

# Agency Progress Report Capital Programs



Stride BRT Environmental Remediation Work at South Renton Transit Center

August | 2022



**Editor's Note**

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

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

We always appreciate any suggestions you might have for future refinements to this document. To make suggestions, please contact Aniekan Usoro at (206) 398-5000.

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

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# Agency Progress Report

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# Sound Transit Current Service

**Link Light Rail**

- Link 1 Line**  
(Northgate–Angle Lake)
- Link T Line**  
(Tacoma Dome – Theater District)

**Sounder**

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

**ST Express**

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

**Icons:**

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

525-5151



# Sound Transit future service



### **Action Plans Seek to Reduce Link Project Delays**

On August 18, staff presented a briefing to the Board’s System Expansion detailing agency efforts to identify new opening dates for current Link construction projects, as Sound Transit works with contractors to address construction challenges.

Since April, Sound Transit has been flagging delays affecting East Link, Lynnwood, Federal Way and Downtown Redmond Link extensions, including current issues and trends that are global in nature and others that are local and project specific, including the concrete strike last Spring.

Staff reported that the most recent assessments predict the Lynnwood and Redmond projects, previously scheduled for mid-2024 completion, may be delayed by four to six months.

While it is too early to accurately assess the delay on the Federal Way Link extension project, staff reported that project completion may extend a number of months into 2025 rather than late 2024.

On East Link, ongoing work to address construction challenges is projected to delay the project by at least a year beyond the previously scheduled mid-2023 opening.

The East Link project is facing challenges because our investigation into problems with cast-in-place concrete plinths supporting the tracks has revealed broader challenges. These include issues with mortar pads, rebar placements and track fasteners, which the contractor has agreed to fix by re-casting the plinths to ensure the long-term reliability and safety of the extension.

On the Federal Way Link Extension, the previously mentioned ground stability issue involves a slope adjacent to I-5 that recently experienced a localized failure. On July 19, approximately 200 linear feet of embankment slid downslope by approximately nine feet, requiring a roughly three-day precautionary lane closure on southbound I-5. The slope has been temporarily stabilized, and Sound Transit and its design-build contractor are working with the Washington State **Department of Transportation** on permanent design solutions that will address a liquefiable layer of soil that has been identified fairly deep below the light rail alignment. Work to identify solutions will remain focused on minimizing delay to the project.

Staff assured the Board that work is moving forward in two areas to support updating the projects’ opening timeframes.

First: Staff is Implementing action plans to resolve project risks and challenges

Second: Staff is Conducting a programmatic risk assessment.

### **Columbia City Station Safety Work Completed**

The agency completed its scheduled two weeks of “Future Ready” project work at Columbia City Station six days early, allowing us to return to normal operations on Saturday, August 27.

Starting on August 19, the station was closed to remove the existing platform tiles, so we could replace them with new, safer ones, eliminating tripping hazards and safety risks from cracking tiles.

The work at the Columbia City station was the first in a series of "Future Ready" projects Sound Transit will undertake before the Link system expands from 26 to 58 miles within the next few years, which will prevent impacts to far greater numbers of passengers.

## First Shipment of New Sounder Cars Arrive

The first two of 11 new cars for the Sounder S Line have arrived in Seattle this month. The two new cars, one cab and one coach, are part of an 11-car order approved by the Sound Transit Board in 2020 totaling three passenger cab cars and eight coach cars. All the cars were manufactured by Alstom (formerly Bombardier, which was acquired in 2021) under a \$46.5 million contract.

A second shipment of two more cars is expected in mid-September.

The 11 new cars will increase the Sounder passenger car fleet to 78, which includes both cab and coach cars.

All the cars being purchased include the latest safety design features known as Crash Energy Management (CEM), a technology designed to absorb energy in the event of a collision. Main elements include an "energy absorption zone" at each end of the car and couplers that can absorb energy between cars. Cab cars also feature a full-width windshield for enhanced sightlines.

All the new cars will go through inspections, systems testing and commissioning before being put in service. The first of the new cars are expected to be in service this fall.

# Progress Report

# Link Light Rail Program



Link Light Rail leaving Mount Baker Station

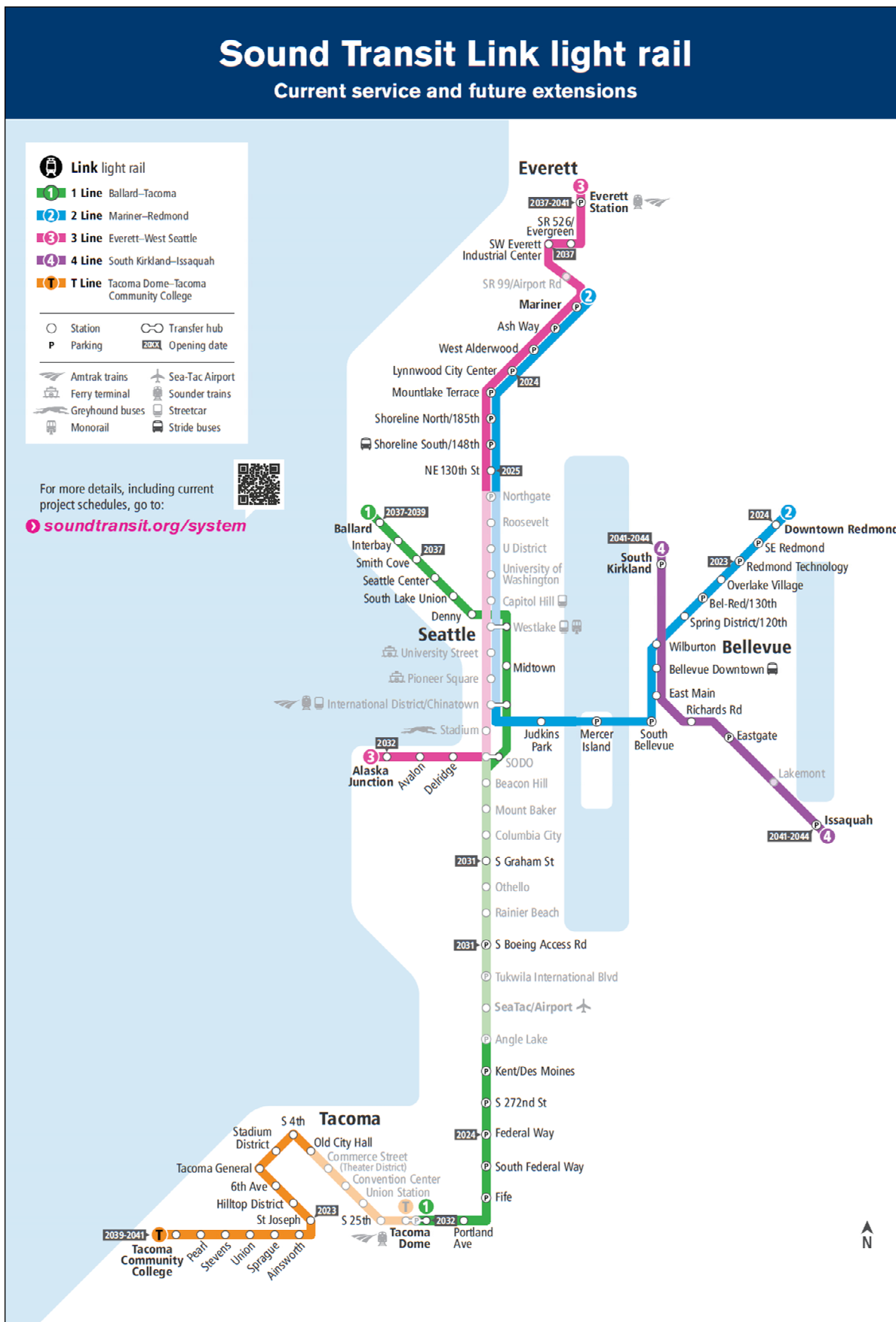
August | 2022



Prepared by Project Controls | Portfolio Services Office



# Link Light Rail Program Overview



# Link Light Rail Program Overview



**Downtown Redmond Link Extension:** This project builds a new light rail from the Redmond Technology Station to downtown Redmond by 2024. Light rail will travel along SR-520 with two new stations in southeast Redmond, at Marymoor Park, and downtown Redmond.

**East Link Extension:** East Link Extension expands light rail to East King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond, with stations serving Rainier Avenue/I-90, Mercer Island, South Bellevue, Downtown Bellevue, Overlake Hospital, the Bel-Red corridor, Overlake Village and the Redmond Technology Center (formerly Overlake Transit Center).

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

**Federal Way Link Extension:** The Federal Way Link Extension adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center. The extension generally parallels SR 99 and I-5 freeway with stations at Kent/Des Moines, South 272nd Star Lake park-and-ride and the Federal Way Transit Center.

**Hilltop Tacoma Link Extension:** The Hilltop Tacoma Link Extension is a 2.4 mile extension of the existing Tacoma Link system from the Theater District in downtown Tacoma to the Hilltop neighborhood. The extension will travel at-grade along Stadium Way, North 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.

**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.

**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	\$1,010.4	\$633.0	\$1,530.0	\$0.0
East Link Extension	\$3,677.2	\$3,250.2	\$3,189.4	\$3,677.1	\$0.0
Everett Link Extension	\$187.9	\$23.3	\$16.9	\$187.9	\$0.0
Federal Way Link Extension	\$2,451.5	\$1,870.2	\$1,225.3	\$2,451.5	\$0.0
Hilltop Tacoma Link Extension	\$282.7	\$253.6	\$241.0	\$282.7	\$0.0
Light Rail Vehicle (LRV) Fleet Expansion	\$740.7	\$687.0	\$455.6	\$740.7	\$0.0
Lynnwood Link Extension	\$2,771.6	\$2,486.3	\$1,962.1	\$2,771.6	\$0.0
NE 130th Street Infill Station	\$240.2	\$40.5	\$26.0	\$240.2	\$0.0
Tacoma Dome Link Extension	\$126.4	\$103.6	\$59.3	\$126.4	\$0.0
West Seattle and Ballard Link Extensions	\$286.7	\$140.0	\$128.2	\$286.7	\$0.0
<b>Total</b>	<b>\$12,295.0</b>	<b>\$9,865.2</b>	<b>\$7,936.8</b>	<b>\$12,295.0</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Link Light Rail Program Overview





## Program Schedule of Baseline Projects

Baseline projects are summarized below. Please see the individual project reports for further details, including schedules for pre-baselined projects.

	'20	'21	'22	'23	'24	'25
<b>LINK LIGHT RAIL PROGRAM</b>						
Downtown Redmond Link Extension						
East Link Extension						
Federal Way Link Extension						
Hilltop Tacoma Link Extension						
Light Rail Vehicle (LRV) Fleet Expansion						
Lynnwood Link Extension						
Northgate Link Extension						

**KEY:**

-  **Final Design** (hatched indicates possible Design-Build; incl procurement)
-  **Construction** (thin hatched is procurement; incl Startup/Testing/Pre-Revenue/Float)

# 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: Marymoor Village and Downtown Redmond

##### Systems

Signals, traction electrification, and communications (SCADA)

##### Phase

Construction

##### Budget

\$1.53 Billion (Baselined October 2018)

##### Schedule

Revenue Service: December 31, 2024



Map of Downtown Redmond Link Extension

### Key Project Activities

- Re-opened SR 520 WB on-ramp to traffic and Installed Bear Creek pedestrian bridge.
- Continued to close out items in the Letter of Conformance for the Milestone Submittals and continue review of Certifiable Items List Documentation of SSIMS.
- Working with the design-builder to find efficiencies in the Notice of Design Change/ Field Design Change process and updating the escalation ladder for WSDOT/ST Operations and Maintenance items for projects and Umbrella agreement.
- Working with Rail Activation to detail out activities supporting testing, commissioning and transition deliverable.
- Developing agreement letter with City of Redmond on tree mitigation and finalizing quantities for mitigation including Fee in Lieu. Working with PSE and the City of Redmond to develop proposed “as-built” easement for permanent power for Downtown Redmond Station.
- Coordinating with PSE for service connection work.
- Observed Design Test verification of the Neeltran Transformer at various facilities in Public Address system and Community Transit.

### Closely Monitored Issues

- Utility Relocation work along NE 70th.
- PSE Permanent Power supply: Design and construction of new services and dedicated, fiber optic network to monitor and manage power supply.
- Design-Builder: The Design-Builder is reporting concern on future crew availability and supply chain impacts. DRLE team continues to look for opportunities to mitigate potential impacts.
- Labor and Industries support for system building design review. L&I has staffing shortages that may impact the duration of their review and inspection.

# Link Light Rail Downtown Redmond Link Extension



## Project Cost Summary

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

In this period, DRLE incurred approximately \$28.9M of expenditure. Most of the expenditures incurred primarily in the construction phase for progression of Design-Build scope. The remaining work phases made up the balance, particularly in Construction Services and Administration. Total cumulative expenditure to date rose from \$604.1M to \$633M.

### 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	\$22.0	\$21.6	\$77.0	\$0.0
Preliminary Engineering	\$23.0	\$23.0	\$19.6	\$19.4	\$23.0	\$0.0
Final Design	\$4.5	\$4.5	\$1.4	\$1.1	\$4.5	\$0.0
Construction Services	\$58.0	\$63.6	\$49.5	\$27.8	\$63.6	\$0.0
Third Party Agreements	\$17.0	\$17.0	\$10.7	\$7.3	\$17.0	\$0.0
Construction	\$1,151.5	\$1,145.9	\$798.6	\$448.9	\$1,145.9	\$0.0
ROW	\$199.0	\$199.0	\$108.6	\$107.0	\$199.0	\$0.0
<b>Total</b>	<b>\$1,530.0</b>	<b>\$1,530.0</b>	<b>\$1,010.4</b>	<b>\$633.0</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	\$247.9	\$145.0	\$483.3	\$150.9
20 Stations	\$261.9	\$261.9	\$196.9	\$95.2	\$188.3	(\$73.6)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$287.1	\$288.1	\$206.7	\$99.8	\$231.5	(\$56.6)
50 Systems	\$108.6	\$103.2	\$70.6	\$34.3	\$78.8	(\$24.4)
<b>Construction Subtotal (10 - 50)</b>	<b>\$990.0</b>	<b>\$985.6</b>	<b>\$722.1</b>	<b>\$374.3</b>	<b>\$981.9</b>	<b>(\$3.8)</b>
60 Row, Land	\$168.5	\$168.5	\$108.6	\$107.0	\$168.5	\$0.0
70 Vehicles (Non-Revenue)	\$4.1	\$4.1	\$0.6	\$0.3	\$4.1	\$0.0
80 Professional Services	\$289.3	\$293.6	\$179.2	\$151.4	\$297.4	\$3.8
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>\$1,010.4</b>	<b>\$633.0</b>	<b>\$1,530.0</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.



# Link Light Rail Downtown Redmond Link Extension

## Risk Management

The following are the current top risk areas that may impact project cost and schedule:

- **Externalities:** COVID-19 (supply chain interruptions, inefficiencies, labor availability); Inflationary pressure on construction supplies and materials.
- **Organizational Capacity:** Opening three other major light rail extensions in 2024, agency staffing and operating labor capacity; developing and mobilizing resources and coordinating system integration and start up activities across multiple extensions concurrently, market shortage of qualified construction labor.
- **Late Design Changes During Construction:** Utilities; threat and vulnerability demands; preliminary hazard designs; owner changes.
- **Permitting and 3<sup>rd</sup> Party Requirements:** Construction adjacent to SR-520; flood-prone areas by Sammamish River and Bear Creek; archaeological discovery; construction impacts to traffic; protracted negotiation with third parties; interfacing with private utilities for utility relocations and power service.
- **Unanticipated and Differing Site Conditions:** Geotechnical conditions could increase cost and delay schedule.



*Artist rendering of Downtown Redmond Station platform (above) and bird eye's view current progress (below)*

# Link Light Rail Downtown Redmond Link Extension



## Contingency Management

The project baseline included a total contingency of \$435.8M. The total project contingency balance stands at \$233.6M. 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 \$4.2M. 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 decreased to executed changes on construction Contract. The AC balance is at \$151.1M.

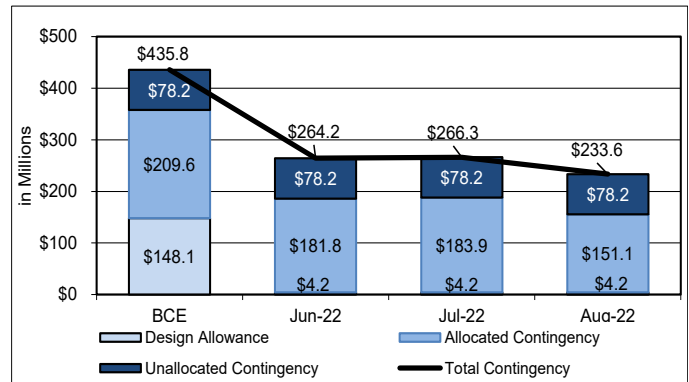
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$78.2M.

### Contingency Status

Contingency Type	Baseline		Current Status	
	Amount	% of Total Budget	Amount Remaining	% of Work Remaining
Design Allowance	\$148.1	9.7%	\$4.2	0.5%
Allocated Contingency	\$209.6	13.7%	\$151.1	16.8%
Unallocated Contingency	\$78.2	5.1%	\$78.2	8.7%
<b>Total</b>	<b>\$435.8</b>	<b>28.5%</b>	<b>\$233.6</b>	<b>26.0%</b>

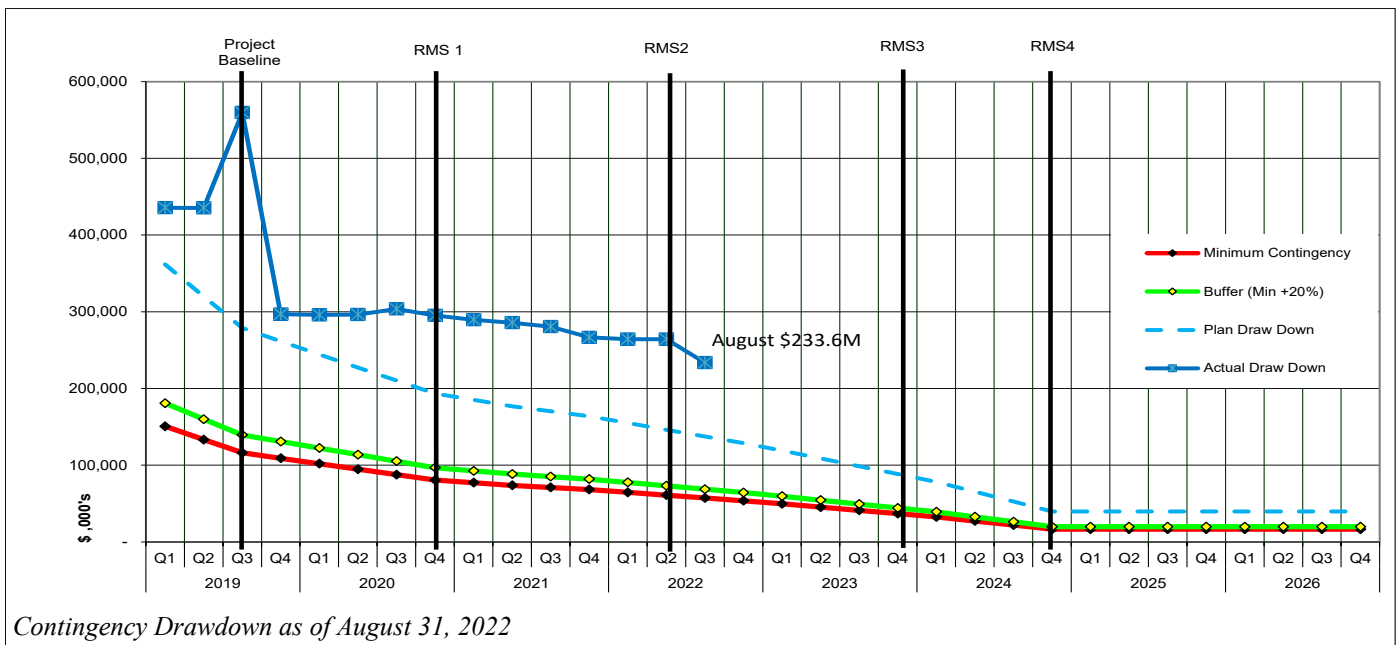
Table figures are shown in millions.

### Contingency by Type



## Contingency Drawdown

DRLE project’s total contingency drawdown trends better than planned and remains above the baseline drawdown projection. The trend is well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. August’s contingency drawdown was \$32.7M primarily due to a global settlement with the DB contractor.



# Link Light Rail Downtown Redmond Link Extension



## Project Schedule

Weighted percent complete of the major construction contracts is calculated at 56.2%.

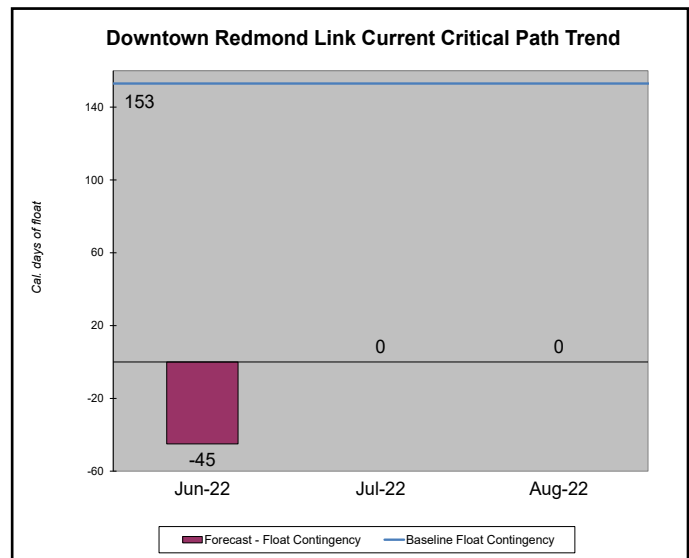
The August update is presented below. The contractor continued placing concrete throughout the alignment, working on soil nail walls, MSE panels, and the box structure for the 60th cut & cover tunnel, diaphragms and decks for elevated guideway, decks and shear walls at the Marymoor Village Garage, and off- and on-ramp construction for the new SR-520 interchange.

Activity Name	Start	Finish	2023				2024					
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Downtown Redmond Link Extension - Construction</b>	09-Sep-19A	31-Dec-24										
<b>R200 - Downtown Redmond Link Extension - Design-Build Contract</b>	09-Sep-19A	31-Dec-24										
<b>CONTRACT MILESTONES &amp; INCENTIVES</b>	09-Sep-19A	31-Dec-24										
NTP (9/9/19)	09-Sep-19A											
MS-1 Project Ready for Pre-Revenue Operations (5/21/24) PLUS 5 MONTHS		01-Oct-24*										
MS-2 Acceptance of All Work - Ready for Revenue Service (8/19/24) PLUS 5 MONTHS		31-Dec-24*										
<b>OWNER FLOAT &amp; PRE-REVENUE OPERATIONS</b>	20-Jul-24	30-Dec-24										
UNUSUALLY SEVERE WEATHER	27-Dec-21 A	19-Jul-24										
<b>GENERAL CONDITIONS</b>	09-Sep-19A	31-Jul-24										
<b>RIGHT OF WAY and EARLY WORK/EXPLORATORY</b>	09-Sep-19A	12-Jul-22 A										
<b>PRE-CONSTRUCTION</b>	09-Sep-19A	02-Sep-21 A										
<b>ALL CONSTRUCTION ACTIVITIES</b>	01-Jul-20A	05-Nov-24										
OFF GUIDEWAY ROADWORK and RESTORATION	01-Sep-20A	05-Nov-24										
GUIDEWAY - ESTABLISH CORRIDOR	01-Jul-20 A	04-Mar-24										
LINEAR GUIDEWAY WORK	07-Jan-22 A	19-Apr-24										
<b>OCC</b>	28-Sep-23	28-Sep-23										
<b>PUNCHLIST</b>	29-Feb-24	29-Apr-24										
<b>TESTING INTEGRATION / REVENUE SERVICES</b>	16-Dec-22	18-Jul-24										
<b>CLOSEOUT</b>	01-Sep-22	31-Dec-24										
<b>COMMISSIONING</b>	01-Sep-22	05-Sep-24										
<b>SAFETY &amp; SECURITY CERTIFICATION</b>	03-Jul-20A	30-Dec-24										
<b>Downtown Redmond Link Extension - Rail Activation/Closeout</b>	22-Jun-22A	31-Dec-24										
Systems Integration & Testing	22-Jun-22A	01-Oct-24										
Safety and Security Certification	22-Sep-23	30-Dec-24										
<b>Pre-Revenue Service</b>	02-Oct-24	30-Dec-24										
Pre-Revenue Operations	02-Oct-24	30-Dec-24										
<b>Revenue Service/Project Float</b>	31-Dec-24	31-Dec-24										
Downtown Redmond Link Revenue Service (Baseline 31-Dec-24)		31-Dec-24*										
Downtown Redmond Link Project Float (Baseline 153 Days)	31-Dec-24	31-Dec-24										

## Project Float

DRLE was baselined with 153 days of project float. After negotiating a settlement with the contractor to resolve impacts from the recent concrete strike and mitigate schedule impacts where possible, the project is forecasting to finish by the baselined finish date of December 31, 2024. While the project float value is at 0 days, there is an additional 104 days of float within the R200 contract.

Current project completion target of the end of 2024 is currently being evaluated as part of a program-wide risk assessment. Results of that assessment will be available in Q4 2022.

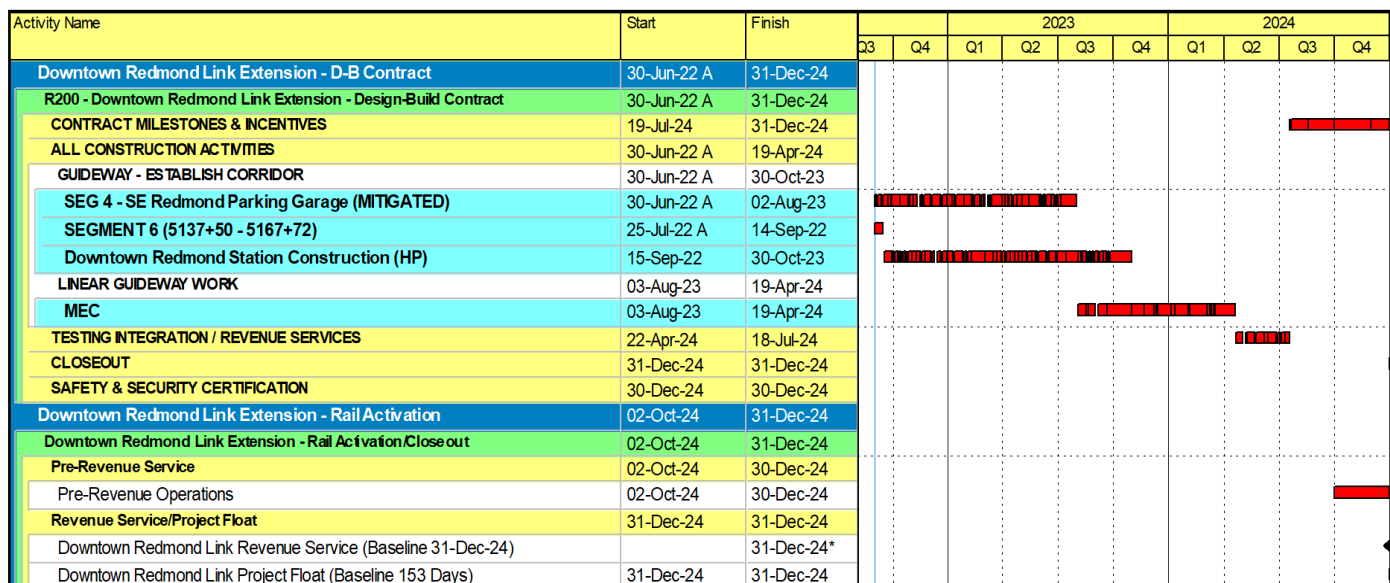


# Link Light Rail Downtown Redmond Link Extension



## Critical Path Analysis

The critical path for R200 runs concurrently through Marymoor Village Parking Garage and the Downtown Guideway Structure; then into Downtown Redmond Station civil and systems construction; then into testing and closeout.



## Right-of-Way

The Right-of-Way effort for this project involves the acquisition of a range of property interests which includes compensable (e.g. fee acquisitions, guideway easements, permanent easements 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	94	93	73	1579	1574

\*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.

Total Acquisitions: Defined as parcels recognizing only land, not owners

Board Approved: Based on parcels and properties (including multi-unit acquisitions)

Offers/Closings: Based on inclusive offers made to separate owners and interest holders

Relocations: Based on number of affected individuals, in the case of DRLE this includes relocation of storage units by impacted individuals.

# Link Light Rail Downtown Redmond Link Extension



## Community Engagement

- Ongoing engagement with the public and businesses on potential construction impacts, with specific focus on property owners and tenants regarding the increasing construction activities.
- Ongoing conversations with 10 homeowners north of SE 51st Street regarding no cost easement along future sound wall.
- Extension of NE 60th Street closure to vehicular traffic.
- Ongoing communications with City of Redmond and Lake Washington School District
- Ongoing coordination with WSDOT, Microsoft, and the City of Redmond to communicate reopening's of 40th, 60th, and SR 202 to WB SR 520 onramp.

## 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 variance in the utilization of consultants is due to the fact that the design-build project management team are being prudently mobilized. The variance on ST Staff is probably due to lower than anticipated staff cross charges. Effectively these variance gaps should trend closer to plan average over time; however, due to fluidity of the situation with COVID-19, it is hard to predict how the plan will unfold.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	29.4	25.0	4.5
Consultants	31.6	24.9	6.7
TOTAL	61.0	49.9	11.2

\* An FTE is the equivalent of 1920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	



# Link Light Rail Downtown Redmond Link Extension



## Construction Safety

Data/ Measure	August 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	7	15
Days Away From Work Cases	1	1	1
Total Days Away From Work	1	1	1
First Aid Cases	8	34	51
Reported Near Mishaps	0	6	16
Average Number of Employees on Worksite	568	-	-
<b>Total # of Hours (GC &amp; Subs)</b>	71,627	445,687	842,758
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	5.58	3.14	3.56
LTI Rate	2.79	0.45	0.24
<b>Recordable National Average</b>	<b>2.50</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.20</b>		
<b>LTI WA State Average</b>	<b>2.90</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 Downtown Redmond Link Extension



## Contract R200 - DRLE Design Build

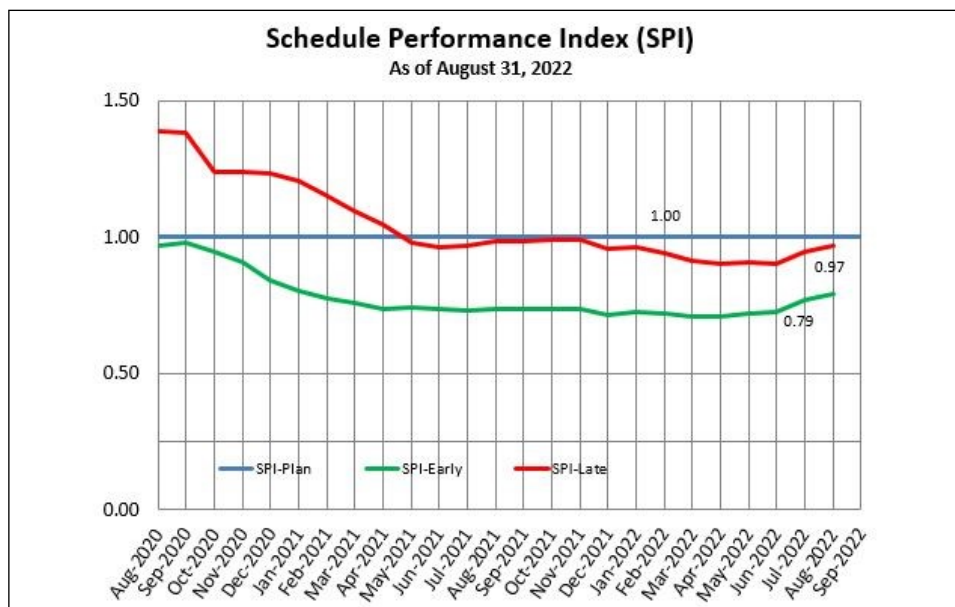
### Current Progress

#### Construction:

- Sammamish River Crossing: Continued corrosion control, grounding installation, formwork and rebar installation and installing emergency railing at Deck Guideway.
- Sammamish River to Marymoor Station: Continued construction of ballast wall and moment slab and Bioswale formwork. Rebar and concrete along Marymoor Park.
- Marymoor Station and Garage: Continued Installation of manholes and tying in TPSS duct bank to manholes. Backfill is inside platform foundation and rough-in of utility conduit inside station stem walls.
- SR-520/SR-202 Interchange: Completed pave and compression seal installation light crossing duct bank of on-ramp. Opened the 202/520 on-ramp to through traffic.
- Bear Creek to Downtown Redmond: Completed Bear Creek ped-bridge precast panel installation and grouting activities. Continued installation of cathodic protection, grounding and rebar installation on decks slabs on aerial guideway through Downtown Redmond.
- Cut and Cover Construction: Continued form and rebar footing and wall at pedestrian walkway and Completed Vibration slab at 40th street C&C. Completed storm drain installation at street level, tie-in to CIP walls and ground water drainage installation at 51st Street C&C. Completed concrete placement at South Headwall, backfill at East and West Walls and installation drainage mat at 60th C&C.

### Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.79 for this period, and the late SPI is at 0.97. The contractor's production rate hasn't met the SPI due to the impact of Teamster Local 174 Strike and labor availability and Supply chain impact. In addition Roadway Restoration and associated activities throughout the project have not yet started due to heavy access needs for the guideway construction.



# Link Light Rail Downtown Redmond Link Extension



## Next Period's Activities

- Continue NE 40th C&C construction, work on guideway deck along SR-520 and construction of vibration slabs walls. Continue 60th Structure construction, UTB superstructure construction and MSE Wall and Sound Wall post and panel construction.
- SR-520 off-ramp: Continue traffic control, construction of the off-ramp, form rebar and concrete placement of MSE Walls.
- Continue pour, cure and strip approach slabs, pig seal and dry finish walls on Bear Creek Ped-bridge.

## Closely Monitored Issues

- Recovery from Teamster strike that is impacting progress of work including concrete delivery.
- Design-Builder is reporting concern on future crew availability and supply chain impacts. DRLE team continues to look for opportunities to mitigate potential impacts.
- PSE Permanent Power for TPSS: PSE progresses towards constructing the power services and progress on the PSE required fiber optic connection to the TPSS services to monitor and manage the power supply.

## Cost Summary

Present Financial Status	Amount
<b>R200 Contractor – Stacy Witbeck Kuney, a Joint Venture</b>	
Original Contract Value	\$ 719,936,000
Change Order Value**	\$ 56,297,969
Current Contract Value	\$ 776,233,969
Total Actual Cost (Incurred to Date)	\$ 435,555,098
Percent Complete	56.81%
Alternative Concept Allowance	\$ 30,208,071
Authorized Contingency	\$ 92,718,529
Contingency Drawdown**	\$ 56,297,969
*Contingency Index	1.13

*\*Excludes Betterments*



*Pave and get ready to open 202/520 on-ramp to  
through traffic*

# 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 King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond.

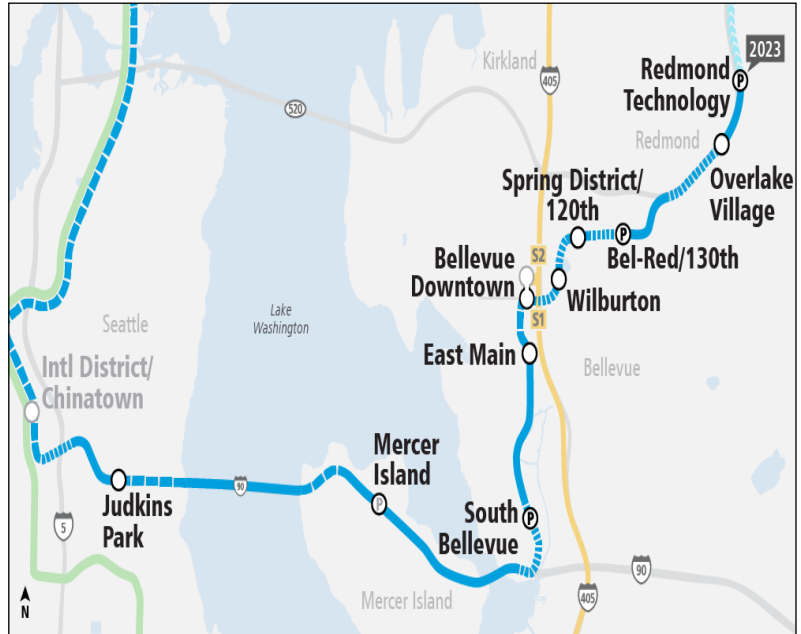
**Stations** Judkins Park (JPS), Mercer Island (MIS), South Bellevue, East Main, Bellevue Downtown (BDS), Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village (OVS) and Redmond Technology (RTS).

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

**Phase** Construction

**Budget** \$3.68 Billion (Baseline April 2015)

**Schedule** Revenue Service: June 2023



Map of East Link Extension Alignment.

## Key Project Activities

- **Seattle to South Bellevue (E130):** Ongoing non-conforming track plinth reconstruction from IDS to East Channel Bridge; continue cathodic protection re/de-energization system due to WSDOT anchor cable replacement; progress punch list and commissioning activities at JPS and Mount Baker Tunnel. Ongoing Nylon Insert replacement on the Floating Bridge segment.
- **Mercer Island Transit Integration (E135):** Demolition of old concrete apron, curb and gutter segment, and asphalt driveway of SW of SE 24<sup>th</sup> St.; completed trenching and placement of electrical and illumination conduits backfilling and compaction, grading and compaction, and concrete placement of ADA Ramp on N. Mercer Way; completed storm water trench excavation and catch basin placement at 80<sup>th</sup> Ave SE.
- **South Bellevue (E320):** Continued non-conforming track remediation; progress remaining contract-wide punch list and maintenance activities.
- **Downtown Bellevue to Spring District (E335):** Continued jet fan commissioning. Installed HVAC, elevator monitoring, gate operator and drive way gate, power and communication at Bellevue Downtown Station.
- **Bel-Red (E340):** Completed Rail-to-Earth (RTE) diagnostic testing with Engineer Of Record's approval. Continued repairs in various areas in the embedded track sections. Completing the corridor landscaping and station punch list items.
- **SR520 to Redmond Technology Station (E360):** RTS Garage ramp precast beam dry finish, bus loop paving and panel pour, decorative concrete wall demo and form work. Lighting and fire alarm work, level 2/3 MEP roughen and painting, install east exterior cladding. Level 4 ponding repairs and traffic coatings; all other sites – continued punch list, NCR, and close-out documentation.
- **Systems (E750):** Continued submittals, component design/manufacturing/fabrication. Progressed communication installations at E130 to E360; performed local testing on communications and signaling equipment. Installation of feeder cables for energization and testing.

# Link Light Rail East Link Extension



## Closely Monitored Issues

- Repair work associated with contractor quality issues at the RTS garage, tunnel ventilation testing at downtown Bellevue tunnel, and E130 track plinths.
- Design corrections, scope additions, contractor performance issues, COVID-19, and the concrete strike have contributed to completion delays of the civil contracts, necessitating unanticipated overlap with systems work
- Contractor claims on E335 and E340 are measurable; E750 impacts are tied to E130's delay
- Staff and consultant attrition and/or loss to other projects increases the risk of oversight "blind spots"
- Operational readiness - operational capacity to support transition from construction and then to operate and maintain Link.

## 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 is about \$45.9M, the total expenditure to date decrease from roughly \$3.143B to \$3.189.4B. Project commitment remains at approximately \$3.25B with all major construction contracts in place.

### 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	\$127.0	\$126.4	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.8	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$251.4	\$244.6	\$283.0	\$0.0
Construction Services	\$257.5	\$254.6	\$217.8	\$213.2	\$254.6	\$2.8
3rd Party Agreements	\$52.2	\$52.2	\$38.3	\$35.5	\$52.2	\$0.0
Construction	\$2,544.3	\$2,547.1	\$2,280.7	\$2,235.1	\$2,547.1	(\$2.8)
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$298.2	\$298.2	\$280.1	\$279.7	\$298.2	(\$0.0)
<b>Total</b>	<b>\$3,677.2</b>	<b>\$3,677.2</b>	<b>\$3,250.2</b>	<b>\$3,189.4</b>	<b>\$3,677.2</b>	<b>(\$0.0)</b>

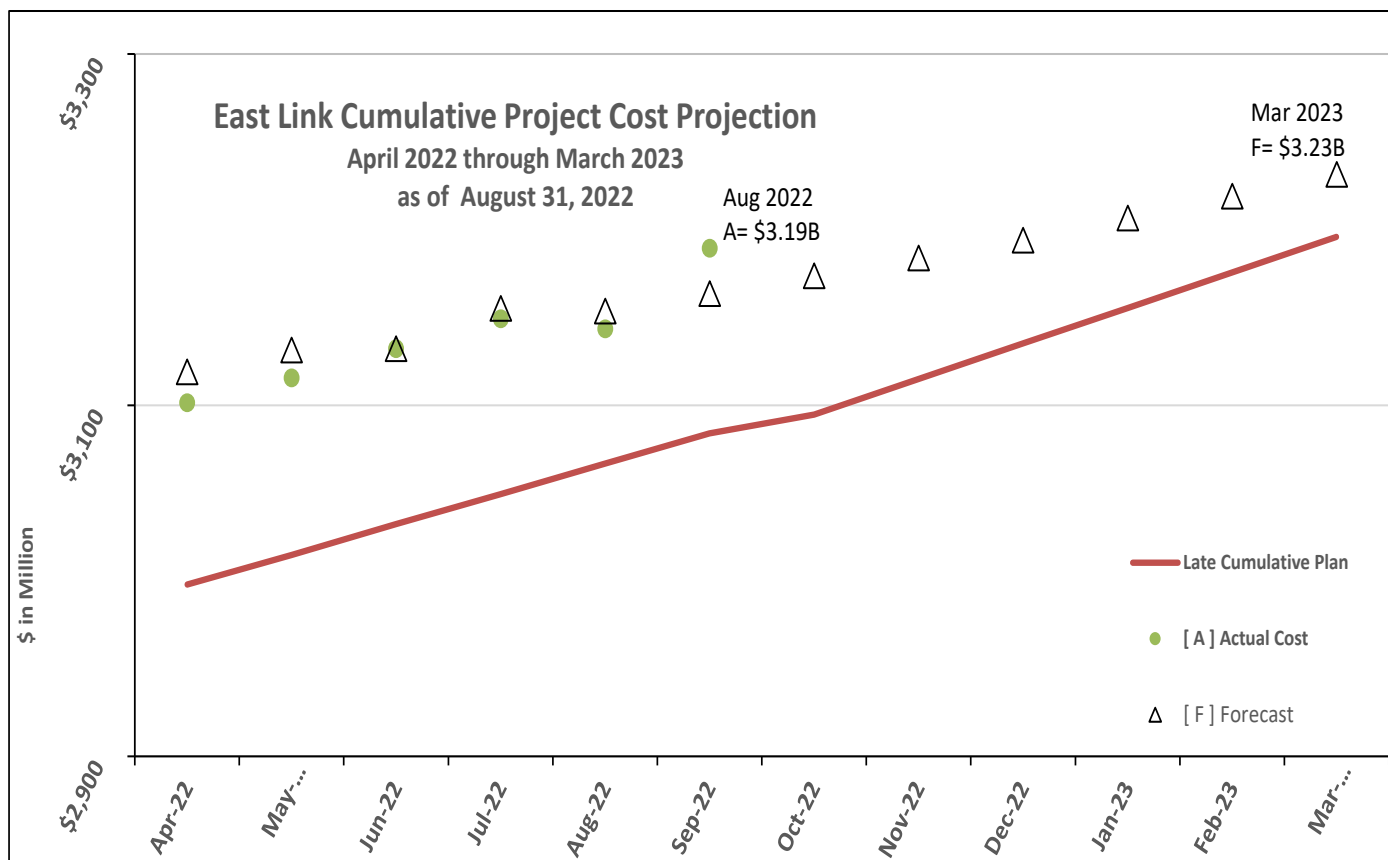
### Cost Summary by SCC

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	\$941.5	\$906.2	\$943.1	\$936.4	(\$191.8)
20 Stations	\$397.7	\$481.1	\$468.2	\$453.2	\$487.6	(\$89.9)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$574.1	\$506.8	\$478.4	\$568.6	\$239.9
50 Systems	\$353.8	\$379.9	\$357.5	\$324.5	\$383.2	(\$29.4)
<b>Construction Subtotal (10 - 50)</b>	<b>\$2,304.6</b>	<b>\$2,376.5</b>	<b>\$2,238.7</b>	<b>\$2,199.3</b>	<b>\$2,375.8</b>	<b>(\$71.2)</b>
60 Row, Land	\$288.5	\$288.5	\$280.1	\$279.7	\$288.5	\$0.0
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$2.3	\$1.0	\$2.8	\$0.0
80 Professional Services	\$898.4	\$885.3	\$729.1	\$709.5	\$886.1	\$12.3
90 Unallocated Contingency	\$182.9	\$124.0	\$0.0	\$0.0	\$124.0	\$58.8
<b>Total (10 - 90)</b>	<b>\$3,677.2</b>	<b>\$3,677.2</b>	<b>\$3,250.2</b>	<b>\$3,189.4</b>	<b>\$3,677.1</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Project Cash Flow Projection

The East Link cost projection continues to progress within the planned expenditure as construction activities continue to pick up. This period's project expenditure \$45.9M. Total project cost incurred this period at \$3.19B, of which the Construction Phase's share is now approaching \$2.24B. The project expenditures picked up this period and is predicted to reach to approximately \$3.24B by March 2023.



