# **Agency Progress Report Capital Programs**



Overlake Village Station construction East Link

May | 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 Julie Parker at (206) 398-5000.

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

#### **SOUND TRANSIT**

Central Puget Sound Regional Transit Authority Union Station 401 S. Jackson St. Seattle, WA 98104-2826

Reception: (206) 398 5000 Facsimile: (206) 398 5499

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# **Agency Progress Report**

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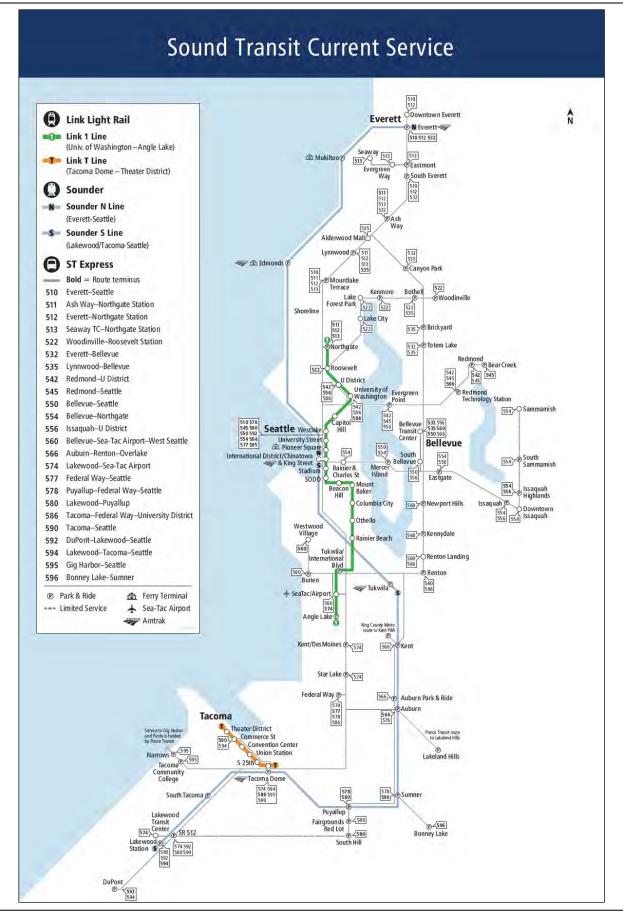
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CHIEF EXECUTIVE OFFICER
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# Executive Summary Sound Transit Capital Program

## Board updates fare polices

At its May meeting, the Sound Transit Board adopted of a package of fare policy changes, including a series of fare compliance reforms. These include:

- Increasing the number of warnings in a 12-month period from one to two.
- Updating the agency's policy on interactions with passengers lacking proof of payment to include \$50 and \$75 fines as resolution options on the third and fourth interactions, as well as non-monetary options for a passenger to dispute or resolve the fine.
- Authorizing the CEO to establish alternative resolution and dispute processes, which may include signing up for a reduced fare program or completing an engagement activity.
- Removing collections from the process.
- Removing suspensions; passengers without proof of payment may continue to ride the system.
- Maintaining the ability to refer cases of repeat non-payment to district court—but only for those without proof of payment five or more times within a 12-month period.

The package also approved funding for ambassador staff to more than double fare checks.

The fare ambassador pilot began in August 2021 based on passenger and public feedback that expressed discomfort with fare enforcement officers who resemble law enforcement. Later this year, staff will bring recommendations to the Board for a permanent fare ambassador program.

The Board also reinforced support for income-qualified riders, including lower ORCA LIFT fares that will be promoted through expanded marketing; extended subsidized pass programs; and increased options for resolving cases of non-payment.

The ORCA LIFT program provides discounted fares to enrolled passengers with household incomes equal to or less than 200% of the federal poverty level. The Board set a goal of increasing enrollment in the program to 80% of likely ORCA LIFT riders in the region and approved lowering ORCA LIFT fares on Sound Transit services from \$1.50 to \$1.00 for a six-month demonstration period. During this time, staff will conduct public outreach and prepare a Title VI fare equity analysis to support a possible action by the Board to make the reduction permanent.

In September 2020 Sound Transit began participating in a program sponsored by King County to provide fully subsidized transit passes to passengers with income less than 80% of the Federal poverty level who qualify for and are participating in specific benefit programs. The Board extended Sound Transit's participation until the end of 2024, or until a permanent program is approved.

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# **Executive Summary**



Later this year the Board will determine its approach to zero youth fares, as well as consider other farerelated actions to address a shortfall in fare revenue caused by a reduction in ridership and a decrease in fare payment compliance.

## ORCA launches upgraded system

On May 16, ORCA launched an updated system for hundreds of thousands of transit customers across the Puget Sound region. New features include:

- New ORCA website: myORCA.com features real-time card loading, mobile phone accessibility, more payment options, and the ability to manage multiple cards. This new site replaces the current ORCAcard.com site.
- **Smartphone app**: Customers can use the myORCA app to manage their account from any location 24/7 with the same functionality available on the new website. The app is available on Apple's app store and the Google Play store.
- **Business account website**: myORCA.com replaces or cacard.biz as the place where employers manage their ORCA programs.

All current ORCA cards, including youth, senior, ORCA LIFT, and reduced fare cards work with the new system. ORCA customers do not need to get a new card.

The transition to the new ORCA system will continue as crews replace over 6,000 card readers and vending machines across the region over the next few months.

Customers who regularly add funds to their account via autoloads—approximately 175,000 people—can now go online to begin to set up a new account and new autoloads to ensure funds are available on their card.

Customers can still add cash to their cards at vending machines, customer service locations, and participating retailers. A new online account is not required to access the system.

Single-ride and pass prices remain the same. Reduced fare programs will also still be available.

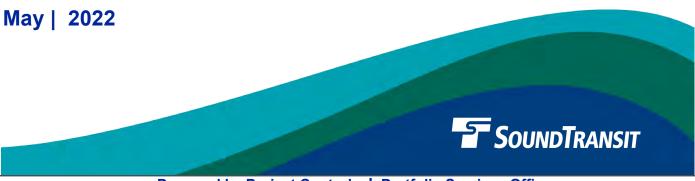
Later in 2022 and 2023, ORCA will be adding more stores to the retail network and introducing a smartphone tap-to-pay option. After these features are delivered, the ORCA agencies will engage with customers to identify improvements and new features.

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# Progress Report Link Light Rail Program



**Link Light Rail leaving Mount Baker Station** 







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# 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.

**Link Operations and Maintenance Facility East:** This project located in the City of Bellevue, includes a 160,000 square foot operations and maintenance facility that will maintain, store and deploy and expand light rail fleet, including seven LRV service bays, a LRV wash facility and storage for up to 96 light rail vehicles.

**Lynnwood Link Extension:** Lynnwood Link Extension extends light rail 8.5 miles to Snohomish County along I-5 from Northgate Mall in Seattle to the Lynnwood Transit Center, with four new light rail stations. The configuration includes at-grade, elevated, and retained cut/fill alignment.

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

**Northgate Link Extension:** The University of Washington Station (UWS) to Northgate project is a 4.3-mile extension of light rail from the UWS north under campus via twin-bored tunnels to an underground station at NE 45th Street continuing to an underground station at NE 65th Street and via tunnel, retained cut and elevated sections to Northgate.

**Tacoma Dome Link Extension:** This project will extend light rail from the Federal Way Transit Center in the City of Federal Way to the Tacoma Dome area in the City of Tacoma a total distance of approximately 9.7 miles, generally along or near I-5 with three elevated stations at South Federal Way, Fife, and East Tacoma, and one at-grade/retained station at the Tacoma Dome.

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

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# 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	\$976.7	\$550.9	\$1,530.0	\$0.0
East Link Extension	\$3,677.2	\$3,251.2	\$3,132.3	\$3,677.1	\$0.0
Everett Link Extension	\$187.9	\$21.2	\$13.8	\$187.9	\$0.0
Federal Way Link Extension	\$2,451.5	\$1,850.4	\$1,133.1	\$2,451.5	\$0.0
Hilltop Tacoma Link Extension	\$282.7	\$243.7	\$229.4	\$282.7	\$0.0
Light Rail Vehicle (LRV) Fleet Expansion	\$740.7	\$683.3	\$422.7	\$740.7	\$0.0
Lynnwood Link Extension	\$2,771.6	\$2,459.1	\$1,786.5	\$2,771.6	\$0.0
NE 130th Street Infill Station	\$36.4	\$27.1	\$21.9	\$36.4	\$0.0
Northgate Link Extension	\$1,899.8	\$1,763.5	\$1,752.1	\$1,847.3	\$52.5
Tacoma Dome Link Extension	\$126.4	\$102.7	\$57.8	\$126.4	\$0.0
West Seattle and Ballard Link Extensions	\$286.7	\$128.9	\$123.7	\$286.7	\$0.0
Total	\$13,991.0	\$11,507.9	\$9,224.3	\$13,938.5	\$52.5

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

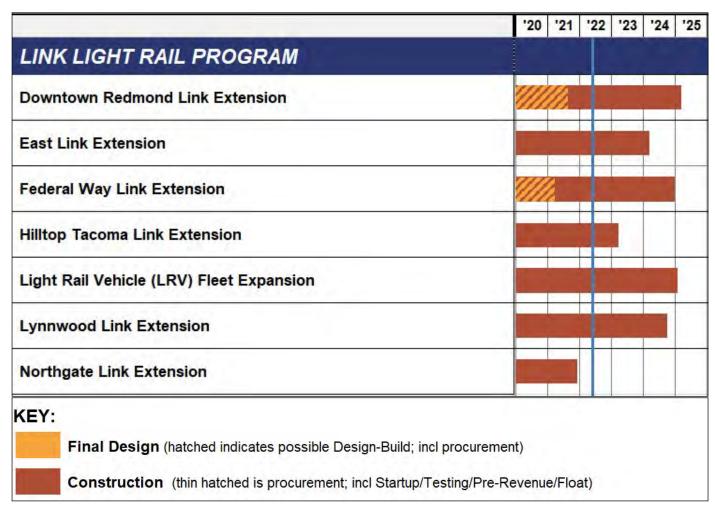
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# Link Light Rail Program Overview



#### **Program Schedule of Baseline Projects**

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



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#### **Project Summary**

Scope

Limits The Downtown Redmond Link Extension

(DRLE) builds new light rail from the Redmond Technology Station to downtown

Redmond.

Alignment The extension starts at Redmond

Technology Station and travels generally along SR-520 and SR-202 to downtown

Redmond.

Stations Two Stations: SE Redmond (at Marymoor

Park) and Downtown Redmond

Systems Signals, traction electrification, and

communications (SCADA)

Phase Construction

**Budget** \$1.53 Billion (Baselined October 2018)

**Schedule** Revenue Service: December 31, 2024



Map of Downtown Redmond Link Extension

#### **Key Project Activities**

- Continued coordination with contractor SWK to refine the field design change review process to provide clearer definition of major vs. minor reviews.
- Supporting SWK in documenting certifiable items list (CIL) mitigations.
- Operation and maintenance agreement discussions are ongoing with King County, City of Redmond and WSDOT. Working with ST Operations to resolve maintenance concerns.
- Continued inspection of the placement of conduits for the systems and the post tensioning cables within the garage deck.
- Working with Rail Activation to detail out activities supporting testing, commissioning and transition deliverables.
- Filmed video about the great collaboration that happened between Sound Transit, the design-builder, City and school district that resulted in the new NE 60th pedestrian overpass, allowing schoolchildren and families continuing access during construction while maintaining project schedule.
- Successfully completed the biggest concrete placement of the job to date at SE Redmond garage (960 cubic yards).

#### **Closely Monitored Issues**

- Working with PSE to complete the NE 70<sup>th</sup> utility relocation design. Determination of whether power supply upgrades may be required for the PSE permanent power at the raction Power Sub-Station (TPSS).
- Design-Builder is reporting concern on future crew availability and supply chain impacts. Team continues to look for opportunities to mitigate potential impacts.
- Washington Labor and Industries (L&I) support for system building design review. L&I has staffing shortages that may impact the duration of their review and inspection.
- Develop Rail Activation schedule in coordination with R200 schedule and development of final tree mitigation planting plan with the City of Redmond.

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#### **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 \$13.8M of expenditure. Most of the expenditure was incurred primarily in the Construction phase for progression of design-build scope and construction services. The remaining work phases made up the balance, particularly in Construction Services and ROW. Total cumulative expenditure to date rose from \$537.1M to \$550.9M.

#### **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	\$20.6	\$20.4	\$77.0	\$0.0
Preliminary Engineering	\$23.0	\$23.0	\$19.6	\$19.3	\$23.0	\$0.0
Final Design	\$4.5	\$4.5	\$1.2	\$0.9	\$4.5	\$0.0
Construction Services	\$58.0	\$63.6	\$49.4	\$25.8	\$63.6	\$0.0
Third Party Agreements	\$17.0	\$17.0	\$10.7	\$7.1	\$17.0	\$0.0
Construction	\$1,151.5	\$1,145.9	\$768.0	\$371.1	\$1,145.9	\$0.0
ROW	\$199.0	\$199.0	\$107.1	\$106.4	\$199.0	\$0.0
Total	\$1,530.0	\$1,530.0	\$976.7	\$550.9	\$1,530.0	\$0.0

#### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$332.4	\$332.4	\$237.2	\$115.3	\$483.3	\$150.9
20 Stations	\$261.9	\$261.9	\$188.3	\$75.1	\$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	\$198.5	\$79.0	\$231.5	(\$56.6)
50 Systems	\$108.6	\$103.2	\$67.6	\$27.1	\$78.8	(\$24.4)
Construction Subtotal (10 - 50)	\$990.0	\$985.6	\$691.6	\$296.5	\$981.9	(\$3.8)
60 Row, Land	\$168.5	\$168.5	\$107.1	\$106.4	\$168.5	\$0.0
70 Vehicles (Non-Revenue)	\$4.1	\$4.1	\$0.7	\$0.2	\$4.1	\$0.0
80 Professional Services	\$289.3	\$293.6	\$177.5	\$147.8	\$297.4	\$3.8
90 Unallocated Contingency	\$78.2	\$78.2	\$0.0	\$0.0	\$78.2	\$0.0
Total (10 - 90)	\$1,530.0	\$1,530.0	\$976.7	\$550.9	\$1,530.0	\$0.0

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

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#### **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 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; and owner change.
- **Permitting and 3<sup>rd</sup> Party Requirements:** Construction adjacent to SR520; 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

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#### **Contingency Management**

The project baseline included a total contingency of \$435.8M. The total project contingency balance stands at \$264.2M (no change from April). 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 draw was negligible due to an adjustment in ROW from previous period.

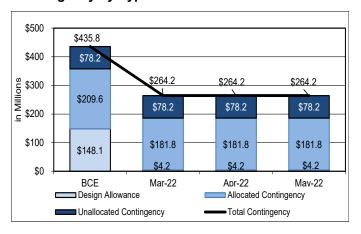
**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance remains at \$78.2M.

#### **Contingency Status**

Contingency	Bas	eline	Current Status		
Туре	Amount % of Total Budget		Amount Remaining	% of Work Remaining	
Design Allowance	\$148.1	9.7%	\$4.2	0.4%	
Allocated Contingency	\$209.6	13.7%	\$181.8	18.6%	
Unallocated Contingency	\$78.2	5.1%	\$78.2	8.0%	
Total	\$435.8	28.5%	\$264.2	27.0%	

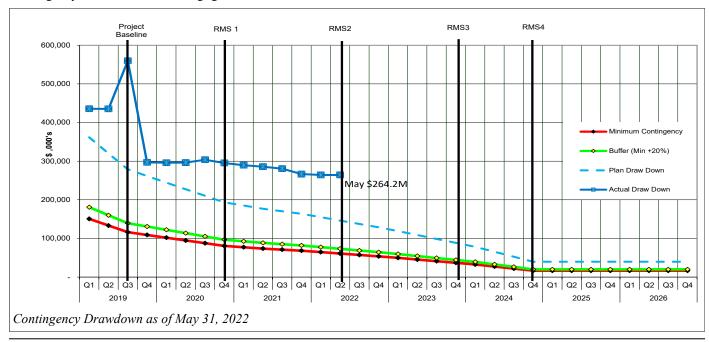
Table figures are shown in millions.

#### **Contingency by Type**



#### **Contingency Drawdown**

DRLE project's total contingency drawdown trends better than planed and remains above the baseline drawdown projection. The trend is well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. May's contingency drawdown net was negligible.



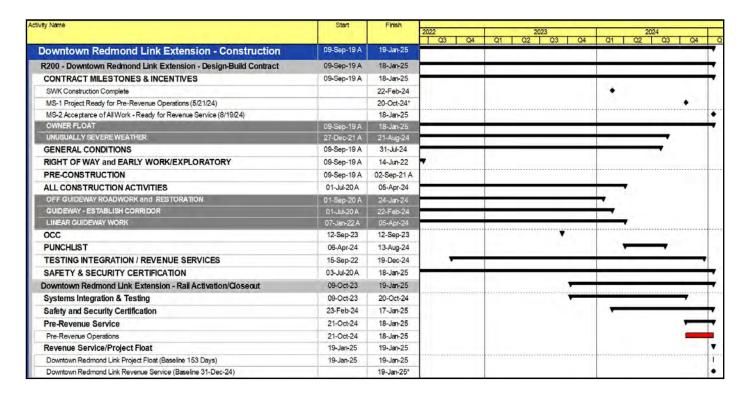
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#### **Project Schedule**

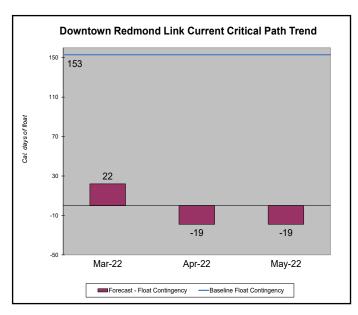
Weighted percent complete of the major construction contracts is calculated at 51.4%.

The May update is presented below. The contractor spent much of May ramping up efforts after the end of the concrete strike. The contractor continued working on soil nail walls, MSE panels, erecting precast beams for elevated guideway, and placing several deck pours at the SE Redmond Garage. The current project completion target of the end of 2024 is currently being evaluated and revised to reflect the impacts of the concrete delivery strike, COVID, and other factors.



#### **Project Float**

DRLE was baselined with 153 days of project float. The project is forecasting to finish 19 days past the baselined finish date of December 31, 2024, due to the months-long concrete strike, COVID and other factors. Concrete deliveries resumed during the month of April, and the contractor is currently developing a mitigation strategy to recover the schedule where possible.

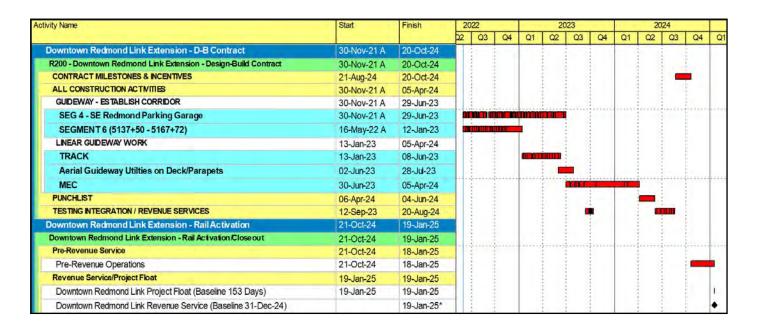


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#### **Critical Path Analysis**

The critical path for R200 runs concurrently through SE Redmond Parking Garage and the downtown guideway structure, and then through track installation, signals and communications and SE Redmond Garage, and into testing and closeout. Due to the ubiquitous interruptions stemming from the Teamster's strike, many areas of the project are near-critical. There may be some shift in critical work as the contractor develops their plan to mitigate impacts.



#### Right-of-Way

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

The Right-of-Way program status for this period is summarized in the following table.

Downtown Redmond Link Extension Property Acquisition Status*						
ACQUISITION RELOCATION						
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date*	Relocations Required	Relocations Completed to date	
84	89	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 incudes relocation of storage units by impacted individuals.

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#### **Community Engagement**

- Ongoing engagement with the public and businesses on potential construction impacts, with specific focus on property owners and tenants regarding the start of construction this year and the increasing construction activities along SR 520.
- Continued coordination with filming a promotional video for the 60th Street Pedestrian Bridge with City of Redmond, Lake Washington School District, and the R200 contractor.
- Began outreach to affected properties along SR 520 to update on changing fence and sound wall configuration.
- Began fielding questions from public about potential delays to service opening.

#### **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	24.0	5.4
Consultants	31.6	25.4	6.2
TOTAL	61.0	49.4	11.6

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
	No Action This Period	

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### **Construction Safety**

Data/ Measure	May 2022	Year to Date	Project to Date	
Recordable Injury/Illness Cases	0	3	11	
Days Away From Work Cases	0	0	0	
Total Days Away From Work	0	0	0	
First Aid Cases	7	20	37	
Reported Near Mishaps	1	4	14	
Average Number of Employees on Worksite	487	-	-	
Total # of Hours (GC & Subs)	44,896	200,483	597,554	
OSHA Incident Rates	Month	Year to Date	Project to Date	
Recordable Injury Rate	0.00	2.99	3.68	
LTI Rate	0.00	0.00	0.00	
Recordable National Average		2.50		
LTI National Average	1.10			
Recordable WA State Average	5.20			
LTI WA State Average		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.

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#### Contract R200 - DRLE Design Build

#### **Current Progress**

#### Design:

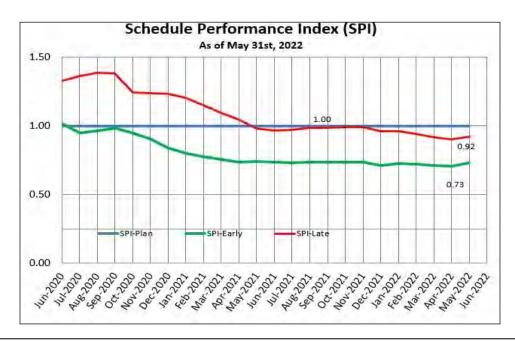
- Ongoing Operations & Maintenance (O&M) agreement discussions with King County, City of Redmond and WSDOT.
   Preparing to escalate unresolved issues related to O&M of WSDOT drainage facilities.
- Continue inspection of the placement of conduits for the systems and the post tensioning cables within the garage deck. Working with other DBPM building inspection team for clarification and confirmation of compliance.
- Working with Rail Activation team to detail out activities supporting testing, commissioning and transition deliverable.
- Meeting with Redmond Fire Department to review comment concerning the previously agreed location of the garage fire alarm control panel.

#### Construction:

- SR520 area: Continued soil nail wall and installation of pre-cast panel walls. Continued rebar, form and concrete placement cap beams in the area, storm drain installation and installation of main electrical duct bank.
- 60th Street Cut and Cover: Completed soil nail at 60th Street and commenced preparation for cast in place structure installation.
- SE Redmond garage: Continued concrete placement on decks, shoring and installation of support beams. At SE Redmond Station, completed canopy anchor bolt survey and concrete installed at plinth blocks.

#### Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.73 for this period, and the late SPI is at 0.92. The contractor's production rate hasn't met the SPI threshold in the last few months due to the impact of Teamster Local 174 Strike that began on December 3, 2021; the significant items of work which have been impacted have resumed during the May 2022 period. In addition, labor availability is causing delay compared to the plan.



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#### **Next Period's Activities**

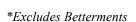
- Continue providing support i.e. technical information for Operation and Maintenance agreement process.
- Commence bridge cure and bridge barrier cure at 40th Street cut and cover. Continue form, rebar and pour at unnamed tributary bridge. Continue form, rebar, and pour end diaphragms on aerial guideway.
- SE Redmond Garage and Station: Continue shoring and install support beams, rebar and concrete placement for columns and shear walls.

#### **Closely Monitored Issues**

- Recovery from Teamster strike that is impacting progress of work including related to concrete delivery.
- Mitigation of schedule delay related to SE Redmond garage design issues.
- Ongoing COVID-19 impact associated to labor availability and supply chain.
- L&I support for system building design review and commissioning.

#### **Cost Summary**

Present Financial Status	Amo	unt			
R200 Contractor – Stacy Witbeck Kuney, a Joint Venture					
Original Contract Value	\$	719,936,000			
Change Order Value	\$	25,654,212			
Current Contract Value	\$	745,567,341			
Total Actual Cost (Incurred to Date)	\$	359,018,842			
Percent Complete		51.4%			
Alternative Concept Allowance	\$	46,381,196			
Authorized Contingency	\$	78,575,348			
Contingency Drawdown	\$	25,654,212			
*Contingency Index		1.57			





Install Pre-cast fascia panel wall next to SR 520

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#### **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).

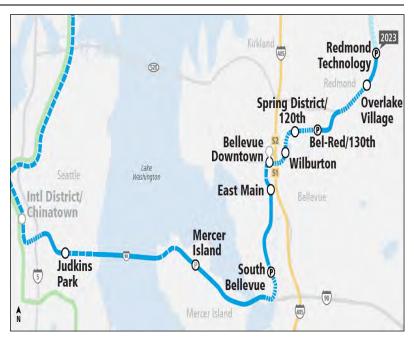
Systems Signals, traction electrification, and

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 direct fixation (DF) track plinth repairs from IDS to East Channel Bridge; progressing punch list and commissioning at JPS and Mount Baker Tunnel.
- Mercer Island Transit Integration (E135): Work progressed into the phase 1 road closure, demolition of sidewalk, milling the existing asphalt, and preparation for storm water utilities installation continued; progressed storm water detention vault backfill.
- **South Bellevue (E320):** Ongoing track repairs for non-conforming work; advancing final punch list activities; completing final clean at South Bellevue Station.
- **Downtown Bellevue to Spring District (E335)**: Continued electrical and escalator commissioning, HVAC controls installed, tunnel emergency ventilation fan flow sensors installed, Saw cut east and west bound tunnel duct bank to achieve the needed LRV dynamic envelope clearance; cleaning Bellevue Downtown Station area. Continuing electrical and escalator commissioning and emergency ventilation systems in the tunnel. Cleaning Wilburton and 120th Stations.
- **Bel-Red (E340)**: Continued to rail-to-earth (RTE) diagnostic testing and repairs in various areas. Completing the corridor landscaping punch list items. Tested signals along the guideway and at the 130th Station.
- SR520 to Redmond Technology Station (E360): Continued Overlake Village Station and pedestrian bridge punch list and NCR repair work; Redmond Technology Station garage work continued with concrete beam skin coating application and formwork, rebar installation, and post tensioning on Level 3 and 4 deck and beams.
- Systems (E750): Contractor continued submittals and component design/manufacturing/fabrication. Progressed communication and signaling equipment installations from E130 to E360; Installation of feeder cables for energization and testing. Signal House delivered at E130. Ongoing installation of OCS wire throughout the alignment.

