CEO by the second quarter of next year.

I have agreed to remain in my position as CEO until that time to assist in an orderly transition and to oversee the immediate agency work at hand, including finalizing our new budget.

After the meeting, Sound Transit Board Chair Kent Keel today issued the following statement explaining the Board's decision to begin a search for a new chief executive officer to succeed me after he I step down in the second quarter of 2022:

"After more than six years serving Sound Transit and our region, CEO Peter Rogoff recently informed the Board and me that he did not foresee remaining in his role beyond the end of 2022. Given the volume and intensity of current and upcoming work and the agency's needs and interests, the Sound Transit Board has exercised its discretion to proceed immediately to initiating a national search to select the agency's next successful leader. Now is a strategic time to identify our next CEO ahead of work to open light rail to the Eastside in 2023 and to Lynnwood, Federal Way and Downtown Redmond in 2024. Peter has agreed to remain in his position until the second quarter of 2022 to assist in an orderly transition.

The Sound Transit Board is grateful to Peter for all his contributions supporting the realization of the largest transit system expansion in the nation. Upon his arrival in early 2016 he worked with the Board and communities across the region to help shape and earn voter approval for the Sound Transit 3 Plan while

simultaneously leading efforts to advance major light rail expansions to the east, north and south. At present, all but one of Sound Transit's seven major construction projects are on time and performing on or below budget, putting the agency on a very solid path to nearly tripling the size of its light rail network over just the next three years while it continues to advance further expansions.

Peter not only helped design the largest transit expansion program in America but convert the agency to one that can deliver on its very ambitious plans. At the same time he sharpened the agency's focus on sustainability and improving riders' daily experiences while advancing equitable access to transit and affordable housing.

Peter's legacy at Sound Transit includes applying his deep federal experience to help secure critical funding for our region. He has worked closely with our congressional delegation as well as the Obama, Trump, and Biden administrations to obtain unprecedented levels of federal grant and loan support. He has also ushered in reforms to bring about a more collaborative, disciplined and informed annual budget process, all to the great benefit of Puget Sound taxpayers.

The Board sincerely thanks Peter for his accomplishments leading Sound Transit's dedicated and talented staff, and for his continuing contributions over the next six to nine months. The Sound Transit Board will soon proceed to forming a search committee and launch our recruitment to identify Peter's successor."

## **Agency begins Fare Ambassador pilot program**

On Monday, Sept. 13, Sound Transit Fare Ambassadors began conducting physical fare checks, marking the start of our eight-month pilot program in which Fare Ambassadors are replacing fare enforcement officers. The pilot program is part of Sound Transit's ongoing efforts to create more equitable fare collection processes.

The Fare Ambassador Pilot Program grew out of passenger feedback and community engagement that expressed discomfort with fare enforcement officers who resemble law enforcement. In response, Fare Ambassadors wear bright yellow caps and carry yellow messenger bags that make them easy to recognize. Their focus is on passenger education and customer service rather than enforcement, with particular emphasis on how to purchase ORCA cards and passes and how income-eligible passengers can obtain ORCA LIFT cards.

Eight Fare Ambassadors and two supervisors were in the field as of September 30. They come from multiple racial and ethnic backgrounds, various genders and orientations, and range in age from 20 to 60.

Fare Ambassadors enter trains from both ends of the car and ask every passenger for proof of payment as they work their way toward the center. This is the same process that had been used by fare enforcement officers previously to ensure equal treatment of all passengers. As in the past, Fare Ambassadors will use hand-held devices to check fares.

Citations are not being issued during the pilot program. Fare Ambassadors will give passengers they interact with a card containing a QR code linking to the fare engagement website, where passengers can



complete a satisfaction survey.

Throughout the pilot, Sound Transit will continue to engage with passengers and the community, including BIPOC-led organizations, to learn about their experiences with Fare Ambassadors and gather feedback that will be used to refine the program, and to develop long-term approaches to addressing non-payment.

At the conclusion of the pilot, staff will evaluate the results, including farebox recovery, and propose policy changes for consideration by the Sound Transit Board of Directors. Policy updates could include lowering fines, implementing a new citation resolution process without court adjudication and making the Fare Ambassador positions permanent.

Fare revenues are critical for operating a fast-expanding regional transit system that increases mobility and opportunities across the region, especially for populations that depend most on transit. It is critical that we foster a welcoming environment for every rider and ensure that transit is accessible and affordable for all.

Our initiative includes expanding access to more affordable ORCA LIFT fares for low-income riders, as well as our partnership with King County Metro to provide subsidized annual passes to qualified riders.



Sound Transit Fare Ambassador on Link September 1, 2021

# Progress Report

## Link Light Rail Program



Link Light Rail leaving Mount Baker Station

September | 2021



Prepared by Project Controls | Portfolio Services Office

# Link Light Rail Program Overview



# Link Light Rail Program Overview

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**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 1<sup>st</sup> 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	\$954.3	\$422.8	\$1,530.0	\$0.0
East Link Extension	\$3,677.2	\$3,193.6	\$2,988.5	\$3,677.2	\$0.0
Everett Link Extension	\$185.0	\$18.8	\$8.6	\$185.0	\$0.0
Federal Way Link Extension	\$2,451.5	\$1,816.2	\$897.8	\$2,451.5	\$0.0
Hilltop Tacoma Link Extension	\$252.7	\$220.3	\$185.4	\$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	\$679.2	\$351.0	\$740.7	\$0.0
Link Operations and Maintenance Facility: East	\$449.2	\$379.4	\$377.9	\$449.2	\$0.0
Lynnwood Link Extension	\$2,771.6	\$2,436.6	\$1,467.2	\$2,771.6	\$0.0
NE 130th Street Infill Station	\$28.9	\$20.1	\$16.8	\$28.9	\$0.0
Northgate Link Extension	\$1,899.8	\$1,738.1	\$1,716.3	\$1,847.3	\$52.5
Tacoma Dome Link Extension	\$125.7	\$67.4	\$49.3	\$125.7	\$0.0
West Seattle and Ballard Link Extensions	\$285.9	\$121.3	\$109.6	\$285.9	\$0.0
<b>Total</b>	<b>\$14,605.9</b>	<b>\$11,855.0</b>	<b>\$8,791.3</b>	<b>\$14,553.5</b>	<b>\$52.5</b>



# 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

- Last final design package was approved - IFC for Unnamed Tributary Main package – marking the completion of the design phase. Working with contractor to close open items related to IFC conditional approvals
- Project system wide CCTV camera design was completed. Temporary cell tower is now operational.
- Evaluation of options for grounding of the TPSS facility at Downtown Station.
- Contractor preparing multiple NDC (notice to designer submittals – post IFC updates).
- Held first Safety Summit with contractor and subs. Ongoing review of construction submittals.
- Ground Improvements at Marymoor and SE Redmond Garage completed.
- Wetland stabilization work at the King County offsite wetland mitigation site.

### Closely Monitored Issues

- Ensuring utility relocations being done by third parties support the project schedule.
- Working with Contractor to resolve open comments on the garage design.
- Contractor monitoring and planning for future crew availability and supply chain impacts.
- Timely relocation of temporary cell tower to new permanent location.
- Acquisition of remaining outstanding property rights.

# Link Light Rail Downtown Redmond Link Extension



## Project Cost Summary

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

In this period, DRLE incurred approximately \$19.4M of expenditure. This period expenditure incurred primarily in the Construction phase \$19.9M for mostly progression of design build scope and construction services and the rest of the work phases made up the balance. Total cumulative expenditure to date rose from \$403.5M to \$422.8M.

### 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	\$17.2	\$16.8	\$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	\$20.0	\$63.6	\$0.0
Third Party Agreements	\$17.0	\$17.0	\$10.7	\$5.9	\$17.0	\$0.0
Construction	\$1,151.5	\$1,145.9	\$752.4	\$258.2	\$1,145.9	\$0.0
ROW	\$199.0	\$199.0	\$103.9	\$101.8	\$199.0	\$0.0
<b>Total</b>	<b>\$1,530.0</b>	<b>\$1,530.0</b>	<b>\$954.3</b>	<b>\$422.8</b>	<b>\$1,530.0</b>	<b>\$0.0</b>

### 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	\$231.6	\$86.7	\$332.4	\$0.0
20 Stations	\$261.9	\$261.9	\$184.6	\$40.3	\$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	\$194.9	\$44.4	\$287.7	\$0.0
50 Systems	\$108.6	\$103.6	\$65.8	\$14.4	\$103.6	\$0.0
<b>Construction Subtotal (10 - 50)</b>	<b>\$990.0</b>	<b>\$985.6</b>	<b>\$676.9</b>	<b>\$185.8</b>	<b>\$985.6</b>	<b>\$0.0</b>
60 Row, Land	\$168.5	\$168.5	\$103.9	\$101.8	\$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	\$173.3	\$135.0	\$293.6	\$0.0
90 Unallocated Contingency	\$78.2	\$78.2	\$0.0	\$0.0	\$78.2	\$0.0
<b>Total (10 - 90)</b>	<b>\$1,530.0</b>	<b>\$1,530.0</b>	<b>\$954.3</b>	<b>\$422.8</b>	<b>\$1,530.0</b>	<b>\$0.0</b>

### Risk Management

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

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

- COVID-19 pandemic - impact due to COVID-19 as experience this past year has been due to supply chain interruption, availability of labor as well as inefficiencies. That said many impacts are still unknown and situation is 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 condition during construction such as grounding solution for TPS; geotechnical condition 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; interfaces 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 have been procured and the total project contingency balance stands at \$280.6M (previously \$281.6M). 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 change of about \$1M bringing the balance to approximately \$198.2M

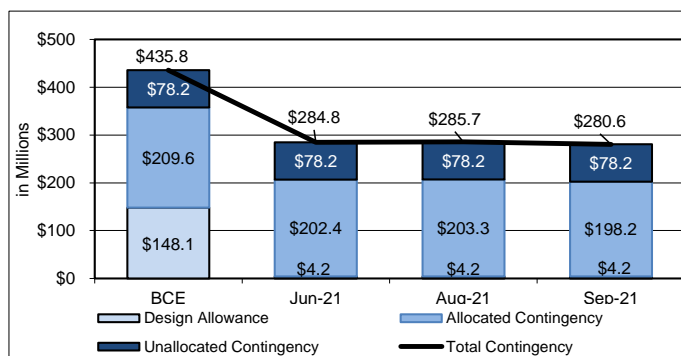
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$78.2M.

### 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%	\$198.2	17.3%
Unallocated Contingency	\$78.2	5.1%	\$78.2	6.8%
<b>Total</b>	<b>\$435.8</b>	<b>28.5%</b>	<b>\$280.6</b>	<b>24.5%</b>

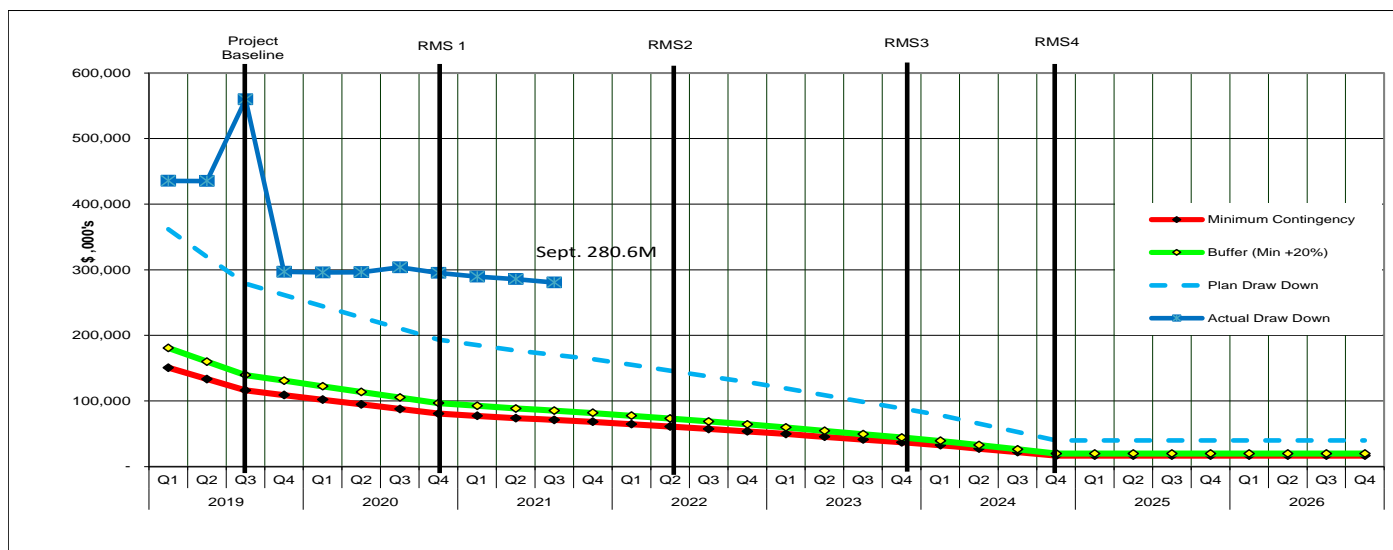
Table figures are shown in millions.

### Contingency by Type



### Contingency Drawdown

DRLE Project's total contingency drawdown trends better than plan with an overall contingency balance at approximately at \$280.6M (previously \$281.6M) 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 net change of approximately \$1M due to construction changes.



Contingency Drawdown as of September 30, 2021



# Link Light Rail Downtown Redmond Link Extension



## Project Schedule

Weighted percent complete of the major construction contracts is calculated at 39.9%

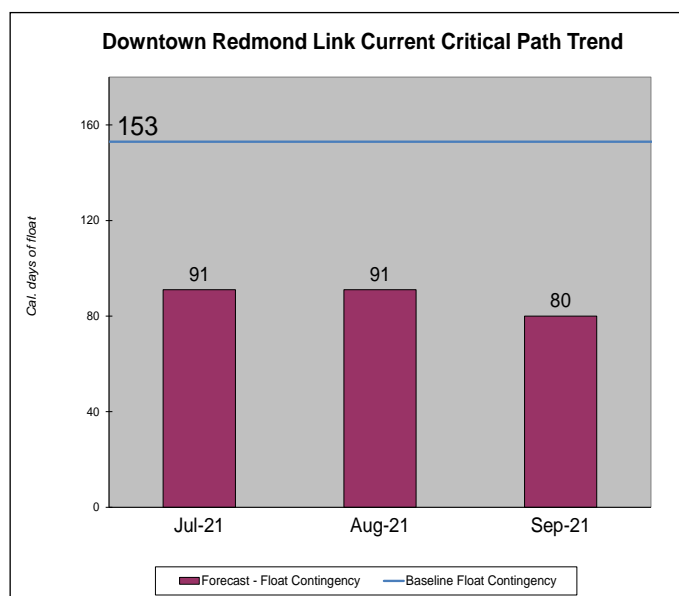
The current project schedule is presented below. All design packages have been Issued for Construction. Ongoing work includes the 40th and 51st St. cut & cover tunnels, wall construction along the at-grade guideway, substructure for both the Sammamish and Downtown Guideways. Foundation work is ongoing at SE Redmond Parking Garage. The project is forecast for completion by the end of 2024.

This month's schedule submittal reflects 54 days of negative float to the completion milestones, due to some logic changes on the schedule. This update has been returned for revision and it is expected that these 54 days will be recovered by the next monthly update.

Activity Name	Start	Finish													
			2022				2023				2024				
			Q4	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	12-Oct-24													
CONTRACT MILESTONES & INCENTIVES	09-Sep-19 A	12-Oct-24													
MS-1 Project Ready for Pre-Revenue Operations (5/21/24)		14-Jul-24*													
MS-2 Acceptance of All Work - Ready for Revenue Service (8/19/24)		12-Oct-24													
OWNER FLOAT	09-Sep-19 A	12-Oct-24													
UNUSUALLY SEVERE WEATHER	15-May-24	15-May-24													
PRE-CONSTRUCTION	09-Sep-19 A	02-Sep-21 A													
CONSTRUCTION	09-Sep-19 A	03-Jul-24													
OCC	22-Aug-23	22-Aug-23													
PUNCHLIST	30-Dec-23	28-Feb-24													
TESTING INTEGRATION / REVENUE SERVICES	23-Jun-22	12-Sep-24													
SAFETY & SECURITY CERTIFICATION	03-Jul-20 A	12-Oct-24													
Downtown Redmond Link Extension - Rail Activation/Closeout	03-Oct-23	31-Dec-24													
Systems Integration & Testing	03-Oct-23	14-Jul-24													
Safety and Security Certification	01-Jan-24	12-Jul-24													
Pre-Revenue Service	15-Jul-24	12-Oct-24													
Pre-Revenue Operations	15-Jul-24	12-Oct-24													
Revenue Service/Project Float	13-Oct-24	31-Dec-24													
Project Float	13-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 80 days of project float. As noted above, the current R200 update is forecasting a delay, but has been returned for revision. It is expected that the revised schedule will result in the restoration of some projected float.

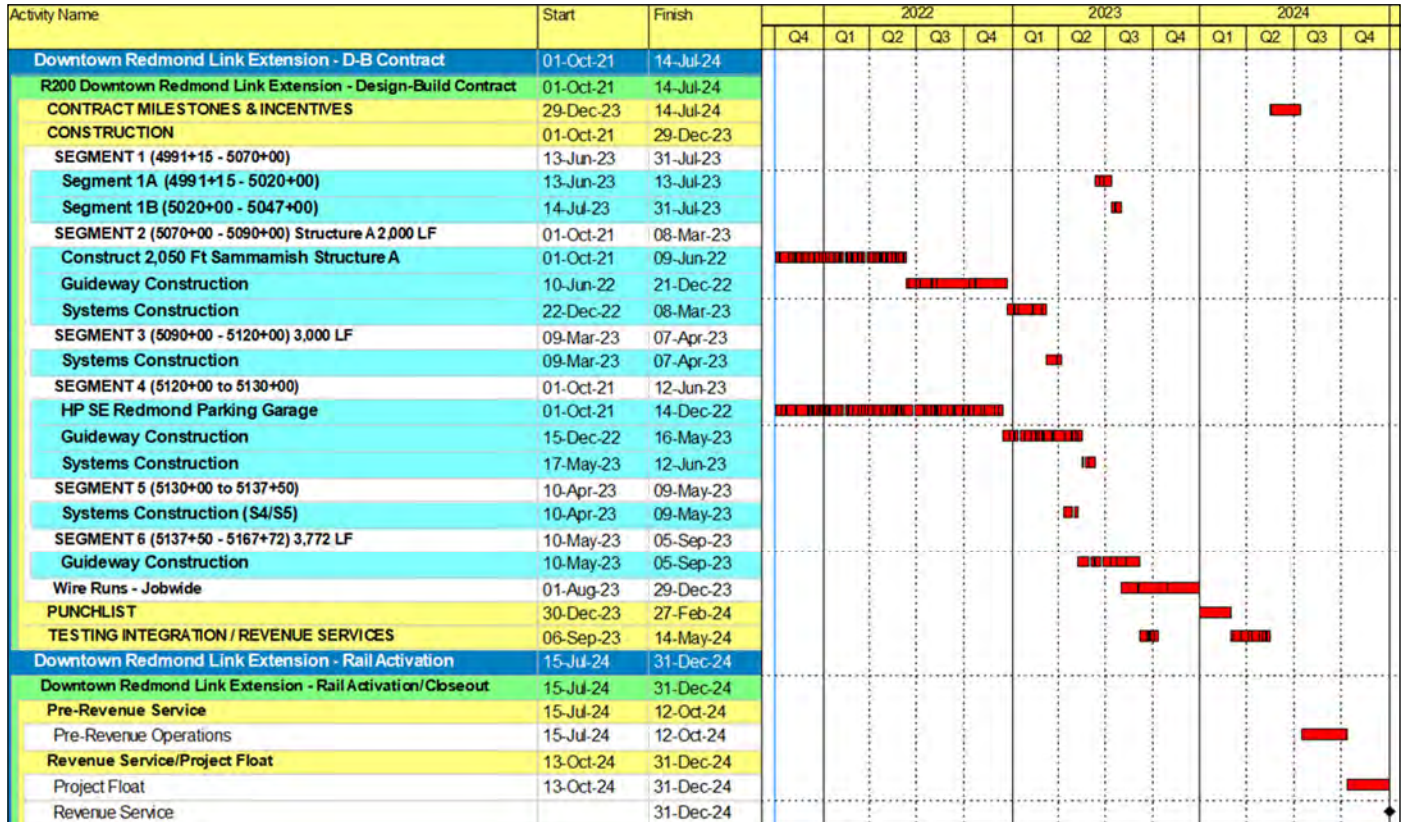


# Link Light Rail Downtown Redmond Link Extension



## Critical Path Analysis

The critical path for R200 currently runs through the parking garage deck due to some preferential logic, which then makes all guideway and systems work critical. Sound Transit expects that corrections to the current schedule update will result in the critical path reverting to the aerial guideway through Downtown Redmond Station.



## 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> <p>Note: The change in Board Approved was due to a correction. The WSDOT ASL/TCAL leases was being counted in the #of parcels needed and board authorized and they should have been included in the WSDOT tracking.</p>					

## Community 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 communications with regards to noise complaints from residents along SR520 corridor
- Coordination with WSDOT and City of Redmond for MOT and pedestrian/bike path changes ahead of both downtown station and guideway girder work through November 2021 and SR 520/202 West Bound on ramp closure January-May 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.

The planned FTE monthly average is the monthly annualized average of 12 months; whereas the YTD monthly average only reflects actuals through September 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 accordingly.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	27.2	22.5	(4.7)
Consultants	37.0	31.3	(5.7)
TOTAL	64.2	53.8	(10.4)

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

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail Downtown Redmond Link Extension



## Construction Safety

Data/ Measure	September 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	6	6
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	1	11	12
Reported Near Mishaps	0	3	7
Average Number of Employees on Worksite	339	-	-
<b>Total # of Hours (GC &amp; Subs)</b>	<b>18,977</b>	<b>247,523</b>	<b>279,650</b>
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	10.54	4.85	4.29
LTI Rate	0.00	0.00	0.00
<b>Recordable National Average</b>	<b>2.80</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.70</b>		
<b>LTI WA State Average</b>	<b>2.00</b>		

*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:

- Continued review of the Issued of Construction packages for closure. Reviewed environmental compliance information for Ground Enhancing Material (GEM) in regard to TPSS grounding.
- Reviewed and responded to Notice of Design Change / Final Design as appropriate for systems issues.

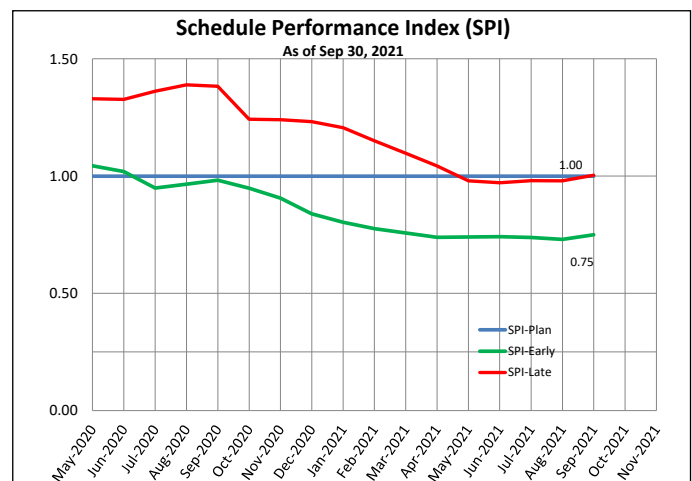
#### Construction:

- Demo and utility work continue in preparation for Concrete In Drilled Hole (CIDH) at NE 40th St. Form and prep for deck slab commenced at NE 51st St.
- Work with PSE to work around duct bank to continue construction of cut and cover at NE 60th.
- Begin installation of access for Unnamed Tributary Bridge (UTB) and vertical elements for soil nail wall.

### 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 1.0. The index under 1.0 indicates that the contractor is behind. The late start to construction is heading according to plan. The SPI Early continues to lag the early finish plans.

The schedule continues to show some time impacts due to extreme weather delay, girder supply chain delay due to COVID-19. The Contractor is working diligently to identify as many opportunities as possible to try 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

- Begin CIDH piles once utilities are relocated at 40th St.
- Roadway reconstruction for SR202 begin on Oct. 7th. On-Ramp and Off-Ramp construction continues.
- Begin drainage at Marymoor Park on Oct 4th.
- Excavation and soil nail installation for walls around NE 60th through end of November.
- Continue with the installation of UTB access and vertical elements for soil nail wall for the next 5 months.

### Closely Monitored Issues

- The existing damaged fiberglass conduit is still in PSE to determine the time to perform repairs on this damaged pipe at NE 60th St.
- City of Redmond (COR) noted the existing communication conduits that will be impacted by the proposed trench drain south of the bike trail at SR 202. ST to follow up with COR on the design impact.



# Link Light Rail Downtown Redmond Link Extension

## Cost Summary

Present Financial Status	Amount
<b>R200 Contractor – Stacy Witbeck Kuney, a Joint Venture</b>	
Original Contract Value	\$719,396,000
Change Order Value	\$11,603,155
Current Contract Value	\$730,999,155
Total Actual Cost (Incurred to Date)	\$247,935,966
Percent Complete	39.9%
Alternative Concept Allowance	\$46,432,698
Authorized Contingency	\$78,823,902
Contingency Drawdown	\$11,603,155
*Contingency Index	2.71

*\*Excludes Betterments*



*Placement of waterproofing membrane for elevator pit walls.*

# 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

- **West Segment:** Ongoing track plinth and grout pad remediation, NCR corrective work; progress power upgrade work for WSDOT system
- **Center Segment:** Ongoing wax tape / track plinth / grout pad remediation; continue west transition plinth stray current banding damage repair
- **East Segment:** Ongoing track plinth and grout pad remediation, NCR corrective work; progress punchlist items at MI Station and MI Tunnel
- **E320 South Bellevue:** L&I elevator inspections at SB Parking garage prior to opening; continued landscaping installation; punchlist and site security work.
- **Downtown Bellevue to Spring District (E335):** Completed station landscaping and paving for station driveway and Continued HVAC commissioning activity, installation of metal panels at Wilburton Station. Continued skim coat walls, planting, installing way finder tiles, downspouts and bird control and traffic signal loops at East Main Station.
- **Bel-Red (E340):** Conducted rail-to-earth testing and rail boot repairs. Addressed station punch-list items. Installed open rail fence wetland signs and station plumbing equipment. Installed systems conductors along the guideway.
- **SR520 to Redmond Technology Station (E360):** Stations punchlist and NCR repair work continues. RTS garage column concrete placement; excavation and formwork; and storm installation. Sweeper Site vaults punchlist work ongoing.
- **Systems (E750):** Continued submittals, component design/manufacturing/fabrication. Progressed communication and signaling equipment installations at E130 and E360; Signal house delivered at E335 and E360, installation of feeder cables for energization and local testing. Ongoing installation of OCS wire and equipment 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 \$320K, the total expenditure to date remained at \$2.99B. Project commitment is at approximately \$3.2B with all major construction contracts in place. The pace of civil construction expenditures has begun to slow down. That said, the major activities predominantly driven from E130; E335 and Systems E750 constructions. COVID-19 cases remains fluid, assessment of impacts continues as well as ongoing monitoring of downstream supply chain interruptions.

### Cost Summary by Phase

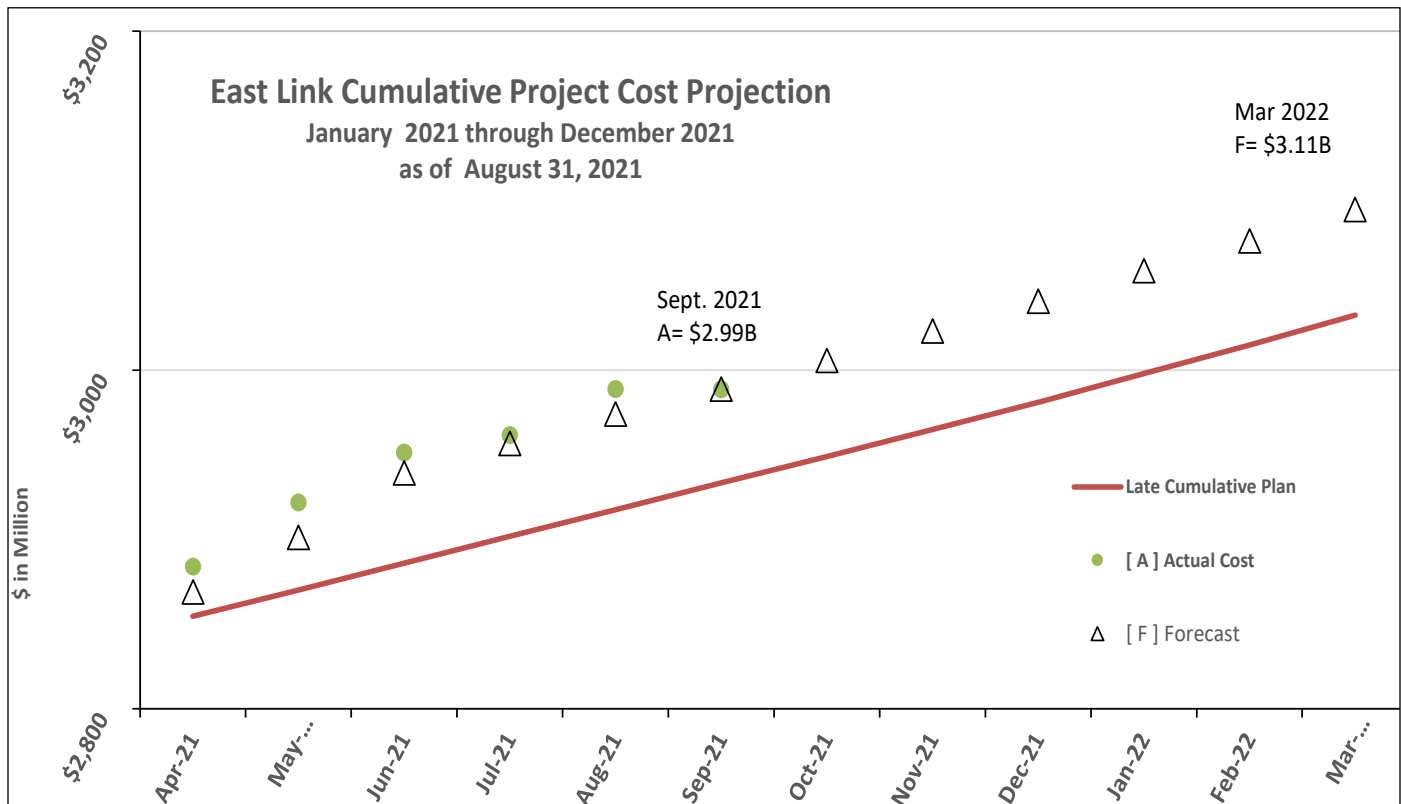
Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$186.2	\$186.2	\$113.3	\$113.1	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.8	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$250.1	\$238.8	\$283.0	\$0.0
Construction Services	\$257.5	\$257.5	\$204.4	\$186.6	\$257.5	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$38.3	\$34.0	\$52.2	\$0.0
Construction	\$2,544.3	\$2,544.3	\$2,253.0	\$2,082.4	\$2,544.3	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$298.2	\$298.2	\$279.7	\$279.0	\$298.2	\$0.0
<b>Total</b>	<b>\$3,677.2</b>	<b>\$3,677.2</b>	<b>\$3,193.6</b>	<b>\$2,988.5</b>	<b>\$3,677.2</b>	<b>\$0.0</b>

### 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	\$908.0	\$883.7	\$942.9	(\$199.8)
20 Stations	\$397.7	\$478.2	\$460.2	\$437.5	\$482.0	(\$83.0)
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	\$465.2	\$569.9	\$238.8
50 Systems	\$353.8	\$367.9	\$347.2	\$264.0	\$371.2	(\$17.3)
<b>Construction Subtotal (10 - 50)</b>	<b>\$2,304.6</b>	<b>\$2,366.7</b>	<b>\$2,217.3</b>	<b>\$2,050.4</b>	<b>\$2,365.9</b>	<b>(\$61.4)</b>
60 Row, Land	\$288.5	\$288.5	\$279.7	\$279.0	\$288.5	(\$0.0)
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$1.1	\$0.4	\$2.8	\$0.0
80 Professional Services	\$898.4	\$889.1	\$695.6	\$658.7	\$889.9	\$8.5
90 Unallocated Contingency	\$182.9	\$130.0	\$0.0	\$0.0	\$130.0	\$52.8
<b>Total (10 - 90)</b>	<b>\$3,677.2</b>	<b>\$3,677.2</b>	<b>\$3,193.6</b>	<b>\$2,988.5</b>	<b>\$3,677.2</b>	<b>\$0.0</b>

## 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 -\$320K due to a cost adjustment where construction contract in E130 was rejected for non-compliance of work performed. Total project cost incurred to date remained at \$2.99B, 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 now in preparation to update the qualitative risk registers for Q3 2021.

The following are the top project risk and risk areas:

- Civil turnovers to Systems construction
- Interfaces between contracts, agency supplied equipment and third party jurisdictions
- COVID-19 pandemic cost and schedule impacts
- 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 \$318.44M (previously \$322.31M). 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 \$3.88M due to construction and construction support changes.

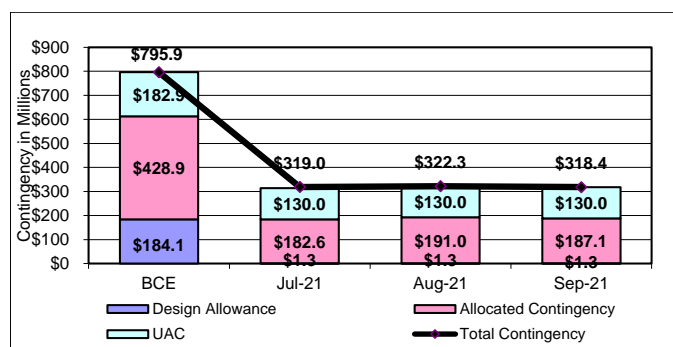
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$130.0M.

### 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%	\$187.1	27.2%
Unallocated Contingency	\$182.9	5.0%	\$130.0	18.9%
<b>Total</b>	<b>\$795.9</b>	<b>21.6%</b>	<b>\$318.4</b>	<b>46.2%</b>

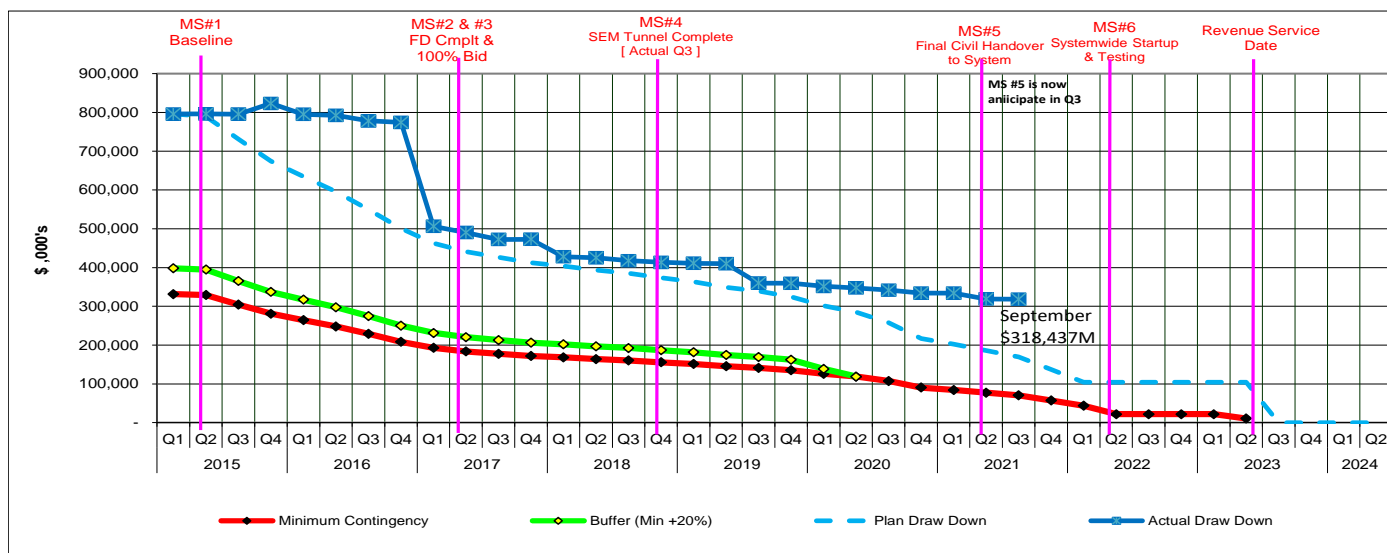
Table figures are shown in millions.

### 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 \$318.44M (previously \$322.31M) 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 September represented the monthly net decrease about \$3.88M due to various construction and construction support changes.



Contingency Drawdown as of September 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 94%.

**E130** continued wax tape removal and track plinth grout pad remediation; corrective and punchlist work.

**E320** continued landscaping and irrigation; final track preparation ahead of punchlist; closeout work.

**E330** has achieved final acceptance.

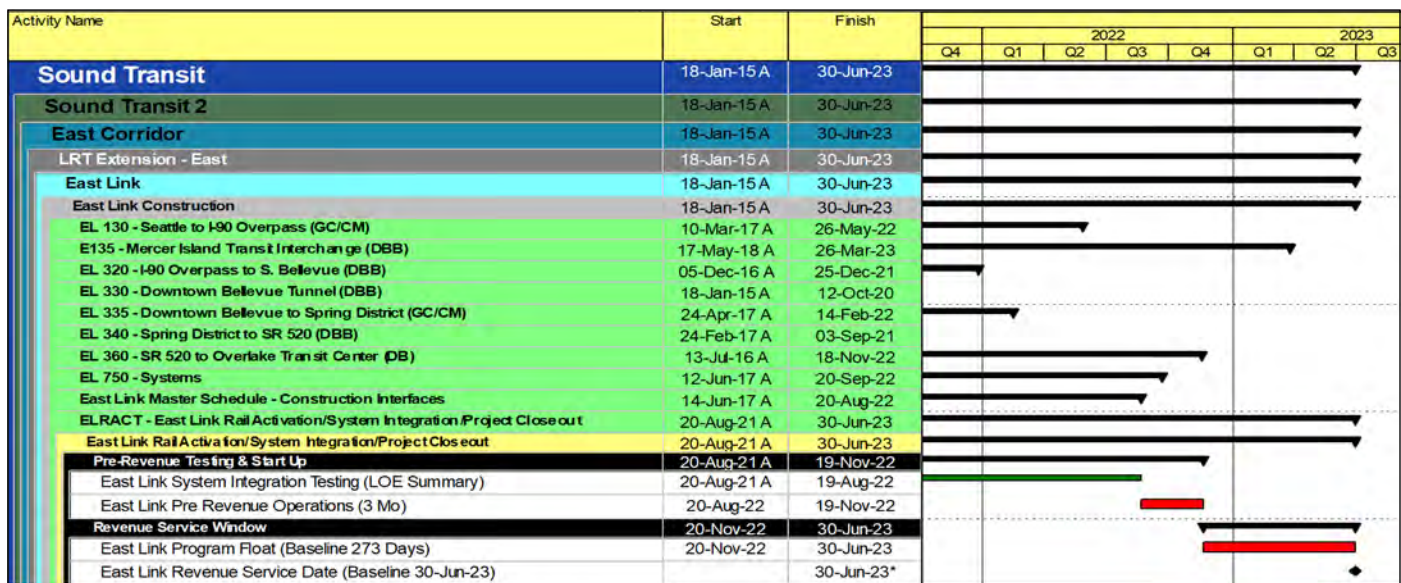
**E335** continued finish work at E. Main and Bellevue Downtown Station and commissioning at Wilburton.

