

Progress Report

Link Light Rail Program



LRV Fleet Expansion– Car body painting is ongoing

June | 2018



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

This page left blank intentionally.

Link Light Rail

Program Overview



University Link Extension (U-Link): This project is a 3.15-mile light rail segment which is located entirely underground with tunnels traveling from Pine Street, under the I-5 freeway to an underground station at Capitol Hill, continuing north beneath SR 520 and the Montlake Cut to an underground station on the University of Washington campus, near Husky Stadium. The Sound Transit Board adopted the baseline capital budget of \$1.76B in July 2008. Revenue Service began on March 19, 2016.

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

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

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

Downtown Redmond Link Extension: This project builds a new light rail from the Redmond Technology Station to downtown Redmond by 2024. Light rail will travel along SR-520 with two new stations in southeast Redmond, at Marymoor Park, and downtown Redmond. Preliminary Engineering for the Redmond light rail extension has a budget of \$178M.

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

Market Street area. It includes nine light rail stations. The route will run through a new downtown Seattle rail-only tunnel, elevated guideway, and a rail-only bridge over Salmon Bay. The current budget for these projects through completion of Preliminary Engineering is \$286M.

South 200th Link Extension: S. 200th Link Extension consists of a 1.6-mile extension of the light rail from the SeaTac/Airport Station to an elevated station at South 200th Street. The Project was developed through a design-build delivery strategy. The Sound Transit Board adopted the baseline capital budget of \$383.2M in 2011. Revenue Service began on September 24, 2016.

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. Final Design for Federal Way has a budget of \$412.6M.

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

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

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

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

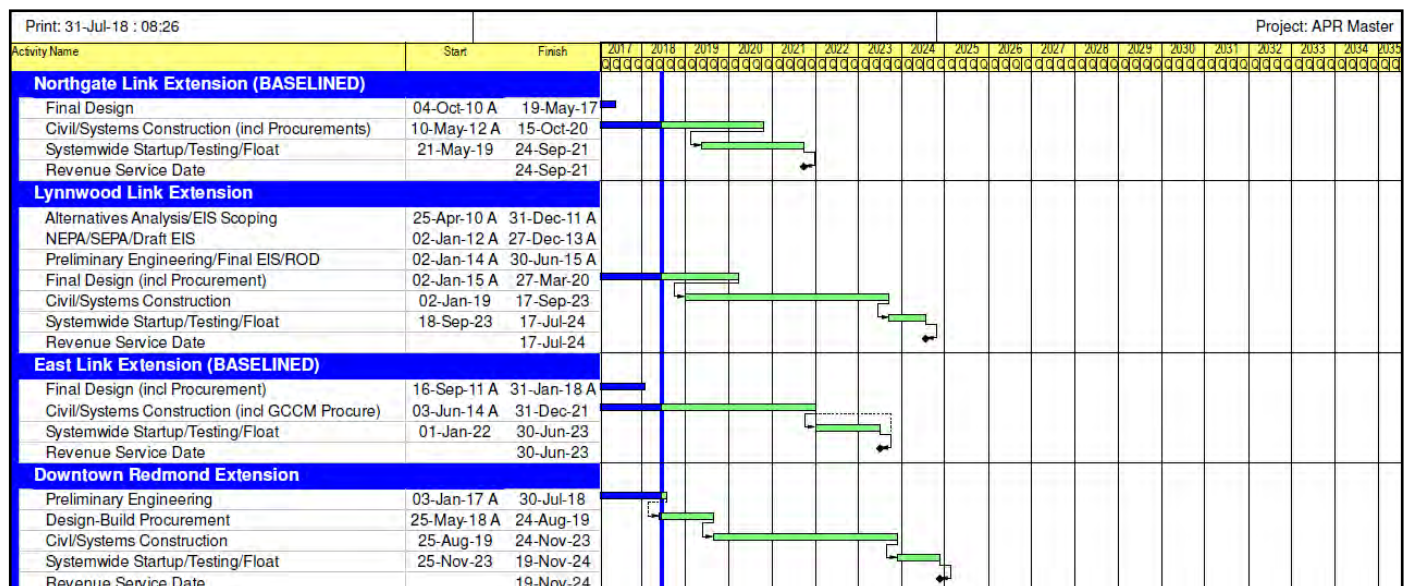
Program Budget

Project figures for active projects are represented in millions below.

Project	Authorized Project Allocation	Commitment to Date	Incurred to Date	Forecast to Complete	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
University Link Extension	\$1,756.0	\$1,516.0	\$1,507.4	\$38.0	\$1,554.0	\$202.0
Northgate Link Extension	\$1,899.8	\$1,625.1	\$1,193.8	\$221.8	\$1,846.9	\$52.9
Lynnwood Link Extension	\$2,771.6	\$288.3	\$238.7	\$2,483.3	\$2,771.6	\$0
East Link Extension	\$3,677.2	\$3,014.9	\$1,347.0	\$662.2	\$3,677.2	\$0
Downtown Redmond Link Ext.	\$178.0	\$24.5	\$18.3	\$153.6	\$178.0	\$0
West Seattle and Ballard Link Ext.	\$285.9	\$27.9	\$12.2	\$258.0	\$285.9	\$0
South 200th Link Extension	\$383.2	\$331.2	\$328.1	\$1.5	\$332.7	\$50.6
Federal Way Link Extension	\$412.6	\$97.8	\$72.3	\$314.9	\$412.6	\$0
Tacoma Link Extension	\$217.3	\$73.6	\$25.0	\$143.7	\$217.3	\$0
Tacoma Dome Link Extension	\$125.7	\$12.1	\$3.3	\$113.6	\$125.7	\$0
Link O & M Facility: East	\$449.2	\$355.3	\$157.9	\$93.9	\$449.2	\$0
LRV Fleet Expansion	\$740.7	\$654.0	\$75.0	\$86.8	\$740.7	\$0
Total Link	\$12,897.3	\$8,020.6	\$4,979.1	\$4,571.2	\$12,591.8	\$305.5

Program Schedule

Schedules for active projects are summarized below.

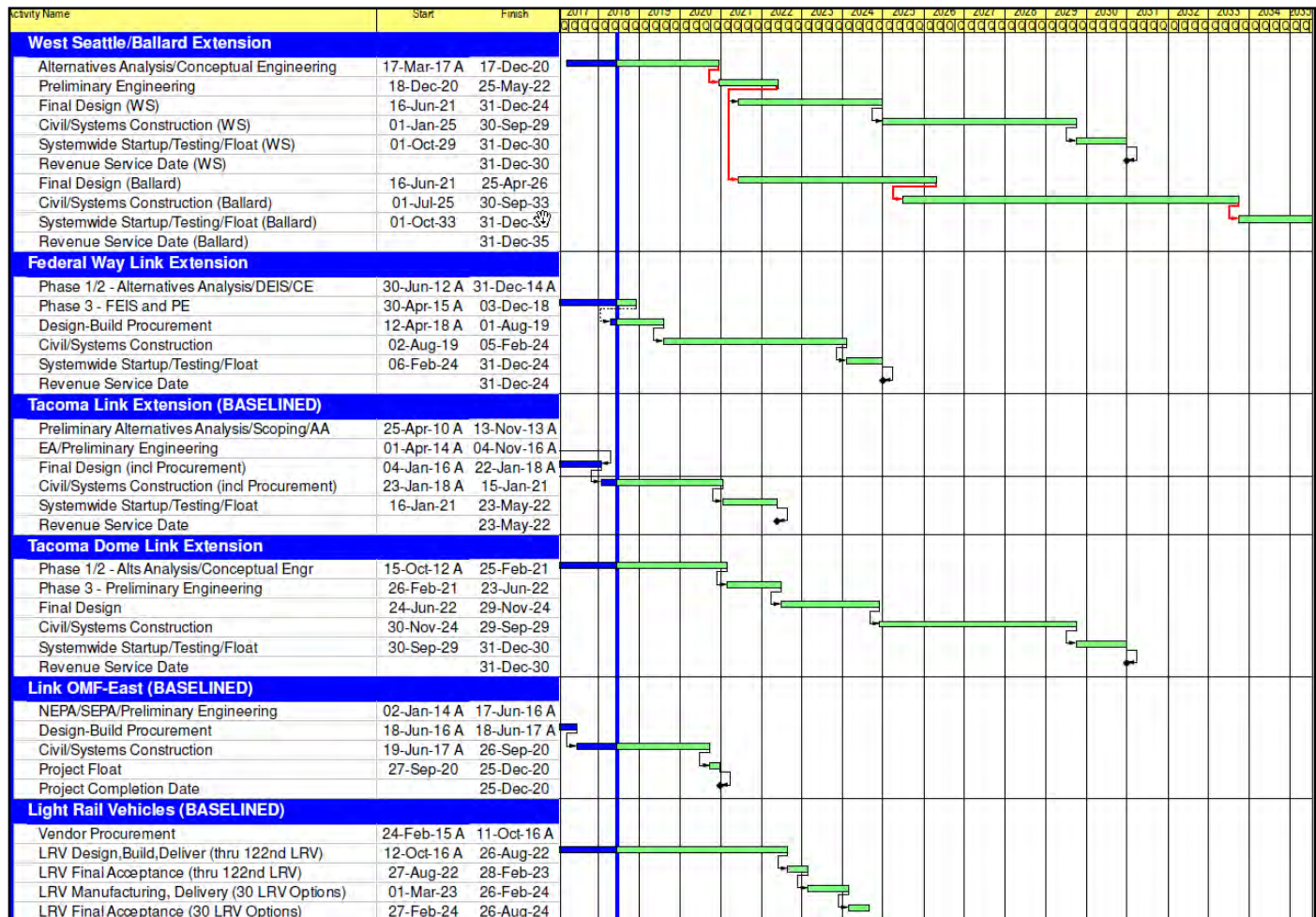


Link Light Rail Program Overview



Program Schedule

Schedules for active projects are summarized below.



This page left blank intentionally.

Link Light Rail

University Link Extension

Project Summary

Scope

Limits 3.15-mile extension of the Initial Segment light rail transit (LRT) system from the Pine Street Stub Tunnel (PSST) in downtown Seattle to University of Washington (UW) campus near Husky Stadium.

Tunnels Two twin bored tunnels. Two contract segments: U220 starts at Husky Stadium, continues beneath SR 520 and the Montlake Cut south to the Capitol Hill underground station. U230 commences at Capitol Hill Station and proceeds south under the I-5 freeway to the PSST.

Stations Two underground center platform stations – Capitol Hill (U240) and University of Washington (U250). U240 is approximately 65' underground with three station entrances. U250 is about 100' below ground, with three station entrances and connections to the UW campus by a pedestrian bridge.

Systems 27 LRV; direct fixation tracks, signals, traction electrification, and SCADA communications

Budget \$1.948 billion including finance cost (capital subtotal of \$1.756 billion)

Schedule Revenue Service began March 19, 2016



Map of Project Alignment

Key Project Activities

- **Certificate of Occupancy (C of O):** University Link continues to operate under a temporary certificate of occupancy until all permit requirements are fully met. C of O for stations has now been issued. Awaiting issuance of C of O for the University Link the project.
- Commercial issues with all prime civil contractors (with the exception of Capitol Hill Station Contractor) has been negotiated as the project proceeds through the close out process. Finalized commercial resolution with Systems contractor.
- Miscellaneous follow-on commitments and restoration work remains including but not limited to the following: Decommissioning of monitoring wells, restoration of the Systems staging area on Pine Street are anticipated when the weather improves, power reliability and vibration monitoring and other follow up on various minor commitments from the Record of Decisions.
- Before and After Study commenced and to complete by summer 2019.

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.