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#### **Closely Monitored Issues**

- Repair work associated with contractor quality issues at the RTS garage, tunnel clearance at BDS, E130 and E320 track plinths, along with RTE repair work at E340
- Design corrections, scope additions, contractor performance issues, COVID-19, and the concrete strike have contributed to belated completion of the civil contracts, necessitating unanticipated overlap with systems work
- Contractor claims on E320, 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

#### **Project Cost Summary**

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

The Estimated Final Cost (EFC) remains the same at approximately \$3.68B. This period's estimated expenditure effectively netted out to \$14.1M, the total expenditure to date increase from roughly \$3.1B to \$3.13B. Project commitment remains at approximately \$3.2B 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	\$124.0	\$123.5	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.8	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$251.1	\$242.8	\$283.0	\$0.0
Construction Services	\$257.5	\$254.6	\$217.0	\$207.2	\$254.6	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$38.5	\$35.5	\$52.2	\$0.0
Construction	\$2,544.3	\$2,547.1	\$2,286.1	\$2,188.8	\$2,547.1	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$298.2	\$298.2	\$279.8	\$279.6	\$298.2	\$0.0
Total	\$3,677.2	\$3,677.2	\$3,251.2	\$3,132.3	\$3,677.2	\$0.0

#### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$744.6	\$941.5	\$908.9	\$913.1	\$936.7	(\$4.8)
20 Stations	\$397.7	\$481.1	\$467.6	\$450.3	\$488.1	\$7.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$574.1	\$508.6	\$472.2	\$567.5	(\$6.6)
50 Systems	\$353.8	\$379.9	\$359.3	\$318.2	\$383.4	\$3.5
Construction Subtotal (10 - 50)	\$2,304.6	\$2,376.5	\$2,244.4	\$2,153.9	\$2,375.8	(\$0.8)
60 Row, Land	\$288.5	\$288.5	\$279.8	\$279.6	\$288.5	\$0.0
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$2.3	\$0.7	\$2.8	\$0.0
80 Professional Services	\$898.4	\$885.3	\$724.7	\$698.1	\$886.1	\$0.8
90 Unallocated Contingency	\$182.9	\$124.0	\$0.0	\$0.0	\$124.0	\$0.0
Total (10 - 90)	\$3,677.2	\$3,677.2	\$3,251.2	\$3,132.3	\$3,677.1	\$0.0

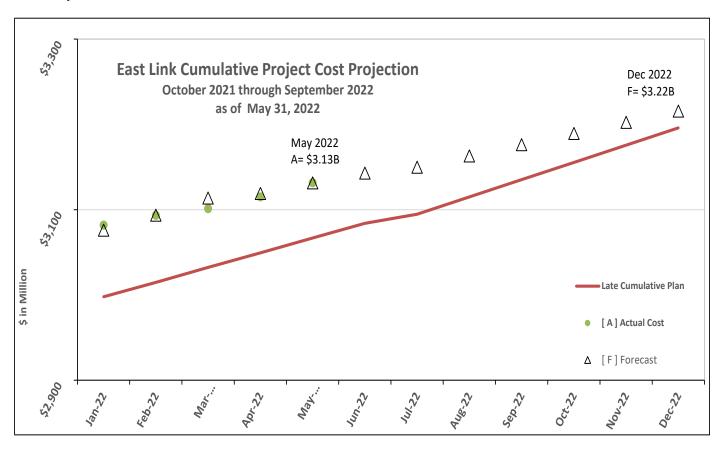
Tables across this report may have totals that do not equal line item sums due to decimal rounding.

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#### **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 netted \$16.8M. Total project cost incurred progressed to \$3.13B, of which the Construction Phase's share is now approaching \$2.2B. The project expenditures picked up in May and is predicted to reach to approximately \$3.22B by December 2022.



#### **Risk Management**

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

- Externalities: COVID-19; unhoused encampments.
- 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. These late emergent issues are highly problematic during this late stage of the project, because of 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.

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#### **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 \$280.20M (previously \$282.0M). 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 decrease of approximately \$1.8M due to construction and construction management support changes.

**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. The UAC balance is at \$124.0M.

#### **Contingency Status**

Contingency	Base	eline	Current Status			
Туре	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%	\$155.3	28.5%		
Unallocated Contingency	\$182.9	5.0%	\$124.0	22.8%		
Total	\$795.9	21.6%	\$280.2	51.4%		

#### Contingency by Type

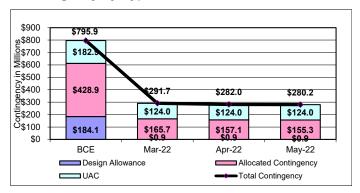
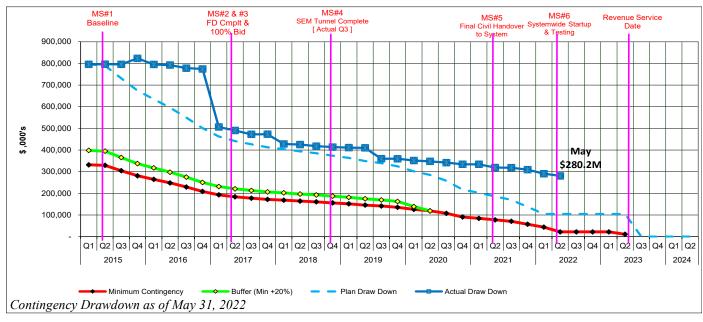


Table figures are shown in millions.

#### **Contingency Drawdown**

East Link Project's total contingency drawdown continues to trend within plan with an overall contingency balance approximately at \$280.2M (previously \$282M). 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 May represented the monthly net decrease about \$1.8M due to various construction and construction support changes.



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#### **Project Schedule**

The Integrated Master Schedule is presented below. Weighted percent complete of the major construction contracts is calculated at 97.2%.

E130 continued DF track plinth repair; commissioning and punch list work.

E320 continued track repair at the station platform area; acoustical panel repair; project closeout.

E330 has achieved final acceptance.

E335 continued tunnel clearance repairs; commissioning and punch list work.

E340 continued rail-to-earth track testing and repair.

E360 continued punch list; continued RTS garage repair / rebuild

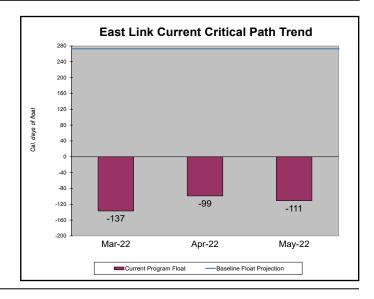
**E750** continued installation of communications systems at most stations; pulling signal cables; setting signal houses; installation and testing of fiber optics.

tivity Name	Start							0000		
			2022 Q3	3 1	Q4	Q1		Q2	2023 Q3	
Sound Transit	13-Jul-16 A	20-Oct-23						-	1	
Sound Transit 2	13-Jul-16 A	20-Oct-23								
East Corridor	13-Ju-16 A	20-Oct-23								
LRT Extension - East	13-Jul-16 A	20-Oct-23								
East Link	13-Jul-16 A	20-Oct-23								_
East Link Construction	13-Jul-16 A	20-Oct-23			********		********			
EL 130 - Seattle to I-90 Overpass (GC/CM)	10-Mar-17 A	09-Mar-23								
EL 135 - Mercer Island Transit Interchange (DBB)	17-May-18 A	28-Mar-23					-			
EL 320 -I-90 Overpass to S. Bellevue (DBB)	05-Dec-16 A	01-Jul-22								
EL 335 - Downtown Bellevue to Spring District (GC/CM)	24-Apr-17 A	03-Sep-22		→						
EL 340 - Spring District to SR 520 (DBB)	24-Feb-17 A	28-Jul-22		4,4230111						.0000010
EL 360 - SR 520 to Overlake Transit Center (DB)	13-Jul-16 A	03-Apr-23			_		-			
EL 750 - Systems	12-Jun-17 A	19-Aug-23			_		-		_	
East Link Master Schedule - Construction Interfaces	14-Jun-17 A	22-Jul-23							_	
ELRACT - East Link Rail Activation/System Integration Project Close out	20-Aug-21 A	20-Oct-23								
East Link Rail Activation/System htegration/Project Closeout	20-Aug-21 A	20-Oct-23						conc		
Pre-Revenue Testing & Start Up	20-Aug-21 A	19-Oct-23	$\overline{}$						-	_
East Link System Integration Testing (LOE Summary)	20-Aug-21 A	21-Jul-23								
East Link Pre Revenue Operations - Operator Qualifications and Simulated Service (3 Mo)	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*								

#### **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.

ST is currently working to determine a new target Revenue Service Date.

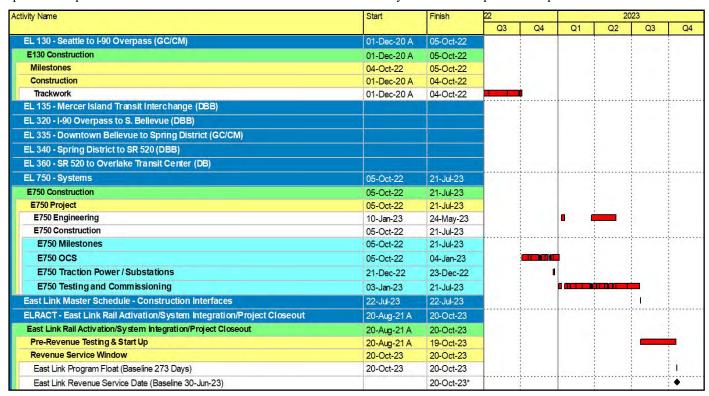


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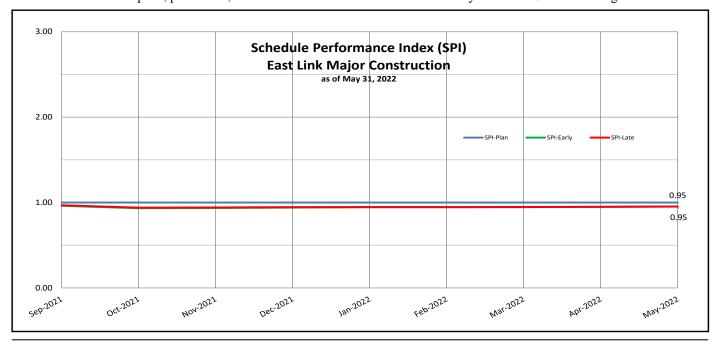
#### **Critical Path Analysis**

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. Additional deficiencies continue to be discovered, 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.



#### Schedule Performance Index

The Schedule Performance Index (SPI) for East Link's Major Construction Packages (both early and late) remains at 0.95 as contractors focus on repairs, punch lists, and closeout. This number will trend steadily towards 1.0 in the coming months.



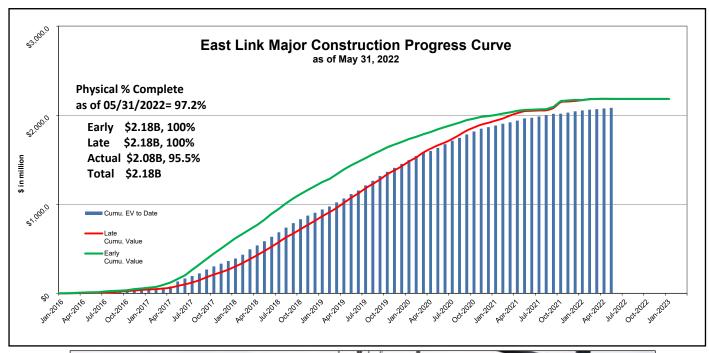
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#### **Major Construction Progress Curve**

The overall physical percent complete for East Link construction is 97.2%.

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.





E340 Bel-Red: Canopied rail as part of keeping the area dry for rail to earth testing.

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#### 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	

\*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

### **Community Engagement**

- Ongoing distribution of weekly construction alerts for maintenance of traffic activities for Mercer Island, Bellevue and Redmond. Communicated with numerous neighbors about upcoming major traffic changes. May's focus included, but not limited to; participation in City of Bellevue's Neighborhood Conference; facilitation on post-construction work; continued with outreach to unhoused population and encampments prior to start of system testing.
- Continued communications to spread the message of safety around construction on Mercer Island Transit Integration site.
- 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.

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#### **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	56.2	4.0
Consultants	97.5	127.7	30.2
TOTAL	149.7	183.9	34.2

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

#### **Sound Transit Board Actions**

<b>Board Action</b>	Description	Date
	No Action This Period	
	NO ACTION THIS I CHOU	

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### **Construction Safety**

Data/ Measure	May 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	3	10	364		
Reported Near Mishaps	0	1	3,438		
Average Number of Employees on Worksite	396	-	-		
Total # of Hours (GC & Subs)	45,128	273,206	7,777,230		
OSHA Incident Rates	Month	Year to Date	Project to Date		
Recordable Injury Rate	0.00	0.73	2.37		
LTI Rate	0.00	0.00	0.39		
Recordable National Average	2.50				
LTI National Average	1.10				
Recordable WA State Average	5.20				
LTI WA State Average	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.

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#### **Major Construction Contract Packages**

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

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

Status: Completed and Closed.

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

Status: See following pages under Contract E130.

**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: Under construction.

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

Status: See following pages under Contract E320.

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

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

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

Status: See following pages under Contract E335.

**E340 Bel-Red** – One light rail station, aerial and at-grade guideway from 124th Ave. NE to NE 20th. [Design-bid-build] *Status: See following pages under Contract E340.* 

**E360 SR520 to Redmond Technology Station** – Two light rail stations; one garage, one 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



E135 Mercer Island Transit Integration: A bird's eye view of this road improvement work adjacent to Mercer Island Station in the middle roadway of I-90.

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

#### **Current Progress**

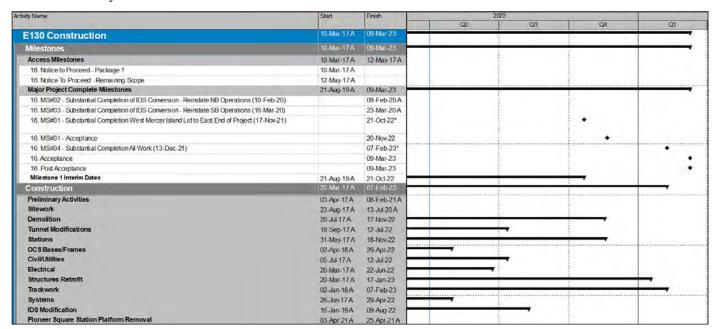
**West Segment:** Ongoing miscellaneous punch list items at JPS; advance tunnel ventilation commissioning in Mount Baker Tunnel; progressing non-conforming track direct fixation concrete plinth repairs

**Center Segment:** Initiate power restoration and monitoring of pontoons A thru D in conjunction with WSDOT anchor cable replacement; progressing non-conforming track direct fixation concrete plinth repairs

East Segment: Advance preparation & installation of artwork at Mercer Island Station head houses; progressing non-conforming track direct fixation concrete plinth repairs

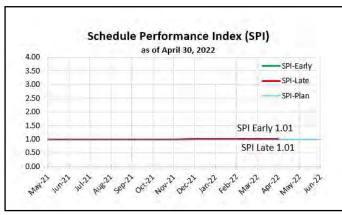
#### **Schedule Summary**

The March update forecasts a Feb. 7, 2023, Substantial Completion date, 421 calendar days later than the contractual milestone date of Dec. 13, 2021. The contractor's April update was rejected for non-compliance with contract specifications and a revised update (or the May monthly update) has not yet been received. Within the E130 contract schedule, the critical path is driven by track remediation and cathodic protection on the floating bridge. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.



#### Schedule Performance Index

The contractor has not submitted their May payment request; numbers through April continue to report cumulative SPI (both early and late) at 1.01. The E130 Substantial Completion (SC) for All Work (Milestone 4) is now Dec. 13, 2022, with the contract projecting SC in Q1 2023. At this final stage of the project, the SPI calculation tends to converge to an index of 1.0. Remaining work is primarily focused on track plinth remediation scope, commissioning and other punch list items.



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#### **Next Period's Activities**

- West Segment: Miscellaneous punch list, commissioning; continue direction fixation plinth remediation
- Center Segment: Repolarization and monitoring at HMH bridge; miscellaneous punch list, commissioning; continue direct fixation plinth remediation
- East Segment: Miscellaneous punch list, commissioning; continue direct fixation plinth remediation

#### **Closely Monitored Issues**

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

#### **E130 Construction Segments**



#### **Cost Summary**

Present Financial Status	Amount*
E130 Contractor - Kiewit-Hoffman	
Original Contract Value (incl. Phase 2 MACC)	\$665,000,000
Change Order Value	\$44,847,337
Current Contract Value*	\$707,932,978
Total Actual Cost (Incurred to Date)	\$702,715,874
Percent Complete	97.3%
Authorized Contingency	\$56,660,541
Contingency Drawdown	\$44,847,337
Contingency Index	1.2

<sup>\*</sup> Contract Value excludes Betterments



Art installation at west head house of Mercer Island Station

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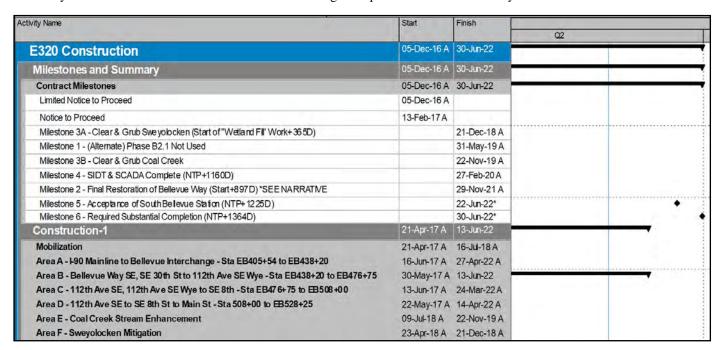
#### Contract E320 - South Bellevue

#### **Current Progress**

Ongoing track remediation of contractor quality issues; advance final punch list activities; complete final cleaning at South Bellevue Station

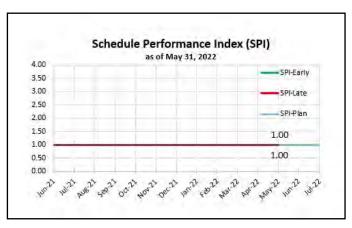
#### **Schedule Summary**

The May update forecasts a June 30, 2022, Substantial Completion date, 538 calendar days later than the contractual milestone date of Jan. 8, 2021. Within the E320 contract schedule, the critical path is driven by punch list and repairs at the station and trackway. ST continues to work with the contractor to mitigate impacts to follow-on work by E750.



#### Schedule Performance Index

E320 base plan called for a Substantial Completion date of November 2020. The contract is projecting Substantial Completion in Q3 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1. South Bellevue Garage is effectively complete and transitioned to Operations. Remaining work is primarily focused on rework of track issues that require remediation, commissioning, and miscellaneous punch list items.



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# Link Light Rail East Link Extension



#### **Next Period's Activities**

- **I-90 Flyover:** Ongoing punch list, repair of girder bearing pads.
- Bellevue Way SE: Ongoing area maintenance and punch list
- S. Bellevue Sta./P&R: Ongoing area maintenance and punch list
- Wye-to-East Main: Ongoing area maintenance and punch list
- Track Work: Remediation of direct fixation track non-compliant items

### **Closely Monitored Issues**

- Resolution to RFC 226 R3 Project Wide Disruptions
- COVID-19 impacts
- Resolution to Substantial Completion date
- E750 contractor access



# **Cost Summary**

Present Financial Status	Amount				
E320 Contractor - Shimmick/Parsons JV.					
Original Contract Value	\$319,859,000				
Change Order Value	\$11,864,074				
Current Contract Value*	\$331,688,820				
Total Actual Cost (Incurred to Date)	\$328,997,602				
Percent Complete	98.6%				
Authorized Contingency	\$38,532,000				
Contingency Drawdown	\$11,864,074				
Contingency Index	3.2				

<sup>\*</sup>Contract Value excludes betterments and START



SPJV maintenance crews cleaning windows at South Bellevue Station

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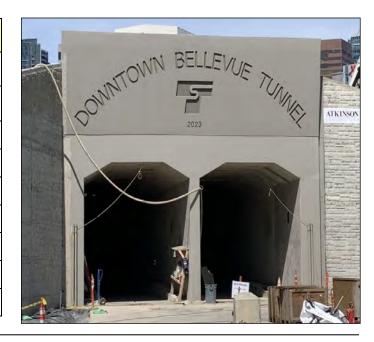
# Contract E330 - Downtown Bellevue Tunnel - Completed & Accepted

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



# **Cost Summary**

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



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

# **Current Progress**

East Main Station: Installed pedestrian track crossing gates, weeded and mowed landscape areas, replaced dead plants and progressed the punch list.

South Portal Electrical Building: Terminated wire breakers and continued commissioning work.

Bellevue Downtown Station (BDS): Continued electrical and escalator commissioning, HVAC controls installed, tunnel emergency ventilation fan flow sensors installed, emergency ventilation commissioning continued, saw cut east and west bound tunnel duct banks to achieve the needed LRV dynamic envelope required and station clean up progressed.

Wilburton Station: Continued with punch list work.

120th Street Station: Continued work on fire caulking and began the punch list for both escalator and elevator.

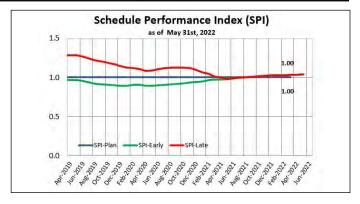
#### Schedule Summary

The May update forecasts a September 03, 2022, Substantial Completion date, 475 calendar days later than the contractual milestone date of May 16, 2021. Within the E335 contract schedule, the critical path is driven by tunnel emergency ventilation system commissioning.

tivity Name	Start	Finish	2022		
			Q2		Q3
E335 Construction	24-Apr-17 A	03-Sep-22		- 1	
Milestones	04-May-18 A	03-Sep-22			
Contract Milestones	30-Sep-18 A	03-Sep-22		-	
Milestone #1 - Complete North Portal Headwall Temporary Shoring		30-Sep-18 A			
Milestone #2 - Complete SIDT's for Interface to SCADA		14-Jan-20 A			
Milestone #3 - Complete Trackway and Stations for Primary Systems Access - BTC to EOP (18-Jul-21)		27-Jun-22*		•	
Milestone #4 - Complete SEM Turnel Trackwork for Primary Systems Access (16-Jan-21)		17-Aug-22*			•
Milestone #5 - Complete Al Trackway and Stations for Primary Systems Access (16-Mar-21)		17-Aug-22*			
Milestone #6 - Substantial Completion of all Work (16-May-21)		03-Sep-22*			- 3
Calculated Milestones	04-May-18 A	03-Sep-22		- :	
Mobilization	24-Apr-17 A	24-Apr-17 A			
Construction	24-Apr-17 A	26-Aug-22		-	
Area 1: E. Main Station to South Portal (531+55 - 538+00)	11-Oct-17 A	01-Jun-22	<del></del>	1	
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91	24-Aug-18A	04-Aug-22		-	
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)	24-Apr-17 A	26-Aug-22			
Area 4: Aeria I Guideway (568+45 - 606+59)	24-Apr-17 A	07-Jun-22			
Area 5: Pine Forest to 120th (606+59 - 619+00)	07-Jul-17 A	08-Oct-21 A			
Area 6: 120th - End of Project (619+00 - 634+99)	01-Aug-17A	14-Jun-22		7	
Testing and Commissioning	01-Jun-20 A	15-Dec-21 A		1	

#### **Schedule Performance Index**

E335's base plan called for a Substantial Completion date of May 2021. The contract is now projecting a Substantial Completion of Q3 2022. At this final stage of the project, the SPI calculation tends to converge to an index of 1.0. Remaining work is primarily focused on the delayed base work at BDS and Wilburton stations, the wiring and termination of the mid-tunnel fans, and the follow-on commissioning and punch list work.



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# Link Light Rail East Link Extension



#### **Next Period's Activities**

- East Main Station: Continue erosion, site security and maintenance. The goal is to finish light pole bases and conduct Station clean up.
- **BDS:** Continue work on electrical metering commissioning, pre-test jet fans, and site clean up. Saw cut Duct bank and Walkway for Tunnel Clearance.
- **Wilburton Station:** Continue elevator and escalator punch list work.

### **Closely Monitored Issues**

- Pipe leak caused water damage to an electrical panel at 120th Station which had already been commissioned.
   Replacement of panel is considered a warranty issue and expedite for delivery in June.
- The designers are working through the conditions related to the location of the transfer switch and ensuring protection of power and control wiring for the tunnel fans.



E335 Aerial Guideway

## **Cost Summary**

Present Financial Status	Amount			
E335 Contractor– Stacy & Witbeck/Atkinson Joint Venture (SWA-JV).				
Original Contract Value (includes station scope)	\$393,798,210			
Change Order Value	\$25,675,691			
Current Contract Value	\$419,473,901			
Total Actual Cost (Incurred to Date)	\$ 411,728,467			
Percent Complete	99.47%			
Authorized Contingency	\$29,689,911			
Contingency Drawdown	\$25,675,691			
Contingency Index	1.2			



Wilburton Station

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#### Contract E340 - Bel-Red

## **Current Progress**

**130th Ave Station:** Continued with repairs on outstanding stray electrical current rail to earth (RTE) issues, and continued work on the punch list items.