**E340** performed testing and punchlist, repair, and closeout work throughout the alignment.

**E360** continued punchlist and repair work all along the alignment; continued RTS garage crack repair.

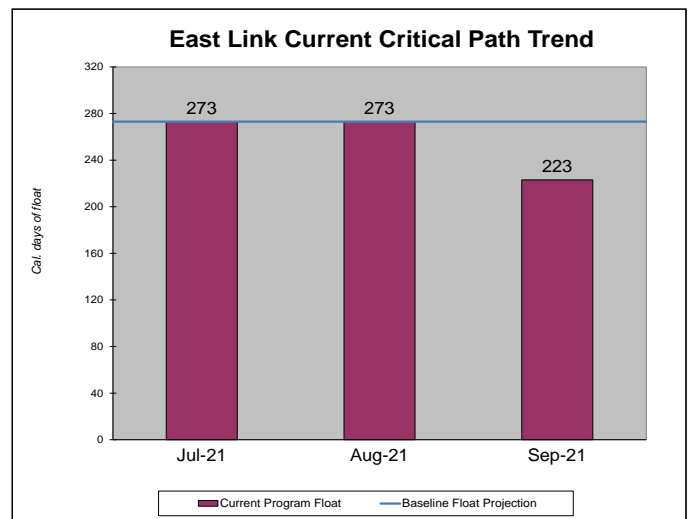
**E750** continued installation of communications systems at most stations; set OCS poles, and strung messenger wire; set and tested several signal houses; continued local testing in multiple segments.

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



## Project Float

East Link was baselined with 273 days of program float. Due to some non-conforming work on the E130 contract, the critical path for construction completion is currently forecast to use 50 days of project float. In the coming months, the post-construction path to revenue service will be refined, which may result in another reduction of float.





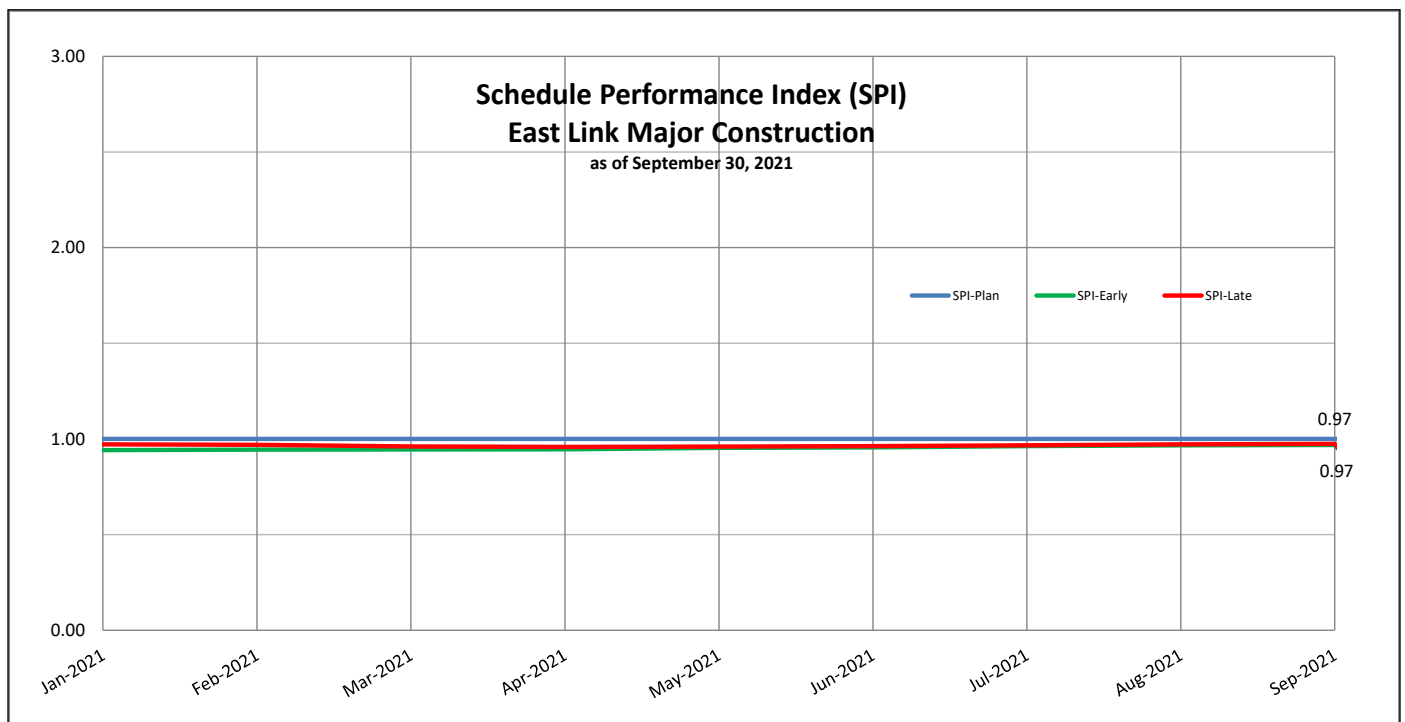
## Critical Path Analysis

The East Link critical path this month runs through track remediation on E130, which is holding up E750 access to complete OCS and signal installation. East Link civil contracts continue to be closely monitored for potential impacts to the E750 schedule.

Activity Name	Start	Finish	2022					2023		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
EL 130 - Seattle to I-90 Overpass (GC/CM)	19-Jul-21 A	25-Jan-22								
E130 Construction	19-Jul-21 A	25-Jan-22								
Milestones	25-Jan-22	25-Jan-22								
Construction	19-Jul-21 A	24-Jan-22								
Trackwork	19-Jul-21 A	24-Jan-22								
E135 - Mercer Island Transit Interchange (DBB)										
EL 320 - I-90 Overpass to S. Bellevue (DBB)										
EL 330 - Downtown Bellevue Tunnel (DBB)										
EL 335 - Downtown Bellevue to Spring District (GC/CM)										
EL 340 - Spring District to SR 520 (DBB)										
EL 360 - SR 520 to Overlake Transit Center (DB)										
EL 750 - Systems	01-Dec-18 A	19-Aug-22								
E750 Construction	01-Dec-18 A	19-Aug-22								
E750 Project	01-Dec-18 A	19-Aug-22								
E750 Engineering	31-Jan-22	22-Jun-22								
E750 Construction	01-Dec-18 A	19-Aug-22								
E750 Milestones	19-Aug-22	19-Aug-22								
E750 OCS	26-Jan-22	28-Jan-22								
E750 Signals	01-Dec-18 A	01-Nov-21								
E750 Testing and Commissioning	28-Feb-22	19-Aug-22								
East Link Master Schedule - Construction Interfaces	20-Aug-22	20-Aug-22								
ELRACT - East Link Rail Activation/System Integration/Project Closeout	20-Aug-21 A	30-Jun-23								
East Link Rail Activation/System Integration/Project Closeout	20-Aug-21 A	30-Jun-23								
Pre-Revenue Testing & Start Up	20-Aug-21 A	19-Nov-22								
Revenue Service Window	20-Nov-22	30-Jun-23								
East Link Program Float (Baseline 273 Days)	20-Nov-22	30-Jun-23								
East Link Revenue Service Date (Baseline 30-Jun-23)		30-Jun-23*								

## Schedule Performance Index

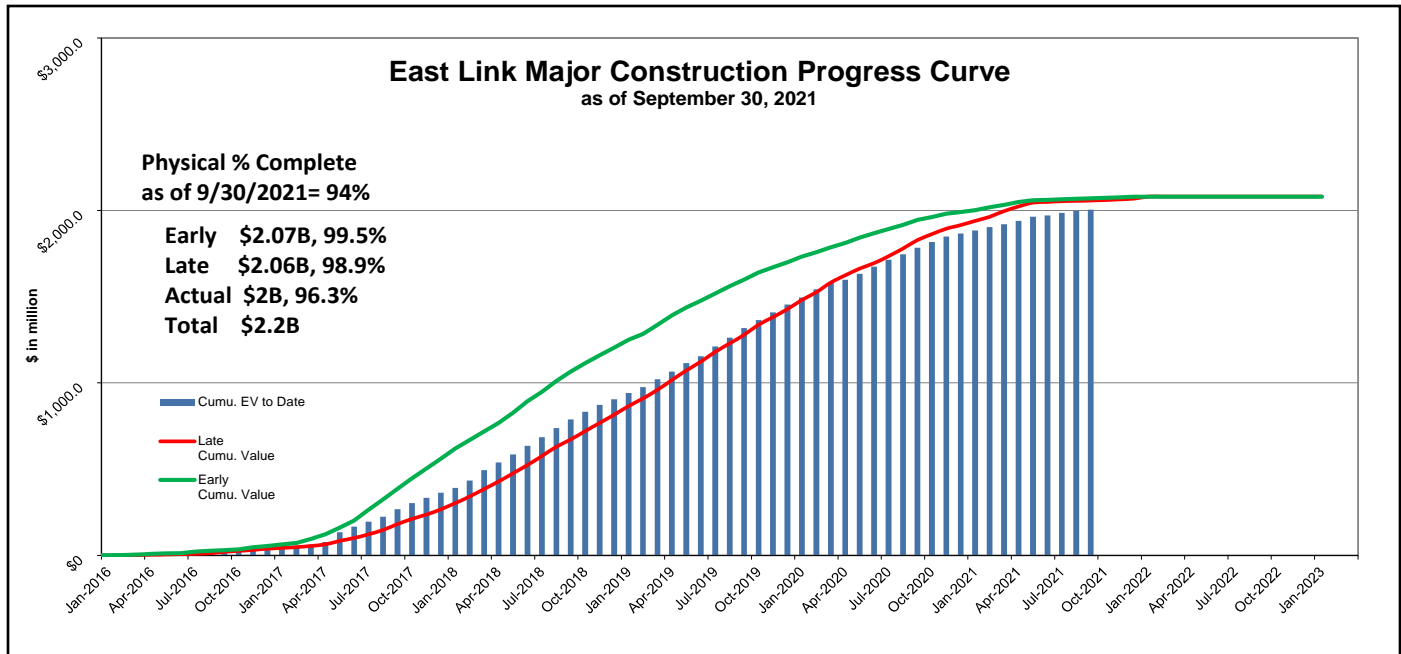
The Schedule Performance Index (SPI) for East Link's Major Construction Packages remains at 0.97 (early and late) as contractors work toward final completion past their target finish dates. This number will steadily trend toward 1 in the coming months as work completes.



## Major Construction Progress Curve

The overall physical percent complete for East Link construction is 94%.

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



*E130 Seattle to South Bellevue: Curtain Wall Glazing at Judkins Park Station*

## 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. September's focus includes but not limiting to reopening of NB Rainer Ave path connection to Haiwatha; continued preparation of South Bellevue Parking Garage opening; notification of NE 12th lane closure; tracking of System Integration Testing and live wire testing.
- 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 September 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 and current overage is not indicative of budget overage. That said, longer than anticipated construction duration coupling with COVID-19 remaining a fluid situation, it is hard to predict how the annual plan will unfold accordingly.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	52.8	46.4	(6.4)
Consultants	91.5	157.5	66.0
TOTAL	144.3	203.9	59.6
* 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
M2021-53	Easements with City of Bellevue as part of the East Link Extension	9/23/21
M2021-50	East Link Extension Preventative Maintenance program from Post Acceptance to Revenue Service  Authorizes the chief executive officer to execute a two-year contract with CBRE to provide preventative maintenance and other services for facilities along the East Link Extension in the amount of \$2,404,602, with a 20 percent contingency of \$480,920 for a total authorized contract amount not to exceed \$2,885,522, plus applicable taxes.	9/2/2021

## Construction Safety

Data/ Measure	September 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	1	23	292
Reported Near Mishaps	1	12	290
Average Number of Employees on Worksite	467	-	-
Total # of Hours (GC & Subs)	67,853	769,789	7,336,711
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	1.30	2.45
LTI Rate	0.00	0.00	0.41
<b>Recordable National Average</b>	<b>2.80</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.70</b>		
<b>LTI WA State Average</b>	<b>2.00</b>		

*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. Accepted 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]

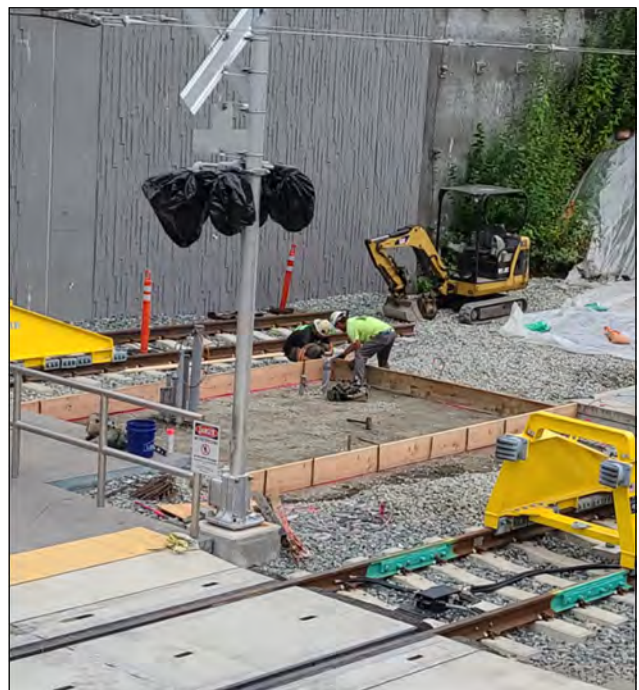
*Status: See following pages under Contract E340.*

**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: Systems Installation - Signal Housing placement (left) and RTS Comm. and Supervisor room formwork (right)*



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

### Current Progress

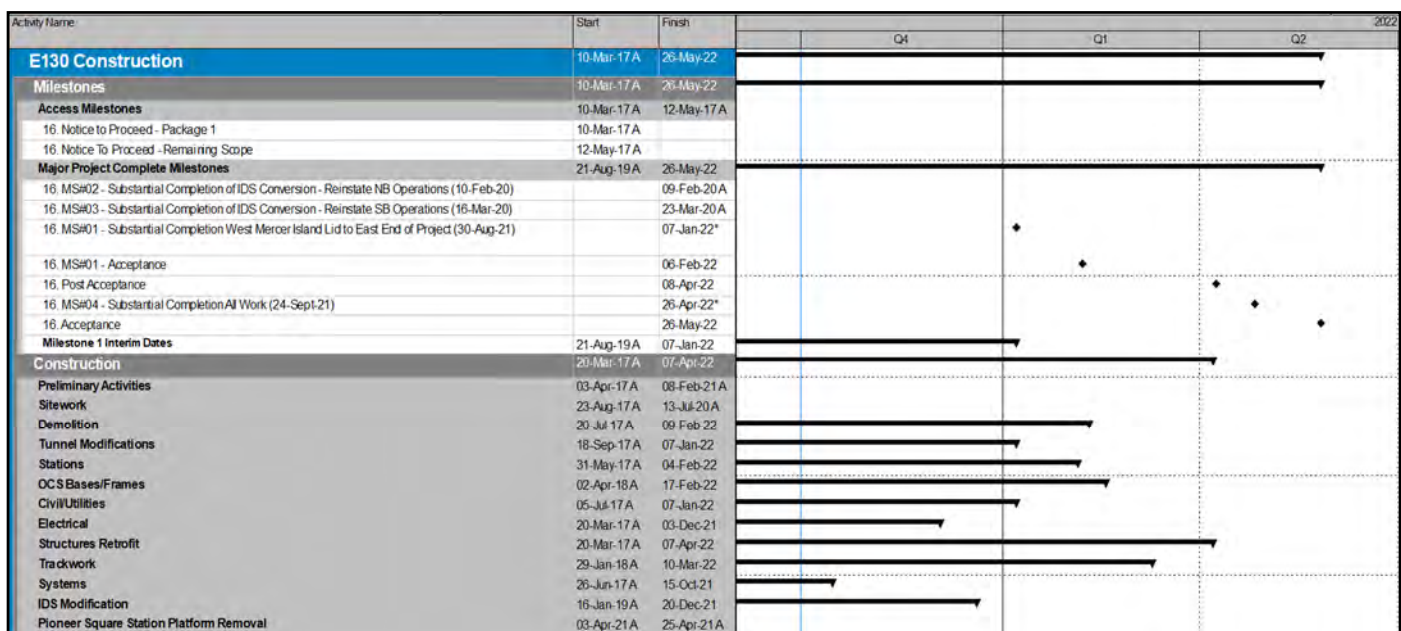
**West Segment:** Ongoing track plinth and grout pad remediation, NCR corrective work; progress TPSS 2 power upgrade work for WSDOT system

**Center Segment:** Ongoing wax tape / track plinth / grout pad remediation; continue west transition plinth stray current banding damage repair

**East Segment:** Ongoing track plinth and grout pad remediation, NCR corrective work; progress punchlist items at Mercer Island (MI) Station, and MI Tunnel

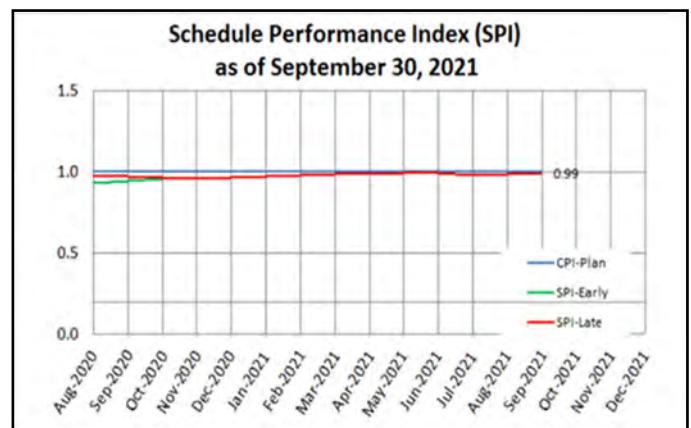
### Schedule Summary

The September update forecasts an April 26, 2022, Substantial Completion date, 215 calendar days later than the contractual milestone date of September 24, 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

Through September, 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. The contract now projects this SC at Q1 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1. Remaining work is primarily focused on track remediation scope and other punch list items.



# Link Light Rail East Link Extension

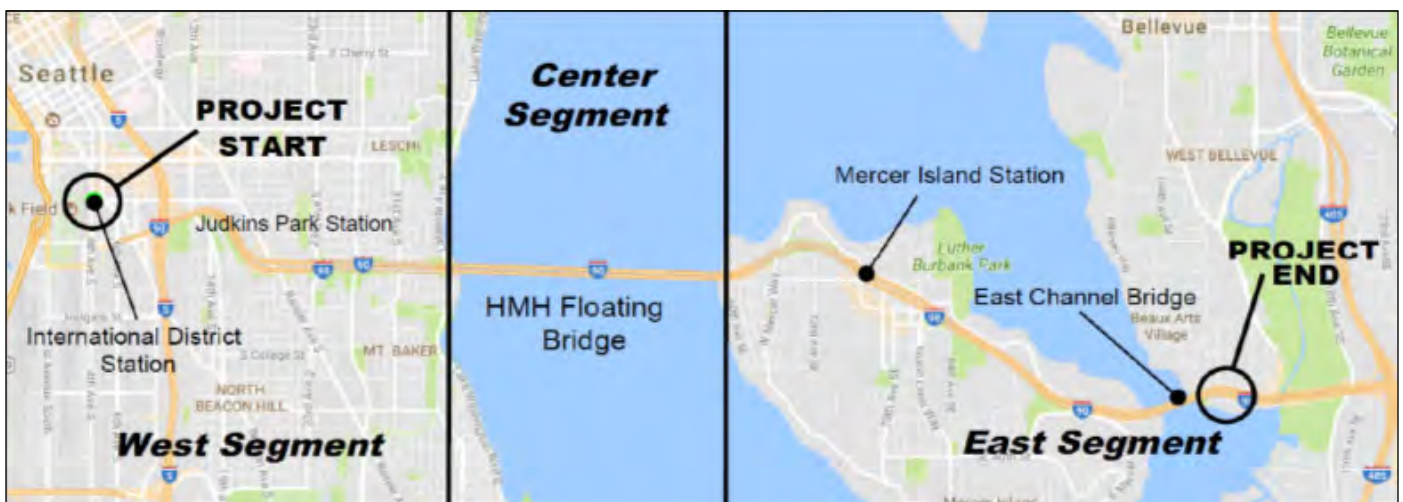
## Next Period's Activities

- **West Segment:** Ongoing track plinth and grout pad remediation; continued NCR corrective work; ongoing Judkins Park Station, Mt. Baker Tunnel commissioning activities
- **Center Segment:** Continued wax tape removal / track plinth / grout pad remediation; initial insert repair testing
- **East Segment:** Ongoing track plinth and grout pad remediation; continued NCR corrective work

## Closely Monitored Issues

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

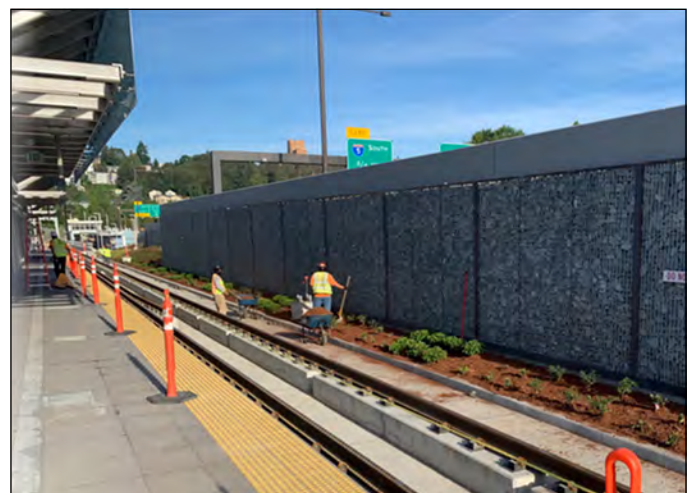
## E130 Construction Segments



## Cost Summary

Present Financial Status	Amount*
<b>E130 Contractor - Kiewit-Hoffman</b>	
Original Contract Value (incl. Phase 2 MACC)	\$665,000,000
Change Order Value	\$41,111,227
Current Contract Value*	\$705,133,064
Total Actual Cost (Incurred to Date)	\$673,782,645
Percent Complete	96.15%
Authorized Contingency	\$56,660,541
Contingency Drawdown	\$41,111,227
Contingency Index	1.3

\* Contract Value excludes Betterments



*Crews installing landscaping along Judkins Park Station platform north sound wall*

## Contract E320 – South Bellevue

### Current Progress

**I-90 Flyover:** Progress utility conflict PSA work to remove/replace WSDOT j-box

**Bellevue Way SE:** Continue landscaping; advance pin pile installation at Wall R14

**S. Bellevue Sta./P&R:** Advance landscaping, irrigation installation; initiate L&I inspections at garage elevators

**Wye-to-East Main:** Continue landscaping activities; installation of fencing along SE 8th

**Track Work:** Ongoing ballasted track pre-punchlist

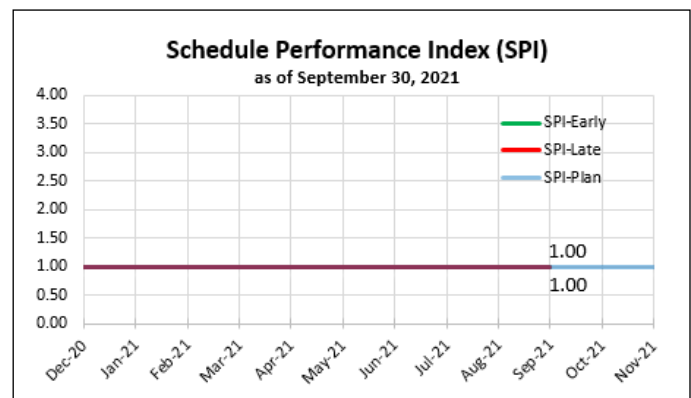
### Schedule Summary

The September update forecasts a December 24, 2021, Substantial Completion date, 351 calendar days later than the contractual milestone date of January 8, 2021. Within the E320 contract schedule, the critical path is driven by track remediation scope and punch list work. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.

Activity Name	Start	Finish	
<b>E320 Construction</b>	<b>05-Dec-16 A</b>	<b>24-Dec-21</b>	
<b>Milestones and Summary</b>	<b>05-Dec-16 A</b>	<b>24-Dec-21</b>	
<b>Contract Milestones</b>	<b>05-Dec-16 A</b>	<b>24-Dec-21</b>	
Limited Notice to Proceed	05-Dec-16 A		
Notice to Proceed	13-Feb-17 A		
Milestone 3A - Clear & Grub Swayolocken (Start of "Wetland Fill" Work+365D)		21-Dec-18 A	
Milestone 1 - (Alternate) Phase B2.1 Not Used		31-May-19 A	
Milestone 3B - Clear & Grub Coal Creek		22-Nov-19 A	
Milestone 4 - SIDA & SCADA Complete (NTP+1160D)		27-Feb-20 A	
Milestone 2 - Final Restoration of Bellevue Way (Start+897D)		11-Sep-20 A	
Milestone 5 - Acceptance of South Bellevue Station (NTP+1225D)		13-Dec-21*	
Milestone 6 - Required Substantial Completion (NTP+1364D)		24-Dec-21*	
<b>Construction-1</b>	<b>21-Apr-17 A</b>	<b>13-Dec-21</b>	
<b>Mobilization</b>	<b>21-Apr-17 A</b>	<b>16-Jul-18 A</b>	
Area A - I-90 Mainline to Bellevue Interchange - Sta EB405+54 to EB438+20	16-Jun-17 A	03-Nov-21	
Area B - Bellevue Way SE, SE 30th St to 112th Ave SE Wye - Sta EB438+20 to EB476+75	30-May-17 A	13-Dec-21	
Area C - 112th Ave SE, 112th Ave SE Wye to SE 8th - Sta EB476+75 to EB508+00	13-Jun-17 A	09-Nov-21	
Area D - 112th Ave SE to SE 8th St to Main St - Sta 508+00 to EB528+25	22-May-17 A	18-Oct-21	
Area E - Coal Creek Stream Enhancement	09-Jul-18 A	22-Nov-19 A	
Area F - Swayolocken Mitigation	23-Apr-18 A	21-Dec-18 A	

### Schedule Performance Index

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 pending AHJ inspection. Remaining work includes rework on track issues that require remediation, landscaping, irrigation, commissioning, and miscellaneous punch list items. The Project Team continues to diligently monitor elements needed for completion.



*This is the last month of reporting on Contract Schedule and SPI as the project reached substantial completion and is working toward contract closeout.*



# Link Light Rail East Link Extension

## Next Period's Activities

- **I-90 Flyover:** Continue PSA work for WSDOT utility
- **Bellevue Way SE:** Continue landscaping, Wall R14 pin piles
- **S. Bellevue Sta./P&R:** Continue landscaping, elevator L&I inspections
- **Wye-to-East Main:** Continue remaining landscaping, planting; progress fence installation at Area D
- **Track Work:** Progress emergency guardrail for DF track; continue NCR remediation

## Closely Monitored Issues

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



## Cost Summary

Present Financial Status	Amount
<b>E320 Contractor - Shimmick/Parsons JV.</b>	
Original Contract Value	\$319,859,000
Change Order Value	\$10,988,602
Current Contract Value*	\$330,813,348
Total Actual Cost (Incurred to Date)	\$326,644,564
Percent Complete	98.43%
Authorized Contingency	\$38,532,000
Contingency Drawdown	\$10,988,602
Contingency Index	3.5

\*Contract Value excludes betterments and START



Crews adjust rail fasteners near the E130 interface

## 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
<b>E330 Contractor– Guy F Atkinson Construction, LLC.</b>	
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 skim coat walls, planting, installing way finder tiles and metal panels, installing downspouts and bird control and traffic signal loops. Continued pull wire and and replace medium voltage cables, sealing windows and move mechanical room elements at South Portal Electrical Building.

**Bellevue Downtown Station (BDS):** Continued installation tactile pathway, end caps and control panels for elevators. Completed installation of commercial fencing at, windscreen glazing, bike shelter roofing, dampeners on egress stairs and installed mullions on surface level.

**Wilburton Station:** Completed station landscaping and paving for station driveway. Continued commissioning activity for HVAC, installing lighting and lighting controls, installing escalators divider wall panels, metal panel above entrance and stairs, concrete coring for plaza bollards.

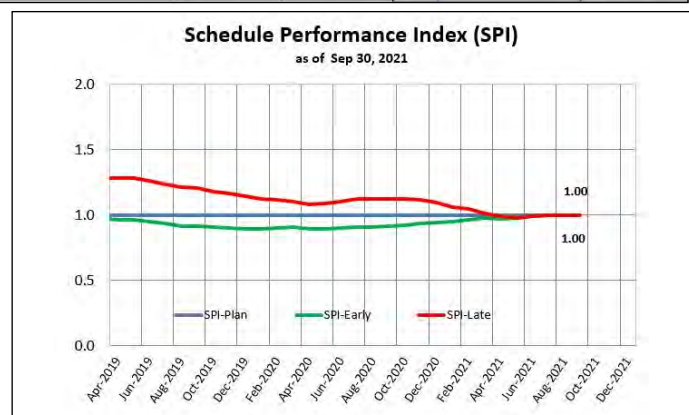
### Schedule Summary

The September update forecasts a February 14, 2022, Substantial Completion date, 215 calendar days later than the contractual milestone date of September 24, 2021. Within the E335 contract schedule, the critical path is driven by the MV transformer at BDS, which drives tunnel commissioning. The E750 contractor has access to most work areas.

Activity Name	Start	Finish	Q4	Q1
<b>E335 Construction</b>	24-Apr-17 A	14-Feb-22		
<b>Milestones</b>	04-May-18 A	14-Feb-22		
<b>Contract Milestones</b>	30-Sep-18 A	14-Feb-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-20)		24-Nov-21*		
Milestone #4 - Complete SEM Tunnel Trackwork for Primary Systems Access (16-Jan-21)		15-Jan-22*		
Milestone #5 - Complete All Trackway and Stations for Primary Systems Access (16-Mar-21)		15-Jan-22*		
Milestone #6 - Substantial Completion of all Work (16-May-21)		14-Feb-22*		
<b>Calculated Milestones</b>	04-May-18 A	14-Feb-22		
<b>Mobilization</b>	24-Apr-17 A	24-Apr-17 A		
<b>Construction</b>	24-Apr-17 A	09-Feb-22		
Area 1: E. Main Station to South Portal (531+55 - 538+00)	11-Oct-17 A	30-Nov-21		
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91)	24-Aug-18 A	06-Jan-22		
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)	24-Apr-17 A	09-Feb-22		
Area 4: Aerial Guideway (568+45 - 606+59)	24-Apr-17 A	06-Jan-22		
Area 5: Pine Forest to 120th (606+59 - 619+00)	07-Jul-17 A	01-Oct-21		
Area 6: 120th - End of Project (619+00 - 634+99)	01-Aug-17 A	28-Oct-21		
Testing and Commissioning	01-Jun-20 A	04-Oct-21		
<b>Negotiated Support Services - CO 20</b>	29-Mar-21 A	14-Feb-22		

### 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 Q1 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1. Remaining work on the contract are mostly due to delays at BDS and Wilburton stations, in addition, requirement to install inner duct and fiber in the tunnel impacted the wiring and termination of the mid-tunnel fans, and the follow-on commissioning. Project team is diligently monitoring completion.



# Link Light Rail East Link Extension

## Next Period's Activities

- **East Main Station:** Install refabricated granite blocks, battery inverter, fencing and ballasted tie blocking.
- **BDS:** Place concrete at far west planter walls, and continue irrigation installation, complete glazing on screen surface.
- **Wilburton Station:** Continue electrical commissioning activities, Install soffit panels, install handrails, stair railings and lightings.
- **120th Station:** Continue Lighting commissioning activities, Concrete punch list work.

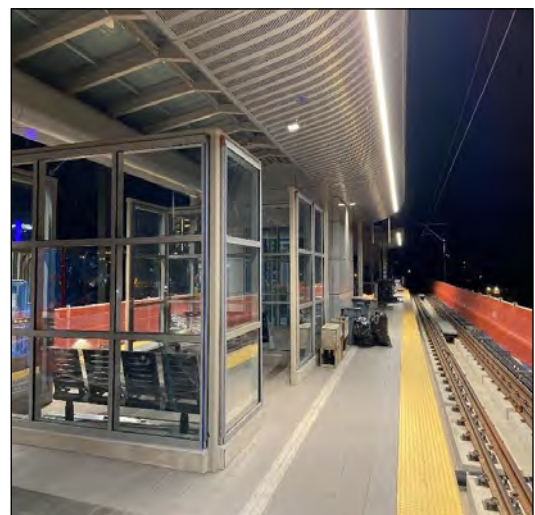
## Closely Monitored Issues

- 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.



## Cost Summary

Present Financial Status	Amount
<b>E335 Contractor– Stacy &amp; Witbeck/Atkinson Joint Venture (SWA-JV).</b>	
Original Contract Value (includes station scope)	\$393,798,210
Change Order Value	\$21,194,722
Current Contract Value	\$414,992,932
Total Actual Cost (Incurred to Date)	\$402,177,382
Percent Complete	98.90%
Authorized Contingency	\$29,689,911
Contingency Drawdown	\$21,194,722
Contingency Index	1.5



*Wilburton Station Platform*



## Contract E340 – Bel-Red

### Current Progress

**Kelsey Creek Mitigation Area:** Install open rail fence wetland signs. Install hydroseed adjacent to mitigation area.

**130th Ave Station:** Conduct rail-to-earth and rail boot repairs. Install station plumbing equipment. Install guideway signage.

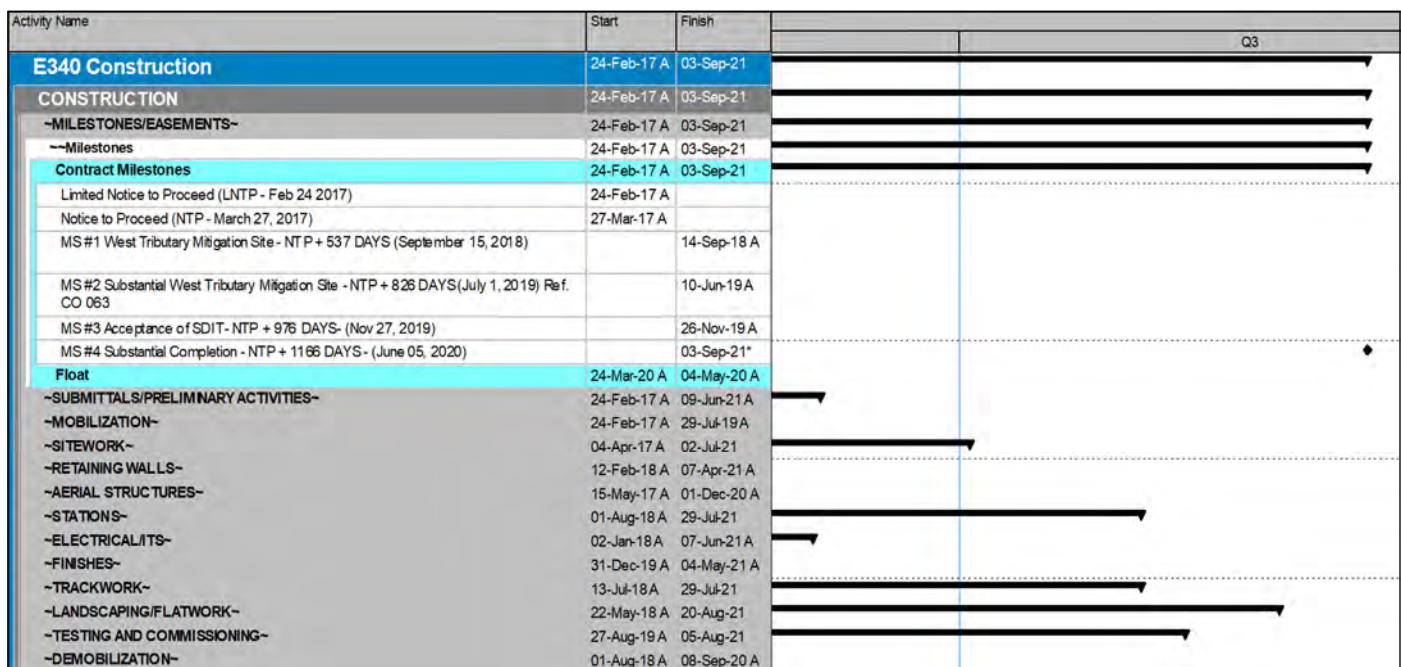
**NE Spring Blvd:** Conduct rail-to-earth testing and rail boot repairs. Address City of Bellevue signals punch-list items.

**136th Ave:** Conduct rail-to-earth testing. Address City of Bellevue signals punch-list items.

**System Scope:** Install system conductors and junction boxes in the 130th Station and along the Guideway.

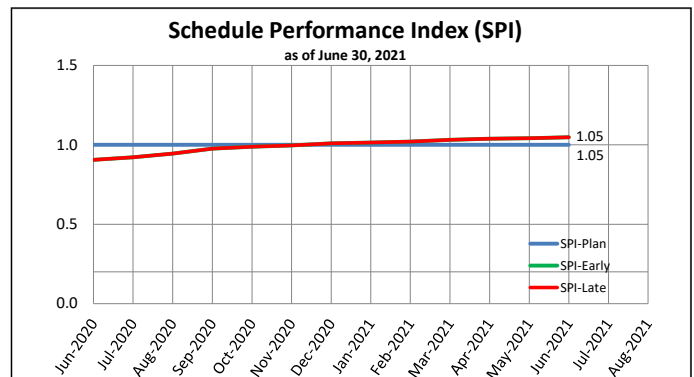
### Schedule Summary

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; work is not yet complete, but only punch list corrections and testing remain. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.



### 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 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 very tardy with their schedule submittal.