University Link's projected Estimated Final Cost (EFC) including Finance Cost remains at about \$1.75B. As the project inches closer to close out, the timing for expenditure becomes less predictable. This period, after some cost adjustments the project expenditure net about \$140K increasing the total direct expenditure to about \$1.5B (Finance Cost excluded). Current activities continues to pertain to close out and miscellaneous follow on work. The construction EFC continues to be approximately \$1B. This trend continues to hold as the project is substantially complete with only miscellaneous follow on scope and commercial issues remaining. Systems continues optimization process with miscellaneous operational equipment purchases trailing. The Total Incurred to Date for the Construction Phase is about \$991M and LRV is at about \$99.2M. Cost of LRV repairs were excluded from this project and tracked independently.

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	\$115.23	\$113.55	\$82.96	\$82.17	\$88.11	\$25.45
Preliminary Engineering	\$24.39	\$24.26	\$24.26	\$24.26	\$24.26	\$0.00
Final Design	\$77.94	\$90.31	\$87.96	\$86.62	\$89.17	\$1.13
Construction Services	\$68.53	\$94.81	\$86.88	\$86.58	\$88.71	\$6.11
3rd Party Agreements	\$18.65	\$18.65	\$11.65	\$11.31	\$13.23	\$5.42
Construction	\$1,180.00	\$1,158.18	\$996.67	\$990.88	\$1,021.84	\$136.34
Vehicles	\$103.91	\$103.91	\$99.20	\$99.19	\$101.91	\$2.00
ROW	\$167.33	\$152.33	\$126.43	\$126.43	\$126.78	\$25.55
Capital Total	\$1,755.97	\$1,756.01	\$1,516.01	\$1,507.45	\$1,554.00	\$202.00
Finance Cost	\$191.71	\$191.71	\$191.71	\$174.87	\$191.71	\$0.00
Project Total	\$1,947.68	\$1,947.72	\$1,707.72	\$1,682.32	\$1,745.71	\$202.00

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

Construction EFC under the SCC format remains relatively unchanged at about \$998M. Construction SCC expenditures to date is about \$979M this period mostly attributed to Systems' continuing optimization and resolutions to change order work and miscellaneous follow on work. Total capital cost incurred to date including non-construction cost (SCC 60 thru 90) now at \$1.5B or about 86% of total project budget scoped (Finance Cost excluded). Total project cost incurred to date at the end of this period including Finance Cost is at \$1.68B. The financing cost incurred to date is about \$175M. University Link EFC continues to be projected to close out with at least \$200M under budget excluding financing cost.

Link Light Rail

University Link Extension



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	\$626.83	\$450.46	\$456.11	\$456.35	\$461.23	(\$10.77)
20 Stations	\$366.33	\$350.75	\$344.76	\$342.95	\$353.10	(\$2.34)
30 Support Facilities: Yards, Shops	\$7.01	\$24.83	\$23.46	\$23.44	\$24.80	\$0.03
40 Sitework & Special Conditions	\$59.03	\$67.39	\$57.14	\$54.92	\$56.89	\$10.50
50 Systems	\$69.63	\$116.42	\$102.15	\$101.45	\$102.40	\$14.02
Construction Subtotal (10 - 50)	\$1,128.82	\$1,009.85	\$983.62	\$979.11	\$998.41	\$11.44
60 Row, Land, Existing Improvements	\$167.33	\$126.60	\$126.43	\$126.43	\$125.76	\$0.84
70 Vehicles	\$99.76	\$100.16	\$99.87	\$99.87	\$100.16	\$0.00
80 Professional Services	\$306.41	\$346.58	\$306.09	\$302.04	\$318.19	\$28.40
90 Unallocated Contingency	\$53.65	\$172.81	\$0.00	\$0.00	\$11.48	\$161.33
Capital Total (10 - 90)	\$1,755.97	\$1,756.01	\$1,516.01	\$1,507.45	\$1,554.00	\$202.00
100 Finance Cost	\$191.71	\$191.71	\$191.71	\$174.87	\$191.71	\$0.00
Project Total	\$1,947.68	\$1,947.72	\$1,707.72	\$1,682.32	\$1,745.71	\$202.00

This page left blank intentionally.

Link Light Rail

Northgate Link Extension

Project Summary

Scope

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

Alignment The extension begins at the UW Station, boring tunnels under campus then continues north to a portal located north of NE 94th Street on the east side of I-5, then transitioning to an aerial structure running north to the Northgate Mall.

Stations The U District Station (UDS) is an underground station located on the west side of the UW campus near Brooklyn Ave. and NE 45th St. The Roosevelt Station (RVS) is an underground station located near NE 65th St. and 12th Ave NE. The Northgate Station is an elevated station located at the southwest edge of the Northgate Mall property.

Systems Include Signals, track electrification, and SCADA communications.

Phase Construction

Budget \$1.899 Billion

Schedule Revenue Service: September 2021



Map of Project Alignment

Key Project Activities

- Hoffman Construction met the first major milestone date for the Roosevelt Station with substantial completion of the basic structure on June 17. Stacy & Witbeck installed the first plinths and direct fixation track in the tunnel between the Roosevelt Station and U District Station.
- Tunnel, Cross Passages, and Maple Leaf Portal (N125):** The CM team continues to work with tunnel contractor, JCM, to finalize claims, RFCs, Safety Critical items and other final documentation needed for contract closeout. Final Acceptance, anticipated soon, will mark the end of this 4 ½ year contract with JCM Northlink, LLC.
- U District Station/UW Campus (N140):** Hoffman crews completed stripping formwork throughout the station and completed waterproofing of the north and south escalator pits. Crews began installation of the lower and upper sections of Escalators #1 and #3.
- Roosevelt Station (N150):** Hoffman crews placed escalator and stair slab at north end; completed protection slab placement at north and south headhouses. Crews laid out concrete masonry unit walls and set door frames at north basement level 3.
- Northgate Station (N160): Guideway Substructure/ Superstructure:** Construction work progressed on several caps and spans on the guideway structure. **Station:** Crews completed forms for the majority of north end retaining walls; placed 60 cubic yards of shotcrete and began station platform structural steel. **Garage:** Crews continued installation of elevator entry frames. Systems work proceeds.
- Trackwork (N180):** About 95% of northbound slabs are currently in place and are expected to be complete by early July. Southbound trackwork ready to start 7/9. Frequency Response Testing of floating slabs is ongoing. The Contractor placed the first concrete for the direct fixation track in the north bound tunnel north of U District Station.
- Environmental:** Moving forward with agreement to purchase additional In-Lieu Fee Mitigation credits to account for wetland mitigation revisions needed to accommodate changes to the City of Seattle's future cycle track and pedestrian bridge designs.

Closely Monitored Issues

- Columbia Precast predicts they will complete production of 7' to 10' floating slab during the first week of July as they continue preparing for 16Hz slab production for the U District station.
- Planning for the Northgate Parking Garage was stepped up with scheduling and coordination activities by the civil contractor, the systems contractor, Sound Transit Facilities Department, and the CM team participating.



Trackwork crew cut rail for installation on the floating slabs in the NB tunnel.

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 \$1,847.4M, which is \$52.9M below the current project budget, which is increased by 0.3M since the last period. This period approximately \$22.4M was incurred, bringing the total project expenditures from \$1.17B to \$1.19B. Project commitments remain at \$1.62B with all major construction projects well underway.

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	\$144.9	\$60.1	\$61.3	\$135.5	\$9.4
Preliminary Engineering	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
Final Design	\$132.2	\$132.2	\$117.0	\$111.1	\$134.7	\$(2.6)
Construction Services	\$118.3	\$118.3	\$103.2	\$69.3	\$110.4	\$7.9
3rd Party Agreements	\$11.8	\$11.8	\$10.0	\$6.6	\$12.4	\$(0.6)
Construction	\$1,343.0	\$1,343.0	\$1,219.3	\$830.1	\$1,332.9	\$10.2
ROW	\$112.3	\$112.3	\$100.4	\$100.3	\$106.0	\$6.3
Project Contingency	\$22.2	\$22.2	\$0.0	\$0.0	\$0.0	\$22.2
Total	\$1,899.8	\$1,899.8	\$1,625.1	\$1,193.8	\$1,846.9	\$52.9

Link Light Rail

Northgate Link Extension



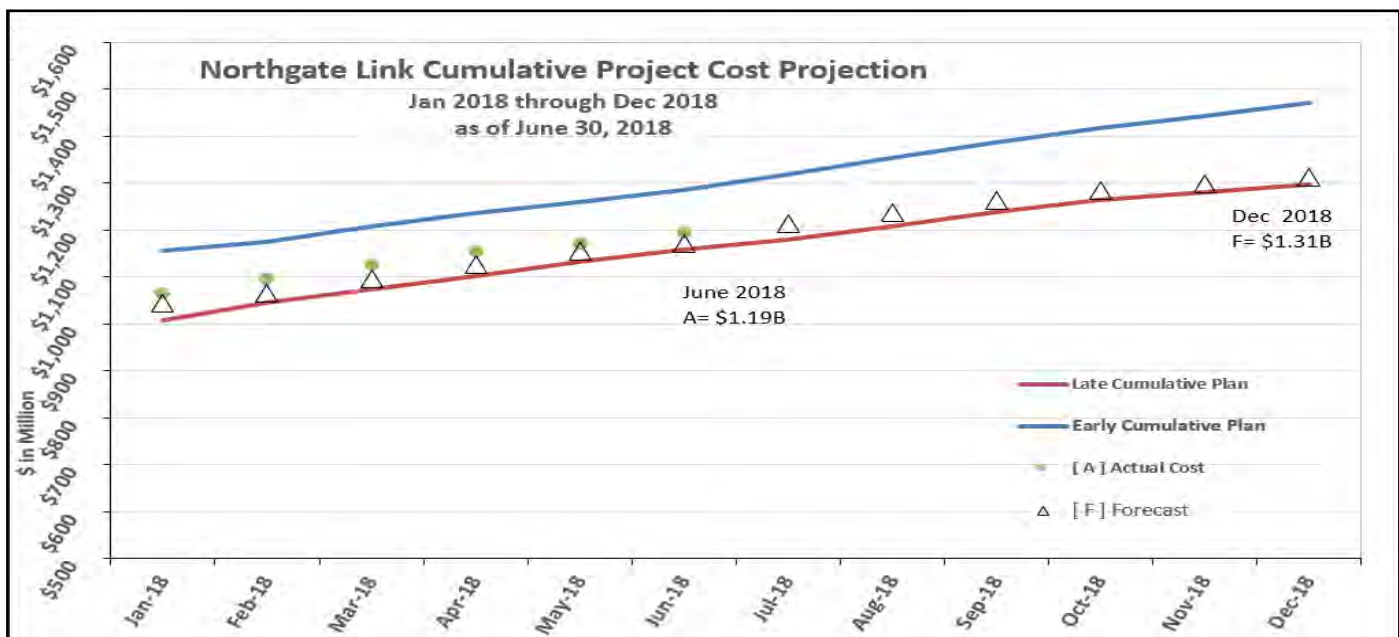
Cost Summary by SCC

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	\$549.3	\$512.0	\$458.9	\$535.1	\$14.2
20 Stations	\$376.1	\$424.1	\$418.1	\$209.8	\$459.2	(\$35.1)
30 Support Facilities: Yard, Shop	\$5.3	\$5.3	\$6.4	\$5.8	\$6.4	(\$1.2)
40 Sitework & Special Conditions	\$140.8	\$224.2	\$165.4	\$130.0	\$204.0	\$20.2
50 Systems	\$110.9	\$96.7	\$106.9	\$17.1	\$102.9	(\$6.1)
Construction Subtotal (10 - 50)	\$1,228.7	\$1,299.6	\$1,208.9	\$821.6	\$1,307.5	(\$8.0)
60 Row, Land, Existing Improvements	\$119.9	\$110.9	\$100.4	\$100.3	\$105.5	\$5.4
80 Professional Services	\$420.7	\$431.6	\$315.8	\$271.9	\$428.5	\$3.1
90 Contingency	\$130.4	\$57.7	\$0.0	\$0.0	\$5.4	\$52.3
Total (10 - 90)	\$1,899.8	\$1,899.8	\$1,625.1	\$1,193.8	\$1,846.9	\$52.9

Project Cash Flow Projection

The Northgate Link cost projection continues to progress within the planned expenditures as construction activities continue. This period's expenditure of \$22.4M included \$18.2M for the ongoing major construction contracts including the N125 tunneling contract, the N140, N150, and N160 Station Finishes contracts, the N180 Trackwork contract and N830 Systems contract, and other miscellaneous construction; \$0.5M was incurred for civil and systems final design and design support during construction; and \$1.7M was for construction management. The remaining expenditures were for third party coordination, permits, staff, legal, right-of-way and other direct charges.