## Risk Management

The following are the top risks areas that may impact project cost and schedules:

- **Externalities:** COVID-19; unhoused encampments; potentially inflationary pressures on supply chain.
- **Design and Construction Changes:** Late emerging interface issues between civil and systems work; changing permit conditions with vertical transportation and tunnel systems; additional scope items required for new safety and/or operating requirements from both internal and third parties; tunnel clearances.
- **Late Discovery of Contractor Quality Issues:** Non-conforming DF plinth constructions on E130 and E320; RTS Garage design / construction issues on E360. The late emergent issues are highly problematic during this late stage of the project due to the lack of time to recover and adhere to the planned schedule.
- **Operational Readiness:** Pre-Revenue Schedule Clarity—A fully integrated schedule ensuring adequate duration and detailing all activities prerequisite to revenue operations is required to analyze risk to revenue service date; agency staffing and operator and maintainer labor capacity.
- **Organizational Capacity:** Loss of key personnel, including key consultants, to other projects creates risk around oversight and administration of project; developing and mobilizing resources and coordinating system integration and start up activities across multiple extensions concurrently.

# Link Light Rail East Link Extension



## 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 \$285.5M (previously \$286.2M). The current contingency balance is consistent with the project's planned contingency drawdown.

**Design Allowance (DA)** was established to account for unquantified scope at the time of the cost estimate. DA remains at \$0.9M. 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, the AC balance shows a net increase of approximately \$7M due to our preparation for a construction claim settlement.

**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance is decrease by \$7M due to a transfer to AC, spotting a balance at \$117M

### Contingency Status

Contingency Type	Baseline		Current Status	
	Amount	% of Total Budget	Amount Remaining	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$0.9	0.2%
Allocated Contingency	\$428.9	11.7%	\$167.6	34.4%
Unallocated Contingency	\$182.9	5.0%	\$117.0	24.0%
<b>Total</b>	<b>\$795.9</b>	<b>21.6%</b>	<b>\$285.5</b>	<b>58.5%</b>

### Contingency by Type

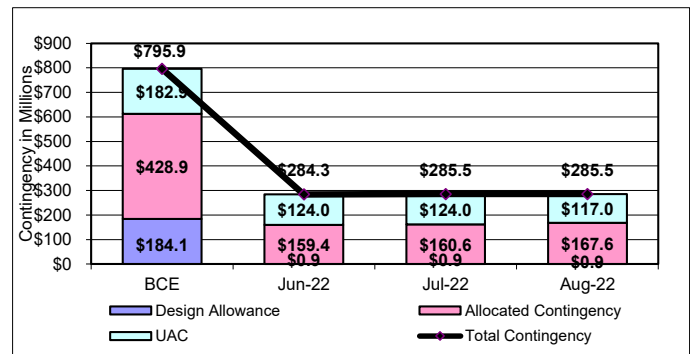
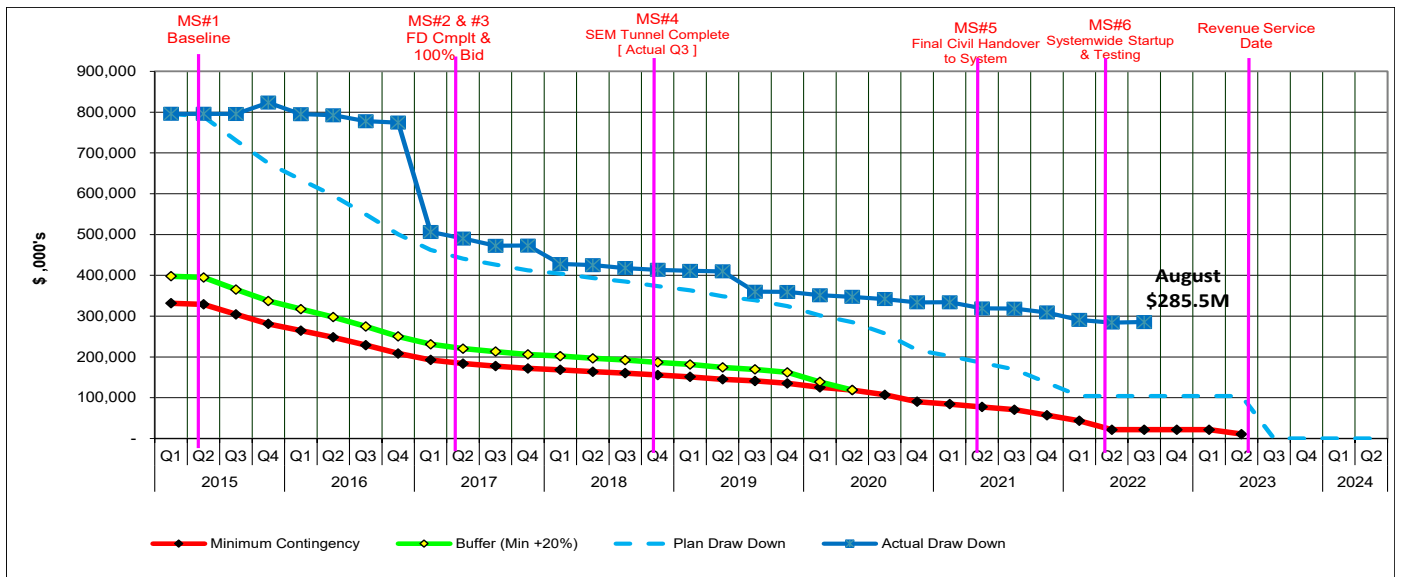


Table figures are shown in millions.

### Contingency Drawdown

East Link Project's total contingency drawdown continues to trend within plan with an overall contingency balance approximately at \$285.5M (previously \$286.2M). With all major construction contracts procured, it remains above the baseline drawdown projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. The contingencies at the end of August represented the monthly net decrease of about \$0.7M due to various construction changes.



Contingency Drawdown as of August 31, 2022



# 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 98%.

**E130** continued DF track plinth repair; closeout, commissioning and punch list work at stations and along guideway.

**E320** continued track repair; corrective work at station elevators; project closeout.

**E330** has achieved final acceptance.

**E335** continued commissioning in stations and tunnel, electrical work at BDS, and punch list work throughout.

**E340** completed rail-to-earth track testing and repair.

**E360** continued RTS garage repair / rebuild

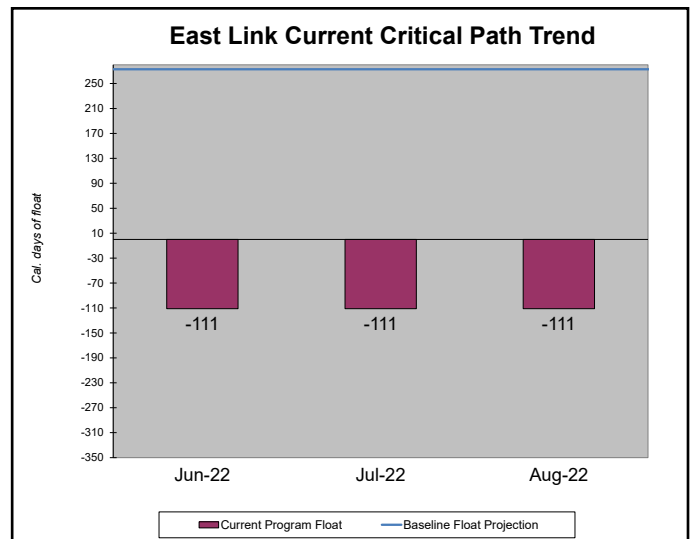
**E750** continued installation and local testing of communications systems at stations, signalization and train control, and SCADA.

Activity Name	Start	Finish	2023					
			Q3	Q4	Q1	Q2	Q3	Q4
<b>Sound Transit</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
<b>Sound Transit 2</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
<b>East Corridor</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
<b>LRT Extension - East</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
<b>East Link</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
<b>East Link Construction</b>	18-Jan-15 A	20-Oct-23	[Gantt bar]					
EL 130 - Seattle to I90 Overpass (GC/CM)	10-Mar-17 A	09-Mar-23	[Gantt bar]					
EL 320 - I90 Overpass to S. Bellevue (DBB)	05-Dec-16 A	18-Sep-22	[Gantt bar]					
EL 330 - Downtown Bellevue Tunnel (DBB)	18-Jan-15 A	12-Oct-20	[Gantt bar]					
EL 335 - Downtown Bellevue to Spring District (GC/CM)	24-Apr-17 A	09-Mar-23	[Gantt bar]					
EL 340 - Spring District to SR 520 (DBB)	24-Feb-17 A	28-Jul-22	[Gantt bar]					
EL 360 - SR 520 to Overlake Transit Center (DB)	13-Jul-16 A	03-Apr-23	[Gantt bar]					
EL 750 - Systems	12-Jun-17 A	19-Aug-23	[Gantt bar]					
East Link Master Schedule - Construction Interfaces	14-Jun-17 A	22-Jul-23	[Gantt bar]					
ELRACT - East Link Rail Activation/System Integration Project Close out	02-Aug-21 A	20-Oct-23	[Gantt bar]					
East Link Rail Activation/System Integration/Project Close out	02-Aug-21 A	20-Oct-23	[Gantt bar]					
<b>Pre-Revenue Testing &amp; Start Up</b>	02-Aug-21 A	19-Oct-23	[Gantt bar]					
East Link System Integration Testing (LOE Summary)	02-Aug-21 A	30-Jun-22 A	[Gantt bar]					
East Link Pre Revenue Operations - Operator Qualifications and Simulated Service (3 Mo)	22-Jul-23	19-Oct-23	[Red bar]					
<b>Revenue Service Window</b>	20-Oct-23	20-Oct-23	[Diamond]					
East Link Program Float (Baseline 273 Days)	20-Oct-23	20-Oct-23	[Vertical line]					
East Link Revenue Service Date (Baseline 30-Jun-23)		20-Oct-23*	[Vertical line]					

## Project Float

East Link was baselined with 273 days of program float, and is currently forecast to finish 111 days behind the target Revenue Service Date of June 30, 2023. Several factors that have impacted construction, such as COVID, the recent concrete strike, plinth repair work on the E130 and E320 segments, and crack repair at the Redmond Technology Station garage.

The target revenue service date is currently being evaluated as part of a program-wide risk assessment. Results of that assessment will be available in Q4 2022.



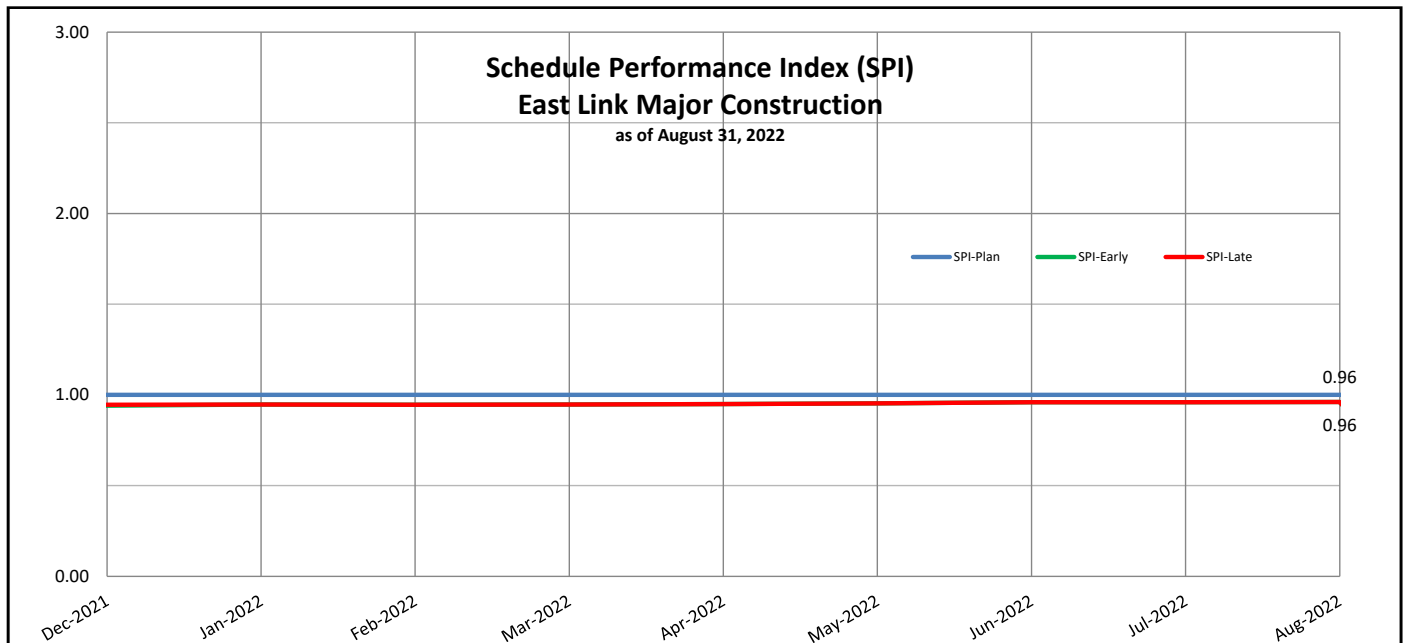
## Critical Path Analysis

The East Link critical path this month continues to run through track remediation on E130, which is holding up E750 access to complete OCS and signal installation. The time required to complete all repairs is still being determined, which may result in an even longer path to completion. Other East Link Civil Contracts continue to be closely monitored for potential impacts to the E750 schedule.

Activity Name	Start	Finish	2023					
			Q4	Q1	Q2	Q3	Q4	
EL 130 - Seattle to I-90 Overpass (GC/CM)	01-Dec-20 A	05-Oct-22						
<b>E130 Construction</b>	01-Dec-20 A	05-Oct-22						
Milestones	04-Oct-22	05-Oct-22						
Construction	01-Dec-20 A	04-Oct-22						
Trackwork	01-Dec-20 A	04-Oct-22						
Direct Fixation	04-Jan-22 A	04-Oct-22	■					
Misc Trackwork & Appurtenances	01-Dec-20 A	04-Oct-22	■					
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	05-Oct-22	21-Jul-23						
<b>E750 Construction</b>	05-Oct-22	21-Jul-23						
E750 Project	05-Oct-22	21-Jul-23						
E750 Engineering	10-Jan-23	24-May-23		■	■			
E750 Construction	05-Oct-22	21-Jul-23						
E750 Milestones	05-Oct-22	21-Jul-23						
E750 OCS	05-Oct-22	04-Jan-23	■	■	■	■		
E750 Traction Power / Substations	21-Dec-22	23-Dec-22		■				
E750 Testing and Commissioning	03-Jan-23	21-Jul-23		■	■	■	■	■
East Link Master Schedule - Construction Interfaces	22-Jul-23	22-Jul-23						■
ELRACT - East Link Rail Activation/System Integration/Project Closeout	22-Jul-23	20-Oct-23						■
East Link Rail Activation/System Integration/Project Closeout	22-Jul-23	20-Oct-23						■
Pre-Revenue Testing & Start Up	22-Jul-23	19-Oct-23						■
Revenue Service Window	20-Oct-23	20-Oct-23						■
East Link Program Float (Baseline 273 Days)	20-Oct-23	20-Oct-23						■
East Link Revenue Service Date (Baseline 30-Jun-23)		20-Oct-23*						◆

## Schedule Performance Index

The Schedule Performance Index (SPI) for East Link’s Major Construction Packages (both early and late) remains at 0.96 as contractors focus on repairs, punch lists, and closeout. This number will trend steadily towards 1.0 in the coming months.

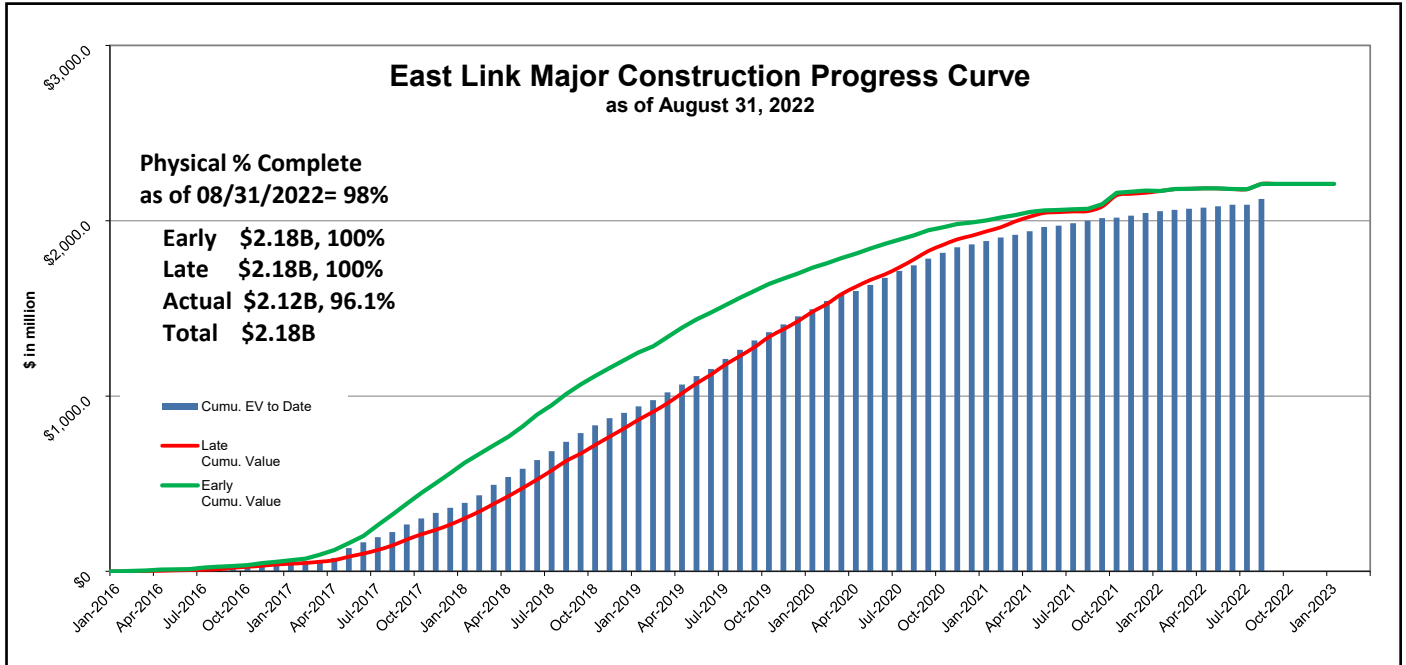


# Link Light Rail East Link Extension

## Major Construction Progress Curve

The overall physical percent complete for East Link construction is 98%.

The percent complete analysis is based on a weighted measurement of the seven major construction contracts' schedule, duration and cost. The graph below shows the aggregate cost progression for these construction contracts. Progress is trending behind the planned curves. The rate of progress is slow as remaining work on civil contracts is limited to repairs and closeout.



*E360 SR520 to Redmond Technology Station: Redmond Technology Station Garage Exterior Finishes.*

## 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 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
<p><i>*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.</i></p> <p><i>Total Acquisitions: Defined as parcels recognizing only land, not owners</i></p> <p><i>Board Approved: Based on parcels and properties (including multi-unit acquisitions)</i></p> <p><i>Offers/Closings: Based on inclusive offers made to separate owners and interest holders</i></p> <p><i>Relocations: Based on number of affected individuals</i></p>					

## Community Engagement

- Ongoing distribution of weekly construction alerts for maintenance of traffic activities for East Link.
- August’s focus included, but not limited to; Ongoing engagement with individual property owners, members of the public and impacted neighbors on a variety of concerns including close-out activities, construction easements, traffic, access, and maintenance of traffic.
- Continued communications to reiterate the message of safety, primarily around construction on Mercer Island Transit Integration site.

## 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.

Consultant utilization is dependent on the efforts to manage construction. The monthly average is trending over the plan and is predicted to decline over time. The current overage is not indicative of an immediate budget overage. That said, the longer than anticipated construction duration due to quality issues and potential delay in transitioning over to Operations will require more labor resources.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	52.2	56.5	(4.3)
Consultants	97.5	126.8	(29.3)
TOTAL	149.7	183.4	(33.6)

\* An FTE is the equivalent of 1920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
M2022-70	Authorizes the Chief Executive Officer to execute an amendment to the SR 520 Maintenance Spoil Processing Site Mitigation Agreement with the Washington State Department of Transportation (WSDOT) to provide an additional mitigation payment to WSDOT in the amount of \$1,750,393 for a total amount not to exceed \$3,131,498.	08/18/2022
M2022-71	Authorizes the Chief Executive Officer to execute a 15-year Lease Agreement that includes two 15-year options to extend with Microsoft Corporation under which Sound Transit will lease to Microsoft Corporation a building located at the Redmond Technology Station, at 3849 156th Avenue NE, Redmond, Washington.	08/25/2022

## Construction Safety

Data/ Measure	August 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	1	92
Days Away From Work Cases	0	0	15
Total Days Away From Work	0	0	1,337
First Aid Cases	1	12	366
Reported Near Mishaps	0	2	3439
Average Number of Employees on Worksite	208	-	-
Total # of Hours (GC & Subs)	41,636	373,157	7,877,181
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	0.54	2.34
LTI Rate	0.00	0.00	0.38
<b>Recordable National Average</b>	2.50		
<b>LTI National Average</b>	1.10		
<b>Recordable WA State Average</b>	5.20		
<b>LTI WA State Average</b>	2.90		

*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.*

**E135 Mercer Island Transit Integration** – Road improvements to enhance bus/rail transfer and connect pedestrian and bicyclist to the Mercer Island light rail station. Status: Construction in progress.

**E320 South Bellevue** – One (1) Light Rail Station and a Parking Garage at South Bellevue P&R; aerial, at-grade and retained-cut guideway along Bellevue Way SE and 112th Avenue SE. [Design-bid-build]

*Status: See following pages under Contract E320.*

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

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

**E335 Downtown Bellevue to Spring District** – Four (4) 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 (1) 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 (2) Light Rail Stations; one (1) garage, one (1) pedestrian bridge; 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*



*E130 Seattle to South Bellevue: Removal of dual block plinths on I-90 floating bridge segment for testing.*

# Link Light Rail East Link Extension



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

### Current Progress

- **West Segment:** Ongoing punch list and commissioning; started demolition for reconstruction of all of the direct fixation track plinths.
- **Center Segment:** Ongoing punch list and commissioning; direct fixation track plinth remediation work stopped. Work will shift to plinth reconstruction in future months (HMH floating bridge pre-cast blocks to remain); continue cathodic protection repolarization and monitoring at HMH bridge.
- **East Segment:** Ongoing miscellaneous punch list and commissioning; started demolition for reconstruction of all of the direct fixation track plinths.

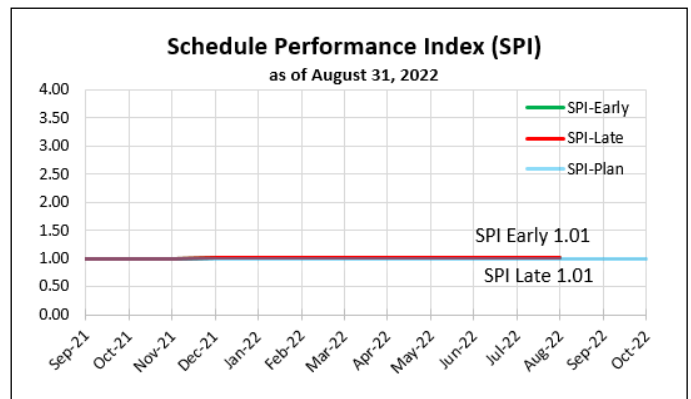
### Schedule Summary

The March update forecasts a February 07, 2023, Substantial Completion date, 421 calendar days later than the contractual milestone date of Dec. 13, 2021. ST has been working with the contractor to reduce uncertainty in the forecast completion; as such, the contractor’s subsequent updates have not yet been accepted. Within the E130 contract schedule, the critical path is driven by track remediation and cathodic protection on the floating bridge. The contractor is working to establish a schedule for the track plinth reconstruction. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.

Activity Name	Start	Finish	2022			
			Q2	Q3	Q4	Q1
<b>E130 Construction</b>	10-Mar-17 A	09-Mar-23	[Gantt bar spanning Q2, Q3, Q4, and Q1 2022]			
<b>Milestones</b>	10-Mar-17 A	09-Mar-23	[Gantt bar]			
<b>Access Milestones</b>	10-Mar-17 A	12-May-17 A	[Gantt bar]			
16. Notice to Proceed - Package 1	10-Mar-17 A		[Gantt bar]			
16. Notice To Proceed - Remaining Scope		12-May-17 A	[Gantt bar]			
<b>Major Project Complete Milestones</b>	21-Aug-19 A	09-Mar-23	[Gantt bar]			
16. MS#02 - Substantial Completion of IDS Conversion - Reinstate NB Operations (10-Feb-20)		09-Feb-20 A	[Gantt bar]			
16. MS#03 - Substantial Completion of IDS Conversion - Reinstate SB Operations (16-Mar-20)		23-Mar-20 A	[Gantt bar]			
16. MS#01 - Substantial Completion West Mercer Island Lid to East End of Project (17-Nov-21)		21-Oct-22*	[Gantt bar]			
16. MS#01 - Acceptance		20-Nov-22	[Gantt bar]			
16. MS#04 - Substantial Completion All Work (13-Dec-21)		07-Feb-23*	[Gantt bar]			
16. Acceptance		09-Mar-23	[Gantt bar]			
16. Post Acceptance		09-Mar-23	[Gantt bar]			
<b>Milestone 1 Interim Dates</b>	21-Aug-19 A	21-Oct-22	[Gantt bar]			
<b>Construction</b>	20-Mar-17 A	07-Feb-23	[Gantt bar]			
<b>Preliminary Activities</b>	03-Apr-17 A	08-Feb-21 A	[Gantt bar]			
<b>Sitework</b>	23-Aug-17 A	13-Jul-20 A	[Gantt bar]			
<b>Demolition</b>	20-Jul-17 A	17-Nov-22	[Gantt bar]			
<b>Tunnel Modifications</b>	18-Sep-17 A	12-Jul-22	[Gantt bar]			
<b>Stations</b>	31-May-17 A	18-Nov-22	[Gantt bar]			
<b>OCS Bases/Frames</b>	02-Apr-18 A	29-Apr-22	[Gantt bar]			
<b>Civil/Utilities</b>	05-Jul-17 A	12-Jul-22	[Gantt bar]			
<b>Electrical</b>	20-Mar-17 A	22-Jun-22	[Gantt bar]			
<b>Structures Retrofit</b>	20-Mar-17 A	17-Jan-23	[Gantt bar]			
<b>Trackwork</b>	02-Jan-18 A	07-Feb-23	[Gantt bar]			
<b>Systems</b>	26-Jun-17 A	29-Apr-22	[Gantt bar]			
<b>IDS Modification</b>	16-Jan-19 A	09-Aug-22	[Gantt bar]			
<b>Pioneer Square Station Platform Removal</b>	03-Apr-21 A	25-Apr-21 A	[Gantt bar]			

### Schedule Performance Index

E130 contract substantial completion date was planned for December 2020 and is currently anticipated to occur in Q1 2023. Remaining work to achieve substantial completion includes remediation of non-conforming track work and other NCR work. By definition, at substantial completion the schedule performance index is 1.0, because all planned work is completed.



# Link Light Rail East Link Extension

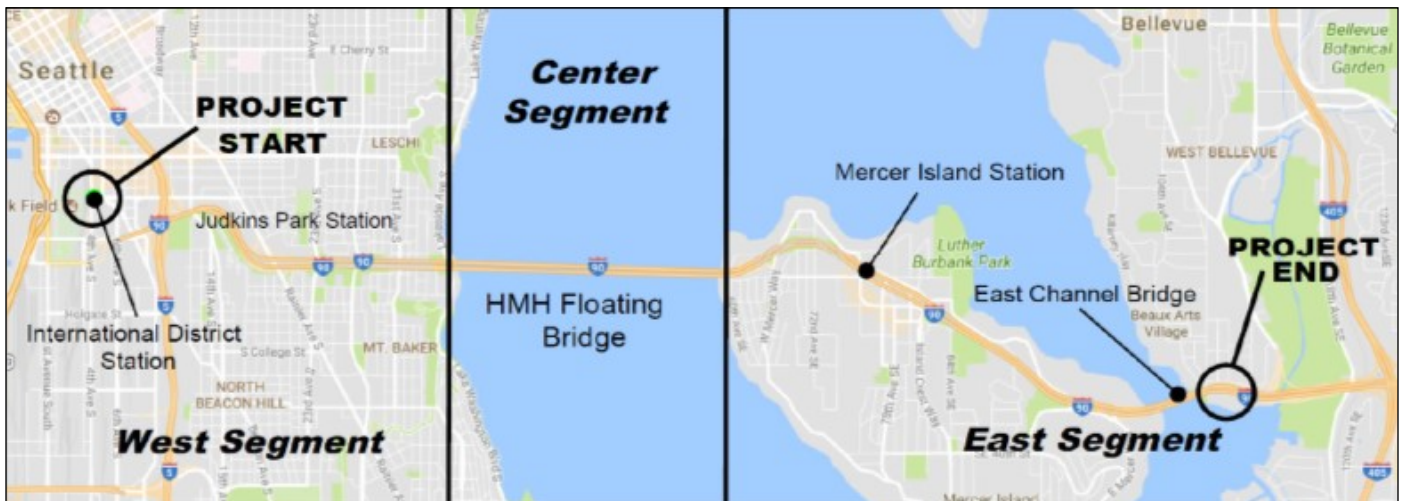
## Next Period's Activities

- **West Segment:** Continue punch list and commissioning; continue demolition for reconstruction of all of the direct fixation track plinths.
- **Center Segment:** Continue cathodic protection repolarization and monitoring at HMH bridge
- **East Segment:** Continue punch list and commissioning; continue demolition for reconstruction of all of the direct fixation track plinths.

## Closely Monitored Issues

- Activity progress to reach Milestones 1 & 4; resultant impacts to E750
- NCR mitigation timeline for direct fixation track plinth reconstruction
- IDS: milestone 03 resolution

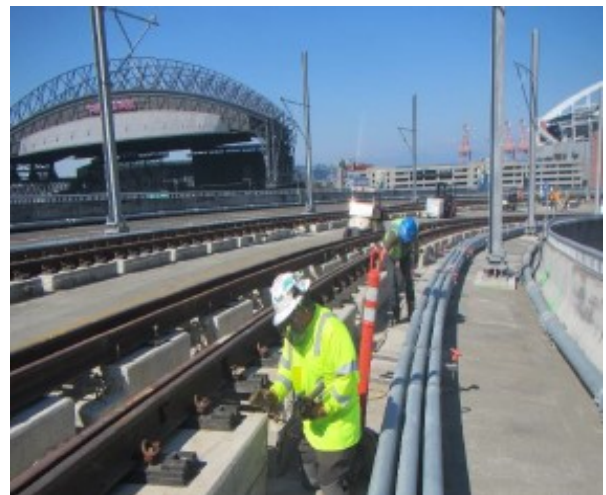
## E130 Construction Segments



## 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	\$42,653,405
Current Contract Value*	\$705,739,046
Total Actual Cost (Incurred to Date)	\$704,041,050
Percent Complete	98.0%
Authorized Contingency	\$56,660,541
Contingency Drawdown	\$42,653,405
Contingency Index	1.3

\* Contract Value excludes Betterments



*Crews Replacing Stray Current Collector in Conjunction with WSDOT Anchor Cable Replacement*

# Link Light Rail East Link Extension



## Contract E320 – South Bellevue

### Current Progress

- Ongoing non-conforming track remediation; advance punch list and maintenance activities.
- Final Settlement and Release Agreement executed; defines terms of completion of contract and final costs.

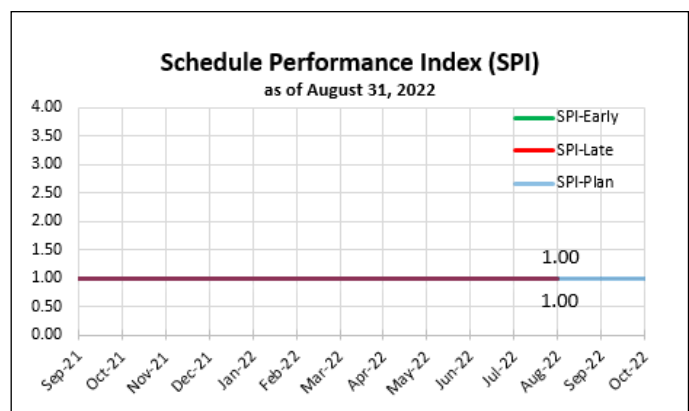
### Schedule Summary

The July update forecasts a September 17, 2022, Substantial Completion Date, 617 calendar days later than the contractual milestone date of Jan. 8, 2021. This forecast date is not achievable a more realistic date is November 2022. The contractor needs to correct non-conforming scopes of work: 1) Pull test 2700 grout rail fastener bolt inserts and replace any failed inserts, and 2) Repair 250 undersized tub girder bearing pad seats. Together this work may take until November 30, 2022 to complete. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.

Activity Name	Start	Finish	Q3
<b>E320 Construction</b>	05-Dec-16 A	17-Sep-22	
<b>Milestones and Summary</b>	05-Dec-16 A	17-Sep-22	
<b>Contract Milestones</b>	05-Dec-16 A	17-Sep-22	
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 - SIDT & SCADA Complete (NTP+1160D)		27-Feb-20 A	
Milestone 2 - Final Restoration of Bellevue Way (Start+897D) *SEE NARRATIVE		29-Nov-21 A	
Milestone 5 - Acceptance of South Bellevue Station (NTP+1225D)		13-Sep-22*	
Milestone 6 - Required Substantial Completion (NTP+1364D)		17-Sep-22*	
<b>Construction-1</b>	21-Apr-17 A	07-Sep-22	
<b>Mobilization</b>	21-Apr-17 A	16-Jul-18 A	
Area A - I-90 Mainline to Bellevue Interchange - Sta EB405+54 to EB438+20	16-Jun-17 A	27-Apr-22 A	
Area B - Bellevue Way SE, SE 30th St to 112th Ave SE Wye - Sta EB438+20 to EB476+75	30-May-17 A	07-Sep-22	
Area C - 112th Ave SE, 112th Ave SE Wye to SE 8th - Sta EB476+75 to EB508+00	13-Jun-17 A	24-Mar-22 A	
Area D - 112th Ave SE to SE 8th St to Main St - Sta 508+00 to EB528+25	22-May-17 A	14-Apr-22 A	
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 contract substantial completion is anticipated to occur in Q4 2022. Remaining work to achieve substantial completion includes non-conforming track work remediation and other track related NCR work, as defined by the recently executed Settlement Agreement and Release. By definition, at substantial completion the schedule performance index is 1.0, which denotes planned work is completed.





## Next Period's Activities

- Per Final Settlement and Release Agreement: Continued non-conforming track remediation; ongoing contract-wide punch list and maintenance activities

## Closely Monitored Issues

- Resolution to RFC 226 R3 Project Wide Disruptions
- Resolution to Substantial Completion Date



## Cost Summary

Present Financial Status	Amount
<b>E320 Contractor - Shimmick/Parsons JV.</b>	
Original Contract Value	\$319,859,000
Change Order Value	\$37,571,973
Current Contract Value*	\$357,396,719
Total Actual Cost (Incurred to Date)	\$358,247,992
Percent Complete	99.9%
Authorized Contingency	\$38,532,000
Contingency Drawdown	\$37,571,973
Contingency Index	1.0

\*Contract Value excludes betterments and START; all current values include recently executed Settlement



Crews Coring Plinths for Fastener Insert Re-installation

# Link Light Rail East Link Extension



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

### Current Progress

- Continued Jet Fan commissioning. Installed HVAC, elevator monitoring, gate operator and drive way gate, power and communication at Bellevue Downtown Station.
- Continued site wide punch list, landscaping and irrigation at East Main Station.

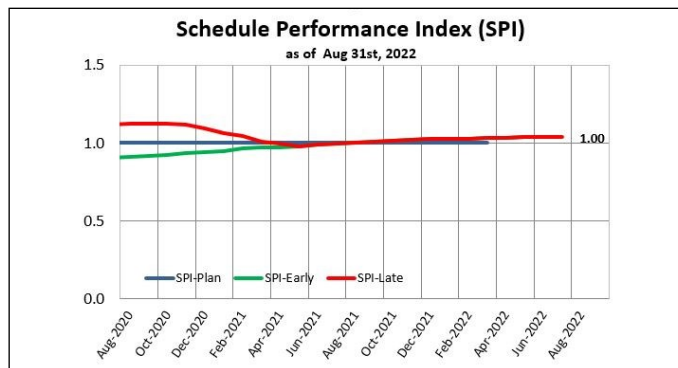
### Schedule Summary

The August update forecasts a March 09, 2023, Substantial Completion Date, 662 calendar days later than the contractual milestone date of May 16, 2021. Within the E335 contract schedule, the critical path is driven by CNWD 412, which directed the contractor to replace breakers at Bellevue Downtown Station for the station stair Emergency Exhaust System. Follow-on work by the systems contract is unaffected. The key scope of work is the Emergency Ventilation System (EVS) in the Bellevue Downtown Tunnel. The EVS testing and commissioning is progressing slower than anticipated. The EVS testing is on hold, pending resolution to the jet fan vibration. The contractor has a fix that involves welding motor stiffeners in the fans. This work is anticipated to be corrected by September, pending approval by Sound Transit.

Activity Name	Start	Finish	Quarter		
			Q3	Q4	Q1
<b>E335 Construction</b>	24-Apr-17 A	09-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Milestones</b>	04-May-18 A	09-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Contract Milestones</b>	30-Sep-18 A	09-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
Milestone #1 - Complete North Portal Headwall Temporary Shoring		30-Sep-18 A	[Gantt bar in Q3]		
Milestone #2 - Complete SIDT's for Interface to SCADA		14-Jan-20 A	[Gantt bar in Q3]		
Milestone #3 - Complete Trackway and Stations for Primary Systems Access - BTC to EOP (18-Jul-21)		26-Jul-21 A	[Gantt bar in Q3]		
Milestone #4 - Complete SEM Tunnel Trackwork for Primary Systems Access (16-Jan-21)		14-Dec-22*		◆	
Milestone #5 - Complete All Trackway and Stations for Primary Systems Access (16-Mar-21)		14-Dec-22*		◆	
Milestone #6 - Substantial Completion of all Work (16-May-21)		09-Mar-23*			◆
<b>Calculated Milestones</b>	04-May-18 A	09-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Mobilization</b>	24-Apr-17 A	24-Apr-17 A	[Gantt bar in Q3]		
<b>Construction</b>	24-Apr-17 A	07-Feb-23	[Gantt bar spanning Q3, Q4, and Q1]		
Area 1: E. Main Station to South Portal (531+55 - 538+00)	11-Oct-17 A	29-Mar-22 A	[Gantt bar in Q3]		
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91)	24-Aug-18 A	05-Dec-22	[Gantt bar in Q3]		
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)	24-Apr-17 A	07-Feb-23	[Gantt bar spanning Q3, Q4, and Q1]		
Area 4: Aerial Guideway (568+45 - 606+59)	24-Apr-17 A	16-Dec-22	[Gantt bar spanning Q3, Q4, and Q1]		
Area 5: Pine Forest to 120th (606+59 - 619+00)	07-Jul-17 A	08-Oct-21 A	[Gantt bar in Q3]		
Area 6: 120th - End of Project (619+00 - 634+99)	01-Aug-17 A	15-Sep-22	[Gantt bar in Q3]		
Testing and Commissioning	01-Jun-20 A	15-Dec-21 A	[Gantt bar in Q3]		

### Schedule Performance Index

E335 contract substantial completion date was planned for May 2021 and is currently anticipated to occur in Q1 2023. Remaining work to achieve substantial completion includes Testing and commissioning of Bellevue Downtown Station and the emergency ventilation fans in the Bellevue tunnel. By definition, at substantial completion the schedule performance index is 1.0 - all planned work is completed.





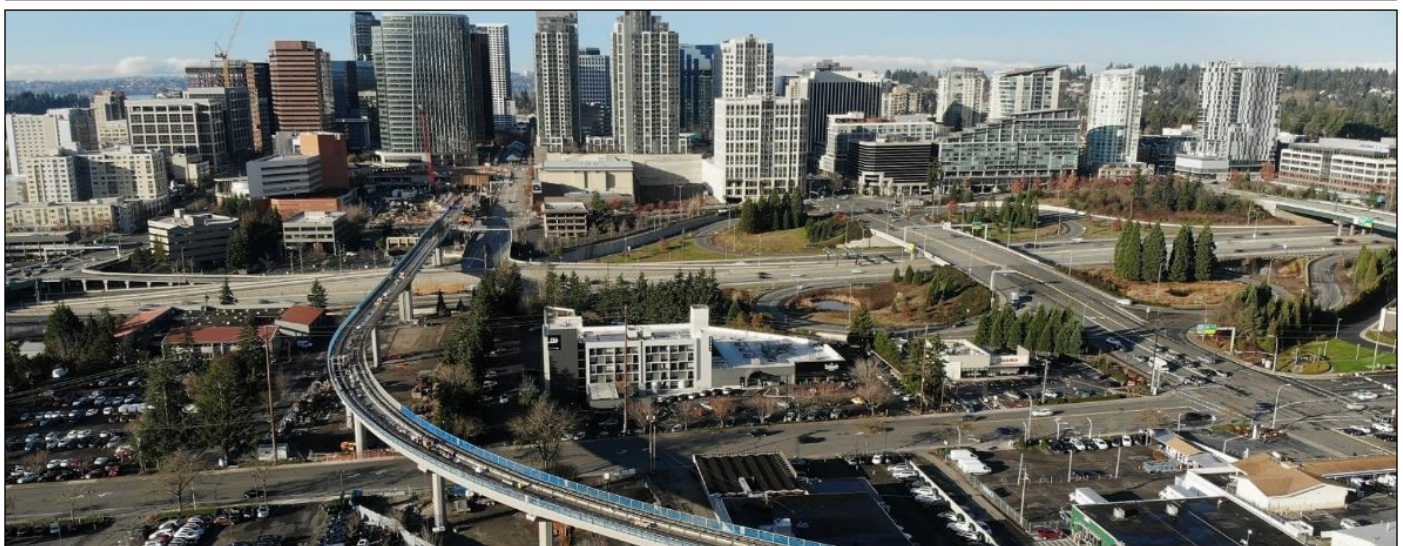
# Link Light Rail East Link Extension

## Next Period's Activities

- Continue Elevators, Tunnel Jet Fan and Electrical commissioning at Bellevue Downtown Station (BDS).
- Continue installation of light pole at NE 6th St.
- Punch list Work, general cleaning and landscaping continues at BDS, Wilburton, East Main, and 120th Stations.

## Closely Monitored Issues

- Re-working conduits and conductors to allow saw cutting of walkway sections that contain conduits and do not meet required clearances. Wires in the affected conduits have been rerouted and re-terminated to their end devices.
- The Contractor has received numerous correction notices from the City of Bellevue Electrical Inspector regarding code compliance issues. AMMMR was submitted and received favorable review by the City Of Bellevue with some conditions. The project team is awaiting stamped and revised drawings .



*E335 Aerial Guideway*

## 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	\$26,594,511
Current Contract Value	\$420,392,721
Total Actual Cost (Incurred to Date)	\$ 415,070,286
Percent Complete	99.63%
Authorized Contingency	\$29,689,911
Contingency Drawdown	\$26,594,511
Contingency Index	1.1



*BDS System Interface Testing*

# Link Light Rail East Link Extension



## Contract E340 – Bel-Red

### Current Progress

**Aerial Guideway:** Mitigation site under Landscape Establishment, and punch list items on-going.

**130th Ave. Station:** Substantial Completion issued for Station. RTE testing complete and passed. Electrical punch list items complete.

**NE Spring Blvd.:** RTE testing completed and passed. Corridor landscape punch list items on-going.

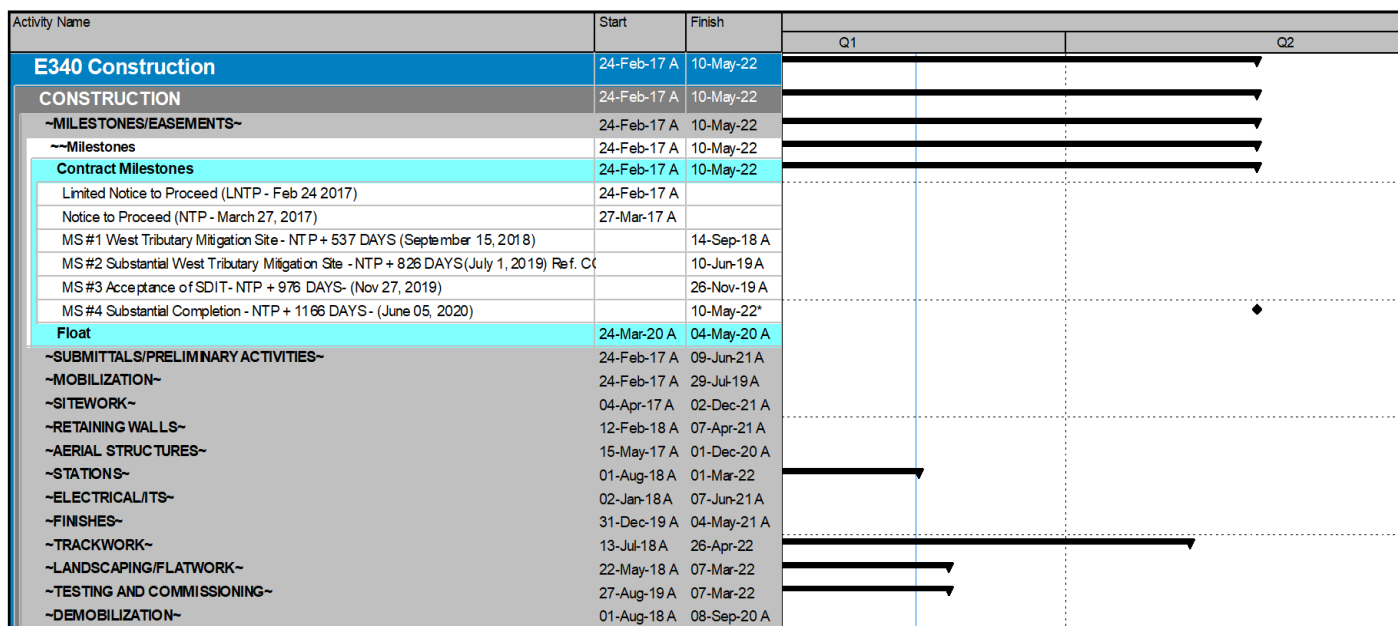
**136th Ave.:** RTE testing completed and passed.