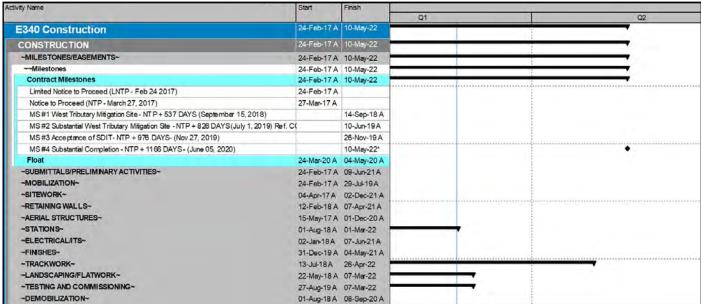
**NE Spring Blvd:** Performed RTE diagnostic testing and repairs, addressed the corridor landscaping punch list and inspected the water utilities.

**136th Ave**: Performed RTE testing, landscaping and punch list items. Inspected the storm drain, sewer and water utilities, and began to repair the water line to EL-327.

**System Scope**: Tested signals along the guideway and at the 130th Station.

#### **Schedule Summary**

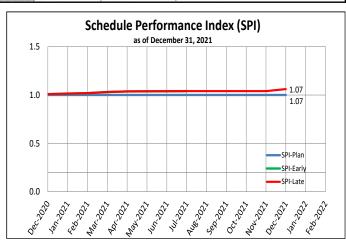
The February update forecasts a May 10, 2022, Substantial Completion date, 705 calendar days later than the contractual milestone date of June 5, 2020. Subsequent updates have not yet been received. Substantial completion is pending completion of the the rail-to-earth repair work, which will extend into July 2022. The RTE repair work is delaying E750 systems integration test-



#### **Schedule Performance Index**

E340's base plan called for a Substantial Completion date of June 2020. It is now projecting to be in June 2022. The December graph shown here is the Contractor's latest submittal.

Remaining work in E340 is limited to the lower cost closeout scope including commissioning work and punch lists. The project team is diligently monitoring completion despite the contractor being late with their schedule submittal. At this stage, the SPI calculation has a mathematical tendency of convergence to an index of 1.0.



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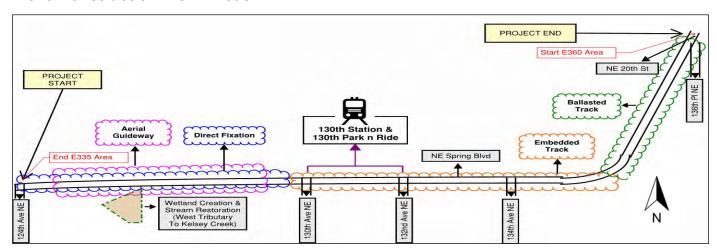
#### **Next Period's Activities**

- Aerial Guideway: Address mitigation landscaping punch list items.
- **130th Ave Station:** Continue RTE testing. Repair RTE issues. Address electrical punch list items.
- NE Spring Blvd: Repair RTE issue. Continue RTE testing. Address corridor landscaping punch list items.
- **136th Pl NE:** Continue RTE testing. Repair water line vault at EL-327.
- System Scope: Test signals along the guideway and at the 130th Station.

# **Closely Monitored Issues**

- NE 20th Modular Track Alignment Additional information has been reviewed and vertical deviations were observed in excess of the contract requirements.
- RTE investigation and repairs continue at a slow pace. This work is delaying E750 SIT work.

#### **E340 Construction Work Areas**



# **Cost Summary**

Present Financial Status	Amount				
E340 Contractor– Max J Kuney					
Original Contract Value	\$93,170,012				
Change Order Value	\$8,195,812				
Current Contract Value	\$101,365,824				
Total Actual Cost (Incurred to Date)	\$99,359,593				
Percent Complete	98.28%				
Authorized Contingency	\$14,317,000				
Contingency Drawdown	\$8,195,812				
Contingency Index	1.72				



Norton Corrosion & CorrPro conducting RTE testing

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# Link Light Rail East Link Extension



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

## **Current Progress**

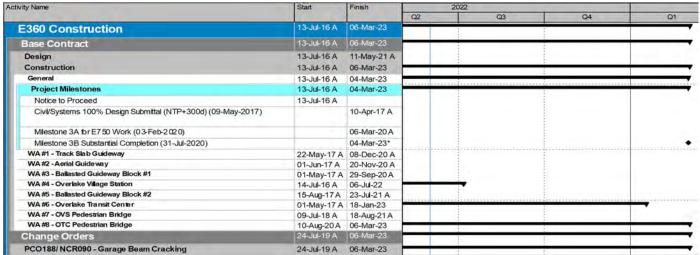
**Design**: Notice of Design Change work for Redmond Technology Station Garage: traffic coating to address non-conforming work.

#### **Construction:**

- Work Area (WA) #1: Park Place wetland punch list work ongoing. Sweeper Site tree planting prep and WSDOT inspection.
- WA #2: Aerial Guideway punch list work advancing.
- WA #3/4: Overlake Village Station (OVS) punch list and NCR repair work progressing.
- WA #6: Redmond Technology Station (RTS) garage level 2/3 coating on beam bottom, completing form work for the ramp between level 3/4, removing cladding on north exterior, and skin reinforcement (grinding, patch & crack repairs).

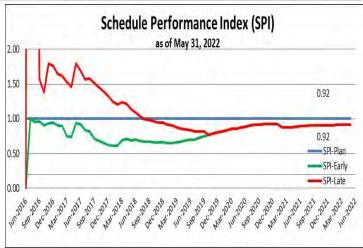
## **Schedule Summary**

The May update forecasts a March 4, 2023, Substantial Completion date, 946 calendar days later than the contractual milestone date of July 31, 2020. Within the E360 contract schedule, the critical path is driven by repairs to the RTS garage. E750 has been granted access to all critical work areas.



#### **Schedule Performance Index**

E360 base plan called for a Substantial Completion date of July 2020. The contract is now projecting a Substantial Completion of Q1 2023. At this final stage of the project, the SPI calculation tends to converge to an index of 1. The lagging in the SPI is primarily due to the impasse on the commercial resolution of the deleted RTS Pedestrian Bridge work that is still part of the EV plan. Also, the Substantial Completion is delayed due to the needed partial rebuild of the RTS Garage. Remaining EV work on the contracted work ranges from commissioning to miscellaneous punch list. The project team is diligently monitoring completion and Systems has access to this segment of their work for the stations and track.



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# Link Light Rail East Link Extension



#### **Next Period's Activities**

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

# **Closely Monitored Issues**

- Schedule delays for Building Management Systems E340/E360 Interface, January & February weather events
- RTS Garage Rebuild
- Milestone 3B delays
- COVID-19 Impacts
- Teamster Local 174 Strike

#### **E360 Construction Work Areas**



# **Cost Summary**

Present Financial Status	Amount			
E360 Contractor— Kiewit-Hoffman				
Original Contract Value	\$225,336,088			
Change Order Value	\$9,742,989			
Current Contract Value	\$235,079,077			
Total Actual Cost (Incurred to Date)	\$219,740,723			
Percent Complete	96.24%			
Authorized Contingency	\$22,533,609			
Contingency Drawdown	\$9,742,989			
Contingency Index	2.1			





WA 6 — Removing Cladding from North Exterior

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## Contract E750 - Systems Heavy Civil GC/CM

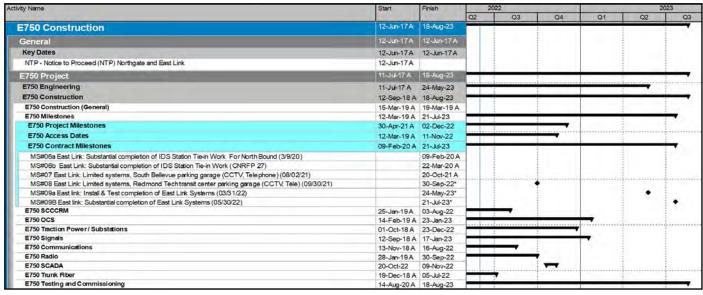
# **Current Progress**

The E750 Contractor, Mass Electric Construction Co.:

- Continue development and reviews of engineering submittals covering all disciplines: Traction Power Substations (TPSS),
   Overhead Catenary Systems (OCS), Train Control Signal Systems and Communications.
- Ongoing coordination meetings for interface and access points with the civil contracts.
- Installed feeder cable, radio equipment, PA devices, conduit and local testing at E130 to E360 civil segment.
- West Mercer Signal House delivered and set at E130 civil segment.
- Track signal testing continues along the alignment from E130—E360.

#### Schedule Summary

The May update projects a July 21, 2023, Substantial Completion date, 418 calendar days later than the contractual milestone date of May 30, 2022. Currently, the critical path is driven by track handover from the E130 contractor. ST and the contractor are actively working to mitigate delays in access to critical work areas.



#### **Schedule Performance Index**

Performance is for May 2022. The SPI-Early is 0.88 and SPI-Late is 0.90. The SPI index indicates the contractor is behind early planned work and is starting to somewhat slip on the late plans compared to the baseline plans.

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



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#### **Next Period's Activities**

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, OCS, Train Control Signal Systems and Communications.
- Ongoing meetings between systems and civil contractors for interface and access points for respective contracts.
- Ongoing installation of feeder cables for energization and local testing.
- Ongoing installation of OCS cabling and pole installation primarily in the E130 segment..

# **Closely Monitored Issues**

- Monitoring the impacts from the delayed handover from the civil contractors in the E130, E320, E335 and E340 segments.
- Monitoring the SCL power connections for the E130 segment.



# **Cost Summary**

Present Financial Status	Amount		
E750 Contractor - Mass Electric Construction Co.			
Original Contract Value	\$255,768,128		
Change Order Value	\$7,807,133		
Current Contract Value	\$263,575,260		
Total Actual Cost (Incurred to Date)	\$226,648,501		
Percent Complete	90.68%		
Authorized Contingency	\$12,788,406		
Contingency Drawdown	\$7,807,133		
Contingency Index	1.42		

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



Signal House delivery near Mercer Station.

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# **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—

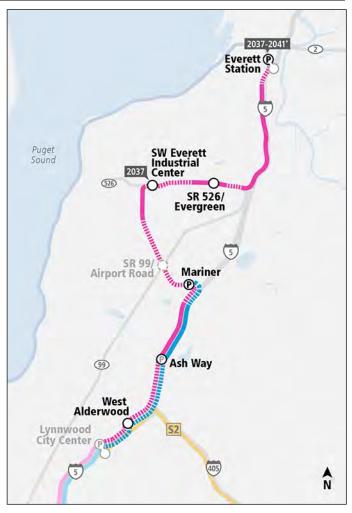
Phase 1 Alternatives Development)

Schedule Target Dates:

SW Everett Industrial Station, 2037

Everett Station, 2037

Parking at Mariner & Everett, 2046



Map of Everett Link Extension

# **Key Project Activities**

- Presented to the Sound Transit Board of Directors' System Expansion Committee on the alternatives for further study in Level 2 evaluation.
- Continued monthly meetings with FTA.
- Coordinated with partner agencies including City of Lynnwood, City of Everett, Snohomish County, Snohomish County PUD, Community Transit, Puget Sound Regional Council and WSDOT regarding Alternatives Development process.

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## **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 May 2022, \$0.29M 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	\$4.0	\$3.8	\$34.2	\$0.0
Preliminary Engineering	\$128.5	\$15.9	\$8.9	\$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
Total	\$188.0	\$21.2	\$13.8	\$188.0	\$0.0

#### **Cost Summary by SCC**

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$1.0	\$0.6	\$0.6	\$1.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$1.0	\$0.6	\$0.6	\$1.0	\$0.0
60 Row, Land	\$10.0	\$0.3	\$0.3	\$10.0	\$0.0
80 Professional Services	\$160.9	\$20.2	\$12.9	\$160.8	\$0.0
90 Unallocated Contingency	\$16.1	\$0.0	\$0.0	\$16.1	\$0.0
Total (10 - 90)	\$188.0	\$21.2	\$13.8	\$188.0	\$0.0

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

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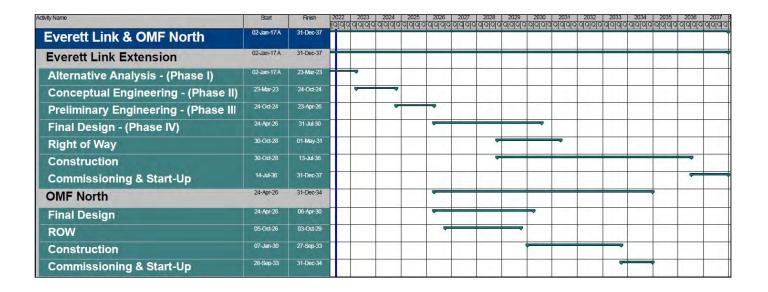
### **Risk Management**

The following are the top cost and schedule project risks:

- Limited understanding of potential engineering challenges and ROW needs due to current level of planning/design.
- Site selection for OMF North and consensus with partners may be challenging.

### **Project Schedule**

Phase 1 work is holding to the current schedule. The target date for the extension to SW Everett Industrial Station remains 2037. Completion of Phase 1 work is forecast for Q1 2023, with Board approval for Phase 2 near the end of the quarter. The extension to Everett Station maintains the target date of 2037. Parking at Mariner and Everett has 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**

- The Everett Link Team provided project briefings to the Sno-King Watershed Council, Snohomish County Transportation Coalition and Mill Creek Foursquare Church.
- Continued Coordination meetings with Sno-Isle Libraries/Mariner Community Campus.
- Continued coordination with partner agencies including City of Lynnwood, City of Everett, Snohomish County and Community Transit regarding community engagement.

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# **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	10.6	8.3
Consultants	27.0	24.8	2.2
TOTAL	45.9	35.4	10.5

<sup>\*</sup> 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 month.	

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## **Project Summary**

Scope

Limits The Federal Way Link Extension (FWLE)

adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center.

Alignment The extension generally parallels SR 99 and

I-5 freeway.

Stations Station and garages at Kent/Des Moines,

South 272nd Star Lake Park-and-Ride and the Federal Way Transit Center (FWTC)

Systems Signals, traction power, and

communications (SCADA)

Phase Final Design/Construction

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

**Schedule** Revenue Service: December 2024



Map of Federal Way Link Extension

# **Key Project Activities**

- F200 progress detail highlights are reflected on last two pages of FWLE section and concrete work continues throughout the alignment.
- Structure C slope stability and environmental concerns necessitate modifications to the work plan regarding installation of construction access. Work plan coordination and monitoring of the slope is ongoing in collaboration with ST, the City of Kent, WSDOT, and the Army Corps of Engineers. Negotiations for related cost are ongoing.
- Traffic Mitigation design highlights are reflected in another section of report. Board approved ROW acquisitions.
- Preparation of Consolidated Transit Way Agreement with the City of SeaTac is underway, execution planned for Q4 2022.
- A minor amendment to the City of Kent Development Agreement on Pond E has been executed.
- ST Board action on FWLE station naming is scheduled for June. Staff will present how name options comply with Board-adopted naming policy and include stakeholder input for Board consideration and final action. This item was reviewed in the South King County Subarea Briefing.
- Project team continued coordinating utility relocations that are necessary in future station areas.
- Quantitative Risk Assessment 3 day workshop was conducted, followed by model validation. Results anticipated for team review in June.

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### **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 \$40M was incurred of which \$35.4M for Construction phase comprised mainly of \$35M for F200 Design Build construction contract and \$0.4M for Utility Relocation by Others. Construction Services was \$2.2M; \$0.5M for Third Party; and \$0.9M 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	\$39.5	\$39.1	\$96.5	\$0.0
Preliminary Engineering	\$46.5	\$46.1	\$45.5	\$45.2	\$46.1	\$0.0
Final Design	\$3.1	\$4.8	\$3.9	\$2.3	\$4.8	\$0.0
Construction Services	\$107.0	\$116.0	\$101.6	\$59.9	\$116.0	\$0.0
3rd Party Agreements	\$27.7	\$27.7	\$25.2	\$15.3	\$27.7	\$0.0
Construction	\$1,831.9	\$1,821.5	\$1,419.6	\$757.7	\$1,821.5	\$0.0
ROW	\$338.8	\$338.8	\$215.1	\$213.6	\$338.8	\$0.0
Total	\$2,451.5	\$2,451.5	\$1,850.4	\$1,133.1	\$2,451.5	\$0.0

#### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$523.0	\$155.2	\$398.3	\$196.0	\$513.4	-\$358.2
20 Stations	\$318.9	\$105.2	\$297.8	\$132.1	\$333.7	-\$228.5
30 Support Facilities	\$5.3	\$4.6	\$11.6	\$5.7	\$5.1	-\$0.5
40 Sitework & Special Conditions	\$558.4	\$1,154.4	\$473.9	\$261.3	\$559.4	\$595.0
50 Systems	\$153.8	\$49.6	\$124.2	\$58.0	\$152.2	-\$102.6
Construction Subtotal (10 - 50)	\$1,559.4	\$1,468.9	\$1,305.7	\$653.2	\$1,563.7	-\$94.9
60 Row, Land	\$341.6	\$338.8	\$215.1	\$213.6	\$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	\$329.6	\$266.3	\$302.1	\$94.8
90 Unallocated Contingency	\$178.1	\$245.2	\$0.0	\$0.0	\$245.2	\$0.0
Total (10 - 90)	\$2,451.5	\$2,451.5	\$1,850.4	\$1,133.1	\$2,451.5	\$0.0

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

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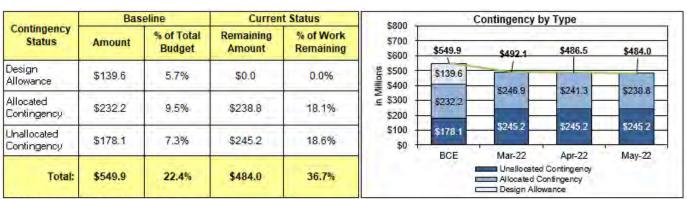
## **Contingency Management**

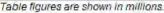
The FWLE project budget was baselined in September 2018 with a total contingency of \$549.9M. Additional contingency of \$460M (FTA P65 requirement in FFGA) is not reflected in the below contingency status. The current contingency balance is \$484M.

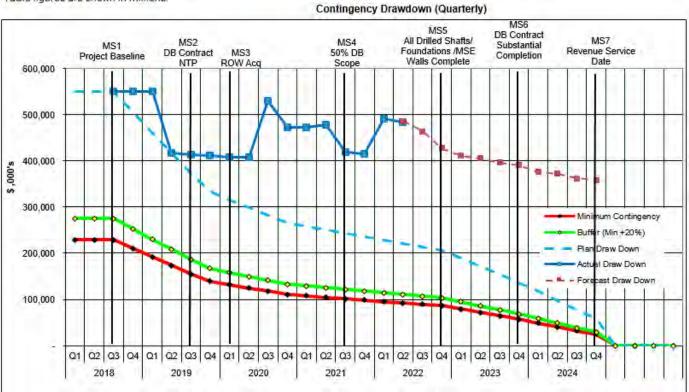
**Design Allowance (DA)** has been used and is no longer reported.

**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 \$2.5M due to combination of increases from betterment reimbursements for ST Admin cost and decreases from two executed change orders for DBPM and Traffic Mitigation Design Services contracts.

**Unallocated Contingency (UAC)** is used to address general project-wide cost risks and uncertainties. During this period the UAC reduced slightly by \$0.04M filling a funding gap for City of Des Moines new commitment.







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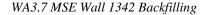


## **Risk Management**

The following are the top project wide risks:

- A liquefaction zone identified at Structure C and the identified design solution could potentially result in additional cost and schedule impacts.
- Unstable soil conditions encountered during Structure C enabling work (temporary access road for pile driving equipment) could result in additional cost and schedule impacts to the project.
- Integration of the Structure C change order scope into the design and construction work plan, could result in additional cost and schedule impacts regarding the scope and scale of the change order.
- Several ST projects will be competing for programmatic ST resources in 2024 to oversee work activities.
- ROW possession and use (P&U) and property acquisition suffer delays and/or legal challenges that prevent the ROW
  parcels from being acquired in time for scheduled construction activities, thus delaying completion of F210 and delaying
  planned revenue service.
- 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.
- Requirements for facility/systems enhancements or additional elements (i.e., betterments) by Third Parties and ST Agency
  not included in the project scope may delay completion of design and construction for specific packages and increase
  project costs.
- Planned utility relocations are not completed in alignment with the construction schedule, resulting in delays to the start of construction of F210 scope.
- Current market conditions including monetary inflation (escalation) and supply chain disruption may result in significantly increased procurement costs.
- Temporary easements obtained to enable PSE advanced utility relocations could expire before permanent easements are
  executed, which would cause a delay (to obtain new easements) and ultimately result in additional cost and schedule
  impacts to completion of construction and to the revenue service date.







WA2.3 Structure C Clean-up and Resloping

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#### **Project Schedule**

The calculated weighted percent complete of the major construction contracts is 52.5%.

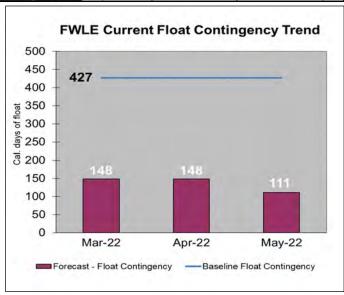
The project schedule presented below is still under review. Right-of-Way acquisitions for F200 are nearly complete. On May 26, 2022, the Sound Transit Board approved the F210 (traffic mitigation) ROW team to begin appraisals and acquisitions of needed properties. Currently, F210 properties are driving FFGA Milestone MS 03 – ROW Acquisitions Complete, which is still trending to be finished by Q4 2023. Lastly, continued delay in the Light Rail Vehicle (LRV) schedule may impact Sound Transit's ability to commence with simulated service. The schedule is under review to assess the impacts to the revenue service date of December 2024 from COVID and the concrete strike. The schedule will be revised accordingly.



#### **Project Float**

Federal Way Link Extension was baselined with 427 days of project float contingency. Currently, the project is reporting 111 days of project float remaining.

The decrease in project float is due to poor soil conditions at Structure C near I-5, which resulted in a temporary stop to drill shaft operations. Currently, timber piles are being installed to stabilize this work area. As Structure C is on the critical path the Design Builder forecasts a potential delay to F200 Milestone #5 – Acceptance of All Work (05-Aug-24). Sound Transit has asked for a recovery schedule by next month's update.

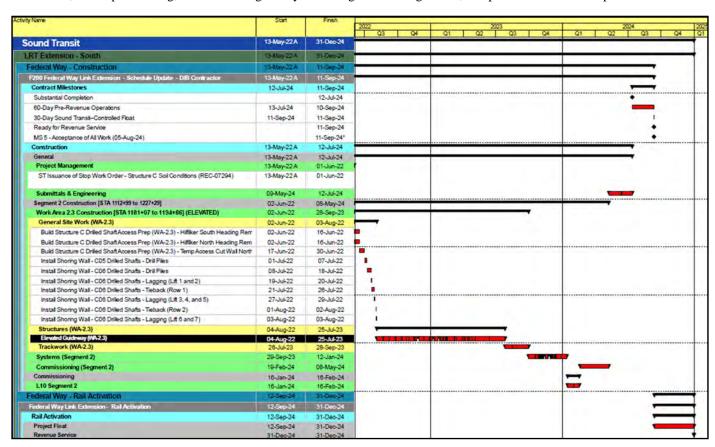


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#### **Critical Path Analysis**

The critical path to Revenue Service commences with Structure C drilled shaft access which is being constructed in poor soil conditions near I-5. To ensure public safety Sound Transit issued a temporary stop work order. The Design Builder is currently taking mitigation actions to improve site conditions such as installing timber piling. Next, is the construction of Structure C precast girders, diaphragms, deck pours, and finishes. Also on the critical path at Work Area 2.3 is direct fixation track, system ductbanks, fiber optic cabling, commissioning and system integration at Segment 2, and pre-revenue service operations.



## **Traffic Mitigation Design**

#### **Key Traffic Mitigation Issues:**

- Design consultant and ST executed change order that funded remaining scope.
- Design continues. 50% design submittal scheduled for mid-June. Board approved ROW acquisitions. Begin ROW appraisals in June.
- Site investigation underway including geotechnical and environmental site assessments. Updated draft Letter of Concurrence (LOC) provided to Kent and Federal Way; pre-application packages submitted in Kent and Federal Way. Draft Master Utility Relocation Agreements sent to MCI and Zayo; response from MCI under review by Agency Agreements.
- Impacts to Riverstone Apartments (KCHA) identified; meeting with stakeholder to be scheduled. Final design advancing; 50% Submittal scheduled for mid-June.

# **Closely Monitored Issues**

• Traffic Mitigation Design and F210 ROW certification.

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#### 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.

Federal Way Link E	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								
278	358	429	328	441	432								

<sup>\*</sup>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**

- Tabled at Mark Twain Elementary to get summer construction information out
- Provided required notifications for night and weekend work.
- Coordinated with the Camelot property owner for removal of an additional hazardous tree.
- Continued engagement planning for property owner outreach for the traffic mitigation program.
- Provided public communication, including construction alerts and flyers for several work activities along the alignment.
  - Conducted additional stakeholder outreach for FWLE Station Naming., including to Service Delivery Council, South King sub-area briefing and an additional round of public comment.



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### **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 3.0 below the staffing plan for this period. DBPM Services is slightly higher than plan addressing Design-Build contractor activities for change management, minor design and major construction oversight that involves drilled shafts, parking garages, stations and utility work. ST staff is 9.0 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	35.7	9.0
Consultants	77.0	83.0	-6.0
TOTAL	121.7	118.7	3.0
**	the NTD and a second se		

<sup>\*</sup> 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
R2022-15	Acquire Real Property Interests Required for the Federal Way Link Extension Project	5/26/22

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# **Construction Safety**

Data/ Measure	May 2022	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	2	7
Days Away From Work Cases	0	1	3
Total Days Away From Work	0	3	6
First Aid Cases	3	8	20
Reported Near Mishaps	0	1	7
Average Number of Employees on Worksite	440	-	-
Total # of Hours (GC & Subs)	66,912	365,893	1,184,637
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	2.99	1.09	1.18
Lost Time Injury (LTI) Rate	0.00	0.55	0.51
Recordable National Average		2.5	
LTI National Average		1.10	
Recordable WA State Average		5.20	
LTI WA State Average		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.