# Link Light Rail East Link Extension

## Next Period's Activities

**Kelsey Creek Mitigation Area:** Install open rail fence wetland signs and planting.

**130th Ave Station:** Conduct rail-to-earth and rail boot repairs. Investigate fire hydrant flow. Install station plumbing equipment. Address station punch-list items.

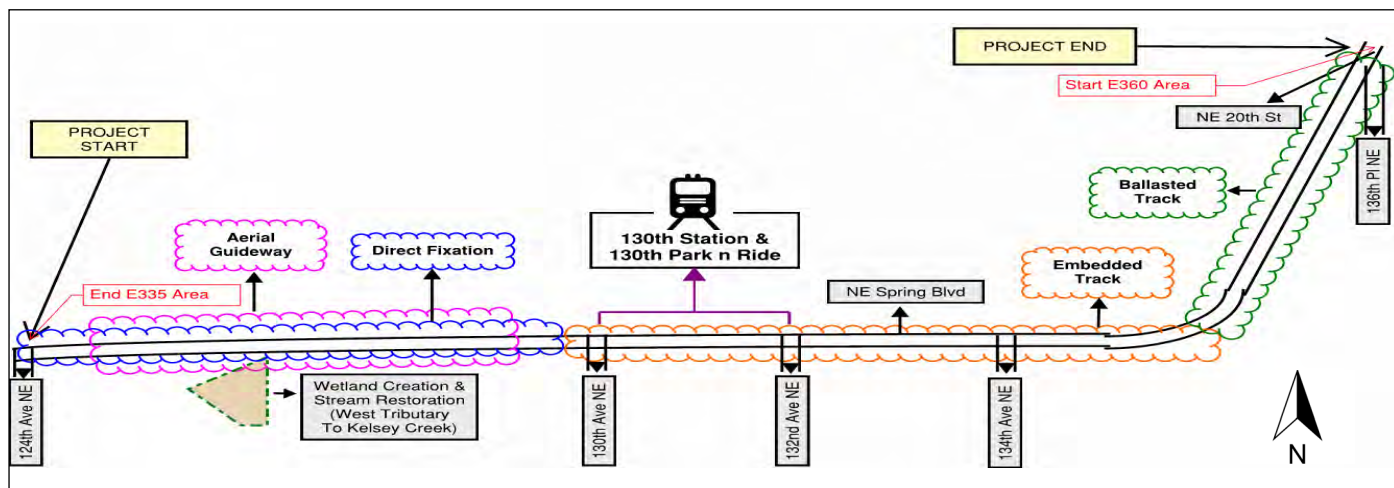
**NE Spring Blvd:** Conduct rail-to-earth testing.

**System Scope:** Install system conductors along the Guideway.

## Closely Monitored Issues

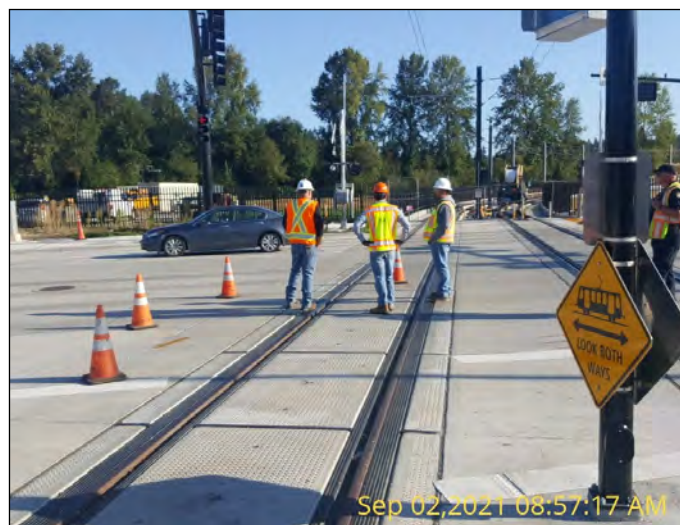
- There are non-compliant track in various stages of construction. Sound Transit is monitoring contractor's corrective method action plan to bring the rail alignment back within specified tolerances.
- There are several Temporary Construction Easements (TCE) with upcoming expiration dates. The Contractor 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
<b>E340 Contractor– Max J Kuney</b>	
Original Contract Value	\$93,170,012
Change Order Value	\$7,945,425
Current Contract Value	\$101,115,437
Total Actual Cost (Incurred to Date)	\$97,439,303
Percent Complete	97.8%
Authorized Contingency	\$14,317,000
Contingency Drawdown	\$7,945,425
Contingency Index	1.76



*Rail alignment inspection at NE 20th facing north.*

## 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: Valley Creek vault punchlist work, Park Place TOD grading, and Sweeper Site vaults punchlist work activities are ongoing.
- WA #2: Aerial Guideway punchlist work advancing.
- WA #3/4: Overlake Village Station punchlist and NCR repair work progressing.
- WA #6: Redmond Technology Station punchlist and NCR repair work continues. Garage storm installation, garage footings and column rebar, P8/P11-P13 concrete placement.
- WA #7: OVS Ped Bridge paperclip stairs finishes, handrails adjusted on bridge and stairs, and stairs concrete placement.

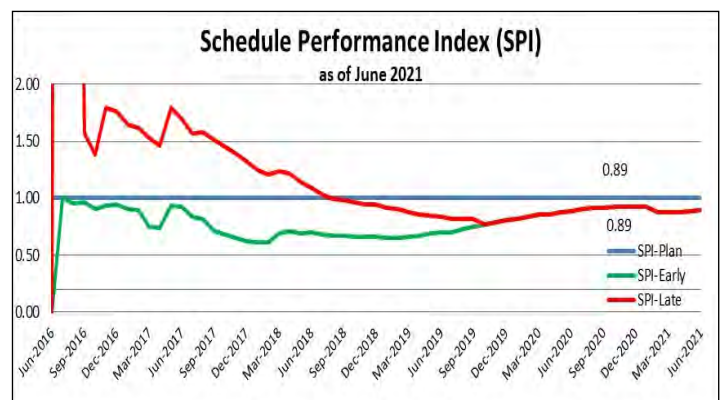
### Schedule Summary

The September update forecasts an October 19, 2022, Substantial Completion date, 811 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	Q3	Q4	Q1	Q2	Q3	Q4
<b>E360 Construction</b>	13-Jul-16 A	20-Oct-22						
<b>Base Contract</b>	13-Jul-16 A	20-Oct-22						
Design	13-Jul-16 A	11-May-21 A						
Construction	13-Jul-16 A	20-Oct-22						
General	13-Jul-16 A	19-Oct-22						
<b>Project Milestones</b>	13-Jul-16 A	19-Oct-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)		19-Oct-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	28-Sep-21						
WA #5 - Ballasted Guideway Block #2	15-Aug-17 A	23-Jul-21 A						
WA #6 - Overlake Transit Center	01-May-17 A	26-Jul-22						
WA #7 - OVS Pedestrian Bridge	09-Jul-18 A	18-Aug-21 A						
WA #8 - OTC Pedestrian Bridge	10-Aug-20 A	20-Oct-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 grading
- **WA #2:** Aerial Guideway punchlist 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

## 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
<b>E360 Contractor— Kiewit-Hoffman</b>	
Original Contract Value	\$225,336,088
Change Order Value	\$9,742,989
Current Contract Value	\$235,079,077
Total Actual Cost (Incurred to Date)	\$214,981,211
Percent Complete	94.94%
Authorized Contingency	\$22,533,609
Contingency Drawdown	\$9,742,989
Contingency Index	2.2

*Excludes Betterment*



WA 6— RTS Garage Schaffle at P11-P13 Columns

## Contract E750 – Systems Heavy Civil GC/CM

### Current Progress

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

- Continue development and reviews of engineering submittals covering all disciplines: Traction Power Substations (TPSS), Overhead Catenary Systems (OCS), Train Control Signal Systems and Communications.
- Ongoing coordination meetings for interface and access points for respective contracts.
- Installed radio equipment, devices and cable at E130 civil segment. Signal House delivered at the E360 civil segment.
- Performed FAT testing on Signal Houses, equipment and cable pulling at E130 and E360 civil segments.
- Installed OCR equipment E130 and E320 civil segment. Preformed testing at E360 civil segment.
- House prep work and installing wire at E130 and E360 civil segment.

### Schedule Summary

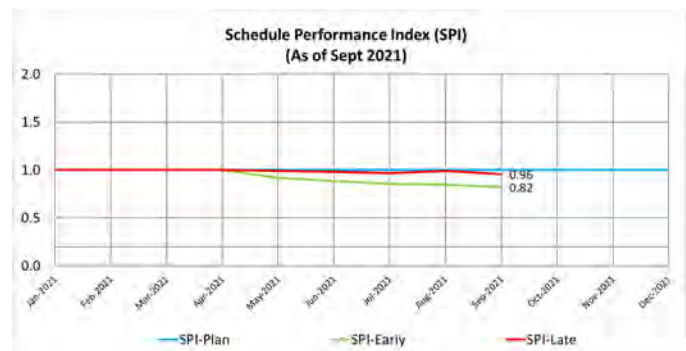
The September update forecasts an August 19, 2022, Substantial Completion date, 82 calendar days later than the contractual milestone date of May 30, 2022. Currently, the critical path is driven by track handover from the E130 contractor. ST and the contractor are actively working to mitigate delays in access to critical work areas.

Activity Name	Start	Finish	Q4	Q1	Q2	Q3
<b>E750 Construction</b>	12-Jun-17 A	19-Sep-22				
<b>General</b>						
Key Dates	12-Jun-17 A	12-Jun-17 A				
NTP - Notice to Proceed (NTP) Northgate and East Link	12-Jun-17 A					
<b>E750 Project</b>	11-Jul-17 A	19-Sep-22				
E750 Engineering	11-Jul-17 A	22-Jun-22				
E750 Construction	12-Sep-18 A	19-Sep-22				
E750 Construction (General)	15-Mar-19 A	19-Mar-19 A				
E750 Milestones	12-Mar-19 A	19-Aug-22				
E750 Project Milestones	30-Apr-21 A	24-Jan-22				
E750 Access Dates	12-Mar-19 A	19-Nov-21				
E750 Contract Milestones	09-Feb-20 A	19-Aug-22				
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)		05-Oct-21*				
MS#09a East link: Install & Test completion of East Link Systems (03/31/22)		22-Jun-22*				
MS#08 East Link: Limited systems, Redmond Techtransit center parking garage (CCTV, Tele) (09/30/21)		18-Jul-22*				
MS#09B East link: Substantial completion of East Link Systems (05/30/22)		19-Aug-22*				
E750 SCCCRM	25-Jan-19 A	22-Nov-21				
E750 OCS	14-Feb-19 A	28-Jan-22				
E750 Traction Power/ Substations	01-Oct-18 A	30-Dec-21				
E750 Signals	12-Sep-18 A	24-Jan-22				
E750 Communications	13-Nov-18 A	18-Jan-22				
E750 Radio	28-Jan-19 A	18-Jul-22				
E750 SCADA	07-Feb-22	04-Mar-22				
E750 Trunk Fiber	19-Dec-18 A	03-Jan-22				
E750 Testing and Commissioning	14-Aug-20 A	19-Sep-22				

### Schedule Performance Index

Performance for September is shown. The SPI-Early is 0.82 and SPI-Late is 0.96. Both the SPI indices indicate the contractor is behind 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.





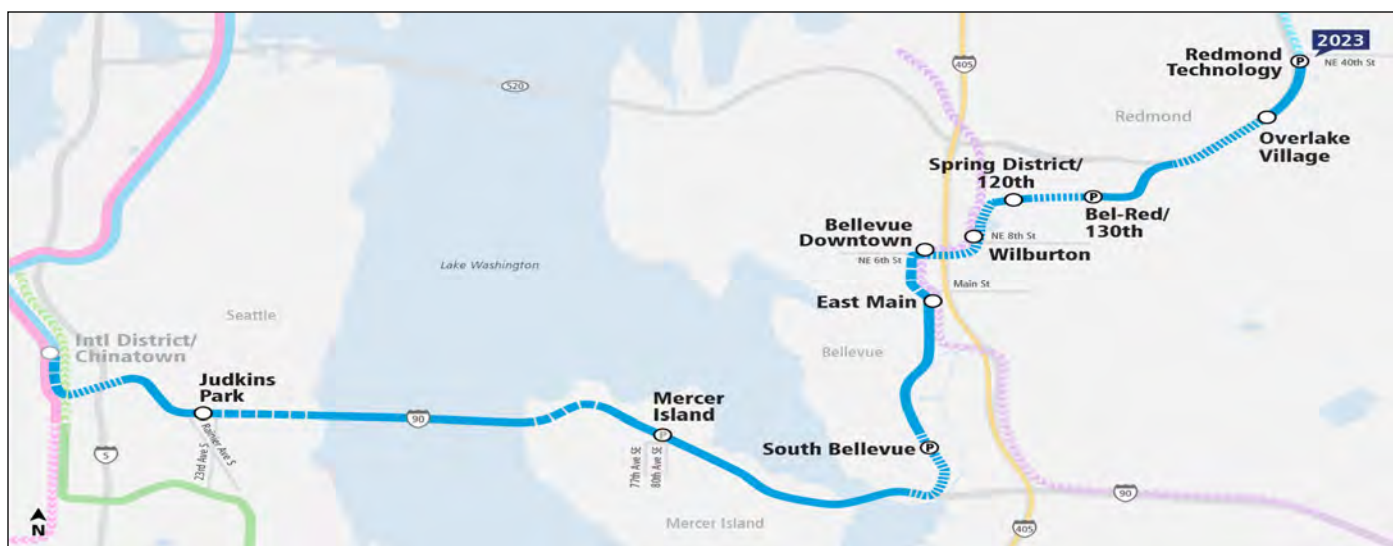
# Link Light Rail East Link Extension

## Next Period's Activities

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, OCS, Train Control Signal Systems and Communications.
- Ongoing installation of feeder cables for energization and local testing.
- Ongoing installation of OCS cabling and pole installation throughout the alignment.
- Ongoing installation of radio equipment and communication equipment 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
<b>E750 Contractor - Mass Electric Construction Co.</b>	
Original Contract Value	\$255,768,128
Change Order Value	(\$3,685,287)
Current Contract Value	\$252,082,841
Total Actual Cost (Incurred to Date)	\$183,444,228
Percent Complete	73.1%
Authorized Contingency	\$12,788,406
Contingency Drawdown	(\$3,685,287)
Contingency Index	-2.49

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



OCS equipment installation along E360 alignment.

# 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.

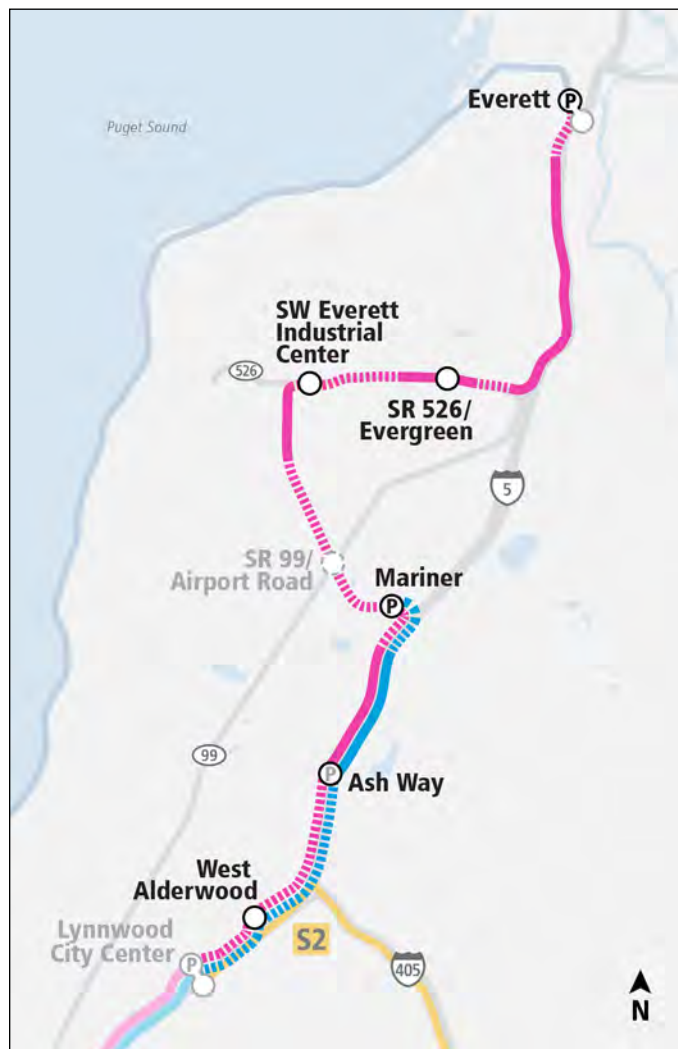
**Stations** The project includes six new stations at West Alderwood Mall, Ash Way, 128th / Mariner, Southwest Everett Industrial Center, SR 526/Evergreen and Everett Station. The project also includes one provisional station, at SR 99/Airport Road.

**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

- Continued monthly meetings with FTA.
- Coordinated with partner agencies including City of Lynnwood, City of Everett, Snohomish County, Community Transit, Puget Sound Regional Council and WSDOT regarding Alternatives Development process.
- Per the ST Board Realignment Decision this project is being planned for revenue service in 2037. The Board also added an affordable schedule with an anticipated 1 year delay in open service to SW Everett Industrial Center and an anticipated 5 year delay in open service to Everett Station if the project affordability gap is not closed. Please see the Executive Summary article on the Board Realignment decision for further details.

# 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 September 2021, \$0.69M 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	\$2.7	\$2.4	\$34.2	\$0.0
Preliminary Engineering	\$125.5	\$14.9	\$5.3	\$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	\$0.3	\$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
<b>Total</b>	<b>\$185.0</b>	<b>\$18.8</b>	<b>\$8.6</b>	<b>\$185.0</b>	<b>\$0.0</b>

### 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
<b>Construction Subtotal (10 - 50)</b>	<b>\$1.0</b>	<b>\$0.6</b>	<b>\$0.6</b>	<b>\$1.0</b>	<b>\$0.0</b>
60 Row, Land	\$10.0	\$0.3	\$0.2	\$10.0	\$0.0
80 Professional Services	\$157.9	\$17.9	\$7.9	\$157.9	\$0.0
90 Unallocated Contingency	\$16.1	\$0.0	\$0.0	\$16.1	\$0.0
<b>Total (10 - 90)</b>	<b>\$185.0</b>	<b>\$18.8</b>	<b>\$8.6</b>	<b>\$185.0</b>	<b>\$0.0</b>



## 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 of for 2046. ST is currently making schedule adjustments in accordance with this direction, a schedule graphic will be provided in a future update.

## Community Engagement

- Presentation to Transit Access Coalition.
- Launch of new online engagement site with updated schedule information and interest form for Community Advisory Group recruitment.
- Outreach with key stakeholders for Community Advisory Group recruitment.
- Continued coordination with partner agencies including City of Lynnwood, City of Everett, Snohomish County and Community Transit.

## 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 close as the project work for 2021 occurs.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	18.5	9.5	(9.0)
Consultants	34.0	16.1	(17.9)
TOTAL	52.5	25.6	(26.9)
<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

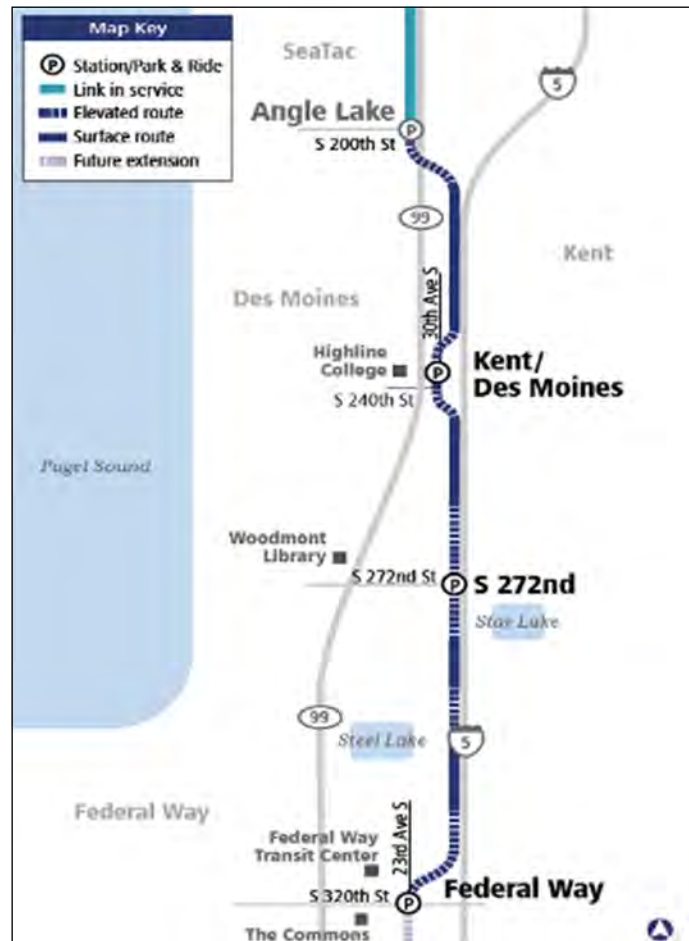
Board Action	Description	Date
	None to report this period	

# Link Light Rail Federal Way Link Extension

## Project Summary

### Scope

<b>Limits</b>	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.
<b>Alignment</b>	The extension generally parallels SR 99 and I-5 freeway.
<b>Stations</b>	Station and garages at Kent/Des Moines, South 272nd Star Lake Park-and-Ride and the Federal Way Transit Center
<b>Systems</b>	Signals, traction power, and communications (SCADA)
<b>Phase</b>	Final Design/Construction
<b>Budget</b>	\$2.451 Billion (ST Baseline Sep 2018)
<b>Schedule</b>	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.
- DB Contractor and Sound Transit continue working together on recommended solution to accommodate the liquefaction zone at Structure C by end of 2021.
- Sound Transit and WSDOT are partnering to expedite an amendment to the existing TCAL for Structure C to facilitate a construction solution. This amendment is a high priority for Sound Transit and FWLE to ensure the project schedule is not impacted. WSDOT legal is reviewing draft TCAL
- Sound Transit and the Contractor are working on potential modifications to environmental permits to allow construction for the solution to the liquefaction area at Structure C.
- Advanced Utility Relocation work by others is anticipated to be completed by end of 2021.
- Project team continued coordinating utility relocations that are necessary to avoid conflicts with Kiewit's drill shaft work.
- Quantitative Risk Assessment final report is complete.
- Began an environmental 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 \$27.8M was incurred this period of which \$0.5M incurred was for Right-of-Way; \$2M incurred for Construction Services; \$24.5M for Construction phase comprised mainly of \$22.2M for F200 Design Build construction contract and \$1.6M for Utility Relocation by Others, \$0.3M in construction permitting, and 0.3M invoice credit adjustment for SPU Midway Landfill contribution. 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	\$34.9	\$34.8	\$96.5	\$0.0
Preliminary Engineering	\$46.5	\$49.0	\$45.5	\$45.1	\$49.0	\$0.0
Final Design	\$3.1	\$3.1	\$1.4	\$1.1	\$3.1	\$0.0
Construction Services	\$107.0	\$107.0	\$97.2	\$44.1	\$107.0	\$0.0
3rd Party Agreements	\$27.7	\$27.7	\$24.9	\$12.2	\$27.7	(\$0.0)
Construction	\$1,831.9	\$1,829.4	\$1,402.5	\$553.1	\$1,829.4	\$0.0
ROW	\$338.8	\$338.8	\$209.8	\$207.4	\$338.8	(\$0.0)
<b>Total</b>	<b>\$2,451.5</b>	<b>\$2,451.5</b>	<b>\$1,816.2</b>	<b>\$897.8</b>	<b>\$2,451.5</b>	<b>\$0.0</b>

### 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	\$395.2	\$134.1	\$513.4	(\$62.4)
20 Stations	\$318.9	\$297.7	\$296.3	\$90.8	\$333.7	(\$36.0)
30 Support Facilities	\$5.3	\$11.8	\$11.5	\$3.9	\$5.1	\$6.7
40 Sitework & Special Conditions	\$558.4	\$489.5	\$469.6	\$186.0	\$649.0	(\$57.5)
50 Systems	\$153.8	\$170.4	\$116.1	\$39.4	\$150.8	\$19.6
<b>Construction Subtotal (10 - 50)</b>	<b>\$1,559.4</b>	<b>\$1,420.4</b>	<b>\$1,288.6</b>	<b>\$454.2</b>	<b>\$1,651.9</b>	<b>(\$129.5)</b>
60 Row, Land	\$341.6	\$338.8	\$209.8	\$207.4	\$338.8	(\$0.0)
70 Vehicles	\$1.8	\$1.8	\$0.0	\$0.0	\$1.8	\$0.0
80 Professional Services	\$370.7	\$514.4	\$317.8	\$236.2	\$294.1	\$120.6
90 Unallocated Contingency	\$178.1	\$176.3	\$0.0	\$0.0	\$165.1	\$8.9
<b>Total (10 - 90)</b>	<b>\$2,451.5</b>	<b>\$2,451.5</b>	<b>\$1,816.2</b>	<b>\$897.8</b>	<b>\$2,451.5</b>	<b>\$0.0</b>

*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 Federal Way Link Extension project budget was baselined in September 2018 with a total contingency of \$549.9M. The current contingency balance is \$419M.

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

**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. During this period the AC reduced by \$6.7M due to several F200 executed COs and a minor adjustment [\$0.2M] reducing project AC related to Midway Landfill contribution by SPU for invoice correction.

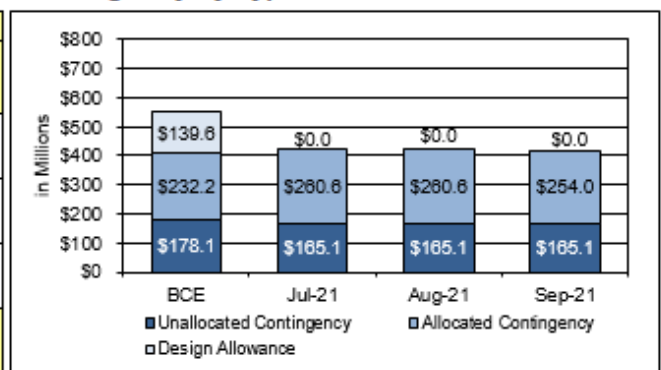
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. During this period the UAC has remained unchanged.

### Contingency Status (Monthly)

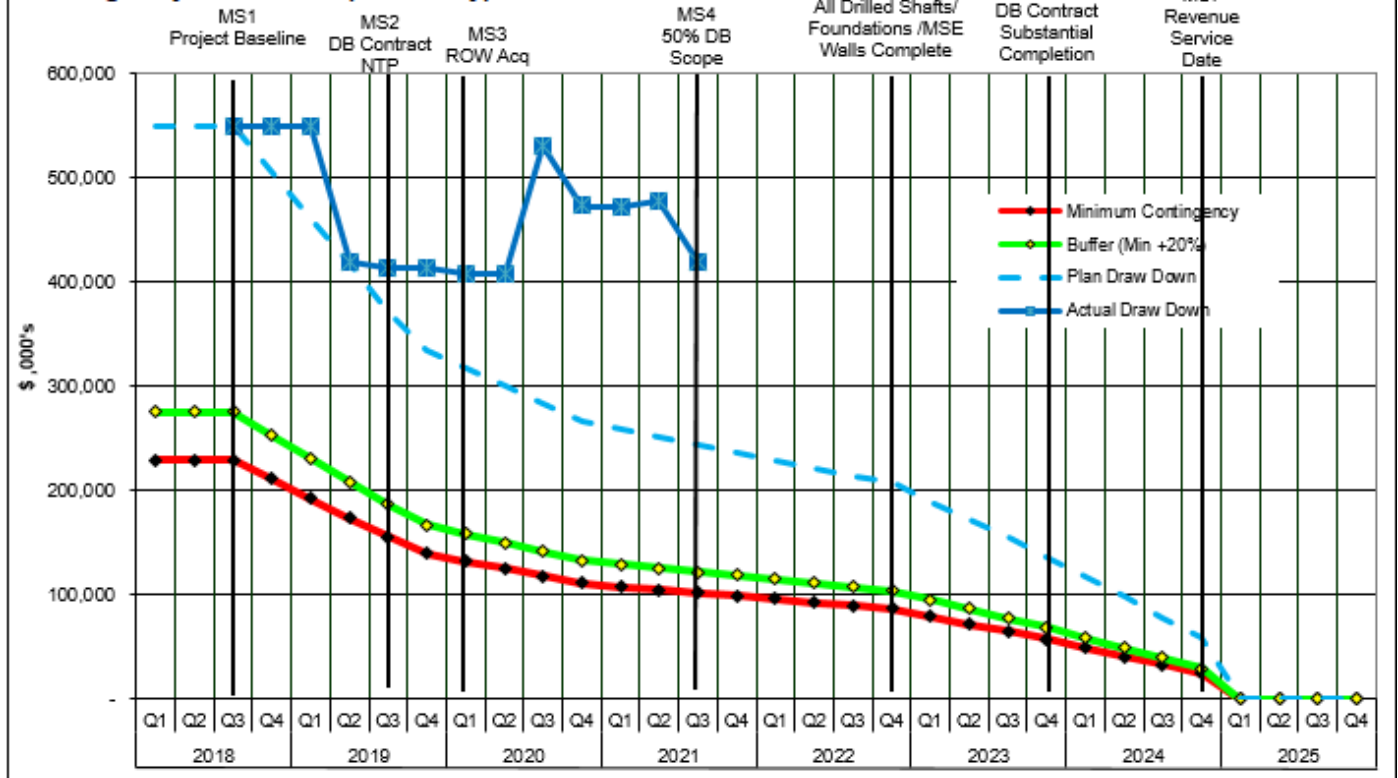
Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$139.6	5.7%	\$0.0	0.0%
Allocated Contingency	\$232.2	9.5%	\$254.0	16.3%
Unallocated Contingency	\$178.1	7.3%	\$165.1	10.6%
<b>Total:</b>	<b>\$549.9</b>	<b>22.4%</b>	<b>\$419.0</b>	<b>27.0%</b>

Table figures are shown in millions.

### Contingency by Type



### 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. The final report of the QRA Workshop from June has been completed.

Below are the top project risks:

- Liquefaction zone identified at Structure C could require an alternate design impacting cost & schedule.
- Final commissioning overlap for DRLE, LLE, and FWLE may constrain resources and result in delays to Final Acceptance.
- 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.
- PSE easements may cause delays of utility work.
- Requirements for facility and/or systems modifications by AHJs and ST.
- Known third party utility relocations (Century Link, Comcast, Lumen etc.) may not occur as scheduled potentially delaying construction and increasing construction costs.
- Lack of appropriate and timely coordination with Operations for the existing FWTC construction, impacting bus, garage operations and customers.
- 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 may request reimbursement to upgrade their electrical grid outside of known scope identified, impacting project budget and construction schedule.



*WA 3.2 Casting D05 Stem Facing SW*

# Link Light Rail Federal Way Link Extension



## Project Schedule

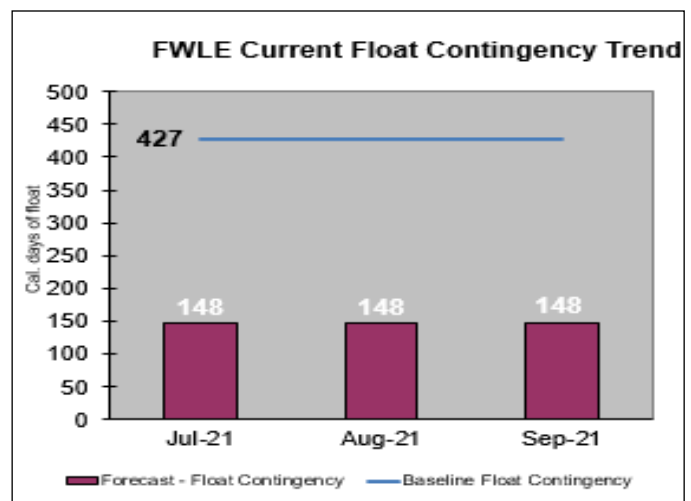
Weighted percent complete of the major construction contracts is calculated at 40.5%

The project schedule is presented below. Weighted percent complete of the major construction contracts is calculated at 50.2%. Right-of-Way acquisitions are nearly complete. LNTP was issued June 7, 2019. The baseline schedule submittal was approved in January 2020. Our Full Funding Grant Agreement was awarded on January 22, 2020. Construction NTP was issued in early May 2020. FWTC re-design change order was approved by the ST Board in April. ST project float contingency was reduced to 148 days now that FWTC CO is endorsed. Revenue Service remains on schedule for Q4 2024.

Activity Name	Start	Finish	20212022202320242025														
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Federal Way - Master Schedule	01-Jul-16 A	31-Dec-24															
Federal Way Link Extension - Integrated Master Schedule	01-Jul-16 A	31-Dec-24															
Federal Way Link Extension - Integrated Master Schedule	01-Jul-16 A	31-Dec-24															
Baseline/FFGA Milestones	27-Sep-18 A	31-Dec-24															
MS 01 - Baseline Project (Q3 2018)		27-Sep-18 A															
MS 02 - NTP to Design/Build Contractor (Q3 2019)		07-Jun-19 A															
MS 04 - 50% Design/Construction Complete (Q4 2021) (*based on contract duration)		11-Nov-21															
MS 03 - ROW Acquisitions Complete (Q1 2020)		26-Jul-22															
MS 05 - All Drilled Shafts/Foundations/MSE Walls Complete (Q1 2022)		07-Feb-23															
MS 06 - Design/Build Contractor - Substantial Completion - (Q4 2023)		06-Jun-24															
MS 07 - Revenue Service w/Float (Q4 2024)		31-Dec-24*															
Preliminary Engineering	01-Jul-16 A	22-Jan-20 A															
Third Party Agreements and Permitting	01-Jul-16 A	21-Sep-20 A															
Federal Way Link - Design-Build Construction Management Consultant - Contract	14-Nov-16 A	04-Aug-24															
Federal Way Design/Build Contract Procurement	11-Mar-17 A	07-Jun-19 A															
Federal Way - Right of Way	10-May-17 A	26-Jul-22															
Federal Way - Construction	01-Jun-19 A	05-Aug-24															
Federal Way - F200 - Guideway and Stations - D/B Schedule Update	01-Jun-19 A	05-Aug-24															
Federal Way - F210 - Traffic Mitigation	04-Jan-21 A	05-Aug-24															
Federal Way - Rail Activation	28-Jun-19 A	31-Dec-24															
Federal Way Link Extension - Rail Activation	28-Jun-19 A	31-Dec-24															
Federal Way Link Extension - Rail Activation	28-Jun-19 A	31-Dec-24															
Rail Activation	28-Jun-19 A	31-Dec-24															
Rail Activation by Task	28-Dec-21	22-Aug-24															
LRV Conditional Acceptance - FWLE	05-Jun-23	13-Nov-23															
FWLE IT Coordination	28-Jun-19 A	04-Aug-24															
Systems Integration & Testing	13-Jul-23	05-Jun-24															
Pre-Revenue Service	06-Jun-24	04-Aug-24															
Project Float	06-Aug-24	31-Dec-24															
Revenue Service	31-Dec-24	31-Dec-24															

## Project Float

Federal Way Link Extension was baselined with 427 days of project float. Currently the project is reporting 148 calendar days of project float remaining between Pre-Revenue Service and Revenue Service in December 2024. Schedule pressure from CO 054 (FWTC), ST design revisions for FWTC required the reduction of project float contingency by 108 calendar days and the use of all 30 days of owner controlled float in the F200 contract. The schedule is being monitored closely for any further schedule delays or impacts.



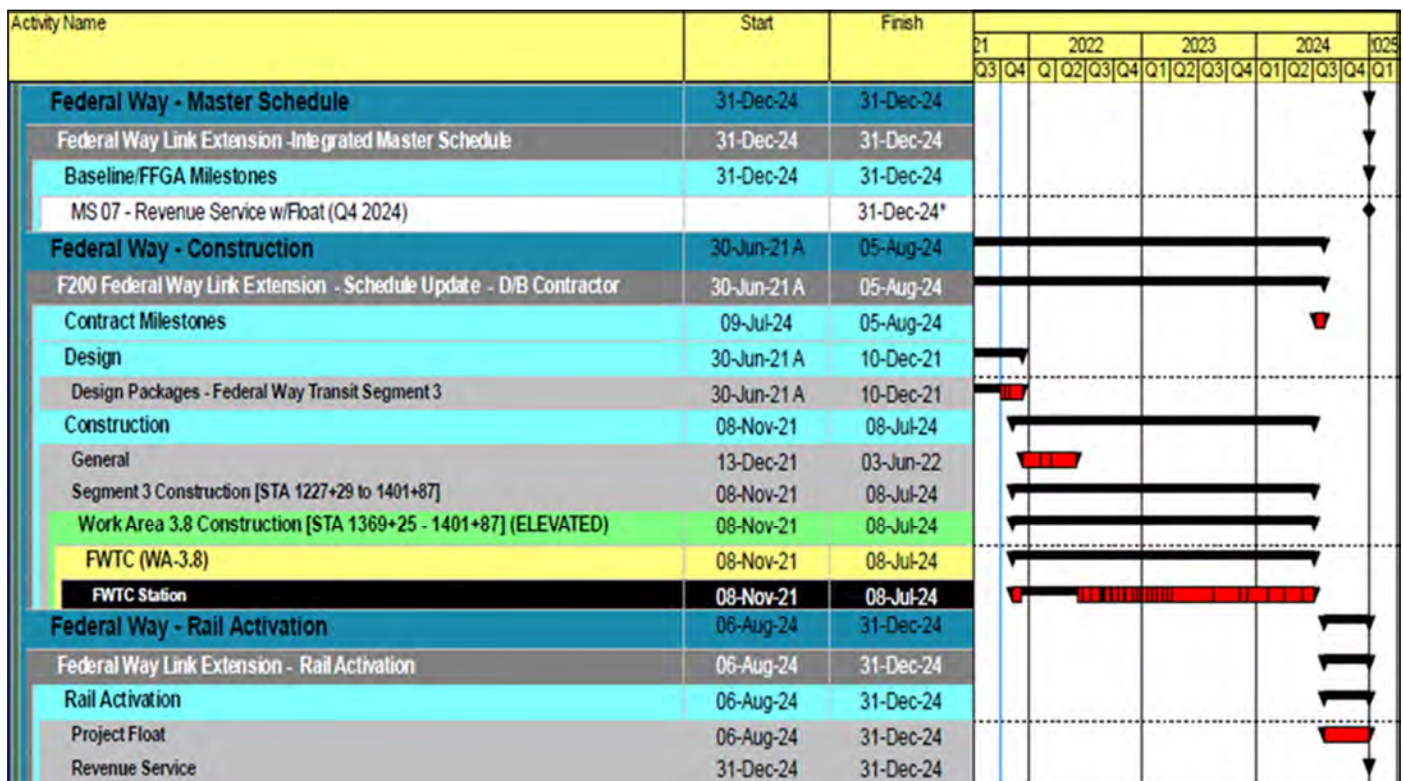
# Link Light Rail Federal Way Link Extension



## Critical Path Analysis

The critical path to Revenue Service commences with FWTC 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 was signed by both parties in July. Kiewit is showing F200 Milestone #5 Final Acceptance as August 5, 2024 for completion of the project. Structure C redesign impacts were included this month and are now near critical path activities and will be monitored closely.