**NE 20th Modular Tack Alignment:** Grade deviations corrected.

**System Scope:** MEC performing signal work. Access being coordinated with Kuney.

### Schedule Summary

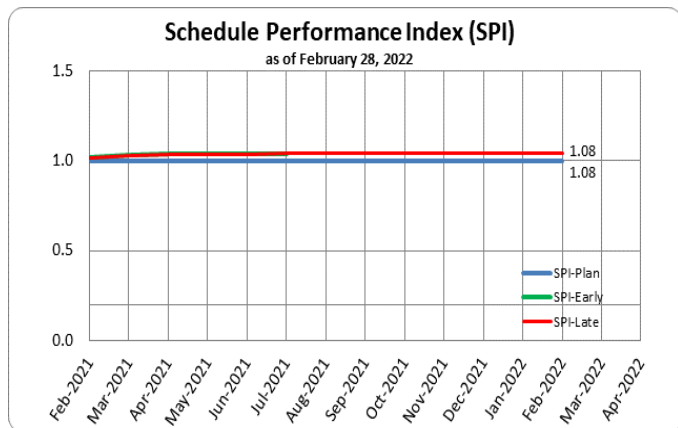
The February update, the most recent contractor schedule, forecasts a May 10, 2022, Substantial Completion date, 705 calendar days later than the contractual milestone date of June 5, 2020. Substantial completion is pending completion of the rail-to-earth (RTE) repair work in the embedded track and NE 20th Street crossing, which completed this month. Substantial completion of the project is anticipated by the end of September 2022.



### Schedule Performance Index

E340 contract substantial completion date was planned for June 2020 and is currently anticipated to occur by September 2022. The February graph shown here is the Contractor’s latest submittal.

Remaining work in E340 is limited to the lower cost close-out scope including commissioning work and punch list items. At this stage, which is near substantial completion, the schedule performance index is 1.0, because all planned work is complete.



# Link Light Rail East Link Extension



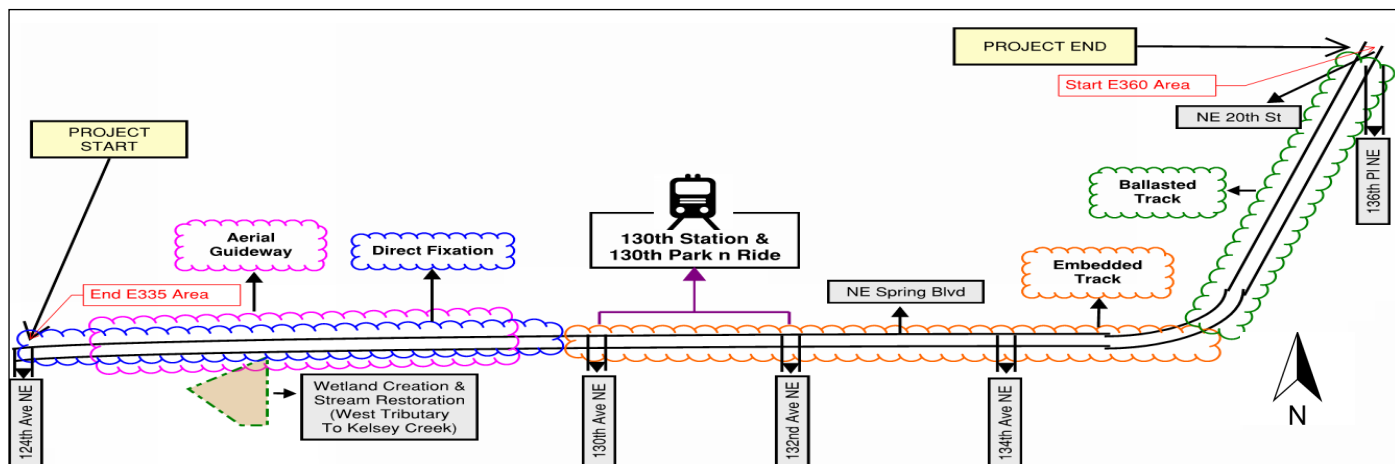
## Next Period's Activities

- **Aerial Guideway:** Address mitigation landscaping punch list items.
- **NE Spring Blvd:** Address corridor landscaping punch list items.
- **System Scope:** MEC performing signal work. Access being coordinated with Kuney.

## Closely Monitored Issues

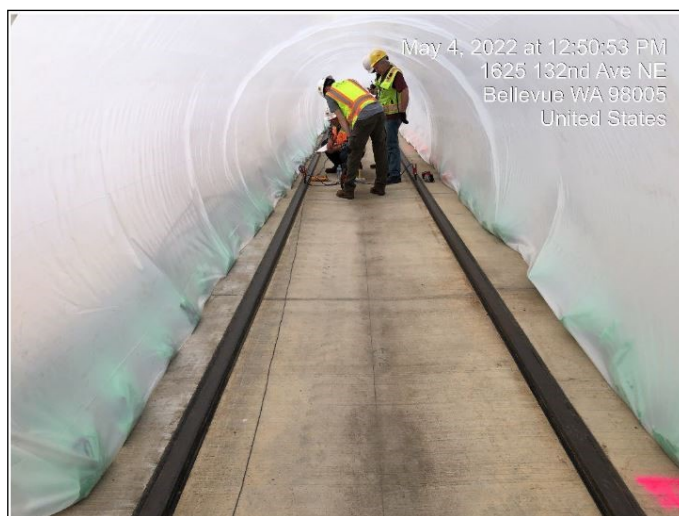
- **System Scope:** MEC performing signal work. Access being coordinated with Kuney.

## 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	\$8,195,812
Current Contract Value	\$101,365,824
Total Actual Cost (Incurred to Date)	\$100,238,688
Percent Complete	99.06%
Authorized Contingency	\$14,317,000
Contingency Drawdown	\$8,195,812
Contingency Index	1.73



*Norton Corrosion & CorrPro Conducting RTE Testing*



# Link Light Rail East Link Extension



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

### Current Progress

- Continued RTS bus loop paving under the reconstructed vehicular ramps.
- Continued coating and painting finishing work on the exterior of the RTS garage.
- Continued NCR/RFD work for the parking decks of the RTS garage.
- Continued internal coordination with ST and City of Redmond for OVS/RTS tree mitigation work.
- Continued punch list, NCR, and close-out documentation for project areas outside of the RTS site.

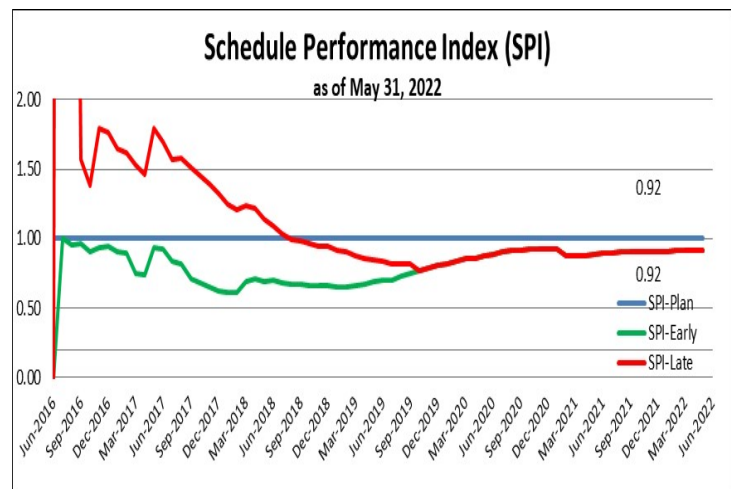
### Schedule Summary

The August update forecasts a March 6, 2023, Substantial Completion date, 948 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 systems contractor has been granted access to all available work areas.

Activity Name	Start	Finish	Q3	Q4	Q1
<b>E360 Construction</b>	13-Jul-16 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Base Contract</b>	13-Jul-16 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
Design	13-Jul-16 A	11-May-21 A	[Gantt bar spanning Q3 and Q4]		
Construction	13-Jul-16 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
General	13-Jul-16 A	04-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Project Milestones</b>	13-Jul-16 A	04-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
Notice to Proceed	13-Jul-16 A		[Gantt bar spanning Q3]		
Civil/Systems 100% Design Submittal (NTP+300d) (09-May-2017)		10-Apr-17 A	[Gantt bar spanning Q3]		
Milestone 3A for E750 Work (03-Feb-2020)		06-Mar-20 A	[Gantt bar spanning Q3]		
Milestone 3B Substantial Completion (31-Jul-2020)		04-Mar-23*	[Gantt bar spanning Q3, Q4, and Q1]		
WA #1 - Track Slab Guideway	22-May-17 A	08-Dec-20 A	[Gantt bar spanning Q3 and Q4]		
WA #2 - Aerial Guideway	01-Jun-17 A	20-Nov-20 A	[Gantt bar spanning Q3 and Q4]		
WA #3 - Ballasted Guideway Block #1	01-May-17 A	29-Sep-20 A	[Gantt bar spanning Q3 and Q4]		
WA #4 - Overlake Village Station	14-Jul-16 A	06-Oct-22	[Gantt bar spanning Q3, Q4, and Q1]		
WA #5 - Ballasted Guideway Block #2	15-Aug-17 A	23-Jul-21 A	[Gantt bar spanning Q3 and Q4]		
WA #6 - Overlake Transit Center	01-May-17 A	05-Dec-22	[Gantt bar spanning Q3, Q4, and Q1]		
WA #7 - OVS Pedestrian Bridge	09-Jul-18 A	18-Aug-21 A	[Gantt bar spanning Q3 and Q4]		
WA #8 - OTC Pedestrian Bridge	10-Aug-20 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
<b>Change Orders</b>	24-Jul-19 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		
PCO188/ NCR090 - Garage Beam Cracking	24-Jul-19 A	06-Mar-23	[Gantt bar spanning Q3, Q4, and Q1]		

### Schedule Performance Index

E360 contract substantial completion date was planned for July 2020 and is currently anticipated to occur in Q1 2023. Remaining work to achieve substantial completion includes the garage reconstruction which requires the removal of the damaged paving, reinstallation of affected MEP items, and commissioning of the installed items. By definition, at substantial completion the schedule performance index is 1.0, which denotes all planned work is completed.



# Link Light Rail East Link Extension



## Next Period's Activities

- MEP reinstall for affected areas of garage.
- Continue with bus loop and decorative plaza paving.
- Complete concrete finishing on exterior of RTS garage.
- Continue NCR/RFD work for the parking decks of RTS garage.
- Continue punch list, NCR, and close-out documentation for project areas outside of the RTS site.
- Continue coordination with ST and City of Redmond for OVS/RTS tree mitigation work.

## Closely Monitored Issues

- Approval and mobilization for the RTS garage deck clear cover work (RFD-020).
- Closeout work for completion and turnover of OVS site.
- Coordination with E750 for system activities in the garage.

## 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	\$9,995,901
Current Contract Value	\$235,331,989
Total Actual Cost (Incurred to Date)	\$212,676,046
Percent Complete	96.44%
Authorized Contingency	\$22,533,609
Contingency Drawdown	\$9,995,901
Contingency Index	2.2



Shoring Removal at RTS Garage Rebuild.

Table Excludes Betterment

# Link Light Rail East Link Extension



## Contract E750 – Systems Heavy Civil GC/CM

### Current Progress

The E750 Contractor, Mass Electric Construction Co.:

- Ongoing coordination meetings for interface and access points with the civil contracts.
- Installed feeder cable, devices, conduit and local testing from E130 to E360 civil segments.
- TPSS house prep work from E130 to E360 civil segments.
- Track signal testing continues along the alignment from E130 to E360 civil segments.

### Schedule Summary

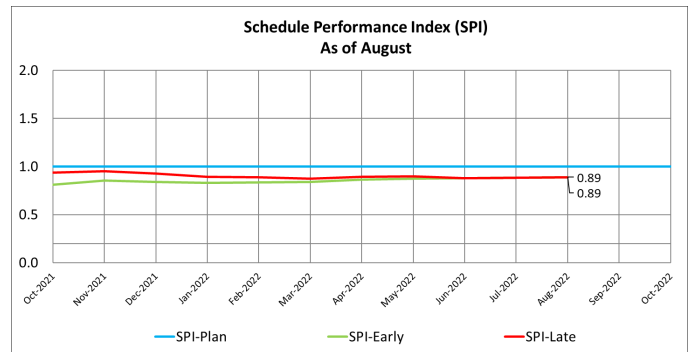
The August update projects a July 21, 2023, Substantial Completion date, 417 calendar days later than the contractual milestone date of May 30, 2022. Currently, the critical path is driven by track handover from the E130 contractor. The substantial completion date will be updated when E130 establishes a schedule for the track plinth repair work. ST and the contractor are actively working to mitigate delays in access to critical work areas.

Activity Name	Start	Finish	2023				
			Q3	Q4	Q1	Q2	Q3
<b>E750 Construction</b>	12-Jun-17 A	18-Aug-23	[Gantt bar spanning from Q3 2022 to Q3 2023]				
<b>General</b>	12-Jun-17 A	12-Jun-17 A	[Gantt bar spanning Q3 2022]				
<b>Key Dates</b>	12-Jun-17 A	12-Jun-17 A	[Gantt bar spanning Q3 2022]				
NTP - Notice to Proceed (NTP) Northgate and East Link	12-Jun-17 A		[Gantt bar spanning Q3 2022]				
<b>E750 Project</b>	11-Jul-17 A	18-Aug-23	[Gantt bar spanning from Q3 2022 to Q3 2023]				
<b>E750 Engineering</b>	11-Jul-17 A	24-May-23	[Gantt bar spanning from Q3 2022 to Q2 2023]				
<b>E750 Construction</b>	12-Sep-18 A	18-Aug-23	[Gantt bar spanning from Q4 2022 to Q3 2023]				
E750 Construction (General)	15-Mar-19 A	19-Mar-19 A	[Gantt bar spanning Q1 2023]				
<b>E750 Milestones</b>	12-Mar-19 A	21-Jul-23	[Gantt bar spanning from Q1 2023 to Q3 2023]				
<b>E750 Project Milestones</b>	30-Apr-21 A	02-Dec-22	[Gantt bar spanning from Q2 2022 to Q4 2022]				
<b>E750 Access Dates</b>	12-Mar-19 A	01-Dec-22	[Gantt bar spanning from Q1 2023 to Q4 2022]				
<b>E750 Contract Milestones</b>	09-Feb-20 A	21-Jul-23	[Gantt bar spanning from Q4 2022 to Q3 2023]				
MS#06a East Link: Substantial completion of IDS Station Tie-in Work For North Bound (3/9/20)		09-Feb-20 A	[Gantt bar spanning Q4 2022]				
MS#06b East Link: Substantial completion of IDS Station Tie-in Work ( CNRFP 27)		22-Mar-20 A	[Gantt bar spanning Q1 2023]				
MS#07 East Link: Limited systems, South Bellevue parking garage (CCTV, Tele phone) (08/02/21)		20-Oct-21 A	[Gantt bar spanning Q3 2022]				
MS#08 East Link: Limited systems, Redmond Techtransit center parking garage (CCTV, Tele) (09/30/21)		28-Dec-22*	[Gantt bar spanning Q4 2022]				
MS#09a East link: Install & Test completion of East Link Systems (03/31/22)		24-May-23*	[Gantt bar spanning from Q1 2023 to Q2 2023]				
MS#09B East link: Substantial completion of East Link Systems (05/30/22)		21-Jul-23*	[Gantt bar spanning from Q2 2023 to Q3 2023]				
<b>E750 SCCRIM</b>	25-Jan-19 A	12-Sep-22	[Gantt bar spanning from Q4 2022 to Q3 2023]				
<b>E750 OCS</b>	14-Feb-19 A	23-Jan-23	[Gantt bar spanning from Q1 2023 to Q4 2022]				
<b>E750 Traction Power/ Substations</b>	01-Oct-18 A	23-Dec-22	[Gantt bar spanning from Q4 2022 to Q1 2023]				
<b>E750 Signals</b>	12-Sep-18 A	17-Jan-23	[Gantt bar spanning from Q4 2022 to Q1 2023]				
<b>E750 Communications</b>	13-Nov-18 A	17-Nov-22	[Gantt bar spanning from Q4 2022 to Q1 2023]				
<b>E750 Radio</b>	28-Jan-19 A	28-Dec-22	[Gantt bar spanning from Q1 2023 to Q4 2022]				
<b>E750 SCADA</b>	12-Jul-22 A	03-Nov-22	[Gantt bar spanning Q3 2022]				
<b>E750 Trunk Fiber</b>	19-Dec-18 A	26-Sep-22	[Gantt bar spanning from Q4 2022 to Q1 2023]				
<b>E750 Testing and Commissioning</b>	27-May-20 A	18-Aug-23	[Gantt bar spanning from Q3 2022 to Q3 2023]				

### Schedule Performance Index

Performance is for July 2022. The SPI-Early is 0.89 and SPI-Late is 0.89. The SPI index indicates the contractor is behind early planned work and is starting to somewhat slip on the late plans compared to the baseline plans.

The lagging is due to challenges in expected access to civil segments, especially with E130 and access to the floating bridge. The ELE team continues to monitor and is evaluating various mitigation option should the late plans continue to slip further.





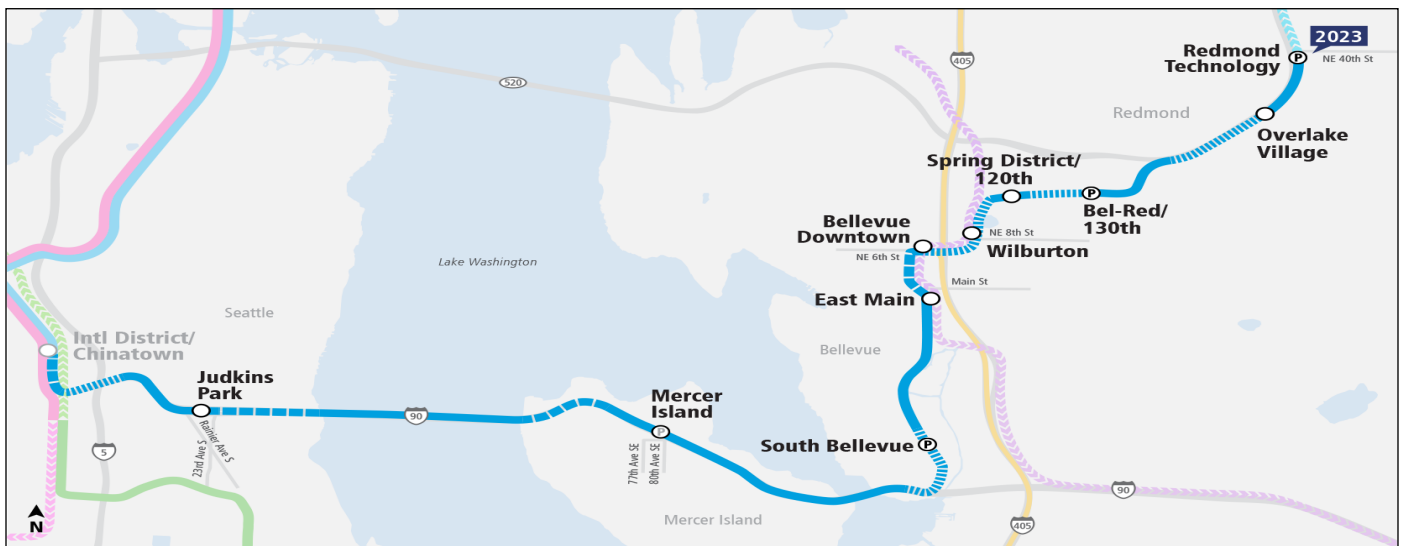
# Link Light Rail East Link Extension

## Next Period's Activities

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, OCS, Train Control Signal Systems and Communications.
- Ongoing meetings between systems and civil contractors for interface and access points for respective contracts.
- Ongoing installation of feeder cables for energization and local testing.

## Closely Monitored Issues

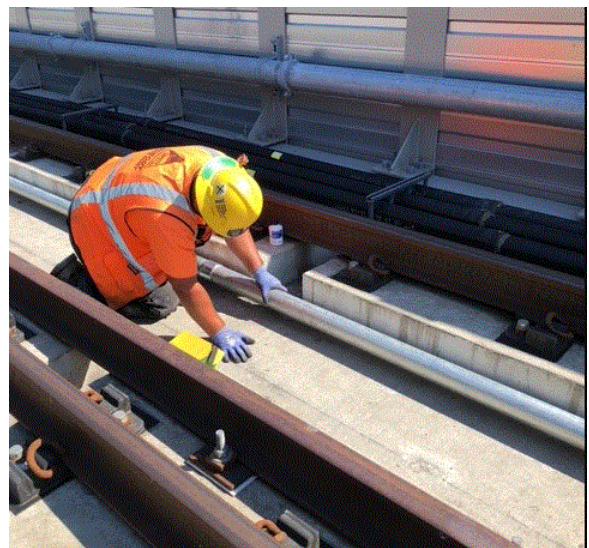
- Monitoring the impacts from the delayed handover from the civil contractors in the E130, E320, E335 and E340 segments.



## Cost Summary

Present Financial Status	Amount
<b>E750 Contractor - Mass Electric Construction Co.</b>	
Original Contract Value	\$255,768,128
Change Order Value	\$7,030,210
Current Contract Value	\$262,798,438
Total Actual Cost (Incurred to Date)	\$232,758,149
Percent Complete	93.1%
Authorized Contingency	\$12,788,406
Contingency Drawdown	\$7,030,210
Contingency Index	1.72

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



Installation of Conduit Near Wilburton Station.

# Link Light Rail Everett Link Extension

## Project Summary

### Scope

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

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

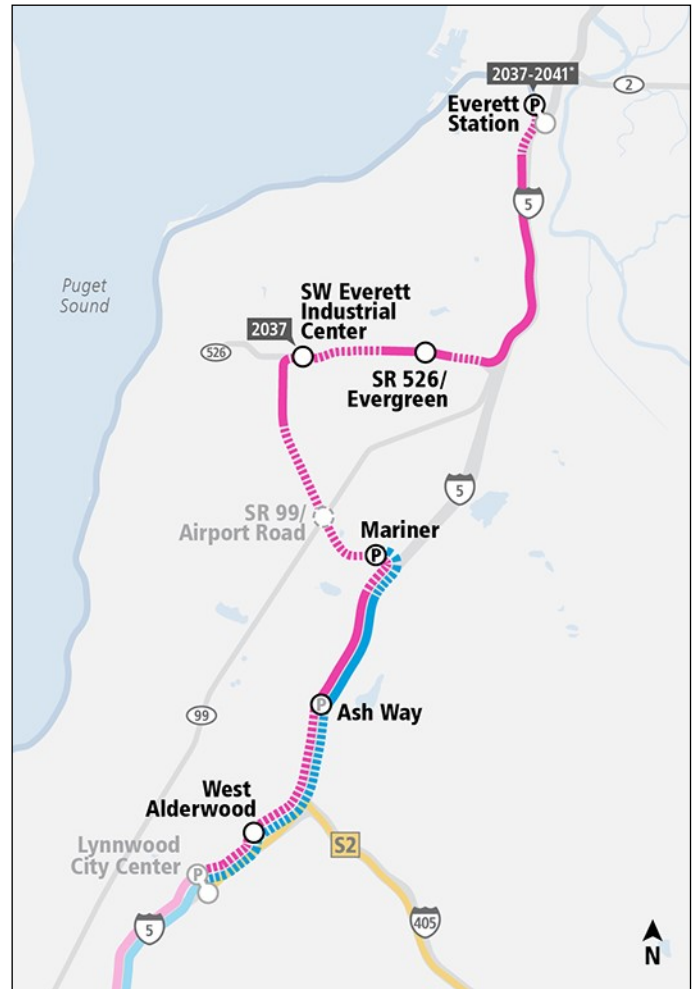
**Stations** The project includes six new stations at West Alderwood Mall, Ash Way, 128th / Mariner, Southwest Everett Industrial Center, SR 526/Evergreen and Everett Station. The project also includes one provisional station, at SR 99/Airport Road.

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

**Phase** Planning

**Budget** \$188 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.

# 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.

During the annual budget cycle \$2.9M was added to the project to fund work for deliverable related to the FTA TOD pilot program. The current Authorized Project Allocation is for completion of preliminary engineering. In August 2022, \$0.8M 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	\$4.7	\$4.4	\$34.2	\$0.0
Preliminary Engineering	\$128.5	\$17.3	\$11.4	\$128.5	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$13.2	\$0.4	\$0.2	\$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	\$0.3	\$11.1	\$0.0
<b>Total</b>	<b>\$188.0</b>	<b>\$23.3</b>	<b>\$16.9</b>	<b>\$188.0</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	\$0.3	\$10.0	\$0.0
80 Professional Services	\$160.9	\$22.4	\$16.0	\$160.8	\$0.0
90 Unallocated Contingency	\$16.1	\$0.0	\$0.0	\$16.1	\$0.0
<b>Total (10 - 90)</b>	<b>\$188.0</b>	<b>\$23.3</b>	<b>\$16.0</b>	<b>\$188.0</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

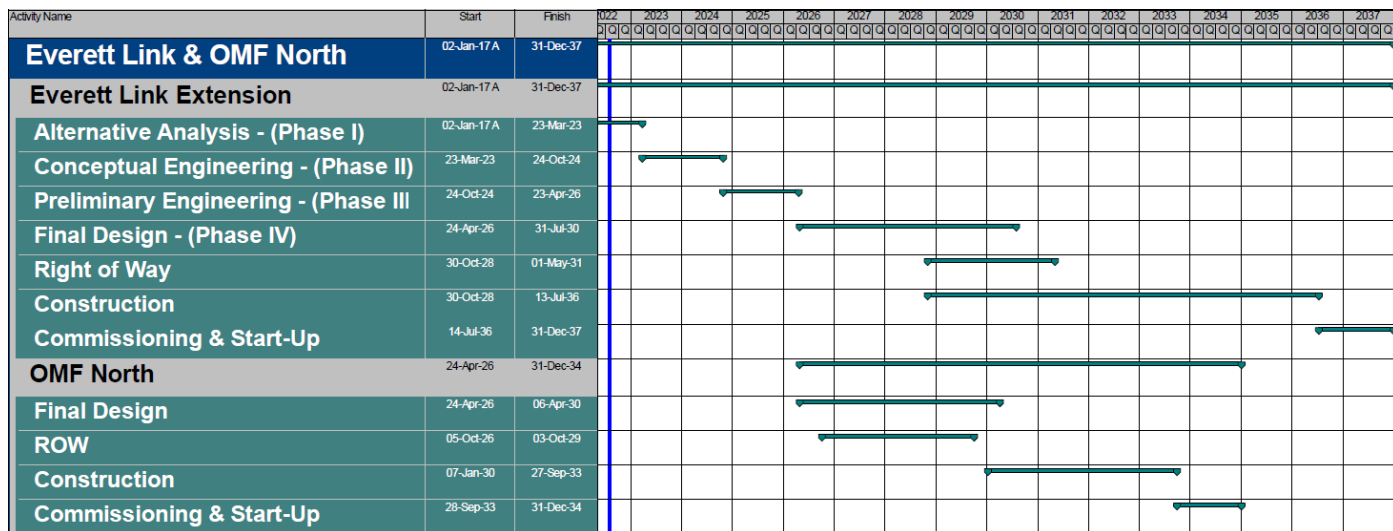
## Risk Management

The following are the top cost and schedule project risks:

- Potential risks associated with engineering challenges over lengthy and varied geography and limited design yet to be investigated. Further design as project advances.
- Potential risks associated with real estate acquisition process and yet unknown ROW needs in early design.
- Potential risks due to confirming environmental review process with third parties.
- Potential risks associated with challenge of consensus with partners on site selection for OMF North.

## Project Schedule

Phase 1 work is holding to the current schedule. Developing the scope of work for Phase 2 will begin in September. Completion of Phase 1 work is forecast for early Q2 2023, with Board identification of a preferred alternative and other alternatives for study in environmental review. ST staff are currently evaluating the durations of both conceptual and final designs, and will update the schedule based on the outcome of those efforts. Parking at Mariner and Everett retains a target date of 2046. The summary schedule shown reflects the current target dates for both the LRT alignment and the OMF facility.



## Community Engagement

- Hosted a table at Everett Food Truck and Upper Left Beerfest to share project and agency information.
- Presented a project update at a South Everett Mukilteo Rotary meeting.
- Continued coordination with Local Initiatives Support Corporation and Snohomish County.
- Continued coordination with partner agencies including City of Lynnwood, City of Everett, Snohomish County and Community Transit regarding community engagement.

## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE 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.

Variance between planned and actual FTE average is expected to continue through 2022, in accordance with the consultant schedule extension and ST realignment decisions.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	18.9	11.4	7.5
Consultants	27.0	22.7	4.3
TOTAL	45.9	34.1	11.8

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

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail Federal Way Link Extension

## Project Summary

### Scope

**Limits** The Federal Way Link Extension (FWLE) adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center.

**Alignment** The extension generally parallels SR 99 and I-5 freeway.

**Stations** Station and garages at Kent Des Moines (KDM), Star Lake (SL), and the Federal Way Downtown (FWD)

**Systems** Signals, traction power, and communications (SCADA)

**Phase** Final Design/Construction

**Budget** \$2.451 Billion (ST Baseline Sep 2018)

**Schedule** Revenue Service: December 2024



Map of Federal Way Link Extension

## Key Project Activities

- F200 progress detail highlights are reflected on last two pages of FWLE section and concrete work continues throughout the alignment.
- Work at Structure C on hold as the team assesses the viability of the temporary construction methods. DB developing alternative design options.
- Traffic Mitigation design highlights are reflected in another section of this report.
- Await review comments from the City of SeaTac for the Consolidated Transit Way Agreement, Board approval and execution planned for Q4 2022.
- Revised scope language for minor revisions to the City of SeaTac Development Agreement memorializing agreed street lighting at South 211 Street & 32 Avenue South comments were received from the City of SeaTac.
- Project team continued coordinating utility relocations that are necessary in future station areas.
- The final Quantitative Risk Assessment report was completed this period and distributed to project team and FTA/PMOC.
- Ongoing ROW acquisition and relocations continued related to Traffic Mitigation and F200 parcels.



# Link Light Rail Federal Way Link Extension



## Project Cost Summary

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

This period approximately \$53.3M was incurred of which \$49.2M for Construction phase comprised mainly of \$48.8M for F200 Design Build construction contract and \$0.4M for Utility Relocation by Others. Construction Services was \$2M; \$0.3M for Third Party; and \$1.5M was for Right-of-Way. 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	\$41.9	\$41.2	\$96.5	\$0.0
Preliminary Engineering	\$46.5	\$46.1	\$45.6	\$45.3	\$46.1	\$0.0
Final Design	\$3.1	\$4.8	\$3.9	\$2.4	\$4.8	\$0.0
Construction Services	\$107.0	\$116.0	\$101.6	\$65.9	\$116.0	\$0.0
3rd Party Agreements	\$27.7	\$27.7	\$25.3	\$16.6	\$27.7	\$0.0
Construction	\$1,831.9	\$1,821.5	\$1,432.7	\$836.0	\$1,821.5	\$0.0
ROW	\$338.8	\$338.8	\$219.2	\$217.9	\$338.8	\$0.0
<b>Total</b>	<b>\$2,451.5</b>	<b>\$2,451.5</b>	<b>\$1,870.2</b>	<b>\$1,225.3</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	\$155.2	\$404.8	\$221.0	\$512.7	-\$357.5
20 Stations	\$318.9	\$105.2	\$300.3	\$150.4	\$334.5	-\$229.3
30 Support Facilities	\$5.3	\$4.6	\$11.6	\$6.4	\$4.9	-\$0.4
40 Sitework & Special Conditions	\$558.4	\$1,154.4	\$477.7	\$286.8	\$559.4	\$595.0
50 Systems	\$153.8	\$49.6	\$124.4	\$65.1	\$152.2	-\$102.6
<b>Construction Subtotal (10 - 50)</b>	<b>\$1,559.4</b>	<b>\$1,468.9</b>	<b>\$1,318.8</b>	<b>\$729.6</b>	<b>\$1,563.7</b>	<b>-\$94.9</b>
60 Row, Land	\$341.6	\$338.8	\$219.2	\$217.9	\$338.8	\$0.0
70 Vehicles	\$1.8	\$1.8	\$0.0	\$0.0	\$1.8	\$0.0
80 Professional Services	\$370.7	\$396.9	\$332.2	\$277.9	\$302.1	\$94.8
90 Unallocated Contingency	\$178.1	\$245.2	\$0.0	\$0.0	\$245.2	\$0.0
<b>Total (10 - 90)</b>	<b>\$2,451.5</b>	<b>\$2,451.5</b>	<b>\$1,870.2</b>	<b>\$1,225.3</b>	<b>\$2,451.5</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Link Light Rail Federal Way Link Extension



## Contingency Management

The FWLE project budget was baselined in September 2018 with a total contingency of \$549.9M. Additional contingency of \$460M (FTA P65 requirement in FFGA) is not reflected in the below contingency status. The current contingency balance is \$472.2M.

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

**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. During this period the AC overall was reduced by approximately \$0.4M mostly due to several executed F200 change orders, A&E contract change order for Traffic Study and Admin reimbursement from WSDOT for betterment work.

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

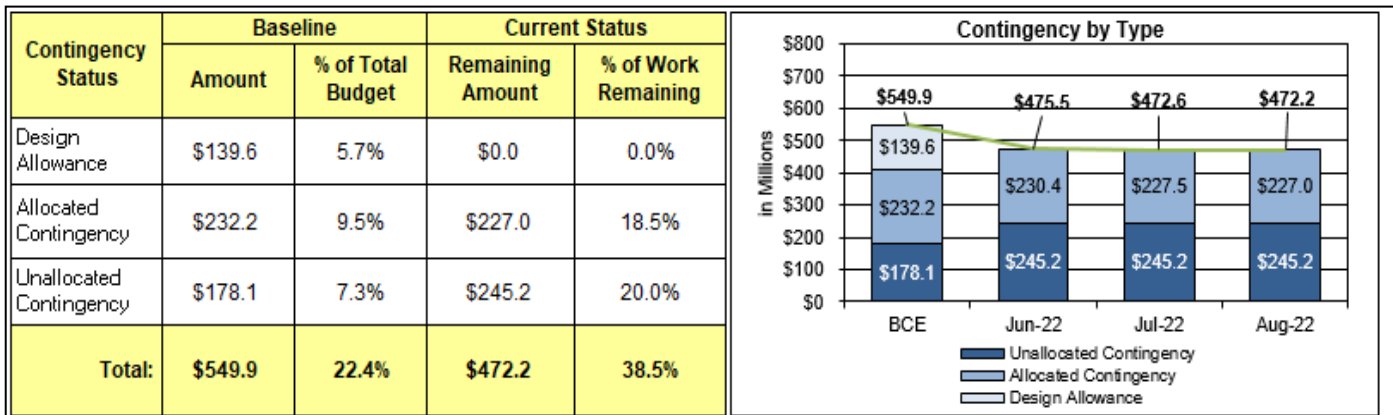
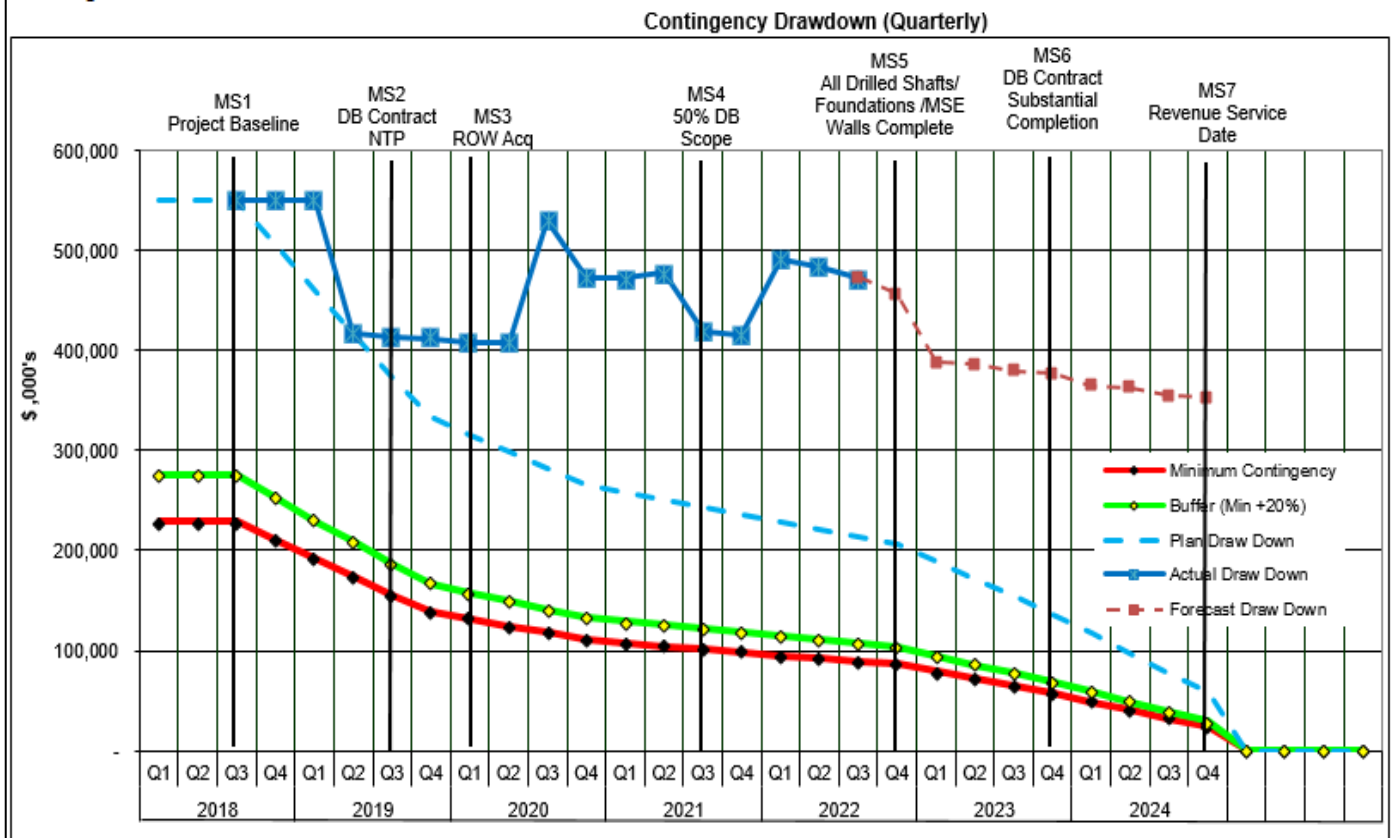


Table figures are shown in millions.



## Risk Management

The following are the top project wide risks:

- A liquefaction zone identified at Structure C and the identified design solution added new scope to the DB contract, resulting in cost and schedule impacts to the project.
- Unstable soil conditions encountered along the Structure C alignment to perform temporary works for construction access could result in additional cost and schedule impacts to the project.
- Several ST projects will be competing for programmatic ST resources in 2024 to oversee work activities.
- PSE Fiber is required to provide continuous monitoring of power supply to FWLE TPSS sites. This additional fiber required by PSE, may impact construction schedule (MS#3) and potentially the project RSD.
- The integration of additional requirements for facilities and/or systems (by ST and AHJs) could not only result in increased costs, but could also impact construction completion.
- AHJs request additional design modifications, above and beyond the original scope, may result in cost and schedule impacts to Traffic Mitigation (FD or Construction-F210) and FWLE completion.
- The required number of LRVs is not available to support pre-revenue service, resulting in delays to F200 Final Acceptance.
- Additional scope is identified at the end of construction (above current expectations and scope) resulting in cost and schedule impacts to the project.
- As a result of limited resource availability (L&I inspectors) to achieve Gold Seal certification, certification may be delayed, impacting RSD.
- Hazardous materials are discovered during F210 construction, delaying RoW acquisition, and resulting in cost and schedule impacts to the project.



*WA1.1 Direct Fixation Track Grinding*



*WA3.8 FWTC Soffit Steel Install*

# Link Light Rail Federal Way Link Extension



## Project Schedule

The calculated weighted percent complete of the major construction contracts is 58.0%. This weighted percent complete does not account for potential cost and schedule delays at structure C.

The project schedule presented below is still under review. Right-of-Way acquisitions for F200 are nearly complete. F210 (traffic mitigation) properties are driving FFGA Milestone MS 03 – ROW Acquisitions Complete, which is trending to be finished by Q1 2024. The F210 ROW team has started appraisals for some of the needed properties, is finalizing the Appraisal Matrix, and is waiting for Letters of Concurrence (LOC) from the City of Kent and Federal Way. The Final Designer has completed the 50% design and is preparing the draft geotechnical report, draft wetland/critical areas report, WSDOT channelization plan, and the Alta Surveys for ROW parcel maps. Lastly, continued delay in the Light Rail Vehicle (LRV) schedule may impact Sound Transit’s ability to commence with simulated service. The project schedules are under review to assess the impacts to the revenue service date of December 2024 from COVID and the concrete strike. The project schedules will be revised accordingly.

Activity Name	Start	Finish	2022			2023				2024				2025
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Sound Transit</b>	01-Jul-16 A	31-Dec-24												
<b>Sound Transit 2</b>	01-Jul-16 A	31-Dec-24												
<b>South Corridor</b>	01-Jul-16 A	31-Dec-24												
<b>LRT Extension - South</b>	01-Jul-16 A	31-Dec-24												
<b>Federal Way - Main Schedule</b>	01-Jul-16 A	31-Dec-24												
<b>Federal Way Link Extension - Integrated Main Schedule</b>	01-Jul-16 A	31-Dec-24												
<b>Federal Way Link Extension - Integrated Main Schedule</b>	01-Jul-16 A	31-Dec-24												
<b>Baseline/FFGA Milestones</b>	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)		05-Jan-22 A												
MS 05 - All Drilled Shafts/Foundations/MSE Walls Complete (Q1 2022)		28-Jun-23												
MS 03 - ROW Acquisitions Complete (Q1 2020)		22-Feb-24												
MS 06 - Design/Build Contractor - Substantial Completion - (Q4 2023)		09-Aug-24												
MS 07 - Revenue Service w/Float (Q4 2024)		31-Dec-24*												
<b>Preliminary Engineering</b>	01-Jul-16 A	22-Jan-20 A												
<b>Third Party Agreements and Permitting</b>	01-Jul-16 A	21-Sep-20 A												
<b>Federal Way Link - Design-Build Construction Management Consultant - Contract</b>	14-Nov-16 A	04-Aug-24												
<b>Federal Way Design/Build Contract Procurement</b>	11-Mar-17 A	07-Jun-19 A												
<b>Federal Way - Right of Way</b>	10-May-17 A	04-Dec-24												
<b>Federal Way - Construction</b>	01-Jun-19 A	21-Oct-24												
<b>Federal Way - F200 - Guideway and Stations - D/B Schedule Update</b>	01-Jun-19 A	09-Oct-24												
<b>Federal Way - F210 - Traffic Mitigation</b>	04-Jan-21 A	21-Oct-24												
<b>Federal Way - Rail Activation</b>	28-Jun-19 A	31-Dec-24												
<b>Federal Way Link Extension - Rail Activation</b>	28-Jun-19 A	31-Dec-24												
<b>Federal Way Link Extension - Rail Activation</b>	28-Jun-19 A	31-Dec-24												
<b>Rail Activation</b>	28-Jun-19 A	31-Dec-24												
<b>Rail Activation by Task</b>	03-Feb-20 A	30-Sep-24												
<b>LRV Conditional Acceptance - FWLE</b>	16-May-24	05-Nov-24												
<b>FWLE IT Coordination</b>	28-Jun-19 A	08-Oct-24												
<b>Systems Integration &amp; Testing</b>	19-Apr-23	21-May-24												
<b>Pre-Revenue Service</b>	10-Aug-24	08-Oct-24												
<b>Project Float</b>	10-Oct-24	31-Dec-24												
<b>Revenue Service</b>	31-Dec-24	31-Dec-24												

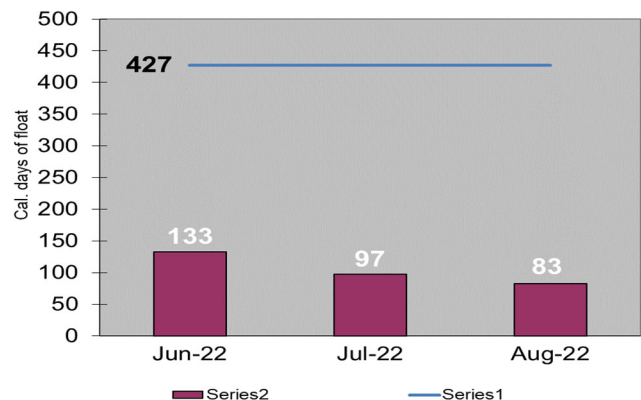
## Project Float

Federal Way Link Extension was baselined with 427 days of project float contingency. Currently, the project is reporting 83 days of project float contingency remaining. The decrease in project float contingency is caused by the continued impact of poor soil conditions at Structure C.