Total project cost incurred to date reached \$1.19B of which about \$830.1M (69%) is attributed to the Construction Phase. The project cost is currently predicted to increase to approximately \$1.3B by December 2018, reflecting continued active construction activities through spring and summer.



Risk Management

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

ST has completed a Quantitative Risk Assessment was required upon completion of Project Milestone 4 – All Civil Work in Tunnels complete, and the report was received in May. Quarterly updates are planned to resume in July.

The following remain the top project wide risks:

- Multiple contract interfaces.
- Potential shortage of skilled labor and O&M support during startup and integration testing.
- Duration uncertainties for system installation, integration, and testing.
- Coordination with third parties (City of Seattle, WSDOT, UW etc.).
- Obsolescence of interfacing systems.

Contingency Management

Northgate Link was baselined in 2012 with a total contingency of \$396.2M. The total contingency has decreased by \$186.1M to \$209.3 million, which is 32.0% of project work remaining. During this reporting period, a decrease of \$0.8M in the overall project contingency occurred. 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. The baseline Design Allowance of \$113.9M has been fully depleted and all major contracts have been awarded.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. Compared to the baseline amount of \$184.0M, Allocated Contingency has decreased by \$10.2M to \$173.8M. During this reporting period, a decrease of \$0.8M occurred due to the execution of change orders on the N125 Tunneling contract, and the N140, N150 and N160 Station contracts.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. Compared to the baseline amount of \$98.3M, Unallocated Contingency has decreased by \$62.8M to \$35.5M. No changes to the UAC occurred during this reporting period.

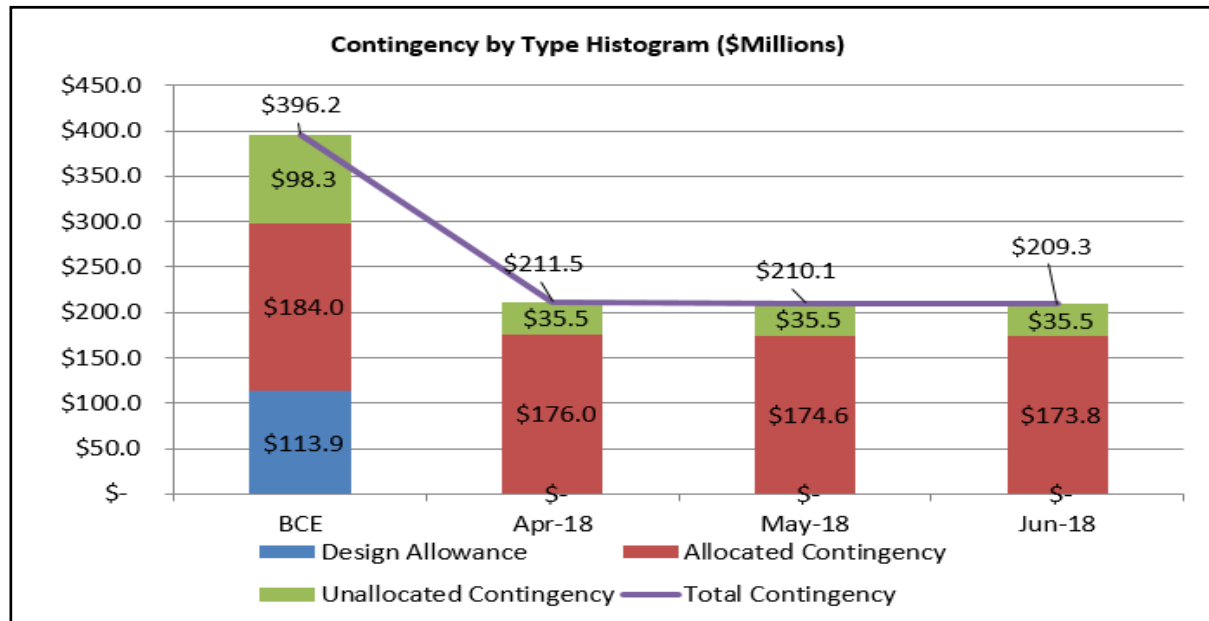
Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ 113.9	5.3%	\$ -	0.0%
Allocated Contingency	\$ 184.0	8.6%	\$ 173.8	26.6%
Unallocated Contingency	\$ 98.3	4.6%	\$ 35.5	5.4%
Total	\$ 396.2	18.6%	\$ 209.3	32.0%

Table figures are shown in millions.

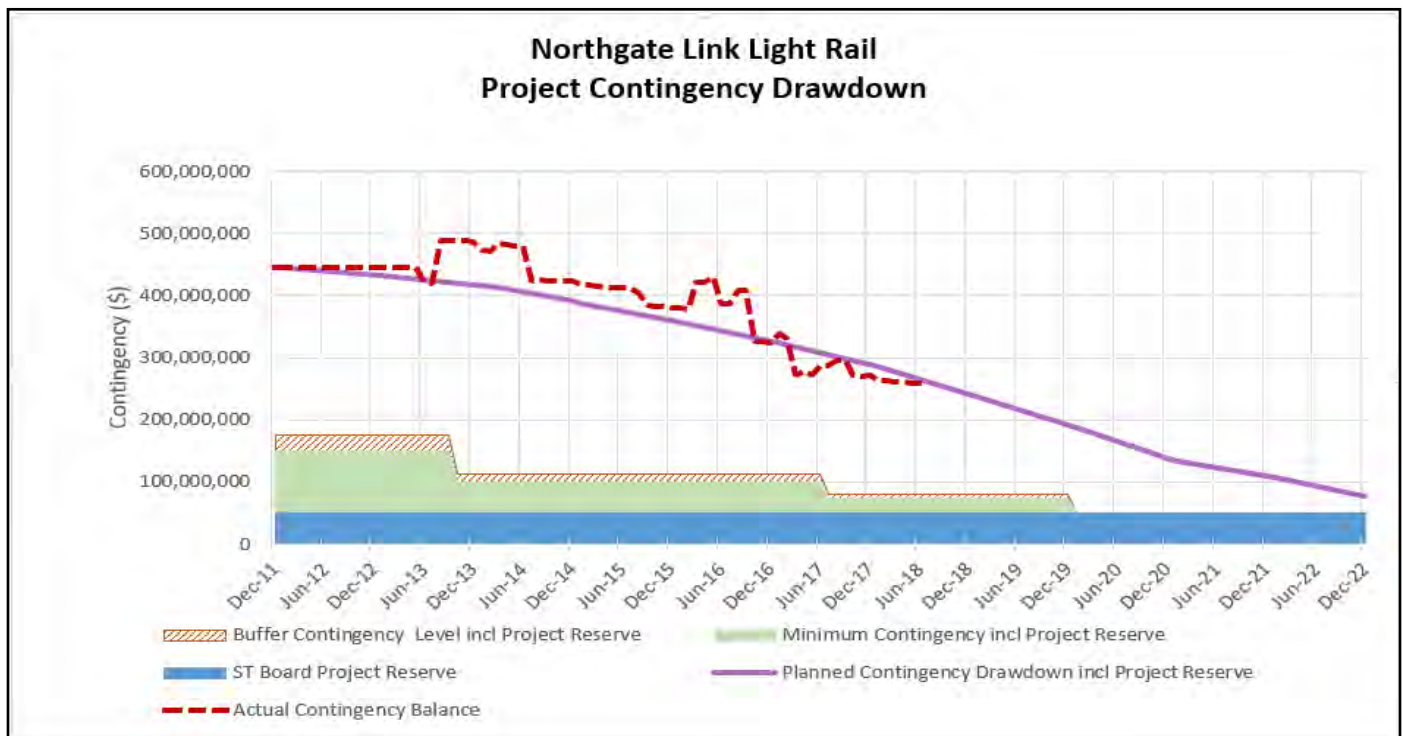
Link Light Rail

Northgate Link Extension



Contingency Drawdown

Northgate Link Project's total contingency drawdown plan is trending slightly below the projected drawdown at the end of the 1st QTR 2018. Total contingency balance is at approximately \$210.1M with all major construction projects procured and major tunneling work completed. The balance remains near the baseline drawdown projection, and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels.



Quarter ending June 2018

Project Schedule

As of June 2018, all Northgate Link civil contracts are under construction and the calculated physical percent complete for all major construction contracts is approximately 65%.

The Northgate Link Extension remains on schedule for the period. Civil construction is still forecast to complete in the 3rd QTR 2020. Systems construction is forecast to complete in late 4th QTR 2020.

The N125 Tunneling Contractor (JCM) has completed all of the physical construction with the exception of one punchlist item, that ST is working to resolve with the City of Seattle. JCM has completed and submitted the As-Built schedule for the project.

The N140 U District Station contractor, Hoffman Construction, continues to work on the basic structure below grade, with efforts concentrated on Basement Level 1 structure. The first escalator has been set in place.

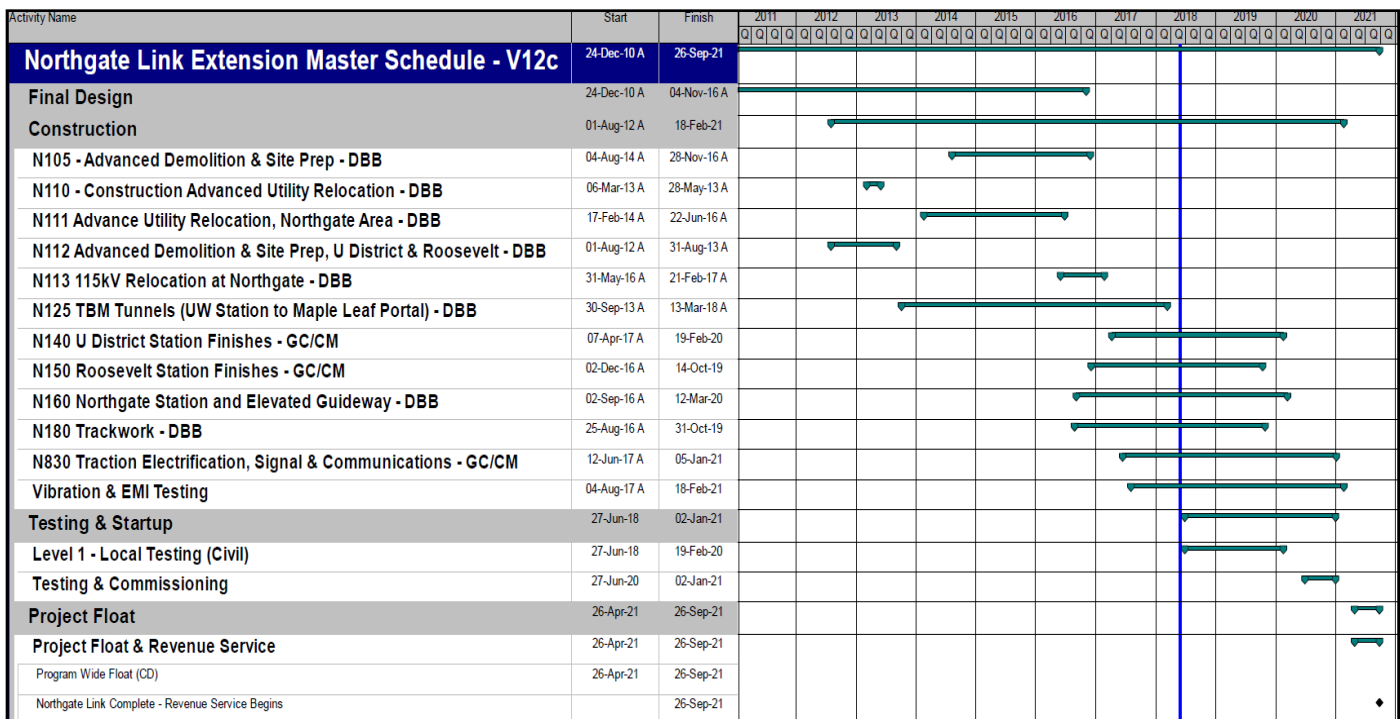
At Roosevelt Station (RVS), the N150 contractor, Hoffman Construction, is continuing with headhouse construction, CMU construction below grade. Hoffman is removing the upper portions of the slurry wall. In mid-June the below-grade structural work was declared complete, achieving Milestone No. 1.