A secondary critical path that is being monitored closely is the KDM station platform concrete installation to FWTC station platform concrete installation. This work is 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 additional detail in the schedule. Please note that the F210 Traffic Mitigation contract has been incorporated and is expected to also be completed in August of 2024. We are working with the team to identify the criticalness of this work.





## Right-of-Way

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

Federal Way Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
257	353	345	312	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

- Met with various property owners and local businesses to address concerns about future project impacts.
- Participated and sponsored the Taste of Federal Way.
- Organized and discussed video coordination of the FWLE Loyal to the Local Businesses.
- The SEO (Search Engine Optimization) project kicked off, over 10 business have signed up for this benefit.
- A giveaway at Camelot of backpacks, coloring books, water bottle, and other Sound Transit branded items.



Sound Wall Constructed Along The Alignment



Above View At 188th Street in SeaTac

## 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 11.8 below the staffing plan for this period. DBPM Services is over plan as they address Design-Build contractor activities for change management, design and major construction oversight that involves drill shafts, demo, utility relocations and various civil site work throughout the alignment. ST staffing is trending approximately 18.1 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	25.8	(18.1)
Consultants	57.3	63.6	6.3
TOTAL	101.2	89.4	(11.8)
<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	September 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	4	4
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	0	6	9
Reported Near Mishaps	0	3	5
Average Number of Employees on Worksite	394	-	-
Total # of Hours (GC & Subs)	44,332	407,552	628,484
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	9.02	1.96	1.27
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
<b>Recordable National Average</b>	<b>2.8</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.70</b>		
<b>LTI WA State Average</b>	<b>2.00</b>		

*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 September 2021, the F200 Design-Build Contractor, Kiewit, established and conducted Design Task Force meetings, completed 38 of 46 design packages and 14 of 17 final specification packages. A review of the baseline schedule for design delivery identified 6 late items: 4 design packages and 2 specification packages. Significant construction progress occurred on: Segment 1 & 3 Guideway, SR99 Bridge, KDM Garage construction, Star Lake Station & Garage, and FWTC & End of Line facility.

#### Design:

- During the month, eight RFIs, 39 Shop drawings, and 51 FDC/NDCs were received.
- Load Flow Analysis (LFA) returned code 2.
- IFC CW.02a OCS Foundations (breakout package) and 90/100% CW.08 Guideway Fire under review.
- Structure C soil liquefaction task force meetings were ongoing. Parallel designs, 30% S 2.02B Rigid Pier and 30% S2.02A Ground Improvement, are under review.
- Under review: 90/100% S3.07 FWTC Garage, IFC 3.15B FWTC MOT, 90/100% S3.16 FWTC Station.

#### Construction:

- Guideway structures % completeness (all Segments): Drilled shafts = 74%, Columns = 65%, and Caps and Straddles = 63%, Girder erection = 33%, Decks = 6%. Extensive superstructure (deck and diaphragms) construction in work areas 1.1, 1.3, and 3.8.
- Extensive Noise wall, MSE, and CIP wall construction in work areas 1.2 and 2.2.
- SR99 Bridge effort included: Soldier piles, lagging, columns, wall formwork, and pier cap forms and dewatering wells columns. Significant rework due to shaft NCRs.
- KDM Garage: L2-L3 ramp completed, L2 deck completed, L3 deck pours, electrical and plumbing rough in.
- 216th Undercrossing construction completed with minor finishing and punch list items remaining.



WA1.1B SR99 Bridge Pier 2 Reinf.



WA3.1 MSE Wall 1227 Facing North



# Link Light Rail Federal Way Link Extension



## Schedule Summary

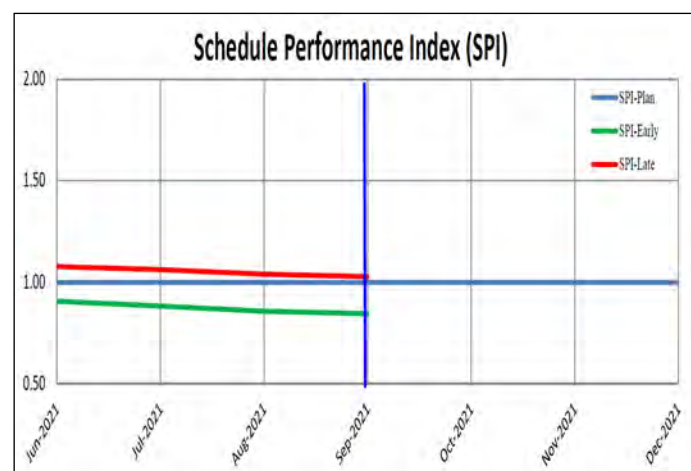
The progress schedule for September 2021 has been accepted and is shown below. Construction NTP was issued in May 2020. All contract milestones are currently being met. Federal Way Transit Center redesign change order was accepted by the ST Board in April which has moved Milestone #5 Final Acceptance to August 5, 2024. ST will continue to work with Kiewit regarding ongoing schedule impacts.

Activity Name	Start	Finish	21	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>F200 Federal Way Link Extension - Schedule Update - D/B Contractor</b>	01-Jun-19A	05-Aug-24														
<b>Contract Milestones</b>	07-Jun-19A	05-Aug-24														
Limited Notice to Proceed	07-Jun-19A															
Contractual Notice to Proceed	28-Feb-20A															
Notice to Proceed	04-May-20A															
Issuance of Full Notice to Proceed (REC-01802, 07-Dec-2020)	07-Dec-20A															
MS 1 - Civil Work in WSDOT ROW From S 208th Street to I-5 (Sta. L 2260+00) (VA-2) (01-Mar-22)		07-Feb-22*														
MS 2 - Civil Work in WSDOT ROW from Start of FWLE to S 208th Street (VA-1) (01-Nov-22)		25-Aug-22*														
MS 3 - LRV Early Storage (2,000 feet of Track) (01-Jun-23)		19-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)		05-Aug-24														
<b>Design</b>	07-Jun-19A	30-Jun-23														
<b>Design Milestones</b>	07-Jun-19A	30-Jun-23														
Corridor Wide	07-Jun-19A	15-Dec-21														
Design Packages - Kent Des Moines Segment 1	07-Jun-19A	15-Jul-21A														
Design Packages - Star Lake Segment 2	07-Jun-19A	27-Jun-22														
Design Packages - Federal Way Transit Segment 3	07-Jun-19A	26-Jan-22														
<b>Construction</b>	01-Jun-19A	08-Jul-24														
<b>General</b>	01-Jun-19A	05-Jun-24														
Segment 1 Construction [STA 990+10 to 1112+99]	28-Jun-19A	07-Mar-24														
Segment 2 Construction [STA 1112+99 to 1227+29]	28-Jun-19A	05-Jun-24														
Segment 3 Construction [STA 1227+29 to 1401+87]	28-Jun-19A	08-Jul-24														
<b>Provisional Sums</b>	01-Dec-19A	08-Feb-24														
<b>Change Orders</b>	01-Jul-19A	24-Jul-24														

## Schedule Performance Index

For the September period, the Early SPI is 0.85 and Late SPI is 1.03 (previously: 0.97 and 1.04 respectively). Although September actuals were in between the Cumulative Early and Late date planned value, Kiewit performance on monthly basis is behind late planned value due to delay in design of Structure C Soil Liquefaction and Load Flow Analysis.

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.
- Load Flow Analysis clean copy and CW.02 90/100% Systems Standards Package submittal expected. Return CW.02A OCS Foundation Breakout Design and CW.07 IFC Non-station Landscaping packages
- Return 30% S2.02A Revised Structure C Ground Improvement.
- Return: 90/100% S3.07 FWTC Garage, IFC 3.15B FWTC MOT, 90/100% S3.16 FWTC Station.
- Structure C soil liquefaction: progress Rigid Pier Design; Final Geotechnical Interpretive Report expected to be submitted .

### Construction:

- Guideway substructure and superstructure construction continues (all segments). Extensive superstructure (deck and diaphragms) construction in segment 1 and 3.
- SR99 Bridge: Soldier piles, lagging, columns, wall formwork, complete pier cap 2 and pier 3 wall fascia. Resolve multiple NCRs for shafts and rework.
- KDM Garage: finish L3 deck, start on deck 4. Electrical and plumbing rough in continued.
- Midway landfill: continue effort on MSE and Noise wall construction. Create girder access.
- Star Lake: pour footings for garage, prep for footings at station. Strip forms at walls, and then backfill.
- FWTC/Seg 3 Guideway: Sewer install, capitals, girder install, canopy beams, and SIP deck panels. Capitals, girder install, and SIP deck panels

## Closely Monitored Issues

- Load flow analysis (LFA)
- Structure C soil liquefaction
- Siding Track
- Testing & Commissioning Program
- Blocked pipe on I-5
- Pond E

## Cost Summary

Present Financial Status	Amount
<b>F200 Contractor - Kiewit Infrastructure West Co</b>	
Original Contract Value	\$1,285,200,000
Change Order Value	\$137,571,169
Current Contract Value	\$1,422,771,169
Total Actual Cost (Incurred to Date)	\$516,848,137
Percent Complete	40.50%
Authorized Contingency + Add'l Ctg	\$248,297,519
Contingency Drawdown	\$137,571,169
Contingency Index	<b>0.73</b>



WA2.4 Tying Rebar at Wall SLB.01

# 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

**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:** Poured Old City Hall Station platform, curb and ramps.
- **Heading 2:** Completed underground signal work at intersection of N. Tacoma and N. 1<sup>st</sup> St.
- **Heading 3:** Completed all underground work for stations systems at St. Joseph's Station and poured platform. Poured inbound ADA ramps, curb and gutter on MLK between S. 10<sup>th</sup> and S. 13<sup>th</sup>. Poured outbound ADA ramps, curb and gutter on MLK between S. 16<sup>th</sup> and S. 19<sup>th</sup>.
- **OMF: E. 25<sup>th</sup> St:** Poured paving on the south side of E. 25<sup>th</sup> St. and graded for paving on E. J St. **Yard:** Began preliminary testing of TPSS No. 5. Paved OMF entry and parking areas. **Interior:** Received temporary certificate of occupancy for the administrative functions of the building.

### Closely Monitored Issues

- Staff continue to monitor supply chain interruptions 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.

# 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 \$2.4M was incurred. The majority of the expenditures (\$1.8M) was incurred in the Construction phase for T100 construction contract and startup activities.

### 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	\$17.6	\$17.4	\$21.7	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$14.1	\$13.8	\$13.6	\$14.1	\$0.0
Construction Services	\$12.4	\$10.4	\$10.5	\$12.4	\$0.0
Third Party Agreements	\$1.5	\$1.3	\$1.0	\$1.5	\$0.0
Construction	\$162.0	\$137.4	\$127.2	\$162.0	\$0.0
Vehicles	\$33.4	\$31.9	\$8.3	\$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
<b>Total</b>	<b>\$252.7</b>	<b>\$220.3</b>	<b>\$185.4</b>	<b>\$252.7</b>	<b>\$0.0</b>

### 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	\$26.3	\$24.3	\$31.0	\$0.0
20 Stations	\$3.5	\$2.9	\$2.7	\$3.5	\$0.0
30 Support Facilities	\$41.2	\$34.9	\$32.3	\$41.2	\$0.0
40 Sitework & Special Conditions	\$51.7	\$43.9	\$40.7	\$51.8	\$0.1
50 Systems	\$34.6	\$29.3	\$27.1	\$34.6	\$0.0
<b>Construction Subtotal (10 - 50)</b>	<b>\$161.9</b>	<b>\$137.4</b>	<b>\$127.2</b>	<b>\$162.0</b>	<b>-\$0.1</b>
60 Row, Land	\$2.0	\$2.2	\$1.9	\$2.2	\$0.2
70 Vehicles (non-revenue)	\$33.1	\$31.9	\$8.3	\$33.4	\$0.3
80 Professional Services	\$53.8	\$48.8	\$48.0	\$55.2	\$1.4
90 Unallocated Contingency	\$2.0	\$0.0	\$0.0	\$0.0	-\$2.0
<b>Total (10 - 90)</b>	<b>\$252.7</b>	<b>\$220.3</b>	<b>\$185.4</b>	<b>\$252.7</b>	<b>\$0.0</b>



# Link Light Rail Hilltop Tacoma Link Extension



## Contingency Management

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

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

**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period the AC was reduced by approximately \$0.2M due to a decrease of executed change orders for T100 contract. Current balance is to \$24.2M.

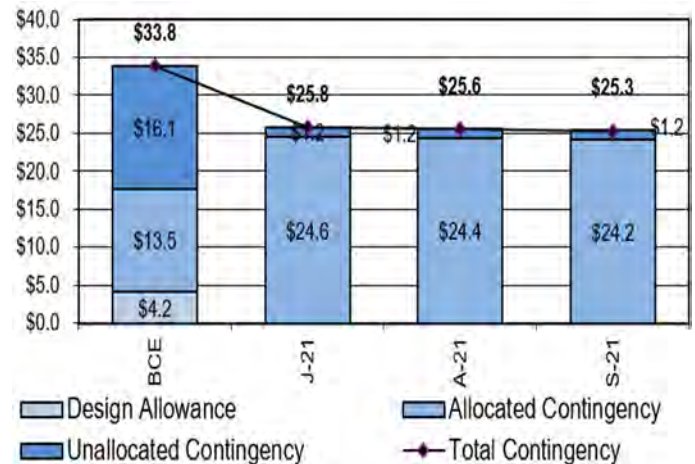
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance of \$1.2M remains unchanged this period.

### Contingency Status (Monthly)

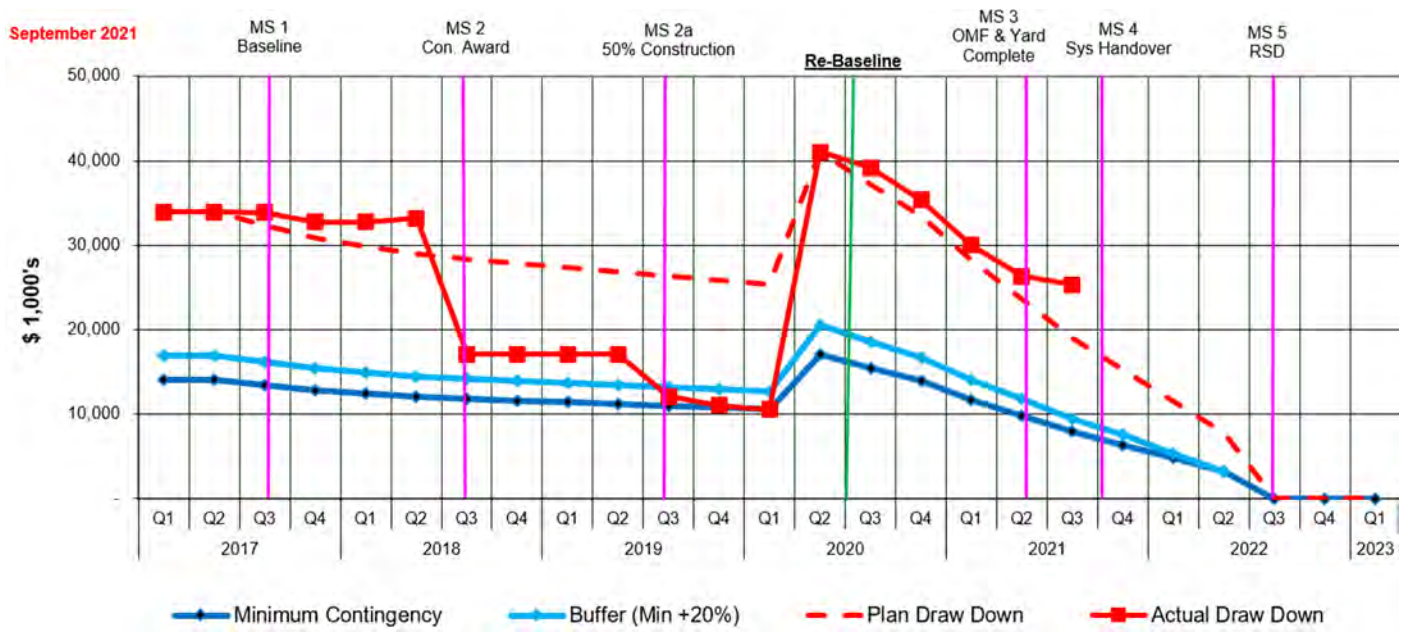
Type	Baseline		Re-Baseline	
	Amount	% of Total	Amount	% of Work
Design Allowance	\$4.2	2.2%	\$0.0	0.0%
Allocated Contingency	\$13.5	6.8%	\$24.2	35.9%
Unallocated Contingency	\$16.1	8.2%	\$1.2	1.7%
<b>Total</b>	<b>\$33.8</b>	<b>17.2%</b>	<b>\$25.3</b>	<b>37.6%</b>

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

- The T100 contractor may submit a cumulative impact claim to ST.
- Third party coordination required for submittal, RFI responses and design reviews may delay construction work progress.
- LRV testing complications may occur after delivery.
- LRV Procurement Schedule - Sufficient time must be allowed for the manufacturer to deliver the cars, otherwise testing and opening of the expansion could be delayed. Current OMF can store 1 LRVs for delivery.
- Inadequate schedule contingency (float) may result in project finishing later than anticipated
- Cutovers - Contractor planning and implementation from existing alignment to new alignment at 9th & Commerce St. switch may negatively impacts Operations.
- Work zone constraints due to traffic control for associated utility work considerations and impacts to stakeholder require additional Contractor resources.
- Construction Modifications - ADA curb ramp. Request by City of Tacoma for adjustments to approved design and/or rework of contract compliant constructed ADA curb ramps due City discretionary inspection.
- ST internal resources (System Integration Testing) may be constrained if schedule slip or does not align with other ST projects needing SMEs and other SIT staff to perform testing.
- Roadway modifications for curb and gutter, may require additional resources for City of Tacoma new curb and gutter standards that conflict with T100 contract.

# Link Light Rail Hilltop Tacoma Link Extension



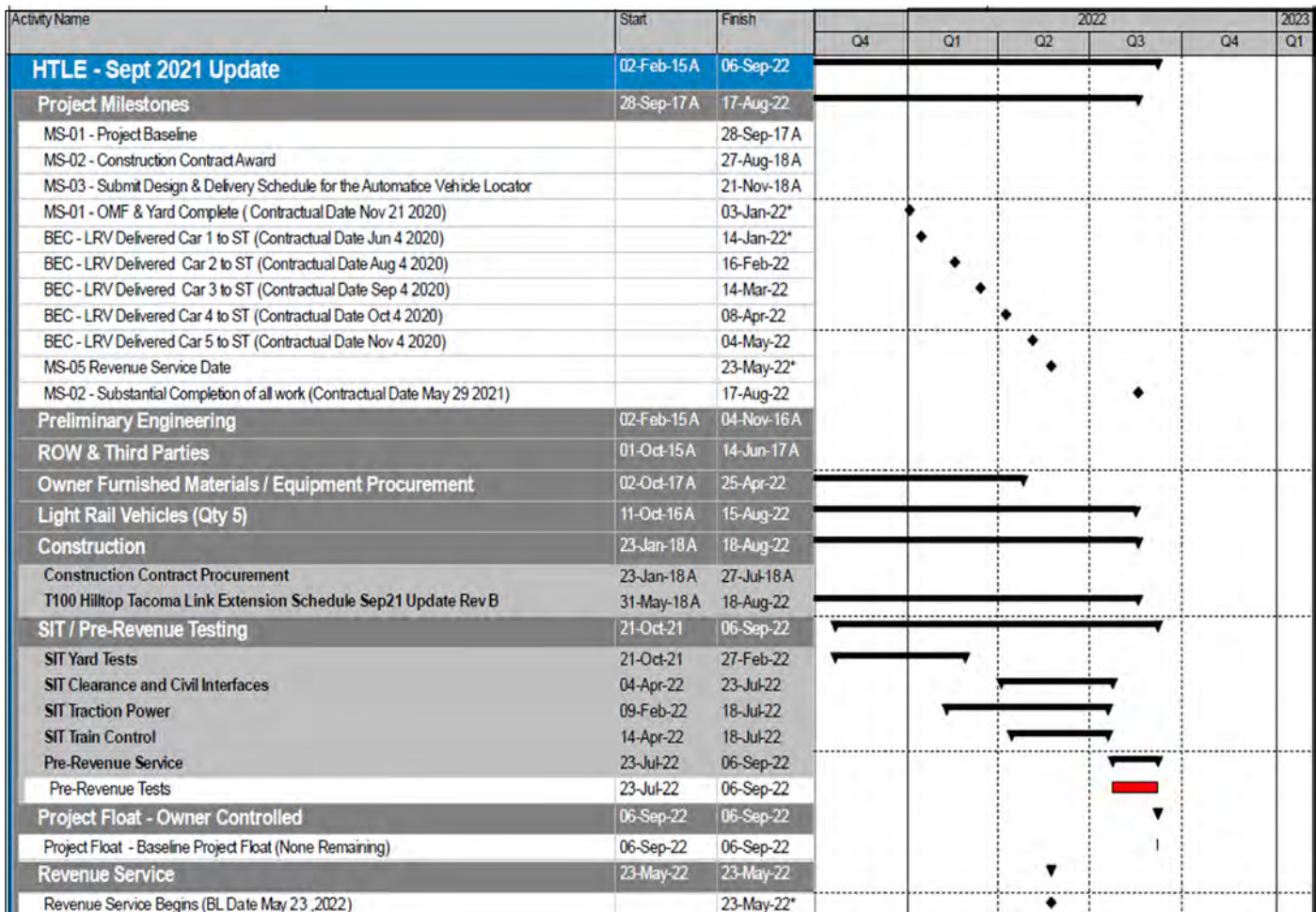
## Project Schedule

The master schedule was updated through the end of September 2021. Overall physical percent complete is 78.8%.

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

**T100:** Project staff continue implementation of mitigations to address delays to baseline 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.





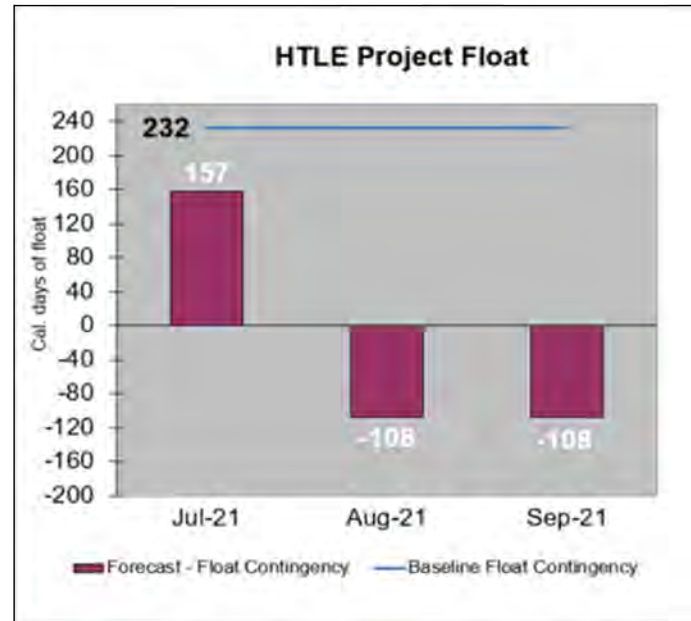
# Link Light Rail Hilltop Tacoma Link Extension

## 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 all the remaining project float of 157 days will be consumed.

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 September 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 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	
<b>HTLE - Sept 2021 Update</b>	19-May-20A	06-Sep-22						
<b>Construction</b>	19-May-20A	18-Jul-22						
T100 Hilltop Tacoma Link Extension Schedule Sep21 Update Rev B	19-May-20A	18-Jul-22						
Tacoma Links Baseline Schedule	19-May-20A	18-Jul-22						
<b>Milestones</b>	11-Jul-22	11-Jul-22						
Heading 1: 7th & Commerce to Stadium Way & Division	07-Dec-21	11-Jul-22						
Heading 2: Stadium Way & Division to Division St and MLK	29-Sep-21A	25-Apr-22						
Heading 3: Division St and MLK to MLK & 19th	11-Jan-22	05-Apr-22						
OCS Wire Runs	12-Jul-22	15-Jul-22						
Job Wide ITS	26-Apr-22	10-May-22						
Testing & Commissioning	05-Jan-22	18-Jul-22						
Change Orders	19-May-20A	30-Sep-21						
RFCs	11-May-22	17-May-22						
<b>SIT / Pre-Revenue Testing</b>	18-Jul-22	06-Sep-22						
SIT Clearance and Civil Interfaces	18-Jul-22	23-Jul-22						
Test 204 - Ride Quality - New Alignment	18-Jul-22	23-Jul-22						
SIT Traction Power	18-Jul-22	18-Jul-22						
Test 79 -Test 301 - OCS Live Wire - New Alignment - Complete		18-Jul-22						
Pre-Revenue Service	23-Jul-22	06-Sep-22						
Pre-Revenue Tests	23-Jul-22	06-Sep-22						
<b>Project Float - Owner Controlled</b>	06-Sep-22	06-Sep-22						
Project Float - Baseline Project Float (None Remaining)	06-Sep-22	06-Sep-22						



## Right-of-Way

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

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

## Community Engagement

- Produced and distributed notification about: curb and gutter work, paving and TPSS 1 delivery on Stadium Way, paving on E. 25th St., curb and gutter work on the east side of MLK Jr. Way from S. 13th St. to S. 10th St., and curb and gutter work on Division Ave. Provided notification about several construction activities in the Stadium District (including station canopy installation and signals), and updated Stadium residents on the schedule and access for paving. Produced and distributed the weekly construction alert about traffic impacts. Continued to provide construction information to businesses and residents on Commerce St. and coordinate access and parking.
- Coordinated with Stadium High School (classes resumed in-person on Sept. 8) on construction activities and obtained feedback from the principal. Asked the contractor to work around the school schedule, if possible. Continued coordinating with MultiCare on construction near the hospitals, including providing 2-week notice and coordinating with the new children's hospital.
- Presented on "the importance of partnerships in Hilltop" at the Hilltop Action Coalition's meeting. Gave updates to the Hilltop Business Association, Hilltop Stakeholder Outreach Group, and Downtown on the Go. Sound Transit sponsored the Stadium Art, Wine and Beer Walk. Continued to coordinate with businesses on Loyal to the Local videos and manage the Hilltop Tacoma Link's Facebook group page.
- Responded to questions and complaints about traffic backups and detour routes during the Stadium Way southbound closure. Provided Stadium Thriftway gift cards to residents at Legacy Apartments as mitigation for the sidewalk damage and closed entrance to their building.

## 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 FTE's (CMC and DSDC) are slightly under plan.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	24.1	14.2	9.9
Consultants	15.5	13.3	2.2
TOTAL	39.6	27.5	12.1

\* 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.	

## Construction Safety

Data/ Measure	September 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	3	11
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	0	3	21
Reported Near Mishaps	0	20	67
Average Number of Employees on Worksite	164	-	-
Total # of Hours (GC & Subs)	10,781	70,317	315,921
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	8.53	6.96
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
<b>Recordable National Average</b>	<b>2.80</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.70</b>		
<b>LTI WA State Average</b>	<b>2.00</b>		

*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: Poured sidewalks on Stadium Way from 4th St. to I-705 and installed canopy steel at Old City Hall
- Heading 2: Continue underground signal work at Division Ave and I Street intersection.
- Heading 3: Continue above signalization at MLK and Earnest Brazil; and began demolishing and grading for flatwork on MLK from S.10th to S.13th streets.
- OMF Yard: Registered OCS Y1 contact wire and tested track power switch gears.

### Schedule Summary

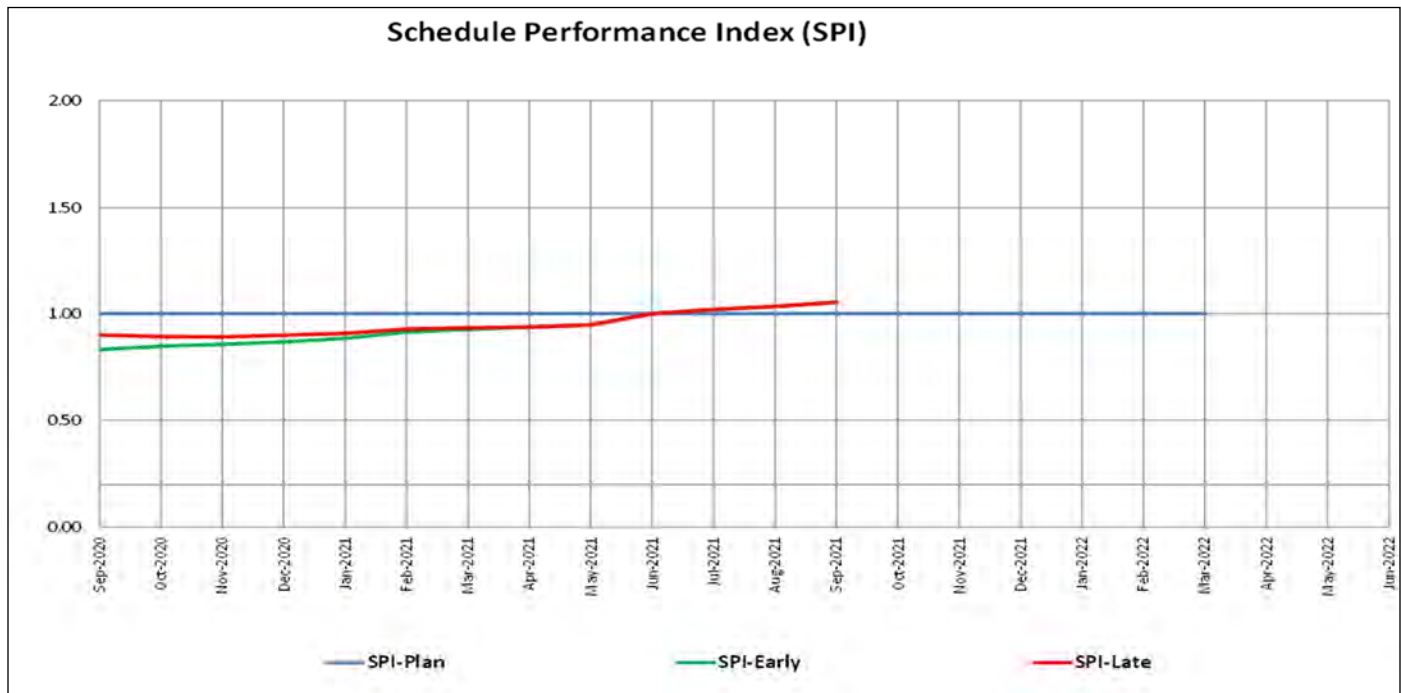
The T100 September 2021 monthly update does not support a Q1 2022 pre-revenue startup date. ST, the City of Tacoma and Walsh management are working collaboratively to identify and implement mitigations to reduce schedule impacts.

Activity Name	Start	Finish	2022			
			Q4	Q1	Q2	Q3
<b>T100 Hilltop Schedule Sep21 Update Rev B</b>	31-May-18 A	15-Jul-22				
<b>Tacoma Links Baseline Schedule</b>	31-May-18 A	15-Jul-22				
<b>Milestones</b>	21-Nov-18 A	15-Jul-22				
Contractual Milestones	21-Nov-18 A	15-Jul-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)		04-Jan-22*				
Contr. MILESTONE 2: Substantial Completion of All Work (NTP + 1005 + 138 = 10/13/21)		15-Jul-22*				
PreConstruction	31-May-18 A	16-Jun-22				
Heading 1: 7th & Commerce to Stadium Way & Division	15-Oct-18 A	15-Jul-22				
Heading 2: Stadium Way & Division to Division St and MLK	23-Oct-18 A	25-Mar-22				
Heading 3: Division St and MLK to MLK & 19th	15-Oct-18 A	02-Jun-22				
OCS Wire Runs	19-Jul-21 A	07-Jul-22				
Train Signal System	19-Dec-20 A	20-Jan-22				
Job Wide ITS	07-Feb-22	09-Apr-22				
OMF Facility	29-Aug-18 A	04-Jan-22				
Testing & Commissioning	11-Mar-19 A	14-Jul-22				
Change Orders	07-Jan-19 A	01-Jul-22				
Provisional Sum Time Impacts	01-Feb-19 A	25-Oct-21				
Other Time Impacts	04-Mar-19 A	13-Jun-22				
RFCs	09-Jan-19 A	15-Apr-22				
Provisional Sums	03-Dec-18 A	16-Feb-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:** Final paving on west side of Stadium Way from 4<sup>th</sup> to Division Ave.
- **Heading 2:** Finish underground traffic signal work at Division and Yakima intersection and Division and I Street intersection.
- **Heading 3:** Final pave on MLK from S.16th to 17th street. Finish testing and commissioning signalization at MLK and Earnest Brazill.
- **OMF Building:** Continue testing and commissioning.  
**Yard:** Install Y2W OCS and register Y2W contact wire. Install fencing and gates. Pour concrete paving and curb and gutter. Complete multi-purpose facility. Pave areas in Yard and OMF parking lot.

## Closely Monitored Issues

- ST continues to monitor contractor compliance to protocols identified in their COVID-19 safety plan.
- 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
<b>T100 Contractor— Walsh Construction Company</b>	
Original Contract Value	\$108,295,000
Change Order Value	\$15,838,516
Current Contract Value	\$124,133,516
Total Actual Cost (Incurred to Date)	\$111,903,542
Percent Complete	90%
Authorized Contingency	\$37,114,750
Contingency Drawdown	\$15,838,516
Contingency Index	2.1



*Finishing median curb on Stadium – H1*

# Link Light Rail

## Hilltop Tacoma Link Extension



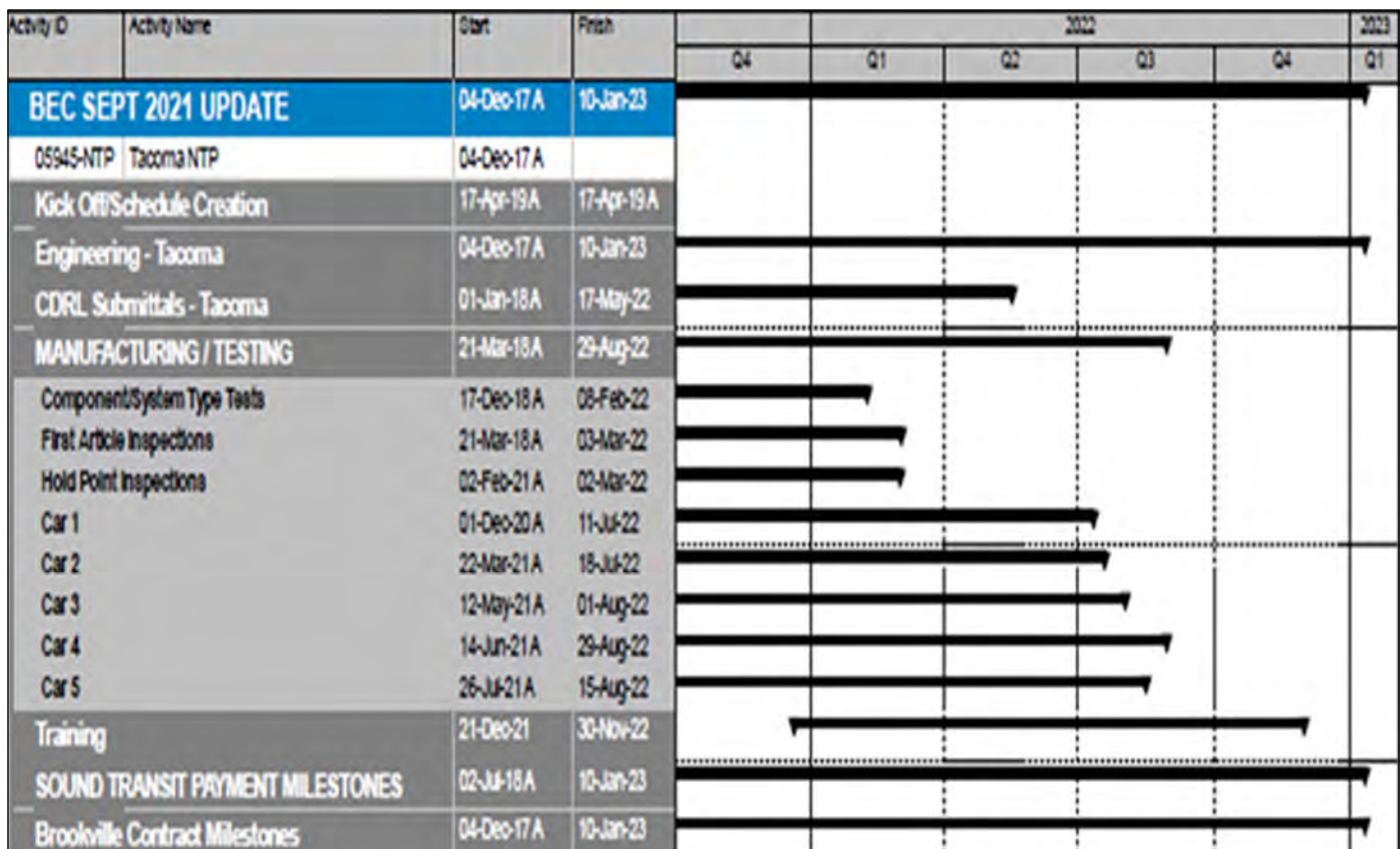
### Contract RTA/RP 0014-16 — Tacoma Link Light Rail Vehicle (LRV) Procurement

#### Current Progress

- Final assemblies of LRV #1, LRV #2, LRV #3 and LRV #4 are underway.
- Installation of vehicle skin and noses is underway on LRV #5.
- Brookville and ST are participating in workshops to develop requirements for commissioning, onsite testing and training plans. BEC is drafting technical manuals for maintenance, heavy repair and special equipment for ST review.
- Brookville continues working on long lead time issues material 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.

#### Schedule Summary

Brookville's September 2021 schedule update submittal is represented in this reporting period. Car deliveries have slipped one to two months since the last schedule submittal due to materials/component availability issues. LRV #1 arriving at the OMF in Tacoma in Jan 2022 and LRV #5 arriving May 2022. The schedule graphic below indicates all vehicles will be conditionally accepted and ready for revenue service in Q3 2022.