The F200 August 2022 schedule update is still under review. Sound Transit and the Design Builder are collaborating to mitigate the impact of the Structure C delay, which includes alternative design solutions.

The target revenue service date is currently being evaluated as part of a program-wide risk assessment. Results of that assessment will be available in Q4 2022.

**FWLE Current Float Contingency Trend**



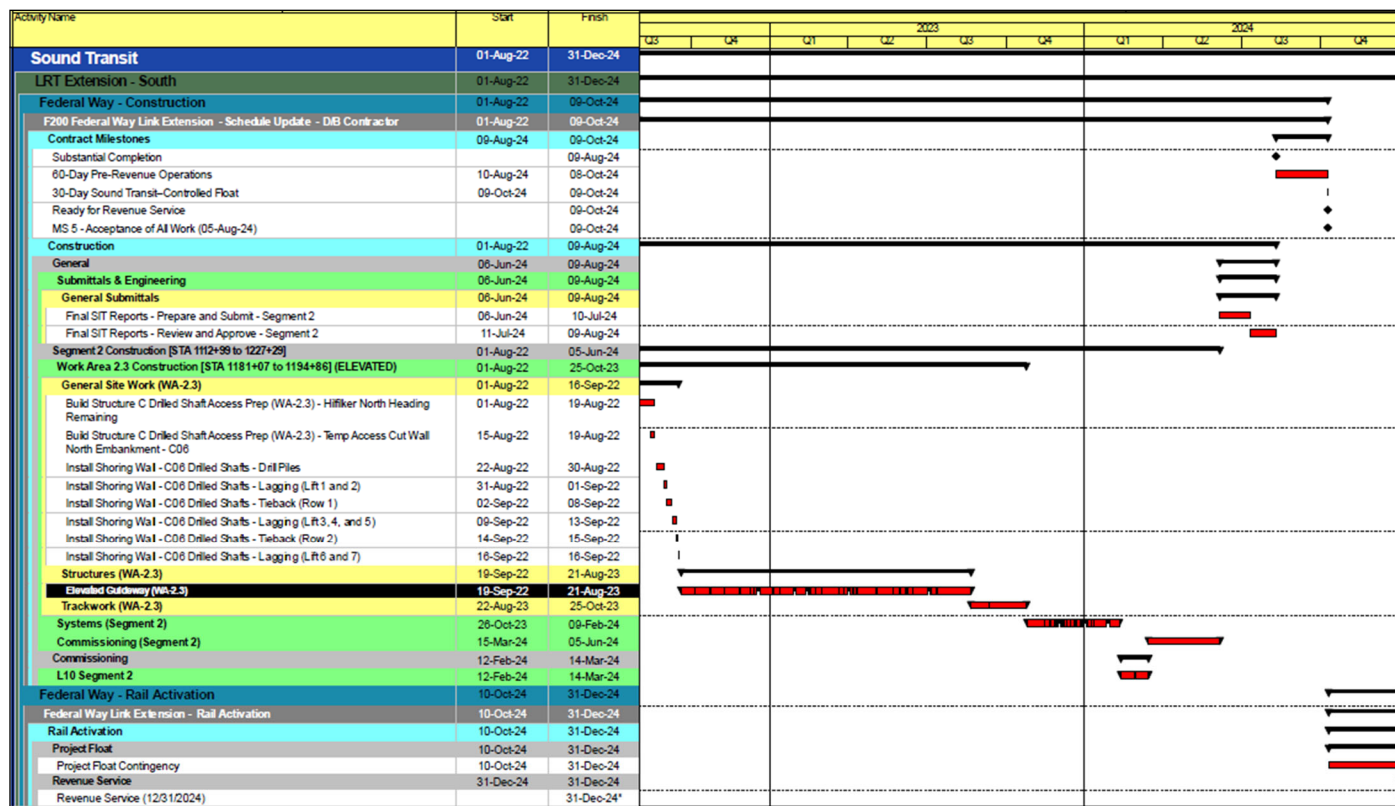


# Link Light Rail Federal Way Link Extension



## Critical Path Analysis

The critical path to revenue service commences with Structure C physical construction, which is currently on hold as the project team advances alternative design options. Work in this area has not recommenced since the latest hillside movement on 19-Jul-22. The Design Builder and Sound Transit have collaborated on simultaneously progressing several design solutions. Next, is the construction of Structure C shoring wall for drill shafts, installation of drill shafts, columns, precast girders, diaphragms, deck pours, and installation of direct fixation track plinths. Also on the critical path at Work Area 2.3 is OCS system installation, commissioning and system integration at Segment 2, and pre-revenue service operations.



## Traffic Mitigation Design

### Key Traffic Mitigation Issues:

- Continued/ongoing coordination with utilities, particularly focused on conflict resolution for ROW plans.
- Agreement reached with City of Federal Way to use Laurelwood mitigation site to mitigate impacts from the Traffic Mitigation Project.
- Critical Areas/wetland report work underway, field work is completed.
- Deviation for left turn length on S. 272nd approved by City of Kent
- 7 of 15 properties have started appraisal process
- Update of FEIS analysis at S. 320th & SR-99 underway to determine if mitigation is required
- Analysis of “need by date” for 6 intersections with ROW needs is in progress. Possible decoupling from F200 RSD
- Master Utility Relocation Agreement with MCI executed 8/25.
- WSDOT Channelization plan & document outline approved.

## Closely Monitored Issues

- Traffic Mitigation Design and F210 ROW acquisition.

## 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 easements 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.

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
276	366	448	356	457	440

*\*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.*

*Total Acquisitions: Defined as parcels recognizing only land, not owners*

*Board Approved: Based on parcels and properties (including multi-unit acquisitions)*

*Offers/Closings: Based on inclusive offers made to separate owners and interest holders*

*Relocations: Based on number of affected individuals*

*18 parcels added for traffic mitigation and 5 parcel added to board approved 4/1/2022*

## Community Engagement

- Attended several community events in August to answer questions and share information about FWLE, including Kent Farmers Market and Des Moines Waterfront Market.
- Provided notifications to residents and businesses for night and weekend work.
- Responded to questions and issues related to the paving work on 30th Ave. increased signage and worked with business owners to ensure access.
- Continued work with ST Graphics to update station names on website, maps, folios and all materials.
- Supported ongoing property owner outreach for the Traffic Mitigation project.
- Developed a Community Engagement plan for the Highline College work in collaboration with the city of Des Moines.
- Obtained Rights of Entry on properties to continue working on hazard tree removal and pot holing work.



*Uploaded quarterly flyover video to YouTube for sharing with AHJs and the public.*



## Staffing Summary

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

The project team has updated the Planned FTE Monthly Average estimate for the year.

Overall the project FTE is 11.1 below the staffing plan for this period. DBPM Services is slight higher than plan this period while addressing Design-Build contractor activities for change management, minor design and major construction oversight that involves drilled shafts, guideway, parking garages, stations, utility work and other civil work. ST staff is 12.0 under plan, however there are a few vacancies in the project that are in the process of being filled.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	44.7	32.7	12.0
Consultants	77.0	77.9	-0.9
TOTAL	121.7	110.6	11.1

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail Federal Way Link Extension



## Construction Safety

Data/ Measure	August 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	4	9
Days Away From Work Cases	0	2	4
Total Days Away From Work	0	6	9
First Aid Cases	6	21	33
Reported Near Mishaps	0	2	8
Average Number of Employees on Worksite	475	-	-
Total # of Hours (GC & Subs)	66,174	609,553	1,428,297
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	3.02	1.31	1.26
Lost Time Injury (LTI) Rate	0.00	0.66	0.56
<b>Recordable National Average</b>	<b>2.5</b>		
<b>LTI National Average</b>	<b>1.10</b>		
<b>Recordable WA State Average</b>	<b>5.20</b>		
<b>LTI WA State Average</b>	<b>2.90</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.*

## F200 Design Build Contract

### Current Progress

Status at the close of August 2022 : The F200 Design-Build Contractor, Kiewit, Significant construction progress occurred on all segments in relation to: Guideway (track construction, systems duct bank, sub-ballast, superstructure and substructure), SR99 Bridge (approach slabs and deck), Kent Des Moines (KDM) Station and Garage construction, Star Lake Station & Garage (foundations and walls), and Federal Way Downtown (FWD) garage, station, and End of Line Facility (EOL).

### Design:

- DB has informed ST rigid pier option is no longer viable. ST and DB holding workshops to review cost and schedule impacts of wall and long-span options. Awaiting DB response regarding root cause analysis of slope failure.

### Construction:

- Guideway substructure and superstructure construction continues in Work Area 1.1, 1.3, 3.4 and 3.8 . Percentage complete for all segments are as follows:

Details	Progress	Details	Progress	Details	Progress	Details	Progress	Details	Progress	Details	Progress
Drilled Shafts	93%	Columns	96%	Caps and Straddles	92%	Girder Erection	89%	Abutments	83%	Decks	76%

- Noise wall, mechanically stabilized earth wall, and cast-in-place wall construction work in progress in work areas 1.2, 2.2, 3.3, 3.5, and 3.7.
- SR99 Bridge: Bridge complete. Curb and gutter work in progress.
- Structure C: All site work stopped due to embankment failure.
- KDM Station: Plumbing testing. Escalator structure and elevator machine room construction; door and frame installations, Overhead electrical, fire and mechanical installations in progress.
- Star Lake Garage: Continued level 2 and level 3 post-tensioned deck, walls, and column construction.
- FWD and End of Line Facility: Continued hung plaza steel, mat slab and underground plumbing. Continue civil construction including vaults, structure support, and roadway restoration .
- FWD Garage modification: Pile caps, civil work for auger cast piles, and excavation for mat footings in progress.



WA 3.3 Pearson Drill at 1264NW - SW.JPG



WA 3.3 Pearson Place Concrete at 1264 Drill Shafts - S.JPG

# Link Light Rail Federal Way Link Extension



## Schedule Summary

The F200 progress schedule for August 2022 is still under review. The Design Builder reported no change to contract Milestones #2 and #3. This month Sound Transit executed a Change Order for severe weather that occurred in December 2021 that extended the required dates which match the current forecasted Milestone #2 and #3 dates. Next, Milestone #5 (acceptance of all work) is forecasted to be delayed due to poor soil conditions at Structure C. Alternative design solutions for this work area are underway. The total impact of the Structure C delay has yet to be determined. Sound Transit will continue to work with the Design Builder to reduce the impact of this delay.

Activity Name	Start	Finish	2022				2023				2024				
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>F200 Federal Way Link Extension - Schedule Update - D/B Contractor</b>	01-Jun-19 A	09-Oct-24													
<b>Contract Milestones</b>	07-Jun-19 A	09-Oct-24	[Gantt bar]												
Limited Notice to Proceed	07-Jun-19 A		[Gantt bar]												
Contractual Notice to Proceed	28-Feb-20 A		[Gantt bar]												
Notice to Proceed	04-May-20 A		[Gantt bar]												
Issuance of Full Notice to Proceed (REC-01802, 07-Dec-2020)	07-Dec-20 A		[Gantt bar]												
MS 1 - Civil Work in WSDOT ROW From S 208th Street to I-5 (Sta. L 2260+00) (VA-2) (01-Mar-22)		01-Mar-22 A													
MS 2 - Civil Work in WSDOT ROW from Start of FWLE to S 208th Street (VA-1) (01-Nov-22)		07-Nov-22													
MS 3 - LRV Early Storage (2,000 feet of Track) (01-Jun-23)		02-Jun-23													
MS 4 - Work in WSDOT ROW from I-5 (Sta. L 2260+00) to S 272nd Street (VA-3) (01-Nov-23)		24-Oct-23													
EOL Building - Completion 365d Before Milestone 5		09-Nov-23													
Substantial Completion		09-Aug-24													
60-Day Pre-Revenue Operations	10-Aug-24	08-Oct-24													
30-Day Sound Transit-Controlled Float	09-Oct-24	09-Oct-24													
MS 5 - Acceptance of All Work (05-Aug-24)		09-Oct-24													
<b>Design</b>	07-Jun-19 A	30-Jun-23	[Gantt bar]												
<b>Design Milestones</b>	07-Jun-19 A	30-Jun-23	[Gantt bar]												
<b>Corridor Wide</b>			[Gantt bar]												
Design Packages - Kent Des Moines Segment 1	07-Jun-19 A	04-Aug-22	[Gantt bar]												
Design Packages - Star Lake Segment 2	07-Jun-19 A	15-Jul-21 A	[Gantt bar]												
Design Packages - Federal Way Transit Segment 3	07-Jun-19 A	01-Aug-22	[Gantt bar]												
Design Packages - Federal Way Transit Segment 3	07-Jun-19 A	06-Sep-22	[Gantt bar]												
<b>Construction</b>	01-Jun-19 A	08-Oct-24	[Gantt bar]												
<b>General</b>	01-Jun-19 A	09-Aug-24	[Gantt bar]												
Segment 1 Construction [STA 990+10 to 1112+99]	28-Jun-19 A	09-Aug-24	[Gantt bar]												
Segment 2 Construction [STA 1112+99 to 1227+29]	28-Jun-19 A	09-Aug-24	[Gantt bar]												
Segment 3 Construction [STA 1227+29 to 1401+87]	28-Jun-19 A	09-Aug-24	[Gantt bar]												
Commissioning	10-May-21 A	08-Oct-24	[Gantt bar]												
Provisional Sums	01-Dec-19 A	16-Mar-24	[Gantt bar]												
Change Orders	01-Jul-19 A	11-Aug-24	[Gantt bar]												

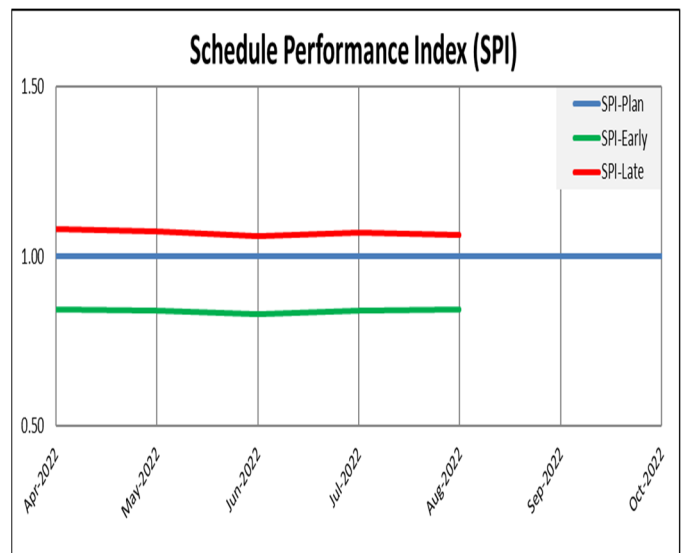
## Schedule Performance Index

For this reporting period, the Early SPI is 0.84 and Late SPI is 1.06 and is calculated based on draft EVM which is an approximation (previously: 0.84 and 1.07 respectively).

August cumulative cost based on draft is in between the Cumulative Early and Late date planned value.

Kiewit cost performance for the month of August is below the late revised planned value due to lack of direct manpower.

Kiewit SPI Performance is below acceptable early range of 0.90 – 1.10 due to lack of direct manpower.



# Link Light Rail Federal Way Link Extension



## Next Period's Activities

### Design:

- Structure C: Ongoing workshops to review options for final design.

### Construction:

- Guideway substructure and extensive superstructure construction continues (all segments).
- Track work: Distribute rail, skeletonize track, form plinths, final alignment, place sub ballast and ballast mat.
- SR99 Bridge: Install luminaires, finish paving, construct sidewalks, and remove detour.
- Kent Des Moines (KDM) Garage: Continue interior room finishes, and elevator roof and equipment install, metal deck for canopy, Painting columns and Canopy, Plumbing and Fire Suppression tests
- KDM Station: Continue steel erection, elevator machine rooms, and plumbing tests.
- Star Lake Garage: Construction effort for walls, columns, and post tensioned decks at Level 4.
- Star Lake Station: Continue wall construction, elevator machine, mechanical and electrical room, form stairs and excavate for ancillary building & Plumbing testing.
- Highline College: Continue Landscaping and punch list

## Closely Monitored Issues (F200)

- Structure C: Rigid pier design encountered constructability issues due to an embankment failure and I-5 lane closure that stopped work until further design analysis is completed. Alternate designs are expected to be presented in August.
- PSE utility easement approval is needed to ensure power for TPSS S02 by Jan 2023. Fiber for medium voltage switch must be installed prior to revenue service.
- Track plinth's structure A: Cracks in Plinths mix modified for future work. Structure A repair process under review.
- As-Built: ST communicated concerns regarding contractor's as-built methods of approving and recording changes. DB reports Midway sewer as-built are nearing completion.

## Cost Summary

Present Financial Status	Amount
<b>F200 Contractor - Kiewit Infrastructure West Co</b>	
Original Contract Value	\$1,285,200,000
Change Order Value	\$163,809,328
Current Contract Value	\$1,449,009,328
Total Actual Cost (Incurred to Date)	\$813,371,238
Percent Complete	<b>58.0%</b>
Authorized Contingency + Add'l Ctg	\$248,297,519
Contingency Drawdown	\$163,809,328
*Contingency Index *Excludes ATC/NTD	<b>1.32</b>



WA 2.4 SL Garage Concrete Placement for Shear Wall on PJ



# Link Light Rail Hilltop Tacoma Link Extension



## Project Summary

### Scope

**Limits** City of Tacoma

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

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

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

**Phase** Construction

**Budget** \$282.7 Million (Increased February 2022)

**Schedule** Revenue Service: Q1 2023



Map of Hilltop Tacoma Link Extension.

## Key Project Activities

**Final Design:** Design Consultant continued design services during construction.

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

- **Heading 1:** Began construction of the cutover at 9th and Commerce including: demolition of existing roadway/track-slab; relocated water and storm lines; installed inbound and outbound track-slab at intersection and installed crosswalks and ADA ramps.
- **Heading 2:** Completed installation of tactile pavers at Stadium District Station and continued fiber splicing at traffic signal cabinets.
- **Heading 3:** Began repair of sanitary manhole at intersection of Division and MLK. Began fiber splicing at traffic signal cabinets. Installed tactile pavers at Hilltop and St. Joseph Stations.
- **OMF:** Continued work on Milestone No. 1 punch list items with four open items remaining. Continued betterment work on E. 25th St.

## Closely Monitored Issues

- Staff continues to monitor LRV delivery dates and conditional acceptance timelines to support pre-revenue service.
- Staff continues to assist contractor planning and execution efforts for required systems tests and support agency integrated testing effort.

# 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 \$2.8M was incurred. The majority of the expenditures were in the Construction phase for the T100 Construction Contract.

### Cost Summary by Phase

Project Phase	Baseline Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$28.9	\$22.2	\$22.0	\$28.9	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$16.2	\$15.1	\$14.8	\$16.2	\$0.0
Construction Services	\$16.7	\$15.4	\$13.2	\$16.7	\$0.0
Third Party Agreements	\$1.4	\$1.3	\$1.0	\$1.4	\$0.0
Construction	\$172.3	\$159.0	\$155.1	\$172.3	\$0.0
Vehicles	\$39.7	\$33.1	\$27.4	\$39.7	\$0.0
ROW	\$1.9	\$1.9	\$1.9	\$1.9	\$0.0
Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$282.7</b>	<b>\$253.6</b>	<b>\$241.0</b>	<b>\$282.7</b>	<b>\$0.0</b>

### Cost Summary by SCC

SCC Element	Baseline Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track	\$33.0	\$30.4	\$29.7	\$33.0	\$0.0
20 Stations	\$3.7	\$3.4	\$3.3	\$3.7	\$0.0
30 Support Facilities	\$43.8	\$40.4	\$39.4	\$43.8	\$0.0
40 Sitework & Special Conditions	\$55.0	\$50.8	\$49.6	\$55.1	\$0.1
50 Systems	\$36.8	\$33.9	\$33.1	\$36.8	\$0.0
<b>Construction Subtotal (10 - 50)</b>	<b>\$172.3</b>	<b>\$159.0</b>	<b>\$155.1</b>	<b>\$172.3</b>	<b>-\$0.1</b>
60 ROW, Land	\$1.8	\$1.9	\$1.9	\$1.9	\$0.2
60 Vehicles	\$39.4	\$33.1	\$27.4	\$39.7	\$0.3
80 Professional Services	\$67.4	\$59.6	\$56.5	\$68.8	\$1.4
90 Unallocated Contingency	\$2.0	\$0.0	\$0.0	\$0.0	-\$2.0
<b>Total (10 - 90)</b>	<b>\$282.7</b>	<b>\$253.6</b>	<b>\$241.0</b>	<b>\$282.7</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Link Light Rail Hilltop Tacoma Link Extension



## Contingency Management

The project was baselined in September 2017 with a total contingency of \$33.8M. Since baselining, there were drawdowns on AC and UAC for Tacoma LRV, T100 construction, Design Services During Construction and Construction Management services contracts. The baseline contingency levels were insufficient and required an additional \$35.4M which was approved by the ST Board in June 2020. An additional \$30M was approved by the ST Board in February 2022.

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

**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period the AC was reduced by approximately \$0.1M due to executed change orders on the T100 contract. The current balance is \$16.3M.

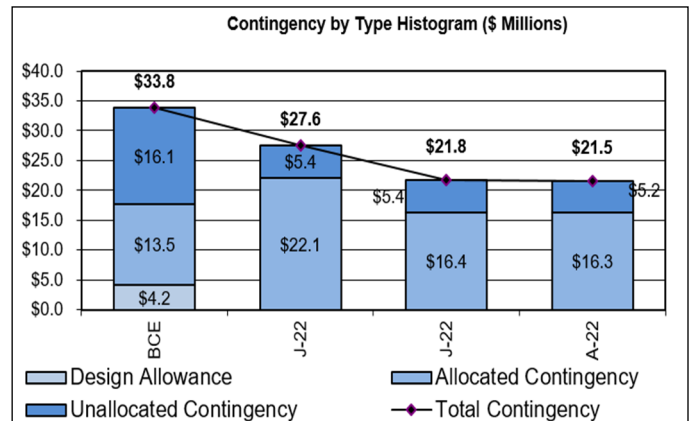
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance was reduced by \$0.2M in order to fund the Opening Day WBS.

### Contingency Status (Monthly)

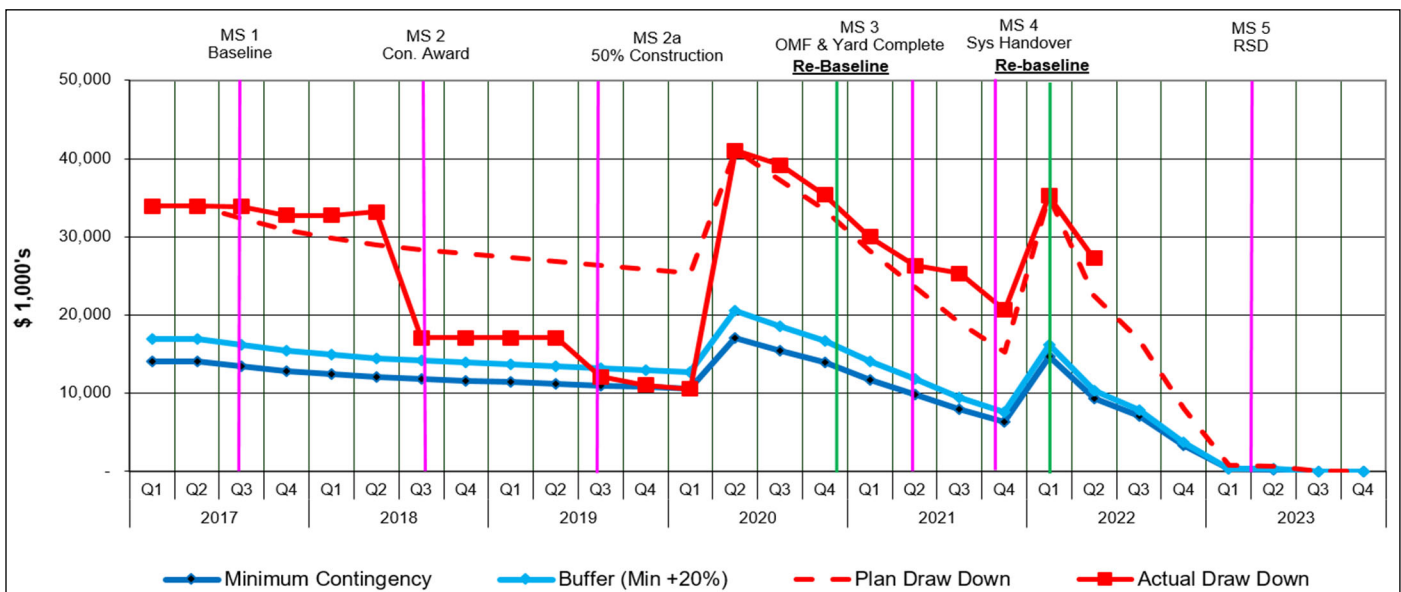
Type	Baseline		Re-Baseline	
	Amount	% of Total	Amount	% of Total
Design Allowance	\$4.2	2.2%	\$0.0	0.0%
Allocated Contingency	\$13.5	6.8%	\$16.3	39.0%
Unallocated Contingency	\$16.1	8.2%	\$5.2	12.4%
<b>Total</b>	<b>\$33.8</b>	<b>17.2%</b>	<b>\$21.5</b>	<b>51.5%</b>

Table figures are shown in millions.

### Contingency by Type (\$ Millions)



### Contingency Drawdown (Quarterly)



Contingency Drawdown as of June 30, 2022

## Risk Management

The following are the top project wide risks:

- The T100 contractor may submit a cumulative impact claim that exceeds available budget.
- LRV manufacturer may not submit completed documentation on time and thereby delay conditional acceptance of cars.
- Lack of detail in T100 construction schedule may impede adequate resource planning for rail activation, safety certification, System Integration Testing (SIT), and vehicle testing and commissioning.
- LRV testing complications may delay conditional acceptance.
- Delays in commissioning could impact training capacity, delaying revenue service.



*9th and Commerce Cutover*



# Link Light Rail Hilltop Tacoma Link Extension



## Project Schedule

The project completion schedule was updated through the end of August 2022 and shows the project is 96% physically complete.

**Revenue Service:** Revenue service is scheduled for March 31, 2023. The current forecast indicates revenue service four weeks earlier. Revenue service requires conditional acceptance of all five LRVs. Any changes in this logic would be addressed as a work-around.

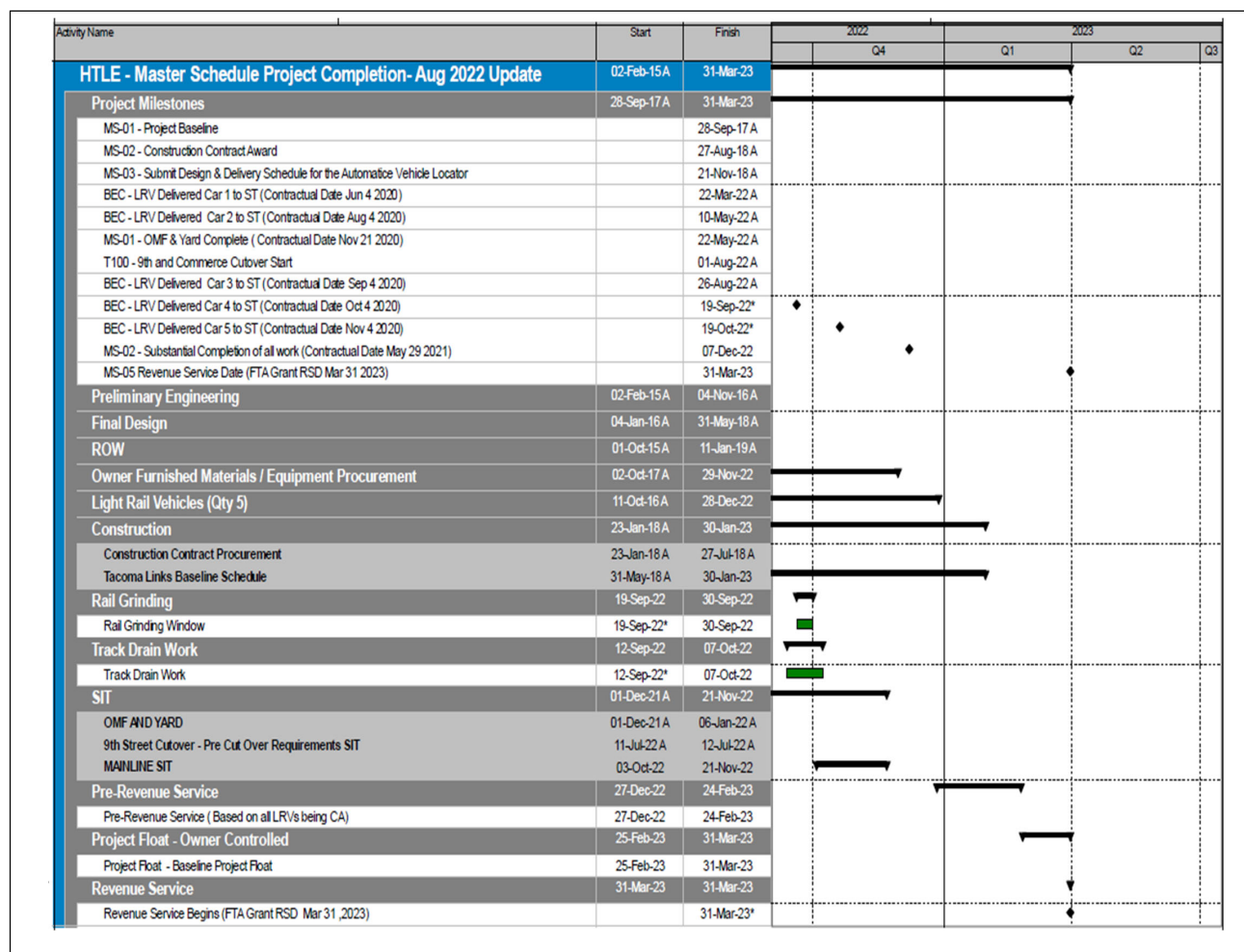
**BEC LRV:** The fourth LRV is scheduled for late September delivery to Tacoma with the fifth and last LRV arriving in late October 2022.

**T100:** The contractor's August 2022 was submitted late and is under review. The submitted schedule indicates substantial completion in January 2023 which is not supported by progressed work and the contractor's own three week look-ahead schedule. Sound Transit estimates substantial completion in early December. Much of the discrepancy is owed to longer durations for systems integration tests than depicted in the contractor's own systems integration plan.

The critical cutover at 9<sup>th</sup> and Commerce began on August 1, 2022 and is scheduled for completion on September 16, 2022.

**Rail Activation:** The rail activation schedule continues be updated to incorporate the revised system integration test matrix. This schedule also includes safety certification activities required before revenue service date.

**Quantitative Risk Analysis (QRA):** Last risk review meeting was held on August 29, 2022.





# Link Light Rail Hilltop Tacoma Link Extension

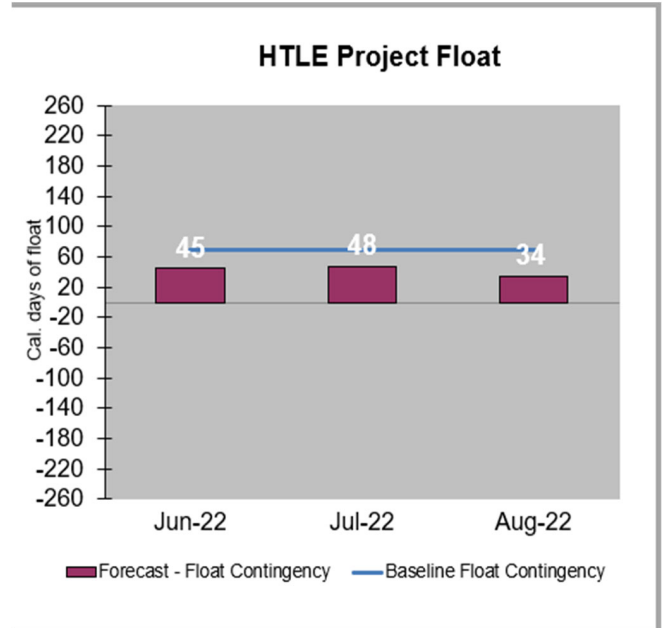


## Project Float

For reporting and analysis purposes, schedule float is calculated based on the latest schedule data and revenue service on March 31, 2023. Sound Transit anticipates identifying a specific revenue service date in Q4 2022.

Project float was reduced from 48 days to 34 days. The August update indicates five LRVs being conditionally accepted by December 27, 2022 in advance of the start of pre-revenue service.

The integrated master schedule continues to be refined to accommodate prioritization of cutover work and onsite testing of new LRVs. It is likely the float contingency will be updated further in subsequent periods.



## Critical Path Analysis

The project completion schedule contains multiple critical paths.

The first critical path pertains to LRV deliveries and conditional acceptance of car #5 in December 2022.

The second critical path still remains the resolution of OSC conflicts with signals required to complete Level 3 system testing.

Impacts to any of the above could influence the start of pre-revenue and revenue service activities.

Activity Name	Start	Finish	2022				2023					
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
<b>HTLE - Master Schedule Project Completion-Aug 2022 Update</b>	27-Dec-22	31-Mar-23										
<b>Project Milestones</b>	31-Mar-23	31-Mar-23										
MS-05 Revenue Service Date (FTA Grant RSD Mar 31 2023)		31-Mar-23										
<b>Light Rail Vehicles (Qty 5)</b>	27-Dec-22	27-Dec-22										
<b>Light Rails Vehicles</b>	27-Dec-22	27-Dec-22										
Light Rail Vehicles - Manufacture, Ship and On Site Testing	27-Dec-22	27-Dec-22										
<b>Car 5</b>	27-Dec-22	27-Dec-22										
Conditional Acceptance	27-Dec-22	27-Dec-22										
Conditional Acceptance - LRV 5		27-Dec-22*										
<b>Pre-Revenue Service</b>	27-Dec-22	24-Feb-23										
Pre-Revenue Service (Based on all LRVs being CA)	27-Dec-22	24-Feb-23										
<b>Project Float - Owner Controlled</b>	25-Feb-23	31-Mar-23										
Project Float - Baseline Project Float	25-Feb-23	31-Mar-23										
<b>Revenue Service</b>	31-Mar-23	31-Mar-23										
Revenue Service Begins (FTA Grant RSD Mar 31 ,2023)		31-Mar-23*										

# Link Light Rail Hilltop Tacoma Link Extension



## Community Engagement

- Held weekly meetings with Multicare representatives to go over construction impacts and coordination.
- Sent regular construction traffic control updates to the HTLE email list, HTLE Facebook page and stakeholder email list.
- Briefed the Downtown on the Go organization on Hilltop Tacoma Link project status
- Worked with the City of Tacoma for parking mitigation for businesses and residences located on Commerce Street impacted by the loss of street parking
- Updated construction alert to the N. 2nd Street neighborhood regarding the long term closure between Yakima and I Street

## 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.

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

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	20.7	16.4	4.3
Consultants	23.4	20.9	2.5
TOTAL	44.1	37.3	6.8

\* An FTE is the equivalent of 1920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail Hilltop Tacoma Link Extension



## Construction Safety

Data/ Measure	August 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	1	13
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
First Aid Cases	0	1	24
Reported Near Mishaps	1	2	70
Average Number of Employees on Worksite	76	-	-
Total # of Hours (GC & Subs)	13,297	67,576	408,328
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	0.00	2.96	6.37
Lost Time Injury (LTI) Rate	0.00	0.00	0.00
<b>Recordable National Average</b>	2.50		
<b>LTI National Average</b>	1.10		
<b>Recordable WA State Average</b>	5.20		
<b>LTI WA State Average</b>	2.90		

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

# Link Light Rail Hilltop Tacoma Link Extension



## Contract T100 — Hilltop Tacoma Link Extension

### Current Progress

**Heading 1:** Continue civil construction activities at the 9<sup>th</sup> and Commerce cutover including: relocation of water and storm lines; installation of roadway panels, crosswalks and ADA ramps and demolition of Theater District Station.

**Heading 2:** Completed installation of tactical pavers at Stadium District Station. Continued fiber splicing at traffic cabinets.

**Heading 3:** Paved the east side of MLK and S. 15<sup>th</sup> Street. Continued repair of sewer manhole at Division and MLK. Continued fiber splicing at traffic cabinets.

**OMF Bldg. & Yard:** Continued Milestone #1 punch list work. Continued betterment work at north side of E. 25<sup>th</sup> St.

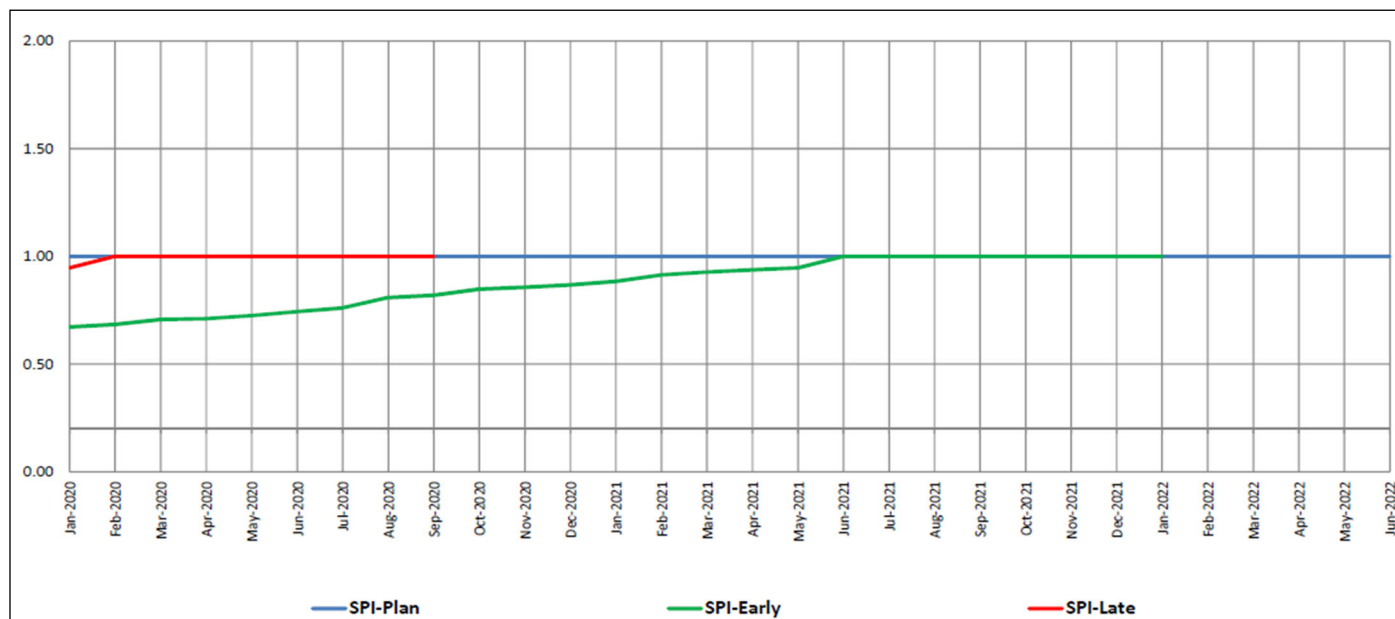
### Schedule Summary

The T100 August 2022 monthly schedule is still under ST review as of this report period but was used for planning purposes. 9th and Commerce Cutover began on August 1, 2022 and will be complete on September 16, 2022. Milestone #2 Substantial Completion of all work is forecasted for January 13, 2023.

Activity Name	Start	Finish	2022				2023			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>T100 Hilltop Tacoma Link Extension Schedule August Update</b>	31-May-18 A	13-Jan-23								
<b>Tacoma Links Baseline Schedule</b>	31-May-18 A	13-Jan-23								
<b>Milestones</b>	29-Jun-18 A	13-Jan-23								
<b>Job Milestones</b>	29-Jun-18 A	13-Jan-23								
<b>Contractual Milestones</b>	21-Nov-18 A	12-Jan-23								
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 + 116 = 3/17/21)		20-May-22 A								
Contr. MILESTONE 1A: OMF Final Completion		01-Oct-22								
Contr. MILESTONE 2: Substantial Completion of All Work (NTP + 1005 + 247+18 = 2/17/22)		12-Jan-23*								
<b>PreConstruction</b>	31-May-18 A	21-Dec-22								
Heading 1: 7th & Commerce to Stadium Way & Division	15-Oct-18 A	23-Nov-22								
Heading 2: Stadium Way & Division to Division St and MLK	23-Oct-18 A	23-Dec-22								
Heading 3: Division St and MLK to MLK & 19th	15-Oct-18 A	04-Nov-22								
OCS Wire Runs	19-Jul-21 A	04-Sep-22								
Train Signal System	19-Dec-20 A	27-Sep-22								
Job Wide ITS	29-Sep-22	03-Nov-22								
OMF Facility	29-Aug-18 A	01-Oct-22								
Testing & Commissioning	11-Mar-19 A	12-Jan-23								
Change Orders	07-Jan-19 A	23-Nov-22								
Provisional Sum Time Impacts	01-Feb-19 A	14-Sep-22								
Other Time Impacts	04-Mar-19 A	04-Nov-22								
RFCs	09-Jan-19 A	17-Oct-22								
Provisional Sums	03-Dec-18 A	17-Dec-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 which is consistent with last month. The SPI shown is relative to the project baseline and does not incorporate executed change orders and time extensions. The contractor needs to reforecast executed changes, upon receiving and acceptance, ST will incorporate the updated data into the SPI and report accordingly. Until such time, SPI will remain at 1.0.



## Next Period's Activities

**Heading 1:** Complete the cutover at 9th and Commerce.

**Heading 2:** Finish sewer relocation at intersection of Division Ave. and MLK. Complete fiber splicing at signal cabinets.

**Heading 3:** Begin grading and forming crosswalks on the west side of the S. 11<sup>th</sup> and MLK intersection. Complete fiber splicing at signal cabinets.

**OMF Bldg. and Yard:** Complete Milestone #1 punch list items. Complete betterment work on E. 25<sup>th</sup> St.

## Closely Monitored Issues

- ST continues to monitor contractor compliance to protocols identified in their COVID-19 safety plan.
- ST continues to monitor timeline of conditional acceptance of LRV to support start of pre-revenue service.
- 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.



# 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	\$32,341,036
Current Contract Value	\$140,636,036
Total Actual Cost (Incurred to Date)	\$138,209,134
Percent Complete	98%
Authorized Contingency	\$40,114,750
Contingency Drawdown	\$32,341,036
Contingency Index (CI = % Complete/% Ctg Spent)	1.22



*Removing switch at 9th and Commerce*

# Link Light Rail Hilltop Tacoma Link Extension



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

### Current Progress

- LRV #1: Began onsite testing. Conditional acceptance forecast for November 29, 2022.
- LRV #2: Delivered on May 10, 2022 and conditional acceptance forecast for December 05, 2022.
- LRV #3: Delivered on August 26, 2022 and conditional acceptance forecast for December 12, 2022
- LRV #4: Delivery forecasted for September 19, 2022 and conditional acceptance forecast for December 19, 2022.
- LRV #5: Delivery is forecast for October 19, 2022 and conditional acceptance forecast for December 27, 2022

### Schedule Summary

Brookville’s August 2022 progress update is represented in the narrative. Onsite testing activities slipped approximately two months due to the power-down of the Tacoma Link system during the 9<sup>th</sup> and Commerce cutover. Onsite testing will resume following completion of the cutover.

LRV #1: Continued vehicle dynamic tests.

LRV #2: Continued vehicle static tests.

LRV #3: Started vehicle static tests.

LRV #4: Performed factory testing and final inspection.

LRV #5: Started final assembly and truck manufacturing.

The schedule graphic below indicates all vehicles will be conditionally accepted in late Q4 2022 ahead of scheduled revenue service in Q1 2023.

A two month delay to conditional acceptance is the result of lack of access (during the cutover) for LRV testing on the extension.

Activity Name	Start	Finish	2022		2023		
			Q3	Q4	Q1	Q2	Q3
<b>BEC LRV - Aug 2022 Update</b>	16-Mar-22 A	27-Dec-22					
<b>MANUFACTURING / TESTING</b>	16-Mar-22 A	27-Dec-22					
<b>Car 1</b>	16-Mar-22 A	29-Nov-22					
Ship	16-Mar-22 A	22-Mar-22 A					
Onsite Testing	15-Oct-22	25-Oct-22					
Conditional Acceptance	29-Nov-22	29-Nov-22					
<b>Car 2</b>	04-May-22 A	05-Dec-22					
Ship	04-May-22 A	10-May-22 A					
Onsite Testing	25-Oct-22	28-Oct-22					
Conditional Acceptance	05-Dec-22	05-Dec-22					
<b>Car 3</b>	17-Aug-22	12-Dec-22					
Ship	17-Aug-22	23-Aug-22					
Onsite Testing	28-Oct-22	02-Nov-22					
Conditional Acceptance	12-Dec-22	12-Dec-22					
<b>Car 4</b>	19-Sep-22	19-Dec-22					
Ship	19-Sep-22	19-Sep-22					
Onsite Testing	02-Nov-22	07-Nov-22					
Conditional Acceptance	19-Dec-22	19-Dec-22					
<b>Car 5</b>	13-Oct-22	27-Dec-22					
Ship	13-Oct-22	19-Oct-22					
Onsite Testing	17-Nov-22	22-Nov-22					
Conditional Acceptance	27-Dec-22	27-Dec-22					

# Link Light Rail Light Rail Vehicle Fleet Expansion

## Project Summary

<b>Scope</b>	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.
<b>Phase</b>	Manufacturing, delivering, testing & commissioning
<b>Budget</b>	\$740.7 Million (Baseline September 2015, Amended April 2017)
<b>Schedule</b>	Project Completion: Q3 2024



*Conditional Accepted Siemens light rail vehicle placed into service.*

## Key Project Activities

- Continued LRV deliveries to ST's operations and maintenance facilities – two LRVs were delivered this month.
- Continued Conditional Acceptance (CA) activities on delivered LRVs at ST's OMF – three LRVs were CA this month.
- Continued shuttling of LRVs between OMF East in Bellevue and OMF Central in Seattle as a mitigation measure to address overflow in OMF Central yard storage.
- Continued final assembly and car shell fabrication in Sacramento facilities – currently there are 25 cars at various stages of final assembly & car shells.
- Twelve Series 1 LRV ATP mechanically retrofitted in OMF East. First Series 1 LRV qualification tests trouble-shooting in progress at OMF Central.