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### F200 Design Build Contract

## **Current Progress**

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

#### Design:

- During the month: Performed reviews on shop drawings, product data, and design changes.
- All Design Packages for Segment 1 are complete, 1 design packages remains open for Segment 2, and 3 design packages remain open for Segment 3. Structure C System design package remains open.
- Track for LRV storage: Finalizing the configuration, functionality and testing requirements.

#### Construction:

- Quality: 76 (project total) Non Conformance Report, 25 open at the end of May.
- Guideway substructure and extensive superstructure construction continues in Work Area 1.1, 1.3, 2.1, 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	95%	Caps and Straddles	90%	Girder Erection	74%	Abutments	75%	Decks	58%

- Noise wall, mechanically stabilized earth wall, and cast-in-place wall construction work in progress in work areas 1.2, 2.2, 3.3 and 3.7.
- SR99 Bridge: Work in progress on walls, decks and diaphragm. Effort ramped up for utilities and approach slabs.
- KDM Station: Stem walls, underground mechanical / electrical / plumbing, and concrete work for elevator and escalators in progress. Installation verification and testing for plumbing in progress.
- Star Lake Garage: Continued Level 2 post-tensioned deck, shear walls, and column construction.
- FWTC and End of Line Facility: Continued Underground electrical construction and concrete work for elevator.



WA 1.1 Kiewit SR99 Span 2 Deck Concrete Placement



WA 2.4 SL Garage Column Concrete Placement at P3

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### **Schedule Summary**

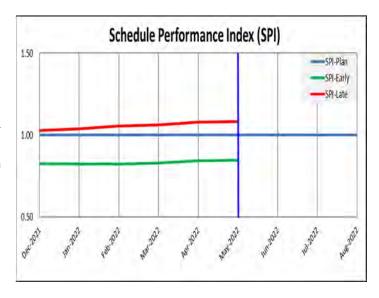
The F200 progress schedule for May 2022 is still under review. The Design Builder reported no change to contract Milestones #2 and #3, which are both slightly behind schedule. Next, both Milestone #4 and #5 (Acceptance of All Work) are forecasted to be delayed due to poor soil conditions at Structure C. Mitigation actions are underway, but the overall impact to the project schedule is still being determined. Sound Transit will continue to work with the Design Builder to reduce the impact of this delay.

tivity Name	Start	Finish		en de la companya de					
				022	734		223   Q3   Q4	01	2024
F200 Federal Way Link Extension - Schedule Update - D/B Contractor	01-Jun-19A	11-Sep-24	1	45	41	41 42	45 4	91	CE CO
Contract Milestones	07-Jun-19 A	11-Sep-24	-		-		_		_
Limited Notice to Proceed	07-Jun-19 A								
Contractual Notice to Proceed	28-Feb-20 A		1						
Notice to Proceed	04-May-20 A		1						
Issuance of Full Notice to Proceed (REC-01802, 07-Dec-2020)	07-Dec-20 A		1					1	
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	1						
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*							
EOL Building - Completion 365d Before Milestone 5		23-Oct-23*						1	
MS 4 - Work in WSDOT ROW from I-5 (Sta. L2260+00) to S 272nd Street (VA-3) (01-Nov-23)		03-Nov-23*					•	1	
Substantial Completion		12-Jul-24							
60-Day Pre-Revenue Operations	13-Jul-24	10-Sep-24	1						
30-Day Sound Transit-Controlled Float	11-Sep-24	11-Sep-24							
MS 5 - Acceptance of All Work (05-Aug-24)		11-Sep-24							
Design	07-Jun-19 A	30-Jun-23		-			•		
Design Milestones	07-Jun-19 A	30-Jun-23			_		•		
Corridor Wide	07-Jun-19 A	18-Jul-22		_					
Design Packages - Kent Des Moines Segment 1	07-Jun-19A	15-Jul-21 A							
Design Packages - Star Lake Segment 2	07-Jun-19A	10-Jun-22							
Design Packages - Federal Way Transit Segment 3	07-Jun-19 A	16-Jun-22		*					
Construction	01-Jun-19A	10-Sep-24			_				_
General	01-Jun-19A	31-Jul-24	_		-			-	_
Segment 1 Construction [STA 990+10 to 1112+99]	28-Jun-19A	17-Apr-24	$\vdash$	_	-			-	,
Segment 2 Construction [STA 1112+99 to 1227+29]	28-Jun-19A	08-May-24			-		_	-	•
Segment 3 Construction ISTA 1227+29 to 1401+87]	28-Jun-19 A	06-Jun-24	*****	*******		*********			
Commissioning	10-May-21 A	10-Sep-24	$\vdash$		$\rightarrow$		_		_
Provisional Sums	01-Dec-19A	18-Feb-24			+	_		-	
Change Orders	01-Jul-19A	28-Jul-24			-		_	-	_

#### **Schedule Performance Index**

For the May period, the Early SPI is 0.85 and Late SPI is 1.08 (previously: 0.85 and 1.08 respectively). May cumulative actuals were in between the Cumulative Early and Late date planned value. Kiewit performance for the month of May is in between early and late revised planned value.

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



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#### **Next Period's Activities**

#### Design:

- Structure C Rigid Pier Design completion.
- Systems Issue For Construction Design package to be submitted.
- Federal Way Transit Center (FWTC) Station design completion.

#### **Construction:**

- Guideway substructure and extensive superstructure construction continues (all segments).
- Track work: Track layout, plinths, final alignment..
- SR99 Bridge: Continue diaphragms and deck construction, approach slabs, electrical and gas work. Establish long term Right Lane.
- Kent Des Moines (KDM) Garage: Concrete work to resume, install plumbing/drainage, steel tread and railing, and elevator roof.
- KDM Station: Continue slab-on-grade foundation and underground mechanical / electrical / plumbing, emergency stair construction, and walls for escalators.
- Star Lake Garage: Construction effort for walls, columns, and post tensioned decks.
- FWTC Garage: auger cast piles, partial wall demo.

## **Closely Monitored Issues (F200)**

- Structure C soil liquefaction potential was identified requiring an updated structure design; the ST standard was achieved in a technical resolution meeting. ST accepted merit on the differing site condition claim, submitted by the contractor. Negotiations for the Change Order are ongoing.
- Siding Track: original Project Requirements did not meet the needs of ST Operations. ST Operation needs were confirmed, and redesign is being finalized. Work Directive for coordinated drainage issued.
- Escalator manufacturer equivalency. Design Build Contractor failed to demonstrate the proposed escalator manufacturer was equivalent to the others listed within the specification.
- Blocked drainage pipe in I-5: Design Build Contractor likely damaged the median drainage pipe near Midway Landfill. Resolution design is complete. Install median drainage in June

# **Cost Summary**

Present Financial Status	Amount
F200 Contractor - Kiewit Infrastructure	e West Co
Original Contract Value	\$1,285,200,000
Change Order Value	\$153,746,352
Current Contract Value	\$1,438,946,352
Total Actual Cost (Incurred to Date)	\$735,938,518
Percent Complete	52.5%
Authorized Contingency + Add'l Ctg	\$248,297,519
Contingency Drawdown	\$153,746,352
*Contingency Index *Excludes ATC/NTD	1.41



Progress of 2nd Utility Trench At KDM Facing South

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## **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.

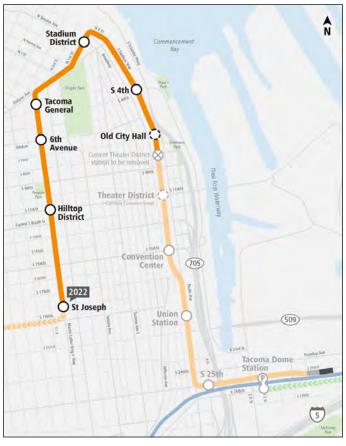
Systems Expansion of the Operations and

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

- Heading 1: Completed signalization at 7th and Commerce. Began installation of glazing at Old City Hall station.
- Heading 2: Continued flatwork and ADA ramps on N. 2nd St. and N. 1st and Tacoma respectively.
- Heading 3: Continued OCS grounding on MLK. Continued curb and gutter and flatwork between S. 5th and S. 7th.
- **OMF:** Continued work on Milestone No. 1 punchlist items.

# **Closely Monitored Issues**

- Staff continue to monitor LRV delivery dates and conditional acceptance timelines to support pre-revenue service.
- Staff continue to assess contractor readiness to perform contractually required systems tests and support agency integrated testing effort.
- Contractor and ST team finalizing work plan for 9th and Commerce cutover scheduled to begin in early August.

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# **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 \$6.0M was incurred. The majority of the expenditures were in the Construction phase for the T100 construction contract and the Vehicles phase for the LRV procurement 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	\$21.1	\$20.9	\$28.9	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$16.2	\$15.1	\$14.3	\$16.2	\$0.0
Construction Services	\$16.7	\$15.4	\$12.5	\$16.7	\$0.0
Third Party Agreements	\$1.4	\$1.3	\$1.0	\$1.4	\$0.0
Construction	\$172.3	\$151.5	\$148.0	\$172.3	\$0.0
Vehicles	\$39.7	\$31.9	\$25.2	\$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
Total	\$282.7	\$243.7	\$229.4	\$282.7	\$0.0

#### **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	\$29.0	\$28.3	\$33.0	\$0.0
20 Stations	\$3.7	\$3.2	\$3.2	\$3.7	\$0.0
30 Support Facilities	\$43.8	\$38.5	\$37.6	\$43.8	\$0.0
40 Sitework & Special Conditions	\$55.0	\$48.4	\$47.3	\$55.1	\$0.1
50 Systems	\$36.8	\$32.3	\$31.6	\$36.8	\$0.0
Construction Subtotal (10 - 50)	\$172.3	\$151.5	\$148.0	\$172.3	-\$0.1
60 ROW, Land	\$1.8	\$1.9	\$1.9	\$1.9	\$0.2
60 Vehicles	\$39.4	\$31.9	\$25.2	\$39.7	\$0.3
80 Professional Services	\$67.4	\$58.4	\$54.3	\$68.8	\$1.4
90 Unallocated Contingency	\$2.0	\$0.0	\$0.0	\$0.0	-\$2.0
Total (10 - 90)	\$282.7	\$243.7	\$229.4	\$282.7	\$0.0

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

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## **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 contract, Design Services During Construction contract and Construction Management services contract. 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 \$4.9M due to executed change orders on the Construction Management contract and the T100 contract. The current balance is \$23.4M.

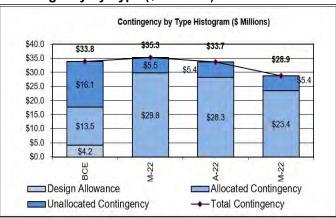
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance is unchanged.

#### **Contingency Status (Monthly)**

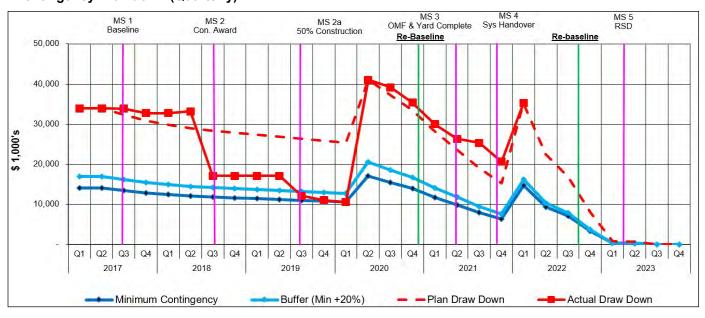
	Base	eline	Re-Baseline			
Туре	Amount	% of Total	Amount	% of Work		
Design Allowance	\$4.2	2.2%	\$0.0	0.0%		
Allocated Contingency	\$13.5	6.8%	\$23.4	43.9%		
Unallocated Contingency	\$16.1	8.2%	\$5.4	10.2%		
Total	\$33.8	17.2%	\$28.9	54.2%		

Table figures are shown in millions.

### **Contingency by Type (\$ Millions)**



#### **Contingency Drawdown (Quarterly)**



Contingency Drawdown as of March 31, 2022

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# **Risk Management**

The following are the top project wide risks:

- The T100 contractor may submit a cumulative impact claim that exceeds available budget.
- 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.
- There may be a lack of experienced testing/commissioning personnel which could result in delays to substantial completion, particularly on the alignment.
- Vehicle delivery may be delayed which could impact timely testing and commissioning of the vehicle and increase risk of fewer vehicles available for pre-revenue and revenue service.
- The 9th and Commerce cutover may not begin or end on time which could cause impacts to project, operations and the city.



Paving west side of S 5th St. May 23, 2022.

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# **Project Schedule**

The master schedule was updated through the end of May 2022. The overall physical percent complete is 89.0%.

**LRV**: The first two LRVs were delivered to Tacoma. LRVs #3 and #4 are scheduled for delivery in late July and LRV #5 in late August 2022.

**T100:** The contractor is working on the detailed schedule to support the critical cutover at 9<sup>th</sup> and Commerce scheduled to begin August 1, 2022.

**Rail Activation**: The rail activation schedule is updated monthly and incorporates information from the T100 System Integration Testing and BEC LRV schedules. The rail activation schedule also includes safety certification activities in advance of revenue service date.

Quantitative Risk Analysis (QRA) The project risk register was updated May 24, 2022.

ivity Name	Start	Finish	200	2	4 1 1 1	202	3
				Q3	Q4	Q1	Q2
HTLE - Master Schedule May 2022 Update -	02-Feb-15 A	31-Mar-23			1		7
Project Milestones	28-Sep-17 A	31-Mar-23					7
MS-01 - Project Baseline		28-Sep-17 A	1				
MS-02 - Construction Contract Award		27-Aug-18 A	1 1		-		1
MS-03 - Submit Design & Delivery Schedule for the Automatice Vehicle Locator		21-Nov-18 A				MILE MEDICAL CONTRACTOR	1
BEC - LRV Delivered Car 1 to ST (Contractual Date Jun 4 2020)		22-Mar-22 A					
BEC - LRV Delivered Car 2 to ST (Contractual Date Aug 4 2020)		10-May-22 A					1
MS-01 - OMF & Yard Complete (Contractual Date Nov 21 2020)		22-May-22 A			İ		Ī
BEC - LRV Delivered Car 3 to ST (Contractual Date Sep 4 2020)		25-Jul-22*		•			
BEC - LRV Delivered Car 5 to ST (Contractual Date Nov 4 2020)		26-Jul-22					1
T100 - 9th and Commerce Cutover Start		01-Aug-22	9	•			
BEC - LRV Delivered Car 4 to ST (Contractual Date Oct 4 2020)		29-Aug-22*		•			1
MS-02 - Substantial Completion of all work (Contractual Date May 29 2021)		11-Jan-23				•	1
MS-05 Revenue Service Date (FTA Grant RSD Mar 31 2023)		31-Mar-23			1		•
Preliminary Engineering	02-Feb-15 A	04-Nov-16 A			la companya da co		January 1
Final Design	04-Jan-16 A	31-May-18 A					
ROW	01-Oct-15 A	11-Jan-19A					1
Owner Furnished Materials / Equipment Procurement	02-Oct-17 A	20-Dec-22				7	
Light Rail Vehicles (Qty 5)	11-Od-16A	19-Oct-22			-		
Construction	23-Jan-18 A	11-Jan-23				+	
SIT	01-Dec-21 A	19-Dec-22				<b>*</b>	7
Pre-Revenue Service	17-Dec-22	14-Feb-23			,	_	1
Pre-Revenue Service (Based on all LRVs being CA)	17-Dec-22	14-Feb-23			-		
Project Float - Owner Controlled	15-Feb-23	31-Mar-23			-	-	100
Project Float - Baseline Project Float (None Remaining)	15-Feb-23*	31-Mar-23					
Revenue Service	31-Mar-23	31-Mar-23			1		Y
Revenue Service Begins (FTA Grant RSD Mar 31,2023)		31-Mar-23	] [				•

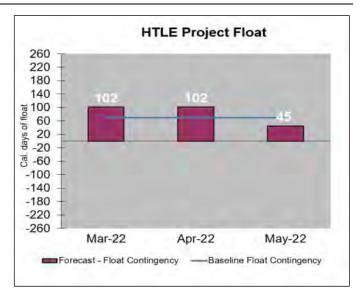
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#### **Project Float**

The HTLE Revenue Service Date (RSD) was re-baselined in February 2022 (under Board Resolution R2022-03) to Q1 2023. This forecast completion was based on the project QRA performed in late January 2022. The project RSD does not include work-arounds to achieve an earlier RSD.

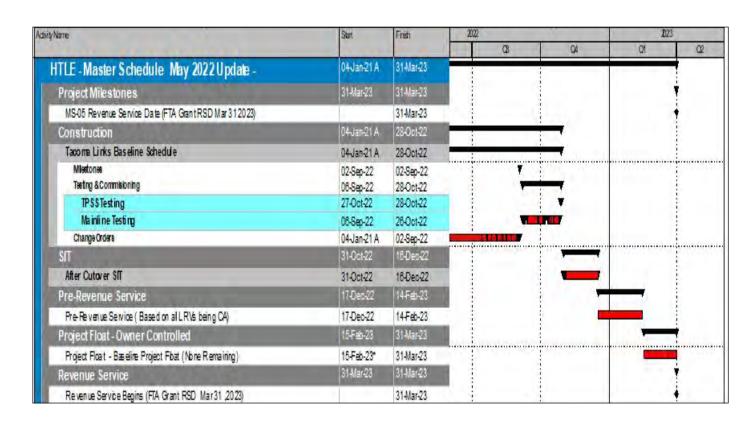
For reporting and analysis purposes, schedule float is calculated based on the latest schedule data and an RSD of March 31, 2022 with a specific date for Revenue Service to be determined. The reduction of float contingency in May resulted from the de-coupling of system-wide testing completion from the 9th & Commerce cutover. The team is still working through the scheduling changes necessary to support the prioritization of cutover work, and expects the float contingency to be further updated in subsequent periods.



### **Critical Path Analysis**

The project contains multiple critical paths. The first is the start of the 9th and Commerce Cutover scheduled for August 1st. The second is completion of OCS registration completion and resolution of OSC conflicts with signals. in order to complete Level 3 system Testing. The third critical path pertains to LRV deliveries and conditional acceptance.

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



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## **Community Engagement**

- Produced and distributed the weekly construction alert about traffic impacts.
- Continued coordinating the Loyal to the Local program.
- Maintained project Facebook page and posted updates about second LRV, the Hilltop Spring Crawl, and ongoing project work.

## **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 project is sufficiently staffed for this period. ST will monitor project needs and adjust FTE levels as needed. Consultant FTEs are slightly under plan.

In this period Actual FTE calculations were revised to an annual basis of 1920 hours to account for holidays and time off.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	20.7	17.1	3.6
Consultants	23.4	18.4	5.0
TOTAL	44.1	35.5	8.6
* An ETE is the consistent of	1000 having VTD marfarmanas F		h. footon of 100

#### \* 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 during this period.	Date
	None during this period.	

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# **Construction Safety**

Data/ Measure	May 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	0	1	69	
Average Number of Employees on Worksite	102	-	-	
Total # of Hours (GC & Subs)	4,077	34,570	375,322	
OSHA Incident Rates	Month	Year to Date	Project to Date	
Recordable Injury Rate	0.00	5.79	6.93	
Lost Time Injury (LTI) Rate	0.00	0.00	0.00	
Recordable National Average	2.50			
LTI National Average	1.10			
Recordable WA State Average	5.20			
LTI WA State Average	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.

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# Contract T100 — Hilltop Tacoma Link Extension

# **Current Progress**

- Heading 1: Started station canopy glazing and electrical panel work at Old City Hall and N. 4<sup>th</sup> Street Stations.Poured flatwork at the I-705 and Stadium Way intersection.
- Heading 2: Finished glazing at Stadium District station.
- Heading 3: Poured parking area at TPSS #4 and installed fences and gates at TPSS#3. Began canopy glazing at 6<sup>th</sup> Ave Station.
- OMF Bldg.: Continued Milestone #1 punch list items.

# **Schedule Summary**

Sound Transit rejected the T100 contractor's May 2022 monthly schedule submittal. The contractor's current update contains constraints which do not support the August 1, 2022 start of the 9th and Commerce cutover.

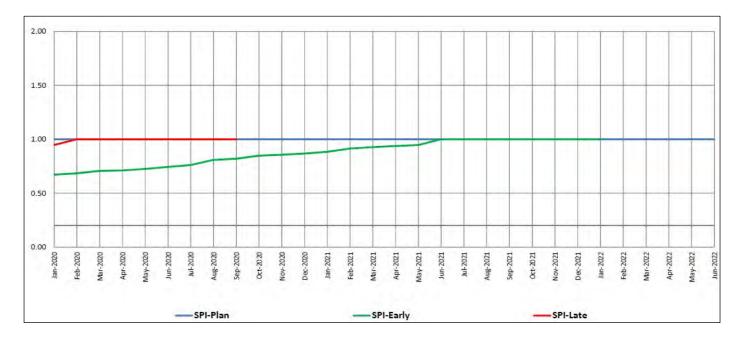
ame	Start	Finish	2022				2023	
				22	Q3	Q4	Q1	
00 Hilltop Feb 2022 Update	31-May-18 A	12-Sep-22		- 1	7			
acoma Links Baseline Schedule	31-May-18 A	12-Sep-22			_			1
Milestones	29-Jun-18 A	12-Sep-22		-	-			1
Job Milestones	29-Jun-18 A	12-Sep-22		- 1	-			1
Contractual Milestones	21-Nov-18 A	11-Sep-22			-		-51124111	L
Contr. MILESTONE 3: Submit and Design of and Delivery Schedule for AVL (NTP+90 = 11/25/18)		21-Nov-18 A						Ī
Contr. MILESTONE 1: Substantial Completion of OMF & Yard (NTP + 817 + 116 = 3/17/21)		22-Mar-22*	•					ŀ
Contr. MILESTONE 2: Substantial Completion of All Work (NTP + 1005 + 247 = 1/30/22)		11-Sep-22*		1	•			į.
PreConstruction	31-May-18 A	31-Aug-22			-			1
Heading 1: 7th & Commerce to Stadium Way & Division	15-Oct-18 A	11-Sep-22		-	-		· Samuel	
Heading 2: Stadium Way & Division to Division St and MLK	23-Oct-18 A	29-Jul-22	-		<b>v</b>	*********		1
Heading 3: Division St and MLK to MLK & 19th	15-Oct-18 A	15-Aug-22	-	-	7			1
OCS Wire Runs	19-Jul-21 A	02-Sep-22	1	-	-			-
Train Signal System	19-Dec-20 A	02-May-22	-					-
Job Wide ITS	07-Mar-22	25-May-22	-	7				-
OMF Facility	29-Aug-18 A	22-Mar-22	-					1
Testing & Commissioning	11-Mar-19 A	10-Sep-22	-		_			-
OMF Testing	21-Oct-19 A	27-Jul-22	-	=+	*			İ
Yard Testing	02-Oct-20 A	03-Mar-22	7					1
TPSS Testing	10-Feb-20 A	01-Jun-22		7				1
Stations Testing	01-Mar-22	27-Apr-22					DEAN MANY	-
Mainline Testing	11-Mar-19 A	10-Sep-22		1 P	_			1
Old Alignment	26-May-22	03-Jun-22		*				1
Change Orders	07-Jan-19 A	06-Sep-22			_			i
Provisional Sum Time Impacts	01-Feb-19 A	10-May-22						1
Other Time Impacts	04-Mar-19 A	25-Apr-22					THE THE TRACE	1
RFCs	09-Jan-19 A	29-Jun-22	1					i
Provisional Sums	03-Dec-18 A	18-Jul-22						1
Weather Days	04-Feb-19 A	27-Jan-20 A						1

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#### Schedule Performance Index

This period the early SPI and late SPI were 1.0, the same as last month. The SPI shown is relative to the project baseline and does not incorporate executed change orders and time extensions. Contractor needs to reforecast executed changes, upon receiving that, ST will incorporate that data into the SPI and report accordingly. Until such time, SPI will remain at 1.0.



#### **Next Period's Activities**

- Heading 1: Complete canopy glazing and flatwork at Stadium Way and I-705 intersection. Receive power drops (provided by Tacoma Public Utilities) at Old City Hall and S. 4<sup>th</sup> Street stations. Complete traffic signal adjustments at S.4<sup>th</sup> and Stadium Way intersection.
- Heading 2: Adjust OCS and signal at Division Ave. and Yakima and Division Ave. and I Street intersections.
- Heading 3: Complete installation of gate and fence at TPSS #3. Receive power drops (provided by Tacoma Public Utilities) at Hilltop Station. Complete finishes at St. Joseph's station and OCS adjustments at the 6<sup>th</sup> Ave. and MLK intersection.
- OMF Bldg.: Continue Milestone #1 punch list items.

## **Closely Monitored Issues**

- ST continues to monitor contractor compliance to protocols identified in their COVID-19 safety plan.
- ST continues 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.
- The cutover at 9th and Commerce requires a series of planning workshops which began in January 2020.
   Participants include ST (including Operations), City of Tacoma and the contractor.

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# Link Light Rail Hilltop Tacoma Link Extension



# **Cost Summary**

Present Financial Status	Amount
T100 Contractor— Walsh Construction	Company
Original Contract Value	\$108,295,000
Change Order Value	\$27,093,252
Current Contract Value	\$135,388,252
Total Actual Cost (Incurred to Date)	\$132,988,946
Percent Complete	98%
Authorized Contingency	\$40,114,750
Contingency Drawdown	\$27,093,252
Contingency Index (CI = % Complete/% Ctg Spent)	1.5



Activating Signals at S. 7th—H1

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# Link Light Rail Hilltop Tacoma Link Extension



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

## **Current Progress**

- LRV #1 On site testing has started and conditional acceptance forecast for September 15, 2022.
- LRV #2 delivered on May 10, 2022 and conditional acceptance forecast for September 15, 2022.
- LRV #3 delivery is forecast for July 25, 2022 date and conditional acceptance for October 15, 2022
- LRV #4 delivery is forecast for July 26, 2022 and conditional acceptance for November 15, 2022.
- LRV #5 delivery is forecast for August 29, 2022 date and conditional acceptance for December 15, 2022
- Brookville and Sound Transit continue to hold weekly meetings regarding the project schedule and identify mitigation steps to maintain delivery dates and track performance regarding testing and commissioning efforts.