The N160 contractor, Absher Construction is continuing placement of column caps, spans, decking and post-tensioning for the elevated guideway between the Maple Leaf Portal and the Northgate Station. Station stair walls, retaining walls and escalator foundations are continuing. At the Parking Garage, electrical and mechanical work continues, and parapet wall pours are in progress.

The N180 Trackwork contractor, Stacy & Witbeck, continues with installation of the floating slabs. Rail installation has begun in the tunnels between MLP and RVS. Installation of the 26Kv power cable is complete. Work on the MLP stair tower is underway.

The N830/E750 Systems Contractor, Mass Electric (MEC), is continuing engineering and procurement work. EMI cable installation is ongoing in the tunnel. MEC now has crews working in the Northgate Station Parking Garage.

Revenue Service date for Northgate Link Extension is scheduled in September 2021.



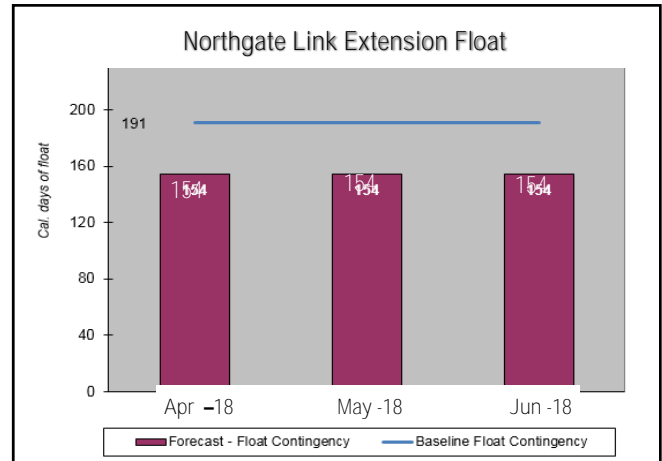
Link Light Rail

Northgate Link Extension



Project Float

The Northgate Link Project currently retains 154 days of un-allocated project float. The station, trackwork, and systems contracts do not have ST Controlled Float. Interface float exists for interim milestones only and is ST managed, not contractual.



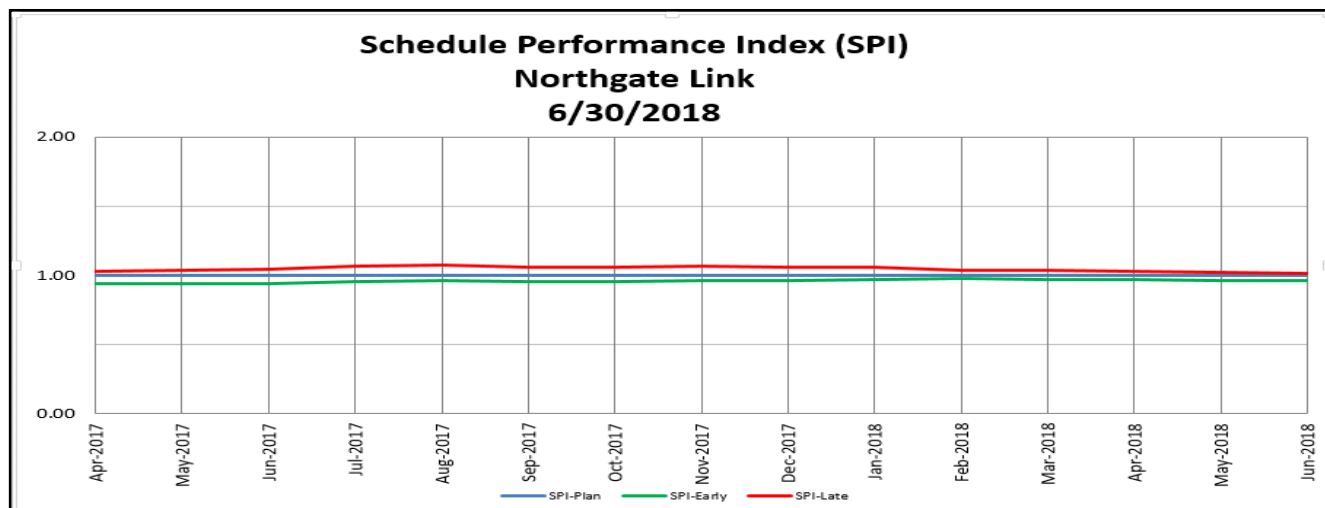
Critical Path Analysis

The critical path for the Northgate Link Extension now runs through the N180 and N830 contracts. The N140 project is off the critical path by 6 days, but is still considered to be critical.

Activity ID	Activity Name	Start	Finish	2018												2019												2020												2021											
				Jun	Jul	A	S	Oct	N	D	Jan	F	M	Apr	M	Jun	Jul	A	S	Oct	N	D	Jan	F	Mar	Apr	M	Jun	Jul	A	S	Oct	N	D	Jan	F	Mar	Apr	M	Jun	Jul	A	S	Oct	N	D					
Northgate Link Extension Master Schedule - V12c		26-Feb-18 A	26-Sep-21																																																
	Construction	26-Feb-18 A	28-May-20																																																
	Testing & Startup	02-Jul-18	26-Apr-21																																																
	Level 1 - Local Testing (Civil)	02-Jul-18	19-Feb-20																																																
	Testing & Commissioning	28-Jun-20	03-Jan-21																																																
	Pre-Revenue Service	04-Jan-21	26-Apr-21																																																
	Project Float	27-Apr-21	26-Sep-21																																																
	Project Float & Revenue Service	27-Apr-21	26-Sep-21																																																
	N180 - Trackwork	25-Aug-16 A	31-Aug-19																																																
	N830/E750 - Systems	17-Aug-19	13-Jan-22																																																
	General	13-Jan-22	13-Jan-22																																																
	N830 Project	01-Oct-19	22-Jun-20																																																
	E750 Project	17-Aug-19	12-Jan-22																																																

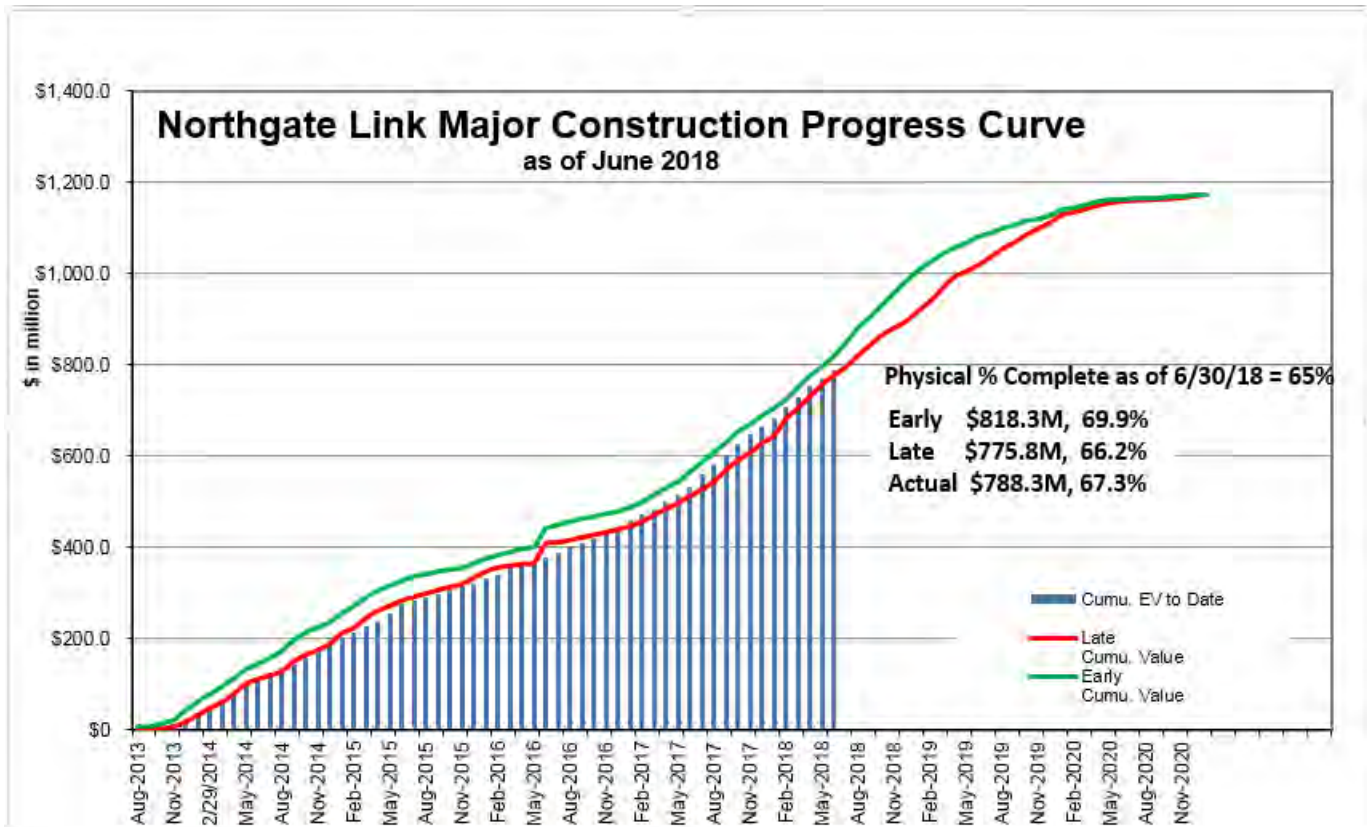
Schedule Performance Index

The early Schedule Performance Index (SPI) for the project is at 0.96 for this period. The late SPI is at 1.02 showing that in general, performance is satisfactory. The early and late numbers have been trending within a range of 0.02 above or below the current period numbers for several months.



Cost Progress Analysis

All civil work in the tunnels is complete and all three station finishes contracts and trackwork are well underway. Systems procurement continues and installation for the garage and EMI cable in the tunnels is ongoing. Overall Northgate Link Major Construction percent complete analysis is based on a weighted measurement among the six major construction contracts' schedules, durations and costs. The graph below shows the aggregate cost progression for these construction contracts, as of the end of June, is trending appropriately between the early/late projections as drawn from the master schedule. The overall physical percent complete for Northgate Link construction is approximately 65% as compared to approximately 61% of contractual duration expended.