## Closely Monitored Issues

- Nine fleet defects have been declared; the commissioning team effort in responding to defects is contributing to delay in Conditional Acceptance (CA) of additional LRVs. ST is working closely with Siemens to resolve and provide vehicle maintenance support.
- 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 onsite Series 1 LRV transportation between OMF East and OMF Central is continuously managed and monitored.
- Manufacturer continued reporting supply chain interruptions impacting implementation of field modification instructions and submitted a general notice for war in Ukraine and COVID-19 pandemic impacts. Weekly meeting with Siemens to monitor progress.
- Coordination and scheduling of Automatic Train Protection (ATP) retrofit on Series 1 LRVs is more challenging than anticipated.

# Link Light Rail Light Rail Vehicle Fleet Expansion



## 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 \$455.6M to which a majority of the cost is attributed to the vehicles phase budget of \$435.6M. The current period expenditure is \$11.3M, where \$10.9M is attributable to the LRV manufacturing and 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	\$6.9	\$6.7	\$9.8	\$0.0
Construction Services	\$18.0	\$18.0	\$15.1	\$12.2	\$17.8	\$0.0
Vehicles	\$713.1	\$713.1	\$665.0	\$436.7	\$713.1	\$0.0
<b>Total</b>	<b>\$740.7</b>	<b>\$740.7</b>	<b>\$687.0</b>	<b>\$455.6</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	\$705.2	\$673.2	\$442.0	\$705.1	\$0.0
80 Professional Services	\$23.2	\$23.8	\$13.8	\$13.6	\$23.8	\$0.0
90 Contingency	\$12.2	\$11.8	\$0.0	\$0.0	\$11.8	\$0.0
<b>Capital Total (SCC 10 - 90)</b>	<b>\$740.7</b>	<b>\$740.7</b>	<b>\$687.0</b>	<b>\$455.6</b>	<b>\$740.7</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Link Light Rail Light Rail Vehicle Fleet Expansion



## Risk Management

The following are the top project risks:

- Competing demands for extension project simulated services, Systems Integration Testing (SIT) and upcoming revenue service preparation reduces the availability of operation labor and vehicle maintenance personnel in supporting Series 2 LRV commissioning.
- Series 1 LRV ATP retrofit schedule has substantial impact on commissioning of 88th Series 2 LRV onwards.
- Delay in access to East Link rail access between OMF Central and OMF East results in cost and schedule inefficiency.
- Receiving LRVs at both OMF Central and OMF East create both cost inefficiency (now require two teams in two locations to support commissioning activity) as well as increased risk of double handling of LRV as not all testing and commission activities can be performed at OMF East currently.
- Continued discovery of fleet defects contributing to the delay of Conditional Acceptance (CA) of additional LRVs.
- War in Ukraine and COVID-19 remains a fluid situation, monitoring reported disruption to manufacturer’s supply chain and assembly plant.

## Contingency Management

The project’s budget was baselined in September 2015 and amended in April 2016 to exercise the option LRV and contained a total of \$78.0M of Total Contingency. The project’s Total Contingency is currently at \$51.7M or about 18.1% 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.

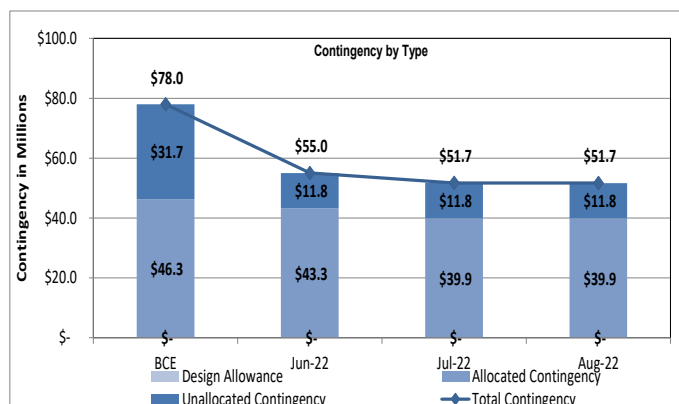
**Allocated Contingency (AC)** is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline’s allocated contingency was \$46.3M. A negligible contingency amount was drawn during this period; hence the allocated contingency remains at \$39.9M.

**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC was not drawn upon this period and remains at \$11.8M.

### 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%	\$ 39.9	14.0%
Unallocated Contingency	\$ 31.7	4.3%	\$ 11.8	4.1%
<b>Total</b>	<b>\$78.0</b>	<b>10.7%</b>	<b>\$ 51.7</b>	<b>18.1%</b>

### Contingency by Type





# Link Light Rail Light Rail Vehicle Fleet Expansion



## Project Schedule

Percent complete of the contract payment milestones is calculated at **65.2%**.

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 Siemens' monthly schedule update. The LRV manufacturer (Siemens) has delivered 86 cars of which 54 cars were Conditionally Accepted. In addition, there are 15 cars fully assembled at Siemens' storage yard in Sacramento and many car shells in various stages of production and assembly. Final Acceptance of the contract is projected for July 1, 2025.

Sound Transit and Siemens anticipate that all the 152 LRVs will have been delivered, commissioned and Conditionally Accepted by of December 2024 which may impact the start of revenue service for each line extension. As was the case with Northgate Link, mitigation measures for managing simulated service during Pre-Revenue may need to be identified and implemented. The interface is monitored closely.

Lastly, ATP retrofit schedule may have substantial impact on Conditional Acceptance rate for LRVs 42 through 100.

Activity Name	Start	Finish	2022												2025
			2022		2023				2024						
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		
<b>ST LRV Fleet Expansion - Siemens Summary by LINK Contract</b>	31-Aug-18A	15-Jul-25													
<b>Siemens Contract Milestones</b>	15-Jul-25	15-Jul-25													
FinalAcceptance_LRV #152		15-Jul-25													
<b>Northgate Link - LRV Summary (Car #1 - #40)</b>	31-Aug-18A	18-Feb-22A													
LRV Factory Test - Northgate Summary	31-Aug-18A	27-Feb-20A													
LRV Delivery to OMF - Northgate Summary	29-Aug-19A	28-Feb-21A													
28 LRV's conditionally accepted	03-Sep-21A	03-Sep-21A													
LRV ConditionalAcceptance - Northgate Summary	30-Mar-21A	18-Feb-22A													
<b>East Link - LRV Summary (Car #41-#86)</b>	28-Feb-20A	18-May-23													
LRV Factory Test - East Link Summary	28-Feb-20A	11-Jun-21A													
LRV Delivery to OMF - East Link Summary	24-May-21A	02-Sep-22													
LRV ConditionalAcceptance - East Link Summary	07-Mar-22A	18-May-23													
<b>Lynnwood Link - LRV Summary (Car #87-#120)</b>	19-Jul-21A	22-Mar-24													
LRV Factory Test - Lynnwood Summary	19-Jul-21A	21-Apr-23													
LRV Delivery to OMF - Lynnwood Summary	22-Aug-22	23-May-23													
LRV ConditionalAcceptance - Lynnwood Summary	28-May-23	22-Mar-24													
<b>Extra - LRV Summary (Car #121-#122)</b>	17-Apr-23	10-Apr-24													
LRV Factory Test - Extra Summary	17-Apr-23	12-May-23													
LRV Delivery to OMF - Extra Summary	05-Jun-23	14-Jun-23													
LRV ConditionalAcceptance - Extra Summary	02-Apr-24	10-Apr-24													
<b>Federal Way Link- LRV Summary (Car #123-#142)</b>	11-May-23	08-Oct-24													
LRV Factory Test - Federal Way Summary	11-May-23	11-Dec-23													
LRV Delivery to OMF - Federal Way Summary	30-Jun-23	26-Jan-24													
LRV ConditionalAcceptance - Federal Way Summary	18-Apr-24	08-Oct-24													
<b>Downtown Redmond Link- LRV Summary (Car #143-#152)</b>	05-Dec-23	21-Jan-25													
LRV Factory Test - Downtown Redmond Summary	05-Dec-23	04-Apr-24													
LRV Delivery to OMF - Downtown Redmond Summary	08-Feb-24	08-May-24													
LRV ConditionalAcceptance - Downtown Redmond Summary	17-Oct-24	21-Jan-25													
LRV ATP Retrofit Summary - Siemens	12-Jul-21A	24-May-23													

# 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 the Sound Transit site. Delivery and Conditional Acceptance testing of all 35 light rail vehicles required for East Link has been completed to support Revenue Service. The planned deliveries, commissioning and testing of light rail vehicles are anticipated to be completed by late January 2025. However, current forecasts notes that Conditional Acceptance may impact pre-revenue service for future expansion projects. As was the case with Northgate Link, measures for managing simulated service during pre-revenue may need to be identified and implemented.

Activity Name	Start	Finish	2022		2023				2024				25
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>ST LRV Fleet Expansion - Siemens Summary by LINK Contract</b>	30-Mar-21 A	15-Jul-25											
<b>Siemens Contract Milestones</b>	15-Jul-25	15-Jul-25											
Final Acceptance_LRV #152		15-Jul-25											
<b>Northgate Link - LRV Summary (Car #1 - #40)</b>	30-Mar-21 A	18-Feb-22 A											
LRV Conditional Acceptance - Northgate Summary	30-Mar-21 A	18-Feb-22 A											
<b>East Link - LRV Summary (Car #41-#86)</b>	07-Mar-22 A	18-May-23											
LRV Conditional Acceptance - East Link Summary	07-Mar-22 A	18-May-23											
<b>Lynnwood Link - LRV Summary (Car #87-#120)</b>	26-May-23	22-Mar-24											
LRV Conditional Acceptance - Lynnwood Summary	26-May-23	22-Mar-24											
<b>Extra - LRV Summary (Car #121-#122)</b>	02-Apr-24	10-Apr-24											
LRV Conditional Acceptance - Extra Summary	02-Apr-24	10-Apr-24											
<b>Federal Way Link- LRV Summary (Car #123-#142)</b>	18-Apr-24	08-Oct-24											
LRV Conditional Acceptance - Federal Way Summary	18-Apr-24	08-Oct-24											
<b>Downtown Redmond Link- LRV Summary (Car #143-#152)</b>	17-Oct-24	21-Jan-25											
LRV Conditional Acceptance - Downtown Redmond Summary	17-Oct-24	21-Jan-25											
<b>LRV ATP Retrofit Summary - Siemens</b>													

## LRV Delivery and Testing Progress as of August 31, 2022

LRV status	Received / Delivered	Testing in progress	Conditionally Accepted	Entered Revenue
Planned	124	15	109	109
Actual (Seattle)	60	7	53	53
Actual (Bellevue)	27	27	0	0



Car 303 preparing for shipment in Sacramento, CA



Car 268 transferred from OMF East to OMF Central

# Link Light Rail Light Rail Vehicle Fleet Expansion



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE 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 is the monthly annualized average; whereas, the YTD monthly average only reflects the actuals for month ending August 2022. The variance are minor and likely attributed to ST staff cross charge and the aggregation of administrative time offs among ST staff and consultants.

Resource Type	Planned FTE Monthly Average*	YTD Actual FTE Monthly Average	Variance
ST Staff	9.2	6.2	3.1
Consultants	6.9	7.9	(1.0)
TOTAL	16.1	14.1	2.0

*An FTE is the equivalent of 1920 hours. YTD performance FTE hours are divided by a monthly factor of 160.*

## 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.

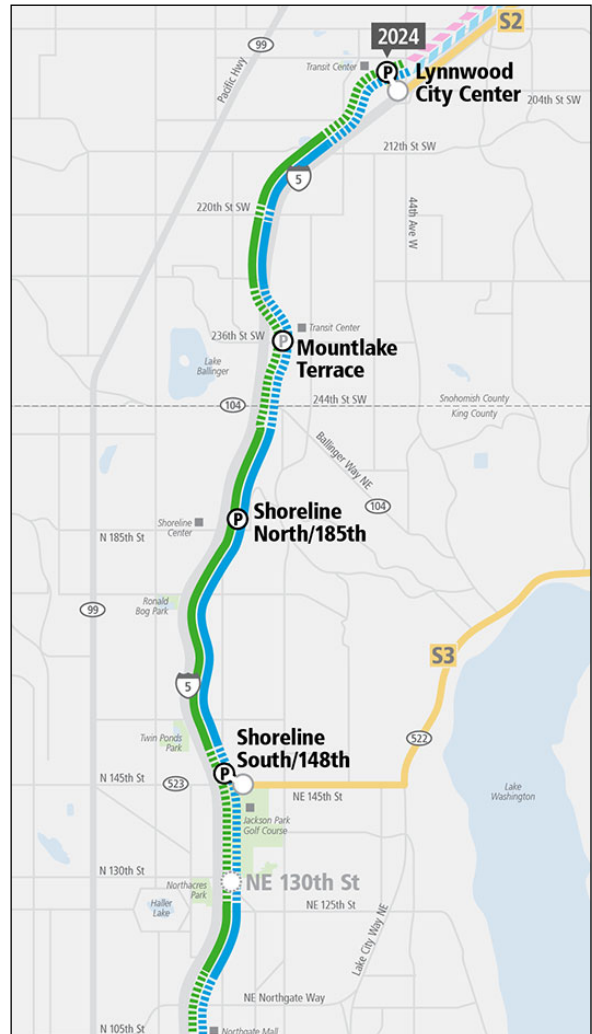
**Stations** Shoreline South/148th  
Shoreline North/185th  
Mountlake Terrace  
Lynnwood City Center

**Systems** Signals, traction power, communications, and SCADA.

**Phase** Construction

**Budget** \$2.77 Billion (Baseline May 2018)

**Schedule** Revenue Service: July 2024



Map of Lynnwood Link Extension Alignment

## Key Project Activities

- Continued construction of the Shoreline South / 148th Station plaza level grading and platform-level painting, as well as elevator installation for the adjacent parking garage (L200).
- Continued construction of the Shoreline North / 185th Station, including station grounding and brick veneer as well as electrical rough-in for the adjacent parking garage (L200).
- Continued construction of the Mountlake Terrace Station, including interior room finishes (L300).
- Continued construction of the Lynnwood City Center Station canopy and platform finishes; including finish painting within the adjacent parking garage (L300).
- Ongoing rail installation on both L200 and L300 along with OCCS poles (L800) along the southern stretch of guideway.

## Closely Monitored Issues

- Lingering impacts on construction schedules of the labor dispute that disrupted concrete material supply in King and Snohomish counties.
- Monitoring progress of systems contractor installations following initial handovers from the civil contractors.

# Link Light Rail Lynnwood Link Extension



## Project Cost Summary

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

For this period, \$49.4M 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	\$57.8	\$57.4	\$98.2	\$0.0
Preliminary Engineering	\$39.1	\$39.1	\$39.1	\$39.1	\$39.1	\$0.0
Final Design	\$164.2	\$164.2	\$149.7	\$144.6	\$164.2	\$0.0
Construction Services	\$128.4	\$139.0	\$126.0	\$87.2	\$139.0	\$0.0
3rd Party Agreements	\$14.6	\$17.6	\$13.1	\$12.2	\$17.6	\$0.0
Construction	\$1,921.4	\$2,094.6	\$1,918.7	\$1,400.9	\$2,094.6	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$235.7	\$219.1	\$182.0	\$178.1	\$219.1	\$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>\$2,486.3</b>	<b>\$1,919.4</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	\$681.7	\$524.5	\$807.7	\$194.5
20 Stations	\$333.8	\$333.8	\$416.4	\$288.9	\$442.3	-\$108.6
30 Support Facilities	\$2.0	\$2.0	\$0.2	\$0.2	\$2.0	\$0.0
40 Sitework & Special Conditions	\$421.1	\$426.2	\$613.5	\$494.7	\$559.7	-\$133.5
50 Systems	\$244.4	\$244.4	\$196.6	\$84.3	\$218.7	\$25.7
<b>Construction Subtotal (10 - 50)</b>	<b>\$1,793.0</b>	<b>\$2,008.5</b>	<b>\$1,908.4</b>	<b>\$1,392.5</b>	<b>\$2,030.5</b>	<b>-\$21.9</b>
60 ROW, Land	\$235.7	\$229.7	\$182.0	\$178.1	\$219.1	\$10.6
70 Vehicles (Non-Revenue)	\$1.4	\$1.4	\$0.0	\$0.0	\$1.4	\$0.0
80 Professional Services	\$449.3	\$448.6	\$395.9	\$348.8	\$475.4	-\$26.8
90 Unallocated Contingency	\$292.2	\$83.4	\$0.0	\$0.0	\$45.3	\$38.1
<b>Total (10 - 90)</b>	<b>\$2,771.6</b>	<b>\$2,771.6</b>	<b>\$2,486.3</b>	<b>\$1,919.4</b>	<b>\$2,771.6</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to rounding.



# Link Light Rail Lynnwood Link Extension



## Contingency Management

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

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

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

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

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

During the current period, Allocated Contingency decreased by a net amount of \$3.5M due to construction change orders and an unallocated contingency budget transfer for an AHJ extension.

### 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%	\$125.1	14.7%
Unallocated Contingency	\$292.2	10.5%	\$47.8	5.6%
<b>Total:</b>	<b>\$737.7</b>	<b>26.6%</b>	<b>\$172.9</b>	<b>20.3%</b>

### Contingency by Type

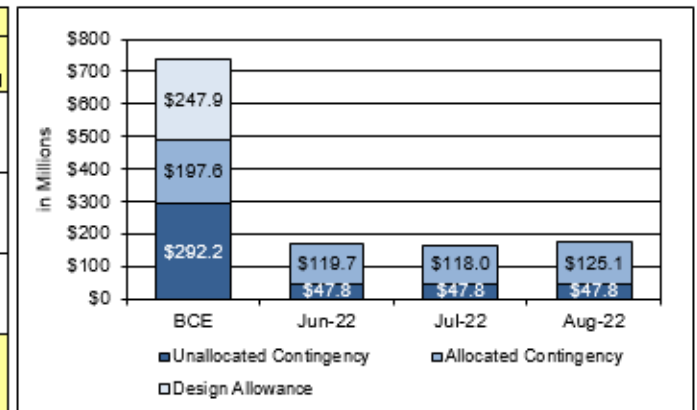
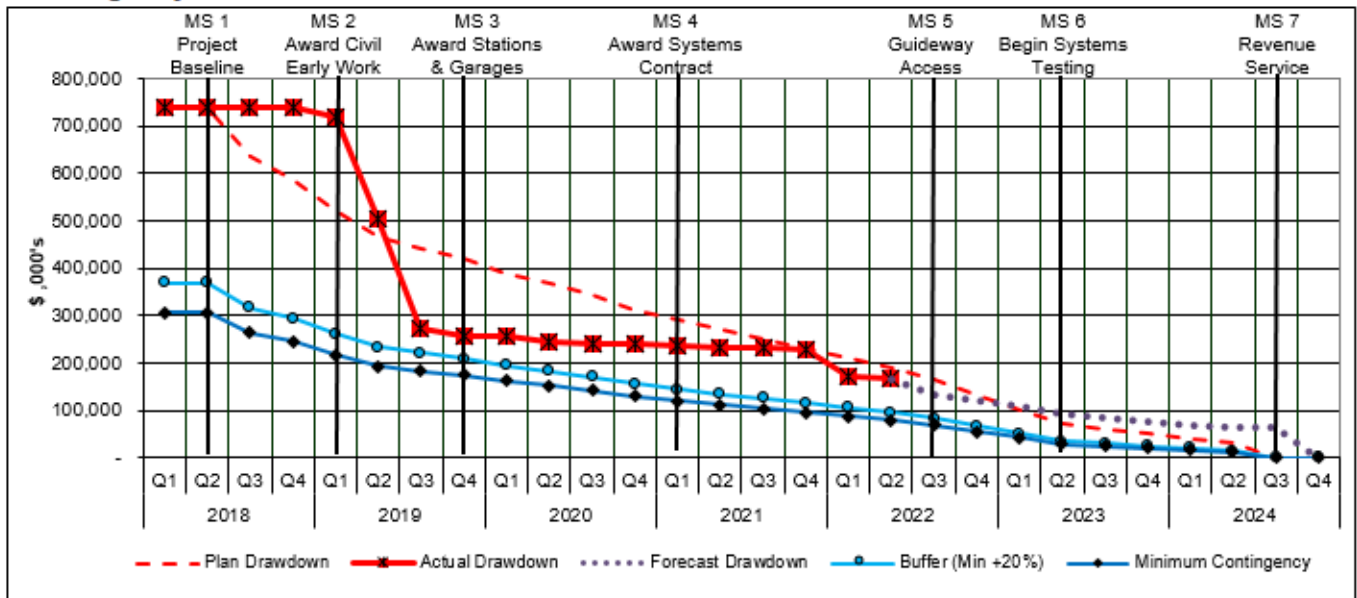


Table figures are shown in millions.

### Contingency Drawdown



# Link Light Rail Lynnwood Link Extension



## Risk Management

The following are the top project-wide risks:

- Requests from third parties for additional scope as part of inspections and approvals.
- Delayed handover of guideway, TPSS, and signal bungalows to L800 contractor causing schedule delays.
- Partner agency and internal support resource availability for testing and commissioning.
- Field changes for design deficiencies leading to additional cost.
- Delays in long lead procurement of key materials, equipment, and resources.

## Project Schedule

Weighted percent complete of the major construction contracts is calculated at 71.6%.

The Master Schedule has been updated through August. The contractors' schedules are currently under review. ST is still awaiting submission of the L300 August update, but it is not currently anticipated to have an impact on the overall critical path. Focus continues to be placed on the Rail Activation schedule with staff reviewing the current template. Permit closeout is also an area of focus for the near term updates. The revenue service date remains unchanged in July 2024.

Activity Name	Start	Finish	2022				2023				2024		
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
<b>LLE Master Schedule</b>	20-May-10A	18-Jul-24											
Project Administration	20-May-10A	18-Jul-24											
Final Design/Preconstruction	01-Sep-15A	22-Apr-24											
Project Wide Utilities	01-Aug-18A	25-Mar-19A											
L200 - Third Party Agreements	01-Aug-18A	31-May-22A											
L300 - Third Party Agreements	02-May-18A	21-Oct-22											
Permitting & AHJ Agreements	07-Jan-15A	28-Nov-22											
Owner Furnished Equipment	01-Oct-21A	10-Aug-23											
L350 200th St. Widening	09-Apr-18A	06-Jan-23											
North Maint. of Way (MOW)	02-Jan-19A	20-Nov-23											
<b>L200 ROW Acquisitions</b>	04-Jan-18A	01-Nov-22											
<b>L300 ROW Acquisitions</b>	14-Jan-18A	29-Jul-23											
<b>LLE WSDOT Surplus and AS</b>	10-Jun-21A	18-Mar-24											
<b>L300 Civil Construction</b>	25-Sep-18A	18-Oct-23											
<b>L200 Civil Construction</b>	25-Dec-18A	16-Jan-24											
<b>L800 Systems Construction</b>	04-Dec-20A	25-Jan-24											
<b>LLE Rail Activation</b>	02-Aug-21A	17-Jul-24											
<b>RA Tasks</b>	02-Aug-21A	17-Jul-24											
Pre-Revenue Service	23-Dec-23	22-May-24											
Revenue Service Preparation	02-May-24	23-May-24											
Revenue Service - FFGA	23-May-24	17-Jul-24											
Program Wide Float - (58 CD)	23-May-24	17-Jul-24											
Revenue Service - 7/17/2024		17-Jul-24											

# Link Light Rail Lynnwood Link Extension

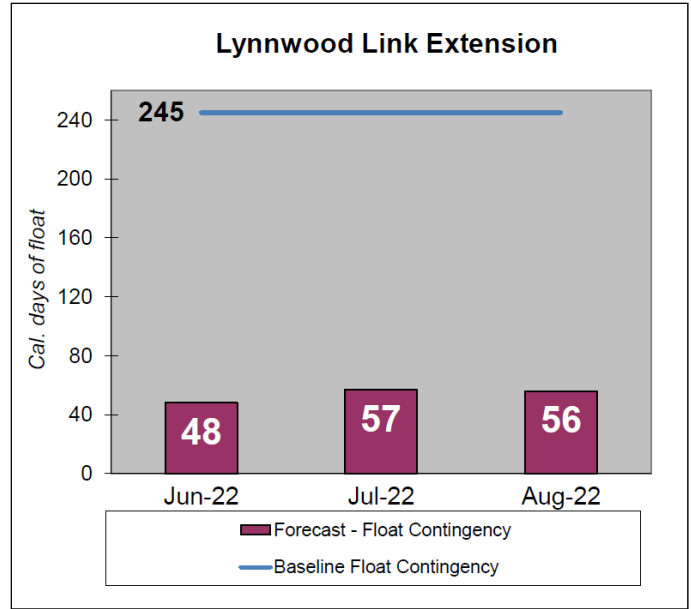


## Project Float

The Lynnwood Link Extension was baselined with 245 days of project float. Currently, the project is calculated to have 56 days remaining between completion of work and the July 17, 2024 revenue service date. The project float lessened by 1 day this period.

The float reported remains an area of focus for improvement. ST continues working with the contractors to re-examine the schedule duration, logic, and work sequences to find opportunities for improvement.

The target revenue service date is currently being evaluated as part of a program-wide risk assessment. Results of that assessment will be available in Q4 2022.



## Critical Path Analysis

The critical path for the Lynnwood Link Extension, in the August update, remains with the L800 contract, unchanged from the July update. The critical path is still driven by the installation of the overhead catenary system (OCS). Work Zone 2 ballasted track re-work has completed, with those crews moving to the At-Grade trackwork in Zones 9 and 11. Other near-critical areas are 148th Street station, 185th Station electrical distribution for the L200 contract, as well as Signals and Communications work within the L800 systems contract.

Activity Name	Start	Finish	2022			2023				2024		
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>LLE Master Schedule</b>	18-Jul-24	18-Jul-24										
<b>Project Administration</b>	18-Jul-24	18-Jul-24										
<b>Project Milestones</b>	18-Jul-24	18-Jul-24										
<b>L800 Systems Construction</b>	01-Sep-22	25-Jan-24										
<b>Sound Transit L800 90% Engineering</b>	01-Sep-22	25-Jan-24										
<b>L800 Engineering</b>	12-Jan-24	12-Jan-24										
<b>L800 Construction</b>	01-Sep-22	25-Jan-24										
<b>LLE Rail Activation</b>	19-Jan-24	17-Jul-24										
<b>Pre-Revenue Service</b>	19-Jan-24	22-May-24										
<b>Pre-Revenue Preparation</b>	19-Jan-24	25-Jan-24										
<b>Operator Preparation</b>	24-Jan-24	23-Mar-24										
<b>Simulated Revenue Service/Drills/Upsets</b>	24-Mar-24	22-May-24										
<b>Revenue Service Preparation</b>	02-May-24	23-May-24										
<b>Revenue Service - FFGA</b>	23-May-24	17-Jul-24										

## 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 can result in owner and tenant residential and commercial relocations.

The Right-of-Way program status for this period is summarized in the following table. For the Lynnwood Link Extension the total number of parcels available for construction is 341.

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	758	387	386
<p><i>*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.</i></p> <p><i>Total Acquisitions: Defined as parcels recognizing only land, not owners</i></p> <p><i>Board Approved: Based on parcels and properties (including multi-unit acquisitions)</i></p> <p><i>Offers/Closings: Based on inclusive offers made to separate owners and interest holders</i></p> <p><i>Relocations: Based on number of affected individuals. All Personal Property Only moves are completed. One relocation remains.</i></p>					

## Community Engagement

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

- Night work on along 1st Ave NE from NE 107th St to NE 115th St for utility pole installation in Seattle.
- Alternating road closures of 5th Ave NE from 145th to NE 148th Street for night work in Shoreline.
- Full road closure of NE 175th Street in Shoreline.
- Nightly closures of SR 104 and I-5 Interchange in Shoreline.
- Night closure at Northeast 107th and NE Northgate Way Northbound I-5 on-ramps in Seattle.
- Early morning work at the NE 148th Station Garage in Shoreline.

Community Engagement staff also sponsored and attended the Latino Educational Technical Institute (LETI) Expo in Lynnwood, communicated with business owners and community members in Lynnwood about construction impacts (parking, poles, fences, signage, etc.), met with City of Lynnwood and City of Shoreline staff about current and upcoming community impacts of construction, and closed out 8 Temporary Construction Easements this month.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail Lynnwood Link Extension



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE is 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.

Fewer staff and consultants than planned have resulted from the reduction of civil/systems final design as the design reached completion.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	41.5	39.0	2.5
Consultants	120.0	111.0	9.0
<b>TOTAL</b>	<b>161.5</b>	<b>150.0</b>	<b>11.5</b>

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Construction Safety

Data/Measure	August 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	3	9	41
Days Away From Work Cases	0	0	4
Total Days Away From Work	0	0	60
First Aid Cases	3	4	72
Reported Near Mishaps	1	6	66
Average Number of Employees on Worksite	516	-	-
Total # of Hours (GC & Subs)	157,357	1,174,042	4,304,033
OSHA Incident Rates	Month	Year to Date	Project to Date
Recordable Injury Rate	3.81	1.53	1.91
LTI Rate	0.00	0.00	0.19
<b>Recordable National Average</b>	<b>2.5</b>		
<b>LTI National Average</b>	<b>1.1</b>		
<b>Recordable WA State Average</b>	<b>5.2</b>		
<b>LTI WA State Average</b>	<b>2.9</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.



# Link Light Rail Lynnwood Link Extension



## 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 direct fixation and ballasted track work installation.
- 148th Station - Continued sheetrock installation in communications and escalator rooms.
- 148th Garage - Continued elevator rail and mounting brackets installation and plumbing/electrical in the machine room.
- 185th Station - Continued overcrossing structure metal roofing panel installation and glazing.
- 185th Garage - Continued concrete placement of barrier walls and installation of elevator steel framing.

### Schedule Summary

The August update forecasts an November 18, 2023 substantial completion date, fourteen calendar days later than the substantial completion date of November 4, 2023. Within the L200 contract schedule, the contractor’s critical path lies in the completion of 148th Street station, in particular completion of communications closets. ST will be working with SKH to mitigate the currently forecast late Substantial Completion date.

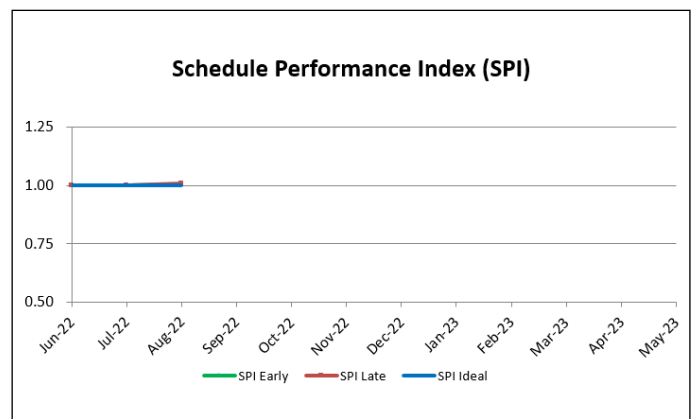
Activity Name	Start	Finish	2023								2024
			Q3	Q4	Q1	Q2	Q3	Q4	Q1		
<b>L200 Civil Construction</b>	25-Dec-18 A	05-Jan-24									
L200 Civil Construction	25-Dec-18 A	05-Jan-24									
Project Wide	25-Dec-18 A	05-Jan-24									
WZ-1 Elevated (1437+00 to 1458+63)	15-May-19 A	22-Dec-22									
WZ-2 At Grade - Fill (1458+63 to 1492+45)	21-Mar-19 A	01-Jun-23									
WZ-3 Elevated (1492+45 to 1559+17)	23-Mar-19 A	26-Oct-23									
WZ-4 145th Station & Garage	08-Apr-19 A	21-Sep-23									
WZ-5 At Grade - Fill (1559+17 to 1571+30)	26-Mar-19 A	24-Apr-23									
WZ-6 155th Bridge (1571+30 to 1572+40)	17-Jun-19 A	03-Apr-23									
WZ-7 At Grade - Retained (1572+40 to 1624+00)	27-Mar-19 A	31-Jul-23									
WZ-8 175th Bridge (1624+00 to 1631+25)	25-Apr-19 A	05-Jan-23									
WZ-9 At Grade - Cut (1631+25 to 1661+78)	15-Apr-19 A	26-Oct-23									
WZ-10 185th Station & Garage	15-Apr-19 A	02-Nov-23									
WZ-11 At Grade (1661+78 to 1694+01)	09-Apr-19 A	18-Aug-23									

### Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 1.00.

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.01.

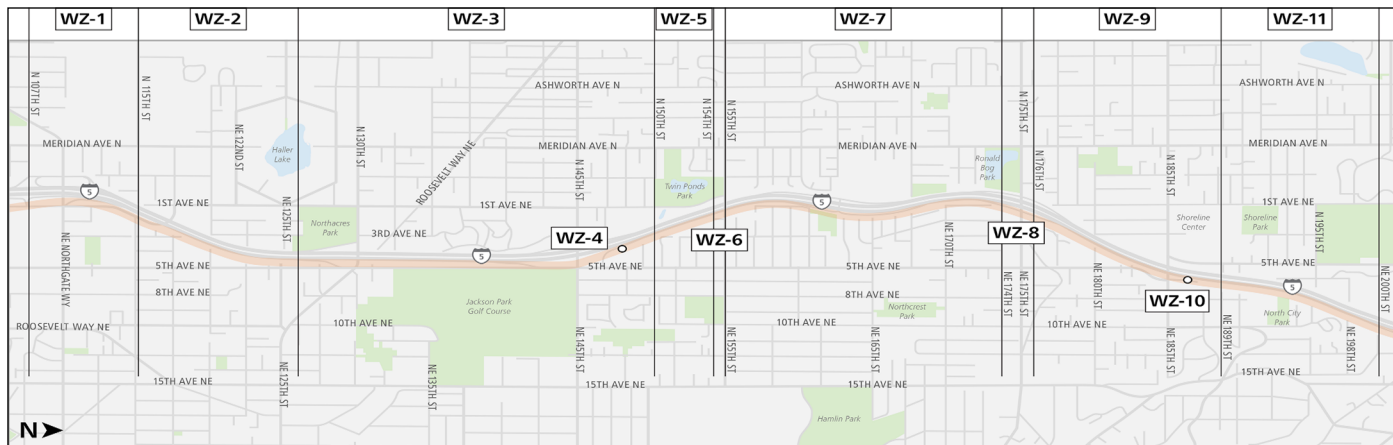
The plan has been restructured given milestone extensions and revised schedule.



# Link Light Rail Lynnwood Link Extension



## Work Zone Overview



### Next Period Activities:

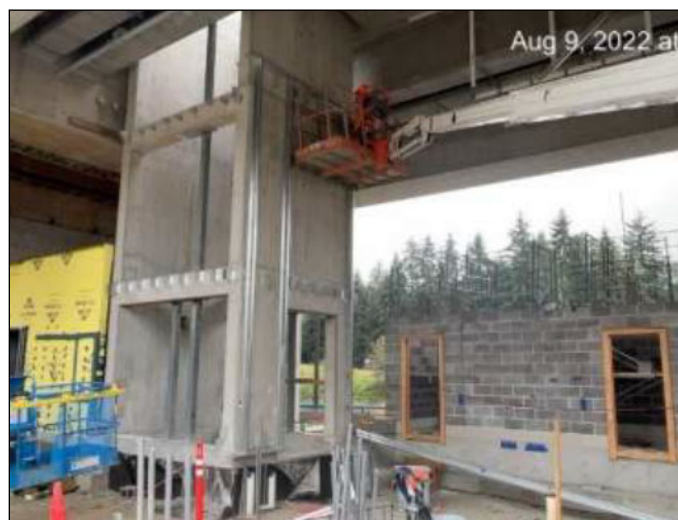
- Continue concrete placement of deck spans and curbs.
- Continue MSE wall construction.
- Continue 148th Station wall sheathing and precast stair installation.
- Continue 185th Station elevator installation and pedestrian overpass framing/glazing.
- Continue trackwork installation.

### Closely Monitored Issues:

- Electrical utility crew availability to install and activate power feeds on schedule for systems testing.
- Schedule impacts from removal and replacement of substandard ballast in Work Zone 2.
- Safety risks associated with shared access to elevated guideway elements.

## Cost Summary

Present Financial Status	Amount
<b>L200 Contractor - SKH</b> Excludes 130th and betterments	
Original Contract Value	\$88,147,258
Change Order Value	\$766,887,679
Current Contract Value	\$855,034,937
Total Actual Cost (Incurred to Date)	\$652,609,882
Percent Complete	77.5%
Authorized Contingency	\$43,762,892
Contingency Drawdown	\$15,036,673
Contingency Index	2.3



*148th Station elevator framing*

# Link Light Rail Lynnwood Link Extension



## 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 Scriber Creek Trestle removal.
- Continued Lynnwood City Center garage work.
- Continued finishes and electrical/mechanical rough-ins for ancillary rooms at Mountlake Terrace and Lynnwood stations.
- Continued installation of electrical vaults and Traction Power Substation (TPSS) foundations.
- Continued stormwater detention pipe installation at Lynnwood Transit Center.
- Continued trackwork and plinth installation along the alignment.

### Schedule Summary

The July update from Skanska was initially returned for revision. The revised schedule has been submitted and is under review at this time. The update for August is still pending submission from the contractor. October 5, 2023 remains the Substantial Completion date. The critical path is anticipated to remain driven by the parking garage at the Lynnwood Transit Center.

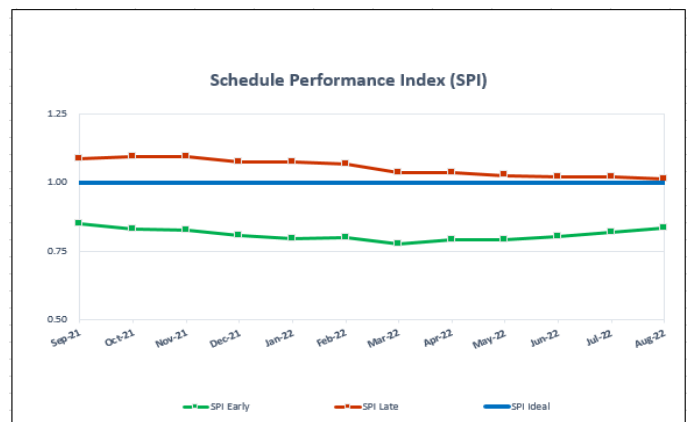
Activity Name	Start	Finish	2023							
			Q3	Q4	Q1	Q2	Q3	Q4		
<b>L300 Civil Construction</b>	25-Sep-18 A	16-Oct-23	[Gantt bar spanning from Q3 2018 to Q4 2023]							
<b>L300 Civil Construction</b>	25-Sep-18 A	16-Oct-23	[Gantt bar spanning from Q3 2018 to Q4 2023]							
<b>MILESTONES</b>	25-Sep-18 A	16-Oct-23	[Gantt bar spanning from Q3 2018 to Q4 2023]							
<b>ROW ACQUISITIONS (PARCELS &amp; TCE)</b>	04-Jun-19 A	16-May-23	[Gantt bar spanning from Q2 2019 to Q4 2023]							
<b>PERMITTING</b>	01-Feb-19 A	19-Sep-22	[Gantt bar spanning from Q4 2018 to Q3 2022]							
<b>SUBMITTALS</b>	12-Apr-19 A	17-Jun-23	[Gantt bar spanning from Q2 2019 to Q4 2023]							
<b>MATERIAL PROCUREMENT</b>	07-Aug-19 A	21-Oct-22	[Gantt bar spanning from Q3 2019 to Q4 2022]							
<b>EARLY WORK</b>	20-Feb-19 A	26-May-23	[Gantt bar spanning from Q1 2019 to Q4 2023]							
<b>CONSTRUCTION</b>	22-Jul-19 A	06-Oct-23	[Gantt bar spanning from Q3 2019 to Q4 2023]							
<b>Main Package Construction Contract Elemer Mobilizations</b>	25-Oct-19 A	06-Oct-23	[Gantt bar spanning from Q4 2019 to Q4 2023]							
<b>3rd Party Utilities</b>	22-Jul-19 A	16-Sep-20 A	[Gantt bar spanning from Q3 2019 to Q3 2020]							
<b>L200 to 236th St. (Sta. 1694+00 to 1739+00)</b>	17-Dec-19 A	10-Jul-23	[Gantt bar spanning from Q4 2019 to Q4 2023]							
<b>236th St. to 220th St. (Sta. 1739+00 to 1791+00)</b>	13-Jan-20 A	23-Jun-23	[Gantt bar spanning from Q1 2020 to Q4 2023]							
<b>220th St. to 52nd Ave (Sta. 1791+00 to 1840+00)</b>	23-Dec-19 A	25-Apr-23	[Gantt bar spanning from Q4 2019 to Q2 2023]							
<b>52nd Ave to EOL (Sta. 1840+00 to 1884+00)</b>	15-Jan-20 A	15-Sep-23	[Gantt bar spanning from Q1 2020 to Q4 2023]							

### Schedule Performance Index

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

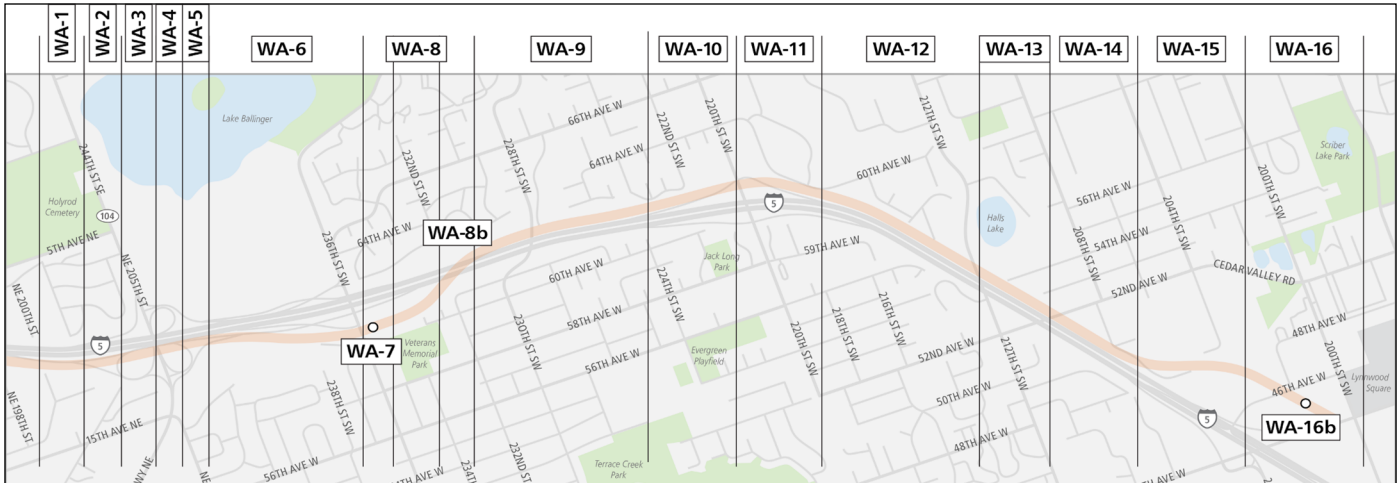
Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.01 (decrease from last period).

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 site and wetlands restoration along alignment.
- Continue Lynnwood City Center parking garage work.
- Continue trackwork and plinth installation along the alignment.
- Continue finishes and electrical/mechanical rough-ins for ancillary rooms at Mountlake Terrace and Lynnwood stations.
- Continue installation of TPSS foundations.

### Closely Monitored Issues

- Number of field changes due to design inconsistencies.
- Environmental compliance as the wet season approaches.
- Network connectivity to support the public opening of the Lynnwood Transit Center garage.

### Cost Summary

Present Financial Status	Amount
<b>L300 Contractor—Skanska</b>	
Original Contract Value	\$56,886,631
Change Order Value	\$799,769,119
Current Contract Value	\$856,655,750
Total Actual Cost (Incurred to Date)	\$655,269,815
Percent Complete	69.8%
Authorized Contingency	\$42,888,048
Contingency Drawdown	\$21,655,750
Contingency Index	1.4



*Lynnwood Station Elevator Glass Installation*

# Link Light Rail Lynnwood Link Extension



## Contract L800 Lynnwood Link Systems GC/CM

### Current Progress

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

- Approvals and procurement of key equipment including Traction Power Substation (TPSS) transformers.
- Continued cable pulling, installing radio cable, and devices at Mountlake Terrace Station and Lynnwood Parking Garage.
- Continued Factory Acceptance Testing on TPSS and train control signal equipment.
- Continued installation of impedance bonds and installed conduit.
- Continued fabrication of OCS poles, hangers and cantilevers. Commenced installation of OCS poles and cantilevers.

### Schedule Summary

The L800 August schedule update forecasts a substantial completion of January 12, 2024, four days earlier than the revised contractual date of January 16, 2024. The critical path continues to be driven by construction of the overhead catenary system, followed by entry into system integrated testing. ST is continuing to closely monitor and coordinate several aspects of the work, including owner supplied network switches, delivery of traction power substations and signal houses, as well as handovers from the civil contractors.