# 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 Transportation Mitigation 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 September were \$5.8K, for ST staff charges. 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
<b>Total</b>	<b>\$225.6</b>	<b>\$207.6</b>	<b>\$209.7</b>	<b>\$199.9</b>	<b>\$207.6</b>	<b>\$0.0</b>

#### 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
<b>Total</b>	<b>\$225.6</b>	<b>\$207.6</b>	<b>\$209.7</b>	<b>\$199.9</b>	<b>\$207.6</b>	<b>\$0.0</b>

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%
<b>Total</b>	<b>\$35.7</b>	<b>15.8%</b>	<b>\$0.7</b>	<b>9.5%</b>

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



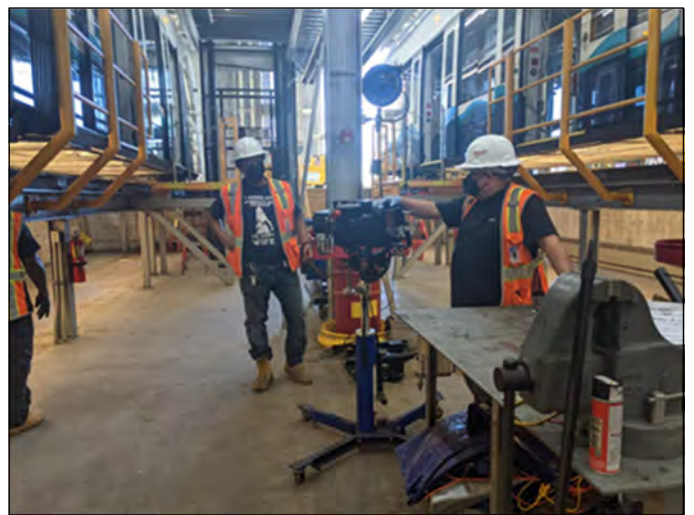
*Siemens Series 2 Link light rail vehicle*

### Key Project Activities

- Car# 275 & 276 were released for shipping, delivery, and acceptance
- Car# 213, 220, 257 were conditional accepted.



*Car 287 shipping preparation in Sacramento, CA*



*Car 216 EHU warranty repair in Seattle, WA*

# 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 labor and vehicle maintenance personnel in supporting Series 2 LRV routine tests and acceptance 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 \$351.0M to which a majority of the cost is attributed to the vehicles phase of \$335.3M. The current period expenditure is \$3.5M 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	\$5.6	\$5.3	\$9.6	\$0.0
Construction Services	\$18.0	\$18.0	\$15.1	\$10.4	\$18.0	\$0.0
Vehicles	\$713.1	\$713.1	\$658.5	\$335.3	\$713.1	\$0.0
<b>Total</b>	<b>\$740.7</b>	<b>\$740.7</b>	<b>\$679.2</b>	<b>\$351.0</b>	<b>\$740.7</b>	<b>\$0.0</b>

#### 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	\$341.4	\$705.3	\$0.0
80 Professional Services	\$23.2	\$23.2	\$9.9	\$9.6	\$23.2	\$0.0
90 Contingency	\$12.2	\$12.2	\$0.0	\$0.0	\$12.2	\$0.0
<b>Capital Total (SCC 10 - 90)</b>	<b>\$740.7</b>	<b>\$740.7</b>	<b>\$679.2</b>	<b>\$351.0</b>	<b>\$740.7</b>	<b>\$0.0</b>

*\*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 currently in preparation to be refreshed.

There are no changes to the current top risks as listed below based on the last update:

- Competing demand for mainline access or SIT support adds time to routine LRV tests and acceptance.
- 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 routine tests and acceptance.
- ATP retrofit schedule has substantial impact on shipping LRVs #42-100.
- Limited OMF Central yard storage capacity in 2021 may affect recovery schedule, preventative maintenance or spares available to support peak service.
- Automatic Train Protection interface between ST1 vehicle ATP system and new ST2 vehicle ATP causing potential interface with wayside signal and on-board systems under investigation.
- COVID-19 remains a fluid situation and disruption to Siemens'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.

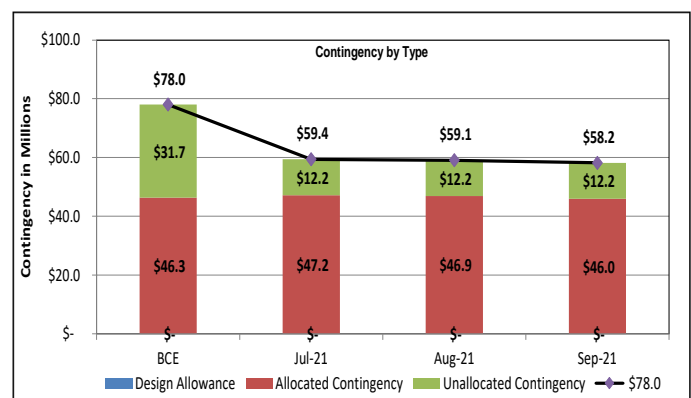
**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline's allocated contingency was \$46.3M. In September AC was effectively drew approximately about \$0.9M from \$46.9 to \$46.0M.

**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	11.8%
Unallocated Contingency	\$ 31.7	4.3%	\$12.2	3.1%
<b>Total</b>	<b>\$78.0</b>	<b>10.7%</b>	<b>\$ 58.2</b>	<b>14.9%</b>

### Contingency by Type





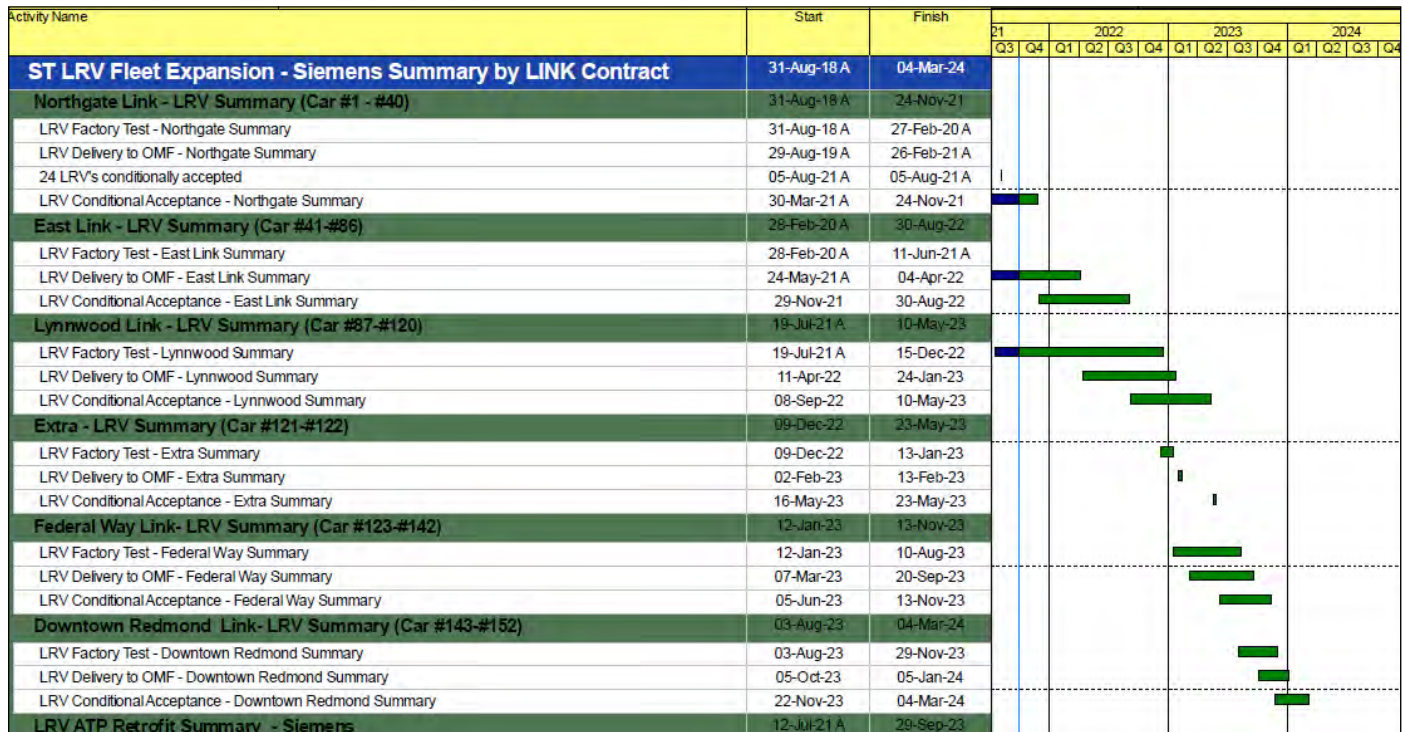
# Link Light Rail Light Rail Vehicle Fleet Expansion



## Project Schedule

Weighted percent complete of the major construction contracts is calculated at 50.6%

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 September 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 24 cars based on current ridership. All 40 cars are expected to be delivered in November 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



## LRV Delivery and Testing Progress as of September 30, 2021

LRV status	Received / Delivered	Testing in progress	Conditionally Accepted	Entered Revenue Service
Planned	87	20	67	67
Actual (Seattle)	40	9	31	31
Actual (Bellevue)	11	0	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. Car 214 is the main test vehicle and Car 204 is needed for test requiring multiple cars.

Delivery and Conditional Acceptance Testing of all 24 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 March 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	21	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>ST LRV Fleet Expansion - Siemens Summary by LINK Contract</b>	<b>30-Mar-21 A</b>	<b>04-Mar-24</b>															
<b>Northgate Link - LRV Summary (Car #1 - #40)</b>	<b>30-Mar-21 A</b>	<b>24-Nov-21</b>															
LRV Conditional Acceptance - Northgate Summary	30-Mar-21 A	24-Nov-21															
<b>East Link - LRV Summary (Car #41-#86)</b>	<b>29-Nov-21</b>	<b>30-Aug-22</b>															
LRV Conditional Acceptance - East Link Summary	29-Nov-21	30-Aug-22															
<b>Lynnwood Link - LRV Summary (Car #87-#120)</b>	<b>08-Sep-22</b>	<b>10-May-23</b>															
LRV Conditional Acceptance - Lynnwood Summary	08-Sep-22	10-May-23															
<b>Extra - LRV Summary (Car #121-#122)</b>	<b>16-May-23</b>	<b>23-May-23</b>															
LRV Conditional Acceptance - Extra Summary	16-May-23	23-May-23															
<b>Federal Way Link- LRV Summary (Car #123-#142)</b>	<b>05-Jun-23</b>	<b>13-Nov-23</b>															
LRV Conditional Acceptance - Federal Way Summary	05-Jun-23	13-Nov-23															
<b>Downtown Redmond Link- LRV Summary (Car #143-#152)</b>	<b>22-Nov-23</b>	<b>04-Mar-24</b>															
LRV Conditional Acceptance - Downtown Redmond Summary	22-Nov-23	04-Mar-24															
<b>LRV ATP Retrofit Summary - Siemens</b>																	

## 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 September 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 accordingly.

Resource Type	Planned FTE Monthly Average*	YTD Actual FTE Monthly Average	Variance
ST Staff	9.5	5.9	(1.4)
Consultants	7.8	7.6	0.1
TOTAL	17.3	13.5	(1.3)
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

## 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.
- Advancing upgrades requested by Facilities
- Final Certificate of Occupancy (C of O) received

### 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 topped out at about \$0.56M. The total project cost incurred increased from approximately \$377.4M to \$377.9M. 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	\$10.4	\$10.4	\$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	\$17.4	\$19.3	\$0.0
3rd Party Agreements	\$3.1	\$3.1	\$0.3	\$0.1	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$239.6	\$238.7	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$102.7	\$102.6	\$134.5	\$0.0
<b>Total</b>	<b>\$449.2</b>	<b>\$449.2</b>	<b>\$379.4</b>	<b>\$377.9</b>	<b>\$449.2</b>	<b>\$0.0</b>

#### 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	\$4.2	\$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	\$136.4	\$141.6	-\$5.5
40 Sitework & Special Conditions	\$43.6	\$48.5	\$43.0	\$40.8	\$45.3	\$3.2
50 Systems	\$43.0	\$41.6	\$41.2	\$40.0	\$41.2	\$0.4
<b>Construction Subtotal (10 - 50)</b>	<b>\$229.3</b>	<b>\$230.6</b>	<b>\$222.3</b>	<b>\$221.5</b>	<b>\$232.4</b>	<b>-\$1.8</b>
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	\$54.3	\$53.9	\$68.5	\$1.8
90 Unallocated Contingency	\$13.8	\$13.8	\$0.0	\$0.0	\$13.8	\$0.0
<b>Total (10 - 90)</b>	<b>\$449.2</b>	<b>\$449.2</b>	<b>\$379.4</b>	<b>\$377.9</b>	<b>\$449.2</b>	<b>\$0.0</b>

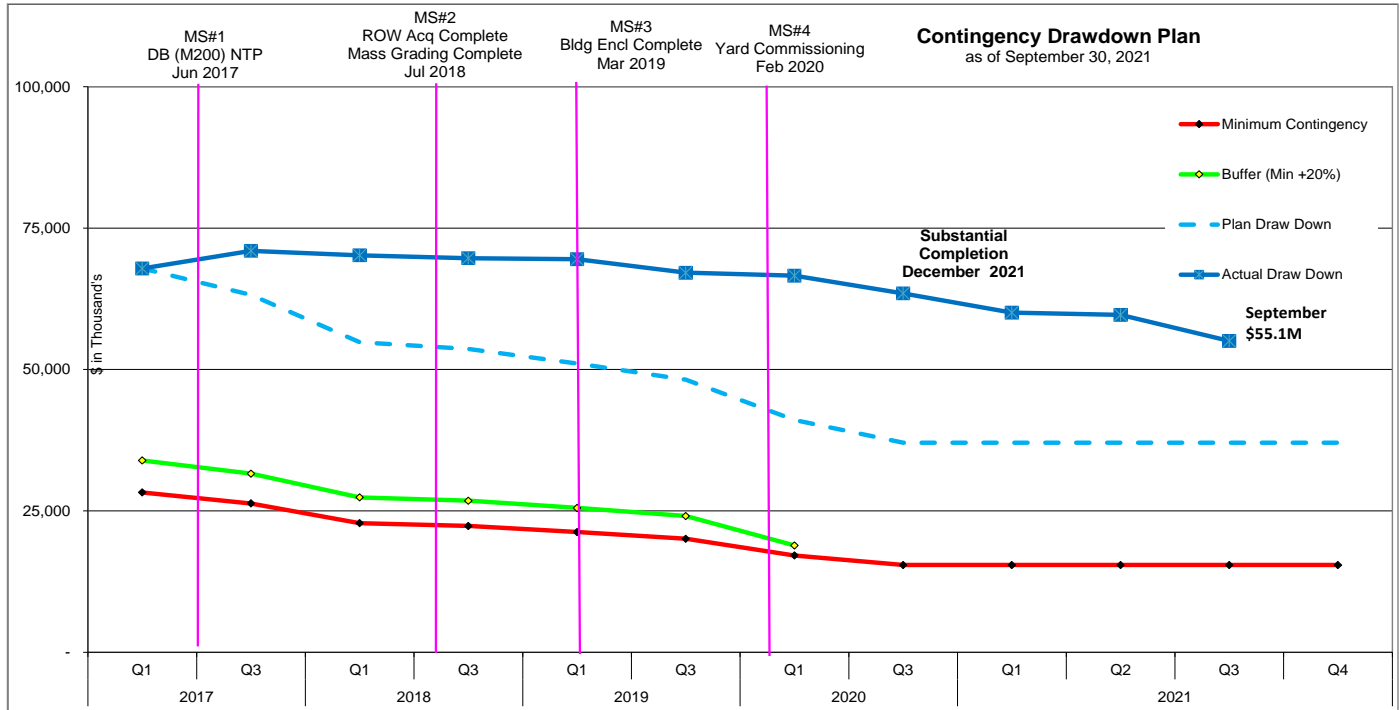


# Link Light Rail

## Link Operations & Maintenance Facility: East

### Contingency Drawdown

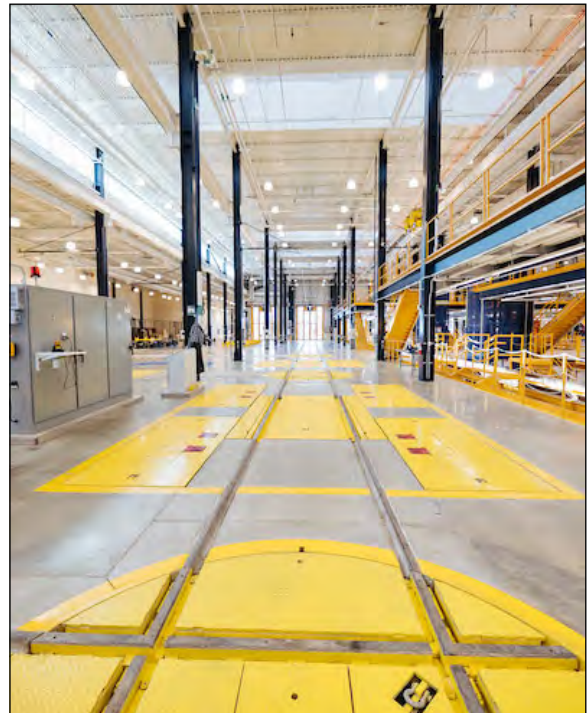
At Substantial Completion in December 2020, OMF East Project's total contingency drawdown plan remained positively. Project contingency at juncture are expected to remain positive with total contingencies balance in September 2021 at approximate \$55.1M (previous quarter at \$55.1M) and remains above 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
<b>M200 Contractor – Hensel Phelps</b>	
Original Contract Value	\$218,912,000
Change Order Value	\$15,806,209
Current Contract Value	\$234,718,209
Total Actual Cost (Incurred to Date)	\$234,389,579
Percent Complete	99.9%
Authorized Contingency	\$21,891,200
Contingency Drawdown	\$15,806,209
*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 September 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	6.3	1.1
Consultants	2.8	11.4	8.6
TOTAL	8.0	17.8	9.7
<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.	

# 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 concrete placement for column caps, placement of pre-stressed concrete girders and elevated deck concrete for the aerial guideway, in addition to continued retaining wall construction work on both civil contracts.
- Continued construction of the Shoreline South / 148th Station structure and underground utilities, as well as electrical, mechanical and structural steel at the adjacent parking garage (L200).
- Continued construction of the Shoreline North / 185th Station including utility infrastructure, and continued elevator framing and concrete deck placements for the adjacent parking garage (L200).
- Continued construction of the Mountlake Terrace Station, including slabs and structure walls for the ancillary buildings (L300).
- Continued construction of Lynnwood Transit Center Station, including precast stair installation and the parking garage with continued 1st level deck concrete placement (L300).

### Closely Monitored Issues

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

## 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 September 2021, \$47.0M 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	\$50.4	\$50.0	\$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	\$134.7	\$164.2	\$0.0
Construction Services	\$128.4	\$128.4	\$110.2	\$66.5	\$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	\$1,903.2	\$993.9	\$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	\$178.6	\$172.5	\$229.7	\$0.0
Project Contingency	\$170.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$2,771.6</b>	<b>\$2,771.6</b>	<b>\$2,436.6</b>	<b>\$1,467.2</b>	<b>\$2,771.6</b>	<b>\$0.0</b>

### 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	\$682.0	\$347.1	\$793.5	\$208.7
20 Stations	\$333.8	\$333.8	\$412.9	\$193.7	\$432.8	-\$99.0
30 Support Facilities	\$2.0	\$2.0	\$0.2	\$0.1	\$2.0	\$0.0
40 Sitework & Special Conditions	\$421.1	\$426.2	\$603.6	\$410.0	\$564.2	-\$138.0
50 Systems	\$244.4	\$244.4	\$194.4	\$36.7	\$216.1	\$28.3
<b>Construction Subtotal (10 - 50)</b>	<b>\$1,793.0</b>	<b>\$2,008.5</b>	<b>\$1,893.1</b>	<b>\$987.6</b>	<b>\$2,008.5</b>	<b>\$0.0</b>
60 ROW, Land	\$235.7	\$229.7	\$178.6	\$172.5	\$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	\$364.9	\$307.1	\$448.6	\$0.0
90 Unallocated Contingency	\$292.2	\$83.4	\$0.0	\$0.0	\$83.4	\$0.0
<b>Total (10 - 90)</b>	<b>\$2,771.6</b>	<b>\$2,771.6</b>	<b>\$2,436.6</b>	<b>\$1,467.2</b>	<b>\$2,771.6</b>	<b>\$0.0</b>



## Contingency Management

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

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

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

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

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

During the current period, Allocated Contingency decreased by a net amount of \$948k 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%	\$149.0	11.4%
Unallocated Contingency	\$292.2	10.5%	\$83.4	6.4%
<b>Total:</b>	<b>\$737.7</b>	<b>26.6%</b>	<b>\$232.4</b>	<b>17.8%</b>

### Contingency by Type

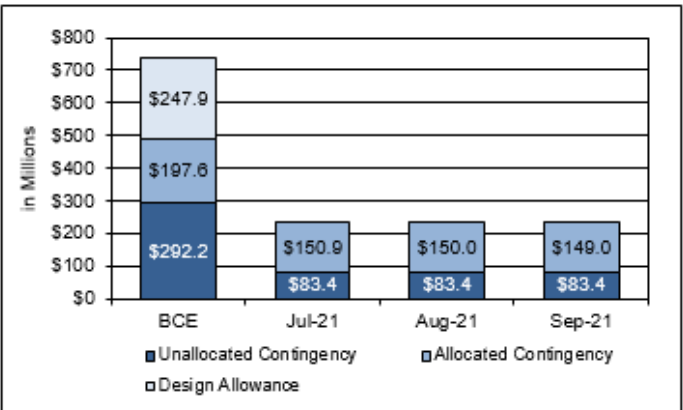
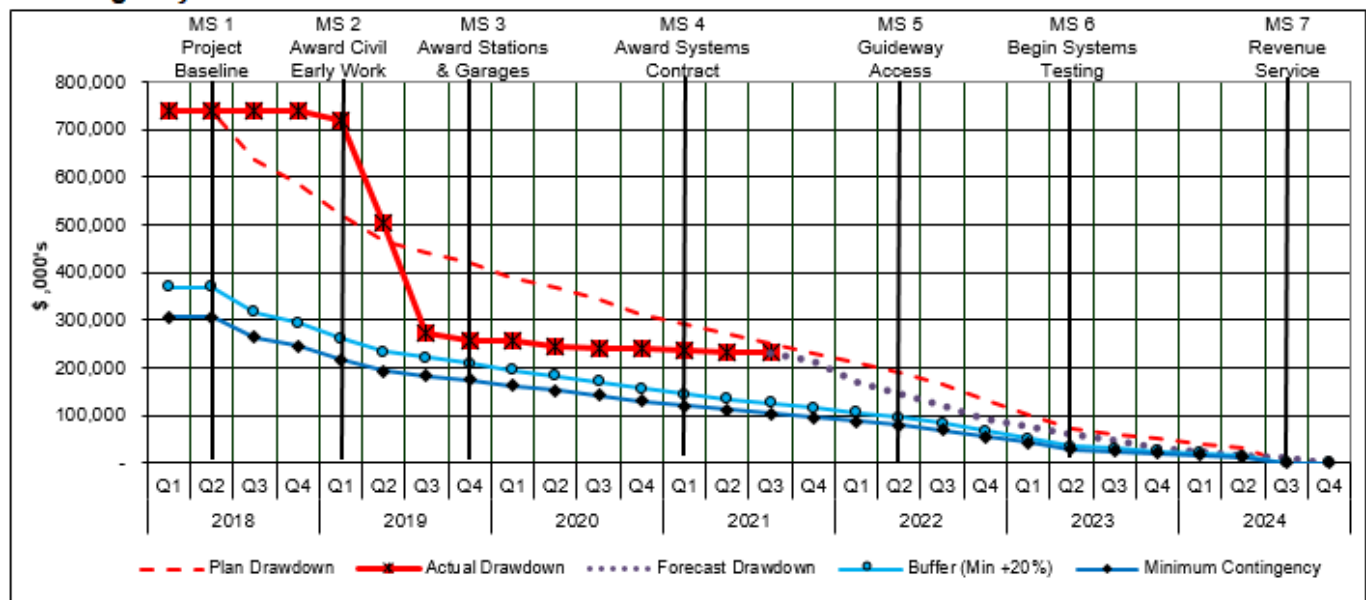


Table figures are shown in millions.

### 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 / 148<sup>th</sup> station, garage and nearby Traction Power Substation (TPSS) in time to support testing in Q1 2022.
- Requests from third parties / AHJs for additional scope as part of permit inspections / approvals.
- Differing site conditions identified during construction.
- Maintaining positive relationships with GC/CM contractors and culture of collaboration for each contract.

## Project Schedule

Weighted percent complete of the major construction contracts is calculated at 50.2%

The Master Schedule has been updated through September at this time. The L200 and L300 schedules are under review. The 800 schedule has been reviewed and accepted. The project team has intensified efforts to build a collaborative scheduling environment with L200, which is expected to improve the schedule in the coming months. This month's update remains stable with 134 calendar days of project float.

Activity Name	Start	Finish	2021				2022				2023				2024			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
LLE Master Schedule	20-May-10 A	17-Oct-23																
Project Administration	20-May-10 A	17-Oct-23																
Final Design/Preconstruction	01-Sep-15 A	10-May-23																
Project Wide Utilities	01-Aug-18 A	25-Mar-19 A																
L300	02-May-16 A	31-Aug-22																
L200	01-Aug-16 A	22-Aug-22																
Permitting & Agreements	07-Jan-15 A	30-Dec-21																
L350 200th St. Widening	09-Apr-18 A	12-Jan-23																
L200 ROW Acquisitions	04-Jan-16 A	28-Jan-22																
L300 ROW Acquisitions	14-Jan-16 A	31-May-22																
L300 Civil Construction	25-Sep-18 A	24-Jul-23																
L200 Civil Construction	25-Dec-18 A	08-Oct-23																
L800 Systems Construction	21-Sep-20 A	09-Nov-23																
LLE Rail Activation	02-Aug-21 A	17-Jul-24																
RA Tasks	02-Aug-21 A	27-Feb-24																
Pre-Revenue Service	04-Nov-23	27-Feb-24																
Revenue Service Preparation	07-Feb-24	06-Mar-24																
Revenue Service - FFCA	06-Mar-24	17-Jul-24																
Program Wide Float - (134 CD)	06-Mar-24	17-Jul-24																
Revenue Service - 7/17/2024		17-Jul-24																

# Link Light Rail Lynnwood Link Extension

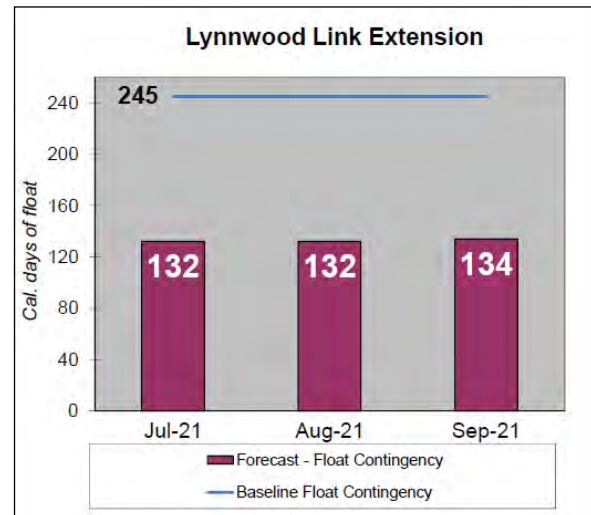


## Project Float

The Lynnwood Link Extension was baselined with 245 days of project float. Currently, the project is calculated to have 134 days remaining between completion of work and the 17-Jul-2024 revenue service date. While the float has remained relatively steady this period, 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 September update, which is still under review.

The impact of the COVID-19 shutdown is 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. The path currently runs through the Shoreline South/148th station, followed by construction of trackwork, and turnover of the guideway to the L800 contractor. Sound Transit is continuing to work with 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 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	01-Oct-21	11-Apr-23															
Project Wide	21-Feb-23	11-Apr-23															
Milestones	28-Mar-23	11-Apr-23															
Punchlist & Commissioning	21-Feb-23	27-Mar-23															
WZ-4 145th Station & Garage	01-Oct-21	20-Feb-23															
Retaining Walls	01-Oct-21	14-Oct-21															
Stations	01-Oct-21	20-Feb-23															
WZ-10 185th Station & Garage	01-Oct-21	10-Dec-21															
Retaining Walls	01-Oct-21	28-Oct-21															
Stations	01-Oct-21	10-Dec-21															
L800 Systems Construction	12-Apr-23	30-Oct-23															
Sound Transit L800 90% Engineering	12-Apr-23	30-Oct-23															
L800 Engineering	12-Apr-23	30-Oct-23															
L800 Construction	12-Apr-23	30-Oct-23															
LLE Rail Activation	30-Oct-23	17-Jul-24															
RA Tasks	30-Oct-23	24-Nov-23															
TASK 00 - Transition To Operations - Project	30-Oct-23	30-Oct-23															
TASK 07 - Safety and Security	31-Oct-23	24-Nov-23															
Pre-Revenue Service	04-Nov-23	27-Feb-24															
Pre-Revenue Preparation	04-Nov-23	01-Dec-23															
Operator Preparation	30-Nov-23	29-Dec-23															
Simulated Revenue Service/Drills/Upsets	30-Dec-23	27-Feb-24															
Revenue Service Preparation	07-Feb-24	06-Mar-24															
Revenue Service - FFGA	06-Mar-24	17-Jul-24															

## Community Engagement

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

- 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 in Shoreline; full Closure at NE 130th and NE 145th Street; along with a single lane closure at 1st Ave from 112th to NE 115th.
- 236th Street SW night time road closure through September in Mountlake Terrace.
- Night closure of Northbound I-5 for the I-5 overcrossing concrete placement.
- Night work along the SR 104 and I-5 interchange.

Community Engagement staff also completed 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	745	387	381
<i>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.</i>					

## Sound Transit Board Actions

Board Action	Description	Date
M2021-54	Authorizes the chief executive officer to execute funding agreements with the City of Shoreline and King County in the amount of \$100,000 each, for a total contribution amount of \$200,000, to support the construction of the Shoreline North / 185th Station pedestrian connection as part of the Lynnwood Link Extension.	09/23/2021
M2021-55	Authorizes the chief executive officer to execute a Master Service Agreement and sub-agreements with AAA Management, LLC to (1) establish terms and operational stipulations and (2) grant temporary and permanent easements for the planned private development at 333 NE 149th Street in Shoreline, WA adjacent to the Shoreline South/148th Station as part of the Lynnwood Link Extension.	09/23/2021



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual 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	108.0	19.0
TOTAL	131.5	143.0	11.5
* 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	September 2021	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	12	26
Days Away From Work Cases	0	2	4
Total Days Away From Work	0	25	60
First Aid Cases	2	28	64
Reported Near Mishaps	1	26	48
Average Number of Employees on Worksite	715	-	-
Total # of Hours (GC & Subs)	174,580	1,465,831	2,631,849
OSHA Incident Rates	September 2021	Year to Date	Project to Date
Recordable Injury Rate	0.00	1.64	1.98
LTI Rate	0.00	0.27	0.30
Recordable National Average	2.8		
LTI National Average	1.1		
Recordable WA State Average	5.7		
LTI WA State Average	2.0		
<b>Note:</b> 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 installation.
- 148th Station - Installed elevator walls and footing; continued underground conduit installation.
- 148th Garage - Completed level 5 barrier walls; began elevator steel erection and traffic coating.
- 185th Station - Concrete placement of north column for the pedestrian bridge.
- 185th Garage - Continued decking concrete on level 2; began MEP rough-in work on level 2.

### Schedule Summary

The September update forecasts an August 24, 2023 substantial completion date, 38 calendar days later than the contractual milestone date of July 18, 2023. Within the L200 contract schedule, the critical path is driven by construction of the elevated guideway and 148th St. Station. This update, submitted for September, is currently under review. ST is continuing to work with SKH toward an acceptable schedule.

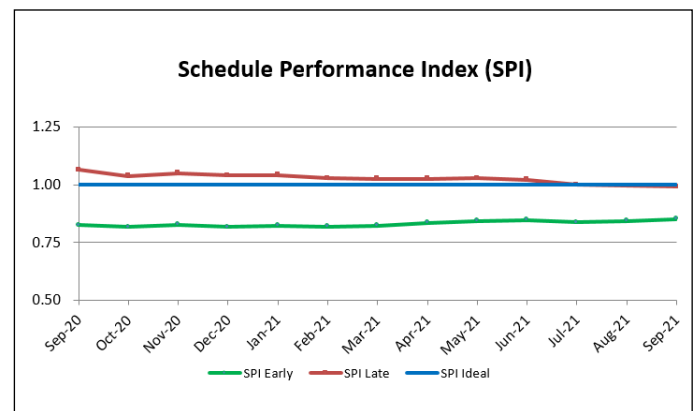
Activity Name	Start	Finish	2022					2023			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L200 Civil Construction	25-Dec-18A	08-Oct-23									
L200 Civil Construction	25-Dec-18A	08-Oct-23									
Project Wide	25-Dec-18A	08-Oct-23									
WZ-1 Elevated (1437+00 to 1458+63)	15-May-19A	22-Dec-22									
WZ-2 At Grade - Fill (1458+63 to 1492+45)	21-Mar-19A	02-Dec-22									
WZ-3 Elevated (1492+45 to 1559+17)	23-Mar-19A	28-Jun-23									
WZ-4 145th Station & Garage	08-Apr-19A	08-May-23									
WZ-5 At Grade - Fill (1559+17 to 1571+30)	26-Mar-19A	01-May-23									
WZ-6 155th Bridge (1571+30 to 1572+40)	17-Jun-19A	21-Jul-22									
WZ-7 At Grade - Retained (1572+40 to 1624+00)	27-Mar-19A	28-Jun-23									
WZ-8 175th Bridge (1624+00 to 1631+25)	25-Apr-19A	16-Sep-22									
WZ-9 At Grade - Cut (1631+25 to 1661+78)	15-Apr-19A	26-Jun-23									
WZ-10 185th Station & Garage	15-Apr-19A	27-Dec-22									
WZ-11 At Grade (1661+78 to 1694+01)	09-Apr-19A	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 (increase from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.00 (no change from last period).

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



# Link Light Rail Lynnwood Link Extension

## Work Zone Overview



### Next Period Activities:

- Continue concrete placement of deck spans and curbs.
- Continue Mechanically Stabilized Earth (MSE) wall construction.
- Continue concrete placement of 148th garage elevator 1 walls; traffic coating installation.
- Continue 185th station pedestrian bridge columns and platform canopies.
- 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 deficiencies.
- Erosion and sediment control during the wet season.

## Cost Summary

Present Financial Status	Amount
<b>L200 Contractor - SKH</b> Excludes 130th and betterments	
Original Contract Value	\$88,147,258
Change Order Value	\$763,226,112
Current Contract Value	\$851,373,370
Total Actual Cost (Incurred to Date)	\$502,458,314
Percent Complete	53.8%
Authorized Contingency	\$43,762,892
Contingency Drawdown	\$11,375,106
Contingency Index	2.1



*148th garage elevator steel erection*

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

### Current Progress

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

- Completed concrete placements (five out of seven) at elevated deck level 1 of the Lynnwood City Center garage.
- Commenced trackwork and plinth installation at the I-5 overcrossing.
- Continued stairwell and elevator shaft construction at the Mountlake Terrace and Lynnwood stations.
- Continued mass excavation along I-5 near 212th Street SW for electrical vaults and the future Traction Power Substation.
- Continued soil nail and cast-in-place wall construction.
- Continued Mechanically Stabilized Earth (MSE) and soil nail / cast-in-place retaining wall construction.

### Schedule Summary

Skanska's September update has been submitted and is currently under review. Negative float in the schedule has been resolved with the exception of the Systems access to the LCC Garage, which is currently 12 days behind. The project overall remains on schedule, with emphasis starting to be placed on planning for the early opening of the Lynnwood City Center Parking Garage, in late 2022.

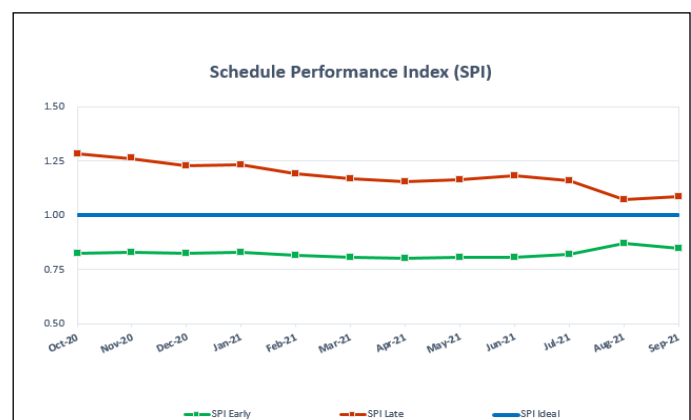
Activity Name	Start	Finish	2022					2023		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>L300 Civil Construction</b>	25-Sep-18 A	24-Jul-23								
<b>L300 Civil Construction</b>	25-Sep-18 A	24-Jul-23								
<b>MILESTONES</b>	25-Sep-18 A	24-Jul-23								
<b>ROW ACQUISITIONS (PARCELS &amp; TCE)</b>	04-Jun-19 A	15-Jun-23								
<b>PERMITTING</b>	01-Feb-19 A	04-Nov-21								
<b>SUBMITTALS</b>	12-Apr-19 A	28-Mar-22								
<b>MATERIAL PROCUREMENT</b>	07-Aug-19 A	29-Mar-22								
<b>EARLY WORK</b>	20-Feb-19 A	28-May-23								
<b>CONSTRUCTION</b>	22-Jul-19 A	19-Jul-23								
<b>Main Package Construction Contract Elemer</b>	25-Oct-19 A	19-Jul-23								
<b>Mobilizations</b>	25-Oct-19 A	02-Feb-23								
<b>3rd Party Utilities</b>	22-Jul-19 A	16-Sep-20 A								
<b>L200 to 236th St. (Sta. 1694+00 to 1739+00)</b>	17-Dec-19 A	02-Feb-23								
<b>236th St. to 220th St. (Sta. 1739+00 to 1791+00)</b>	21-Jan-20 A	07-Dec-22								
<b>220th St. to 52nd Ave (Sta. 1791+00 to 1840+00)</b>	23-Dec-19 A	30-Jan-23								
<b>52nd Ave to EOL (Sta. 1840+00 to 1884+00)</b>	15-Jan-20 A	23-Jun-23								

### Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.85 (decrease from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.09 (increase 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.