Link Light Rail

Northgate Link Extension



Community Outreach

University District Station (140)

- A project update was provided to the Northeast District Council on June 7.
- Continued to work with businesses on impacts related to the alley closure and move of perimeter fencing. Replacement parking has been provided, load/unload areas addressed and garbage/cooking oil pick up has been arranged.
- Distributed and posted a construction alert about the partial closure of NE 43rd Street on June 8.

Roosevelt Station (N150)

- Participated in the Roosevelt TOD meeting, answering project related questions.
- Coordinated with a property owner for installation of a web cam on the rooftop of their business.

Northgate Station (N160)

- A construction alert was prepared and distributed for the partial road closure on 1st Ave.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Construction Safety

Data/ Measure	June 2018	Year to Date	Project to Date
Recordable Injury/Illness Cases	3	14	93
Days Away From Work Cases	0	0	6
Total Days Away From Work	0	0	397
First Aid Cases	3	34	131
Reported Near Mishaps	2	28	112
Average Number of Employees on Worksite	502	-	-
Total # of Hours (GC & Subs)	89,865	545,777	3,453,910
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	6.68	5.13	5.39
Lost Time Injury (LTI) Rate	0.00	0.00	0.34
Recordable National Average	3.20	3.20	3.20
LTI National Average	1.30	1.30	1.30
Recordable WA State Average	6.40	6.40	6.40
LTI WA State Average	2.10	2.10	2.10

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

Major Construction Contract Packages

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

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.

N150 Roosevelt Station Finishes— Civil and architectural finishes work for the Roosevelt Station.

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

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

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



N140 Station box with structural cross-bracing at Mezzanine level —view to the south.

Contract N125 – TBM Tunnels

Close-out Progress

The N125 Contractor, JCM, was issued Substantial Completion on March 13, 2018. JCM is working to complete the final punchlist in the tunnels:

- One item of curb and ramp restoration, requiring SDOT agreement.
- Completion of WSDOT punchlist items, pending WSDOT review.
- JCM is working to complete Documentation and Spare Parts items.

Next Period's Activities

- Complete remaining NCRs and punch list items.
- Continue safety critical certification.
- Complete UPS training.
- Complete submission of outstanding as-builts and O&M manuals.
- Continue finalizing remaining change orders.

Closely Monitored Issues

- There are numerous open claims on the contract that are being reviewed and/or negotiated at various levels of partnering. Close-out of these remaining items will be necessary to achieve Final Acceptance.

Cost Summary

Present Financial Status	Amount
N125 Contractor - JCM Northlink	
Original Contract Value	\$ 440,321,000
Change Order Value	\$ 60,435,102
Current Contract Value	\$ 500,756,102
Total Actual Cost (Incurred to Date)	\$ 496,884,392
% Authorized Billed-to-Date	99.2%
Physical Percent Complete	100.0%
Authorized Contingency	\$ 66,048,150
Contingency Drawdown	\$ (60,435,102)
Contingency Index	1.09

Contract N140—U District Station Finishes

Current Progress

The N140 Contractor, Hoffman Construction (HCC), continues to prosecute the structural work in Basement Level (BL) 1 in the North and South Areas. Roof Deck forming is underway in the Center Area.

- Completed electrical conduit installation for EC5 & EC6 wall areas.
- Escalator #3 - delivered and commenced installation of the lower and upper sections.
- Escalator #1 - delivered and completed installation of the lower and upper sections.
- Continued with new construction wall for NE 43rd St. to prepare for bridge demolition and removal.
- Completed electrical conduit installation for EC5 & EC6 wall areas.

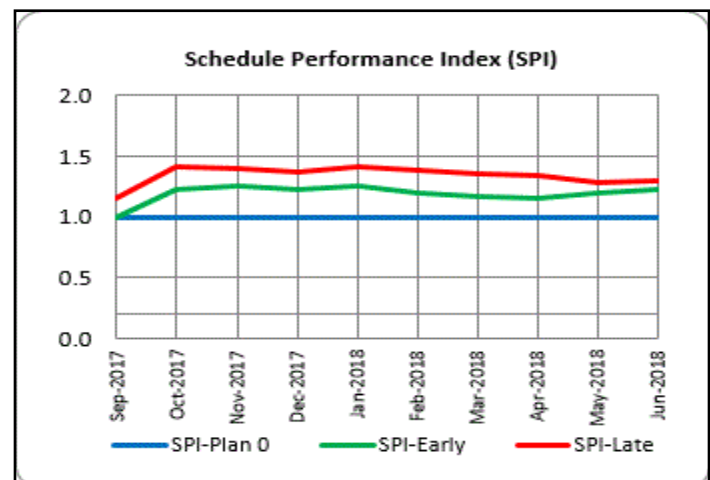
Schedule Summary

The schedule update for June 2018 indicates the project remains ahead of schedule with no variances in the project milestones. The critical path for the project remains in the North Headhouse structure, North Entry, and then into commissioning.

Activity Name	OD	RD	Start	Finish	2017				2018				2019				2020				2021				J22
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
N140 - U-District Station Finishes	758	415	10-Feb-17 A	19-Feb-20																					
MILESTONES	0	0	19-Feb-20	19-Feb-20																					
Milestone 4 - Substantial Completion	0	0		19-Feb-20*																					
PRECONSTRUCTION	0	0	17-Jul-17 A	17-Jul-17 A																					
Precon - Site Access Granted (Construction NTP)	0	0	17-Jul-17 A																						
CONSTRUCTION	758	415	10-Feb-17 A	19-Feb-20																					
Structure	685	342	10-Feb-17 A	04-Nov-19																					
EXTERIOR SHELL / SKIN	169	169	26-Oct-18	26-Jun-19																					
INTERIORS	350	350	11-Jul-18	22-Nov-19																					
ELEVATORS	155	155	08-Jan-19	15-Aug-19																					
ESCALATORS	200	190	18-Jun-18 A	01-Apr-19																					
STAIRS	62	62	24-Sep-18	20-Dec-18																					
SITWORK	341	324	18-Jun-18 A	18-Oct-19																					
START-UP & COMMISSIONING	208	208	25-Apr-19	19-Feb-20																					

Schedule Performance Index

This period, the SPI early is at 1.23 and the SPI late is 1.30. The early index indicates that the Contractor continues to perform slightly ahead of plan when compared to the baseline schedule and cash flow.



Link Light Rail

Northgate Link Extension

Next Period's Activities

- Continue procurement of long lead materials and equipment.
- Continue North Basement Level 1 & South Lid Level falsework set up.
- Remaining escalator support steel will be set at Escalators #5-8.
- Continue Interior concrete wall work at South Basement Level 2 and at egress levels.
- Continue platform, track, & shoulder slabs.
- Center exterior walls EC5 & 6 will pour.
- North Basement Level 1 suspended slab is scheduled to pour July 20.
- Commence closing south end of alley and building temporary fence.
- Continue demolition of the temporary bridge.

Closely Monitored Issues

- No new issues.

Cost Summary

Present Financial Status	Amount
N140 Contractor—Hoffman Construction	
Original Contract Value	\$159,836,688
Change Order Value	\$ 366,987
Current Contract Value	\$160,203,675
Total Actual Cost (Incurred to Date)	\$ 48,188,975
Financial Percent Complete	30.1%
Physical Percent Complete	31.7%
Authorized Contingency	\$ 7,991,834
Contingency Drawdown	\$ 366,987
Contingency Index	6.9



UDS – Escalator #1 installed.

Contract N150—Roosevelt Station Finishes

Current Progress

Hoffman Construction (HCC) has achieved Milestone No. 1—Basic Structure Completion Below Grade as of June 17, 2018. Work continues on the Headhouse stem walls and foundations, both North and South. CMU block work has moved up to BL-3. Major accomplishments this period include:

- Commenced MEP rough-in at north head house under slab.
- Commence forming and rebar for north head house stemwalls.
- Poured south hammerhead column.
- Complete protective deck over south bound trackway.

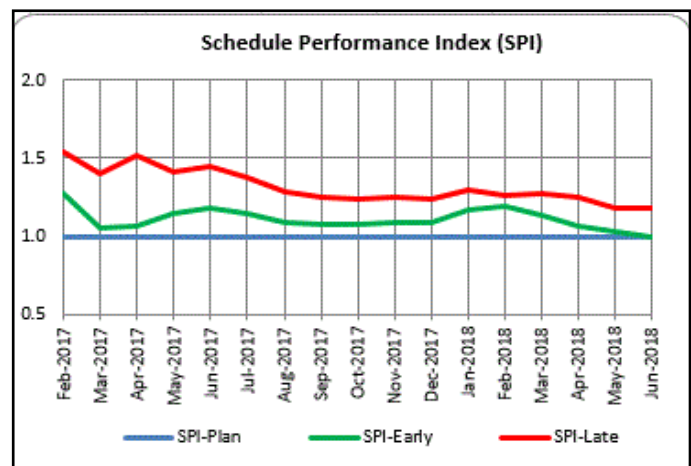
Schedule Summary

The N150 May schedule update was returned to Hoffman Construction with a review status of Revise and Resubmit. The Contractor has submitted a recovery schedule based on the May update, that ST has reviewed and accepted. A June update is expected soon but has not been submitted as of this writing.

Activity Name	OD	RD	Start	Finish	2017				2018				2019				
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
N150 - Roosevelt Station Finishes	709	352	02-Dec-16 A	18-Sep-19													
MILESTONES	0	0	18-Sep-19	18-Sep-19													
MILESTONE 3 - SUBSTANTIAL COMPLETION OF ALL WOR	0	0		18-Sep-19*													
PRECONSTRUCTION	0	0	02-Dec-16 A	02-Dec-16 A													
ISSUE CONSTRUCTION NTP	0	0		02-Dec-16 A													
CONSTRUCTION	661	352	13-Feb-17 A	18-Sep-19													
MOBILIZATION	587	168	13-Feb-17 A	04-Jun-19													
STRUCTURE	607	298	13-Feb-17 A	02-Jul-19													
INTERIORS	234	207	23-Mar-18 A	22-Feb-19													
HEADHOUSE	292	263	21-Mar-18 A	13-May-19													
BUS SHELTER	30	30	09-Oct-18	19-Nov-18													
BIKE CAGE	13	13	19-Oct-18	06-Nov-18													
ELEVATORS	172	172	27-Sep-18	03-Jun-19													
ESCALATORS	130	130	02-Aug-18	06-Feb-19													
STAIRS	78	78	29-Jun-18	18-Oct-18													
CP-31	212	55	19-Feb-18 A	18-Dec-18													
CONSTRUCTION ACCESS INFILL	68	68	05-Jun-19	10-Sep-19													
START-UP & COMMISSIONING	174	174	15-Jan-19	18-Sep-19													
SITE RESTORATION	245	245	07-May-18	23-Apr-19													
ARTWORK	129	129	02-Aug-18	05-Feb-19													
CLOSEOUT	20	20	20-May-19	17-Jun-19													
N830 TRACTION ELECTRIFICATION, SIGNALS, C	39	39	16-Oct-18	11-Dec-18													

Schedule Performance Index

This period, the SPI early is at 1.0 and the SPI late is 1.2. The early index indicates that the Contractor continues performing the work on schedule when compared to the baseline plan and is expected to continue this trend next period.



Link Light Rail

Northgate Link Extension

Next Period's Activities

- Place north escalator wall from roof to surface lift 1.
- Complete fill to bottom of footings at north head house.
- Place footings at north head house.
- Backfill CCF to bottom of slab at north head house.
- Continue installation of CMU walls at North Basement Level 3.
- Commence structural steel framing Basement Level 3.
- Place footings at south head house.
- Continue to fill CCF to bottom of slab at south head house.
- Continue installing Type 17 material at Right-of-Way.
- Continue demolition of both slurry wall and guide wall along perimeter.

Closely Monitored Issues

- Design continues to focus on responding to overdue RFIs and urgent submittals.
- N830 indicated that they will be delivering the MVSS gear in November 2018, which is later than originally planned. N830 is looking for ways to expedite delivery and HCC is reviewing potential impacts to finishes related to pathway for equipment installation.