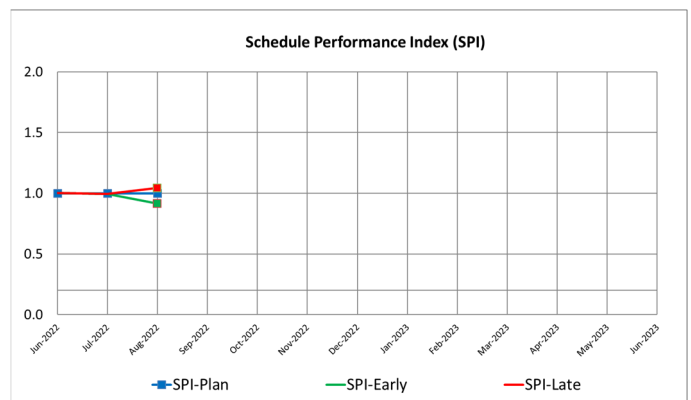
Activity Name	Start	Finish	2023								2024
			Q3	Q4	Q1	Q2	Q3	Q4	Q1		
<b>L800 Systems Construction</b>	04-Dec-20 A	25-Jan-24									
L800 Systems Construction	04-Dec-20 A	25-Jan-24									
<b>Sound Transit L800 90% Engine</b>	04-Dec-20 A	25-Jan-24									
<b>L800 Engineering</b>	04-Dec-20 A	12-Jan-24									
L800 Milestones	04-Dec-20 A	12-Jan-24									
L800 Submittals	04-Dec-20 A	04-Jan-24									
L800 OCS	01-Jun-21 A	04-Jan-24									
L800 Traction Power/Substations	04-Dec-20 A	12-Nov-23									
L800 Signals	07-Dec-20 A	30-Nov-23									
L800 Communications	03-Jan-21 A	30-Oct-23									
L800 SCADA	01-Mar-22 A	27-Jun-23									
<b>L800 Construction</b>	04-Dec-20 A	25-Jan-24									
L800 OCS	01-Feb-21 A	10-Sep-23									
L800 Traction Power / Substations	04-Dec-20 A	07-Jul-23									
L800 Signals	04-Dec-20 A	03-Oct-23									
L800 Communications	04-Dec-20 A	26-Sep-23									
L800 SCADA	01-Jul-21 A	06-Dec-23									
L800 Testing and Commissioning	11-Oct-22	25-Jan-24									

### Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.91 (increase from last period).

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

The plan has been restructured given milestone extensions and revised schedule.





## Next Period's Activities

- Continue procurement of key equipment including Traction Power Substation (TPSS) and train control signal system buildings, including delivery of the first TPSS unit.
- Continued FAT testing on TPSS and Signal Houses.
- Continue installation of OCS poles and cantilevers.
- Continue installation of communication equipment at Mountlake Terrace Station and Lynnwood Parking Garage.

## Closely Monitored Issues

- Monitoring the manufacture and delivery of long lead equipment such as network switches, TPSS units and signal houses.
- Monitoring the completion of civil package work for potential delays in hand over to the system contractor.
- Monitoring the manufacture and delivery of Supervisory Control and Data Acquisition (SCADA) equipment.
- Safety risks associated with shared access to elevated guideway elements.

## Cost Summary

Present Financial Status	Amount
<b>L800 Contractor - Mass Electrical Construction Co.</b>	
Original Contract Value	\$148,000,000
Change Order Value	\$802,026
Current Contract Value	\$148,802,026
Total Actual Cost (Incurred to Date)	\$49,933,506
Percent Complete	39.9%
Authorized Contingency	\$10,360,000
Contingency Drawdown	\$802,026
Contingency Index	5.2



*Installation of Impedance Bonds Along Alignment.*

# Link Light Rail NE 130th St Infill Station

## Project Summary

**Scope** Construct an elevated infill station at NE 130<sup>th</sup> St and 5<sup>th</sup> Ave NE in Seattle.

**Phase** Construction

**Budget** \$240.2 Million

**Schedule** Q2 2026



*Rendering of Station as Viewed from I-5 Overpass*

## Key Project Activities

- Began end diaphragm installation.
- Began decking formwork.
- Preparing bid documents for station finishes package.

## Closely Monitored Issues

- Progress of the Lynnwood Link civil contractor and availability of the station area for finishes construction.
- Market conditions, inflation, and supply chain pressures on cost estimates for station finishes.
- Closure duration and future restoration requirements for 5<sup>th</sup> Ave NE.
- Coordination with Seattle for permit review of station finishes package.
- Coordination with Seattle for use of Non Motorized Access Enhancement Funds.
- City Council adoption of amendment to Transit Way Agreement, allowing for construction of station finishes.

# Link Light Rail NE 130th St Infill Station



## 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 the current period, \$189K was incurred. The major project expenditures were for construction services, civil design services during construction and staffing.

### 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	\$8.1	\$8.1	\$2.5	\$2.5	\$8.1	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$2.7	\$2.7	\$2.7	\$0.0
Final Design	\$17.6	\$17.6	\$11.8	\$9.9	\$17.6	\$0.0
Construction Services	\$17.3	\$17.3	\$12.5	\$1.7	\$17.3	\$0.0
3rd Party Agreements	\$1.7	\$1.7	\$0.7	\$0.6	\$1.7	\$0.0
Construction	\$192.6	\$192.6	\$10.3	\$8.7	\$192.6	\$0.0
ROW	\$0.1	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Project Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$240.2</b>	<b>\$240.2</b>	<b>\$40.5</b>	<b>\$26.0</b>	<b>\$240.2</b>	<b>\$0.0</b>

*Tables across this report may have totals that do not equal line item sums due to rounding.*

# Link Light Rail NE 130th St Infill Station



## Contingency Management

The project budget was baselined in 2022 with a total contingency of \$48.6M.

**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.

**Current Period:** During the current period there was no change to contingency.

### Contingency Status

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$0.0	0.0%	\$0.0	0.0%
Allocated Contingency	\$30.9	12.9%	\$30.9	14.5%
Unallocated Contingency	\$17.7	7.4%	\$17.7	8.2%
<b>Total:</b>	<b>\$48.6</b>	<b>20.2%</b>	<b>\$48.6</b>	<b>22.7%</b>

### Contingency by Type

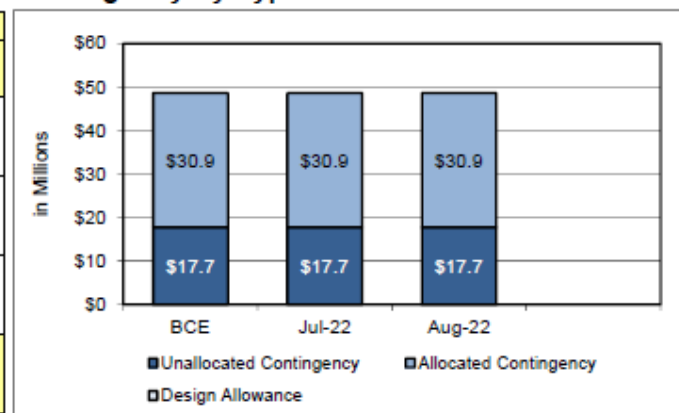
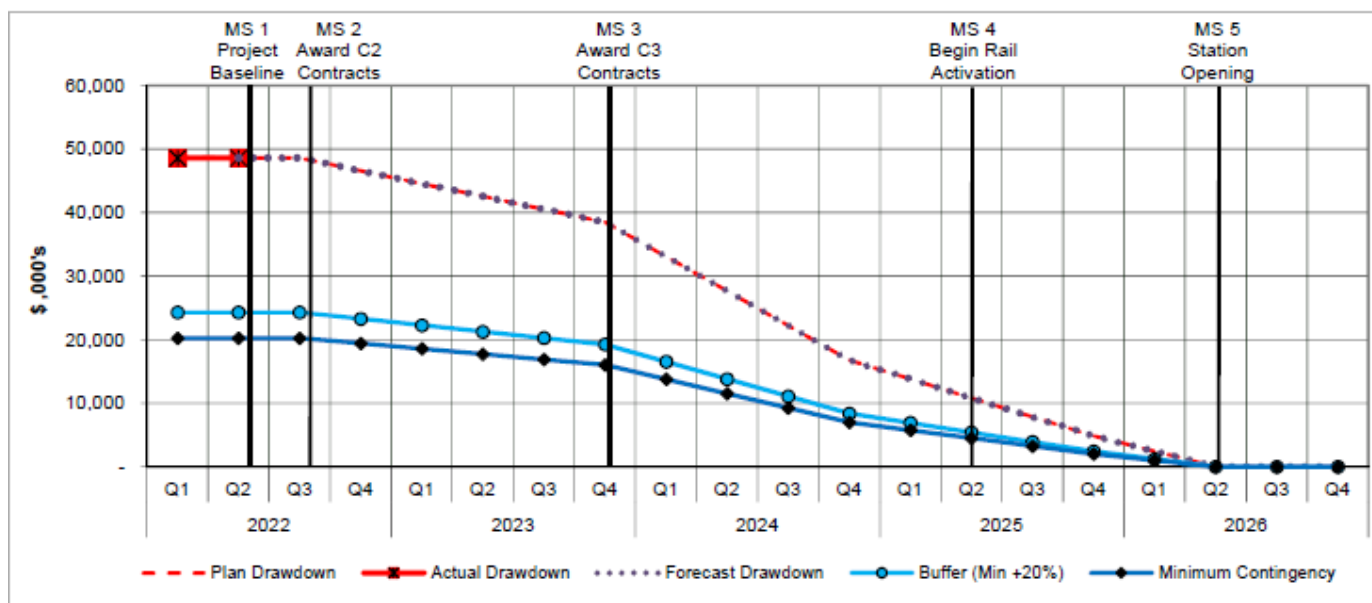


Table figures are shown in millions.

### Contingency Drawdown



## Risk Management

The following are the top project risks identified:

- City of Seattle Design Commission requests added station aesthetics resulting in additional design.
- Contract interface handover issues from L210 (Platform/Canopy) contractor to the L230 (Station Finishes) contractor.
- Delay in achieving Labor & Industries Inspections and approvals for elevators and escalators.

## Project Schedule

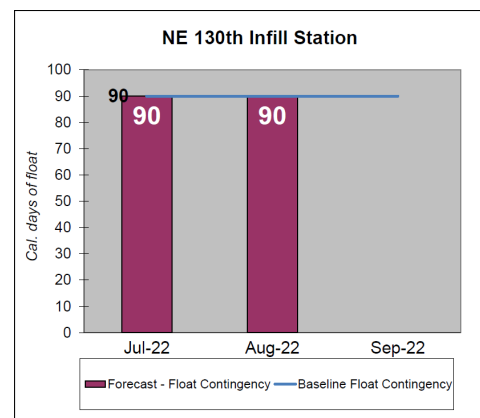
Weighted % complete for the major construction contracts is calculated at 6.2%.

Design for the station, both Civil and Systems, is complete. The Lynnwood Link GC/CM contractor Stacey & Witbeck/Kiewit/Hoffman (SKH) is continuing work on the L210 station platforms. Permitting activities for the building, WSDOT PDA and City of Seattle Street Improvement permits for the final station construction are ongoing in support of the L230 Station Finishes contract, scheduled for April 2023. Final plans for the L230 bid set are scheduled to be submitted in mid-October and advertise bids in mid-January 2023. The station is currently forecast scheduled to open in Q2 2026.

Activity Name	Start	Finish	2022				2023				2024				2025				2026	
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	PS	
<b>NE 130th Station - Design &amp; Permitting</b>	04-Feb-19A	05-Mar-24																		
Project Management	24-Jun-21 A	23-Jun-22 A																		
Preliminary Design	04-Feb-19 A	14-Nov-19 A																		
Final Design	30-Sep-19 A	05-Jun-23																		
Permitting	16-Mar-20 A	05-Mar-24																		
Estimating/Negotiations/Amendments	23-Dec-19 A	23-Jun-22 A																		
<b>NE 130th Station - Construction</b>	04-Aug-21 A	25-Jun-26																		
NE 130th Milestones	23-Jun-22 A	25-Jun-26																		
Final Design Tasks	04-Aug-21 A	29-Sep-23																		
L210 Procurement	17-Nov-21 A	06-Jul-22 A																		
L210 Construction	07-Jul-22 A	05-Aug-23																		
L230 Procurement w/Soldier Pile Wall	17-Oct-22	27-Apr-23																		
L230 Construction	05-Jun-23	12-Sep-25																		
L810 Systems Procurement	31-Jul-24	24-Jul-25																		
L810 Systems Construction	25-Jul-25	24-Feb-26																		
Pre-Revenue & Opening	05-Apr-25	24-Jun-26																		

## Project Float

Project float is planned be a total of 90 days and associated with completion of the station commissioning and the completion of the L230 contract.





## Right of Way

The Right-of-Way effort on this project consists of one permanent easement and two temporary construction easements. These three easements will impact two different properties. The properties have been identified as necessary for construction of the NE 130th Street Infill Station. No relocations will be necessary.

## Community Engagement

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

- Developing a template for a future online open house.
- Continuing to receive and incorporate feedback from the online open house template.

## 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 the current period is above the Planned FTE Monthly Average, with less staff but more civil DSDC and CM staff than planned.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.8	3.7	2.0
Consultants	4.0	6.7	(2.7)
TOTAL	9.8	10.5	(0.7)

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail NE 130th St Infill Station

## SKH- Civil Construction

### Current Progress

- Began girder end diaphragm installation.
- Preparing/staging formwork for the decking.

### Schedule Summary

ST/CM staff are currently reviewing the contractor's revised baseline schedule submission.

Present Financial Status	Amount
<b>SKH- Civil Construction—C1 package + advance material procurement</b>	
Original Contract Value	\$5,000,000
Change Order Value	\$3,953,439
Current Contract Value	\$8,953,439
Total Actual Cost (Incurred to Date)	\$8,456,132
Percent Complete	94.2%
Authorized Contingency	\$20,530,000
Contingency Drawdown	\$3,953,439
Contingency Index	4.89



*Diaphragm Formwork*

# Link Light Rail Tacoma Dome Link Extension



## Project Summary

### Scope

**Limits** Federal Way Transit Center to South Federal Way, Fife, Portland Avenue, and Tacoma Dome

**Alignment** The Tacoma Dome Link Extension (TDLE) expands light rail 9.7 miles from the Federal Way Transit Center to Tacoma. The representative alignment travels adjacent to I-5 with four stations.

**Stations** South Federal Way, Fife, Portland Avenue and Tacoma Dome

**Systems** Signals, traction power, communications (SCADA), Operations and Maintenance Facility South (OMF South)

**Phase** Planning: Alternative Development/Project Development

**Budget** \$126.4 Million for Preliminary Engineering Phase 1—Alternative Development Phase 2

**Schedule** Target Dates:  
Tacoma Dome Station, 2032  
Parking at South Federal Way & Fife, 2038

A separate project, Tacoma Dome Station Parking and Access Improvements, will fund non-motorized and/or parking improvements in the vicinity of Tacoma Dome Station. This project will be developed in parallel with TDLE.



Map of Tacoma Dome Link Extension.

## Key Project Activities

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

### Tacoma Dome Link Extension (TDLE)

- Continued alternatives development in coordination with Tribal Nations and agency partners.
- Awaiting correspondence from Tribal Council of Puyallup Tribe of Indians following meeting.

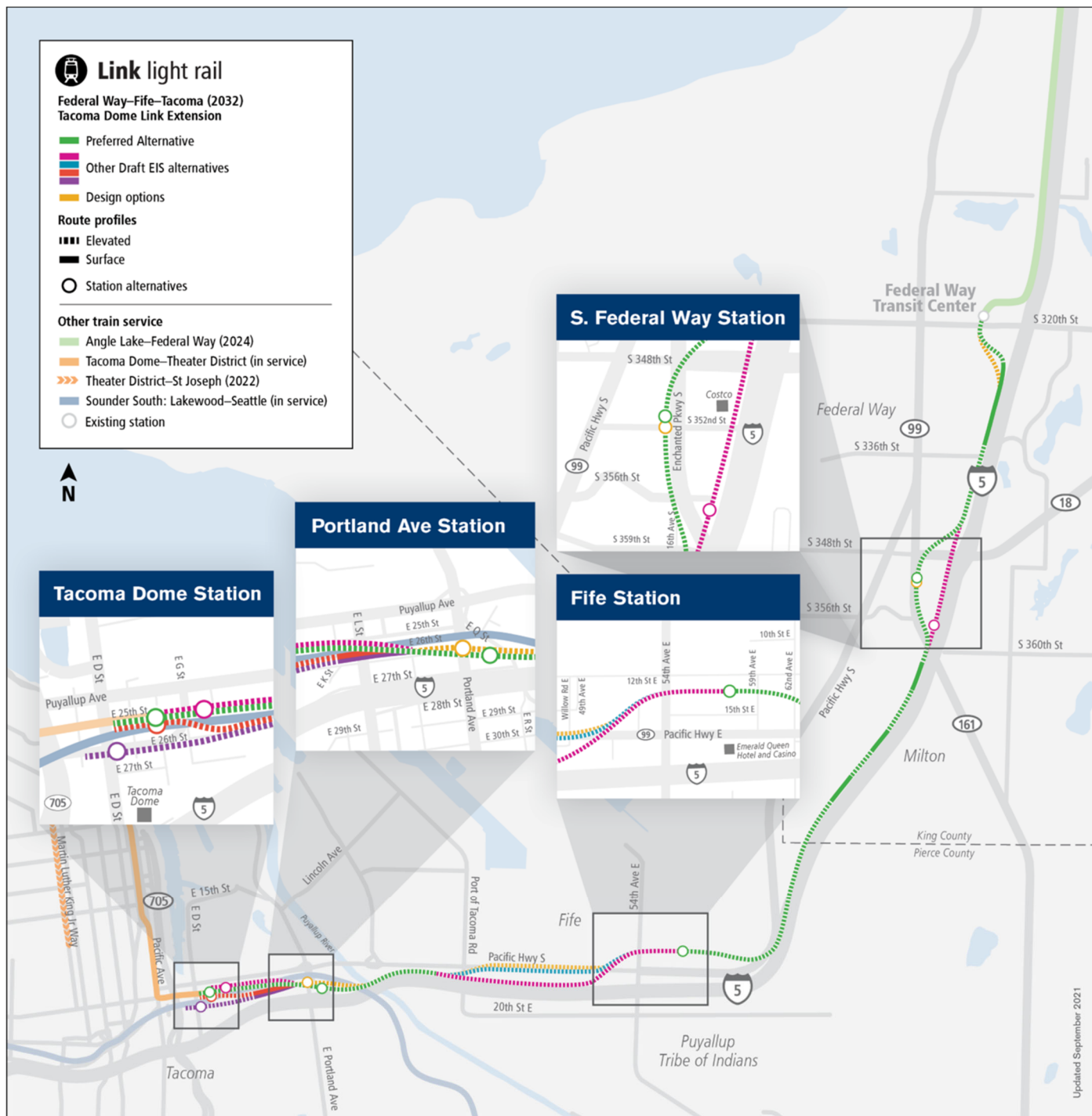
### Operations and Maintenance Facility South (OMF South)

- Continued production of the Final Environmental Impact Statement (FEIS) and supporting design.
- Geotechnical borings in the proposed OMF South project area and related Real Property and engagement coordination with property owners.
- Continued design development in coordination with Tribal Nations and agency partners.

# Link Light Rail Tacoma Dome Link Extension

## Project Map

Graphic below depicts additional 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.

For this period \$1.2M was incurred. The majority of project expenditures were for preliminary engineering associated with TDLE Phase 2 and OMF South Phase 3.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$27.8	\$17.2	\$17.2	\$27.8	\$0.0
Preliminary Engineering	\$86.8	\$81.6	\$39.9	\$86.8	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$6.4	\$3.7	\$1.5	\$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	\$1.1	\$0.7	\$5.4	\$0.0
<b>Total</b>	<b>\$126.4</b>	<b>\$103.6</b>	<b>\$59.3</b>	<b>\$126.4</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	\$1.1	\$0.7	\$4.4	\$0.0
80 Professional Services	\$119.6	\$102.5	\$58.6	\$119.6	\$0.0
90 Unallocated Contingency	\$2.4	\$0.0	\$0.0	\$2.4	\$0.0
<b>Total (10 - 90)</b>	<b>\$126.4</b>	<b>\$103.6</b>	<b>\$59.3</b>	<b>\$126.4</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.



## Risk Management

The following are the top project-wide risks:

### Tacoma Dome Link Extension (TDLE)

- Identification of a new station option in Fife outside the floodplain and additional identification and environmental review of alignment(s) in the South Federal Way area will substantially impact the DEIS publication.
- Heightened risk of design changes or unanticipated mitigation associated with cultural and/or natural resources may increase project cost and extend schedule.
- Potential that design or construction challenges could emerge as work progresses, including crossing of Puyallup River, may increase time needed.
- Environmental mitigation costs could increase.
- Potential impacts from higher real estate and construction costs.
- Potential permitting challenges and other necessary timely coordination/approvals with many permitting authorities.

### OMF South

- Preferred Alternative in Federal Way requires a street vacation and code deviation from City of Federal Way. Approvals and timely concurrence on design may impact schedule.
- Evaluating whether delivery method and contract packaging opportunities provide enough flexibility to meet realigned schedule for opening.
- Potential impacts from higher real estate and construction costs.
- Third party coordination and/or unanticipated required mitigation could increase cost.
- Unidentified utility conflicts, contaminated soil and/or groundwater may be discovered during construction, increasing cost.
- Potential permitting/design review challenges and other necessary timely coordination/approvals with permitting authorities/reviewers.

# Link Light Rail Tacoma Dome Link Extension



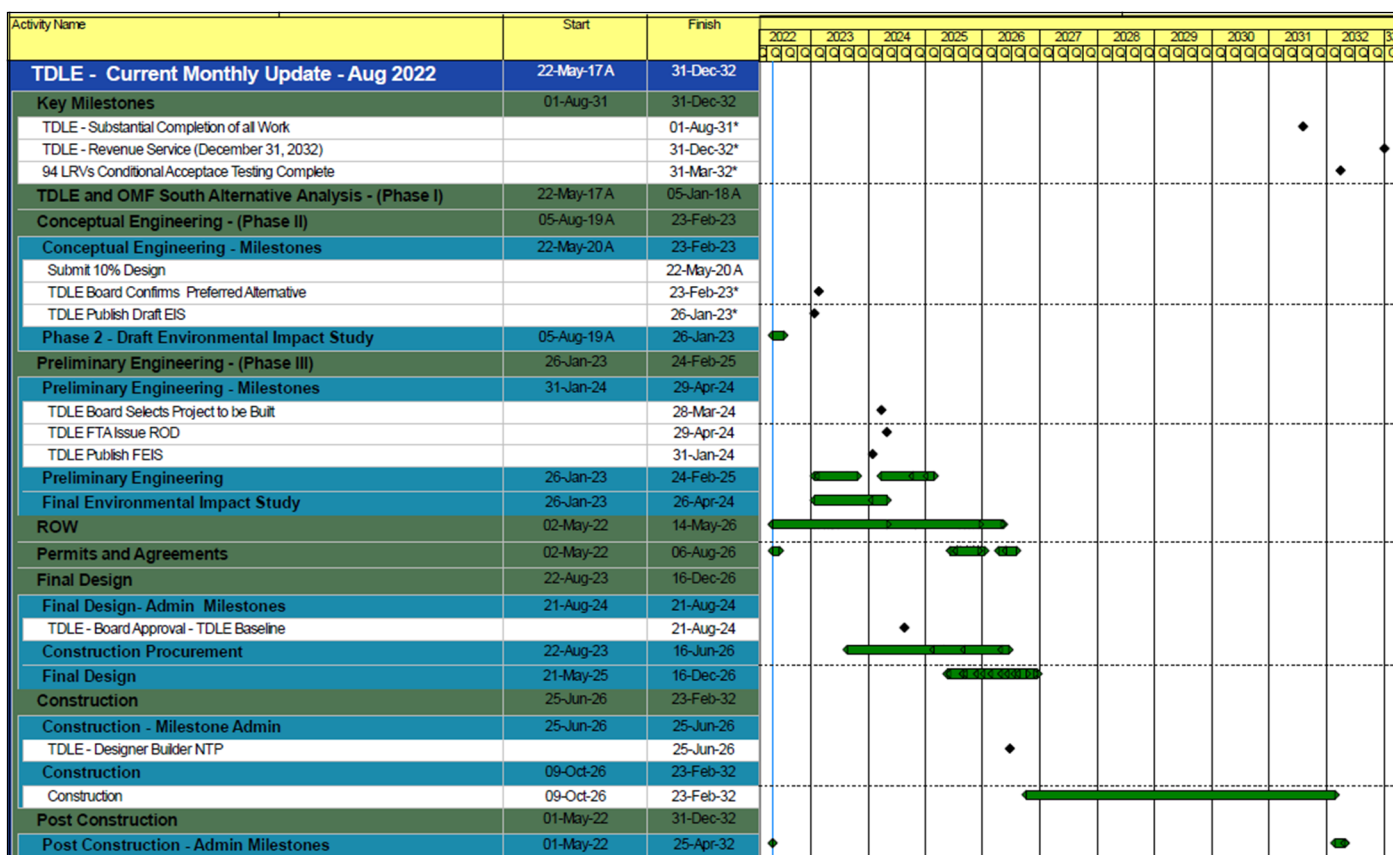
## Tacoma Dome Link Extension

### Current Progress

- Continued work to facilitate the production of the DEIS.
- Continued regular coordination with Tribal Nations and the Cities of Fife, Milton, Federal Way and Tacoma.

### TDLE Project Schedule

Below is the summary schedule as of Aug 31, 2022. As noted in the TDLE Project Risk section, the project team is presently working to evaluate the impacts to the forecasted date of DEIS publication stemming from the potential inclusion of a new station option in Fife and two additional alignment options in South Federal Way.

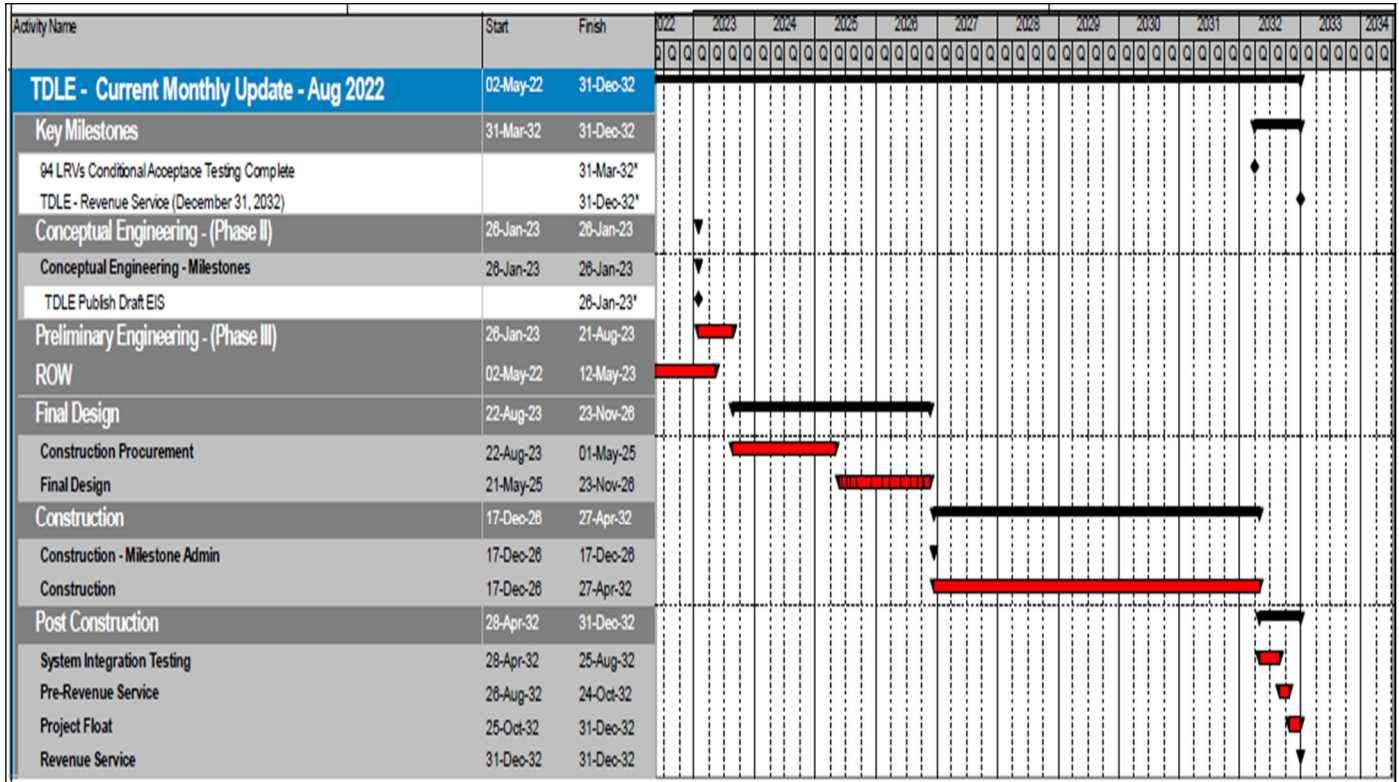


# Link Light Rail Tacoma Dome Link Extension



## TDLE Critical Path Analysis

The critical path for TDLE is running through Phase 2 publishing of the DEIS and ST Board Preferred Alternative identified/confirmed. Any slippage to Phase 2 and Phase 3 could impact the Revenue Service target date completion of 2032 for TDLE.



## Community Engagement

- Table at the Salishan Association’s National Night Out Celebration.
- Provided update to the Federal Way Kiwanis Club.
- Table at the Back to School Festival in Tacoma.

# Link Light Rail Tacoma Dome Link Extension



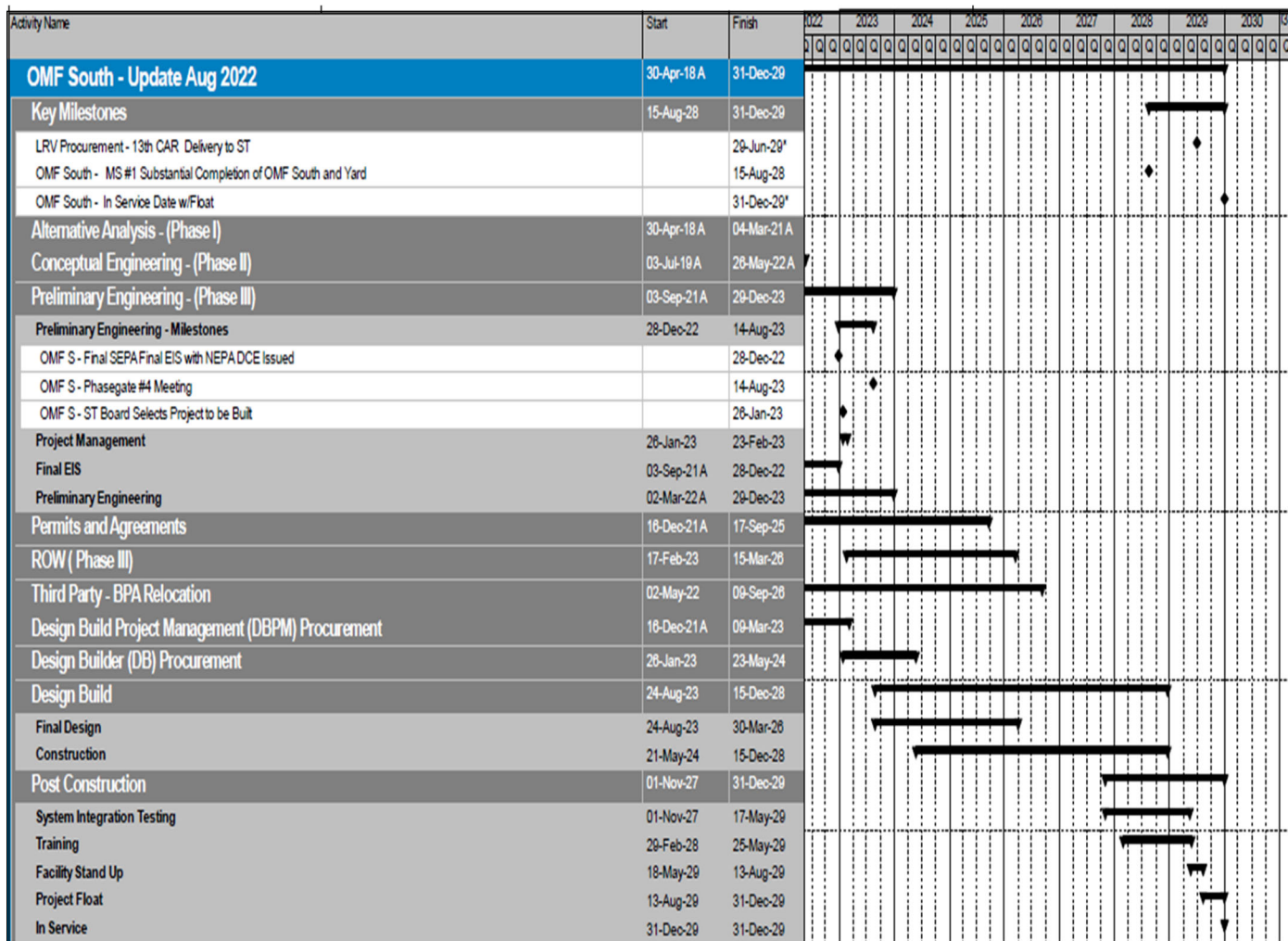
## Operations and Maintenance Facility South

### Current Progress

- Continued work to produce of the Final Environmental Impact Statement (FEIS) and supporting design.
- Continued regular coordination with City of Federal Way on design, land use, city code and permitting.
- Continued coordination with environmental permitting agencies.

### OMF South Project Schedule

Below is the summary schedule as of Aug 31, 2022. Project is Phase 3 with the Final SEPA/Final EIS milestone is forecasted for Q4 2022. The project team is presently working to evaluate impacts on the forecasted FEIS publication date stemming from integration of test track scope into the final design. A series of scheduling workshops are being held to establish the best delivery methods and means needed to complete project on the 4th Qtr. 2029.

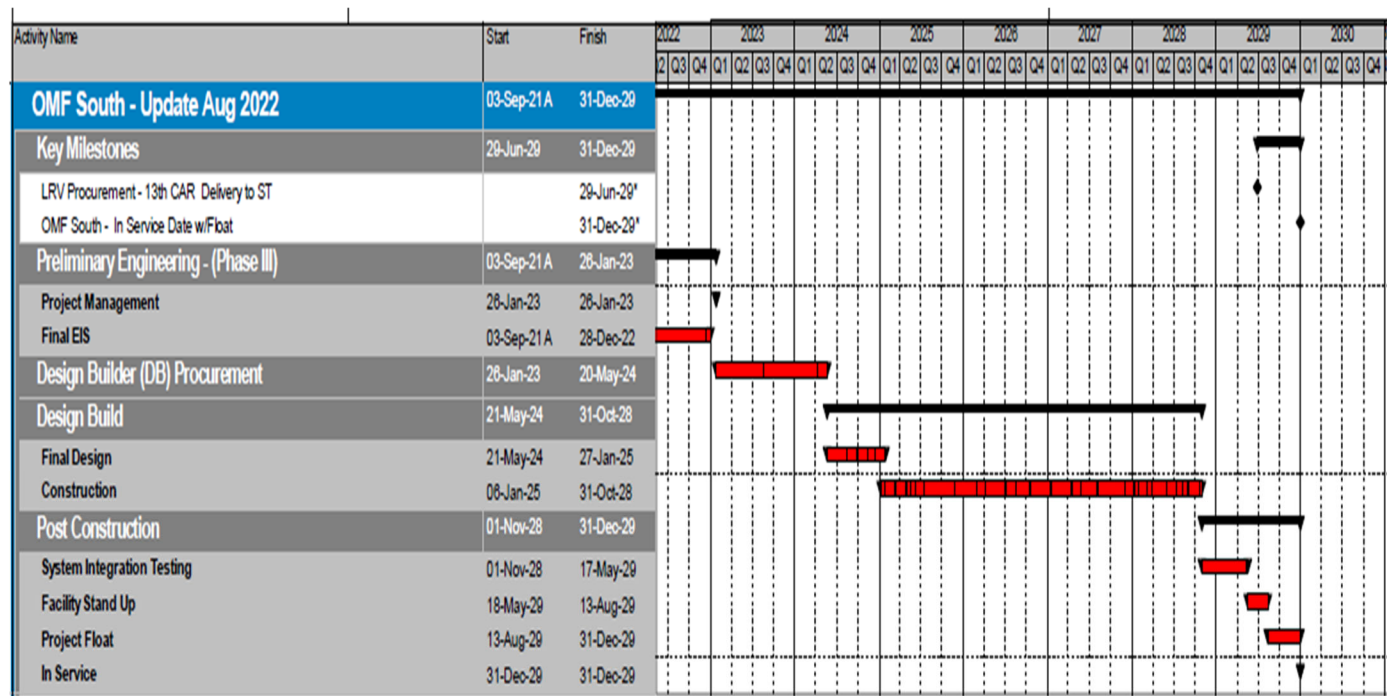


# Link Light Rail Tacoma Dome Link Extension



## OMF South Critical Path Analysis

The critical path for OMF South is running through Preliminary Engineering Final Environmental Impact Statement effort and procurement of the design-build contractor.



## Community Engagement

- Provided briefing to Belmor Park resident.



# Link Light Rail Tacoma Dome Link Extension



## 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 easements and temporary construction easements) and non-compensable rights (e.g. rights of entry). These acquisitions may result in owner and tenant residential and commercial relocations. The right-of-way program status for this period is summarized in the following table.

Tacoma Dome 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
<p><i>*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.</i></p> <p><i>Total Acquisitions: Defined as parcels recognizing only land, not owners</i></p> <p><i>Board Approved: Based on parcels and properties (including multi-unit acquisitions)</i></p> <p><i>Offers/Closings: Based on inclusive offers made to separate owners and interest holders</i></p> <p><i>Relocations: Based on number of affected individuals</i></p>					

## 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.

Project has planned 95.6 average FTEs per month for the year 2022. To date, both ST and consultant actual staffing levels have recorded an underrun variance to the Planned Monthly FTE average. Regarding OMF South project, the decision on test track and site layout has not been made yet, once a decision is made, HDR will be full steam ahead on the mainline. Also HDR has not been fully authorized for the new additional alignment design. That cause lower burn rate on TDLE project.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	37.3	17.9	19.4
Consultants	58.3	22.1	36.2
TOTAL	95.6	40.0	55.6
<p><i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.</i></p>			

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Link Light Rail West Seattle and Ballard Link Extensions

## Project Summary

### Scope

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.

#### West Seattle

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.

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

#### Ballard

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

\$286.7M through completion of Preliminary Engineering

### Schedule

Target dates:

West Seattle Extension: 2032

Ballard Extension: 2037



Map of Project Alignment

## Key Project Activities

- Initiated Phase 3 Project Development activities to prepare the Final EIS and conduct Preliminary Engineering for the West Seattle Link Extension. Conduct further studies and engagement in some areas to inform a future Board action to confirm or modify the Preferred Alternative for the Ballard Link Extension.
- Continued engagement with partners and regulatory agencies, stakeholder groups and property owners regarding environmental process and next steps.
- Continued community engagement activities including meetings for community groups and property owners.

# 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 \$41M in 2022 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	\$55.1	\$28.9	\$28.8	\$55.1	\$0.0
Preliminary Engineering	\$215.3	\$103.9	\$94.3	\$215.3	\$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	\$10.4	\$3.4	\$2.0	\$10.4	\$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	\$3.8	\$3.1	\$6.0	\$0.0
<b>Total</b>	<b>\$286.7</b>	<b>\$140.0</b>	<b>\$128.2</b>	<b>\$286.7</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	\$5.1	\$3.8	\$3.1	\$5.0	\$0.0
80 Professional Services	\$252.2	\$136.3	\$125.1	\$252.2	\$0.0
90 Unallocated Contingency	\$29.5	\$0.0	\$0.0	\$29.5	\$0.0
<b>Total (10 - 90)</b>	<b>\$286.7</b>	<b>\$140.0</b>	<b>\$128.2</b>	<b>\$286.7</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are the top project wide risks:

- Delay to reaching stakeholder consensus on a preferred alternative, including third party funding, could delay completion of environmental documentation and design.
- Complexity of alignments in a constrained environment with challenging topography and waterway crossings.
- Complexity associated with tunneling through a mature urban environment.
- Potential construction effects in a constrained environment.
- Potential effect on Central Link operations during construction.
- Potential schedule risks associated with real estate acquisition process
- Budget risk due to higher current real estate costs and construction costs.
- Potential permitting challenges and other necessary coordination/approvals could delay the project and add cost.

## Community Engagement

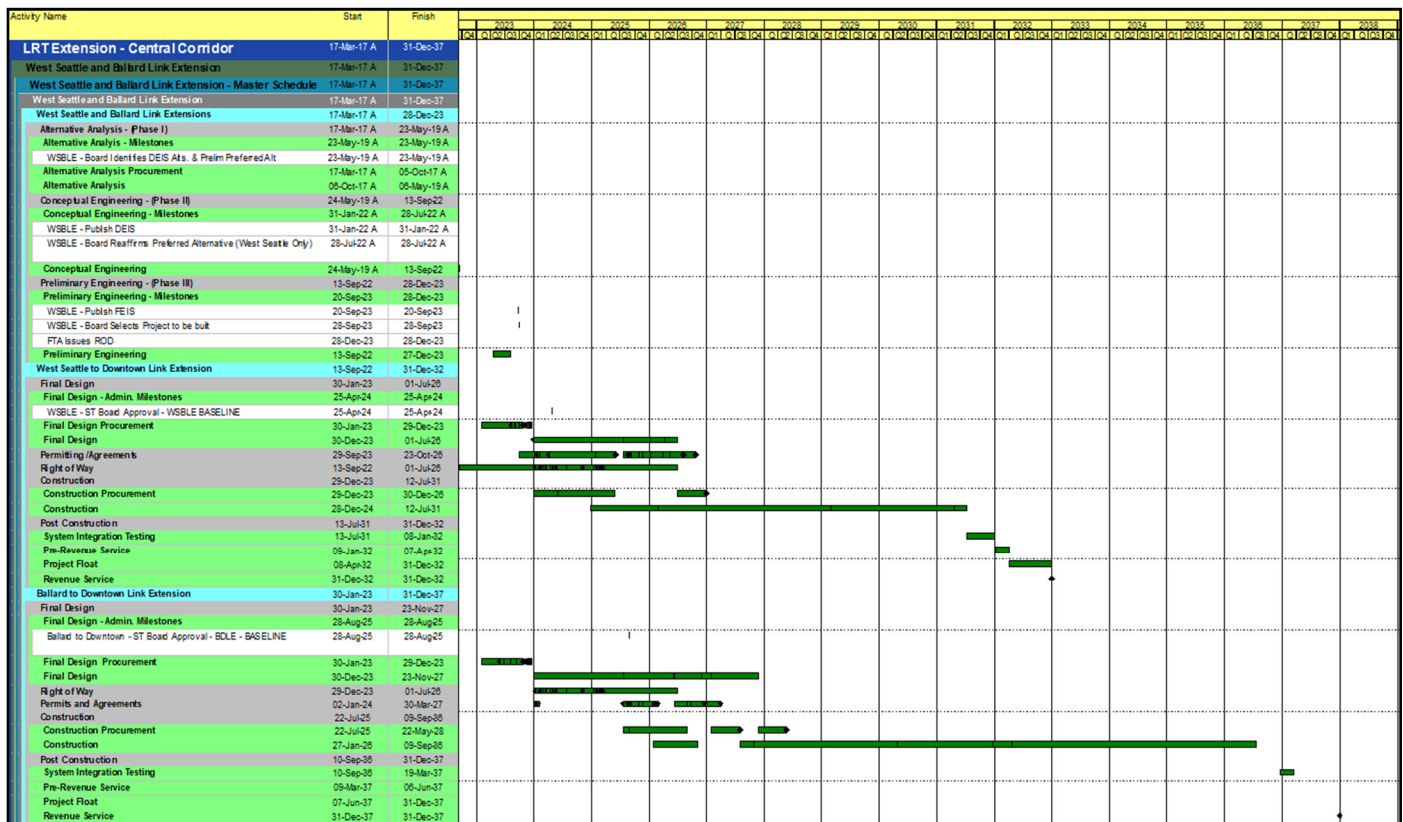
- Conducted outreach to five property owners throughout the corridor.
- Conducted nine community outreach briefings, tours, and other external engagement activities throughout the corridor.
- Tabled at one fair and festival throughout the corridor.

# Link Light Rail West Seattle and Ballard Link Extensions



## Project Schedule

The Board of Directors announced their realignment decision in August 2021 which includes target dates of 2032 for the West Seattle Extension and 2037 for the Ballard Extension. The schedule below has been updated to represent these dates. The DEIS was published in January 2022 and Phase 3 Preliminary Engineering approval is expected in September 2022. The schedule graphic below represents these updates. The Board re-affirmed the Preferred Alternative for the West Seattle Extension in July 2022. More analysis is needed prior to affirming the Preferred Alternative for the Ballard Extension.