# Link Light Rail Lynnwood Link Extension

## Work Zone Overview



## Next Period's Activities

- Continue platform decking and track slab concrete placements at the Mountlake Terrace and Lynnwood stations.
- Continue deck at all erected girder spans.
- Continue Lynnwood City Center parking garage work.
- Continue installation of Traction Power Substations foundation
- Continued Mechanically Stabilized Earth (MSE) and soil nail / cast-in-place retaining wall construction.

## Closely Monitored Issues

- Potential unsuitable soil conditions at wall foundations.
- Number of field changes due to design deficiencies.
- Erosion and sediment control during the wet season.

## Cost Summary

Present Financial Status	Amount
<b>L300 Contractor—Skanska</b>	
Original Contract Value	\$56,886,631
Change Order Value	\$792,501,647
Current Contract Value	\$849,388,278
Total Actual Cost (Incurred to Date)	\$442,038,333
Percent Complete	52.7%
Authorized Contingency	\$42,888,048
Contingency Drawdown	\$14,388,278
Contingency Index	1.6



*Placing concrete at Lynnwood City Center Garage.*

## Contract L800 Lynnwood Link Systems GC/CM

### Current Progress

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

- Continued working on engineering submittals and subcontract packages.

### Schedule Summary

The L800 September schedule update forecasts a 9 day late contract completion of September 18, 2023. The critical path is now driven by TPSS submittals. Submittals for TPSS components are currently undergoing multiple revisions. ST is continuing to monitor the progress, as well as looking for opportunities to improve the overall work plan.

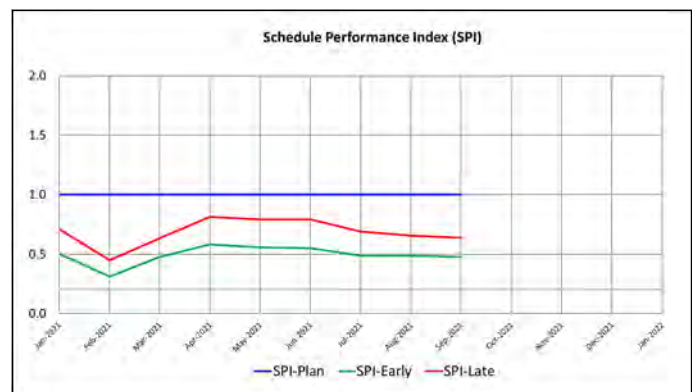
Activity Name	Start	Finish	2022				2023				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
L800 Systems Construction	21-Sep-20 A	09-Nov-23									
L800 Systems Construction	21-Sep-20 A	09-Nov-23									
Sound Transit L800 90% Engine	21-Sep-20 A	09-Nov-23									
L800 Engineering	21-Sep-20 A	30-Oct-23									
L800 Milestones	04-Dec-20 A	30-Oct-23									
L800 Submittals	21-Sep-20 A	18-Oct-23									
L800 OCS	01-Jun-21 A	18-Oct-23									
L800 Traction Power/Substations	04-Dec-20 A	07-Sep-23									
L800 Signals	21-Sep-20 A	10-Sep-23									
L800 Communications	01-Feb-21 A	12-Sep-23									
L800 SCADA	01-Jul-22	16-Jun-23									
L800 Construction	04-Dec-20 A	09-Nov-23									
L800 OCS	01-Feb-21 A	14-Jun-23									
L800 Traction Power / Substations	04-Dec-20 A	02-Jun-23									
L800 Signals	04-Dec-20 A	17-Jul-23									
L800 Communications	04-Dec-20 A	19-Jun-23									
L800 SCADA	01-Jul-21 A	28-Jun-23									
L800 Testing and Commissioning	07-Jul-22	09-Nov-23									

### Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.48 (decrease from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 0.64 (decrease 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: Traction Power Substations (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 system contractor.

## Cost Summary

Present Financial Status	Amount
<b>L800 Contractor - Mass Electrical Construction Co.</b>	
Original Contract Value	\$148,000,000
Change Order Value	\$20,251
Current Contract Value	\$148,020,251
Total Actual Cost (Incurred to Date)	\$14,667,120
Percent Complete	14.6%
Authorized Contingency	\$10,360,000
Contingency Drawdown	\$20,251
Contingency Index	74.5



*Representative Traction Power Substation (TPSS) unit.*

# Link Light Rail

## NE 130th St Infill Station

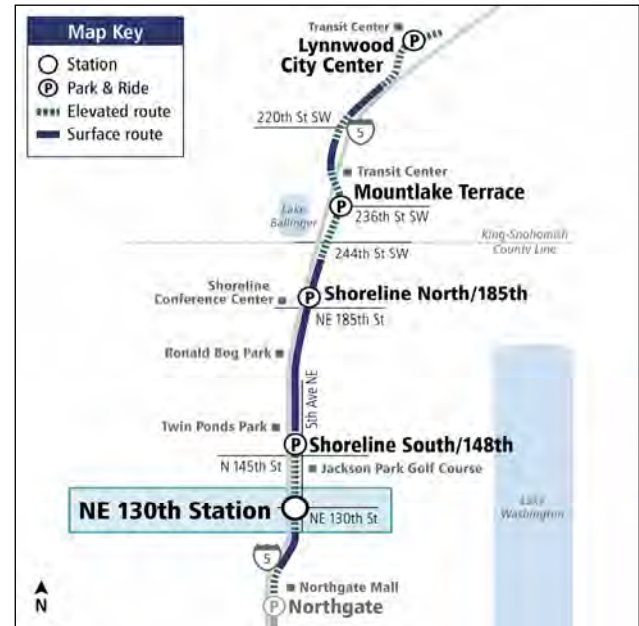
### Project Summary

**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** \$28.9 Million

**Schedule** Target date for station opening: 2025



Map of Project Alignment

### Key Project Activities

- Continued final design for D3 civil package, nearing completion of Issue for Construction (IFC) documents.
- Continued final design for D3 systems package, reaching 100% set.
- Continued 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 both tables are shown in millions. In September 2021, \$0.8M 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	\$1.8	\$1.8	\$3.6	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$2.7	\$2.7	\$0.0
Final Design	\$10.8	\$7.8	\$7.8	\$10.8	\$0.0
Construction Services	\$2.1	\$1.6	\$1.1	\$2.1	\$0.0
3rd Party Agreements	\$1.0	\$0.7	\$0.4	\$0.9	\$0.0
Construction	\$8.5	\$5.4	\$3.0	\$8.5	\$0.0
ROW	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Project Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$28.9</b>	<b>\$20.1</b>	<b>\$16.8</b>	<b>\$28.9</b>	<b>\$0.0</b>



## 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.

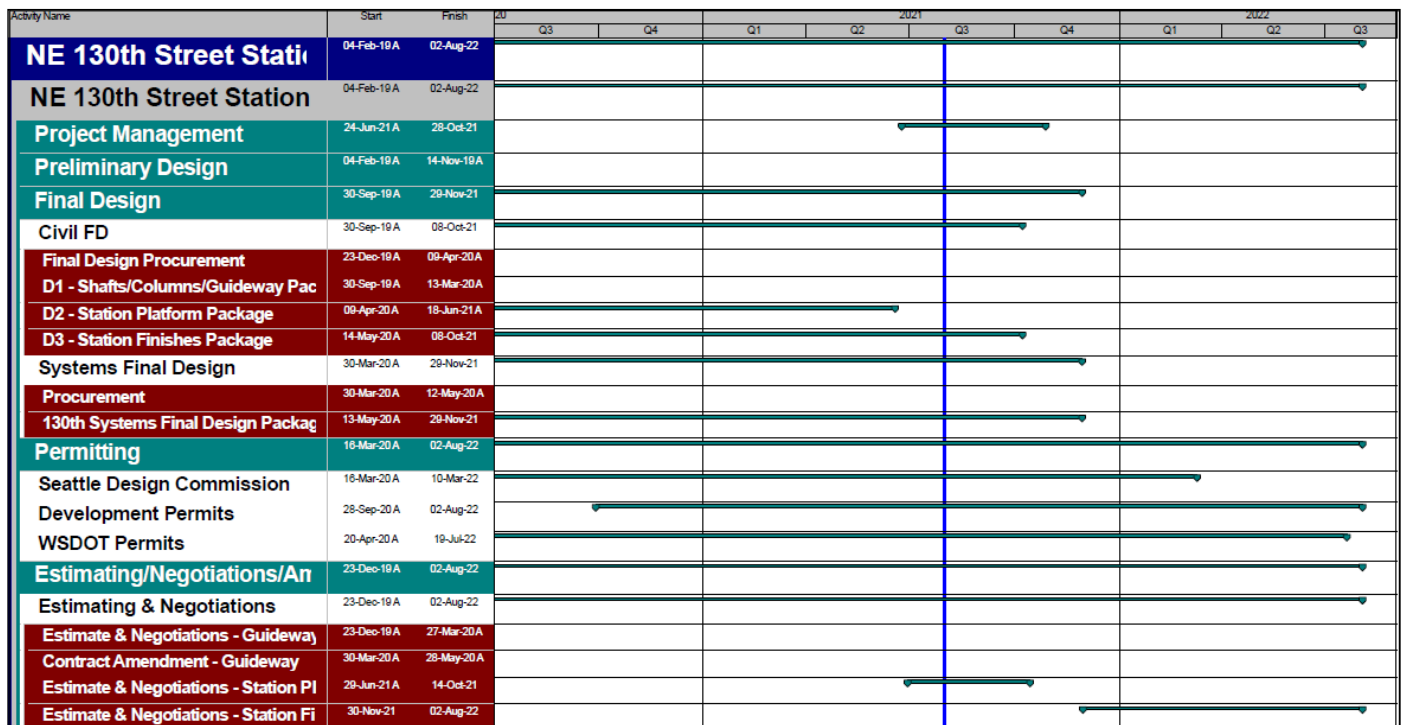
The following are the top project risks identified:

- Local permitting authorities may require additional right-of-way improvements beyond what was budgeted.
- Local electrical utility supplier may need to construct additional upgrades to the power infrastructure to supply the station.
- Potential challenges in synchronizing specific construction milestones with Lynnwood Link.

## Project Schedule

Design for the station remains on schedule, with the IFC package for D3 expected in early October. Permitting activities for the building, WSDOT utility and Street Improvement permits are under way.

Construction of the initial construction package for C1 is ongoing and expected to complete in October or early November. The next major milestone remains the ST Board decision to continue early advancement of the project, planned in Q4 2021, and in keeping with the ST Realignment plans.



## 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.

## 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 September is above the Planned FTE Monthly Average, with more design 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	27.0	7.5
TOTAL	24.0	31.0	7.0
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.			

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	



*Deck formwork removal*

### Contract Cost Summary

#### Civil Final Design Overview

Sound Transit executed an amendment with HNTB Jacobs to perform civil final design for NE 130<sup>th</sup> 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. Final design is continuing work on the Issue for Construction set of documents for the C3 package.

Present Financial Status	Amount
<b>HNTB Jacobs– Civil Final Design</b>	
Original Contract Value	\$1,570,864
Change Order Value	\$5,472,984
Current Contract Value	\$7,043,848
Total Actual Cost (Incurred to Date)	\$6,897,535
Financial Percent Complete	98%
Authorized Contingency	\$1,551,541
Contingency Drawdown	\$1,095,389
Contingency Index	1.4

#### 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 completed the 100% set of documents based on the civil deliverables.

Present Financial Status	Amount
<b>LTK– Systems Final Design</b>	
Original Contract Value	\$299,332
Change Order Value	\$823,076
Current Contract Value	\$1,122,408
Total Actual Cost (Incurred to Date)	\$862,478
Financial Percent Complete	77%
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.

Present Financial Status	Amount
<b>SKH– Civil Construction</b>	
Original Contract Value	\$5,000,000
Change Order Value	\$37,805
Current Contract Value	\$5,037,805
Total Actual Cost (Incurred to Date)	\$2,924,361
Percent Complete	58%
Authorized Contingency	\$500,000
Contingency Drawdown	\$37,805
Contingency Index	7.7

# Link Light Rail

## Northgate Link Extension

### Project Summary

#### Scope

<b>Limits</b>	The Northgate Link Extension consists of 4.3 miles of light rail extending from the University of Washington to Northgate.
<b>Alignment</b>	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.
<b>Stations</b>	U District Station (UDS) Roosevelt Station (RVS) Northgate Station and Parking Garage
<b>Systems</b>	Signals, track electrification, and SCADA communications
<b>Phase</b>	Pre-Revenue Service
<b>Budget</b>	\$1.899 Billion
<b>Schedule</b>	Revenue Service: October 2021



Map of Project Alignment

### Key Project Activities

- **U District Station/UW Campus (N140) Roosevelt Station (N150) and Northgate Station (N160):** Certificates of Occupancy obtained for all three stations.
- **Systems (N830):** Punchlist items for all disciplines significantly reduced The final Train Control System (TCS) update was successfully performed on September 28, 2021.
- **Environmental:** Nothing to report

### Closely Monitored Issues

- **N140, N150 and N160** – Certificates of Occupancy obtained for all three stations.
- **N830 Systems** – Contractor reports all SDCI permits are closed – awaiting documentation. Safety and Security Management documentation required ahead of revenue operations is complete and the certificates of conformance have been signed at the project-level.



# 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 \$1.8M 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	\$97.6	\$96.8	\$124.9	\$5.5
Preliminary Engineering	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
Final Design	\$132.2	\$137.2	\$121.8	\$119.3	\$132.0	\$5.2
Construction Services	\$118.3	\$118.3	\$105.0	\$104.0	\$111.8	\$6.6
3rd Party Agreements	\$11.8	\$11.8	\$8.7	\$7.5	\$11.0	\$0.8
Construction	\$1,343.0	\$1,352.5	\$1,288.0	\$1,271.6	\$1,341.6	\$11.0
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
<b>Total</b>	<b>\$1,899.8</b>	<b>\$1,899.8</b>	<b>\$1,738.1</b>	<b>\$1,716.3</b>	<b>\$1,847.3</b>	<b>\$52.5</b>

### 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	\$517.0	\$514.9	\$520.9	-\$7.2
20 Stations	\$376.1	\$441.2	\$459.4	\$456.5	\$464.3	-\$23.1
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	\$181.6	\$175.6	\$186.1	\$47.8
50 Systems	\$110.9	\$101.5	\$106.9	\$103.3	\$117.2	-\$15.7
<b>Construction Subtotal (10 - 50)</b>	<b>\$1,228.7</b>	<b>\$1,296.4</b>	<b>\$1,271.5</b>	<b>\$1,256.8</b>	<b>\$1,295.0</b>	<b>\$1.4</b>
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	\$364.5	\$357.4	\$423.9	\$0.7
90 Contingency	\$130.4	\$67.9	\$0.0	\$0.0	\$17.3	\$50.7
<b>Total (10 - 90)</b>	<b>\$1,899.8</b>	<b>\$1,899.8</b>	<b>\$1,738.1</b>	<b>\$1,716.3</b>	<b>\$1,847.3</b>	<b>\$52.5</b>

## Contingency Management

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

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

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

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

In this period, AC reduced by \$0.2M due to construction change orders. UAC remained unchanged. The overall contingency balance remains well above both the minimum and the buffer zone contingency levels.

### Contingency Status (Monthly)

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$113.9	6.0%	\$0.0	0.0%
Allocated Contingency	\$184.0	9.7%	\$64.1	48.9%
Unallocated Contingency	\$98.3	5.2%	\$60.1	45.9%
<b>Total:</b>	<b>\$396.2</b>	<b>20.9%</b>	<b>\$124.2</b>	<b>94.8%</b>

### Contingency by Type

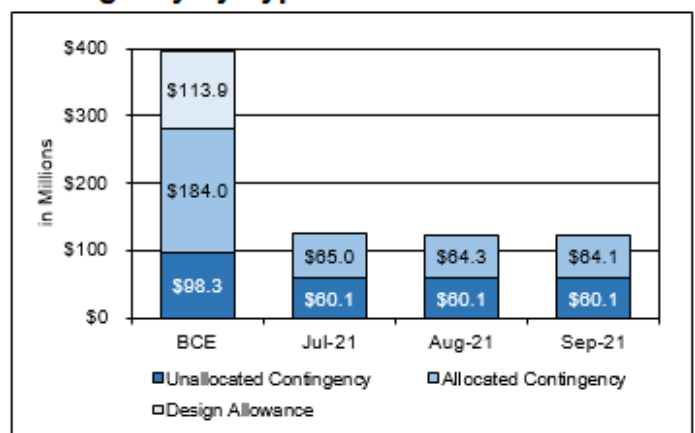
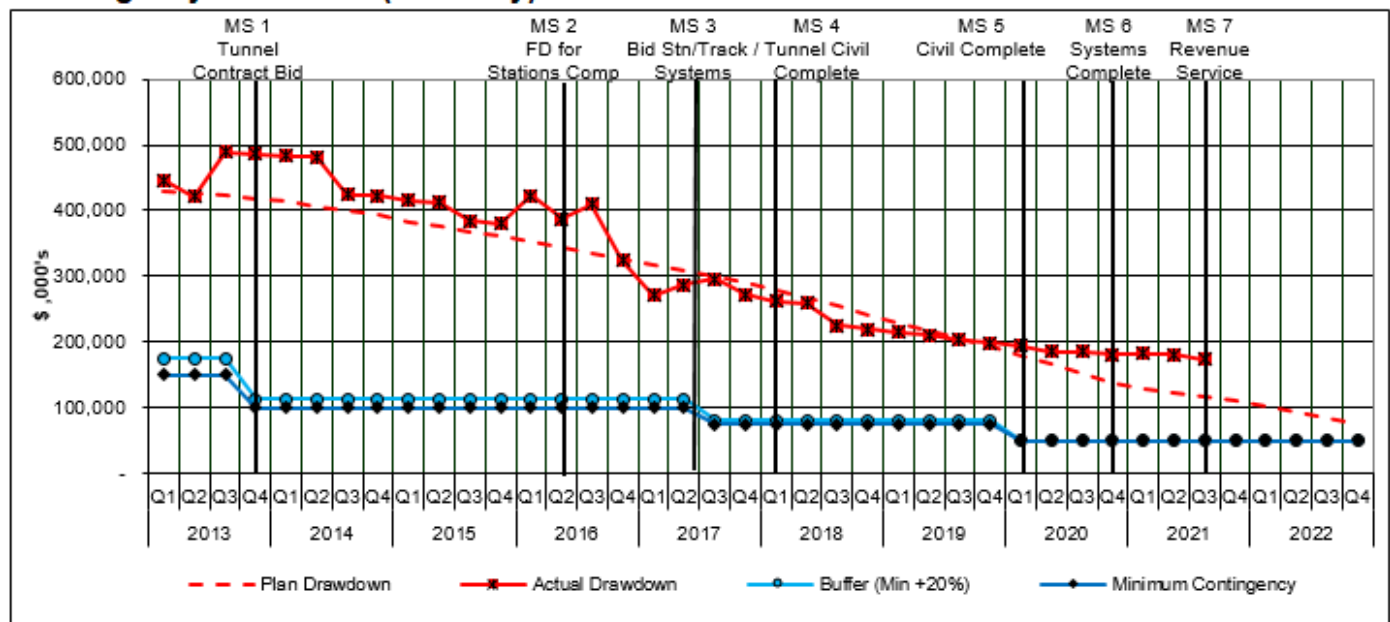


Table figures are shown in millions.

### Contingency Drawdown (Quarterly)



This is the last month of reporting on Contingency Drawdown as the project is set to reach Revenue Service next month on October 2, 2021.

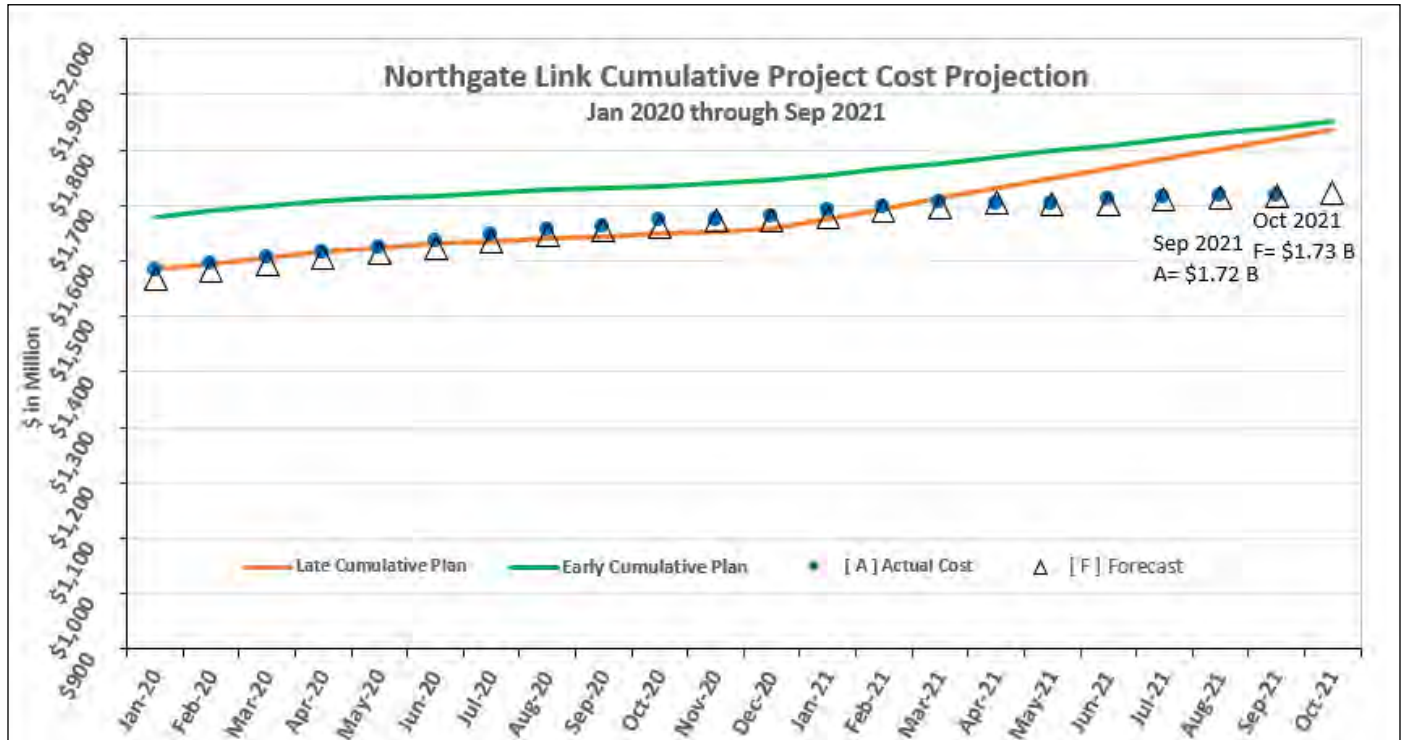
# Link Light Rail Northgate Link Extension



## Project Cash Flow Projection

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

Total project cost to date reached \$1.72B of which about \$1.27B (74%) is attributed to construction. The project cost is forecast to reach \$1.73B by October 2021, by the time the project opens for Revenue Service.



This is the last month of reporting on Project Cash Flow Projection as the project is set to reach Revenue Service next month on October 2, 2021.

## Risk Management

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

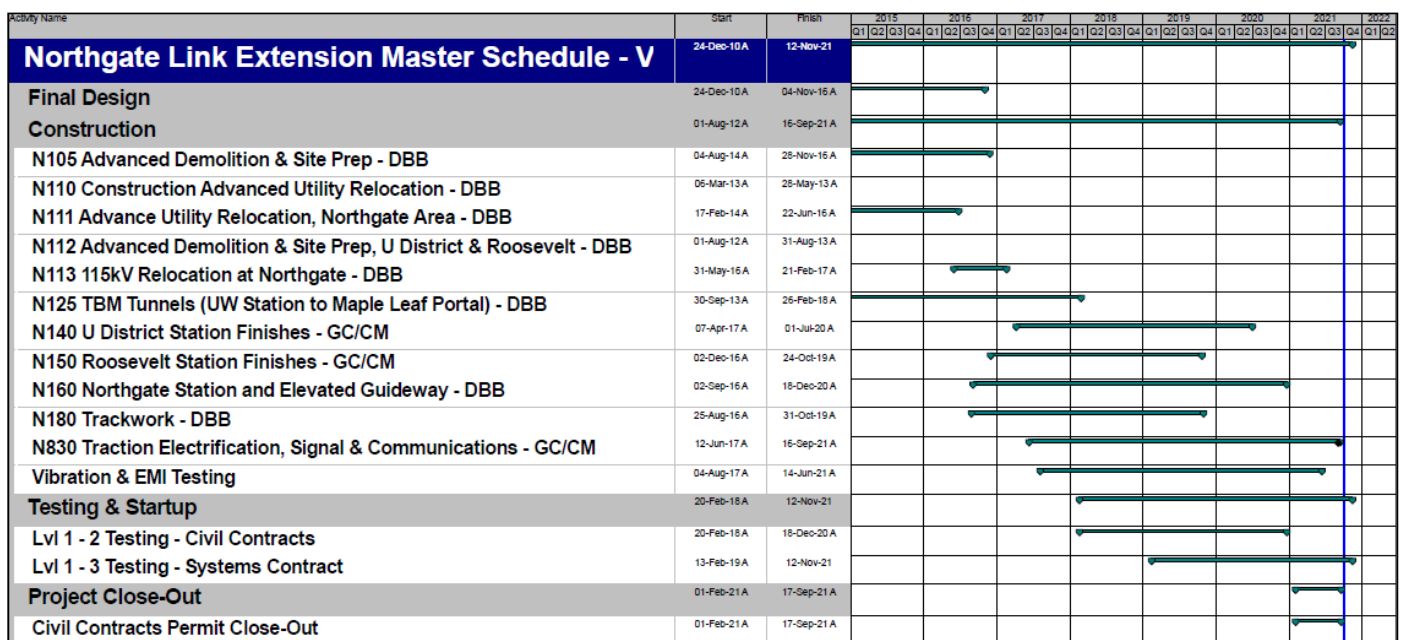
The project's final risk register update workshop was held on 6/21/21 but will be discontinued moving forward as the extension is about to open for Revenue Service.

The top project-wide risks are:

- Electrical issue at EMI cable splice may have additional consequences or require a complicated fix.
- Delay final SIT test (506) until Pre-Revenue Service which causes disruption or delay of service, testing, or closeout of documentation. Risk is since this is one of the last activities, any bugs may cause schedule delays.
- Live wire arcing in the tunnels may delay testing of LRVs. This may or may not impact RSD.
- Electrical distribution system was not fully coordinated throughout the tunnel and the station interface, which resulted in some scope gap. This will result in a potential fix and project wide change for N830 and the civil contracts.

## Project Schedule

The Northgate Master Schedule has been update through October 3rd, 2021, to include the October 2nd opening of the Extension to the public. This update completes the CPM scheduling efforts for the Northgate Link Extension. The N160 contractor will provide a final As-Built Schedule for the project record. The remaining N830 change items will be managed via an Open Items Log will no longer be tracked via the CPM schedule.



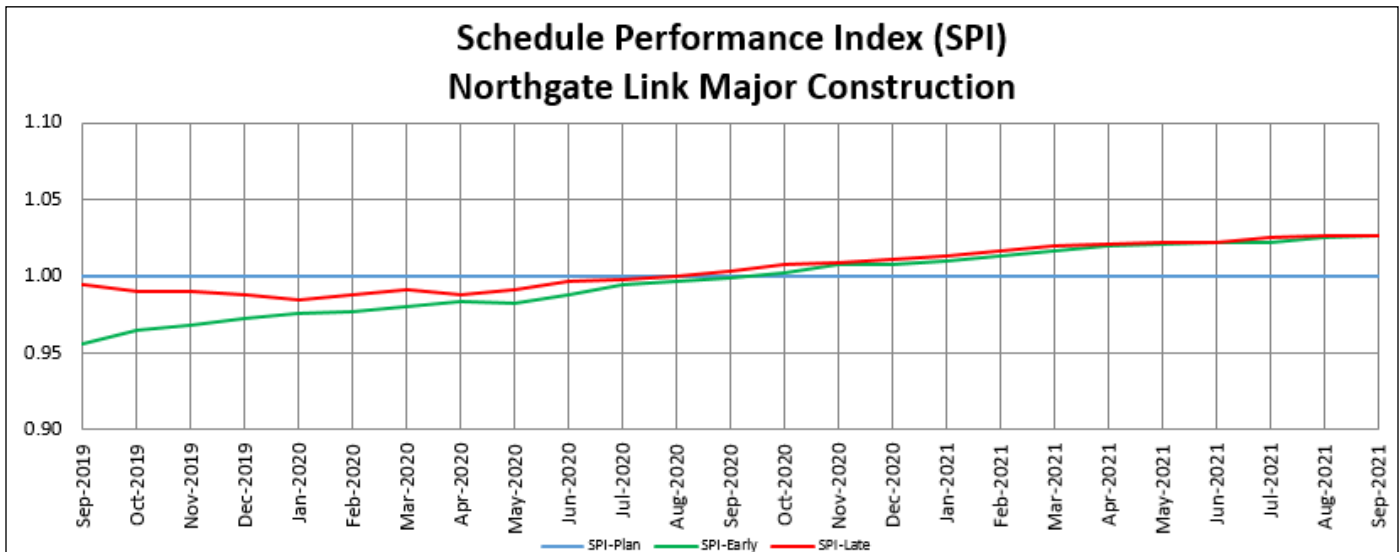


## Critical Path Analysis

The schedule for the Northgate Extension is complete. A critical path can no longer be calculated. The August report is the last month of reporting on Critical Path Analysis as the project is set to reach Revenue Service next month on October 2, 2021.

## Schedule Performance Index

The early Schedule Performance Index (SPI) for the project edged up to 1.03 this period, and the late SPI is at 1.03 as well, showing that in general, performance remains on, or very close to plan.

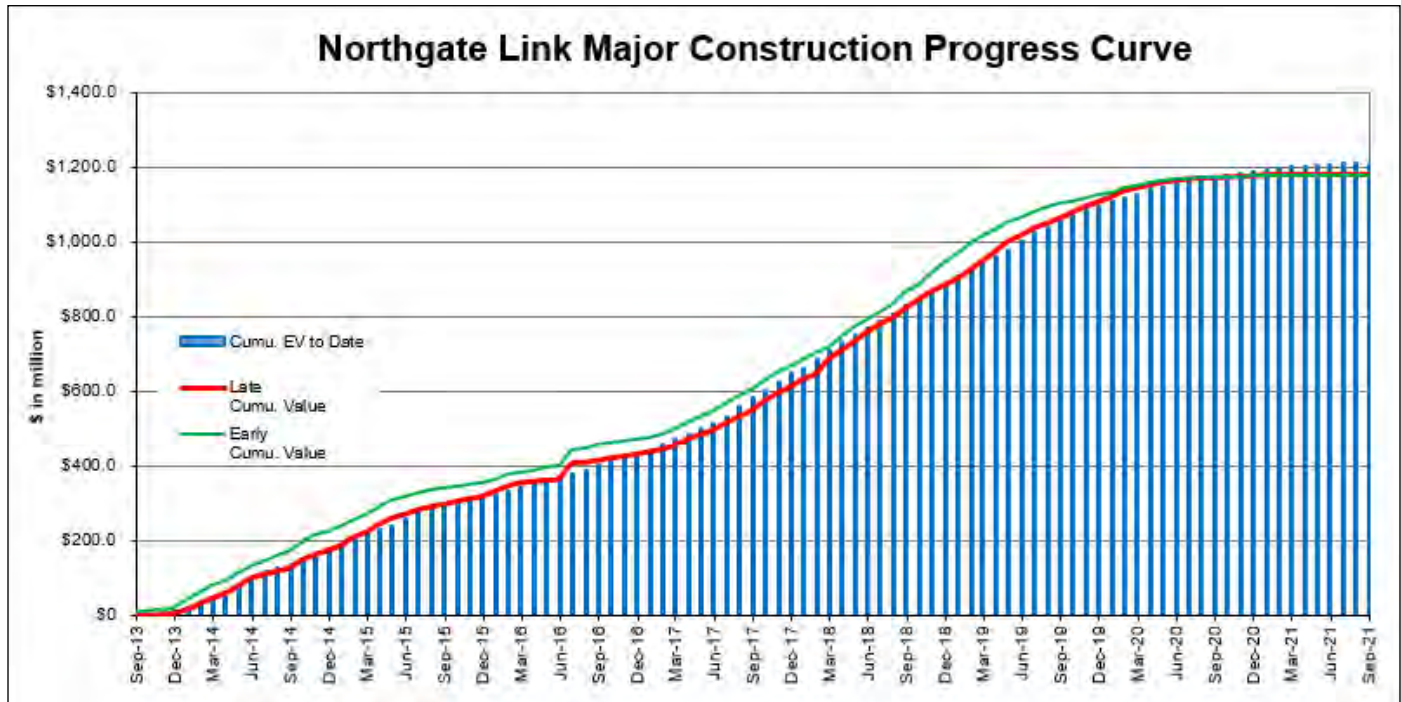


*This is the last month of reporting on SPI as the project is set to reach Revenue Service next month on October 2, 2021.*

## Cost Progress Analysis

Weighted percent complete of the major construction contracts is calculated at 99.7%

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



*This is the last month of reporting on Cost Progress Analysis as the project is set to reach Revenue Service next month on October 2, 2021.*

## Community Engagement

- Participated in the Northgate Pedestrian Bridge Coordination meeting.
- Responded to emails and calls regarding Northgate Link opening events.
- Hosted tour of the U District Station for the U District businesses that were impacted during construction
- Continue reaching out to properties along Northgate Link alignment to complete Noise and Vibration testing.

## 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 4 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	30	(12)
Consultants	29	27	(2)
TOTAL	71	57	(14)
* 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.

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

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



*Northgate Station complete with artwork.*



## Contract N140—U District Station Finishes

### Current Progress

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

- Completed all change notice work and work required to open the station. Completion of warranty items are being tracked by Sound Transit Operations.

### Closely Monitored Issues

- Nothing to report.

### Cost Summary

Present Financial Status	Amount
<b>N140 Contractor—Hoffman Construction</b>	
Original Contract Value	\$159,836,688
Change Order Value	\$ 14,672,440
Current Contract Value	\$ 174,509,128
Total Actual Cost (Incurred to Date)	\$ 172,779,331
Percent Complete	100.0%
Authorized Contingency	\$ 15,491,834
Contingency Drawdown	\$ 14,672,440
Contingency Index	1.1

## Contract N150 – Roosevelt Station Finishes

### Current Progress

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

- Completed all change notice work and work required to open the station. There are a few open warranty items which are being scheduled for completion and tracked by Sound Transit Operations.

### Closely Monitored Issues

- Nothing to report.

### Cost Summary

Present Financial Status	Amount
<b>N150 Contractor—Hoffman Construction</b>	
Original Contract Value	\$152,291,184
Change Order Value	\$ 18,791,006
Current Contract Value	\$ 171,082,190
Total Actual Cost (Incurred to Date)	\$ 170,612,396
Percent Complete	100.0%
Authorized Contingency	\$ 18,914,559
Contingency Drawdown	\$ 18,791,006
Contingency Index	1.0

# Link Light Rail Northgate Link Extension



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

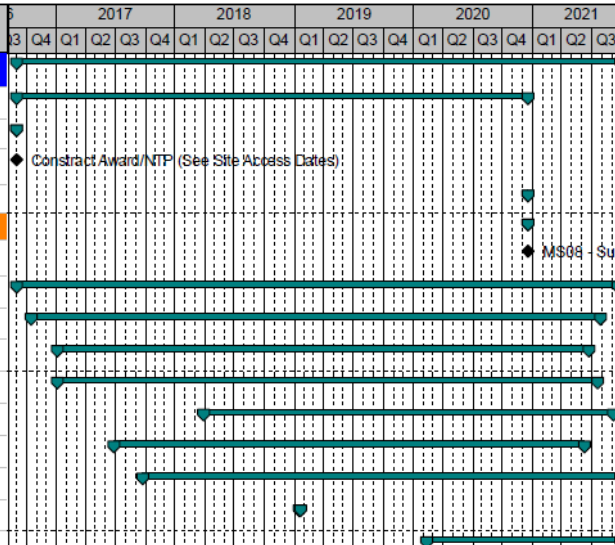
### Current Progress

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

- Handover of busway and KCM areas to KCM on 08/05/21
- Handover of the site to ST Operation on 08/30/21
- All punchlist work has been completed.

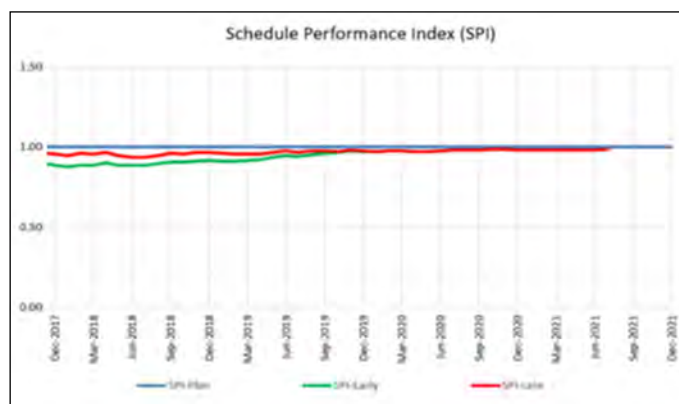
### Schedule Summary

All scheduled work for the Northgate Station has been completed. The schedule reflects the completed status of the work.

Activity Name	OD	RD	Start	Finish																			
<b>N160 - Northgate Station Finishes</b>	1291	0	01-Sep-16 A	29-Sep-21 A																			
1.00 - General Requirements	1087	0	01-Sep-16 A	18-Dec-20 A																			
1.10 - Project Start-up	0	0	01-Sep-16 A	01-Sep-16 A																			
Contract Award/NTP (See Site Access Dates)	0	0	01-Sep-16 A		◆ Contract Award/NTP (See Site Access Dates)																		
1.20 - Contractual Milestones	0	0	18-Dec-20 A	18-Dec-20 A																			
Absher Contract Milestones	0	0	18-Dec-20 A	18-Dec-20 A																			
MS08 - Substantial Completion [Site Access+1201d; 10/17/16, then by 1/30/20] Rev to 5/23/20 (CO-271)	0	0		18-Dec-20 A	◆ MS08 - Substantial Completion																		
2.00 - Procurement	791	0	02-Sep-16 A	20-Sep-21 A																			
3.00 - Preparatory Work	861	0	17-Oct-16 A	30-Jul-21 A																			
4.00 - Earthwork & Utilities	874	0	04-Jan-17 A	25-Jun-21 A																			
5.00 - Guideway (inc. Station Unit)	1181	0	03-Jan-17 A	21-Jul-21 A																			
6.00 - Station Finishes	983	0	27-Mar-18 A	07-Sep-21 A																			
7.00 - Garage	999	0	27-Jun-17 A	09-Jun-21 A																			
8.00 - At-Grade Restoration	1024	0	22-Sep-17 A	29-Sep-21 A																			
9.00 - Transition to Operations	5	0	14-Jan-19 A	22-Jan-19 A																			
10.00 - Project Close-out	403	0	13-Feb-20 A	29-Sep-21 A																			

### Schedule Performance Index

This period, the SPI early is 0.99 (0.01 increase from last period) and the SPI late is at 0.99 (0.01 increase from last period), indicating slight change in performance since last month. However, the indices indicate that the contractor continues performing slightly behind plan when compared to the baseline schedule. Overall work progress has remained within 0.01 of its current trend over the last year.