### **Schedule Summary**

Brookville's May 2022 Monthly progress update is represented in the narrative.

LRV #1 Started brake and propulsion rough tuning and final tuning tests.

LRV #2: Delivered to the Tacoma OMF on May 10, 2022 and began vehicle static testing.

LRV #3: Completed of truck 1 and 2 assemblies. Complete final paint touch up and inspection

LRV #4: Continued electrical sub-assembly of A-Car, B-Car and C-Car and began final assembly.

LRV #5: Began electrical sub assembly of A-Car, B-Car and C-Car

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

Delays due to personnel resource availability impacted final assembly and delivery dates of vehicles to Tacoma.

tivity Name	Start	Finish		2022		202
		The same of the sa	Q2	Q3	Q4	Q
BEC Monthly Update - Apr 2022	04-Dec-17 A	30-May-23				
Tacoma NTP	04-Dec-17 A			1181		
Kick Off/Schedule Creation	17-Apr-19 A	17-Apr-19 A				
Engineering - Tacoma	22-Mar-22 A	30-May-23				-
CDRL Submittals - Tacoma	20-Feb-23	03-Apr-23				
MANUFACTURING / TESTING	16-Mar-22 A	11-Oct-22			•	000
Component/System Type Tests	14-Jun-22	20-Jun-22	-			
Car 1	16-Mar-22 A	14-Sep-22	_			
Ship	16-Mar-22 A	22-Mar-22 A		-4:		
Onsite Testing	22-Mar-22 A	10-Aug-22		T		
Conditional Acceptance	10-Sep-22	14-Sep-22	TOTAL STREET	₩		
Car 2	04-May-22	12-Sep-22	V	-		
Ship	04-May-22	10-May-22	T-7			
Onsite Testing	11-May-22	15-Aug-22		<del></del>		
Conditional Acceptance	12-Sep-22	12-Sep-22				Orași de la S
Car 3	27-Jul-22	13-Sep-22		· · · · · · · · · · · · · · · · · · ·		
Ship	27-Jul-22	01-Aug-22		<b>—</b>		
Onsite Testing	02-Aug-22	12-Sep-22		· · · · · · · · · · · · · · · · · · ·		
Conditional Acceptance	13-Sep-22	13-Sep-22		V <sub>2</sub> =		
Car 4	08-Aug-22	23-Sep-22		· ·		
Ship	08-Aug-22	13-Aug-22		<b>T</b>		
Ship LRV 4	08-Aug-22	13-Aug-22				
Onsite Testing	15-Aug-22	23-Sep-22		· · · · · · · · · · · · · · · · · · ·		
Conditional Acceptance	23-Sep-22	23-Sep-22		· · · · · · · · · · · · · · · · · · ·		
Car 5	24-Aug-22	11-Oct-22				Appropriate Copies
Ship	24-Aug-22	30-Aug-22	T	<del></del>		
Ship LRV 5	24-Aug-22	30-Aug-22				
Onsite Testing	30-Aug-22	11-Oct-22		· ·	•	
Conditional Acceptance	11-Oct-22	11-Oct-22			▼	

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### **Project Summary**

Scope Design, manufacturing, assembly,

inspection, testing and delivery of 152 low

floor light rail vehicles for service requirements of Northgate, East Link and Lynnwood Link, Federal Way and Downtown Redmond Extensions.

Phase Manufacturing

**Budget** \$740.7 Million (Baseline September 2015,

Amended April 2017)

Schedule Project Completion: Q3 2024



Siemens Series 2 Link light rail vehicle

### **Key Project Activities**

- Continued LRV deliveries to ST's operations and maintenance facilities five LRVs were delivered this month.
- Continued Conditional Acceptance (CA) activities on delivered LRVs at ST's OMF one LRV was 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 the are 27 cars at various stages of final assembly & car shells.

## **Closely Monitored Issues**

- Eight 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 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. Retrofit works continue to be planned to start in June 2022.

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## **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 \$422.7M to which a majority of the cost is attributed to the vehicles phase budget of \$404.5M. The current period expenditure is \$10M, where \$9.8M 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	\$6.6	\$6.4	\$9.6	\$0.0
Construction Services	\$18.0	\$18.0	\$15.1	\$11.7	\$18.0	\$0.0
Vehicles	\$713.1	\$713.1	\$661.6	\$404.5	\$713.1	\$0.0
Total	\$740.7	\$740.7	\$683.3	\$422.7	\$740.7	\$0.0

### **Cost Summary by SCC**

SCC Elements	Baseline Budget	Authorized Project Allocation	Commitmen t 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	\$669.8	\$409.4	\$705.1	\$0.0
80 Professional Services	\$23.2	\$23.8	\$13.5	\$13.3	\$23.8	(\$0.0)
90 Contingency	\$12.2	\$11.8	\$0.0	\$0.0	\$11.8	\$0.0
Capital Total (SCC 10 - 90)	\$740.7	\$740.7	\$683.3	\$422.7	\$740.7	\$0.0

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

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### **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 Automatic Train Protection (ATP) retrofit schedule has substantial impact on commissioning LRVs #42-100.
- 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.
- 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 \$55.0M or about 17.3% 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.

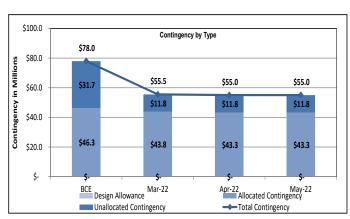
Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline's allocated contingency was \$46.3M. No contingency was drawn during this period; hence the allocated contingency remains at \$43.3M.

**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	Base	eline	Current					
Status	## Amount	% of Total Budget	Remaining Amount	% of Work Remaining				
Design Allowance	\$ -	0.0%	\$ -	0.0%				
Allocated Contingency	\$ 46.3	6.3%	\$ 43.3	13.6%				
Unallocated Contingency	\$ 31.7	4.3%	\$ 11.8	3.7%				
Total	\$78.0	10.7%	\$ 55.0	17.3%				

### **Contingency by Type**



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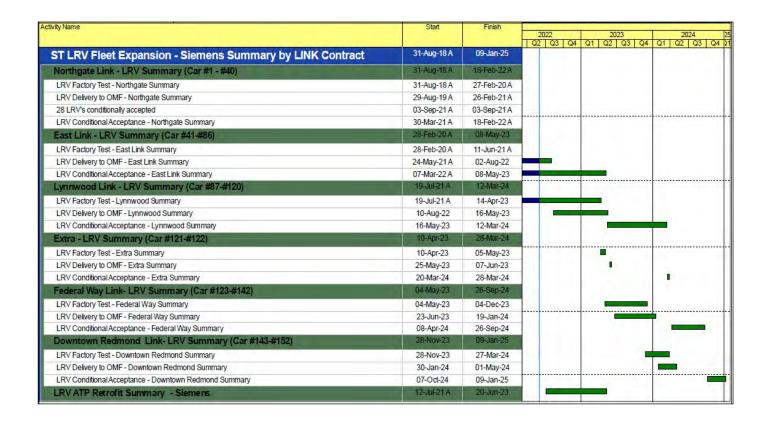
### **Project Schedule**

Percent complete of the contract payment milestones is calculated at 60.7%.

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 66 cars of which 47 cars were Conditionally Accepted. In addition, there are 22 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.



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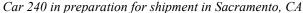
## **Critical Path Analysis**

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 28 light rail vehicles required for Northgate Link has been completed to support Revenue Service. The planned deliveries, commissioning and testing of light rail vehicles are anticipated to be completed by 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.

vity Name	Start	Finish									
				022	04	01 1	2023		01	202	
ST LRV Fleet Expansion - Siemens Summary by LINK Contract	30-Mar-21 A	09-Jan-25	Q2	Q3	Q4	Q1 (	Q2	Q3 Q4	Q1	Q2	Q3 C
Northgate Link - LRV Summary (Car #1 - #40)	30-Mar-21 A	18-Feb-22 A									
LRV Conditional Acceptance - Northgate Summary	30-Mar-21 A	18-Feb-22 A									
East Link - LRV Summary (Car #41-#86)	07-Mar-22 A	08-May-23									
LRV Conditional Acceptance - East Link Summary	07-Mar-22 A	08-May-23		and the second					The second		
ynnwood Link - LRV Summary (Car #87-#120)	16-May-23	12-Mar-24									
LRV Conditional Acceptance - Lynnwood Summary	16-May-23	12-Mar-24									
Extra - LRV Summary (Car #121-#122)	20-Mar-24	28-Mar-24									
LRV Conditional Acceptance - Extra Summary	20-Mar-24	28-Mar-24									
Federal Way Link- LRV Summary (Car #123-#142)	08-Apr-24	26-Sep-24									
LRV Conditional Acceptance - Federal Way Summary	08-Apr-24	26-Sep-24							1		
Downtown Redmond Link-LRV Summary (Car #143-#152)	07-Oct-24	09-Jan-25									
LRV Conditional Acceptance - Downtown Redmond Summary	07-Oct-24	09-Jan-25									
LRV ATP Retrofit Summary - Siemens											

LRV Delivery	and Testing Progress	as of May 31, 2022					
LRV status	Received / Delivered	Testing in progress	Conditionally Accepted	Entered Revenue			
Planned	115	18	97	97			
Actual (Seattle)	54	7	47	47			
Actual (Bellevue)	17	17	0	0			







Car 277 test preparation in Seattle, WA

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### **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 May 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	6.0	3.2
Consultants	6.9	8.2	(1.3)
TOTAL	16.1	14.2	1.9
An FTE is the equivalent of 192	0 hours. YTD performance FTE hours	s are divided by a monthly factor of 1	60.

### **Sound Transit Board Actions**

<b>Board Action</b>	Description	Date
	None to report this period.	

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## **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, as well as electrical and mechanical rough-in for the adjacent parking garage (L200).
- Continued construction of the Shoreline North / 185th Station, including station canopy steel framing (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 concrete construction of the remaining garage deck pours, along with electrical and mechanical rough in within the garage (L300).
- Ongoing rail and overhead catenary system (OCS) foundation installation on both L200 and L300.

### **Closely Monitored Issues**

- Lingering impacts on construction schedules of the labor dispute that disrupted concrete material supply in King and Snohomish counties.
- Milestone dates for guideway and facility handovers from the civil to the systems contractor are under review.
- Sediment and erosion control measures are being actively monitored based on heavy rains.

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### **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, \$39.5M was incurred. The major project expenditures were for civil and systems construction, construction management, and design services during construction. The remaining expenditures were for right-of-way, third-party coordination, and staff.

### **Cost Summary by Phase**

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$98.2	\$98.2	\$55.5	\$55.5	\$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	\$141.9	\$164.2	\$0.0
Construction Services	\$128.4	\$139.0	\$110.2	\$81.3	\$139.0	\$0.0
3rd Party Agreements	\$14.6	\$17.6	\$12.9	\$11.6	\$17.6	\$0.0
Construction	\$1,921.4	\$2,094.6	\$1,912.4	\$1,281.9	\$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	\$179.4	\$175.2	\$219.1	\$0.0
Project Contingency	\$170.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$2,771.6	\$2,771.6	\$2,459.1	\$1,786.5	\$2,771.6	\$0.0

### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$791.8	\$1,002.2	\$682.0	\$462.9	\$809.9	\$192.2
20 Stations	\$333.8	\$333.8	\$415.2	\$268.2	\$442.5	-\$108.7
30 Support Facilities	\$2.0	\$2.0	\$0.2	\$0.1	\$0.1 \$2.0	
40 Sitework & Special Conditions	\$421.1	\$426.2	\$608.9	\$478.2	\$557.3	-\$131.1
50 Systems	\$244.4	\$244.4	\$195.8	\$64.6	\$218.8	\$25.6
Construction Subtotal (10 - 50)	\$1,793.0	\$2,008.5	\$1,902.1	\$1,274.1	\$2,030.5	-\$21.9
60 ROW, Land	\$235.7	\$229.7	\$179.4	\$175.2	\$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	\$377.6	\$337.2	\$472.9	-\$24.3
90 Unallocated Contingency	\$292.2	\$83.4	\$0.0	\$0.0	\$47.8	\$35.6
Total (10 - 90)	\$2,771.6	\$2,771.6	\$2,459.1	\$1,786.5	\$2,771.6	\$0.0

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

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### **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 \$830K due to construction change orders.

### **Contingency Status**

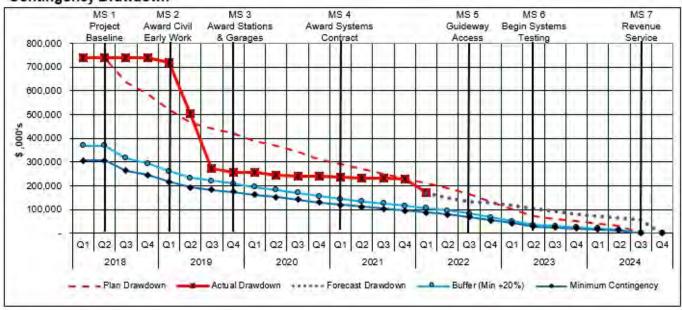
#### Baseline **Current Status** Type % of Total Remaining % of Work Amount Remaining Budget Amount Design \$247.9 8.9% \$0.0 0.0% Allowance Allocated \$197.6 7.1% \$122.7 12.5% Contingency Unallocated \$292.2 10.5% \$47.8 4.9% Contingency \$737.7 26.6% \$170.5 17.3% Total:

### Contingency by Type



Table figures are shown in millions.

### Contingency Drawdown



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### **Risk Management**

The following are the top project-wide risks:

- Delayed handover of guideway to L800 contractor causing schedule delays.
- Partner agency support resource availability for testing and commissioning.
- Field changes for design deficiencies leading to additional cost.
- Requests from third parties for additional scope as part of permit inspections / approvals.
- Agency staff availability to support full corridor testing leading to delayed pre-revenue service.

### **Project Schedule**

Weighted percent complete of the major construction contracts is calculated at 65.9%.

The Master Schedule has been updated through May. The schedule updates for L200, L300, and L800 are currently under review. The interim handover milestones have been updated based on agreement with the contractors. The revenue service date remains unchanged, and ST continues to evaluate recovery schedules, that take into account labor disputes, COVID, and other factors. Work also continues to refine the rail activation schedule. Revenue service currently remains July 17, 2024.

tivity Name	Start	Finish	2021	- 70		100	2022	2. 19			2023	1 11	2024			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q	
LLE Master Schedule	20-May-10 A	17-Jul-24														
Project Administration	20-May-10 A	17-Jul-24													-	
Final Design/Preconstruction	01-Sep-15 A	12-Mar-24	-										-			
Project Wide Utilties	01-Aug-18A	25-Mar-19 A														
L200 - Third Party Agreements	01-Aug-16A	31-May-22 A														
L300 - Third Party Agreements	02-May-16 A	16-Feb-23							-							
Permitting & AHJ Agreements	07-Jan-15 A	28-Nov-22				_		_					i -			
Owner Furnished Equipment	01-Oct-21 A	27-Jul-23		•		_					_		1			
L350 200th St. Widening	09-Apr-18A	30-Nov-22				_		-								
North Maint. of Way (MOW)	10-Jan-24	29-Jan-24											-		-	
L200 ROW Acquisitions	04-Jan-16A	16-Aug-22					-									
L300 ROW Acquisitions	14-Jan-16A	D1-Sep-23									-					
LLE WSDOT Surplus and AS	10-Jun-21 A	21-Feb-24	-			_							7			
L300 Civil Construction	25-Sep-18 A	26-Od-23										-				
L200 Civil Construction	25-Deo-18 A	10-Jan-24	-			_							•			
L800 Systems Construction	04-Deo-20 A	08-Feb-24				_							-			
LLE Rail Activation	02-Aug-21 A	17-Jul-24	-												-	
RA Tasks	02-Aug-21 A	28-May-24	-			_								-		
Pre-Revenue Service	09-Jan-24	05-Jun-24											Ç-	-		
Revenue Service Preparation	16-May-24	06-Jun-24												-	•	
Revenue Service - FFGA	06-Jun-24	17-Jul-24												-	-	
Program Wide Float - (42 CD)	08-Jun-24	17-Jul-24														
Revenue Service - 7/17/2024		17-Jul-24														

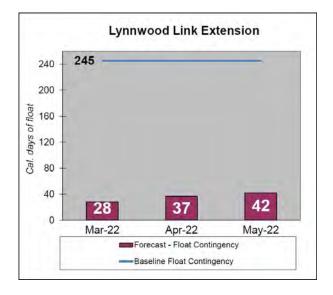
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### **Project Float**

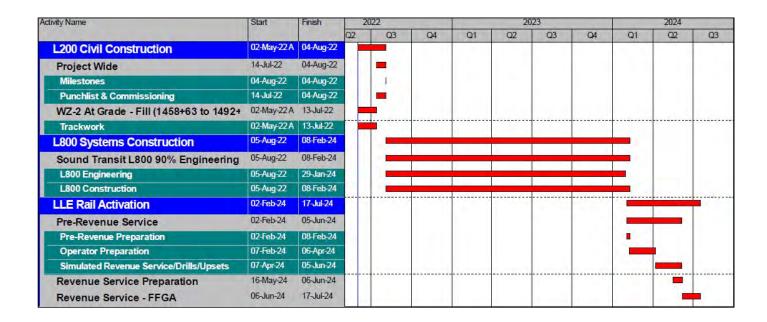
The Lynnwood Link Extension was baselined with 245 days of project float. Currently, the project is calculated to have 42 days remaining between completion of work and the July 17, 2024 revenue service date. The labor dispute related to readymix concrete deliveries, as well as COVID and other factors, has had an impact on the schedule, that is currently being evaluated.

The float reported remains preliminary at best. ST will not have a definitive project float value until the contractors have prepared and submitted recovery schedules based on the conclusion of the concrete delivery dispute, re-planning of remaining concrete pours, as well as resource availability.



### **Critical Path Analysis**

The critical path for the Lynnwood Link Extension continues to be the L200 contract. As of the end of May, the critical path is currently driven by the impact of removing and replacing substandard ballast rock in Work Zone 2. ST is working with contractor SKH to determine the impact of the issue. The critical path however remains the handover of the southern portion of the guideway to the Systems contractor for the start of overhead catenary system (OCS) work.



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### 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									
	ACQUISIT	RELOCATION							
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date				
363	400	783	755	387	386				

<sup>\*</sup>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. All Personal Property Only moves are completed. One relocation remains.

### **Community Engagement**

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

- Daytime road closures of 5th Avenue NE at NE 115th Street to NE 117th Street, and NE 120th in Seattle.
- Night work on NE 145th Street and adjacent I-5 ramps in Seattle, as well as on NE 175th Street and closure of the adjoining I-5 ramps in Shoreline.
- Nighttime closures of: 1st Avenue NE from NE 103rd Street to Northgate Way and adjacent I-5 on-ramps, NE 130th Street and adjoining I-5 off— and on-ramps in Seattle, the SR 104 and I-5 Interchange in Shoreline and Mountlake Terrace,
   236th Street SW in Mountlake Terrace, as well as the 46<sup>th</sup> Avenue W Direct Access ramp to Lynnwood Transit Center.
- Weekend closure of the freeway station at Mountlake Terrace Transit Center as well as alternating full weekend closures of southbound and northbound I-5 in Mountlake Terrace.

Community Engagement staff also distributed an email update related to the Agency's Transit Oriented Development project in the city of Lynnwood, and also closed out one and activated three temporary construction easements.

### **Sound Transit Board Actions**

Board Action	Description	Date
	None to report this period.	

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### **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	37.6	3.9
Consultants	120.0	101.0	19.0
TOTAL	161.5	138.6	22.9

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

### **Construction Safety**

May 2022	Project to Date				
0	2	34			
0	0	4			
0	60				
0	69				
0	0 3				
570	-	-			
127,320	622,800	3,752,791			
May 2022	Year to Date	Project to Date			
0.00	0.64	1.81			
0.00	0.00	0.21			
2.5					
1.1					
5.2					
	2.9				
	0 0 0 0 0 0 570 127,320 <b>May 2022</b> 0.00	0 2 0 0 0 0 0 0 0 1 0 3 570 - 127,320 622,800  May 2022 Year to Date 0.00 0.64 0.00 0.00 2.5 1.1			

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

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

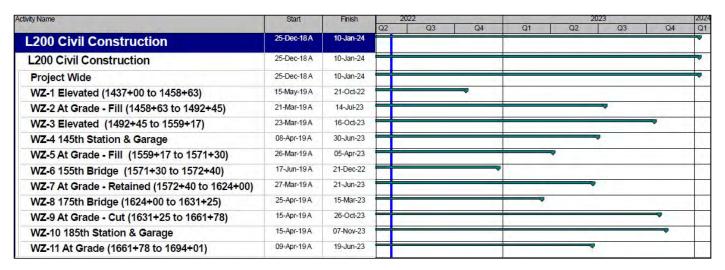
### **Current Progress**

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 concrete placement at elevator room slab on grade and placed metal decking on roof of platform canopy.
- 148th Garage Continued sprinkler piping installation and continued drywall installation in the communications room.
- 185th Station Continued stairway roofing placement and continued elevator equipment installation.
- 185th Garage Completed barrier wall concrete placement on levels 1 and 2 and continued CMU wall placement and conduit rough-ins.

### **Schedule Summary**

The May update forecasts an Nov. 12, 2023 substantial completion date, 9 calendar days later than the revised substantial completion date of November 4, 2023. Within the L200 contract schedule, the critical path is impacted primarily by the ballast removal and replacement in Work Zone 2. Sound Transit, its construction management consultants, and SKH are currently evaluating the impact and potential recovery efforts that could be put in place.

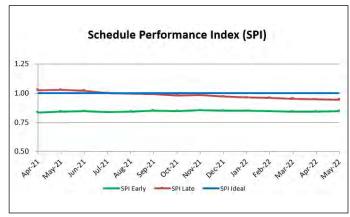


#### Schedule Performance Index

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.84 (decrease from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 0.95 (decrease from last period).

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



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### **Work Zone Overview**



### **Next Period Activities:**

- Continue concrete placement of deck spans and curbs.
- Continue MSE wall construction.
- Continue 148th Station metal decking and conduit ductbank installation/concrete placement.
- Continue 185th Garage barrier wall concrete placement and elevator steel erection.
- Continue track work installation.

## **Closely Monitored Issues:**

- Electrical utility crew availability to install and activate power feeds on schedule for systems testing.
- Effects of the labor dispute between ready-mix concrete delivery drivers and batch plant operators.
- Removal and replacement of substandard ballast in Work Zone 2.

### **Cost Summary**

Present Financial Status	Amount			
L200 Contractor - SKH Excludes 130th and betterments				
Original Contract Value	\$88,147,258			
Change Order Value	\$766,395,838			
Current Contract Value	\$854,543,096			
Total Actual Cost (Incurred to Date)	\$615,405,598			
Percent Complete	71.6%			
Authorized Contingency	\$43,762,892			
Contingency Drawdown	\$14,544,832			
Contingency Index	2.2			



185th Garage stairway structural steel

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

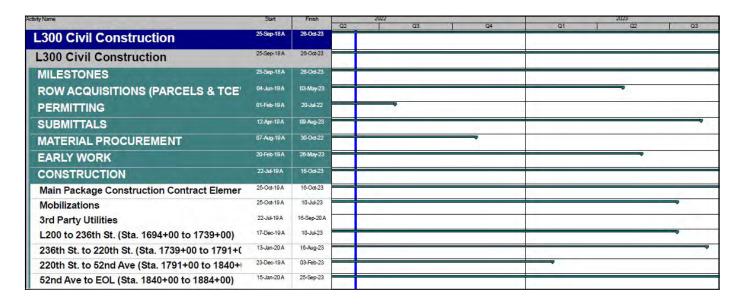
## **Current Progress**

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

- Continued 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 soil nail, cast-in-place, and MSE retaining wall construction.
- Continued conduit ductbank installation at signal houses.
- Continued track work and plinth installation along the alignment.

### Schedule Summary

The May update from Skanska is under review at this time, with a Oct. 5, 2023 Substantial Completion date. The critical path remains the completion of the Lynnwood Parking Garage, followed by completion of the Transit Center hardscape work. ST and Skanska are continuing to focus on the interim milestones representing handovers to the systems contractor.

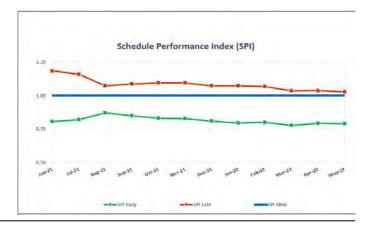


### **Schedule Performance Index**

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.79 (same from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 1.03 (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.



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### **Work Zone Overview**



### **Next Period's Activities**

- Continue Lynnwood City Center parking garage work.
- Continue track work 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.
- Continue MSE, soil nail and cast-in-place retaining wall construction.

## **Closely Monitored Issues**

- Effects of the labor dispute between ready-mix concrete delivery drivers and batch plant operators.
- Number of field changes due to design inconsistencies.
- Erosion and sediment control during the wet season.

### **Cost Summary**

Present Financial Status	Amount
L300 Contractor—Skanska	
Original Contract Value	\$56,886,631
Change Order Value	\$794,865,141
Current Contract Value	\$852,771,973
Total Actual Cost (Incurred to Date)	\$592,174,448
Percent Complete	66.2%
Authorized Contingency	\$42,888,048
Contingency Drawdown	\$17,771,973
Contingency Index	1.6



Acoustic Panel Installation Along I-5

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### Contract L800 Lynnwood Link Systems GC/CM

### **Current Progress**

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

- Continued development of engineering submittals and subcontract packages.
- Approvals and procurement of key equipment including Traction Power Substation (TPSS) transformers.
- Continued fabrication of TPSS units and train control signal building enclosures.
- Commenced Factory Acceptance Testing on TPSS and train control signal equipment.

### **Schedule Summary**

The L800 May schedule update forecasts a substantial completion of January 29, 2024, 13 days later than the revised contractual date of Jan 16, 2024. The critical path is driven by the handover of the guideway from the L200 Contractor, which was impacted by the labor dispute and now the ballast issue. MEC is currently working on mitigation plans. ST is continuing to monitor the effects of the labor dispute, as well as looking for opportunities to improve the overall work plan.