# Link Light Rail West Seattle and Ballard Link Extensions



## Staffing Summary

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

The planned FTE monthly average takes peaks and valleys in activity into account; whereas the YTD monthly average only reflects January—August actuals. Staffing variance reflects extension of DEIS schedule to accommodate internal and external agency capacity in response to COVID-19.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	41.1	34.0	(7.1)
Consultants	58.0	21.1	(36.9)
TOTAL	99.1	55.1	(44.0)

\* 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
M2022-73	Authorizes the Chief Executive Officer to execute a Contract Modification with HNTB Corporation to provide Project Development Services for the West Seattle and Ballard link Extensions project.	8/25/2022

# 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.

August | 2022



Prepared by Project Controls | Portfolio Services Office

# Sounder Commuter Rail Program Overview



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

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

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

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

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

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

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

# Sounder Commuter Rail Program Overview



## Program Budget

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

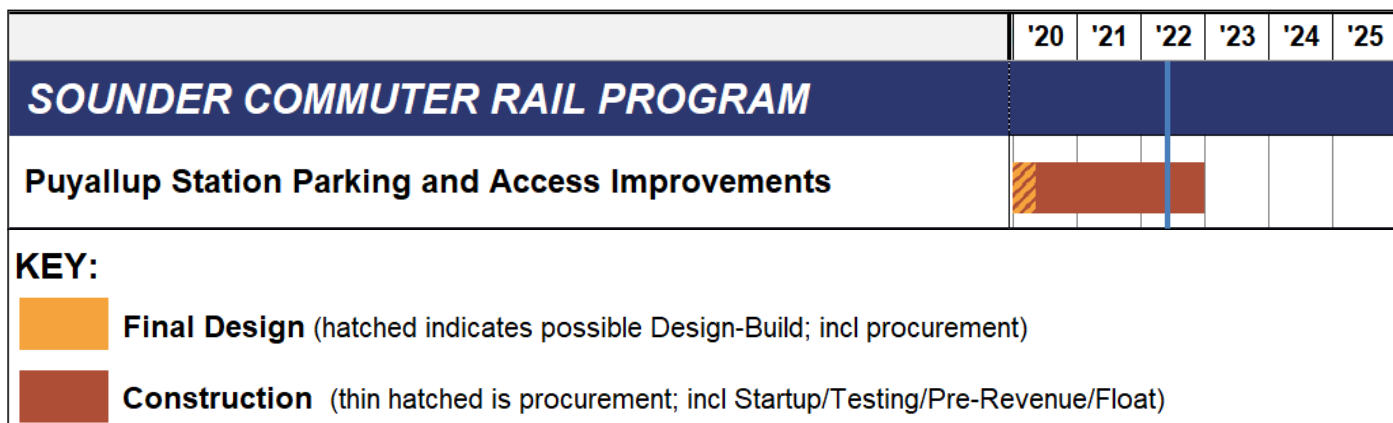
Table figures are shown in millions.

Project Authorized Project Allocation Date Incurred to Date Estimated Final Cost (EFC) Authorized	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Auburn Station Access Improvement	\$14.9	\$8.0	\$5.8	\$14.9	\$0.0
Kent Station Access Improvements	\$16.8	\$11.9	\$9.9	\$16.8	\$0.0
Lakewood Station Access Improvement	\$5.9	\$3.6	\$1.5	\$5.9	\$0.0
Puyallup Station Access Improvements	\$82.4	\$76.9	\$72.5	\$82.3	\$0.0
Sounder South Capacity Expansion	\$21.1	\$5.9	\$5.0	\$21.1	\$0.0
South Tacoma Station Access Improvements	\$5.4	\$3.5	\$1.2	\$5.4	\$0.0
Sumner Station Access Improvements	\$17.8	\$16.7	\$14.5	\$17.8	\$0.0
<b>Total</b>	<b>\$164.3</b>	<b>\$126.3</b>	<b>\$110.5</b>	<b>\$164.3</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Program Schedule of Baseline Projects

Baseline projects are summarized below. Please see the individual project reports for further details, including schedules for pre-





# Sounder Commuter Rail Auburn Station Parking and Access Improvements



## Project Summary

**Scope** The purpose of the project is to improve parking and access to the existing Auburn 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 Auburn Station.



*Improving access to Sounder Auburn Station*

**Phase** Complete Environmental / Enter Design & Construction

**Budget** \$14.9 Million

**Schedule** Target Date: 2025 (Realignment schedule)



## Key Project Activities

- All Temporary Construction Easements (TCEs) offers were made and are in negotiations.
- Offer was made for all City of Auburn real property interests.
- Continued development of the design-build project requirements for upcoming Request for Qualifications (RFQ).

# Sounder Commuter Rail Auburn Station Parking and Access Improvements



## 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 \$155K. The incurred cost increased from \$5.83M to \$5.98M. The majority of this period’s costs are attributed to staff costs, design-build project management activities, and right-of-way activities.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.4	\$2.1	\$2.1	\$2.4	\$0.0
Preliminary Engineering	\$2.9	\$2.7	\$2.7	\$2.9	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$2.0	\$0.6	\$2.0	\$0.0
3rd Party Agreements	\$0.4	\$0.4	\$0.0	\$0.4	\$0.0
Construction	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
ROW	\$6.9	\$0.9	\$0.6	\$6.9	\$0.0
<b>Total</b>	<b>\$14.9</b>	<b>\$8.1</b>	<b>\$6.0</b>	<b>\$14.9</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are the top project wide risks:

- Complexity of property acquisition could result in a delay to the start of construction and cause budget overrun.
- Additional scope and project change requests from stakeholders could cause project delay during permit approval.
- Differing soil and site conditions discovered after the design-builder Notice to Proceed could cause project delay.
- Overall increase in cost due to inflationary market conditions.

# Sounder Commuter Rail Auburn Station Parking and Access Improvements



## Project Schedule

Sound Transit decided to move forward with Kent and Auburn as two separate contracts to maintain federal loan eligibility. The schedule will continue to be updated and modified. End of September schedule update will be used in the Baseline QRA session which is planned for the week of Oct. 17, 2022.

The project team has engaged the current Design-Build Project Management (DBPM) team to help with the development of the Design-Build Project Requirements, issuance of the Design-Build Procurement Request for Qualifications, and Baseline.

Other activities underway include continued property appraisal and condemnation activities. Team is preparing to issue RFQ (Request for Qualifications) by early September 2022.

Phase III Board Approval of Baseline is planned for Q4 2022. Design-Build Notice to Proceed is expected Q2 2023.

Project is forecasting a Q1 2027 target date for Open for Service. The date will be confirmed as part of Q4 2022 Board Baseline process.

Activity Name	Start	Finish	2022				2023				2024									
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
<b>Auburn Station Parking and Access Improvements -DB MS Baseline</b>	03-Dec-20 A	27-Jan-27																		
<b>Preliminary Engineering (Phase III) - Auburn</b>	14-Feb-22 A	15-Dec-22																		
ST Board Approves Project Baseline - Phase Gate 4 - Auburn	15-Dec-22	15-Dec-22																		
<b>Administration Phase III - Auburn</b>	14-Feb-22 A	12-Dec-22																		
<b>Establish Project Baseline (Phase Gate 4) - Auburn</b>	14-Feb-22 A	12-Dec-22																		
Post-Risk Assessment Budget and Schedule Refinement - Auburn	14-Feb-22 A	21-Sep-22																		
Staff Report Preparation - Auburn	03-May-22 A	19-Oct-22																		
CCB Baseline/Phase Gate 4 Est Baseline Documents Due - Auburn	27-Sep-22	04-Oct-22																		
Final QRA Session - Kent	17-Oct-22*	21-Oct-22																		
PC/Finance/Environmental Review of Staff Report - Auburn	24-Oct-22	16-Nov-22																		
CCB for Baseline/Phase Gate 4 - Auburn	25-Oct-22	25-Oct-22																		
System Expansion Committee Approval of Baseline and Entry to Construction (PG 4) -	08-Dec-22	08-Dec-22																		
Board Administration Review of Staff Report - Auburn	12-Dec-22	12-Dec-22																		
<b>VE Workshop - Auburn</b>	12-Sep-22	18-Oct-22																		
<b>Permits and Agreements - Auburn</b>	02-Jan-24	11-Jan-24																		
<b>Right of Way - Auburn</b>	13-Apr-22 A	20-Feb-24																		
<b>Design-Build Project Management - Auburn</b>	03-Dec-20 A	14-Jul-26																		
<b>Design-Build Contract (DB) - Auburn</b>	22-Aug-22 A	14-Jul-26																		
<b>Design-Build Contract-Procurement - Auburn</b>	22-Aug-22 A	14-Jun-23																		
<b>Prepare and Finalize RFQ</b>	22-Aug-22 A	06-Sep-22																		
<b>RFQ Solicitation Period</b>	07-Sep-22	05-Oct-22																		
<b>SOQ Evaluation and Selection</b>	06-Oct-22	15-Nov-22																		
<b>RFP Phase</b>	04-Oct-22	26-Apr-23																		
<b>ST Board Path</b>	24-Apr-23	14-Jun-23																		
<b>Design-Build - Design and Construction - Auburn KR</b>	14-Jun-23	14-Jul-26																		
<b>Const - Misc / Other / Env Mitigation</b>	14-Jun-23	04-Mar-24																		
<b>Post Construction - Auburn</b>	14-Jul-26	27-Jan-27																		
<b>Post Construction - Auburn</b>	14-Jul-26	27-Jan-27																		
<b>Transition to Operations - Auburn</b>	14-Jul-26	15-Jul-26																		
<b>Project Float - Auburn</b>	15-Jul-26	27-Jan-27																		
<b>Open For Service - Auburn</b>	27-Jan-27	27-Jan-27																		

# Sounder Commuter Rail Auburn Station Parking and Access Improvements



## Community Engagement

- We hosted information tables at the National Night Out event in downtown Auburn on August 2 and Hot Summer Nights Market on August 12.
- We are preparing to publish the visual design vision statement on the Sound Transit website.

## 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.

Less than anticipated level of effort by ST staff and consultants due to availability constraints of resources and efficiencies gained from recent development of Summer procurement documents.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.5	3.0	2.5
Consultants	4.5	1.7	2.8
TOTAL	10.0	4.7	5.3

*\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.*

## 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 (Realignment schedule)



*Improving access to Sounder Kent Station*

## Key Project Activities

- Coordination with King County Metro to determine the requirements for a bus layover to be incorporated into the project as a Betterment.
- Coordination with City of Kent and King County Metro on non-motorized improvements.
- Continued development of the design-build project requirements for upcoming Request for Qualifications (RFQ).



*©Lydia Aldredge, 2002, "Cornucopia", Sound Transit, Kent Station plaza art*



# Sounder Commuter Rail Kent Station Parking and Access Improvements



## 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 \$134K. The incurred cost increased from \$9.9M to \$10.0M. The majority of this period’s costs are attributed to staff costs, design-build project management activities, and right-of-way activities.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.7	\$2.3	\$2.3	\$2.7	\$0.0
Preliminary Engineering	\$3.4	\$2.8	\$2.7	\$3.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$2.0	\$0.6	\$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	\$4.8	\$4.4	\$8.2	\$0.0
<b>Total</b>	<b>\$16.8</b>	<b>\$11.9</b>	<b>\$10.0</b>	<b>\$16.8</b>	<b>\$0.0</b>

*Tables across this report may have totals that do not equal line item sums due to decimal rounding.*

## Risk Management

The following are the top project wide risks:

- Longer City of Kent permitting process in-lieu of executing a Development Agreement could delay project.
- Differing soil and site conditions discovered after the design-builder Notice to Proceed could cause project delay.
- Project changes that occur during procurement that require additional environmental review could delay project.
- Overall increase in cost due to inflationary market conditions.

# Sounder Commuter Rail Kent Station Parking and Access Improvements



## Project Schedule

Sound Transit decided to move forward with Kent and Auburn as two separate contracts to maintain federal loan eligibility. The schedule will continue to be updated and modified. End of September schedule update will be used in the Baseline QRA session which is planned for the week of Oct. 17, 2022.

The project team has engaged the current Design-Build Project Management (DBPM) team to help with the development of the Design-Build Project Requirements, issuance of the Design-Build Procurement Request for Qualifications, and Baseline.

Other activities underway include continued property appraisal and condemnation activities, negotiating the King County Metro agreement and contribution for bus layover accommodation expected in Q3 2023. Team is preparing to issue RFQ (Request for Qualifications) by early September 2022.

Phase III Board Approval of Baseline is planned for Q4 2022. Design-Build Notice to Proceed is expected Q2 2023.

Project is forecasting a 2027 target date for Open for Service. The date will be confirmed as part of Q4 2022 Board Baseline process.

Activity Name	Start	Finish	2022			2023				2024				
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Kent Station Parking and Access Improvements -DB MS Baseline - Kent - 9/1/2022</b>	03-Dec-20 A	30-Mar-27												
▣ Preliminary Engineering (Phase III) - Kent	14-Feb-22 A	15-Dec-22												
▣ Preliminary Engineering (Phase III) - Kent	14-Feb-22 A	15-Dec-22												
▣ Administration	14-Feb-22 A	15-Dec-22												
ST Board Approves Project Baseline - Phase Gate 4 - Kent	15-Dec-22	15-Dec-22												
▣ Establish Project Baseline (Phase Gate 4)	14-Feb-22 A	12-Dec-22												
Post-Risk Assessment Budget and Schedule Refinement - Kent	14-Feb-22 A	03-Oct-22												
Staff Report Preparation - Kent	03-May-22 A	31-Oct-22												
CCB Baseline/Phase Gate 4 Est Baseline Documents Due - Kent	04-Oct-22	04-Oct-22												
Final QRA Session - Kent	17-Oct-22*	21-Oct-22												
CCB for Baseline/Phase Gate 4 - Kent	25-Oct-22	25-Oct-22												
PC/Finance/Environmental Review of Staff Report - Kent	01-Nov-22	28-Nov-22												
System Expansion Committee Approval of Baseline and Entry to Construction (PG 4) - Kent	08-Dec-22	08-Dec-22												
Board Administration Review of Staff Report - Kent	12-Dec-22	12-Dec-22												
+ VE Workshop	12-Sep-22	18-Oct-22												
+ Permits and Agreements - Kent	01-Jul-21 A	03-Jan-25												
+ Right of Way - Kent	28-Jul-22 A	26-Jan-24												
+ Design-Build Project Management - Kent	03-Dec-20 A	30-Nov-26												
▣ Design-Build Contract (DB) - Kent	01-Sep-22	30-Nov-26												
▣ Design-Build Contract-Procurement - Kent	01-Sep-22	14-Jun-23												
+ Prepare and Finalize RFQ	01-Sep-22	06-Sep-22												
+ RFQ Solicitation Period	07-Sep-22	05-Oct-22												
+ SOQ Evaluation and Selection	06-Oct-22	22-Nov-22												
+ RFP Phase	04-Oct-22	03-May-23												
+ ST Board Path	08-May-23	14-Jun-23												
+ Design-Build Contract-Design and Construction - Kent	14-Jun-23	30-Nov-26												
+ Const - Misc / Other / Env Mitigation	16-Dec-22	06-May-24												
▣ Post Construction - Kent	30-Nov-26	30-Mar-27												
▣ Post Construction - Kent	30-Nov-26	30-Mar-27												
+ Transition to Operations - Kent	30-Nov-26	30-Nov-26												
+ Project Float - Kent	01-Dec-26	30-Mar-27												
+ Open For Service - Kent	30-Mar-27	30-Mar-27												

# Sounder Commuter Rail Kent 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 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.

Less than anticipated level of effort by ST staff and consultants due to availability constraints of resources and efficiencies gained from recent development of Summer procurement documents.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.9	3.2	2.7
Consultants	4.5	1.7	2.8
TOTAL	10.4	4.9	5.5

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## 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 2, the project will conceptually design the improvements and conduct an environmental review under SEPA.

**Phase** Planning Phase 2—Conceptual Engineering and Environmental

**Budget** \$5.86 Million

**Schedule** Target Date: 2030



*Lakewood Station in Pierce County.*

## Key Project Activities

- Continued conducting survey work on the proposed improvements.
- Continued planning for Conceptual Engineering.
- Started developing materials for community engagement.



*Lakewood Station Garage*



*Lakewood Station Passenger Platform Access*

# Sounder Commuter Rail Lakewood Station Access Improvements



## Project Cost Summary

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

This period expenditures decreased by \$85K with the majority of the amount coming from staff costs and Phase 2 —Conceptual Engineering and Environmental 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	\$2.2	\$0.5	\$0.5	\$2.2	\$0.0
Preliminary Engineering	\$3.0	\$2.8	\$0.7	\$3.0	\$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	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
<b>Total</b>	<b>\$5.9</b>	<b>\$3.6</b>	<b>\$1.5</b>	<b>\$5.9</b>	<b>\$0.0</b>

*Tables across this report may have totals that do not equal line item sums due to decimal rounding.*

## Risk Management

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.
- Too many desired improvements may exceed the financial plan budget.



# Sounder Commuter Rail Lakewood Station Access Improvements



## Project Schedule

Sound Transit continues to make schedule adjustments. Scope of work covered by funding agreement, contract, statement of work, or similar executed commitment, is reflected in the schedule shown below.

Phase I - Alternative Development NTP was issued in December 2020. The consultant has completed Alternative Development for this project on March 31, 2022. In March 2022, staff updated the System Expansion Committee on the set of improvements to further study in the next phase of the project.

Phase II Kick Off was in April 2022, NTP was in May 2022. The staff completed Project Management and External Engagement Plans in June 2022. Currently working on communities engagements, Conceptual Plans, Reports and Utilities Relocation.

Selecting Delivery Method is expected during Q2 2023. Board selects projects to be built planned for end of Q1 2024.

The target Open for Service Date for this project is planned for Q4 2030.

Activity Name	Start	Finish	2022				2023				2024				2025			
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Lakewood Station Access Improvements - Master Schedule</b>	02-May-22 A	31-Dec-30	[Gantt bar spanning from Q2 2022 to Q4 2030]															
<b>Preliminary Engineering</b>	02-May-22 A	23-Oct-25	[Gantt bar spanning from Q2 2022 to Q4 2025]															
<b>Phase II - Conceptual Engineering</b>	02-May-22 A	28-Mar-24	[Gantt bar spanning from Q2 2022 to Q1 2024]															
Board Selects Projects to be Build	28-Mar-24	28-Mar-24	[Vertical tick mark in Q1 2024]															
<b>Conceptual Engineering</b>	02-May-22 A	13-Mar-24	[Gantt bar spanning from Q2 2022 to Q1 2024]															
Phase 2 Draft SEPA and CE	02-May-22 A	29-Dec-23	[Gantt bar spanning from Q2 2022 to Q4 2023]															
Prepare Cost Estimate	02-May-22 A	19-Apr-23	[Gantt bar spanning from Q2 2022 to Q2 2023]															
DEA Performss and Completes CE/ENV	02-May-22 A	12-Oct-23	[Gantt bar spanning from Q2 2022 to Q4 2023]															
External Engagement	01-Jun-22 A	27-Sep-23	[Gantt bar spanning from Q3 2022 to Q4 2023]															
Finalize SEPA, Check List and Review	01-Jun-22 A	02-Nov-23	[Gantt bar spanning from Q3 2022 to Q4 2023]															
Submit Cost Estimate	20-Apr-23	20-Apr-23	[Vertical tick mark in Q2 2023]															
Cost Estimates Submitted for review - Preferred Alt.	21-Apr-23	21-Apr-23	[Vertical tick mark in Q2 2023]															
Prepare for Gate 2: Select Delivery Method	21-Apr-23	02-Jun-23	[Gantt bar spanning from Q2 2023 to Q2 2024]															
Publish SEPA - Planned for Nov 7, 2023	07-Nov-23	07-Nov-23	[Vertical tick mark in Q4 2023]															
Phasegate #2 Meeting - Confirm Delivery Method	02-Jan-24	02-Jan-24	[Vertical tick mark in Q1 2024]															
Prepare for Board Meeting	03-Jan-24	13-Mar-24	[Gantt bar spanning from Q1 2024 to Q1 2024]															
<b>Phase III - Preliminary Engineering</b>	29-Mar-24	23-Oct-25	[Gantt bar spanning from Q1 2024 to Q4 2025]															
<b>Right of Way</b>	04-Mar-25	03-Mar-27	[Gantt bar spanning from Q1 2025 to Q1 2025]															
<b>Final Design</b>	24-Oct-25	11-May-28	[Gantt bar spanning from Q4 2025 to Q2 2026]															
<b>Construction</b>	12-May-28	23-Sep-30	[Gantt bar spanning from Q2 2026 to Q4 2026]															
<b>Post Construction</b>	24-Sep-30	31-Dec-30	[Gantt bar spanning from Q4 2026 to Q4 2026]															

## Community Engagement.

- Hosted an information table at Springbrook Connections meeting and meal distribution.

# 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 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.

Currently the project is trending under the planned staffing needs as the conceptual plans and reports are still under development and not ready for staff review. Staff are continuing to work on laying out assumptions for the improvements that will inform the conceptual design and are also developing materials for the upcoming activities planned for later in the year. As the conceptual design advances, we anticipate more staff will be needed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	2.7	1.2	1.5
Consultants	3.0	0.9	2.1
TOTAL	5.7	2.1	3.6

\* An FTE is the equivalent of 1920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Sounder Commuter Rail Puyallup Station Access Improvements

## Project Summary

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

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

**Phase** Final Design and Construction

**Budget** \$82.4 Million

**Schedule** Open for Service: Q4 2022



*Improving access to Sounder Puyallup Station*

## Key Project Activities

- Awaiting delivery of final long lead items.
- Continued with off-site curb cut and curb ramp improvements.
- City provided comments to traffic signalization memo. Hensel Phelps responded to comments. Second review cycle by the City continues.
- The BNSF continues with implementation of the rail crossing improvements.

## Closely Monitored Issues

- Coordination of work with BNSF and the City of Puyallup required to execute off-site intersection and signal improvements.
- Replacement of intersection signal cabinet and signal cabinet programming and delivery timelines.
- Supply chain variables are in constant flux. Frequent schedule monitoring of key products required to complete the work and any potential effects on Open for Service date.

# Sounder Commuter 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 \$604K. The incurred cost increased from \$72.5 to \$73.1. The majority of this period’s costs are attributed to staff costs, construction management services, and 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	\$5.5	\$4.7	\$4.7	\$5.5	\$0.0
Preliminary Engineering	\$2.9	\$2.6	\$2.6	\$2.6	\$2.6	\$0.0
Final Design	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$5.2	\$5.7	\$5.7	\$5.0	\$5.7	\$0.0
3rd Party Agreements	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$58.4	\$61.8	\$58.7	\$54.2	\$61.8	\$0.0
ROW	\$5.6	\$6.7	\$6.6	\$6.6	\$6.7	\$0.0
<b>Total</b>	<b>\$79.1</b>	<b>\$82.4</b>	<b>\$78.4</b>	<b>\$73.1</b>	<b>\$82.4</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	\$33.3	\$31.7	\$30.2	\$33.3	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$1.0	\$10.7	\$9.4	\$8.8	\$10.7	\$0.0
50 Systems	\$0.0	\$3.8	\$4.0	\$3.7	\$3.8	\$0.0
<b>Construction Subtotal (10 - 50)</b>	<b>\$48.0</b>	<b>\$47.8</b>	<b>\$45.0</b>	<b>\$42.7</b>	<b>\$47.8</b>	<b>\$0.0</b>
60 ROW, Land	\$5.4	\$6.7	\$6.6	\$6.6	\$6.7	\$0.0
80 Professional Services	\$22.0	\$27.5	\$26.7	\$23.8	\$27.5	\$0.0
90 Unallocated Contingency	\$3.7	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
<b>Total (10 - 90)</b>	<b>\$79.1</b>	<b>\$82.4</b>	<b>\$78.4</b>	<b>\$73.1</b>	<b>\$82.4</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Sounder Commuter Rail Puyallup Station Access Improvements



## Contingency Management

The Puyallup project budget was baselined in February 2019 with a total contingency of \$14.6M. Since baselining, there were drawdowns on AC and UAC to address the procurement of the design-build construction contract, design-building project management, and various construction change orders. The baseline contingency levels were insufficient and required an additional \$3.25M that was approved by the ST Board in April 2022.

**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 \$1.5M in AC was used for an executed change order for the S300017 contract and increased anticipated actuals for the BNSF work.

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

### Contingency Status (Monthly)

Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$4.6	5.8%	\$0.0	0.0%
Allocated Contingency	\$6.3	8.0%	\$2.0	22.1%
Unallocated Contingency	\$3.7	4.7%	\$0.4	4.8%
<b>Total:</b>	<b>\$14.6</b>	<b>18.4%</b>	<b>\$2.5</b>	<b>26.9%</b>

### Contingency by Type

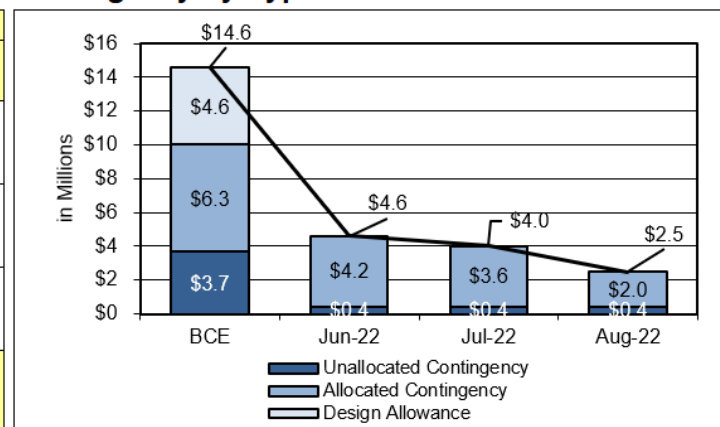


Table figures are shown in millions.

## Risk Management

The following are the top project wide risks:

- Additional unknown schedule impacts after ordering of long lead items required for the completion of off-site intersection work (control cabinets) which was initially delayed by extended permit approval process.
- Coordination of the BNSF and Design-Builder to execute off-site improvements (Intersection and Signal upgrades) takes longer than expected or incurs greater expense.
- City of Puyallup changing submittal requirements for intersection signalization impacts schedule, activities, and projected public opening date.



# Sounder Commuter Rail Puyallup Station Access Improvements



## Project Schedule

This month the weighted percent complete is 98.8%. Change Order #32 has been issued to extend Milestone #1, Substantial Completion of the Parking Garage, 124 days to May 10, 2022. Milestone #1 Parking Garage Completion was completed in May 2022. Change Order #33 has been issued to extend Milestone #2 (Acceptance of All Work) 168 days to Nov. 24, 2022.

August 2022 schedule update has been submitted and is currently under review. August 2022 schedule update is represented in the schedule graphic below. Traffic Mitigation work is expected to be completed in Q4 2022. Contractor however, is predicting further delay to Milestone #2 if Card Reader Procurement is delayed beyond Oct. 21, 2022.

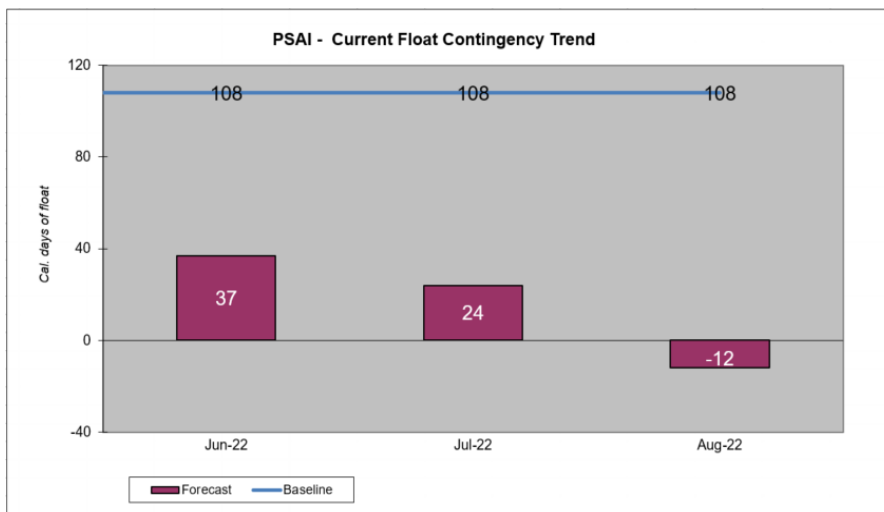
Activity Name	Start	Finish	2022				2023
			Q2	Q3	Q4	Q1	Q2
<b>S300017 - Puyallup Station Access and Improvements - Design/Build</b>	01-Jun-20 A	18-Mar-23					
<b>Milestones</b>	28-Dec-22	18-Mar-23					
<b>Milestone 2 - Acceptance of Work</b>	12-Jan-23	12-Jan-23					
Milestone 2 - Acceptance of Work - Scheduled (Constrained 24-Nov-22)		12-Jan-23*					
<b>Milestone 3 - Final Acceptance</b>	13-Jan-23	18-Mar-23					
Administrative Closeout	13-Jan-23	18-Mar-23					
Milestone 3 - Final Acceptance - Scheduled (Constrained 28-Jan-23)		18-Mar-23*					
<b>Interim Milestones</b>	28-Dec-22	28-Dec-22					
<b>Construction</b>	11-May-22 A	12-Jan-23					
<b>Provisional Sums</b>	08-Sep-20 A	03-Oct-22					
<b>Change Orders</b>	01-Jun-20 A	28-Dec-22					
<b>Preconstruction &amp; Administration</b>	20-May-21 A	28-Oct-22					
<b>Other Milestones</b>	01-Sep-22	30-Sep-22					
<b>S300017-PSAI - Project Closeout</b>	01-Jun-22 A	12-Jan-23					
<b>S300017 - Puyallup Station Access and Improvements - P</b>	01-Jun-22 A	12-Jan-23					
<b>Activation - Parking Garage</b>	01-Jun-22 A	12-Jan-23					
<b>Post Construction</b>	12-Jan-23	12-Jan-23					
<b>Transition to Operations</b>	12-Jan-23	12-Jan-23					
<b>Project Float</b>	12-Jan-23	12-Jan-23					
<b>Open For Service</b>	12-Jan-23	12-Jan-23					

## Project Float

The Puyallup Station Access Improvements was baselined with 108 days of project float. The project team has received ST Board approval to move the open for service milestone to December 2022 due the traffic mitigation delays.

Substantial completion was granted to the parking garage in May. The open for service is trending to mid-January 2023. We are working with the City to try to achieve a December 2022 open for service.

ST and the contractor are working diligently to reduce impacts to the project.



# Sounder Commuter Rail Puyallup Station Access Improvements



## Critical Path Analysis

The critical path for the Puyallup Station Access Improvements is currently driven by the traffic mitigation activities. However, the work at the parking garage achieved substantial completion in May 2022. The traffic mitigation is expected to be complete in Q4 2022. We will continue to monitor the current critical path and the coordination with our Third Party partners (City of Puyallup and the BNSF) on traffic mitigation.

Activity Name	Total Float	Start	Finish	2022		2023					
				Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Total</b>	-35	09-May-22 A	18-Mar-23								
CO 031 - CoP Review & Approve Signal Memo (including comments & revisions)	-32	09-May-22 A	14-Sep-22								
Puyallup State Fair - No Road Closures - 9/2/22 to 9/25/22	-26	02-Sep-22	25-Sep-22								
CO 031 - Incorporate CoP Comments & Test Programs	-32	15-Sep-22	05-Oct-22								
CO 031 - Upload Programs to Controllers	-32	04-Oct-22	05-Oct-22								
CO 031 - Deliver Controllers to CoP	-32	06-Oct-22	12-Oct-22								
CO 031 - CoP Test Controllers	-32	13-Oct-22	02-Nov-22								
CO 031 - RailPros / BNSF Test Controllers	-32	27-Oct-22	02-Nov-22								
Set Controller - 5th St NW	-32	03-Nov-22	04-Nov-22								
WD 014 - Set Arms/Wire/Adjust/Pre-Test - 5th St NW	-32	07-Nov-22	11-Nov-22								
WD 017 - Pull Wire - 4th/Stewart	-32	14-Nov-22	18-Nov-22								
WD 017 - Install Controller/Terminate/Cutover - 4th/Stewart	-32	21-Nov-22	29-Nov-22								
WD 017 - BNSF Configuration - 4th/Stewart	-32	28-Nov-22	29-Nov-22								
WD 017 - CoP Activate Signals - 4th/Stewart	-32	30-Nov-22	06-Dec-22								
CO 031 - Rhythm Engineering Data Collection for Adaptive Optimization	-32	07-Dec-22	20-Dec-22								
Punchlist Resolution & Acceptance - Street Improvements - 4th/5th St	-39	14-Dec-22	02-Jan-23								
CO 031 - On-Site Adaptive Configuration & Controller Mods to Run ASC	-32	21-Dec-22	28-Dec-22								
Traffic Signals Substantially Complete	-39		28-Dec-22								
CoP Observe / Configure Signals (ALL)	-32	29-Dec-22	12-Jan-23								
Milestone 2 - Acceptance of Work - Scheduled (Constrained 24-Nov-22)	-49		12-Jan-23*								
Administrative Closeout	-49	13-Jan-23	18-Mar-23								
Milestone 3 - Final Acceptance - Scheduled (Constrained 28-Jan-23)	-49		18-Mar-23*								

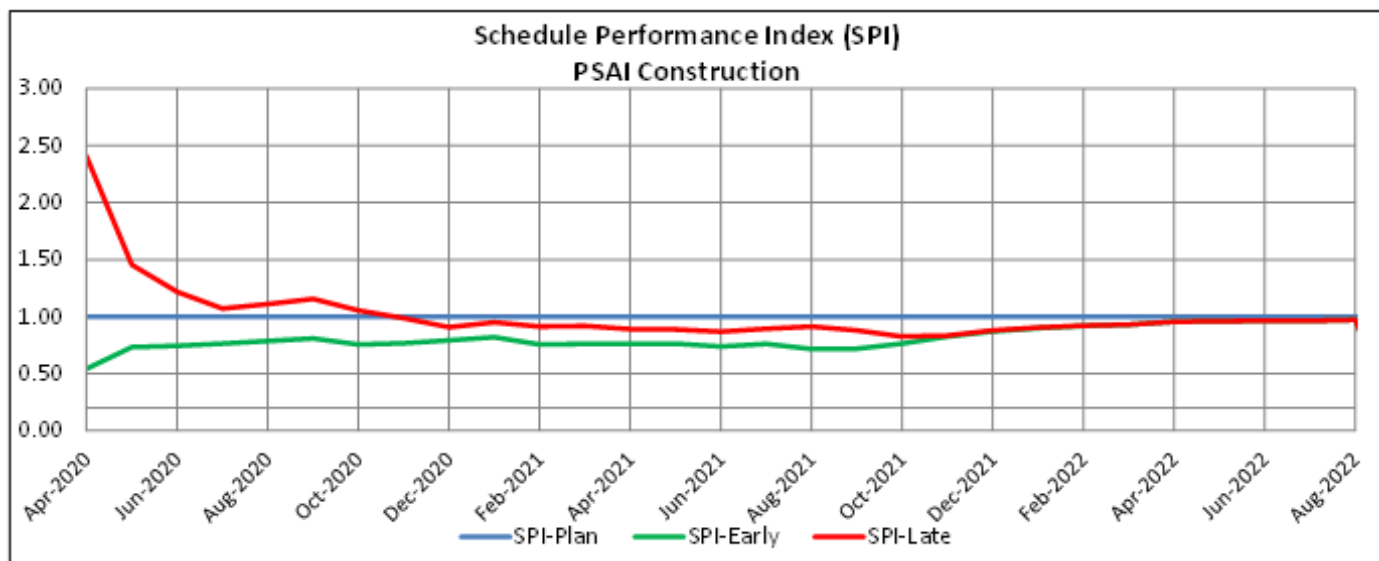
# Sounder Commuter Rail Puyallup Station Access Improvements



## Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.97 for this period, and the late SPI is at 0.97. An index under 1.0 indicates that the Contractor is behind schedule.

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



## Community Engagement

- We issued three construction alerts and monitored construction activities for impacts to community.
- We are planning outreach around the garage opening.

# Sounder Commuter Rail Puyallup Station Access Improvements



## 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.

Staff vacancies create more demand in consultant resources. Working to fill ST staff vacancies.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	8.0	4.8	3.2
Consultants	5.0	6.2	(1.2)
TOTAL	13.0	11.0	2.0

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Sounder Commuter Rail Sounder South Capacity Expansion



## Program Summary

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

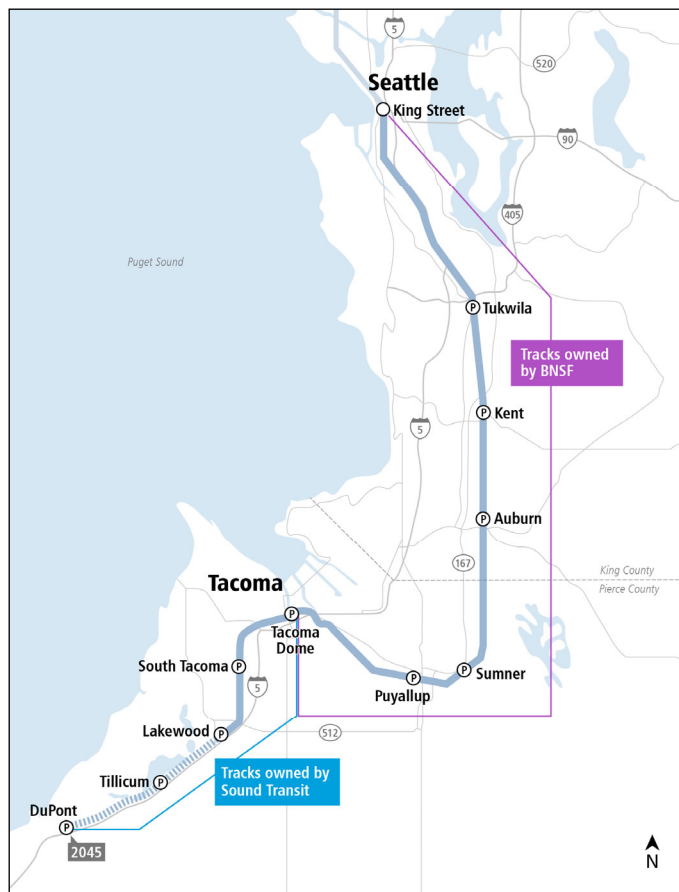
Program elements could include platform extensions, track and signal upgrades, and other related infrastructure to facilitate additional capacity and access elements such as improvements for pedestrians, bicyclists, buses, and private vehicles prioritized per Sound Transit's System Access Policy.

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

**Phase** Planning

**Budget** \$21.1 Million

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



Sounder South Capacity map alignment

## Program Key Activities

- The Federal Railroad Administration (FRA) awarded a \$10 million Consolidated Railroad Infrastructure & Safety Improvement (CRISI) grant to Sound Transit. This grant award funds, with a 50% ST match, conceptual engineering, environmental review and preliminary engineering for double track mainline projects on ST's rail corridor in Pierce County (Pierce County Rail Capacity and Reliability Improvement Project). The projects are anticipated to initiate in Q2 2023 after ST completes the requirements to obligate the FRA grant. ST and FRA to hold monthly CRISI grant coordination meetings monthly.
- SSCE Program Elements and project specific activities are detailed in their own sections below.

**King Street Station Platform Area Project and the CRISI grant projects are summarized on the next pages 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

- Finalized Alternative Analysis Report and Community Engagement Summary.
- Prepared materials for a briefing and consultant contract modification for the Sept. System Expansion Committee.

#### Community Engagement

- Posted the summary of spring community engagement on the Sound Transit website.

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### Pierce County Rail Capacity and Reliability Improvement Project

This project adds second tracks to several single track segments between Tacoma and Dupont on the ST-owned Lakewood Subdivision. Under the SSCE Program, the double track segments will be added between Tacoma and Lakewood along ST's right-of-way in Pierce County. Project elements may include additional crossovers and improvements to at-grade crossings to increase capacity and reliability for Sounder S Line, Amtrak Cascades and Amtrak Coast Starlight service. This project currently does **not** include any passenger-facing elements such as new stations or access improvements.

#### Key Activities

- Sound Transit and Federal Railroad Administration held monthly coordination meeting.
- Sound Transit continued work on grant administration items towards grant obligation, which is expected by early 2023.

#### Community Engagement

- Community outreach activities will begin when Sound Transit initiates the next phase of the project.

### 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 by 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

- The Auburn Platform Extension alternative analysis is complete. For the BNSF Platform Extension Project, that includes the Auburn Platform Extension Project, initiation of conceptual engineering and environmental review is paused consistent with the schedule identified in the capital program realignment and continued low ridership on the Sounder South corridor.

### Community Engagement

- Community engagement is expected to begin when conceptual engineering gets underway.

# 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 \$100K 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	\$4.8	\$2.4	\$2.4	\$4.8	\$0.0
Preliminary Engineering	\$13.6	\$3.0	\$2.2	\$13.6	\$0.0
Third Party Agreements	\$0.9	\$0.5	\$0.4	\$0.9	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$1.7	\$0.0	\$0.0	\$1.7	\$0.0
<b>Total</b>	<b>\$21.0</b>	<b>\$5.9</b>	<b>\$5.0</b>	<b>\$21.0</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

# Sounder Commuter Rail Sounder South Capacity Expansion



## Project Schedule

Sound Transit continues to make schedule adjustments. Scope of work covered by funding agreement, contract, statement of work, or similar executed commitment, reflected in the schedule shown below.

The second Mainline Track Study and Report were finalized and completed on July 28, 2021. Auburn Platform Alternative Analysis was completed on Jan. 31, 2022. King St Station Alternative Analysis and Report have been completed and issued in August 2022.

Staff are currently completing a community engagement summary and preparing for Board confirmation of the potential improvements to advance for further study at King Street Station, anticipated in September 2022.

Activity Name	Start	Finish	2023				2024				2025							
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Sounder South Capacity Expansion - Master Schedule</b>	13-Jun-18 A	31-Dec-36	[Gantt bar spanning from 2018 to 2036]															
<b>Sounder South Platform Extensions</b>	13-Jun-18 A	31-Dec-36	[Gantt bar spanning from 2018 to 2036]															
<b>Alternative Analysis - (Ph - I)</b>	13-Jun-18 A	08-Jan-24	[Gantt bar spanning from 2018 to 2024]															
<b>Alternative Analysis Procurement</b>	13-Jun-18 A	18-Nov-18 A	[Gantt bar spanning from 2018 to 2018]															
<b>Alternative Analysis</b>	18-Nov-18 A	08-Jan-24	[Gantt bar spanning from 2018 to 2024]															
Phase I - CE and Scoping - Current Active Projects Only	18-Nov-18 A	07-Sep-22	[Gantt bar spanning from 2018 to 2022]															
SDIP Second Mainline Feasibility Study	22-Jan-21 A	28-Jun-21 A	[Gantt bar spanning from 2021 to 2021]															
King St. Station - Platform Improvements	05-Feb-21 A	07-Sep-22	[Gantt bar spanning from 2021 to 2022]															
Auburn Platform Alternative Analysis	15-Feb-21 A	31-Jan-22 A	[Gantt bar spanning from 2021 to 2022]															
Prepare and Review Alternatives Cost Estimate - KSS	19-Jul-21 A	31-May-22 A	[Gantt bar spanning from 2021 to 2022]															
Prepare and Review Alternative Analysis Report - KSS	25-Oct-21 A	21-Jul-22 A	[Gantt bar spanning from 2021 to 2022]															
Briefing at System Expansion Committee - Actual Date is Sep 8, 2022	08-Sep-22	08-Sep-22	[Gantt bar spanning from 2022 to 2022]															
Sounder South Access - Pierce County (Anticipated Completion by 2036) - for Future Inclusion	02-Jan-24*	08-Jan-24	[Gantt bar spanning from 2024 to 2024]															
Sounder South Access - South King County (By 2041) - Added for Future Inclusion	02-Jan-24*	08-Jan-24	[Gantt bar spanning from 2024 to 2024]															
Additional Roundtrip Trains - (2046) - Added for Future Inclusion	02-Jan-24*	08-Jan-24	[Gantt bar spanning from 2024 to 2024]															
<b>Conceptual Engineering/Environmental - (Ph - II)</b>	09-Sep-22	11-Oct-24	[Gantt bar spanning from 2022 to 2024]															
<b>Right of Way</b>	08-Aug-25	05-Apr-27	[Gantt bar spanning from 2025 to 2027]															
<b>Preliminary Engineering - (Ph - III)</b>	12-Oct-24	28-Aug-25	[Gantt bar spanning from 2024 to 2025]															
<b>Final Design</b>	20-May-25	10-May-28	[Gantt bar spanning from 2025 to 2028]															
<b>Construction</b>	11-May-28	31-Oct-33	[Gantt bar spanning from 2028 to 2033]															
<b>Post Construction</b>	01-Nov-33	31-Dec-36	[Gantt bar spanning from 2033 to 2036]															

# Sounder Commuter Rail Sounder South Capacity Expansion



## Risk Management

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 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 staffing variance is attributed to the majority of the SSCE Program’s conceptual engineering and environmental activities being on pause from Q1 2022 to Q3 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.4	5.1	0.3
Consultants	8.2	1.3	6.9
TOTAL	13.6	6.4	7.2

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## 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 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, weather shelters; parking options and more.

During Phase 2, the project will conceptually design the improvements and conduct an environmental review under SEPA.

**Phase** Planning Phase 2—Conceptual Engineering and Environmental Review

**Budget** \$5.4 Million

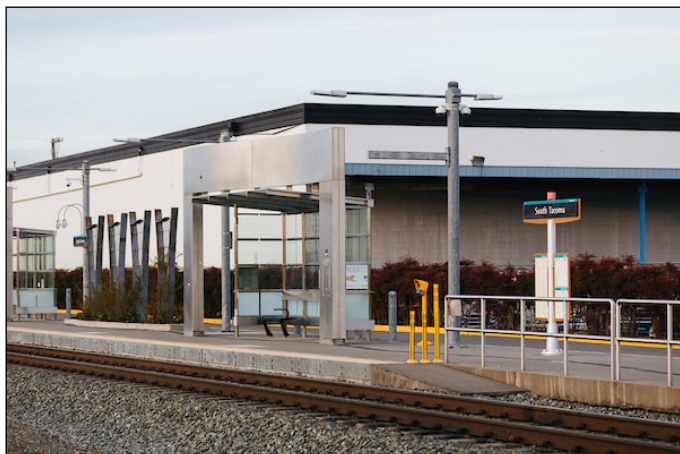
**Schedule** Target Date: 2030



*South Tacoma Station in Pierce County*

## Key Project Activities

- Continued to meet with jurisdictional partners to finalize design assumptions.
- Continued conducting survey work on the proposed improvements.
- Continued planning for Conceptual Engineering.
- Started developing materials for community engagement.