Cost Summary

Present Financial Status	Amount
N150 Contractor - Hoffman Construction	
Original Contract Value	\$ 152,291,184
Change Order Value	\$ 1,825,303
Current Contract Value	\$ 154,116,487
Total Actual Cost (Incurred to Date)	\$ 74,607,322
Financial Percent Complete	48.4%
Physical Percent Complete	42.5%
Authorized Contingency	\$ 7,614,559
Contingency Drawdown	\$ 1,825,303
Contingency Index	1.8



RVS Pour CCF at North headhouse surface lid N.



Link Light Rail

Northgate Link Extension

Next Period's Activities

- **General Project Progress:** Continue processing and reviewing of submittals and RFIs. Continue CIP meetings with N830.
- **Guideway Substructure/Superstructure:** Continue formwork, rebar and concrete placement for columns/caps. Continue A-line guideway decks and track slabs. Continue guardrail installation. Install emergency walkway framework and grating.
- **Station:** Continue steel erection for Stair 2 and lower roof, and complete placement of Stair 5 walls. Continue escalator foundations.
- **Parking Garage:** Continue wall, column and parapet wall rebar and concrete placement. Continue mechanical, electrical and fire suppression piping installation on all levels. Begin plumbing rough-in. Continue elevator equipment installation and hold preliminary L&I inspection check of elevators. Continue prep and paint CMU walls and systems rough-in at systems rooms.
- **Utility & Drainage Work:** Continue water and sewer service line installation for the Garage; SPU service connection planned for early July. Place FC 6 precast slab and walls. Continue soldier pile, timber lagging, and excavation work in jurisdictional ditch.

Closely Monitored Issues

- Schedule slippage on elevated structure and garage, largely due to labor shortages. Contractor revised schedule logic to have concurrent work to mitigate this issue.
- Elevator installation for parking garage is critical to opening on schedule. Early coordination with L&I planned to ensure timely inspections.
- Standby generator tap may be added at the garage and station. Design review for this work is underway to determine if work can be expedited for the garage.

Cost Summary

Present Financial Status	Amount
N160 Contractor—Absher Construction	
Original Contract Value	\$ 174,000,000
Change Order Value	\$ 5,124,730
Current Contract Value	\$ 179,124,730
Total Actual Cost (Incurred to Date)	\$ 110,761,434
Financial Percent Complete	61.8%
Physical Percent Complete	63.3%
Authorized Contingency	\$ 17,400,000
Contingency Drawdown	\$ 5,124,730
Contingency Index	2.1



Placing concrete for deck span A05 Guideway looking north.

Contract N180 – Trackwork UWS to Northgate Station

Current Progress

The N180 Contractor, Stacy and Witbeck, Inc. (SWI) is nearing completion of the Floating Slab install in the Northbound tunnel (NBT), and is preparing to move to the Southbound tunnel (SBT). Plinth formwork is being installed between UDS and RVS. At MLP, the floor drains & piping has been installed, in advance of concrete footings. Track assemble is ongoing between RVS and UDS as well as UWS and UDS.

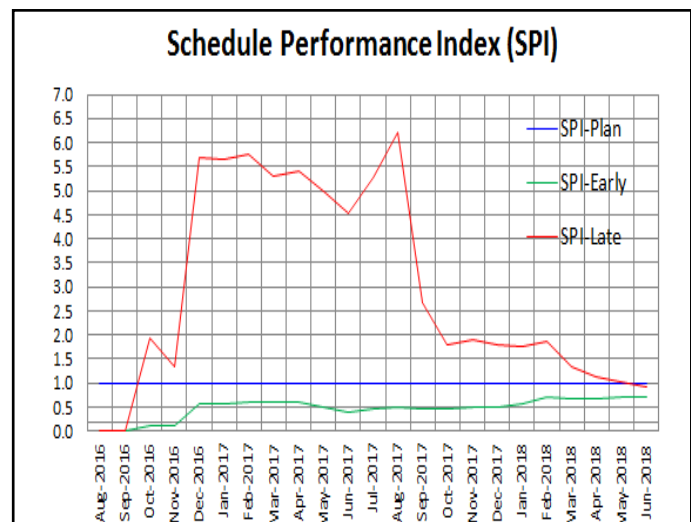
Schedule Summary

The N180 schedule for June forecast an on-time completion with project milestones moving back to the contract dates, rather than an early completion. SWI reviewed and resequenced their schedule, placing the critical path in the Plinth construction in Work Area 3 (WA.3), with the crew alternating between the NBT and SBT. The path then carries on through Work Area 5 (WA.5).

Activity Name	OD	RD	Start	Finish	16	2017				2018				2019					
						Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
N180 - Trackwork	800	335	25-Aug-16 A	30-Oct-19															
Milestones	0	0	30-Oct-19	30-Oct-19															
Milestone 7d - Substantial Completion of Work Area 7, 7.1, 7.2 (10/31/19)	0	0		30-Oct-19*															
Construction	800	335	25-Aug-16 A	30-Oct-19															
Mobilization	691	335	25-Aug-16 A	30-Oct-19															
Submittals	1078	405	25-Aug-16 A	17-Aug-19															
Procurement	595	282	07-Oct-16 A	15-Aug-19															
Work Area 1 (N06 - UWS to UDS Tunnels)	327	170	13-Nov-17 A	08-Mar-19															
Work Area 2.1 and 2.2 (N07 - U-District Station)	314	152	15-Dec-17 A	11-Feb-19															
Work Area 3 (N08 - UDS to RVS Tunnels)	177	91	05-Feb-18 A	07-Nov-18															
Work Area 4 (N09 - Roosevelt Station)	151	97	19-Mar-18 A	15-Nov-18															
Work Area 5 (N10 - RVS to MLP Tunnels)	293	219	28-Feb-18 A	31-May-19															
Work Area 6 (MLP and At Grade Guideway)	348	284	19-Mar-18 A	19-Aug-19															
Work Area 7 (Elevated Guideway South of NGS)	153	153	03-Dec-18	15-Jul-19															
Work Area 7.1 (N11 - Northgate Station)	82	82	02-Jan-19	26-Apr-19															
Work Area 7.2 (Elevated Guideway North of NGS)	128	128	02-Jan-19	02-Jul-19															

Schedule Performance Index

The Contractor's performance has fallen below the late schedule SPI 0.94 and behind the early schedule SPI 0.70. Performance in between the curves is normally what is expected. Due to late access to the tunnel, the Contractor is behind the baselined schedule, but continues to meet their goals for early work such as material procurement and fabrications. Work performed in the field has to date met or exceeded forecasts.



Link Light Rail

Northgate Link Extension

Next Period's Activities

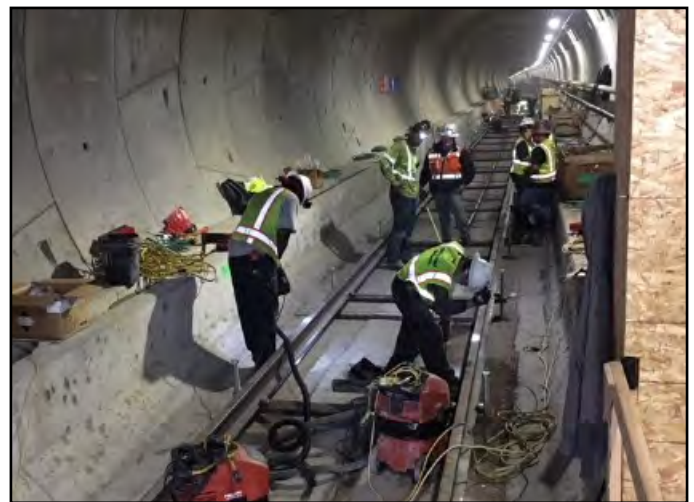
- Continue review and processing of submittals and RFIs.
- SWI to continue the install of their control survey in the NBT and SBT in WA.3.
- CPP to complete casting 7'-10" floating slabs, and trench caps.
- CPP to begin casting of the 16HZ floating slabs to be installed at the UDS station, WA.2.
- SRC to continue producing 5Hz isolation pads.
- SWI to begin delivery and install of the floating slabs into the SBT of WA.1.
- SWI to continue DF track in WA.3.
- Hymark to continue work on MLP stair tower.
- Liberty Electric to begin installing the conduits that run through the stair tower footing at MLP.

Closely Monitored Issues

- Frequency Response Testing (FRT) on floating slabs continues to produce excellent results with roughly 95% passing on the first pass. A handful of slabs have been lifted and had their bearing pads replaced after failing the first round of testing. Replacement of the pads seems to have rectified the issue and they've passed on the second round of testing. FRT is moving toward completion and final data is being analyzed.

Cost Summary

Present Financial Status	Amount
N180 Contractor—Stacy & Witbeck	
Original Contract Value	\$ 71,455,950
Change Order Value	\$ 2,616,179
Current Contract Value	\$ 74,072,129
Total Actual Cost (Incurred to Date)	\$ 37,411,039
Financial Percent Complete	50.5%
Physical Percent Complete	63.3%
Authorized Contingency	\$ 10,718,393
Contingency Drawdown	\$ 2,616,179
Contingency Index	2.07



Crews building skeleton track in the SBT of Work Area 3.

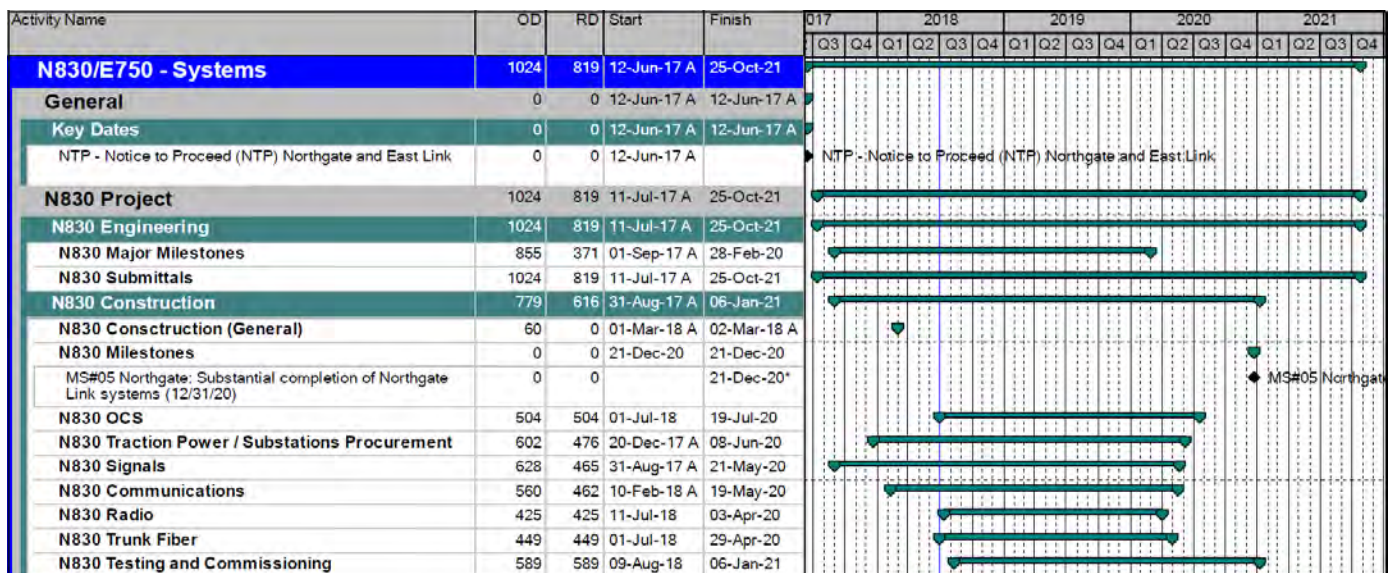
Contract N830 – Northgate Link Systems, Heavy Civil GC/CM

Current Progress

The N830 Contractor, Mass Electric, continues to focus on engineering efforts, including the design of communications, radio and signaling systems. EMI cable installation in the tunnel is ongoing in conjunction with the installation of the floating slabs. At the Northgate Station Parking Garage, systems conduit and wire racks and wire are being installed. The Contractor has also gained Below Grade access milestone at the Roosevelt Station.