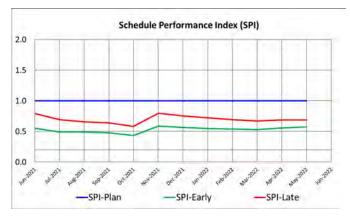


### **Schedule Performance Index**

Early SPI represents progress against an optimistic version of the contract baseline schedule. This period, the early SPI is 0.57 (increase from last period).

Late SPI represents progress against a more conservative schedule. This period, the late SPI is 0.69 (same as last period).

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



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### **Next Period's Activities**

- Continue development and reviews of engineering submittals covering all disciplines: TPSS, Overhead Catenary System (OCS), train control signal systems, and communications.
- Continued procurement of key equipment including Traction Power Substation (TPSS) and train control signal system buildings.

### **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.
- Monitoring permitting approvals by Washington State Department of Labor & Industries for remaining TPSS prefabricated structures.

### **Cost Summary**

Present Financial Status	Amount					
L800 Contractor - Mass Electrical (	Construction Co.					
Original Contract Value	\$148,000,000					
Change Order Value	\$104,244					
Current Contract Value	\$148,104,244					
Total Actual Cost (Incurred to Date)	\$33,678,720					
Percent Complete	31.1%					
Authorized Contingency	\$10,360,000					
Contingency Drawdown	\$104,244					
Contingency Index	30.9					



Representative TPSS unit

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### **Project Summary**

**Scope** Construct foundation and substructure

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

Seattle.

Phase Final Design / Early Construction

**Budget** \$36.4 Million

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



Rendering of Station

## **Key Project Activities**

- Ongoing negotiations with civil and systems contractors for L210 (Platform & Canopies) and L230 (Station Finishes) packages.
- Received approval from Sound Transit internal committee to advance to the Board for presentation of the baseline budget and schedule.

### **Project Cost Summary**

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

In the current period, \$472K was incurred. The major project expenditures were for construction services, civil design services during construction and staffing.

### **Cost Summary by Phase**

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$3.6	\$2.3	\$2.3	\$3.6	\$0.0
Preliminary Engineering	\$2.7	\$2.7	\$2.7	\$2.7	\$0.0
Final Design	\$10.8	\$9.9	\$9.5	\$10.8	\$0.0
Construction Services	\$2.1	\$1.8	\$1.6	\$2.1	\$0.0
3rd Party Agreements	\$1.0	\$0.7	\$0.5	\$0.9	\$0.0
Construction	\$16.0	\$9.8	\$5.2	\$16.0	\$0.0
ROW	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
Project Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$36.4	\$27.1	\$21.9	\$36.4	\$0.0

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

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### **Risk Management**

The following are the top project risks identified:

- Local permitting authorities may require additional right-of-way improvements beyond what was budgeted.
- Contract interface handover issues from L210 (Platform/Canopy) contractor to the L230 (Station Finishes) contractor.
- Potential challenges in synchronizing specific construction milestones with Lynnwood Link.

## **Project Schedule**

Design for the station, both Civil and Systems, is complete. Pricing and negotiation efforts are nearing conclusion. Permitting activities for the building, WSDOT utility and Street Improvement permits are ongoing. Development of construction and activation schedules has advanced and these schedules are now included as part on the integrated schedule. The station is currently scheduled to open in the Q2 2026.

obvity Name	Start	Frish	1 00	2022	1 24	1	202		-		24		64 T	202	D3	-	2	U26 Q2
NE 130th Station - Design & Permitting	04-Feb-19 A	08-Feb-23	02	Q3	Q4	Q1	Q2	Q3 Q4	Q1	02	Q3	Q4	Q1	Q2	Q3	Q4	Q1	QZ
Project Management	24-Jun-21 A	23-Jun-22		•														
Preliminary Design	04-Feb-19 A	14-Nov-19 A																
Final Design	30-Sep-19 A	19-Nov-21 A																
Permitting	16-Mar-20 A	08-Feb-23.				-												
Estimating/Negotiations/Amendments	23-Dec-19 A	23-Jun-22		•														_
NE 130th Station - Construction	04-Aug-21 A	25-Jun-28																_
NE 130th Milestones	23-Jun-22	25-Jun-26		_	_				1									
Final Design Tasks	04-Aug-21 A	29-Sep-23						-										
L210 Procurement	17-Nov-21 A	06-Jul-22		7														
L210 Construction	07-Jul-22	05-Aug-23		-				•										
L230 Procurement w/Soldier Pile Wall	01-Jun-22	17-Nov-22			-													
L230 Construction	19-Apr-23	19-Sep-25					Ψ-								-			
L810 Systems Procurement	31-Jul-24	24-Jul-25									-				7			
L810 Systems Construction	25-Jul-25	24-Feb-26							T					7	-	7	-	
Pre-Revenue & Opening	05-Apr-25	24-Jun-26																_

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### **Community Engagement**

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

- Preparing for a future online open house.
- Receiving and incorporating feedback from the online open house template.
- Presenting an overview of the NE 130th station to the Shoreline Chamber of Commerce.

## **Staffing Summary**

The planned Full-Time Equivalent (FTE) is an annual projection of ST project staff and consultants. Planned FTEs 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 more civil DSDC and CM staff than planned.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance				
ST Staff	5.8	3.6	2.1				
Consultants	4.0	6.7	(2.7)				
TOTAL	9.8	10.3	(0.6)				
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.							

# **Sound Transit Board Actions**

Board Action	Description	Date
	None to report this period.	

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### **Contract Cost Summary**

## **Civil Final Design Overview**

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

Present Financial Status	Amount					
HNTB Jacobs- Civil Final Design						
Original Contract Value	\$1,570,864					
Change Order Value	\$5,924,734					
Current Contract Value	\$7,495,598					
Total Actual Cost (Incurred to Date)	\$7,460,989					
Financial Percent Complete	99%					
Authorized Contingency	\$1,951,541					
Contingency Drawdown	\$1,913,290					
Contingency Index	1.01					

## **Systems Final Design Overview**

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

Present Financial Status	Amount				
LTK- Systems Final Design					
Original Contract Value	\$299,332				
Change Order Value	\$823,076				
Current Contract Value	\$1,122,408				
Total Actual Cost (Incurred to Date)	\$1,112,151				
Financial Percent Complete	99%				
Authorized Contingency	\$110,310				
Contingency Drawdown	\$0				
Contingency Index	N/A				

### **Construction Overview**

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

Present Financial Status	Amount				
SKH- Civil Construction (C1 package & advanced material procurement)					
Original Contract Value	\$5,000,000				
Change Order Value	\$3,456,132				
Current Contract Value	\$8,456,132				
Total Actual Cost (Incurred to Date)	\$5,037,805				
Financial Percent Complete	60%				
Authorized Contingency	\$5,410,000				
Contingency Drawdown	\$3,456,132				
Contingency Index	0.94				

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### **Project Summary**

Scope

Limits The Northgate Link Extension consists of 4.3

miles of light rail extending from the University of Washington to Northgate.

Alignment The extension begins at UW Station,

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

Stations U District Station (UDS)

Roosevelt Station (RVS)

Northgate Station and Parking Garage

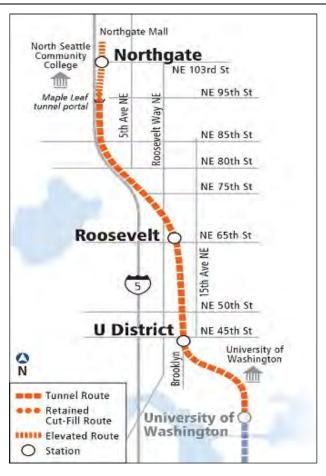
Systems Signals, track electrification, and SCADA

communications

Phase Revenue Service

**Budget** \$1.899 Billion

**Schedule** Revenue Service: October 2021



Map of Project Alignment

## **Key Project Activities**

- U District Station/UW Campus (N140) Roosevelt Station (N150) and Northgate Station (N160): The project successfully opened for Revenue Service Oct. 2, 2021. The project is now in closeout phase, focusing on completion of remaining open project items and documentation of lessons learned.
- Systems (N830): Punch list items for all disciplines are in the verification phase prior to full closure. Building Management System (BMS) testing is complete. Minor updates resulting from test findings will be deployed on the Northgate Train Control System pending completion of field work and scheduling with operations staff.

## **Closely Monitored Issues**

• Systems N830: The team continues to receive, track and close issues that arise post-revenue-service start-up.

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## **Project Cost Summary**

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

The Estimated Final Cost (EFC) for the project as of this reporting period is \$1,847.3M, which is \$52.5M below the current project budget, unchanged since last period. This period, only \$200K was incurred as construction closeout activities continue to wrap up.

### **Cost Summary by Phase**

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$144.9	\$130.4	\$106.6	\$106.6	\$124.1	\$6.3
Preliminary Engineering	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
Final Design	\$132.2	\$137.2	\$121.8	\$119.8	\$132.0	\$5.2
Construction Services	\$118.3	\$118.3	\$105.5	\$105.5	\$112.2	\$6.1
3rd Party Agreements	\$11.8	\$11.8	\$10.4	\$8.5	\$11.0	\$0.8
Construction	\$1,343.0	\$1,352.5	\$1,301.7	\$1,294.6	\$1,342.0	\$10.6
ROW	\$112.3	\$112.3	\$102.4	\$102.2	\$111.0	\$1.3
Project Contingency	\$22.2	\$22.2	\$0.0	\$0.0	\$0.0	\$22.2
Total	\$1,899.8	\$1,899.8	\$1,763.5	\$1,752.1	\$1,847.3	\$52.5

### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$595.6	\$522.0	\$516.0	\$515.9	\$520.7	\$1.3
20 Stations	\$376.1	\$464.7	\$461.1	\$460.2	\$465.6	-\$0.9
30 Support Facilities: Yard, Shop	\$5.3	\$6.5	\$6.5	\$6.5	\$6.5	\$0.0
40 Sitework & Special Conditions	\$140.8	\$188.2	\$181.9	\$178.8	\$185.7	\$2.5
50 Systems	\$110.9	\$117.1	\$108.9	\$107.6	\$116.1	\$1.1
Construction Subtotal (10 - 50)	\$1,228.7	\$1,298.6	\$1,274.4	\$1,268.9	\$1,294.5	\$4.0
60 Row, Land, Improvements	\$119.9	\$110.9	\$102.4	\$102.2	\$111.0	-\$0.1
70 Vehicles	\$0.0	\$0.2	\$0.2	\$0.2	\$2.4	-\$2.2
80 Professional Services	\$420.7	\$422.9	\$386.5	\$380.7	\$424.4	-\$1.6
90 Contingency	\$130.4	\$67.3	\$0.0	\$0.0	\$14.9	\$52.3
Total (10 - 90)	\$1,899.8	\$1,899.8	\$1,763.5	\$1,752.1	\$1,847.3	\$52.5

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

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## **Risk Management**

The remaining top project-wide risks are:

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

## **Community Engagement**

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

### **Sound Transit Board Actions**

Board Action	Description	Date
N/A	None	N/A

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### **Major Construction Contract Packages**

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

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

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

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

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

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

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

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

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

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

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### Contract N140—U District Station Finishes

## **Current Progress**

The N140 Contractor, Hoffman Construction, achieved Substantial Completion in April 2020. Hoffman focused on the following activities through the end of May 2022:

• Continued administrative closeout activities.

### **Closely Monitored Issues**

Nothing to report.

### **Cost Summary**

Present Financial Status	Amount				
N140 Contractor—Hoffman Construction					
Original Contract Value	\$	159,836,688			
Change Order Value	\$	14,688,730			
Current Contract Value	\$	174,525,418			
Total Actual Cost (Incurred to Date)	\$	174,113,347			
Percent Complete		100.0%			
Authorized Contingency	\$\$	15,491,834			
Contingency Drawdown	\$	14,688,730			
Contingency Index		1.1			

### Contract N150 - Roosevelt Station Finishes

### **Current Progress**

The N150 Contractor, Hoffman Construction, achieved Substantial Completion in September 2019. Hoffman focused on the following activities through the end of May 2022:

Continued administrative closeout activities.

# **Closely Monitored Issues**

Nothing to report.

### **Cost Summary**

Present Financial Status	Amount					
N150 Contractor—Hoffman Construction						
Original Contract Value	\$ 152,291,184					
Change Order Value	\$ 18,791,006					
Current Contract Value	\$ 171,082,190					
Total Actual Cost (Incurred to Date)	\$ 170,970,422					
Percent Complete	100.0%					
Authorized Contingency	\$ 18,914,559					
Contingency Drawdown	\$ 18,791,006					
Contingency Index	1.0					

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

### **Current Progress**

The N160 prime contractor, Absher Construction, achieved Substantial Completion in December 2020. Accomplishments through the end of May 2022 include:

• Continued closeout of open change management items.

## **Closely Monitored Issues**

Nothing to report.

## **Cost Summary**

Present Financial Status	Amount				
N160 Contractor - Absher Construction					
Original Contract Value	\$ 174,000,000				
Change Order Value	\$ 19,517,596				
Current Contract Value	\$ 193,517,596				
Total Actual Cost (Incurred to Date)	\$ 193,145,508				
Percent Complete	99.9%				
Authorized Contingency	\$ 20,400,000				
Contingency Drawdown	\$ 19,517,596				
Contingency Index	1.0				

## Contract N180 - Trackwork UWS to Northgate Station

### **Current Progress**

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

Pending final contract closeout.

## **Closely Monitored Issues**

Nothing to report.

### **Cost Summary**

		_		
Present Financial Status Amount				
N180 Contractor - Stacy and Witbeck, Inc.				
Original Contract Value	\$ 71,455,950	)		
Change Order Value	\$ 4,102,105	5		
Current Contract Value	\$ 75,557,965	5		
Total Actual Cost (Incurred to Date)	\$ 75,557,965	<u>-</u>		
Percent Complete	100.0%	6		
Authorized Contingency	\$ 10,718,393	3		
Contingency Drawdown	\$ 4,102,105	5		
Contingency Index	2.6	3		

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

## **Current Progress**

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

- Performed punch list work at U District Station (UDS).
- Performed punch list work at Roosevelt Station (RVS).
- Performed punch list work at Northgate Station (NGS).

## **Closely Monitored Issues**

None to report.

## **Cost Summary**

Present Financial Status	Amount				
N830 Contractor - Mass Electric Construction Co.					
Original Contract Value	\$104,660,444				
Change Order Value	\$2,805,582				
Current Contract Value	\$107,466,026				
Total Actual Cost (Incurred to Date)	\$106,428,911				
Percent Complete	99.7%				
Authorized Contingency	\$7,233,022				
Contingency Drawdown	\$2,805,582				
Contingency Index	2.6				

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

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### **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



Map of Tacoma Dome Link Extension.

# **Key Project Activities**

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

### **Tacoma Dome Link Extension (TDLE)**

• Continued production of the Draft Environmental Impact Statement (DEIS).

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

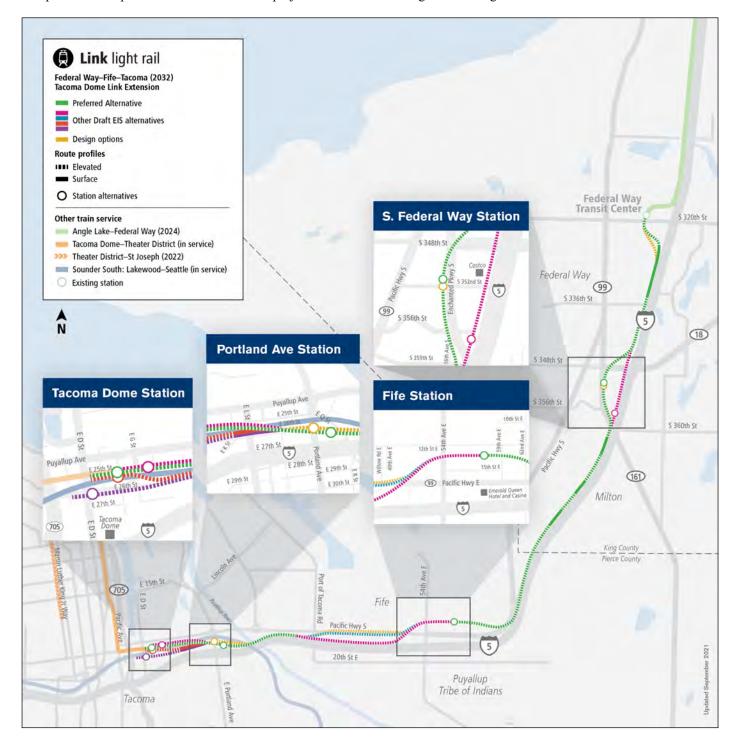
- Continued production of the Final Environmental Impact Statement (FEIS) and supporting design.
- Continued preparations for OMF South Phase Gate 2 (select delivery method) tentatively scheduled July 28.
- Geotechnical borings in the proposed OMF South project area and related Real Property/engagement coordination with property owners.

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### **Project Map**

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



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## **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 \$1.9M was incurred. The majority of project expenditures were for preliminary engineering \$845K associated with TDLE Phase 2 and OMF South Phase 3 and 3rd parties \$793K.

### **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	\$16.3	\$16.3	\$27.8	\$0.0
Preliminary Engineering	\$86.8	\$81.6	\$39.1	\$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	\$1.8	\$6.4	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$5.4	\$1.0	\$0.6	\$5.4	\$0.0
Total	\$126.4	\$102.7	\$57.8	\$126.4	\$0.0

### **Cost Summary by SCC**

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 ROW, Land	\$4.4	\$1.0	\$0.6	\$4.4	\$0.0
80 Professional Services	\$119.6	\$101.7	\$57.2	\$119.6	\$0.0
90 Unallocated Contingency	\$2.4	\$0.0	\$0.0	\$2.4	\$0.0
Total (10 - 90)	\$126.4	\$102.7	\$57.8	\$126.4	\$0.0

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

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### **Risk Management**

The following are the top project-wide risks:

### **Tacoma Dome Link Extension (TDLE)**

- Heightened risk of design changes or unanticipated mitigation associated with cultural and/or natural resources may increase project cost and extend schedule.
- 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.
- 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**

- Third party coordination and/or unanticipated required mitigation could increase cost.
- Potential impacts from higher real estate and construction costs.
- 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.
- Evaluating whether delivery method and contract packaging opportunities provide enough flexibility to meet realigned schedule for opening.
- Preferred Alternative in Federal Way requires a street vacation, which may impact schedule.

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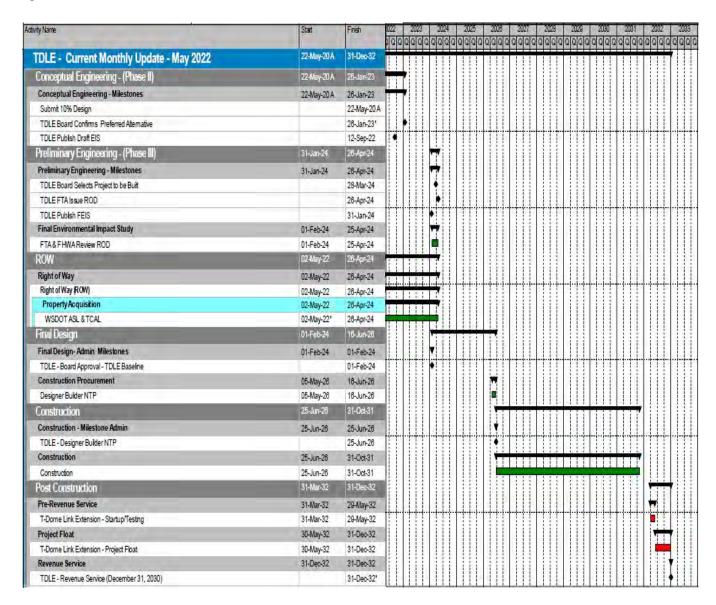
#### **Tacoma Dome Link Extension**

# **Current Progress**

• Continued production of the Draft Environmental Impact Statement (DEIS)

### **TDLE Project Schedule**

Below is the summary schedule as of May 31, 2022. The project continues to forecast a publication of the Draft Environmental Impact Statement in Q3 2022 and ST Board Preferred Alternative identified in Q1 2023.

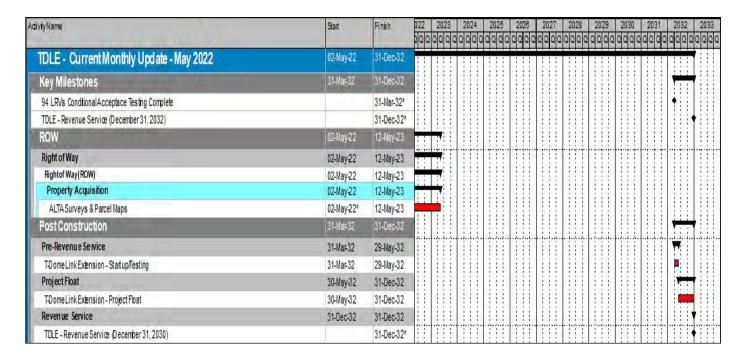


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### **TDLE Critical Path Analysis**

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



# **Community Engagement**

- Met with the Tacoma Urban League to discuss future engagement
- Met with the Asia Pacific Cultural Center to discuss future engagement
- Participation in the New Tacoma Neighborhood Council meeting

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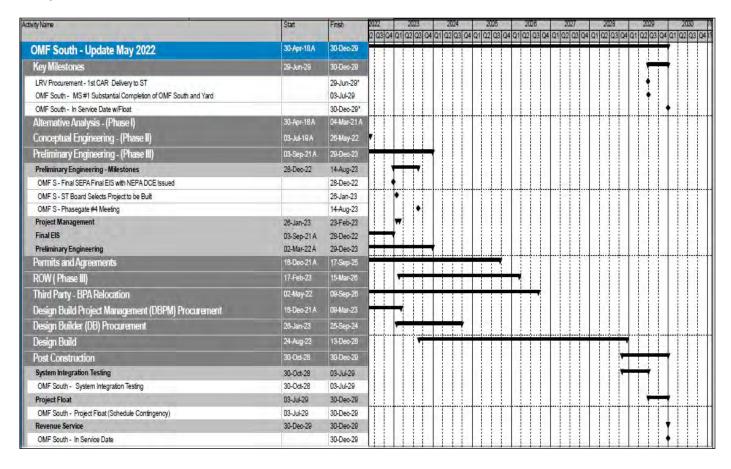
# **Operations and Maintenance Facility South**

# **Current Progress**

- Continued Phase 3 work consisting of production 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 and Tribes.

### **OMF South Project Schedule**

Below is the summary schedule as of May 31, 2022. Project is Phase 3 with the Final SEPA/Final EIS milestone is forecasted for Q4 2022.

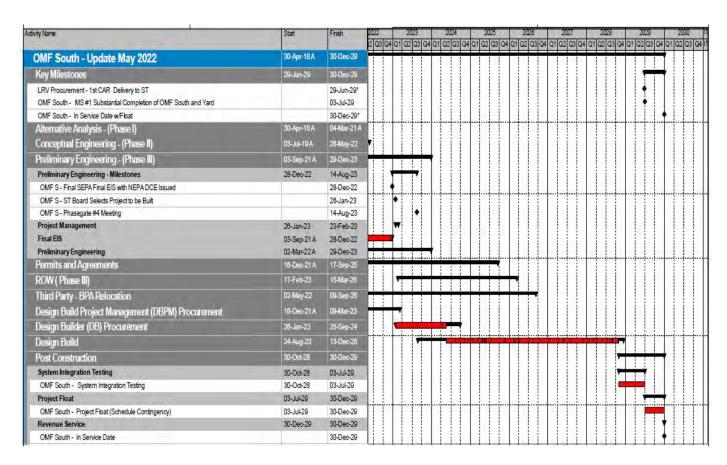


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### **OMF South Critical Path Analysis**

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 property owners in Federal Way segment.

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0

### 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.

Tacoma Dome Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions*	Board Approved*	Offers Made to	Closings to	Relocations Required	Relocations Completed

0

0

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

0

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

### **Staffing Summary**

0

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 a underrun variance to the Planned Monthly FTE average. Since the OMF South Phase 3 has started in March, the actual FTE have a smooth upward trend and underrun rate is expected to be decreased. Both ST and Consultant staffing plan will increase gradually and reach its peak by Q4 2022.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	37.3	18.5	18.8
Consultants	58.3	19.4	38.9
TOTAL	95.6	37.9	57.7

<sup>\*</sup> 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 month.	

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



# **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**

- Presented Draft EIS findings at Board System Expansion Committee workshop on the West Seattle and Ballard Link Extensions project.
- Continued community engagement activities including meetings for Community Advisory Groups, property owners, and community groups.
- Continued collecting, compiling, and translating in-language Draft EIS comments.
- Continued collecting data and conducting fieldwork activities in support of ongoing engineering design.
- Continued engagement with partners and regulatory agencies, stakeholder groups and property owners regarding environmental process and next steps.