*South Tacoma Station*



*South Tacoma Station Passenger Platform Access*

# Sounder Commuter Rail South Tacoma Access Improvement



## Project Cost Summary

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

This period expenditures increased by \$94.7K with the majority of the amount coming from staff costs and Phase 2—Conceptual Engineering and Environmental activities.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$1.8	\$0.5	\$0.5	\$1.8	\$0.0
Preliminary Engineering	\$3.3	\$3.0	\$0.8	\$3.3	\$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	\$0.0	\$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	\$0.3	\$0.0	\$0.0	\$0.3	\$0.0
<b>Total</b>	<b>\$5.4</b>	<b>\$3.5</b>	<b>\$1.3</b>	<b>\$5.4</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

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.
- Too many desired improvements may exceed the financial plan budget.

# Sounder Commuter Rail South Tacoma Access Improvement



## Project Schedule

Scope of work covered by funding agreement, contract, statement of work, or similar executed commitment, is reflected in the schedule shown below.

Phase 1 - Alternative Development NTP was issued in December 2020. Consultant completed Alternative Development for this project on March 2022. Staff updated the System Expansion Committee on the set of improvements to further study in the next phase of the project in March 2022.

Phase 2 Kick Off Meeting was in April 2022, NTP was in May 2022. Team completed Project Management and External Engagement Plan in June 2022. Team is currently working on engaging the stakeholders, communities, Conceptual Engineering Plans, and reports.

Selecting Delivery Method is expected during Q2 2023. Board selection of projects to be built is planned for end of Q1 2024.

The target Open for Service Date is planned for Q4 2030.

Activity Name	Start	Finish	2022				2023				2024				2025			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>South Tacoma Station Access Improvements - Master Schedule</b>	02-May-22 A	31-Dec-30	[Gantt bar spanning from May 2022 to Dec 2030]															
<b>Preliminary Engineering</b>	02-May-22 A	23-Oct-25	[Gantt bar spanning from May 2022 to Oct 2025]															
<b>Phase II - Conceptual Engineering</b>	02-May-22 A	28-Mar-24	[Gantt bar spanning from May 2022 to Mar 2024]															
Board Selects Project to be Build	28-Mar-24	28-Mar-24	[Vertical tick mark in Q1 2024]															
<b>Conceptual Engineering</b>	02-May-22 A	05-Mar-24	[Gantt bar spanning from May 2022 to Mar 2024]															
Phase 2 Draft SEPA and CE	02-May-22 A	05-Mar-24	[Gantt bar spanning from May 2022 to Mar 2024]															
DEA Performs and Completes CE/ENV	02-May-22 A	12-Oct-23	[Gantt bar spanning from May 2022 to Oct 2023]															
Finalize SEPA, Check List and Review	01-Jun-22 A	02-Nov-23	[Gantt bar spanning from Jun 2022 to Nov 2023]															
External Engagement	13-Jun-22 A	27-Sep-23	[Gantt bar spanning from Jun 2022 to Sep 2023]															
Prepare Cost Estimate	25-Aug-22 A	19-Apr-23	[Gantt bar spanning from Aug 2022 to Apr 2023]															
Submit Cost Estimate	20-Apr-23	20-Apr-23	[Vertical tick mark in Q2 2023]															
Cost Estimates Submitted for review - Preferred Alt.	21-Apr-23	21-Apr-23	[Vertical tick mark in Q2 2023]															
Prepare for Gate 2: Select Delivery Method	21-Apr-23	02-Jun-23	[Vertical bar in Q2 2023]															
Phasegate #2 Meeting - Confirm Delivery Method	13-Oct-23	13-Oct-23	[Vertical tick mark in Q4 2023]															
Prepare for Board Meeting	16-Oct-23	09-Jan-24	[Gantt bar spanning from Oct 2023 to Jan 2024]															
Publish SEPA	07-Nov-23	07-Nov-23	[Vertical tick mark in Q4 2023]															
<b>Phase III - Preliminary Engineering</b>	29-Mar-24	23-Oct-25	[Gantt bar spanning from Mar 2024 to Oct 2025]															
<b>Right of Way</b>	04-Mar-25	03-Mar-27	[Gantt bar spanning from Mar 2025 to Mar 2027]															
<b>Final Design</b>	24-Oct-25	11-May-28	[Gantt bar spanning from Oct 2025 to May 2028]															
<b>Construction</b>	12-May-28	26-Sep-30	[Gantt bar spanning from May 2028 to Sep 2030]															
<b>Post Construction</b>	27-Sep-30	31-Dec-30	[Gantt bar spanning from Sep 2030 to Dec 2030]															

## Community Engagement

- Hosted information table at the Metro Parks Summer Bash Event at the STAR Center on August 5.
- Preparing for fall outreach.

# Sounder Commuter Rail South Tacoma Access Improvement



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTE 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.

Currently the project is trending under the planned staffing needs as the conceptual plans and reports are still under development and not ready for staff review. Staff are continuing to work on laying out assumptions for the improvements that will inform the conceptual design and are also developing materials for the upcoming activities planned for later in the year. As the conceptual design advances, we anticipate more staff will be needed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	3.5	1.6	1.9
Consultants	3.0	1.1	1.9
TOTAL	6.5	2.7	3.8

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## 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 (Realignment Schedule)



*Improving access to Sumner Sounder Station*

## Key Project Activities

- Conducted remaining two of three proprietary 1:1 meetings with shortlisted design-build proposers.
- Completed property appraisals for Temporary Construction Easements.



©Ellen Sollod, 2003, "Hops Trellis", Sound Transit, Sumner Sounder Station, platform

# Sounder Commuter Rail Sumner Station Access Improvements



## 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 \$74K. The incurred cost increased from \$14.5M to \$14.6M. The majority of this period’s costs are attributed to staff costs and right-of-way activities.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$2.7	\$2.4	\$2.4	\$2.7	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$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	\$5.5	\$7.6	\$0.0
Construction	\$0.2	\$0.1	\$0.1	\$0.2	\$0.0
ROW	\$4.6	\$4.1	\$3.9	\$4.6	\$0.0
<b>Total</b>	<b>\$17.8</b>	<b>\$16.8</b>	<b>\$14.6</b>	<b>\$17.8</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are the top project-wide risks:

- Supply chain issues may impact delivery of materials.
- Additional scope and project change requests from stakeholders could cause project delay during permit approval.
- Risk of project delay due to Area of Potential Effect requiring updating before the start of construction.
- Overall increase in cost due to inflationary market conditions.



# Sounder Commuter Rail Sumner Station Access Improvements



## Project Schedule

Team continues to modify and update Sumner schedule. End of September schedule update will be used in the Baseline QRA session which is planned for the week of Oct. 17, 2022.

Statements of Qualification (SOQs) were received on April 18, 2022 and review was completed in May. Contracts issued Final RFP to Short List and conducted Pre-Proposal Meeting early July 2022. Proposals are due by mid September 2022.

The project is in the Preliminary Engineering Phase III. Upcoming milestones include Gate 4 Establish Baseline and Notice to Proceed, both expected in Q4 2022. Right-of-Way acquisitions are in progress and are forecast to be completed in advance of the area needed for the design-build contractor's construction activities.

Project is forecasting 2026 target date for Open for Service. Date will be confirmed as part of the Q4 2022 Board Baseline process.

Activity Name	Start	Finish	2022				2023				2024				2025				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>S300018 - Sumner Station Parking and Access Improvements - DB MS Baseline</b>	01-Oct-21 A	28-Feb-26																	
<b>Preliminary Engineering (Phase III)</b>	01-Mar-22 A	15-Dec-22																	
<b>Administration</b>	01-Mar-22 A	15-Dec-22																	
MS01 ST Board Approves Project (Baseline) - Phase Gate 4 - Sumner	15-Dec-22	15-Dec-22																	
<b>Phase Gate 4 and Establish Project Baseline</b>	01-Mar-22 A	12-Dec-22																	
<b>Project Baseline</b>	01-Mar-22 A	12-Dec-22																	
Post-Risk Assessment Budget and Schedule Refinement - Sumner	01-Mar-22 A	02-Sep-22																	
Staff Report Preparation - Sumner	03-May-22 A	03-Oct-22																	
CCB Baseline/Phase Gate 4 Est Baseline Documents Due - Sumner	06-Sep-22	06-Sep-22																	
CCB for Baseline/Phase Gate 4 - Sumner	27-Sep-22	27-Sep-22																	
PC/Finance/Environmental Review of Staff Report - Sumner	04-Oct-22	17-Nov-22																	
Final QRA Session	17-Oct-22	21-Oct-22																	
System Expansion Committee Approval of Baseline and Entry to Construction (PG 4) - Sumner	08-Dec-22	08-Dec-22																	
Board Administration Review of Staff Report - Sumner	12-Dec-22	12-Dec-22																	
<b>Permits and Agreements</b>	01-Oct-21 A	29-Sep-22																	
<b>Right of Way</b>	25-Aug-22 A	15-Mar-24																	
<b>Design-Build Project Management</b>	16-Feb-22 A	08-Sep-25																	
<b>Design-Build Contract (DB)</b>	06-Jul-22 A	08-Sep-25																	
<b>Design-Build Contract-Procurement</b>	06-Jul-22 A	16-Dec-22																	
<b>RFP Phase</b>	06-Jul-22 A	04-Nov-22																	
<b>ST Board Path</b>	27-Oct-22	16-Dec-22																	
<b>Design-Build - Design and Construction</b>	16-Dec-22	08-Sep-25																	
<b>Const - Misc / Other / Env Mitigation</b>	01-Aug-23	02-Jul-25																	
<b>Post Construction</b>	08-Sep-25	28-Feb-26																	

# 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 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.

This month the project team was focused on reviewing Requests for Information (RFI) and Alternate Technical Concepts (ATC). The level of staff effort for procurement has been less than planned and will remain at a similar level of effort until design-build NTP.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.9	3.8	2.1
Consultants	0.0	0.0	0.0
TOTAL	5.9	3.8	2.1

\* An FTE is the equivalent of 1,920 hours. YTD performance FTE hours are divided by a monthly factor of 160.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

# Progress Report Regional Express & STRIDE Programs

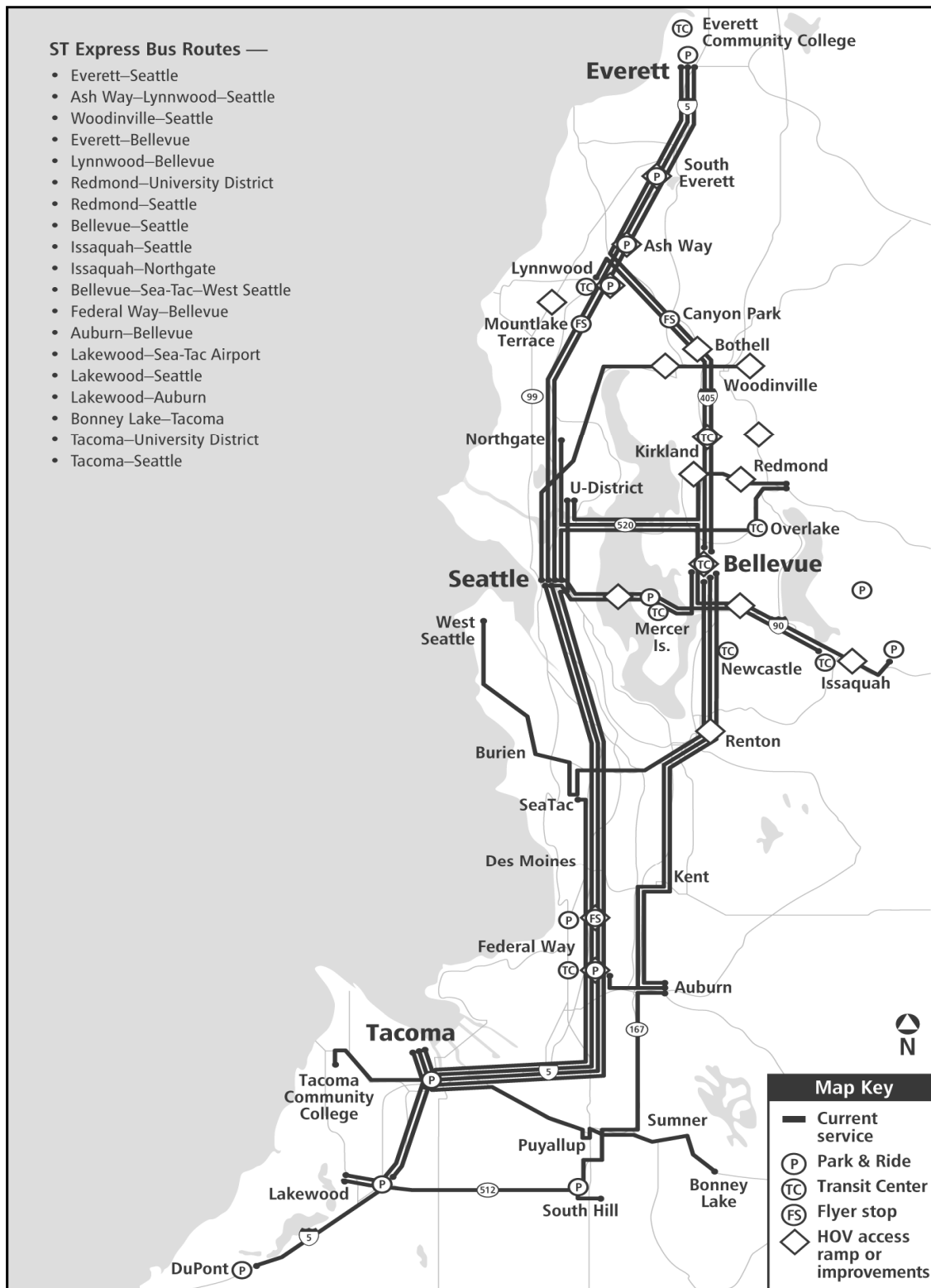


ST Express Bus routes connects major regional hubs throughout the three counties  
(King, Pierce, and Snohomish)

August | 2022



# 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, Business Access Transit (BAT) lanes, and bus-only lanes. 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.

Table figures are shown in millions.

Project	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Bus Base North	\$64.0	\$49.6	\$43.4	\$64.0	\$0.0
I-405 Bus Rapid Transit	\$703.9	\$639.8	\$116.7	\$703.9	\$0.0
SR 522/NE 145th St Bus Rapid Transit	\$209.1	\$83.1	\$60.0	\$209.1	\$0.0
<b>Total</b>	<b>\$977.1</b>	<b>\$772.5</b>	<b>\$220.1</b>	<b>\$977.1</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Program Schedule of Baseline Projects

There are no baselined projects at this time. Please see the individual project reports for schedule information.

	'20	'21	'22	'23	'24	'25
<b>REGIONAL EXPRESS AND STRIDE</b>						
<b>No Baseline Projects</b>						

### KEY:

**Final Design** (hatched indicates possible Design-Build; incl procurement)

**Construction** (thin hatched is procurement; incl Startup/Testing/Pre-Revenue/Float)



# 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>	Preliminary Engineering
<b>Budget</b>	\$64.0 Million for Preliminary Engineering, Final Design, Property Acquisition, and Third Party Coordination.
<b>Schedule</b>	Target Date: 2025



Map of Project Alignment

## Key Project Activities

- GEC submitted 30% of design documents for internal Sound Transit review in July; design review completed and comment resolution process is ongoing.
- Continued evaluating adjacent property needs and requirements to settle codes, covenants, and restrictions (CC&Rs) associated with the Canyon Park Business Park.
- Scope development of next task order to advance design from 30% to Issue for Construction (IFC) currently in development by GEC.
- Initiated work through the recommendations to determine which Value Engineering (VE) ideas to carry forward into the 60% design after a successful 30% VE Workshop held in August.

## 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.

As part of the Sound Transit Board approval of 2022 budget, the Authorized Project Allocation has been increased by \$15.3 million to support Program Management with the GEC and Final Design progress.

The project cost incurred increased by around \$0.6M this period due to progress in Final Design with the GEC for \$0.3M, Program Management for \$0.1M and ST Staff for \$0.1M. It is due also to small expenditures in 3rd Party phase and on ROW related 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	\$7.1	\$4.9	\$3.6	\$7.1	\$0.0
Preliminary Engineering	\$2.0	\$1.7	\$1.4	\$2.0	\$0.0
Final Design	\$12.3	\$6.9	\$3.1	\$12.3	\$0.0
Construction Services	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
3rd Party Agreements	\$0.2	\$0.1	\$0.1	\$0.2	\$0.0
Construction	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
Right-of-Way (ROW)	\$42.3	\$35.9	\$35.2	\$42.3	\$0.0
<b>Total</b>	<b>\$64.0</b>	<b>\$49.6</b>	<b>\$43.4</b>	<b>\$64.0</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are the top risks for the project:

- Potential budget impact due to higher inflation and higher construction costs. Continued to monitor the development of these issues and develop future cost estimates that capture the most current information.
- Soil conditions could require additional special foundations or ground improvements. Risk Response: ST has changed the design concept of the parking structure to move the staff parking above grade. Also, ST will be conducting additional review of soil testing and geotechnical borings during the design phase.
- Addressing the Business Park Codes, Covenants, and Restrictions (CC&R). Risk Response: ST will be performing additional noise and vibration analysis and actively working with the Business Park to resolve CC&R issues during design. Also, ST has changed the project delivery method to better address risks related to permitting and CC&R.
- Schedule delays could affect I-405 BRT and SR 522 BRT revenue service, depending on future phasing options.

# Regional Express & STRIDE Bus Base North



## Project Schedule

The Board of Directors announced their realignment decision in August 2021. The upcoming project milestone is Project Baseline, which is currently shown as February 2023. The team is formulating a plan and evaluating the timeline to allow the project to baseline with high level of confidence.

The current critical path for Bus Base North is Final Design by the GEC then construction procurement, civil construction and finishes, then systems integration and testing. Activities that need to be monitored closely are acquiring rights to deviate from restrictive covenants (CC&Rs) that prohibit Sound Transit’s proposed use for the property, developing project requirements, and permitting/agreements.

The current forecast for completion is Q4 2026, or about 10 months past the ST Board realignment milestone due to need to do additional geotechnical investigation, addressing CC&R issues and complexity of the facility. The realignment schedule is aggressive and staff have routinely informed the Board that the current schedule is inconsistent with the target and affordable schedule. Staff and consultants are working to identify which components of the project could be deemed “complete” by the realignment milestones, and whether or not acceleration of the project would be cost effective. Staff is mitigating the schedule risk by changing the delivery method from design-build to design-bid-build to reduce procurement timeframes and gain efficiencies. Additionally, staff is engaging permitting agencies early to obtain feedback on design concepts and requirements.

Activity ID	Activity Name	Start	Finish	2022				2023				2024				2025				2026			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>BRT June 2022 Update</b>																							
<b>Bus Base North and System-wide</b>																							
<b>Major Milestones</b>																							
STR-MS-2000	ST Board, Phase Gate 4 - Baseline Project BBN		23-Feb-23																				
<b>DESIGN / ENGINEERING</b>																							
CU1 Bus Base North (BBN)																							
	30% Final Design & Review	13-Apr-22	07-Aug-23																				
	60% Final Design & Review	06-Jun-22	21-Feb-23																				
	90% Final Design & Review	31-Jan-23	26-Jul-23																				
	100% Final Design & Review	05-Jul-23	08-Nov-23																				
	IFB Final Design & Review	08-Oct-23	01-Dec-23																				
<b>THIRD PARTY AGREEMENTS AND PERMITTING</b>																							
CU1 - BBN PERMITS																							
<b>RIGHT OF WAY</b>																							
Bus Base North Property Acquisition																							
<b>PROCUREMENT</b>																							
CU1 Bus Base North - PROCUREMENT																							
Vehicles (Bus) - PROCUREMENT																							
Other BRT Systems - PROCUREMENT																							
<b>CONSTRUCTION</b>																							
CU1 Bus Base North - CONSTRUCTION																							
Permit Package 1 - Temp Trailers/Utilities Permit - DBB																							
Civil Construction																							
Finishes																							
Site Improvements																							
Systems Construction																							
Post Construction																							
STR-1-SO-1000	Open BBN for Service		20-Oct-26																				
CU14 Stations Fit Up - FAB/INSTALLATION																							
Contract Operator - SYSTEM SUPPORT																							

## 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.

- Finalized Bus Base North project factsheet

## 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.

Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
1	1	1	1	0	0
<p><i>*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.</i></p> <p><i>Total Acquisitions: Defined as parcels recognizing only land, not owners</i></p> <p><i>Board Approved: Based on parcels and properties (including multi-unit acquisitions)</i></p> <p><i>Offers/Closings: Based on inclusive offers made to separate owners and interest holders</i></p> <p><i>Relocations: Based on number of affected individuals</i></p>					

## 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 YTD Actual FTE Monthly Average is slightly lower than Planned. Both ST staff and Consultants staff levels are expected to move up slightly in the later part of 2022, which might move up the YTD Actual FTE Monthly Average.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	6.9	4.7	2.2
Consultants	18.0	17.8	0.2
TOTAL	24.9	22.5	2.4
<p><i>* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 160.</i></p>			

## 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 (SRTC), Tukwila International Blvd Station, Burien Transit Center
<b>Phase</b>	Final Design
<b>Budget</b>	\$703.9 Million for Preliminary Engineering, 60% Final Design, and funding for improvements at the NE 44th, NE 85th, and Brickyard to Canyon Park.
<b>Schedule</b>	Target Date: 2026 for Service Line 1 (S1); 2027 for Service Line 2 (S2); not including parking elements



## Key Project Activities

- The contractor for the South Renton Transit Center Environmental Remediation, Engineering/Remediation Resources Group, Inc., has fully mobilized. Work began on August 29.
- Conducted further analysis on Hardie/Rainier intersection in Renton and BEB charging infrastructure with KCM.
- Ongoing coordination with the City of Bellevue staff is underway to discuss the 30% Bellevue Transit Center design and next steps.
- Continued close coordination with WSDOT on the scope of work they are delivering for ST, including NE 44th Street Interchange / Station, NE 85th Street Interchange / Station, Brickyard, the Transit Hub, and Canyon Park stations.

# Regional Express & STRIDE I-405 Bus Rapid Transit



## 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 \$5.2M total. It is contributed by about \$4.2M from the design and construction of WSDOT-led projects, \$0.4M from the engineering and program management by the GEC, and \$0.2 in ST Staff costs, ROW administration 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	\$18.6	\$14.7	\$13.1	\$18.6	\$0.0
Preliminary Engineering	\$49.2	\$40.3	\$36.5	\$49.2	\$0.0
Final Design	\$17.4	\$7.1	\$2.1	\$17.4	\$0.0
Construction Services	\$1.7	\$1.7	\$0.0	\$1.7	\$0.0
Third Party Agreements	\$1.7	\$0.9	\$0.8	\$1.7	\$0.0
Construction	\$578.5	\$544.2	\$36.2	\$578.5	\$0.0
Right-of-Way (ROW)	\$36.8	\$30.8	\$28.1	\$36.8	\$0.0
<b>Total</b>	<b>\$703.9</b>	<b>\$639.8</b>	<b>\$116.7</b>	<b>\$703.9</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are top project risks and response plan:

- Potential budget impact due to higher inflation and higher real estate costs. Continued to monitor the development of these issues and develop future cost estimates that capture the most current information.
- ST is not in total control of WSDOT-delivered projects. Delays or cost overruns could impact the service and start date for the I-405 BRT. Risk response: Close coordination with WSDOT by integrating BRT milestones into the WSDOT schedule; having ST staff and consultant participating in design and constructability reviews for BRT related facilities; and expedite reviews and decisions that need to be made by ST for WSDOT-delivered projects, which include:
  - NE 85th / I-405 Interchange
  - Tukwila International Boulevard Station
  - NE 44th Park-and-Ride amendment
  - Brickyard to SR 527, North Express Toll Lanes



# Regional Express & STRIDE I-405 Bus Rapid Transit



## Project Schedule

The Board of Directors announced their realignment decision in August 2021. The upcoming project milestone is Project Baseline, which is currently shown as February 2023. The team is formulating a plan and evaluating the timeline to allow the project to baseline with high level of confidence.

The current critical path for the I-405 BRT project is through Tukwila International Blvd Station Improvements in coordination with WSDOT, commissioning and testing, project float contingency to service line activation.

I-405 S, Service Line S1 opening is currently forecasting to be in Q4 2027, about 10 months beyond the proposed ST Board realignment dates due to the anticipated duration to enter into an agreement with WSDOT for the Tukwila International Blvd Station Improvements, and the duration to complete their design and construction. Additional scheduling study suggested that meeting the realignment target date may not be possible without substantial added cost or changing the operation plan. The realignment schedule is aggressive and staff have routinely informed the Board that the current schedule is inconsistent with the target and affordable schedule.

I-405 N, Service Line S2 opening is forecasting to be within ST Board realignment date of Dec. 31, 2027. The Washington State Legislature had passed the budget with the funding needed for the I-405 North ETL project to move forward. Sound Transit also has entered into an agreement WSDOT for the design and construction of the Stride BRT facilities as part of the North ETL project.

*\*There are construction projects being managed by WSDOT, with elements specific to Sound Transit, such as the I-405 Renton to Bellevue Widening and Express Toll Lanes which includes the NE 44th Street interchange and BRT station, I-405 NE 85th interchange and BRT Station, and BRT stations that are part of WSDOT's I-405—SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project.*

Activity ID	Activity Name	Start	Finish	2022		2023				2024				2025				2026				2027			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>BRT_June_2022_Update</b>				02-Dec-19 A	13-Oct-27																				
<b>I-405 BRT</b>				02-Dec-19 A	13-Oct-27																				
<b>Major Milestones</b>				23-Feb-23	23-Feb-23																				
STR-MS-3000	ST Board, Phase Gate 4 - Baseline Project I-405 BRT		23-Feb-23																						
<b>DESIGN / ENGINEERING</b>				28-Feb-22	07-Jun-24																				
CUD 2 Bellevue TC, Burien TC & Rd Improvements				28-Feb-22	11-Apr-24																				
CUD 5 South Renton Transit Center				04-May-22	07-Jun-24																				
CUD 11 Lynnwood TC & Totem Lk Freeway Station				05-Apr-22	17-Apr-23																				
CUD 12 Poplar Way Loop Widening				07-Mar-22	27-Jun-23																				
<b>THIRD PARTY AGREEMENTS AND PERMITTING</b>				02-Dec-19 A	16-Feb-24																				
<b>RIGHT OF WAY</b>				30-Jul-21 A	20-Nov-25																				
<b>PROCUREMENT</b>				01-Dec-20 A	10-Sep-24																				
CUD 2 Bellevue TC, Burien TC & Rd Improvements - PROCUREMENT				15-Mar-24	10-Sep-24																				
CUD 5 South Renton Transit Center - PROCUREMENT				26-Dec-23	07-Jun-24																				
CUD 11 Lynnwood TC & Totem Lk Freeway Station - PROCUREMENT				21-Mar-23	15-Nov-23																				
CUD 12 Poplar Way Loop Widening - PROCUREMENT				31-May-23	25-Jan-24																				
WSDOT Tukwila Int'l Blvd. Station (TIBS) - PROCUREMENT				07-Feb-22	15-Sep-23																				
WSDOT NE 85th Interchange and Station - PROCUREMENT				01-Dec-20 A	08-Aug-22																				
WSDOT Brickyard to SR 527, North ETL - PROCUREMENT				01-Sep-21	18-May-23																				
<b>CONSTRUCTION</b>				08-Aug-22	19-Nov-26																				
CUD 2 Bellevue TC, Burien TC & Rd Improvements - CONSTRUCTION				11-Sep-24	22-Jun-26																				
CUD 5 South Renton Transit Center - CONSTRUCTION				11-Jun-24	09-Dec-25																				
CUD 11 Lynnwood TC & Totem Lk Freeway Station - CONSTRUCTION				16-Nov-23	14-Nov-25																				
CUD 12 Poplar Way Loop Widening - CONSTRUCTION				26-Jan-24	24-Jan-26																				
WSDOT Tukwila Int'l Blvd. Station (TIBS) - CONSTRUCTION				16-Sep-23	25-Aug-26																				
WSDOT NE 85th Interchange and Station - CONSTRUCTION				08-Aug-22	17-Aug-25																				
WSDOT Brickyard to SR 527, North ETL - CONSTRUCTION				19-May-23	19-Nov-26																				
<b>Service Line 1 (S1) Activation: I-405 South incl. NE 85th Sta</b>				20-Oct-26	13-Oct-27																				
Bus Base - Open for Service				20-Oct-26	20-Oct-26																				
S1 Start Up and Systems Integration				21-Oct-26	16-Apr-27																				
S1 Start of Service				17-Apr-27	13-Oct-27																				
STR-S1-SO-1300	I405 S - Start of Service Float	17-Apr-27	13-Oct-27																						
STR-S1-SO-1400	I405 S - Start of Service with Float		13-Oct-27*																						
<b>Service Line 2 (S2) Activation: I-405 North</b>				20-Oct-26	13-Oct-27																				
Bus Base - Open for Service				20-Oct-26	20-Oct-26																				
S2 Start Up and Systems Integration				21-Oct-26	16-Apr-27																				
S2 Start of Service				17-Apr-27	13-Oct-27																				
STR-S2-SO-1300	I405 N - Start of Service Float	17-Apr-27	13-Oct-27																						
STR-S2-SO-1400	I405 N - Start of Service with Float		13-Oct-27*																						

## 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.

- Touch a Truck event has been rescheduled for June 2023 in Bellevue
- Started work for September Project update
- Coordination with WSDOT team continues for upcoming engagement events

## 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.

Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
46	23	5	5	5	5
<p><i>*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.</i></p> <p><i>Total Acquisitions: Defined as parcels recognizing only land, not owners</i></p> <p><i>Board Approved: Based on parcels and properties (including multi-unit acquisitions)</i></p> <p><i>Offers/Closings: Based on inclusive offers made to separate owners and interest holders</i></p> <p><i>Relocations: Based on number of affected individuals</i></p>					

# Regional Express & STRIDE I-405 Bus Rapid Transit



## Staffing Summary

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff. 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 YTD Actual FTE Monthly Average for ST staff and consultants are lower than Planned. Sound Transit is looking to augment ST staff vacancies with consultants. Both ST staff and Consultants staff levels are expected to move up slightly in the later part of 2022, which might move up the YTD Actual FTE Monthly Average.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	15.3	12.7	2.6
Consultants	26.5	23.1	3.4
TOTAL	41.8	35.8	6.0

\* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 160

## Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	

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



## Project Summary

**Scope** Launch a Bus Rapid Transit (BRT) system in the SR 522 / SR 523 Corridor between the Shoreline South/148th light rail station and the SR522/I-405 Transit Hub near UW Bothell campus.

**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.

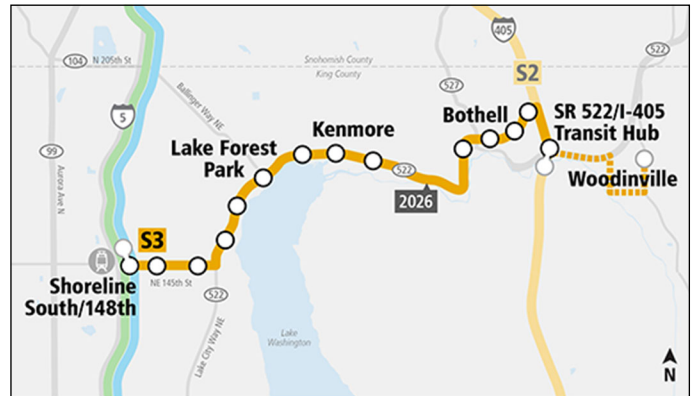
**Stations** 14 BRT stations along NE 145th and SR 522 in Shoreline, Lake Forest Park, Kenmore, and Bothell.

**Systems** BRT Operations & Transit Signal Priority

**Phase** Final Design

**Budget** \$209.1 Million for Preliminary Engineering, 60% Final Design, Bothell Stage 3, Third Party Agreements, and Property 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

- The 60% design for the Shoreline to Kenmore Roadway & BRT station improvements (contract unit BT306) has been completed. Design deliverables are being reviewed and commented.
- The 60% design for the Bothell segment (contract unit BT307) is anticipated for October.
- Properties in Civil Certification Package (CCP) #1 are in the appraisal stage; CCP #2 was approved by the board in May 2022. CCP #3 currently in development and planned for Board action in September. The team is also currently working on drafting necessary third-party agreements to support design development.
- Continued developing scope of work with GEC to advance and complete the design of BT306 from 60% to Issue for Bid.
- Project team worked with the Station Fit-up (BT014) design team to update systems and architectural design elements at 148th Station BRT pickup bay. Final conduit runs as a change order to L200 construction team was submitted.

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



## 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 \$1.7M due to progress in final design and program management with the GEC for \$1.1M, Sound Transit project administration. for \$150K and ROW related expenditure for \$235K.

### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$13.9	\$10.7	\$9.4	\$13.9	\$0.0
Preliminary Engineering	\$15.5	\$15.3	\$15.3	\$15.5	\$0.0
Final Design	\$33.8	\$14.6	\$8.5	\$33.8	\$0.0
Construction Services	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
3rd Party Agreements	12.1	\$1.1	\$0.7	12.1	\$0.0
Construction	\$49.4	\$35.0	\$24.2	\$49.4	\$0.0
Right-of-Way (ROW)	\$83.8	\$6.4	\$1.9	\$83.8	\$0.0
<b>Total</b>	<b>\$209.1</b>	<b>\$83.1</b>	<b>\$60.0</b>	<b>\$209.1</b>	<b>\$0.0</b>

Tables across this report may have totals that do not equal line item sums due to decimal rounding.

## Risk Management

The following are the top project risks and response plan:

- Potential budget impact due to higher inflation and higher real estate costs. Continued to monitor the development of these issues and develop future cost estimates that capture the most current information.
- The improvements for the BRT in the SR 522/NE 145th Street corridor are complex. Staff has been working in close coordination with multiple project partners on the project development, design, property acquisitions, permitting process, and construction activities.
- Early concurrence on project components is a key effort of project development through ongoing coordination with the Project Interagency Coordination Group, City Managers Group, and Elected Leadership Group. Letters of Concurrence were secured prior to beginning 30% design. Additional efforts are underway to secure concurrence as the project advances into final 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.
- Aggressive realignment schedule could lead to higher cost if directed to accelerate to meet the Board’s realignment milestone. The team is actively looking for cost efficient opportunities to meet the target date, such as working with the local jurisdictions to streamline their permitting process.

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



## Project Schedule

The Board of Directors announced their realignment decision in August 2021. The upcoming project milestone is Project Baseline, which is currently shown as February 2023. The team is formulating a plan and evaluating the timeline to allow the project to baseline with high level of confidence.

There are two critical paths for the SR 522/NE 145th BRT project opening. The most critical path is through the completion of the Bus Base North and integrated systems testing of the SR 522 corridor. A near critical path is the completion of final design and ROW acquisitions for the SR 522/NE 145th Roadways in Shoreline, Lake Forest Park and Kenmore needed to start construction. Both paths are monitored closely along with permitting/agreements by the team.

The current forecast for completion is Q4 2027, including 180 days float, or a total of about 10 months past the ST Board realignment milestone. The realignment schedule is aggressive and staff have routinely informed the Board that the current schedule is inconsistent with the target and affordable schedule. ST is planning to complete the design necessary to seek civil certification from ST Board for all ROW acquisition in the SR-522 corridor by Q4 2022 to prevent further delay. Staff is also working with the Authorities Having Jurisdiction (AHJs) in the corridor on plans to streamline the permitting process for the project.

*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	2022				2023				2024				2025				2026				2027							
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>BRT June 2022 Update</b>																															
<b>SR 522 BRT</b>																															
<b>Major Milestones</b>																															
STR-MS-4000	ST Board, Phase Gate 4 - Baseline Project SR-522	12-Jun-18 A	13-Oct-27																												
<b>DESIGN / ENGINEERING</b>																															
CUD 6 Shoreline, Lk Forest Pk, Kenmore Rdw & Stations		01-Nov-21	29-Apr-24	[Green bar from Q4 2022 to Q2 2024]																											
CUD 7 Bothell Roadways & Stations		17-Dec-21	04-Mar-24	[Green bar from Q4 2022 to Q1 2024]																											
<b>THIRD PARTY AGREEMENTS AND PERMITTING</b>																															
RIGHT OF WAY		12-Jun-18 A	17-Jan-23	[Green bar from Q4 2022 to Q1 2023]																											
<b>PROCUREMENT</b>																															
CUD 6 Shoreline, Lk Forest Pk, Kenmore Rdw & Stations - PROCUREM		23-Mar-24	18-Sep-24	[Green bar from Q3 2024 to Q3 2025]																											
CUD 7 Bothell Roadways & Stations - PROCUREMENT		03-Feb-24	31-Jul-24	[Green bar from Q4 2023 to Q3 2024]																											
<b>CONSTRUCTION</b>																															
CUD 6 Shoreline, Lk Forest Pk, Kenmore Rdw & Stations - CONSTRUC		19-Sep-24	23-Jul-26	[Green bar from Q3 2024 to Q3 2026]																											
CUD 7 Bothell Roadways & Stations - CONSTRUCTION		01-Aug-24	05-Jun-26	[Green bar from Q3 2024 to Q2 2026]																											
<b>Service Line 3 (S3) Activation: SR 522</b>																															
Bus Base - Open for Service		20-Oct-26	20-Oct-26	[Green bar from Q4 2026 to Q4 2026]																											
S3 Start Up and Systems Integration		21-Oct-26	16-Apr-27	[Green bar from Q4 2026 to Q2 2027]																											
S3 Start of Service		17-Apr-27	13-Oct-27	[Green bar from Q2 2027 to Q4 2027]																											
STR-S3-SO-1300	SR522/NE 145th - Start of Service Float	17-Apr-27	13-Oct-27																												
STR-S3-SO-1400	SR522/NE 145th - Start of Service with Float	17-Apr-27	13-Oct-27*																												



## Community Engagement

We are committed to proactively seeking public input during all stages of the project. The SR 522 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.

- August 31 Shoreline Developer meeting
- Letters mailed to LFP property owners in package 3
- Notifications to neighbors of Geotech borings and activations of right of entries.

## 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.

Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
250	67	0	0	13	0

*\*All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of the report periods.*

*Total Acquisitions: Defined as parcels recognizing only land, not owners*

*Board Approved: Based on parcels and properties (including multi-unit acquisitions)*

*Offers/Closings: Based on inclusive offers made to separate owners and interest holders*

*Relocations: Based on number of affected individuals*

# 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 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.

Planned FTE is an annual projection. The variance will reduce once final design accelerates.

The YTD Actual FTE Monthly Average for ST Staff is lower than Planned due to the loss of key staff since the beginning of the year. ST Staff resource is being augmented by the GEC, which is showing higher than Planned. Overall, YTD Actual FTE Average is slightly lower than planned, and are expected to move up slightly in the later part of 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	17.8	10.0	7.8
Consultants	38.0	47.9	(9.9)
TOTAL	55.8	57.9	(2.1)

\* 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.	

# 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	Drawdown to Date	Status	Balance Remaining
<b>FEDERAL TRANSIT AUTHORITY</b>							
LINK LIGHT RAIL	WA-03-0237	University Link Extension	684,370,641	09/16/2015	615,951,591	Active	68,419,050
LINK LIGHT RAIL	WA-2018-013	Hilltop Tacoma Link Extension SYGA	74,999,999	05/15/2018	73,520,167	Active	1,479,832
SOUNDER COMMUTER RAIL	WA-2018-015	Souder Rolling Stock	7,800,002	12/30/2019	-	Active	7,800,002
LINK LIGHT RAIL	WA-2018-082	* East Lake Sammamish Trail North Extensio	2,318,683	04/29/2020	2,072,920	Active	245,763
LINK LIGHT RAIL	WA-2019-001	Lynnwood Link Extension FFGA	497,710,967	03/19/2021	489,046,057	Active	8,664,910
LINK LIGHT RAIL	WA-2020-001	Federal Way Link Extension	297,710,967	02/25/2021	236,806,852	Active	60,904,115
SOUNDER COMMUTER RAIL	WA-2020-002	S Souder Capacity Exansion	5,600,000	12/13/2019	1,535,144	Active	4,064,856
REGIONAL EXPRESS	WA-2020-007	I-405 Bus Rapid Transit- Bus Procurement	5,400,000	12/21/2020	-	Active	5,400,000
REGIONAL EXPRESS	WA-2020-080	HIMB Bus Prev Maint	14,898,460	09/08/2021	14,898,460	Active	-
LINK LIGHT RAIL	WA-2020-086	HIFG Rail Prev Maint	38,937,648	09/18/2021	38,184,629	Active	753,019
LINK LIGHT RAIL	WA-2021-002	Downtown Redmond Link Ext	31,668,475	09/10/2021	31,668,475	Active	-
LINK LIGHT RAIL	WA-2021-004	Everett Link Extension Model Code Partne	2,000,000	12/31/2020	211,797	Active	1,788,203
REGIONAL EXPRESS	WA-2021-012	SR 522/NE 145th BRT Vehicles	4,800,000	02/25/2021	-	Active	4,800,000
SOUNDER COMMUTER RAIL	WA-2021-085	Auburn Station Access Improvments	1,500,000	09/10/2021	-	Active	1,500,000
Bus RAPID Transit	WA-2021-115	I-405 BRT Expansion Buses	7,255,465	09/18/2021	-	Active	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	Active	-
SOUNDER COMMUTER RAIL	WA-2021-140	20 CARSI/5307 Enhance at Puyallup CR Stn	1,421,500	10/28/2021	-	Active	1,421,500
REGIONAL FUND	WA-2021-141	ARP Act 2021-Operating Expense	275,258,761	10/28/2021	209,233,792	Active	66,024,969
LINK LIGHT RAIL	WA-95-X061	Hilltop Tacoma Link Extension	5,599,943	08/27/2015	5,314,193	Active	285,750
<b>TOTAL FEDERAL TRANSIT AUTHORITY</b>			<b>1,962,863,740</b>		<b>1,722,056,306</b>		<b>240,807,434</b>
<b>OTHER FEDERAL</b>							
REGIONAL FUND	EMW-2017-RA-00018	Radio Communication Network	662,138	11/02/2017	-	Active	662,138
REGIONAL FUND	EMW-2019-RA-00014	ATAT, Crit Evtnt OT, Fac Hardening	1,315,813	09/01/2019	458,356	Active	857,457
REGIONAL FUND	EMW-2020-RA-00022	Crit Evtnt OT, CEDO	642,738	08/10/2020	197,809	Active	444,929
<b>TOTAL OTHER FEDERAL</b>			<b>2,620,689</b>		<b>656,165</b>		<b>1,964,524</b>
<b>STATE</b>							
REGIONAL FUND	19-92501-015	Agency Energy Efficiency Project	197,000	06/03/2019	-	Active	197,000
<b>TOTAL STATE</b>			<b>197,000</b>		<b>-</b>		<b>197,000</b>
<b>TOTAL ALL GRANTS</b>			<b>1,966,181,429</b>		<b>1,723,212,472</b>		<b>242,968,957</b>

\* = Multiple values exist within this grant number grouping, see AwardID for details.

Above table as of Q2 2022. 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 2022, Sound Transit continues to carry out a wide range of projects, with increased focus on integrating sustainable design into capital expansion – from planning and final design to construction. With the passage of the ST3 Plan, a fully funded Sustainability Program will integrate green building and infrastructure in projects across all phases of development.

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

## Key Accomplishments and Activities for Q2 2022

- Received FTA Climate Challenge Award under the category of “Most Transformative.”
- Finalized the 2021 Greenhouse Gas Inventory and Sustainability Progress Report.
- Completed the ESMS Internal Audit and environmental compliance audit.
- Collected applications for Efficiency and Sustainability Program internal grant program.
- Continued work on the Zero Emission Bus Transition Plan work.
- Celebrated Earth Month by hosting a series of internal events.
- Launched internal Sustainability Learning Community.
- Onboarded two summer interns.
- Hosted a Sound Transit Design Summit.
- Completed a sustainability charette for Bus Base North.

## Key Upcoming Activities for Q3 2022

- Present to the Board of Directors on the Annual 2021 Sustainability Progress Report and Sustainability Cost Allocations.
- Approve Efficiency and Sustainability Program projects.
- Re-launch interagency working group on Zero Emissions Bus planning.

# Progress Report

# Acronyms

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# Acronyms

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<b>AA</b>	Alternative Analysis	<b>FD</b>	Final Design
<b>AHU</b>	Air Handling Units	<b>FHWA</b>	Federal Highway Administration
<b>AHJ</b>	Authority Having Jurisdiction	<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>IDS</b>	International District Station
<b>CCTV</b>	Close Circuit Television	<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>DAHPP</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>MBT</b>	Mount Baker Tunnel
<b>DEIS</b>	Draft Environmental Impact Statement	<b>MEPF</b>	Mechanical/Electrical/Plumbing/Fire Sprinkler
<b>DP</b>	Design Package	<b>MI</b>	Mercer Island
<b>DPD</b>	Seattle Department of Planning and Development	<b>MLK</b>	Martin Luther King, Jr. Way
<b>DSC</b>	Differing Site Conditions	<b>MOA</b>	Memorandum of Agreement
<b>DSDC</b>	Design Support During Construction	<b>MOU</b>	Memorandum of Understanding
<b>DSTT</b>	Downtown Seattle Transit Tunnel	<b>MOW</b>	Maintenance of Way
<b>EFC</b>	Estimated Final Cost	<b>MPPCV</b>	Major Public Project Construction Variance
<b>EMI</b>	Electro Magnetic Interference	<b>MRB</b>	Material Review Board
<b>ERC</b>	East Rail Corridor	<b>MUP</b>	Master Use Permit

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# Acronyms



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

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