*This is the last month of reporting on Project Schedule and SPI as the project is set to reach Revenue Service next month on October 2, 2021.*

## Next Period's Activities

- Closeout of open change notice items.

## Closely Monitored Issues

- Nothing to report.

## Cost Summary

Present Financial Status	Amount
<b>N160 Contractor - Absher Construction</b>	
Original Contract Value	\$ 174,000,000
Change Order Value	\$ 18,475,002
Current Contract Value	\$ 192,475,002
Total Actual Cost (Incurred to Date)	\$ 190,869,837
Percent Complete	99.6%
Authorized Contingency	\$ 20,400,000
Contingency Drawdown	\$ 18,475,002
Contingency Index	1.1



View of west side of Station.

## Contract N180 – Trackwork UWS to Northgate Station

### Current Progress

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

Final contract change order was executed in December and ST is now 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 close-out.

### Cost Summary

Present Financial Status	Amount
<b>N180 Contractor - Stacy and Witbeck, Inc.</b>	
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	\$ 0,718,393
Contingency Drawdown	\$ 4,017,015
Contingency Index	2.67

# Link Light Rail Northgate Link Extension



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

### Current Progress

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

- Preformed SIT testing and punchlist work at U District Station (UDS).
- Preformed SIT testing and punchlist work at Roosevelt Station (RVS).
- Preformed testing on SIT testing, install PA devices, installed OCS equipment and punchlist work at Northgate Station (NGS).

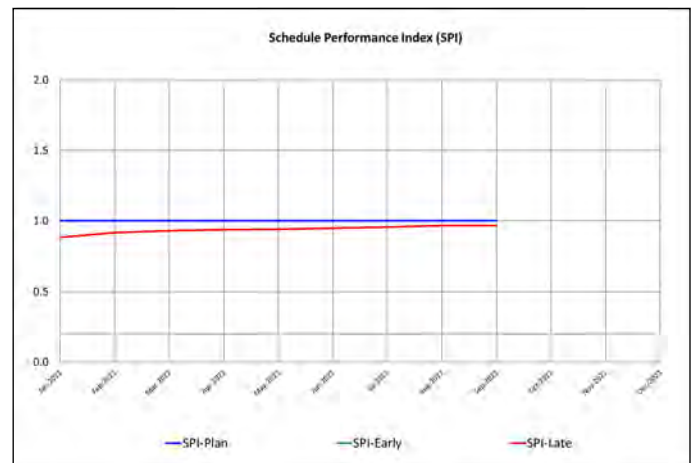
### Schedule Summary

The N830 contractor's September 2021 update completes all contract work with the exception of change order, punchlist, and follow-on monitoring of installed systems. This update constitutes the last CPM update for the Northgate portion of the N830/E750 contract. All remaining work items have been transferred to an Open Items log and will no be tracked via the schedule.

Activity Name	OD	RD	Start	Finish																
					017	2018		2019		2020		2021								
						Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>N830 - Northgate Systems Installation</b>	1089	21	12-Jun-17 A	01-Nov-21																
<b>General</b>	0	0	12-Jun-17 A	12-Jun-17 A																
<b>Key Dates</b>	0	0	12-Jun-17 A	12-Jun-17 A																
NTP - Notice to Proceed (NTP) Northgate and East Link	0	0	12-Jun-17 A		NTP - Notice to Proceed (NTP) Northgate and East Link															
<b>N830 Project</b>	957	21	20-Dec-17 A	01-Nov-21																
<b>N830 Construction</b>	957	21	20-Dec-17 A	01-Nov-21																
<b>N830 Milestones</b>	231	0	11-Jan-21 A	30-Aug-21 A																
MS#10 Northgate: Completion of limited NG Systems from UoW to UD Stations for EMI (03/08/21)	0	0		11-Jan-21 A	MS#10 Northgate															
MS#05 Northgate: Substantial completion of Northgate Link systems (05/31/21)	0	0		30-Aug-21 A	MS#05 Northgate															
<b>N830 OCS</b>	618	0	10-Sep-18 A	15-Mar-21 A																
<b>N830 Traction Power / Substations Procurement</b>	907	0	20-Dec-17 A	20-Aug-21 A																
<b>N830 Signals</b>	669	0	15-Aug-18 A	30-Apr-21 A																
<b>N830 Communications</b>	880	0	10-Feb-18 A	26-Aug-21 A																
<b>N830 Radio</b>	645	0	09-Jul-18 A	18-Feb-21 A																
<b>N830 Trunk Fiber</b>	628	0	28-Sep-18 A	16-Apr-21 A																
<b>N830 Testing and Commissioning</b>	781	21	07-Sep-18 A	01-Nov-21																

### Schedule Performance Index

Performance for September is shown. SPI-Early is 0.97 (an increase from last period) and the SPI-Late is 0.97 (an increase from last period), this indicate a slight change in performance when compared to the previous month. The SPI does indicate that the contractor is performing slightly behind the plan when compared to the baseline schedule.



*This is the last month of reporting on Project Schedule and SPI as the project is set to reach Revenue Service next month on October 2, 2021.*



# Link Light Rail Northgate Link Extension

## Next Period's Activities

- Ongoing coordination meetings between systems and civil contractors for interface and access points for respective contracts.
- Performing Testing and Commissioning at Northgate Station, U District Station and Roosevelt Station.

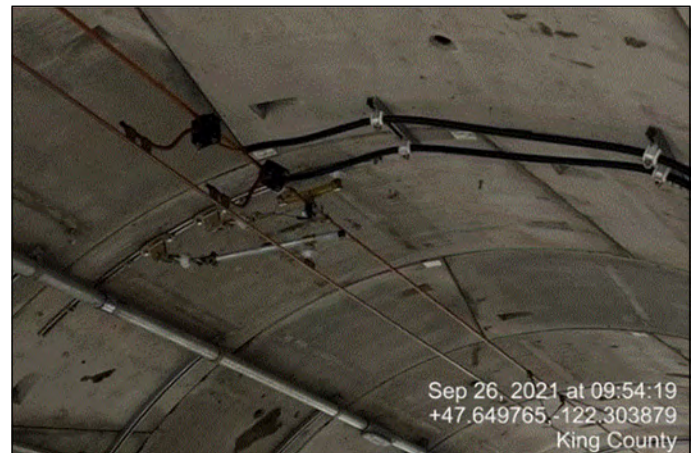
## Closely Monitored Issues

- COVID-19 impacts continue to be fluid and is being monitored.
- Monitoring the completion of testing and commissioning the Train Control System (TCS).

## Cost Summary

Present Financial Status	Amount
<b>N830 Contractor - Mass Electric Construction Co.</b>	
Original Contract Value	\$ 104,660,444
Change Order Value	\$ 753,077
Current Contract Value	\$ 105,413,521
Total Actual Cost (Incurred to Date)	\$ 103,857,166
Percent Complete	99.1%
Authorized Contingency	\$ 7,233,022
Contingency Drawdown	\$ 753,077
Contingency Index	9.52

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



*OCS work performed in Northgate Tunnel.*

# Link Light Rail Tacoma Dome Link Extension

## Project Summary

### Scope

<b>Limits</b>	Federal Way Transit Center to South Federal Way, Fife, East Tacoma, and Tacoma Dome
<b>Alignment</b>	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.
<b>Stations</b>	South Federal Way, Fife, and East Tacoma (elevated stations) and Tacoma Dome (at-grade station)
<b>Systems</b>	Signals, traction power, communications (SCADA), Operations and Maintenance Facility South (OMF South)
<b>Phase</b>	Planning: Alternative Development/Project Development
<b>Budget</b>	\$125.7 Million for Preliminary Engineering Phase 1—Alternative Development Phase 2
<b>Schedule</b>	Target Dates: Tacoma Dome Station, 2032 Parking at South Federal Way & Fife, 2038



Map of Tacoma Dome Link Extension.

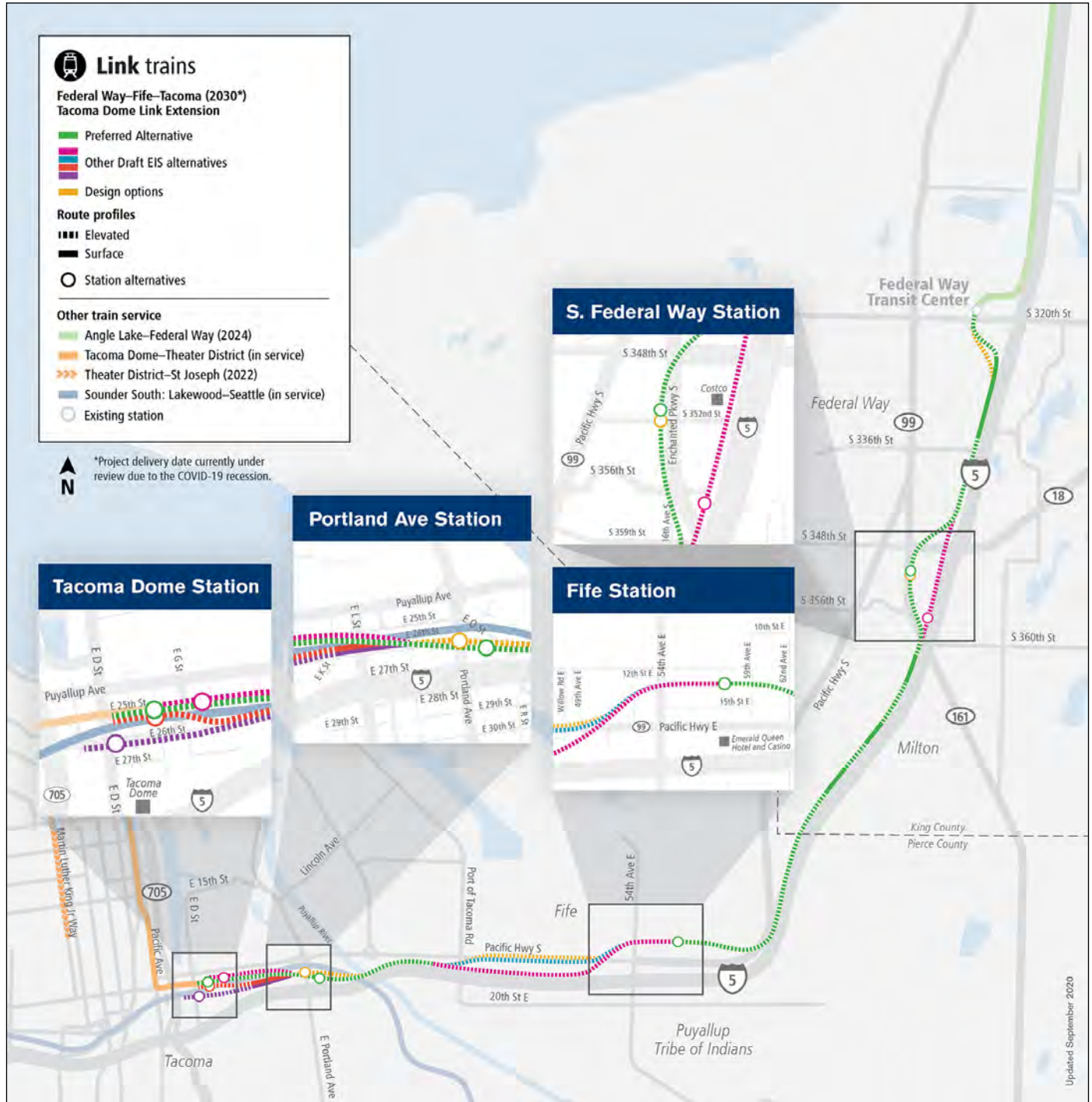
## Key Project Activities

- TDLE – Continued discussion around the Freighthouse Square Fire and Life Safety issues.
- TDLE – Environmental review kickoff meeting with cooperating agencies on 9/23.
- TDLE – Conceptual Design coordination with partnering agencies and the Tribes.
- TDLE - Held meetings with the Federal Transit Administration.
- OMF South - Title VI Facility Equity Analysis report reviews continue.
- OMF South - Change order extending consultant services and contract time to February 2022 finalized.
- OMF South - Continued Phase 3 scope of work development.
- OMF South – Various Briefing presentations drafted and developed for Subareas, PEPD ED, CEO, SEC and the Board.
- OMF South – Agendas and FAQs developed and meetings with FW, Kent, SPU and IAG held

# 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 September.

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	\$13.8	\$13.7	\$26.8	\$0.0
Preliminary Engineering	\$87.1	\$50.4	\$34.5	\$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	\$0.8	\$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	\$0.3	\$5.4	\$0.0
<b>Total</b>	<b>\$125.7</b>	<b>\$67.4</b>	<b>\$49.3</b>	<b>\$125.7</b>	<b>\$0.0</b>

### 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
<b>Construction Subtotal (10 - 50)</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
60 Row, Land	\$4.4	\$1.0	\$0.3	\$4.4	\$0.0
80 Professional Services	\$114.4	\$66.4	\$49.0	\$114.4	\$0.0
90 Unallocated Contingency	\$6.9	\$0.0	\$0.0	\$6.9	\$0.0
<b>Total (10 - 90)</b>	<b>\$125.7</b>	<b>\$67.4</b>	<b>\$49.3</b>	<b>\$125.7</b>	<b>\$0.0</b>



### 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 monitoring 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 Q2 2021 risk review workshop was held in May 2021. The following are the top project wide risks:

- Reduced revenue as a result of COVID-19 may impact schedule and cost.
- Other ST projects are experiencing baseline cost escalation, resulting in insufficient funding available for TDLE and OMFS.
- 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 TDLE and OMF South construction, resulting in increased costs.
- Existing buildings below the proposed guideway/stations require upgrades/replacement to meet code requirements (i.e.- Construction type challenges), thus increasing project costs.
- OMFS 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.
- Complications to cross the Puyallup River due to cultural, geo-technical, structural, or ROW.
- City of Tacoma requests pedestrian bridge crossing I5 in East Tacoma (Portland Ave. station) which was not included in ST3 scope assumption
- Close to Sounder alignment options have substantial impact on Tacoma Link, Sounder, Amtrak, PS Transit, ST Express, and Greyhound operations.
- Delays caused by local AHJ reviews.

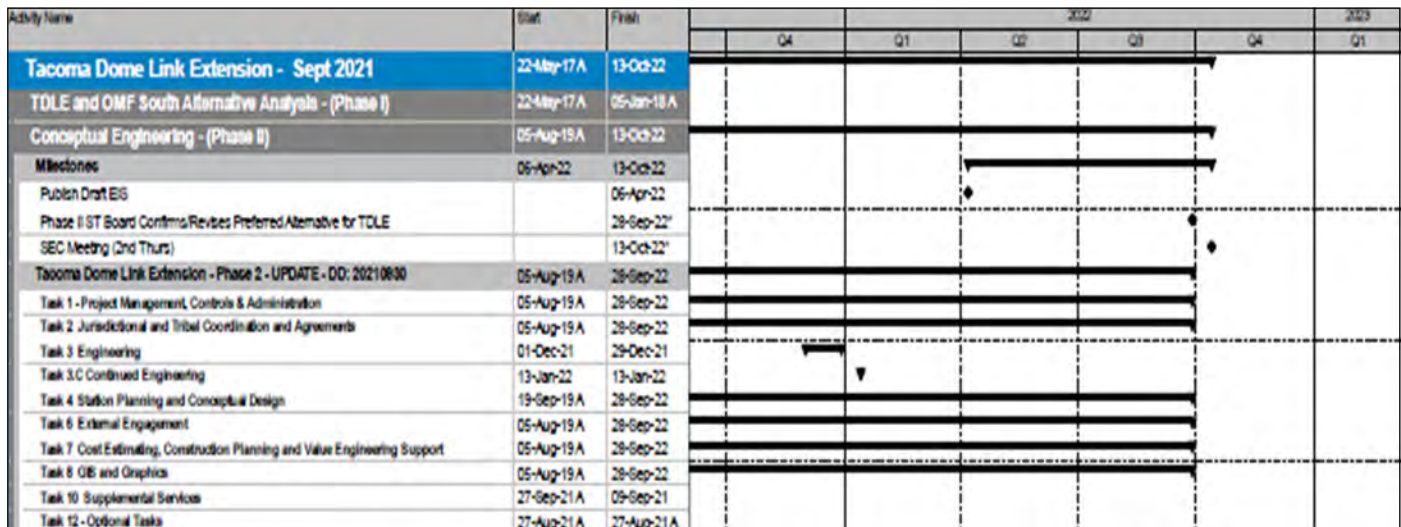
# Link Light Rail Tacoma Dome Link Extension



## TDLE Project Schedule

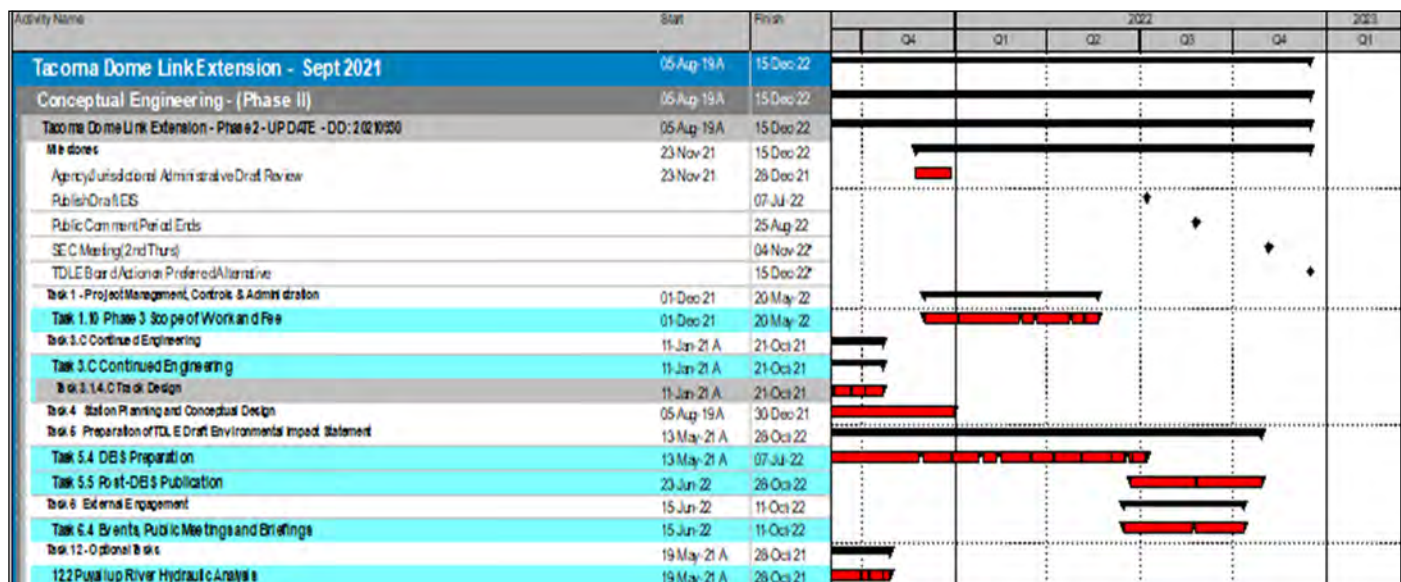
The Board of Directors announced their realignment decision in August. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown

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



## TDLE Critical Path Analysis

This critical path for is running thru Phase II publishing of the DEIS and ST Board Preferred Alternative identified an order to maintain a Revenue Service target date completion of 2032 for TDLE.



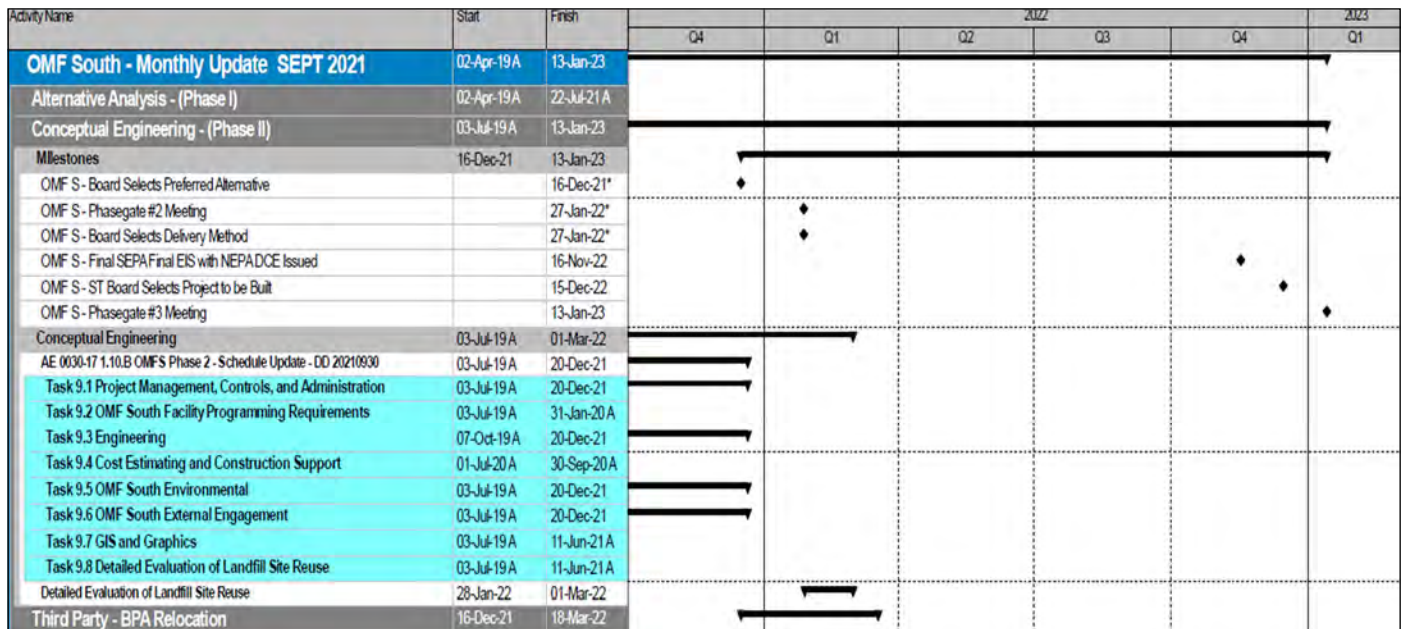
# Link Light Rail Tacoma Dome Link Extension



## OMF South Project Schedule

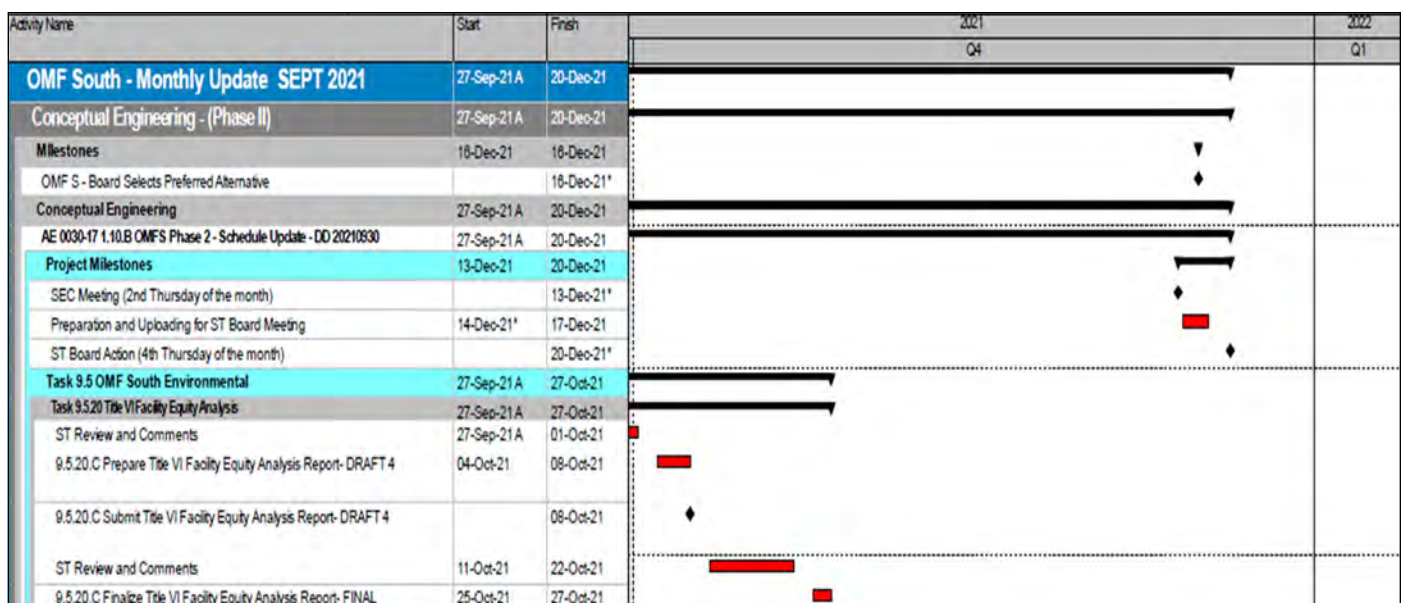
The Board of Directors announced their realignment decision in August. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown

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



## OMF South Critical Path Analysis

This critical path for is running thru Phase II getting to the ST Board Preferred Alternative identified, preparation for Phase Gate 2 to establish delivery method , bridging documents required in order to enter Final Design to Construction start the Request for Proposal (RFP) Design Build in order to maintain 2030 project completion .



## 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
<i>* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.</i>					

## Community Engagement

- TDLE - Participated in the monthly New Tacoma Neighborhood Council meeting (virtual meeting on 9/8)
- OMF South – Held the monthly meeting with the City of Kent (virtual meeting on 9/13)
- OMF South – Provided a project update to Seattle Public Utilities (virtual meeting on 9/16)
- TDLE – Held the monthly meeting with the City of Federal Way (virtual meeting on 9/16)
- OMF South – Held the monthly meeting with the City of Federal Way (virtual meeting on 9/16)
- OMF South – Hosted an Interagency Group meeting (virtual meeting on 9/21)
- TDLE – Hosted a kickoff meeting for the Administrative Draft EIS (virtual meeting on 9/23)



# Link Light Rail Tacoma Dome Link Extension



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual 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 expecting to be continued as board action on preferred alternative was pushed out.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	30.0	19.6	(10.4)
Consultants	28.5	16.3	(12.2)
TOTAL	58.5	35.9	(22.6)
<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 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



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.
- Briefed community groups virtually as requested. Provided overview of outreach, project goals, agency roles and near-term opportunities for engagement.
- Continued engagement with partner and regulatory agencies, stakeholder groups and property owners regarding environmental process and next steps.

# 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	\$22.1	\$22.0	\$63.1	\$0.0
Preliminary Engineering	\$205.4	\$93.1	\$84.1	\$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	\$1.2	\$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	\$3.0	\$2.3	\$6.0	\$0.0
<b>Total</b>	<b>\$285.9</b>	<b>\$121.3</b>	<b>\$109.6</b>	<b>\$285.9</b>	<b>\$0.0</b>

### 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
<b>Construction Subtotal (10 - 50)</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
60 Row, Land	\$5.0	\$3.0	\$2.3	\$5.0	\$0.0
80 Professional Services	\$263.4	\$118.3	\$107.3	\$263.4	\$0.0
90 Unallocated Contingency	\$17.5	\$0.0	\$0.0	\$17.5	\$0.0
<b>Total (10 - 90)</b>	<b>\$285.9</b>	<b>\$121.3</b>	<b>\$109.6</b>	<b>\$285.9</b>	<b>\$0.0</b>

# Link Light Rail West Seattle and Ballard Link Extensions



## Risk Management

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

## 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. Only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown below.

Activity Name	Start	Finish	2021			2022	
			Q3	Q4		Q1	
West Seattle and Ballard Link Extension	17-Mar-17 A	24-Mar-22					
West Seattle and Ballard Link Extension	17-Mar-17 A	24-Mar-22					
West Seattle and Ballard Link Extensions	17-Mar-17 A	24-Mar-22					
Alternative Analysis - (Phase I)	17-Mar-17 A	23-May-19 A					
Alternative Analysis - Milestones	23-May-19 A	23-May-19 A					
WSBLE - Board Identifies DEIS AIs. & Prelim Preferred Alt.	23-May-19 A	23-May-19 A					
Alternative Analysis Procurement	17-Mar-17 A	05-Oct-17 A					
Alternative Analysis	06-Oct-17 A	06-May-19 A					
Conceptual Engineering - (Phase II)	24-May-19 A	24-Mar-22					
Conceptual Engineering - Milestones	24-Mar-22	24-Mar-22					
WSBLE - Board Reaffirms Preferred Alternative	24-Mar-22	24-Mar-22					
Conceptual Engineering	24-May-19 A	04-Dec-21					
Geotech Investigation - Phase II	24-May-19 A	05-Aug-21					
Conceptual Engineering - Phase II - ST	24-May-19 A	25-Mar-22					
Conceptual Engineering and Draft EIS - Phase II - U	24-May-19 A	25-Mar-22					



## Community Engagement

- Prepared and staffed eleven briefings and events in September 2021 to provide communities along the project corridor with 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:
  - Chinatown-International District Business Improvement Association Board of Directors, September 2, 2021
  - International Community Health Services (ICHS), September 2, 2021
  - Chinese Information and Service Center (CISC), September 8, 2021
  - Ping Pong Tournament, September 10, 2021
  - Mercer Corridor Stakeholders Group, September 16, 2021
  - Seattle Center/KEXP, September 20, 2021
  - Ballpark Public Facilities District Board of Directors, September 20, 2021
  - Pioneer Square Residents Council, September 21, 2021
  - Chinatown-International District Night Market, September 25, 2021
  - Seattle Center/Seattle Repertoire Theatre, September 27, 2021
  - Historic South Downtown Board of Directors, September 28, 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.

## 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-August 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	28.8	(5.5)
Consultants	50.0	35.9	(14.1)
TOTAL	84.3	64.8	(19.5)

\* 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	

# Progress Report Sounder Program

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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.

September | 2021



Prepared by Project Controls | Portfolio Services Office



**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	\$6.7	\$4.4	\$12.6	\$0.0
Kent Station Access Improvements	\$16.8	\$7.9	\$5.5	\$16.8	\$0.0
Lakewood Station Access Improvement	\$1.96	\$1.3	\$1.0	\$1.96	\$0.0
Puyallup Station Access Improvements	\$79.1	\$70.7	\$50.6	\$79.1	\$0.0
Sounder South Capacity Expansion	\$17.37	\$5.0	\$3.9	\$17.37	\$0.0
South Tacoma Station Access Improvements	\$1.5	\$1.0	\$0.7	\$1.5	\$0.0
Sumner Station Access Improvements	\$17.8	\$16.2	\$13.0	\$17.8	\$0.0
<b>Total</b>	<b>\$147.2</b>	<b>\$108.8</b>	<b>\$79.0</b>	<b>\$147.2</b>	<b>\$0.0</b>

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
<b>South Corridor</b>	01-May-15	16-Apr-22														
<b>Sounder Commuter Rail - South</b>	01-May-15	16-Apr-22														
<b>Station Access - South</b>	01-May-15	16-Apr-22														
<b>S300017 - Puyallup Station Access Improvements</b>	01-May-15	16-Apr-22														

# Sounder Commuter Rail Auburn Station Parking and Access Improvements

## Project Summary

<b>Scope</b>	<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>
<b>Phase</b>	Complete Environmental/Enter Design & Construction
<b>Budget</b>	\$12.6 Million
<b>Schedule</b>	Target Date: 2025



*Improving access to Sounder Auburn Station*

## Key Project Activities

- Team continued to work with DBPM to determine packaging and cost saving strategies for Kent/Auburn/Sumner garages.
- Finalizing appraisals for full property acquisition, initiating appraisals for Temporary Construction Easements (TCEs).
- Executed agreement with the City of Auburn to contribute to the City's planned A Street Loop project in lieu providing traffic mitigation.

## Project Cost Summary

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

This period expenditures increased by \$40K. The incurred cost increased from \$4.35M to \$4.39M. The majority of this period's costs are attributed to staff costs and design-build project management 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	\$1.6	\$2.4	\$0.0
Preliminary Engineering	\$3.4	\$2.8	\$2.6	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$1.8	\$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	\$0.4	\$0.1	\$3.8	\$0.0
<b>Total</b>	<b>\$12.6</b>	<b>\$6.7</b>	<b>\$4.4</b>	<b>\$12.6</b>	<b>\$0.0</b>

# 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 will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team plans to conduct a risk assessment workshop in 2022 to identify all the potential risks during design and construction.

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 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

The Board of Directors announced their realignment decision this month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The project team has engaged the current Design Build Project Management (DBPM) team to help develop the project schedule and begin tasks such as development of the Design-Build Project Requirements, issuance of the Design-Build Procurement RFQ and Baselineing.

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

Activity Name	Start	Finish	2021			2022		
			Q2	Q3	Q4	Q1	Q2	Q3
<b>S300041 - Auburn Station Access Improvements</b>	24-Feb-16 A	31-Dec-25						
+ Alternative Analysis (Phase I)	24-Feb-16 A	15-Nov-17 A						
+ Conceptual Engineering (Phase II)	22-Mar-18 A	07-Jun-22						
+ Preliminary Engineering (Phase III)	13-Dec-18 A	28-Jul-22						
+ Permits and Agreements	30-Sep-19 A	15-Sep-22						
+ Right of Way	09-May-19 A	30-Aug-23						
+ Design-Build Project Management (DBPM)/Construction Se	02-Jan-20 A	07-Mar-25						
+ Design-Build Contract (DB)	01-Dec-21	07-Mar-25						

# Sounder Commuter Rail Auburn Station Parking and 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 focused on packaging and evaluating cost saving strategies regarding the Kent, Auburn, and Sumner Station garages.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	3.6	1.4	(2.2)
Consultants	3.0	0.2	(2.8)
TOTAL	6.6	1.6	(5.0)

\* 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 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
- Team continued to work with DBPM to determine packaging and cost saving strategies for Kent/Auburn/Sumner garages.

## 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 \$47K. The incurred cost increased from \$5.5M to \$5.53M. The majority of this period's costs are attributed to staff costs, ROW activities and design-build project management 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	\$1.8	\$1.8	\$2.7	\$0.0
Preliminary Engineering	\$3.4	\$3.1	\$2.7	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$1.8	\$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
<b>Total</b>	<b>\$16.8</b>	<b>\$7.9</b>	<b>\$5.5</b>	<b>\$16.8</b>	<b>\$0.0</b>

# 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 October 2021.

The following are the top project wide risks:

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

### Project Schedule

The Board of Directors announced their realignment decision this month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The project team has engaged the current Design Build Project Management (DBPM) team to help develop the project schedule and begin tasks such as development of the Design-Build Project Requirements, issuance of the Design-Build Procurement RFQ and Baseline.

Other activities underway include initiating property appraisal and condemnation activities, negotiating Development Agreement with the City of Kent and negotiating King County Metro agreement and contribution for bus layover accommodation expected in Q4 2021.

Activity Name	Start	Finish	2021		2022	
			Q3	Q4	Q1	Q2
<b>S300035 - Kent Station Access Improvements</b>	24-Feb-16A	31-Dec-25				
Alternative Analysis (Phase I)	24-Feb-16A	15-Nov-17A				
Conceptual Engineering (Phase II)	22-Mar-18A	03-Jun-22				
Preliminary Engineering (Phase III)	13-Dec-18A	28-Jul-22				
Permits and Agreements	01-Apr-19A	04-Sep-23				
Right of Way	17-Jan-19A	01-Aug-23				
Design/Build Project Management (DBPM)/Construction Serv	02-Jan-20A	30-May-25				

### 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 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.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.0	1.5	(3.5)
Consultants	3.0	0.3	(2.7)
TOTAL	8.0	1.8	(6.2)
<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 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 Sounder Station in Pierce County.*

## Key Project Activities

- Continued to evaluate potential improvements.
- Finished preparations of materials for community and stakeholder engagement to occur in the fall.
- Presented to the Lakewood City Council.



*Lakewood Sounder Station Building*



*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 \$52K 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	\$0.4	\$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
<b>Total</b>	<b>\$1.9</b>	<b>\$1.3</b>	<b>\$1.0</b>	<b>\$1.9</b>	<b>\$0.0</b>

### 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 will be scheduled for December 2021. 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

The Board of Directors announced their realignment decision last month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. Phase 1 - Alternative Development NTP was issued in Dec 2020 and expected to complete in Q1 2022.

Activity Name	Start	Finish	2021			2022	
			Q2	Q3	Q4	Q1	Q2
<b>Lakewood Station Access Improvements -</b>	18-Feb-20A	10-Dec-28					
<b>Perliminary Engineering</b>	18-Feb-20A	28-Mar-24					
<b>Phase I - Alternative Analysis</b>	18-Feb-20A	24-Feb-22					
Alternative Analysis Admin	18-Feb-20A	04-Nov-21					
Alternative Analysis Procurement	25-Sep-20A	04-Dec-20A					
Alternative Analysis	01-Oct-20A	24-Feb-22					
Prepare Cost Estimate	01-Oct-20A	15-Oct-20A					
Submit Cost Estimate	16-Oct-20A	30-Oct-20A					
Alignment and Parcel Maps - Submitted for Pricing - Not Applicable	04-Dec-20A	04-Dec-20A					
Alternatives Development	04-Dec-20A	18-Dec-21					
Board Identifies DEIS Alts. & Prelim Preferred Alt.	27-Jan-22	24-Feb-22					

### Community Engagement

- Organized an information booth at the Lakewood Farmers Market on September 24th.
- Continued preparations for fall engagement.

# 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 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 time will be needed.

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

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

**Phase** Final Design and Construction

**Budget** \$79.1 Million

**Schedule** Open for Service: Q2 2022



*Improving access to Sounder Puyallup Station*

## Key Project Activities

- Update of project schedule is underway due to recently completed negotiations with the City impacting previously forecast Design Build Notice To Proceed (NTP) date.
- Installation of art glass panels at elevator shafts completed.
- Fire protection/drainage pipes, electrical rough-in work, and installation of cable barriers continue.
- Final Issued For Construction Package (IFB) received—Offsite Improvements.
- Planning for and Operational Assessment (OA) and Phase Gate 5 Enter Operations action.