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### **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	\$27.2	\$27.2	\$55.1	\$0.0
Preliminary Engineering	\$215.3	\$94.8	\$92.1	\$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	\$1.7	\$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	\$3.5	\$2.7	\$6.0	\$0.0
Total	\$286.7	\$128.9	\$123.7	\$286.7	\$0.0

#### **Cost Summary by SCC**

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 ROW, Land	\$5.1	\$3.5	\$2.7	\$5.1	\$0.0
80 Professional Services	\$252.2	\$125.4	\$121.0	\$252.2	\$0.0
90 Unallocated Contingency	\$29.5	\$0.0	\$0.0	\$29.5	\$0.0
Total (10 - 90)	\$286.7	\$128.9	\$123.7	\$286.7	\$0.0

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

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# **Risk Management**

The following are the top project wide risks:

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

### **Community Engagement**

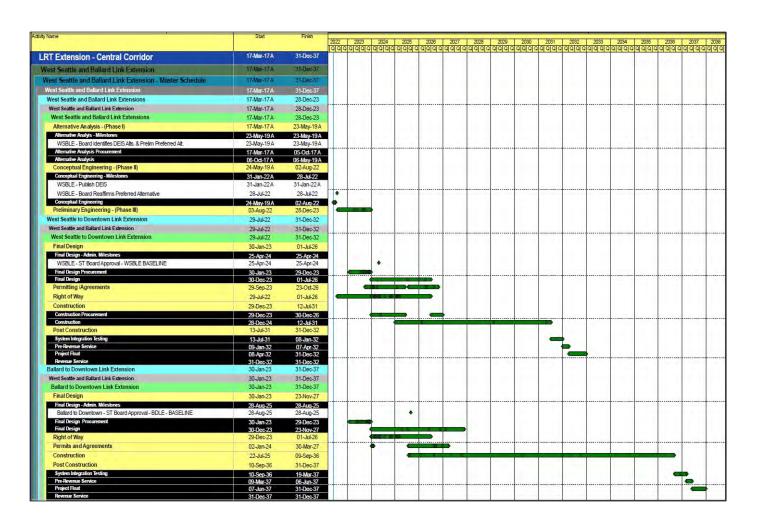
- Conducted outreach to four property owners throughout the corridor.
- Conducted five community outreach briefings, tours, and other external engagement activities throughout the corridor:
  - ♦ Delridge Neighborhood Development Association (DNDA), 5/1/22
  - ♦ Denny Triangle Neighborhood Association (DTNA), 5/12/22
  - ♦ West Seattle and Ballard Link Extensions Board System Expansion Committee Workshop, 5/20/22
  - ♦ Alliance for Pioneer Square Day of Service, 5/21/22
  - ♦ Chinatown/International District (CID) Senior Light Rail Tour, 5/25/22
- Hosted four Community Advisory Group Meetings.
- Continued efforts to contact stakeholders throughout the project corridor to offer briefings regarding the project alternatives as well as information related to ongoing fieldwork activities.

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### **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. Our DEIS was published in January 2022 and Phase 3 Preliminary Engineering approval is expected in Q3 2022. The May 2022 schedule update was received from our Designer and is currently under review. The schedule graphic below represents these updates. Our milestone for the Board to re-affirm the Preferred Alternative is expected in July 2022.



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# **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—May 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	35.4	(5.7)
Consultants	58.0	24.5	(33.5)
TOTAL	99.1	59.9	(39.2)

<sup>\*</sup> 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**

<b>Board Action</b>	Description	Date
	None to report for May 2022	

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# Progress Report **Sounder Program**



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



# Sounder Commuter Rail Program Overview





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# 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.

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# Sounder Commuter Rail Program Overview



# **Program Budget**

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

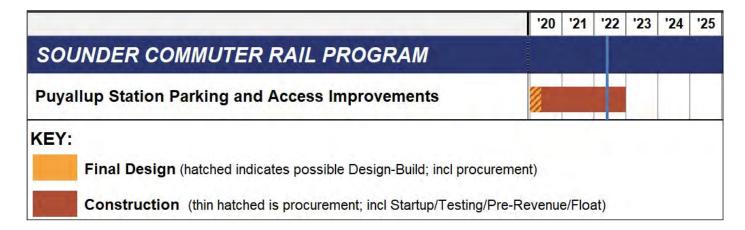
Table figures are shown in millions.

Project	Authorized Allocation	Commitment To Date	Incurred to Date	Estimated Final Cost	Authorized Allocation vs EFC
Auburn Station Access Improvement	\$14.9	\$7.5	\$5.2	\$14.9	\$0.0
Kent Station Access Improvements	\$16.8	\$11.5	\$9.6	\$16.8	\$0.0
Lakewood Station Access Improvement	\$5.9	\$1.5	\$1.3	\$5.9	\$0.0
Puyallup Station Access Improvements	\$82.4	\$75.8	\$71.9	\$82.3	\$0.0
Sounder South Capacity Expansion	\$21.1	\$5.7	\$4.7	\$21.1	\$0.0
South Tacoma Station Access Improvements	\$5.4	\$1.2	\$1.0	\$5.4	\$0.0
Sumner Station Access Improvements	\$17.8	\$16.5	\$13.4	\$17.8	\$0.0
Total	\$164.3	\$119.8	\$107.2	\$164.3	\$0.0

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-



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# **Project Summary**

Scope

The purpose of the project is to improve parking and access to the existing Auburn Sounder Station for Sounder riders, bicyclist, bus riders, and drivers.

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**

- Continued appraisals for Temporary Construction Easements (TCEs).
- Continued development of the design-build project requirements.
- Pursuing clarification regarding eligibility of Railroad Rehabilitation & Improvement Financing (RRIF) loan and packaging approach with the (non-federalized) Kent Station Parking and Access Improvements project.
- Briefed executive leadership on alternative baseline and procurement approach.

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### **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 \$111K. The incurred cost increased from \$5.13M to \$5.24M. 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	\$2.0	\$2.0	\$2.4	\$0.0
Preliminary Engineering	\$2.9	\$2.7	\$2.6	\$2.9	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$2.0	\$0.4	\$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	\$0.5	\$0.2	\$6.9	\$0.0
Total	\$14.9	\$7.5	\$5.2	\$14.9	\$0.0

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 resulting in a delay to the start of construction and cause a budget overrun.
- 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.
- Additional scope and project change requests from stakeholders could cause project delay during permit approval.

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### **Project Schedule**

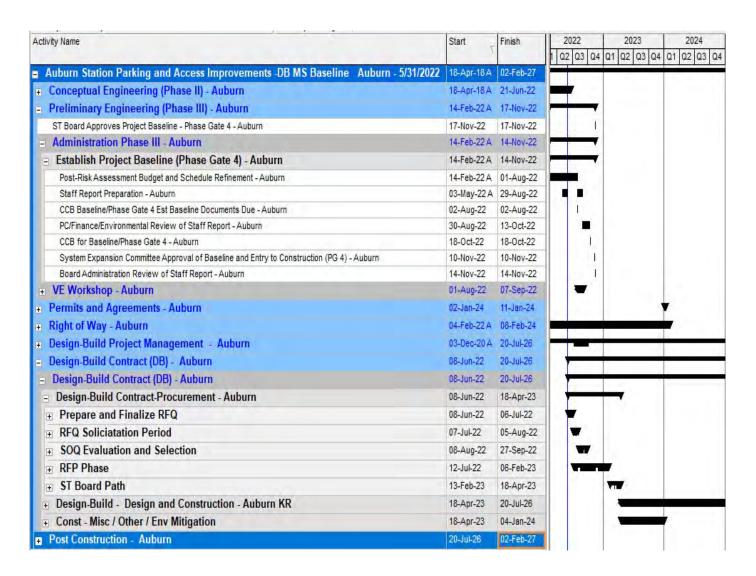
Sound Transit decided to move forward with Kent and Auburn as two separate contracts to maintain federal loan eligibility. The schedule will continue to be updated and modified to incorporate 2022 QRA session final outcomes as they become available.

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 Baselining.

Other activities underway include continued property appraisal and condemnation activities. Team is preparing to get CCB (Change Control Board) approval to issue RFQ (Request for Qualifications) mid June 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.



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# **Community Engagement**

- Online open house held to gather community feedback on garage visual design from May 4-25.
- In-person drop-in session held at Auburn Station on May 10, and a Virtual Q&A session on May 16.
- Plan to publish an engagement summary in June/July.

# **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 actual FTE monthly average will increase to planned levels as work on the DB procurement documents ramps up and leading to baselining the project.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.5	2.7	2.8
Consultants	4.5	1.6	2.9
TOTAL	10.0	4.3	5.7

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.	

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# **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.
- Continued development of the design-build project requirements.
- Pursuing clarification regarding eligibility of Railroad Rehabilitation & Improvement Financing (RRIF) loan and packaging approach with the Auburn Station Parking and Access Improvements project.
- Briefed executive leadership on alternative baseline and procurement approach.





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

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# **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 \$234K. The incurred cost increased from \$9.4M to \$9.6M. 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	\$2.2	\$2.2	\$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	\$1.9	\$0.4	\$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	\$4.6	\$4.3	\$8.2	\$0.0
Total	\$16.8	\$11.5	\$9.6	\$16.8	\$0.0

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.
- Project changes that occur during procurement that require additional environmental review could delay project.
- New building codes could cause a delay in permitting and delay the project due to seismic requirements.
- Overall increase in cost due to inflationary market conditions.

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### **Project Schedule**

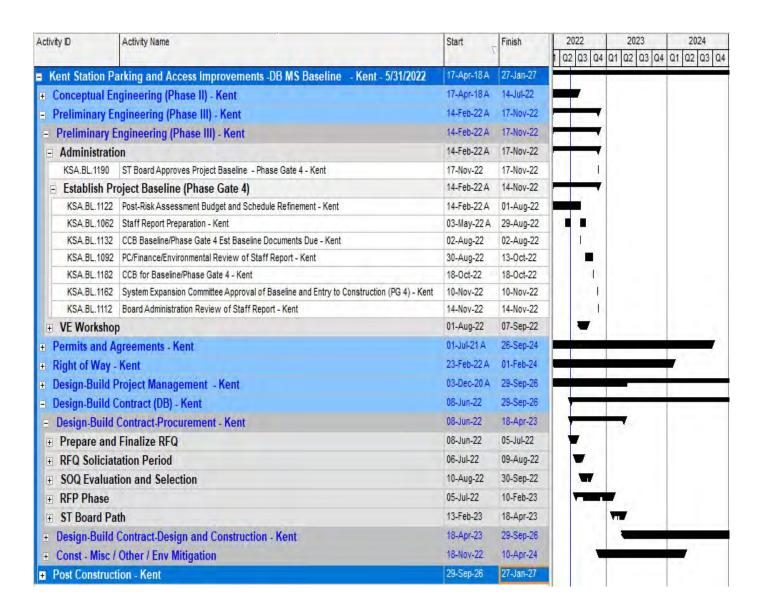
Sound Transit decided to move forward with Kent and Auburn as two separate contracts to maintain federal loan eligibility. The schedule will continue to be updated and modified to incorporate 2022 QRA session final outcomes as they become available.

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 Baselining.

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 get CCB approval to issue RFQ mid June 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.



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# **Community Engagement**

• We prepared an engagement summary of visual design outreach held in April; we will publish this in June and will incorporate feedback into the project requirements.

# **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 actual FTE monthly average will increase to planned levels as work on the DB procurement documents ramps up and leading to baselining the project.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	5.9	3.1	2.8
Consultants	4.5	1.6	2.9
TOTAL	10.4	4.7	5.7

<sup>\*</sup> 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**

<b>Board Action</b>	Description	Date
	None to report this period.	

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# **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**

- Met with the jurisdictional partners to begin Phase 2
- Drafted a Project Management Plan and Community Engagement Plan
- Prepared for survey work on the proposed improvements



Lakewood Station Garage



Lakewood Station Passenger Platform Access

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### **Project Cost Summary**

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

This period expenditures decreased by \$10.7K with the majority of the amount coming from staff costs and starting Phase 2.—Conceptual Engineering and Environmental.

### **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	\$0.7	\$0.6	\$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
Total	\$5.9	\$1.5	\$1.3	\$5.9	\$0.0

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.

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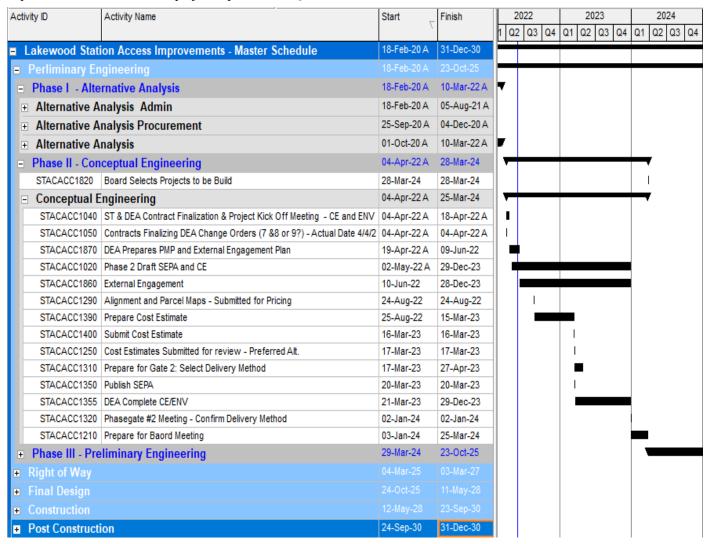


### **Project Schedule**

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 1 - 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 on April 18, 2022. Currently, the Staff is working on preparing Project Management and External Engagement Plan. Selecting Delivery Method is expected during Q2 2023. Board selects projects to be build planned for end of Q1 2024.

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



# Community Engagement.

Continued planning for Phase 2 community engagement.

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# **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 project initiation and initial identification of improvements took less effort than planned. Additionally, the majority of the Alternatives Analysis Phase work was completed in December 2021. As the project gets underway with conceptual design and environmental review of the improvements, we anticipate more staff will be needed.

Resource Type	Planned FTE Monthly Average		
ST Staff	2.7	1.1	1.6
Consultants	3.0	0.5	2.5
TOTAL	5.7	1.6	4.1

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

#### **Sound Transit Board Actions**

<b>Board Action</b>	Description	Date
	None to report this period.	

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# **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**

- Testing and commissioning finalized except for long lead items.
- Continued with off-site curb cut and curb ramp improvements.
- Transition to Operations/Facilities and achieved Substantial Completion by May 10th.
- Traffic study for potential opening prior to mitigations underway—results expected mid-June.
- Traffic signalization memo finalized by Hensel Phelps and submitted to the City in early May. Six week review expected.
- The BNSF continues with implementation of the rail crossing improvements.

# **Closely Monitored Issues**

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

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### **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 \$2.4M. The incurred cost increased from \$69.5M to \$71.9M. 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	\$4.5	\$4.5	\$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	\$5.1	\$4.7	\$5.7	\$0.0
3rd Party Agreements	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$58.4	\$61.8	\$56.9	\$53.4	\$61.8	\$0.0
ROW	\$5.6	\$6.7	\$6.6	\$6.6	\$6.7	\$0.0
Total	\$79.1	\$82.4	\$75.8	\$71.9	\$82.4	\$0.0

#### **Cost Summary by SCC**

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$47.1	\$33.3	\$30.7	\$30.9	\$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	\$9.1	\$7.9	\$10.7	\$0.0
50 Systems	\$0.0	\$3.8	\$3.5	\$3.2	\$3.8	\$0.0
Construction Subtotal (10 - 50)	\$48.0	\$47.8	\$43.3	\$42.0	\$47.8	\$0.0
60 Row, Land	\$5.4	\$6.7	\$6.6	\$6.6	\$6.7	\$0.0
80 Professional Services	\$22.0	\$27.5	\$25.9	\$23.3	\$27.5	\$0.0
90 Unallocated Contingency	\$3.7	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
Total (10 - 90)	\$79.1	\$82.4	\$75.8	\$71.9	\$82.4	\$0.0

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

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# **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 the AC was reduced by \$1.5M due to an executed change order for the S300017 contract.

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

#### Contingency Status (Monthly)

#### Baseline **Currrent Status** Type % of Total Remaining % of Work Amount Remaining Budget Amount Design \$4.6 0.0% 5.8% \$0.0 Allowance Allocated 8.0% 41.9% \$6.3 \$4.4 Contingency Unallocated \$3.7 4.7% \$0.4 4.2% Contingency 46.2% Total: \$14.6 18.4% \$4.8

### Contingency by Type

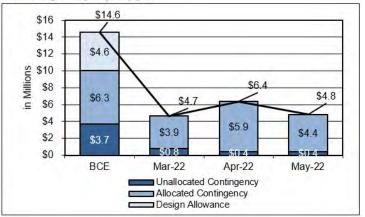


Table figures are shown in millions.

# **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 (signal heads & control cabinets) which was initially delayed by extended permit approval process.
- Coordination of the BNSF, Design Builder, and City of Puyallup to execute off-site improvements (Intersection and Signal upgrades) takes longer than expected.
- Requests for changes or modifications to completed facility once under Sound Transit assumes operations.

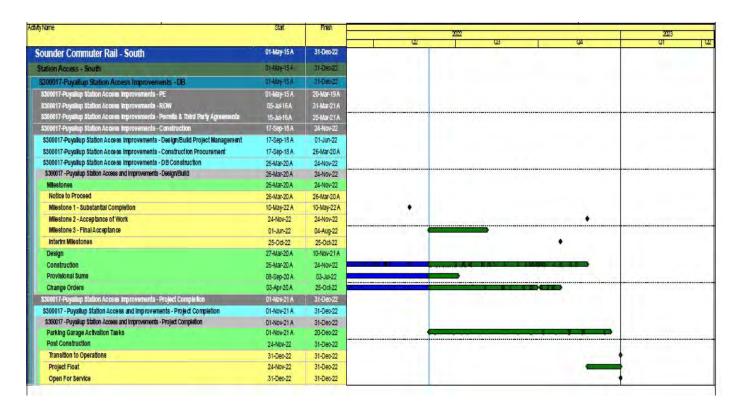
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# **Project Schedule**

This month the weighted percent complete is 97.0%. 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.

The May 2022 schedule update has been submitted and is currently under review at this time and is represented in the schedule graphic below.

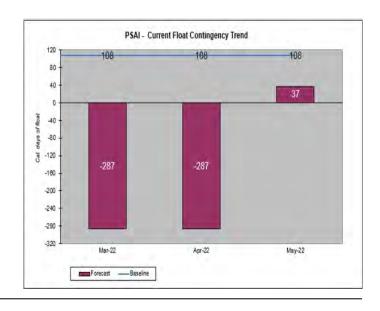


### **Project Float**

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 expected in 4th Qtr 2022.

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

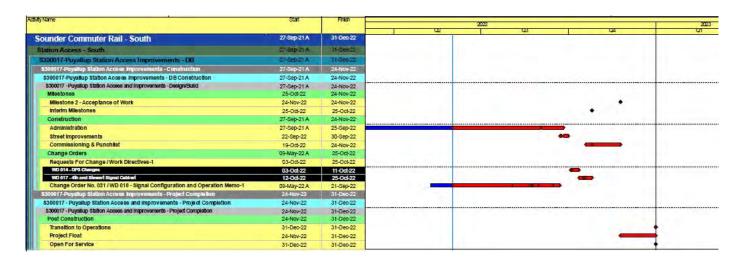


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# **Critical Path Analysis**

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 on traffic mitigation.



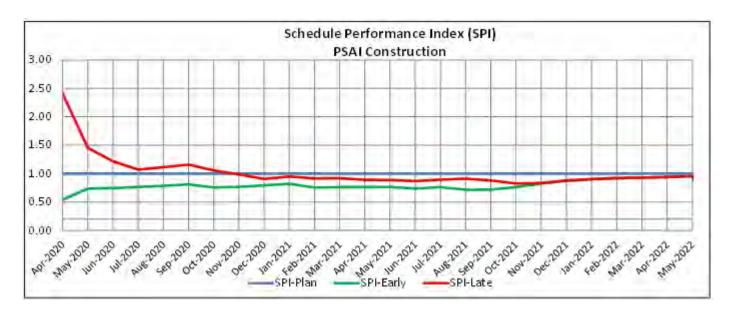
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### **Schedule Performance Index**

The early Schedule Performance Index (SPI) for the project is at 0.96 for this period, and the late SPI is at 0.96. 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**

- Monitored construction activities for impacts to community.
- Issued a construction alert on May 24 about work at 7th St NW and W Stewart Ave and notified nearby residents.

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# **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.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	8.0	5.3	2.7
Consultants	5.0	6.6	(1.6)
TOTAL	13.0	11.9	1.1

<sup>\*</sup> 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.	

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# **Construction Safety**

Data/Measure	May 2022	Year to Date	Project to Date	
Recordable Injury/Illness Cases	0	0	2	
Days Away From Work Cases	0	0	1	
Total Days Away From Work	0	0	32	
First Aid Cases	0	0	4	
Reported Near Mishaps	0	0	5	
Average Number of Employees on Worksite	15	-	-	
Total # of Hours (GC & Subs)	2,399	26,721	105,660	
OSHA Incident Rates	May 2022	Year to Date	Project to Date	
Recordable Injury Rate	0.00	0.00	3.79	
LTI Rate	0.00	0.00	1.89	
Recordable National Average		2.50		
LTI National Average	1.10			
Recordable WA State Average	5.20			
LTI WA State Average	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.

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# 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.

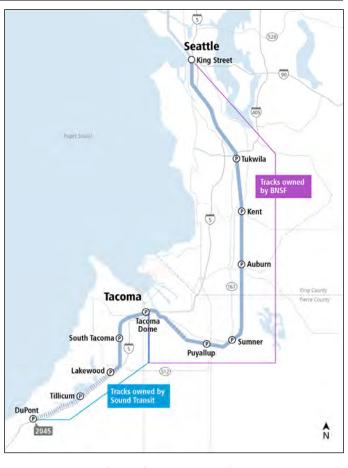
The Sounder Strategic Development and Implementation Plan is complete and includes a program of proposed capital projects.

Phase Planning

**Budget** \$21.1 Million

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

Program Element



Sounder South Capacity map alignment

# **Program Key Activities**

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

#### **Sounder South Project Development Key Activities**

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

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

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# Sounder Commuter Rail Sounder South Capacity Expansion



# King Street Station Platform Improvements

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

### **Key Activities**

- Continue Level 1 evaluation of potential improvements to access and pedestrian flow.
- Working closely with the West Seattle Ballard Link Extension (WSBLE) team on the conceptual design phase of the Chinatown/International District Station which is in the vicinity of the King Street Station.

### **Community Engagement**

• Conducted community engagement this spring to share draft concepts with the public and gather feedback, including an online open house April 19 through May 10, and station drop-in sessions on April 27 and May 2. We will publish an engagement summary this spring and incorporate feedback in 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. The BNSF Platform Extension Project, that includes the
Auburn Platform Extension Project, initiation of conceptual engineering and environmental review will be paused
consistent with the schedule identified in the capital program realignment and continued low ridership on the Sounder South
corridor.

# **Community Engagement**

• No community outreach activities to report this month.

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### 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 \$39K 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	\$2.2	\$2.2	\$4.8	\$0.0
Preliminary Engineering	\$13.6	\$3.0	\$2.1	\$13.6	\$0.0
Third Party Agreements	\$0.9	\$0.5	\$0.4	\$.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
Total	\$21.1	\$5.7	\$4.7	\$21.1	\$0.0

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

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### Sounder Commuter Rail Sounder South Capacity Expansion

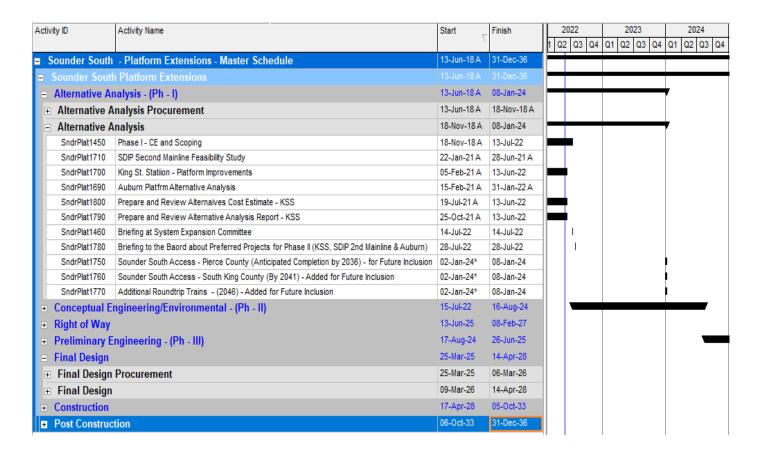


#### **Project Schedule**

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 was finalized and completed on July 28, 2021. Auburn Platform Alternative Analysis was completed on Jan 31, 2022.

Staff are 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 Q2 2022.



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# 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 are an annual projection and remains constant from month to month. The Year-to-Date (YTD) Performance is the total actual FTEs accumulated through this reporting period. Staffing status is summarized in the following table.

The staffing variance is attributed to the majority of the 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	4.6	0.8
Consultants	8.2	1.8	6.4
TOTAL	13.6	6.4	7.2

<sup>\*</sup> 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.	

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### 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**

- Met with jurisdictional partners to begin Phase 2
- Drafted a Project Management Plan and Community Engagement Plan
- Prepared for survey work on the proposed improvements



South Tacoma Station



South Tacoma Station Passenger Platform Access

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### 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).

This period expenditures increased by \$11K with the majority of the amount coming from staff costs and starting Phase 2—Conceptual Engineering and Environmental.

#### **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	\$0.4	\$0.4	\$1.8	\$0.0
Preliminary Engineering	\$3.3	\$0.7	\$0.6	\$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
Total	\$5.4	\$1.2	\$1.0	\$5.4	\$0.0

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.

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### Sounder Commuter Rail South Tacoma Access Improvement

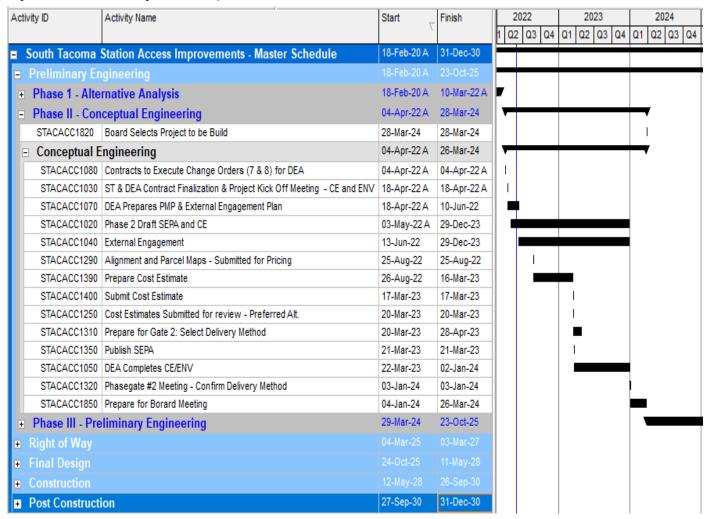


#### **Project Schedule**

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 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 II Kick Off Meeting was in April 2022. Currently working on preparing Project Management and External Engagement Plan. Selecting Delivery Method is expected during Q2 2023. Board selects projects to be build planned for end of Q1 2024.