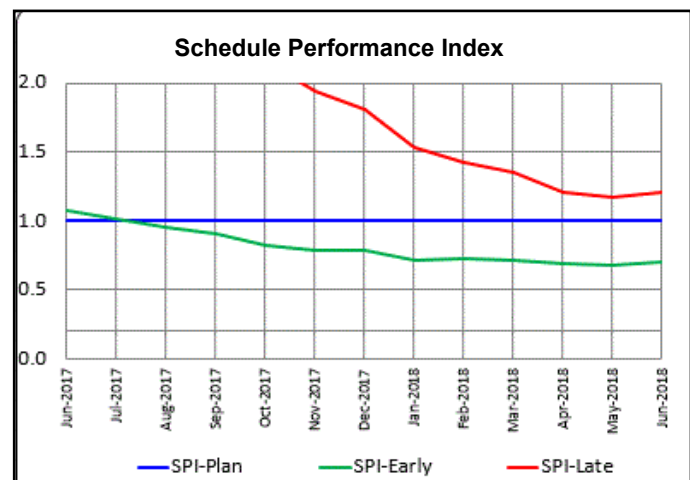
Schedule Summary

The N830 schedule for June continues to forecast an early completion of the work, in December 2020, though it did slip 6 days leaving 7 days of float. Within the schedule the critical paths related to each station, as well as the overall alignment are unchanged. At UDS, critical activities are the 26kV power. At Northgate Station, the communications cable installation at the Parking Garage remains critical and Substantial Completion is driven by completion of the OCS throughout the alignment.



Schedule Performance Index

The Contractor (Mass Electric) continues to perform ahead of the late schedule SPI 1.20 and behind the early schedule SPI 0.70 in comparison to the baseline work plan. The Contractor initiated EMI installation and continues to procure subcontractor packages and developing engineering submittals. Once the majority of subcontractor packages are secured and the engineering submittals are progressed, the schedule will align with the baseline to allow for an accurate earned value measurements.



Link Light Rail

Northgate Link Extension

Next Period's Activities

- Continued Procurement for Signal and Communication materials fabrication and installation.
- Continued development and reviews of engineering submittals covering all disciplines: TPSS, OCS, TCS/ Signals and Communications.
- Continued meetings held between Systems and Civil Contractors to discuss and coordinate interface/access points for respective contracts.
- Continued EMI Cable installation between University of Washington and University District Stations.

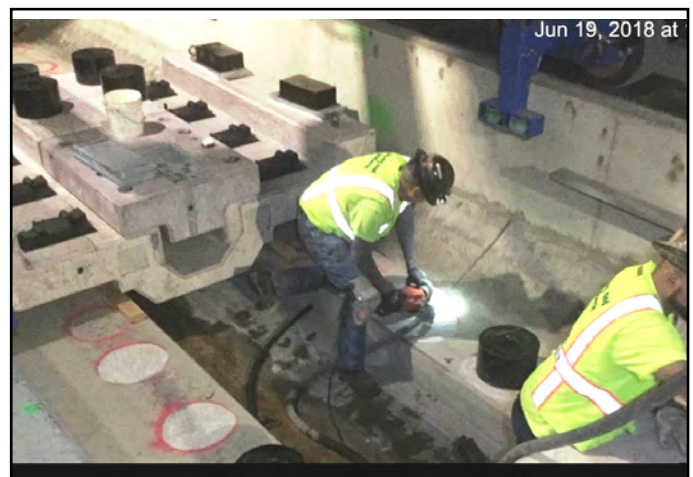
Closely Monitored Issues

- CMC and ST continues to closely monitor the prolonged procurement packages to ensure the process are progressed and does not impact upcoming work activities.

Cost Summary

Present Financial Status	Amount
N830 Contractor—Mass Electric Construction Co.	
Original Contract Value	\$ 104,660,444
Change Order Value	\$ 156,686
Current Contract Value	\$ 104,817,130
Total Actual Cost (Incurred to Date)	\$ 15,898,103
Financial Percent Complete	15.2%
Physical Percent Complete	16.1%
Authorized Contingency	\$ 5,233,022
Contingency Drawdown	\$ 156,686
Contingency Index	5.4

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



EMI Cable installation in the NB area.

This page left blank intentionally.

Link Light Rail

Lynnwood Link Extension

Project Summary

Scope

Limits North Seattle to Shoreline, Mountlake Terrace, and Lynnwood Transit Center

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

Stations Shoreline South/145th, Shoreline North/185th, Mountlake Terrace, Lynnwood City Center

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

Phase Final Design

Budget \$2.772 Billion (Baseline May 2018)



Map of Lynnwood Link Extension Alignment.

Schedule Revenue Service: July 2024

Key Project Activities

- Received L200 early work 100% plan submittal on June 1st. Continued working toward completion of L300 early work 100% plan set.
- Presented design update and open house preview to Mountlake Terrace City Council on June 4th.
- Station design online open house went live to the public on June 4th. Held open house for Mountlake Terrace on June 13th and Seattle/Shoreline on June 27th.
- L115 Contractor began pre-demolition abatement of hazardous materials.
- Held quarterly risk register update workshop with the project team.

Project Cost Summary

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

In May 2018 the Sound Transit Board approved the Project Baseline scope, schedule and budget which is reflected in the tables below. Approximately \$7.5M was incurred, of which \$3.0M was for advancing Civil & Systems Final Design; \$1.9M was incurred for Right-of-Way property acquisitions and relocations. The remaining expenditures were for third party coordination, permits, staff, legal, and other direct charges.

Commitment and Actuals under Construction Phase are related to construction permits, utility relocation, and early demolition activity.

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	\$23.7	\$23.7	\$98.2	\$0.0
Preliminary Engineering	\$39.1	\$39.1	\$39.1	\$39.1	\$39.1	\$0.0
Final Design	\$164.2	\$164.2	\$82.8	\$69.6	\$164.2	\$0.0
Construction Services	\$128.4	\$128.4	\$19.6	\$11.6	\$128.4	\$0.0
3rd Party Agreements	\$14.6	\$14.6	\$8.5	\$4.5	\$14.6	\$0.0
Construction	\$1,921.4	\$1,921.4	\$12.0	\$1.4	\$1,921.4	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$235.7	\$235.7	\$102.6	\$88.8	\$235.7	\$0.0
Project Contingency	\$170.2	\$170.2	\$0.0	\$0.0	\$170.2	\$0.0
Total	\$2,771.6	\$2,771.6	\$288.3	\$238.7	\$2,771.6	\$0.0

Cost Summary by SCC

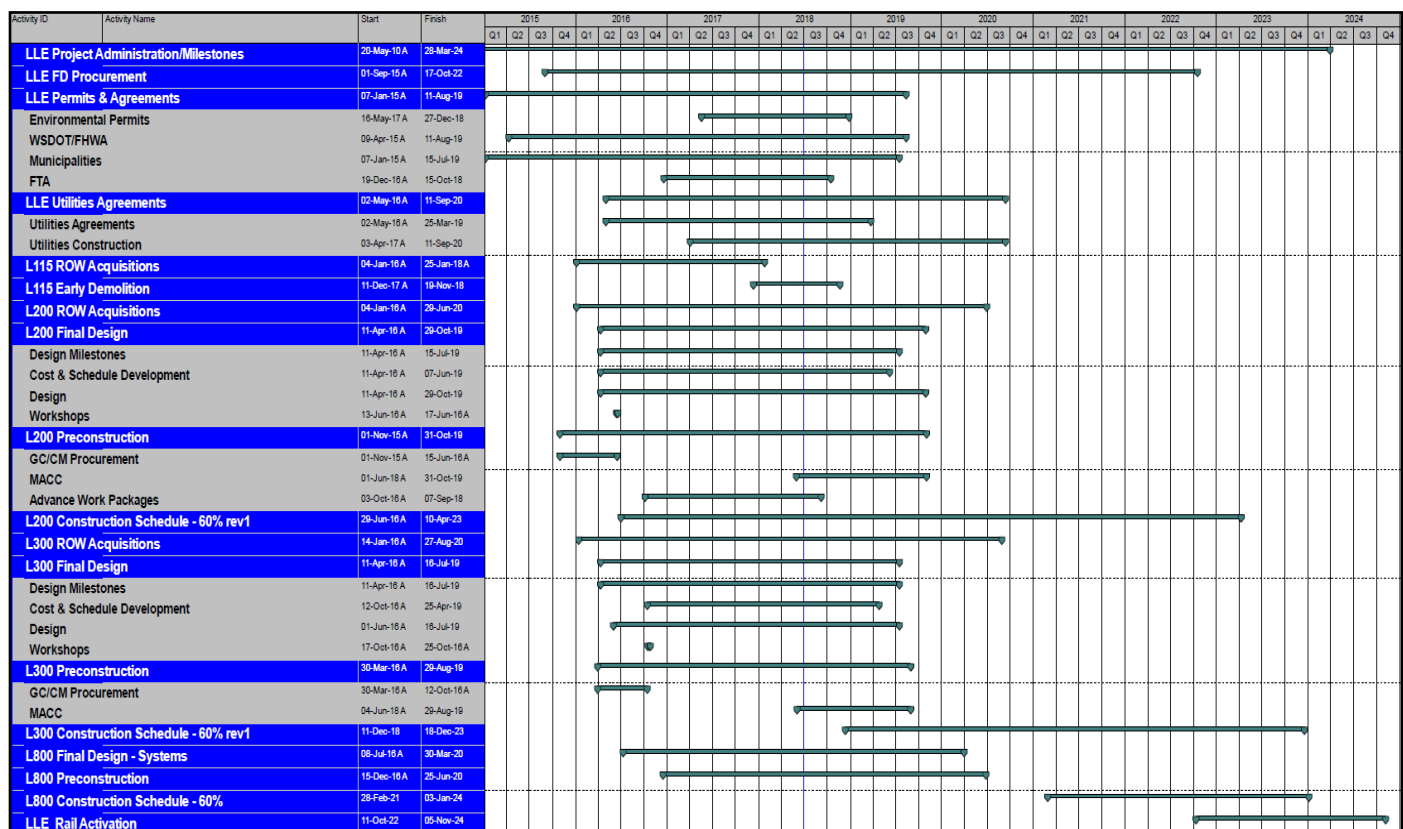
SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$791.8	\$791.8	\$0.0	\$0.0	\$791.8	\$0.0
20 Stations	\$357.9	\$357.9	\$0.0	\$0.0	\$357.9	\$0.0
30 Support Facilities	\$2.0	\$2.0	\$0.0	\$0.0	\$2.0	\$0.0
40 Sitework & Special Conditions	\$397.0	\$397.0	\$11.6	\$1.3	\$397.0	\$0.0
50 Systems	\$244.4	\$244.4	\$0.0	\$0.0	\$244.4	\$0.0
Construction Subtotal (10 - 50)	\$1,793.0	\$1,793.0	\$11.6	\$1.3	\$1,793.0	\$0.0
60 Row, Land	\$235.7	\$235.7	\$102.6	\$88.8	\$235.7	\$0.0
70 Vehicles (Non-Revenue)	\$1.4	\$1.4	\$0.0	\$0.0	\$1.4	\$0.0
80 Professional Services	\$449.3	\$449.3	\$174.1	\$148.6	\$449.3	\$0.0
90 Unallocated Contingency	\$292.2	\$292.2	\$0.0	\$0.0	\$292.2	\$0.0
Total (10 - 90)	\$2,771.6	\$2,771.6	\$288.3	\$238.7	\$2,771.6	\$0.0

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

The following are the top project risks:

- FFGA approval and execution schedule.
- Obtaining permits—Cities, WSDOT and resource agencies.
- Timely completion of right-of-way acquisition.
- Construction market conditions.
- Differing site conditions encountered during construction.