## Closely Monitored Issues

- Coordination of work with BNSF and the City 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 incur costs originating from the Eagles relocation reimbursements

# 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 \$3.6M. The incurred cost increased from \$47M to \$50.6M. The majority of this period's costs are attributed to staff costs, construction management services and \$3.1M 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	\$3.8	\$3.8	\$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	\$3.5	\$5.1	\$0.0
3rd Party Agreements	\$2.2	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0
Construction	\$58.4	\$60.0	\$53.2	\$34.3	\$60.0	\$0.0
ROW	\$5.6	\$6.6	\$6.4	\$6.3	\$6.6	\$0.0
<b>Total</b>	<b>\$79.1</b>	<b>\$79.1</b>	<b>\$70.7</b>	<b>\$50.6</b>	<b>\$79.1</b>	<b>\$0.0</b>

### 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	\$29.0	\$19.5	\$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	\$8.3	\$3.9	\$10.0	\$0.0
50 Systems	\$0.0	\$4.3	\$2.3	\$1.0	\$4.3	\$0.0
<b>Construction Subtotal (10 - 50)</b>	<b>\$48.0</b>	<b>\$45.5</b>	<b>\$39.7</b>	<b>\$24.5</b>	<b>\$45.5</b>	<b>\$0.0</b>
60 Row, Land	\$5.4	\$6.6	\$6.4	\$6.3	\$6.6	\$0.0
80 Professional Services	\$22.0	\$25.8	\$24.7	\$19.8	\$25.8	\$0.0
90 Unallocated Contingency	\$3.7	\$1.2	\$0.0	\$0.0	\$1.2	\$0.0
<b>Total (10 - 90)</b>	<b>\$79.1</b>	<b>\$79.1</b>	<b>\$70.7</b>	<b>\$50.6</b>	<b>\$79.1</b>	<b>\$0.0</b>

# 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 \$153K due to two executed change orders for the S300017 contract.

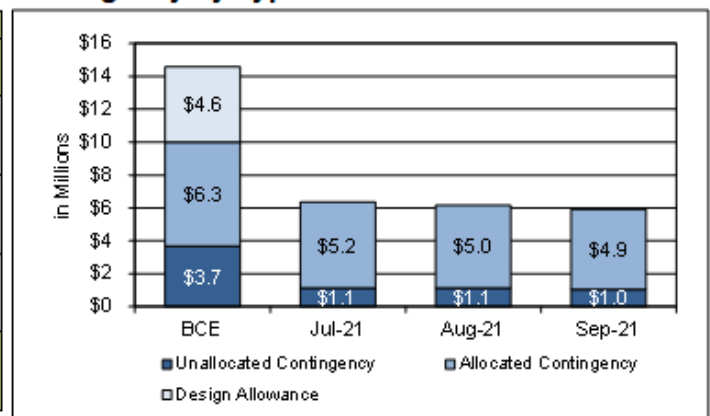
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. During this period the UAC was reduced by \$91K due to an unanticipated task order for utility relocation.

#### 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%	\$4.9	17.0%
Unallocated Contingency	\$3.7	4.7%	\$1.0	3.7%
<b>Total:</b>	<b>\$14.6</b>	<b>18.4%</b>	<b>\$5.9</b>	<b>20.7%</b>

*Table figures are shown in millions.*

#### Contingency by Type



### 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 August 2021. The next risk register update is scheduled for November 2021.

The following are the top project wide risks:

- Ordering of long lead items required for the completion of off site intersection work (signal poles) 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.
- Need to complete agreement regarding use of availability of parking during off hours with City.



# Sounder Commute Rail

## Puyallup Station Access Improvements



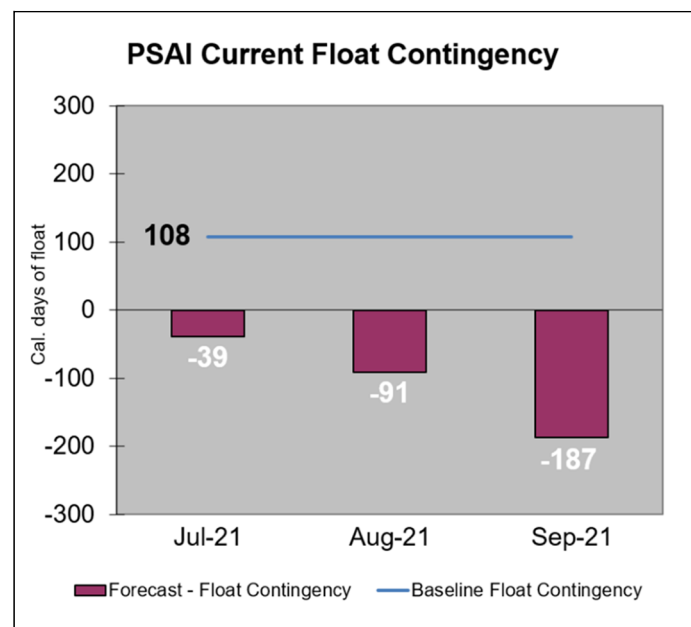
### Project Schedule

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 April 2022 which is approx. two months behind but open for service may be constrained by the traffic mitigation design delays that are pushing project completion into Q3 2022. This month the weighted percent complete for the schedule is 67.7% .

Activity ID	Activity Name	Start	Finish	2019				2020				2021				2022				
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S300017-Puyallup Station Access Improvements - DB		01-May-15 A	19-Nov-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-Nov-22																	
S300017-Puyallup Station Access Improvements - Design/Build Project Management		17-Sep-18 A	14-Sep-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	19-Nov-22																	
S300017 - Puyallup Station Access and Improvements - Design/Build - Design and Construction		26-Mar-20 A	19-Nov-22																	
Milestones		26-Mar-20 A	19-Nov-22																	
Notice to Proceed		26-Mar-20 A	26-Mar-20 A																	
Milestone 1 - Substantial Completion		16-Aug-22	16-Aug-22																	
Milestone 2 - Acceptance of Work		15-Sep-22	15-Sep-22																	
Milestone 3 - Final Acceptance		16-Sep-22	19-Nov-22																	
Tentative Interim Milestones		08-Mar-22	05-Apr-22																	
Design		26-Mar-20 A	25-Feb-22																	
Construction		27-Mar-20 A	15-Sep-22																	
Provisional Sums		08-Sep-20 A	25-Jan-22																	
Requests For Change / Work Directives		13-Apr-20 A	27-May-22																	
Change Orders		03-Apr-20 A	29-Oct-21																	
S300017-Puyallup Station Access Improvements - Project Completion		16-Aug-22	16-Aug-22																	
S300017 - Puyallup Station Access and Improvements - Project Completion		16-Aug-22	16-Aug-22																	
Post Construction		16-Aug-22	16-Aug-22																	
Project Float		16-Aug-22	16-Aug-22																	
Open For Service		16-Aug-22	16-Aug-22																	
Transition to Operations		16-Aug-22	16-Aug-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 187 calendar days due to delays to traffic mitigation design and is reporting a Q3 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.

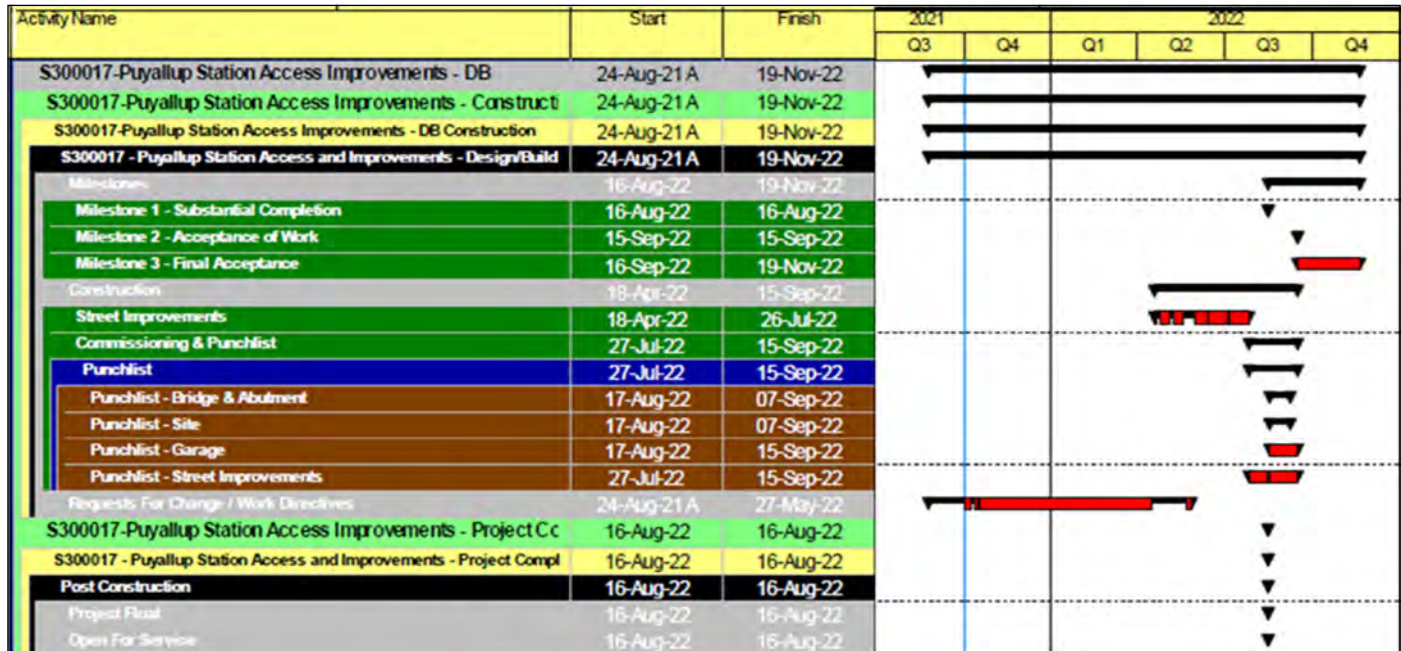


# Sounder Commute Rail Puyallup Station Access Improvements



## Critical Path Analysis

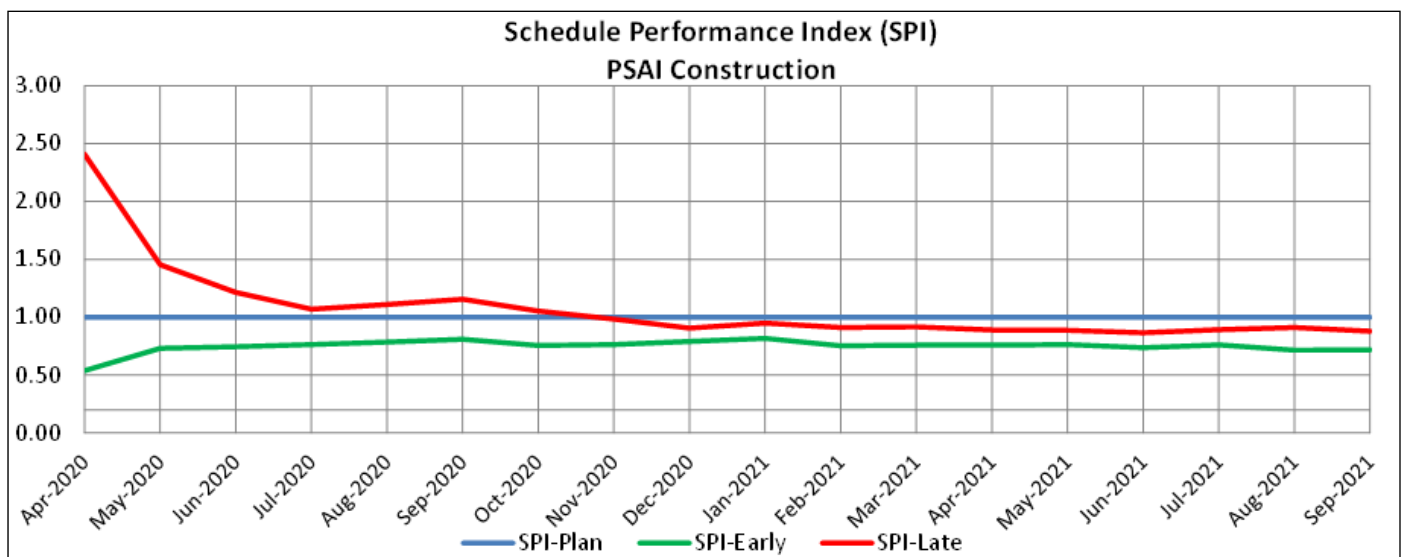
The critical path for the Puyallup is currently driven by the design delays to off site traffic mitigations. However, the work at the parking garage is on track for completion in April of 2022. We will continue to monitor the schedule and coordination with our Third Party partners on traffic mitigation.



## Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.72 for this period, and the late SPI is at 0.88. The index under 1.0 indicates that the Contractor is behind.

The schedule continues to show some time impacts due to procurement of traffic signals. 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

- Issued a project newsletter on September 13 with updates.
- Held an information booth at the Puyallup Farmers Market on September 18.
- 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	6.1	(1.2)
Consultants	7.5	7.2	(0.3)
TOTAL	14.8	13.3	(1.5)
* 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 Commute Rail Puyallup Station Access Improvements



## Construction Safety

Data/Measure	September 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	1	3	3
Reported Near Mishaps	0	5	5
Average Number of Employees on Worksite	34	-	-
Total # of Hours (GC & Subs)	5,420	51,624	53,932
OSHA Incident Rates	September 2021	Year to Date	Project to Date
Recordable Injury Rate	0	7.75	7.42
LTI Rate	0	3.87	3.71
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 now complete that includes a program of proposed capital projects.

#### Phase

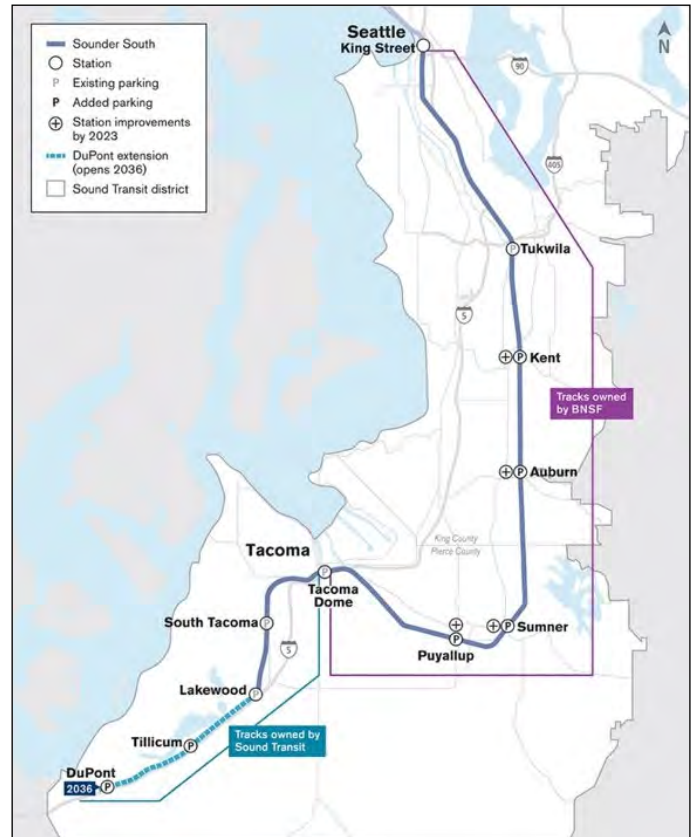
Planning

#### 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

- Sound Transit and BNSF Railway finalized the results of the Path Finding Study and the report recommendations.
- 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

- Begin 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.
- Engaged with BNSF Railway and the City of Auburn to discuss the alternatives evaluation and refine the alternatives analysis.

#### 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 \$149K 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	\$1.6	\$1.6	\$3.9	\$0.0
Preliminary Engineering	\$12.1	\$3.0	\$1.9	\$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
<b>Total</b>	<b>\$17.4</b>	<b>\$5.0</b>	<b>\$3.9</b>	<b>\$17.4</b>	<b>\$0.0</b>

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

### Project Schedule

The Board of Directors announced their realignment decision last month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The second Mainline Track Study and Report has been finalized and completed on July 28, 2021. Current Finish Date for Ph-I reflects the inclusion of King Street Station Platform Improvement Project.

Activity Name	Start	Finish	2021			2022		
			Q2	Q3	Q4	Q1	Q2	Q3
<b>Sounder South - Platform Extensions</b>	13-Jun-18 A	31-Dec-31						
<b>Sounder South Platform Extensions</b>	13-Jun-18 A	31-Dec-31						
<b>Alternative Analysis - (Ph - I)</b>	13-Jun-18 A	26-May-22						
<b>Conceptual Engineering/Environmental - (Ph - II)</b>	27-May-22	29-May-24						

### 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 December 2021.

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	3.0	(4.7)
Consultants	28.6	1.8	(26.8)
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** \$1.53 Million

**Schedule** Target Date: 2030



*South Tacoma Station in Pierce County.*

### Key Project Activities

- Continued to evaluate potential improvements.
- Finished preparations of materials for community and stakeholder engagement to occur in the fall.
- Presented to the City of Tacoma Bike Pedestrian Technical Advisory Group.



*South Tacoma Station Building*



*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 \$52K 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	\$0.4	\$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	\$0.0	\$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
<b>Total</b>	<b>\$1.5</b>	<b>\$1.0</b>	<b>\$0.7</b>	<b>\$1.5</b>	<b>\$0.0</b>

## 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 will be scheduled for December 2021. 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

The Board of Directors announced their realignment decision this month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown. Phase 1 - Alternative Development NTP was issued in Dec 2020 and expected to complete in Q1 2022.

Activity Name	Start	Finish	2021		2022
			Q3	Q4	Q1
<b>South Tacoma Station Access Improvements</b>	18-Feb-20 A	10-Dec-28			
<b>Preliminary Engineering</b>	18-Feb-20 A	28-Mar-24			
<b>Phase 1 - Alternative Analysis</b>	18-Feb-20 A	24-Feb-22			
Alternative Analysis Admin	18-Feb-20 A	06-Dec-21			
Alternative Analysis Procurement	25-Sep-20 A	04-Dec-20 A			
Alternative Analysis	01-Oct-20 A	24-Feb-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	16-Dec-21			
Board Identifies DEIS Alts. & Prelim Preferred Alt.	27-Jan-22	24-Feb-22			

## Community Engagement

- Continued preparations for fall 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.

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	1.6	(0.2)
Consultants	2.1	1.8	(0.3)
TOTAL	3.9	3.5	(0.5)

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

# Sounder Commuter Rail South Tacoma Access Improvement



## 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

- Design-Build procurement documents finalized.
- Realignment direction with delivery in 2025.
- Updating design build procurement documents and finalizing procurement strategy.
- Identifying additional site investigation activities to support 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's expenditures increased by \$10K. 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	\$1.8	\$1.8	\$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
<b>Total</b>	<b>\$17.8</b>	<b>\$16.2</b>	<b>\$13.0</b>	<b>\$17.8</b>	<b>\$0.0</b>

# 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 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 November 2021.

The following are the top project wide risks:

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

### Project Schedule

The Board of Directors announced their realignment decision last month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

Project Procurement documents are complete; Procurement for Issuance of the Design-Build Request For Qualifications (RFQ) is upcoming. Finalizing agreements for replacement parking during construction.

The project is in the Preliminary Engineering phase, the preliminary engineering work overall is complete, the primary remaining activities in this phase are to initiate Design-Build procurement and Baseline the project. Right-of-Way acquisitions are in progress and are forecast to be completed in advance of the area of construction needed for the Design-Build contractor's construction activities.

Activity Name	Start	Finish	2021			2022		
			Q2	Q3	Q4	Q1	Q2	Q3
<b>S300018 - Sumner Station Parking and Access</b>	01-May-15 A	31-Dec-25						
+ Alternative Analysis (Phase I)	01-May-15 A	26-May-16 A						
+ Conceptual Engineering (Phase II)	01-May-15 A	14-Mar-16 A						
+ Preliminary Engineering (Phase III)	14-Jul-16 A	23-Jun-22						
+ Permits and Agreements	01-Mar-16 A	31-Aug-21						
+ Right of Way	22-Sep-16 A	02-Feb-23						
+ Design-Build Project Management	24-Sep-20 A	29-Oct-24						
+ Design-Build Contract (DB)	03-Sep-19 A	29-Oct-24						

# 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.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	6.2	0.5	(5.7)
Consultants	0.0	0.0	0.0
TOTAL	6.2	0.5	(5.7)

\* 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.	



# Progress Report

## Regional Express & STRIDE Programs



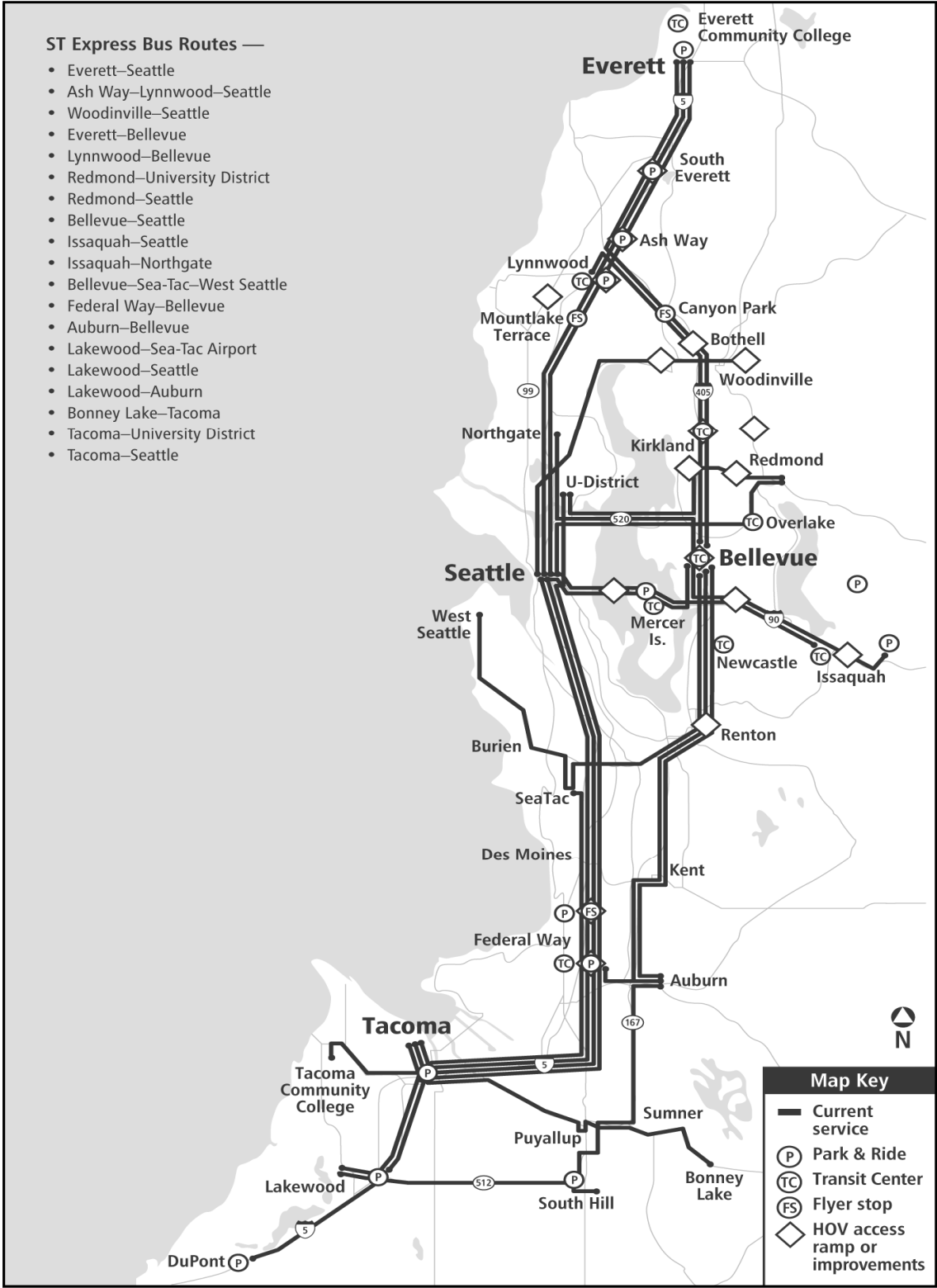
**ST Express Bus routes connects major regional hubs throughout the three counties  
(King, Pierce, and Snohomish)**

**September | 2021**



**Prepared by Project Controls | Portfolio Services Office**

# Regional Express & STRIDE Program Overview



ST Regional Express Bus Routes

# Regional Express & STRIDE Program Overview

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**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	\$38.9	\$38.3	\$48.7	\$0.0
I-405 Bus Rapid Transit	\$268.3	\$203.7	\$90.6	\$268.3	\$0.0
SR 522/NE 145th St Bus Rapid Transit	\$148.6	\$49.0	\$44.9	\$148.6	\$0.0
<b>Total</b>	<b>\$465.6</b>	<b>\$291.6</b>	<b>\$173.7</b>	<b>\$465.6</b>	<b>\$0.0</b>

*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

<b>Scope</b>	The Bus Base North will accommodate up to 120 buses to serve I-405 and SR 522/145th BRT and some ST Express routes.
<b>Phase</b>	Conceptual Engineering/Environmental Review
<b>Budget</b>	\$48.7 Million
<b>Schedule</b>	Target Date: 2025



Map of Project Alignment

## Key Project Activities

- Per the ST Board Realignment Decision, this project has a target date of 2025.
- State Environmental Policy Act (SEPA) Determination of Non-significance (DNS) appeal has been resolved.
- Addressing the Business Park's Codes, Covenants and Restriction (CCRs).
- Corps Environmental Permits submitted.



## 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 \$58K. This is primarily due to Sound Transit staff time, some progress on preliminary engineering and environmental with the consultant, and some ROW 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	\$4.4	\$1.9	\$1.9	\$4.4	\$0.0
Preliminary Engineering	\$2.3	\$1.7	\$1.3	\$2.3	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.2	\$0.1	\$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
<b>Total</b>	<b>\$48.7</b>	<b>\$38.9</b>	<b>\$38.3</b>	<b>\$48.7</b>	<b>\$0.0</b>

## Risk Management

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

The top project risk and proposed mitigation is below:

- 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 last month. ST is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The current phase, Conceptual Engineering/Environmental review, commenced in Q2 2019 and is now anticipated to complete in Q3 2021.

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

Activity ID	Activity Name	Start	Finish	2019				2020				2021			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
STRIDE - I-405 Bus Rapid Transit (BRT)		21-Nov-17 A	03-Jan-22												
STRIDE - BRT - Bus Base North (CUD01)		21-Nov-17 A	03-Jan-22												
BRT - Bus Base North - Preliminary Engineering		08-Apr-19 A	03-Jan-22												
BRT - Bus Base North - Conceptual Engineering - Phase II		08-Apr-19 A	10-Sep-21												
BRT - Bus Base North - Preliminary Engineering - Phase III		24-Feb-21	03-Jan-22												
BRT - Bus Base North Right of Way (ROW) / Property Acquisition		21-Nov-17 A	26-Aug-21												
BRT BBN ROW Acquisitions		21-Nov-17 A	26-Aug-21												

## 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 starts with the GEC contract (DBPM option is not considered anymore).

Consultant staff are currently working on Phase 2 and Phase 3.

Capacity's increase of the GEC contract has been approved. First Task Order for Bus Base North should be 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	0.6	(0.4)
TOTAL	7.6	3.4	(4.2)
<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

<b>Scope</b>	Launch a Bus Rapid Transit (BRT) system along the I-405 corridor.
<b>Limits</b>	Approximately 37 miles between Lynnwood and Burien
<b>Alignment</b>	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.
<b>Stations</b>	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
<b>Phase</b>	Planning Phase 2 Environmental Review and Conceptual Engineering and Phase 3 Preliminary Engineering.
<b>Budget</b>	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.
<b>Schedule</b>	Target Date: 2026, not including parking elements



*Map of Project Alignment*

## Key Project Activities

- Developing partnering agreements and letters of concurrence.
- Working 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.
- Board selected the “Project to be Built”
- Board approved a Task Order with WSDOT for the Tukwila International Boulevard Station project development.

## 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 \$1.2M, of which \$0.2M for staff time, \$0.75M for project refinement activities, preliminary engineering and environmental activities in the PE phase, \$160K in the final design phase, \$38K in ROW phase and \$20K in third party 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	\$9.2	\$9.1	\$11.0	\$0.0
Preliminary Engineering	\$50.2	\$45.6	\$28.8	\$50.2	\$0.0
Final Design	\$16.3	\$0.9	\$0.4	\$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	\$118.9	\$24.4	\$152.2	\$0.0
Right-of-Way (ROW)	\$36.2	\$28.2	\$27.2	\$36.2	\$0.0
<b>Total</b>	<b>\$268.3</b>	<b>\$203.7</b>	<b>\$90.6</b>	<b>\$268.3</b>	<b>\$0.0</b>

## 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 is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The current phase, Conceptual Engineering/Environmental Review (Phase 2), commenced in Q2 2019 and is anticipated to complete in Q3 2021. In October 2020, the Sound Transit System Expansion Committee (SEC) authorized advancing the current Conceptual Engineering consultant's (WSP) Preliminary Engineering (Phase 3) SOW per Motion No. M2020-59: Authorizing the chief executive officer to execute a contract modification with WSP USA Inc. to exercise a contract option for Phase 3 preliminary engineering services for the I405 Bus Rapid Transit project. In November 2020, Notice to Proceed (NTP) was provided to WSP.

"Project to be Built" has been approved by ST Board this month.

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

Activity ID	Activity Name	Start	Finish	2019				2020				2021			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
STRIDE - I-405 Bus Rapid Transit (BRT)		01-Jan-18 A	31-Dec-23												
I-405 BRT - Preliminary Engineering		02-Mar-18 A	26-Nov-21												
I-405 BRT - Alternatives Analysis - Phase I		02-Mar-18 A	28-May-19 A												
I-405 BRT - Conceptual Engineering/Environmental Review - Phase II		08-Apr-19 A	12-Jul-21												
I-405 BRT - Preliminary Engineering - Phase III		22-Oct-20 A	26-Nov-21												
I-405 BRT - Final Design - GEC (General Engineering Contract)		31-Jul-19 A	17-Dec-20 A												
I-405 BRT - Final Design - Procurement (GEC)		31-Jul-19 A	17-Dec-20 A												
I-405 BRT - Final Design - Procurement (GEC)		31-Jul-19 A	17-Dec-20 A												
I-405 BRT - Final Design - Procurement (GEC)		31-Jul-19 A	17-Dec-20 A												
STRIDE - General Engineering Contract (GEC) - ST OC&S Sys. Exp/Board		31-Jul-19 A	07-Jan-20 A												
STRIDE - General Engineering Contract (GEC) - Procurement		31-Dec-19 A	17-Dec-20 A												
I-405 BRT - Construction		01-Jan-18 A	31-Dec-23												
I-405 BRT - Construction - South		01-Apr-19 A	31-Dec-23												
I-405 BRT - Construction Roadway - South		01-Apr-19 A	31-Dec-23												
I-405 BRT - WSDOT - I-405/NE 44th St. Interchange		01-Apr-19 A	31-Dec-23												
Construction		01-Apr-19 A	31-Dec-23												
WSDOT - Construction		01-Apr-19 A	31-Dec-23												
D/B - Design & Construction		01-Apr-19 A	31-Dec-23												
WSDOT I-405/NE 44th S. Interchange Ramps Available to ST		01-Apr-19 A	31-Dec-23												
I-405 BRT - Construction - North		01-Jan-18 A	28-Jan-21												
I-405 BRT - Construction Roadway - North		01-Jan-18 A	28-Jan-21												
I-405 BRT - WSDOT - Brickyard Station		22-Aug-19 A	01-May-20 A												
I-405 BRT - WSDOT - Brickyard		22-Aug-19 A	01-May-20 A												
ST-WSDOT Agreement - Conceptual Engineering Design (15%)		22-Aug-19 A	01-May-20 A												
I-405 BRT - WSDOT - NE 85th interchange and inline station		01-Jan-18 A	28-Jan-21												
Preliminary Engineering		01-Jan-18 A	28-Jan-21												

## 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.

- Bus Base North outreach planning kicked off
- Project update/ listserv email was sent with new project timeline Sept. 28

## 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 that just started with six executed task orders. Progress of GEC should accelerate as capacity's increase has been approved by ST Board in August 2021.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	17.0	13.7	(3.3)
Consultants	90.8	26.9	(63.9)
TOTAL	107.8	40.6	(67.2)

\* 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
R2021-08	Selecting the Project to be Built for the I-405 BRT	9/9/2021
M2021-51	Umbrella Agreement for Professional Services with WSDOT for Project Development of Tukwila International Boulevard Station/I-405	9/23/2021

# 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.

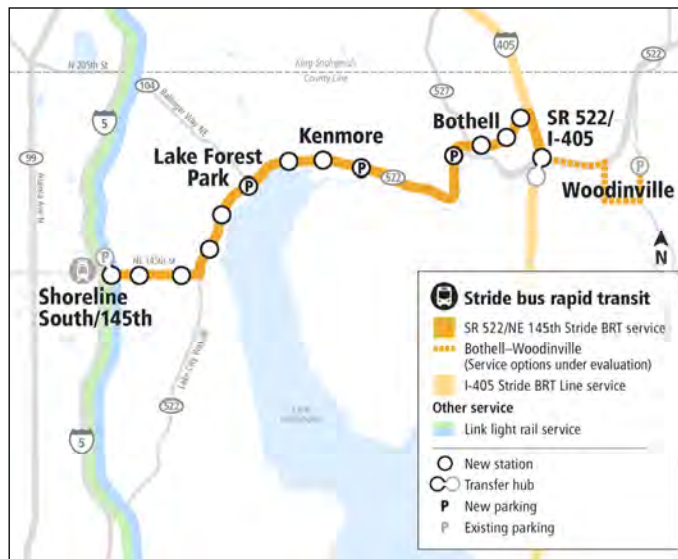
**Stations** Includes 14 BRT stations. Additional parking is included in Lake Forest Park, Kenmore, and Bothell.

**Systems** BRT Operations & Transit Signal Priority

**Phase** Phase 3 Preliminary Engineering

**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.
- Interagency Group is focused on identifying station access projects.
- Reviewing realignment impacts to schedule and project elements.
- First property acquisition package approved by the Board.”
- Board selected the “Project to be Built.”

### 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 \$1.1M. This is primarily due to progress on Bothell construction for \$0.9M. Sound Transit staff time accounts for \$120K, progress on final design for \$100K with the GEC contract and in ROW for \$20K.

### 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	\$6.6	\$6.6	\$9.1	\$0.0
Preliminary Engineering	\$16.9	\$15.3	\$15.0	\$16.9	\$0.0
Final Design	\$19.8	\$0.7	\$0.3	\$19.8	\$0.0
Construction Services	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
3rd Party Agreements	16.4	\$0.7	\$0.5	\$11.4	\$0.0
Construction	\$33.7	\$25.0	\$21.9	\$38.7	\$0.0
Right-of-Way (ROW)	\$52.1	\$0.7	\$0.6	\$52.1	\$0.0
<b>Total</b>	<b>\$148.6</b>	<b>\$49.0</b>	<b>\$44.9</b>	<b>\$148.6</b>	<b>\$0.0</b>

### 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 is currently making schedule adjustments in accordance with this direction. At this time, only near-term schedule activities or those for which a funding agreement, contract, statement of work, or similar commitment has been executed are shown.

The SR 522/NE 145th BRT Project Refinement Phase completed in Q2 2019. Conceptual Engineering/Environmental Review, commenced in Q2 2019 and this phase completed in Q2 2021. The Preliminary Engineering phase is anticipated to complete in Q3 2021. The 30% design has been completed for the NE 145th, Lake Forest Park and Kenmore segments, and is being finalized for the Bothell segment. All segments have been reviewed by the local Authorities Having Jurisdiction (AHJ) and/or Sound Transit's third party partners, including WSDOT and others. The SEPA expanded checklist work was completed in Q1 2021.

"Project to be Built" has been approved by ST Board this month.

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

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

Activity ID	Activity Name	Start	Finish	2019			2020			2021		
				Q	Q	Q	Q	Q	Q	Q	Q	Q
STRIDE - SR 522/NE 145th Bus Rapid Transit (BRT)		26-Feb-18 A	31-Aug-21									
SR 522/NE 145th BRT - Preliminary Engineering		26-Feb-18 A	25-Jun-21									
SR 522/NE 145th BRT - Final Design		31-Jul-19 A	17-Dec-20 A									
SR 522/NE 145th BRT - Final Design - GEC (General Engineering Contract)		31-Jul-19 A	17-Dec-20 A									
SR522/NE 145th BRT - Final Design - Procurement (GEC)		31-Jul-19 A	17-Dec-20 A									
SR522/NE 145th BRT - Final Design - Procurement (GEC)		31-Jul-19 A	17-Dec-20 A									
STRIDE - General Engineering Contract (GEC) - ST CCB/Sys Exp/Board		31-Jul-19 A	07-Jan-20 A									
STRIDE - General Engineering Contract (GEC) - Procurement		31-Dec-19 A	17-Dec-20 A									
SR 522/NE 145th BRT - Construction		07-Jan-19 A	31-Aug-21									
SR 522/NE 145th BRT - Construction - Roadway		07-Jan-19 A	31-Aug-21									
SR 522/NE 145th BRT - City of Bothell - Bothell Rwy - Bothell Stage 3 - Construction - DBB		07-Jan-19 A	31-Aug-21									
City of Bothell SR-522 BAT Lanes Project (Bothell Stage 3)		07-Jan-19 A	31-Aug-21									
Construction		07-Jan-19 A	31-Aug-21									
Construction Procurement		07-Jan-19 A	01-Apr-19 A									
Civil Construction		01-Apr-19 A	31-Aug-21									

## 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.

- One property owner meeting
- Worked with Property acquisitions team to prepare for first package of properties going to the Board
- Sent out project update/email with new timeline September 28



# Regional Express & STRIDE SR 522/NE 145th Street Bus Rapid Transit



## 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 with six executed task orders. 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	10.3	(4.9)
Consultants	75.1	14.4	(60.7)
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
R2021-09	Real Property Acquisition for STRIDE SR522 Project	9/23/2021
R2021-07	Selecting the Project to be Built for the SR-522/NE 145th BRT project	9/23/2021

# Progress Report Capital Program Support

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# 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
<b>FEDERAL TRANSIT AUTHORITY</b>					
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
<b>TOTAL FEDERAL TRANSIT AUTHORITY</b>			<b>2,224,148,821</b>		<b>313,095,262</b>
<b>OTHER FEDERAL</b>					
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
<b>TOTAL OTHER FEDERAL</b>			<b>2,620,689</b>		<b>2,469,420</b>
<b>STATE</b>					
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
<b>TOTAL STATE</b>			<b>697,000</b>		<b>196,999</b>
<b>TOTAL ALL GRANTS</b>			<b>2,227,466,510</b>		<b>315,761,681</b>

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 Q3 2021 Accomplishments and Activities**

- 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

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

# Acronyms

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