Open for Service Date is planned for Q4 2030.



#### **Community Engagement**

Continued planning for Phase 2 community engagement.

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### 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 for the project as the project initiation and initial identification of improvements took less effort than planned. Additionally, the majority of the Alternatives Analysis Phase work was completed in December 2021. As the project gets underway with conceptual design and environmental review of the improvements, we anticipate more staff will be needed.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance
ST Staff	3.4	1.1	2.3
Consultants	3.0	0.7	2.3
TOTAL	6.4	1.8	4.6

<sup>\*</sup> 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**

<b>Board Action</b>	Description	Date
	None to report at this time.	

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### 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 Sounder Sumner Station

#### **Key Project Activities**

- Team conducted evaluations on design-build statement of qualifications (SOQ) in May 2022.
- Finalizing design-build project requirements for issuance of the request for proposals (RFP) in June 2022.
- Conducting property appraisals for Temporary Construction Easements.
- Briefed executive leadership on alternative baseline and procurement approach.





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

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### 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 \$72K. The incurred cost increased from \$13.37M to \$13.45M. The majority of this period's costs are attributed to staff costs working on finalizing the project requirements for the upcoming design-build procurement.

#### **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	\$2.7	\$2.6	\$2.6	\$2.7	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$7.6	\$7.6	\$4.6	\$7.6	\$0.0
Construction	\$0.2	\$0.1	\$0.1	\$0.2	\$0.0
ROW	\$4.6	\$4.0	\$3.9	\$4.6	\$0.0
Total	\$17.8	\$16.5	\$13.4	\$17.8	\$0.0

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:

- Risk of project delay due to Area of Potential Effect requiring updating before the start of construction.
- Risk of project delay if the Inadvertent Discovery Plan is not complete by beginning of construction.
- Schedule impacts if Third Party Agreements not finalized before contract award.
- Overall increase in cost due to inflationary market conditions.

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# Sounder Commuter Rail Sumner Station Access Improvements



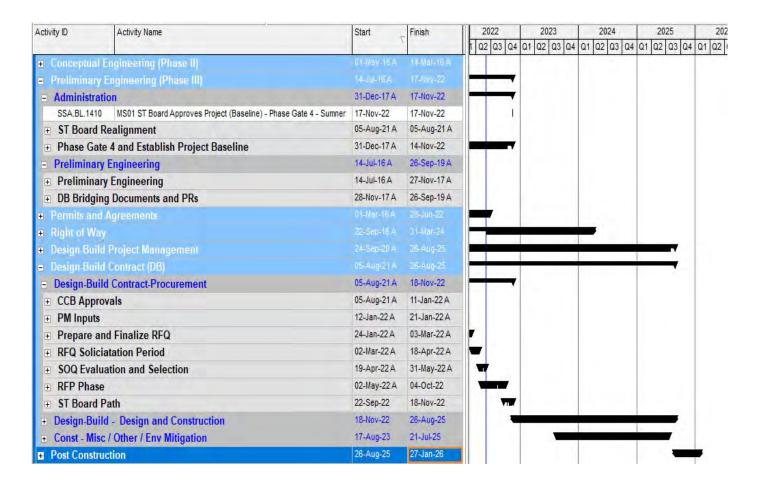
#### **Project Schedule**

Team continues to modify and update Sumner schedule used for Feb 2022 QRA session. The schedule will continue to incorporate 2022 QRA session final outcomes as they become available.

SOQs were received on April 18, 2022 and review was completed in May. Currently working on RFP and its issuance is expected by mid June 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.



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### Sounder Commuter Rail Sumner Station Access Improvements



#### **Community Engagement**

Prepared for information table at City of Sumner Open House event in June.

#### **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 was focused on updating the design-build project requirements and contract documents. 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	4.0	1.9
Consultants	0.0	0.0	0.0
TOTAL	5.9	4.0	1.9

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

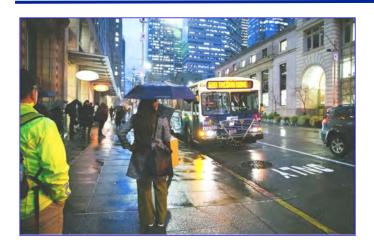
#### **Sound Transit Board Actions**

Board Action	Description	Date
	None to report this period.	

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# **Progress Report**

# Regional Express & STRIDE Programs







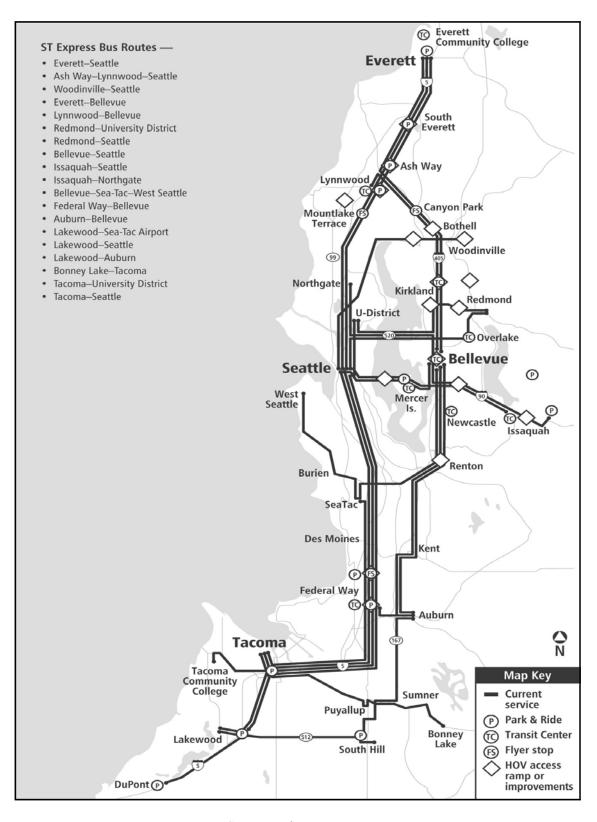


ST Express Bus routes connects major regional hubs throughout the three counties (King, Pierce, and Snohomish)

May | 2022







ST Regional Express Bus Routes

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# Regional Express & STRIDE Program Overview



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

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

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

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# 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 Allocation	Commitment To Date	Incurred to Date	Estimated Final Cost	Authorized Allocation vs EFC
Bus Base North	\$64.0	\$48.1	\$40.1	\$64.0	\$0.0
I-405 Bus Rapid Transit	\$703.9	\$477.5	\$102.6	\$703.9	\$0.0
SR 522/NE 145th St Bus Rapid Transit	\$209.1	\$80.6	\$54.6	\$209.1	\$0.0
Total	\$977.1	\$606.3	\$197.2	\$977.1	\$0.0

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
	'20	'20 '21	'20 '21 '22	'20   '21   '22   '23	'20 '21 '22 '23 '24

#### KEY:

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

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

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#### **Project Summary**

**Scope** The Bus Base North will accommodate up

to 120 buses to serve I-405 and SR 522/145th BRT and some ST Express

routes.

Phase Preliminary Engineering

**Budget** \$64.0 Million for Preliminary Engineering,

Final Design, Property Acquisition, and

Third Party Coordination.

**Schedule** Target Date: 2025



Map of Project Alignment

#### **Key Project Activities**

- Held a design kick-off meeting to advance the design toward 30%.
- Continued working with the GEC on addressing the Bus Base North design, permitting and construction schedule, and the integration of the schedule to the overall BRT Program (S1, S2, and S3) in the master integrated schedule.
- Held a pre-application meeting with City of Bothell to discuss permitting requirements.
- Continued addressing Codes, Covenants, and Restrictions (CCRs) of the site that has been selected for the bus base at Canyon Park Business Center.
- Completed Phase 1 of Transfer of Development Rights study and initiation Phase 2 implementation that will focus on city code changes that will facilitate Bus Base North permitting.

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#### **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 decreased by around \$130K this period due to overestimated progress in Final Design in April 2022 that has been corrected this month.

#### **Cost Summary by Phase**

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$7.1	\$4.6	\$2.8	\$7.1	\$0.0
Preliminary Engineering	\$2.0	\$1.5	\$1.4	\$2.0	\$0.0
Final Design	\$12.3	\$6.3	\$0.8	\$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	\$35.6	\$35.1	\$42.3	\$0.0
Total	\$64.0	\$48.1	\$40.1	\$64.0	\$0.0

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:

- 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.

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#### **Project Schedule**

The Board of Directors announced their realignment decision in August 2021. ST is working with the GEC consultant to address the project schedule to align with the decision. The GEC also commenced conceptual design of the base in October 2021.

The current critical path for Bus Base North is Final Design by the GEC then construction procurement, civil construction and finishes, then systems and testing. Activities that need to be monitored closely are acquiring rights to deviate from restrictive covenants (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, 286 days 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.



#### **Community Engagement**

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

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

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#### 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.

<b>Property Acquisition</b>	Property Acquisition Status							
ACQUISITION				RELOCATION				
Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required Relocations Compute to date				
1	1	1	1	0	0			

<sup>\*</sup>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

#### **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 lower than Planned. Both ST staff and Consultants staff levels will ramp up as the project progresses toward 30% and 60% design in 2022. We forecast to be at or close to the Planned FTE Monthly Average then.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance	
ST Staff	6.9	3.6	3.3	
Consultants	18.0	9.5	8.5	
TOTAL	24.9	13.1	11.8	

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

#### **Sound Transit Board Actions**

Board Action	Description	Date
	None to report this period.	

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#### **Project Summary**

Scope Launch a Bus Rapid Transit (BRT) system

along the I-405 corridor.

Limits Approximately 37 miles between

Lynnwood and Burien

Alignment I-405 BRT will extend along the I-5, I-405,

and SR 518 corridors. BRT will serve Lynnwood, Bothell, Kirkland, Bellevue, Renton, SeaTac, Tukwila, and Burien. Buses will operate in high occupancy vehicle lanes, express toll lanes, bus only

lanes, and general purpose lanes.

Stations Lynnwood City Center, Canyon Park, SR

522/I-405 Transit Hub, Brickyard, Totem Lake/Kingsgate, NE 85th, Bellevue Transit Center, NE 44th, South Renton Transit Center, Tukwila International Blvd Station,

Burien Transit Center

Phase Final Design

**Budget** \$703.9 Million for Preliminary

Engineering, 60% Final Design, and funding for improvements at the NE 44th, NE 85th, and Brickyard to Canyon Park.

**Schedule** Target Date: 2026 for Service Line 1 (S1);

2027 for Service Line 2 (S2); not including

parking elements



#### **Key Project Activities**

- NE 44th Station: Ongoing project coordination with WSDOT and its design-build contractor. Current focus topics are utility service coordination, conduit layouts, and Stride platforms.
- Finalizing the procurement process for the South Renton environmental remediation construction contract. NTP planned for June 2022.
- Worked with WSDOT on the design-build draft RFP for the Brickyard, SR 522/I-405 Transit Hub, Canyon Park In-line Stations, and the Express Toll Lane (ETL) project.
- Sound Transit Board approved the funding agreement with City of Kirkland for the BRT-related construction of NE 85th arterial. Plan to seek approval from Sound Transit Board in May 2022.
- Began scoping for the final design of Burien and Bellevue Transit Center modifications (CUD 2) with the GEC.

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#### **Project Cost Summary**

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

This period expenditures are \$(2.6)M, because estimated progress for in NE 44th construction was not counted this month by error. Preliminary engineering and environmental activities in the preliminary engineering phase progressed by \$0.5M, \$330K in the final design and program management with the GEC, \$175K in ST Staff Costs, \$30K in ROW activities and \$10K in third party agreement phase.

#### **Cost Summary by Phase**

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$18.6	\$14.2	\$12.0	\$18.6	\$0.0
Preliminary Engineering	\$49.2	\$40.3	\$35.9	\$49.2	\$0.0
Final Design	\$17.4	\$2.1	\$1.4	\$17.4	\$0.0
Construction Services	\$1.7	\$0.4	\$0.0	\$1.7	\$0.0
Third Party Agreements	\$1.7	\$0.9	\$0.7	\$1.7	\$0.0
Construction	\$578.5	\$390.0	\$25.0	\$578.5	\$0.0
Right-of-Way (ROW)	\$36.8	\$29.5	\$27.6	\$36.8	\$0.0
Total	\$703.9	\$477.5	\$102.6	\$703.9	\$0.0

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:

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

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#### **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 COVD-19, outreach efforts have shifted to virtual platforms.

- Highlands Neighborhood Association presentation May 18
- Began internal engagement for Touch-a-Truck event in Bellevue in September

#### **Project Schedule**

The Board of Directors announced their realignment decision in August 2021. ST is working with the General Engineering Contract (GEC) consultant to address the project schedule to align with the decision.

The current critical path for the I-405 BRT project is through Contract Unit Description (CUD) 03 Tukwila International Blvd Station Improvements in coordination with WSDOT, commissioning and testing, project float contingency to service line activation. There are other near critical efforts which include ROW acquisition for CUD 02—Burien Transit Center, Bellevue Transit Center, South Renton Roadway.

I-405 S, Service Line S1 is currently forecasting 370 days beyond the proposed ST Board realignment dates due to the anticipated duration to enter into an agreement with WSDOT and the duration to complete the design and construction of the Tukwila International Blvd Station Improvements. Additional scheduling study suggested that S1 could start service a few months earlier in Q3 2027, but 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.

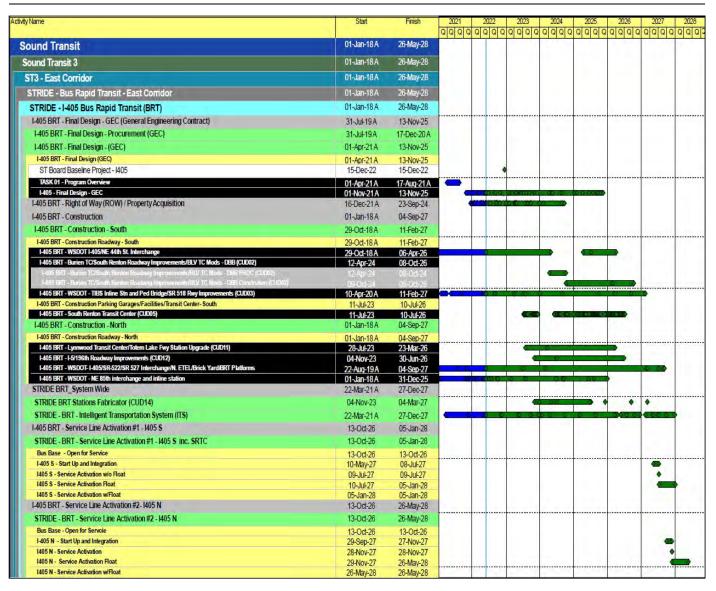
I-405 N, Service Line S2 is currently forecasting 147 days beyond the proposed ST Board realignment dates due to a schedule assumption related to the State funding of the WSDOT I-405 North Express Toll Lanes (ETL) project. However, the Washington State Legislature has now passed the budget with the funding needed for this project. In April 2022 the Board authorized entering into an agreement with WSDOT for the design and construction of the Stride BRT facilities as part of the North ETL project.

The current summary schedule is shown on the next page.

\*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 WSDOTs I-405—SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project.

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#### **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.

	Property Acquisition Status							
ACQUISITION RELOCATION					CATION			
	Total Acquisitions*	Board Approved*	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date		
	23	23	5	5	5	5		

\*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

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#### **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 is slightly lower than Planned, while the consultants staff FTE Actual Monthly Average is greater than planned. Sound Transit is looking to augment ST staff vacancies with consultants.

Resource Type	Planned FTE Monthly Average			
ST Staff	15.3	11.6	3.7	
Consultants	26.5	26.0	0.5	
TOTAL	41.8	37.6	4.2	
* An FTE is the equivalent of 2080 hours. YTD performance FTE hours are divided by a monthly factor of 173.33.				

**Sound Transit Board Actions** 

Board Action	Description	Date
M2022-33	Authorizes the chief executive officer to execute a funding agreement with the City of Kirkland for the City of Kirkland to provide project development, environmental review, stakeholder and community engagement, design, permitting, and construction of the NE 85th Street Arterial Improvements in the amount of \$14,480,000 with a 10 percent contingency in the amount of \$1,448,000 for a total authorized agreement amount not to exceed \$15,928,000.	5/26/2022
R2022-13	Authorizes the chief executive officer to acquire certain real property interests, including acquisition by condemnation to the extent authorized by law, and to reimburse eligible relocation and reestablishment expenses incurred by affected owners and tenants as necessary for the I-405 Bus Rapid Transit Project.	5/26/2022

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#### **Project Summary**

**Scope** Launch a Bus Rapid Transit (BRT) system

from the Shoreline South/148th light rail station to UW Bothell campus with connecting service to Woodinville including park and ride, access improvements, and transit centers.

Limits Approximately 8 miles between Shoreline

and Bothell

Alignment The BRT route will travel via NE 145th

Street and SR 522 serving Seattle, Shoreline, Lake Forest Park, Kenmore, and Bothell, including UW Bothell/Cascadia College area. The route will have a connection to I-405 BRT at the SR 522/I-405 interchange. Buses will operate primarily in Business Access and Transit

(BAT) lanes, transit queue bypass lanes,

and in general purpose lanes.

Stations 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**

- City of Bothell's BAT (Business Access and Transit) Lanes, funded by ST is complete. Final channelization markings have been installed. All lanes are now open to traffic.
- Continued to advance the design for the entire SR 522 corridor, which includes NE 145th Street, Lake Forest Park and Kenmore segments (CUD 6) and Bothell segment (CUD 7) toward 60%.
- Advanced the properties through the process of certification, appraisals, and acquisitions. Civil Certification Package (CCP) 1 was certified by Sound Transit Board in 2021. CPP 2 was approved by the Board in May 2022.
- Continued coordination with other Sound Transit's L200 project for the Battery Electric Bus Charging at 148th Station.

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#### **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 \$1.2M due progress in final design and program management with the GEC for a total of \$0.8M, Sound Transit staff time accounts for \$150K, Construction in Bothell for \$200K,, ROW for \$50K.

#### **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	\$10.2	\$8.5	\$13.9	\$0.0
Preliminary Engineering	\$15.5	\$15.4	\$15.3	\$15.5	\$0.0
Final Design	\$33.8	\$13.0	\$4.9	\$33.8	\$0.0
Construction Services	\$0.6	\$0.0	\$0.0	\$0.6	\$0.0
3rd Party Agreements	12.1	\$11.1	\$0.6	12.1	\$0.0
Construction	\$49.4	\$25.0	\$24.1	\$49.4	\$0.0
Right-of-Way (ROW)	\$83.8	\$6.0	\$1.2	\$83.8	\$0.0
Total	\$209.1	\$80.6	\$54.6	\$209.1	\$0.0

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:

- 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 though 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.

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#### **Project Schedule**

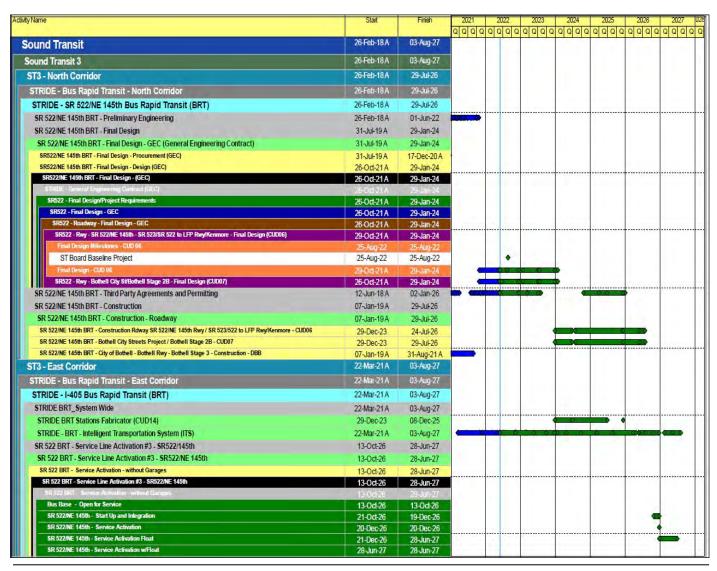
The Board of Directors announced their realignment decision in August 2021. ST is working with the GEC consultant to address the project schedule to align with the decision.

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

The current critical path for the ST 522/NE 145th BRT project is now through ROW acquisition as appraisal delays continue and may impact the start of construction. Final Design by the GEC is now near critical a task order was issued in October 2021 to proceed with design for Contract Unit Description (CUD) 06 - SR 522/NE 145th Roadway. Both paths will be monitored closely along with permitting/agreements by the team.

The current forecast for completion is Q2 2027, 179 days 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.



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#### **Community Engagement**

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

Met with Lake City Collective on site on May 6th to discuss potential partnership

#### 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. Additional narrative only for noteworthy changes to table such as Board Approved changes.

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	10	0	

<sup>\*</sup>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

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#### **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 is lower than Planned. Staff level will ramp up as the project progresses toward 60% design in 2022 to be at or close to the Planned FTE Monthly Average.

Resource Type	Planned FTE Monthly Average	YTD Actual FTE Monthly Average	Variance		
ST Staff	17.8	9.1	8.7		
Consultants	38.0	36.6	1.4		
TOTAL	55.8	45.7	10.1		
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
R2022-14	Authorizes the chief executive officer to acquire certain real property interests, including acquisition by condemnation to the extent authorized by law, and to reimburse eligible relocation and reestablishment expenses incurred by affected owners and tenants as necessary for the SR 522 Bus Rapid Transit Project.	5/26/2022

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# Progress Report Capital Program Support



# Capital Program Support Grants



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

Line of Business	siness Grant Number Grant / Project Description		<b>Award Amount</b>	Date Executed	Balance Remaining	
FEDERAL TRANSIT AUTHORITY				ALC: UNKNOWN		
LINK LIGHT RAIL	WA-03-0237	University Link Extension	684,370,641	09/16/2015	68,419,050	
LINK LIGHT RAIL	WA-2018-013	Hilltop Tacoma Link Extension SYGA	74,999,999	05/15/2018	3,994,635	
SOUNDER COMMUTER RAIL	WA-2018-015	Sounder Rolling Stock	7,800,002	12/30/2019	7,800,002	
LINK LIGHT RAIL	WA-2018-082	* East Lake Sammamish Trail North Extensio	2,318,683	04/29/2020	1,227,709	
LINK LIGHT RAIL	WA-2019-001	Lynnwood Link Extension FFGA	497,710,967	03/19/2021	11,562,720	
LINK LIGHT RAIL	WA-2020-001	Federal Way Link Extension	297,710,967	02/25/2021	70,128,838	
SOUNDER COMMUTER RAIL	WA-2020-002	S Sounder Capacity Exansion	5,600,000	12/13/2019	5,012,935	
REGIONAL EXPRESS	WA-2020-007	I-405 Bus Rapid Transit- Bus Procurement	5,400,000	12/21/2020	5,400,000	
REGIONAL EXPRESS	WA-2020-080	HIMB Bus Prev Maint	14,898,460	09/08/2021		
LINK LIGHT RAIL	WA-2020-086	HIFG Rail Prev Maint	38,937,648	09/18/2021	753,019	
LINK LIGHT RAIL	WA-2021-002	Downtown Redmond Link Ext	31,668,475	09/10/2021	300	
LINK LIGHT RAIL	WA-2021-004	Everett Link Extension Model Code Partne	2,000,000	12/31/2020	1,817,390	
REGIONAL EXPRESS	WA-2021-012	SR 522/NE 145th BRT Vehicles	4,800,000	02/25/2021	4,800,000	
SOUNDER COMMUTER RAIL	WA-2021-085	Auburn Station Access Improvments	1,500,000	09/10/2021	1,500,000	
Bus RAPID Transit	WA-2021-115	I-405 BRT Expansion Buses	7,255,465	09/18/2021	7,255,465	
LINK LT RAIL & SOUNDER RAIL	WA-2021-123	Rail State of Good Repair - PIMS	3,612,229	09/24/2021		
SOUNDER COMMUTER RAIL	WA-2021-140	20 CARSI/5307 Enhance at Puyallup CR Stn	1,421,500	10/28/2021	1,421,500	
REGIONAL FUND	WA-2021-141	ARP Act 2021-Operating Expense	275,258,761	10/28/2021	215,533,904	
LINK LIGHT RAIL	WA-95-X061	Hilltop Tacoma Link Extension	5,599,943	08/27/2015	285,750	
		TOTAL FEDERAL TRANSIT AUTHORITY	1,962,863,740		406,912,917	
OTHER FEDERAL						
REGIONAL FUND	EMW-2017-RA-00018	Radio Communication Network	662,138	11/02/2017	662,138	
REGIONAL FUND	EMW-2019-RA-00014	ATAT, Crit Evnt OT, Fac Hardening	1,315,813	09/01/2019	857,457	
REGIONAL FUND	EMW-2020-RA-00022	Crit Evnt OT, CEDO	642,738	08/10/2020	537,737	
		TOTAL OTHER FEDERAL	2,620,689		2,057,332	
STATE						
REGIONAL FUND	19-92501-015	Agency Energy Efficiency Project	197,000	06/03/2019	197,000	
REGIONAL EXPRESS	PTD0164	Afford & Access Improv Low Income Riders	500,000	02/10/2020	-1	
		TOTAL STATE	697,000		196,999	
	1	TOTAL ALL GRANTS	1,966,181,429		409,167,248	
* = Multiple values exist within thi	is grant number grouping	see AwardID for details			-	

Above table as of Q1 2022. This section is updated every quarter.

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### Capital Program Support Environmental Affairs & Sustainability



#### 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 Q1 2022

- Published 2022 Environmental and Sustainability Targets.
- Began data collection for 2021 Annual Sustainability Progress Report and greenhouse gas inventory.
- Began collecting applications for Efficiency and Sustainability Program internal grant program.
- Launched Zero Emission Bus Transition Plan work.

#### **Key Upcoming Activities for Q2 2022**

- Finalize the Sustainability Inventory and Progress Report.
- Complete ESMS Internal Audit.
- Celebrate Earth Month by hosting a series of internal events.

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# Progress Report Acronyms



### **Acronyms**



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

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### **Acronyms**



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

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