The continues to progress through the 90% final design efforts for both L200 and L300. The L115 Demolition work is scheduled to begin in December 2018, with early work for L200 and L300 starting in 4th Quarter 2018. Construction is planned through the end of 2023, including the Systems installations. Sound Transit will receive construction schedules based on the 90% design in July and will review and incorporate them into the overall master schedule as appropriate. The critical path for the project currently runs through the L200 contract, driven by Right-of-Way acquisition. ST is monitoring this closely and will reassess the path once the 90% schedule submission have been accepted. Revenue Service for Lynnwood Link is scheduled for 2024.



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 is expected to be fully drawn when all construction contract packages are executed.

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

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

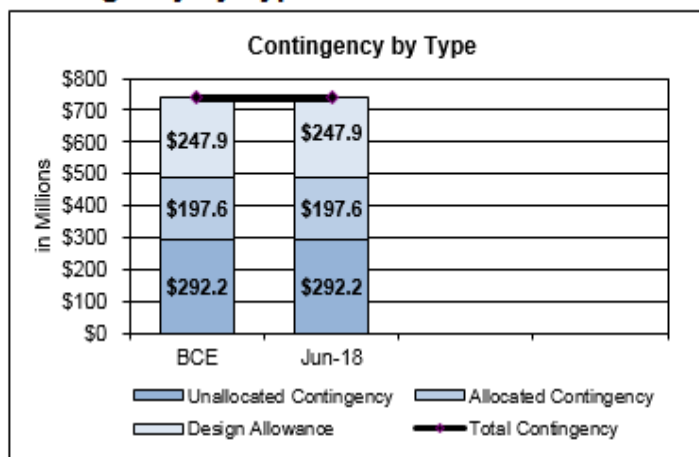
In the current period, there are no changes to contingency.

Contingency Status

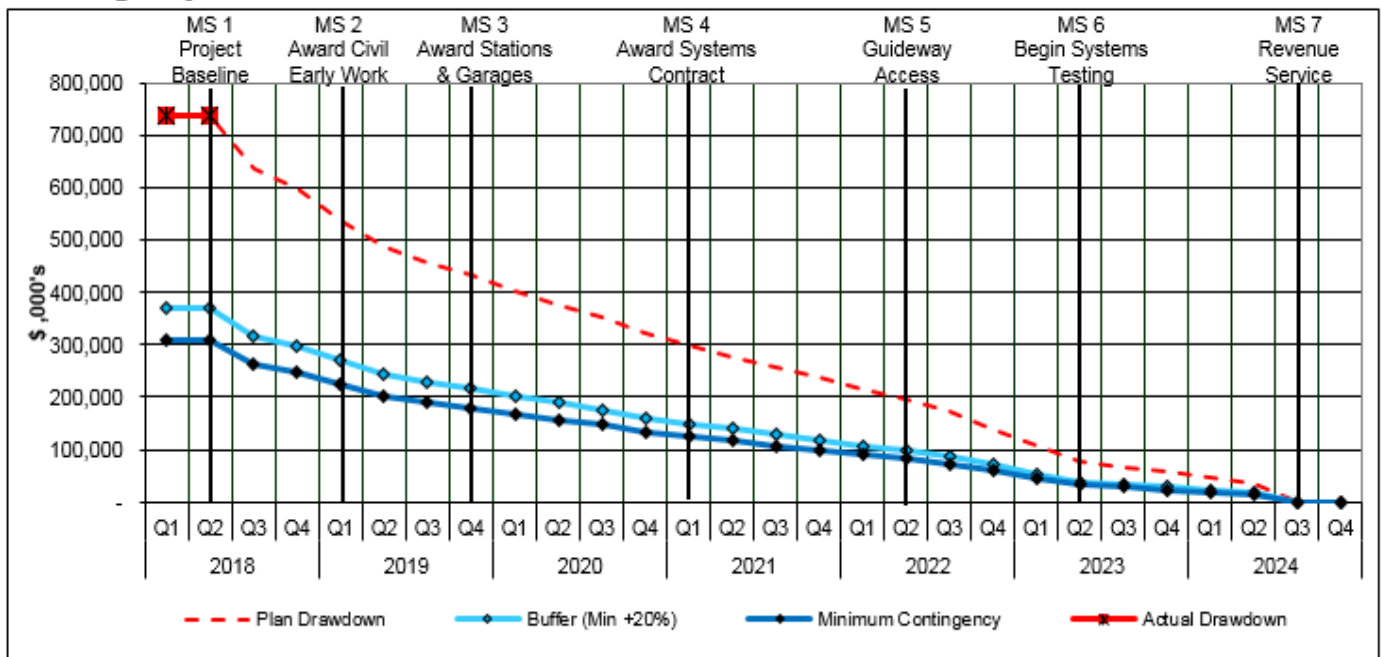
Type	Baseline		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$247.9	8.9%	\$247.9	9.7%
Allocated Contingency	\$197.6	7.1%	\$197.6	7.8%
Unallocated Contingency	\$292.2	10.5%	\$292.2	11.5%
Total:	\$737.7	26.6%	\$737.7	29.0%

Table figures are shown in millions.

Contingency by Type



Contingency Drawdown



Graph for quarter ending June 2018.

Link Light Rail

Lynnwood Link Extension

Right-of-Way

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

Lynnwood Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
357	336	102	77	234	113
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Community Outreach

- Station Design Open House Meetings – Two of three public open house meetings were held in June to update the public on the latest station designs and project plans.
- Shoreline Special Use Permit – A meeting notice was prepared and delivered to Shoreline residents satisfying permitting requirements. A summary of comments and promotional activities was prepared for the permit application.
- Community Outreach Specialists – Two new Community Outreach Specialists reported for work in June and worked to complete on-boarding activities along with reviewing project materials and plans.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	



Attendees ask questions at the Shoreline/Seattle open house on 6/27.

Civil Final Design Overview

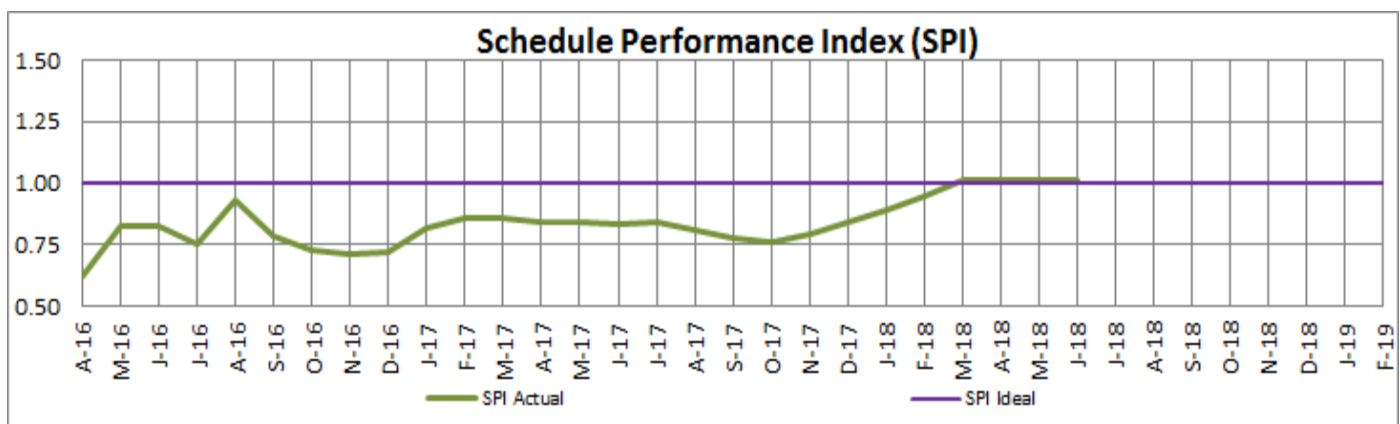
Sound Transit executed a professional services contract with HNTB Jacobs in April 2016 to perform civil final design along the entire Lynnwood Link alignment. Design services include preparation of comprehensive civil contract documents for construction, design coordination and cooperation with the GC/CM contractors, permit support, survey, geotechnical investigations, right-of-way planning and acquisition support, third party coordination support, risk assessment support, value engineering and constructability support, building and station systems design, cost estimating, and sustainability reports.

Current Progress

- Advancement of 90% Design.
- Advancement of IP-90% Cost Estimates.
- L200 Early Work 100% Submitted June 1st.
- L300 Early Work 100% Submittal QC Lock on June 13th.

Schedule Performance Index

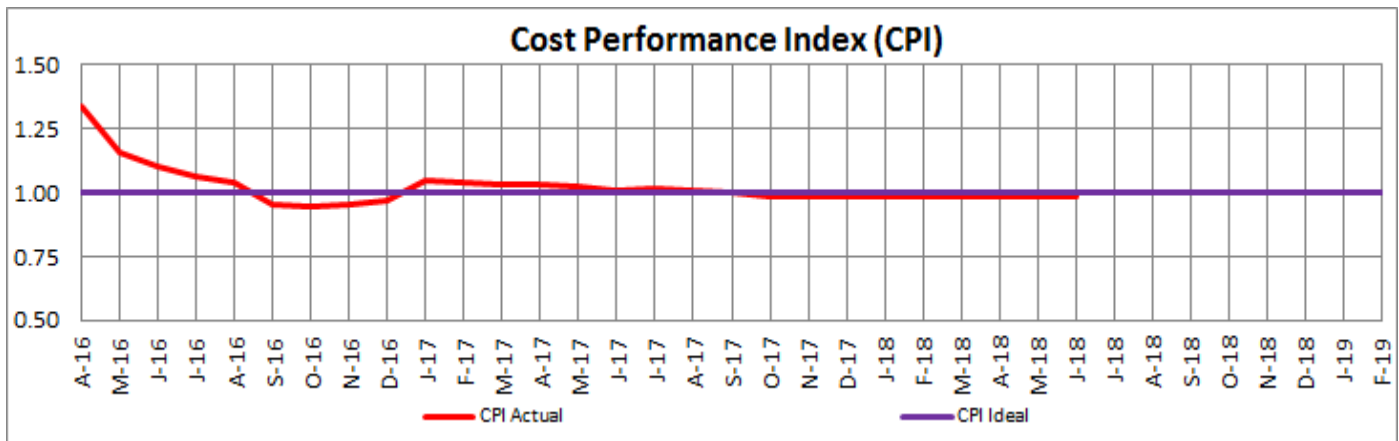
The cumulative Schedule Performance Index (SPI) trends at 1.01 through June 2018, which means that the cumulative amount of work accomplished is consistent with the amount of work originally planned. The civil final design cost savings ideas development was completed in October 2017. Schedule performance is expected to stay consistent over the next couple of reporting periods, as civil design activities have restarted and cost savings ideas will be incorporated into the project design.



Link Light Rail Lynnwood Link Extension

Cost Performance Index

\$64.5 M of the total contract amount, 89%, has been spent through June 2018. The civil final design percent complete is 88%, with an earned value of \$63.7 M. The cumulative Cost Performance Index (CPI) through June is 0.99 indicating that expenditures are consistent with the earned value of work performed.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$64.5M
% Spent	89%
Earned Value	\$63.7M
% Complete	88%
SPI	1.01
CPI	0.99



Attendees listen to a presentation at the Mountlake Terrace open house 6/13.

Systems Final Design Overview

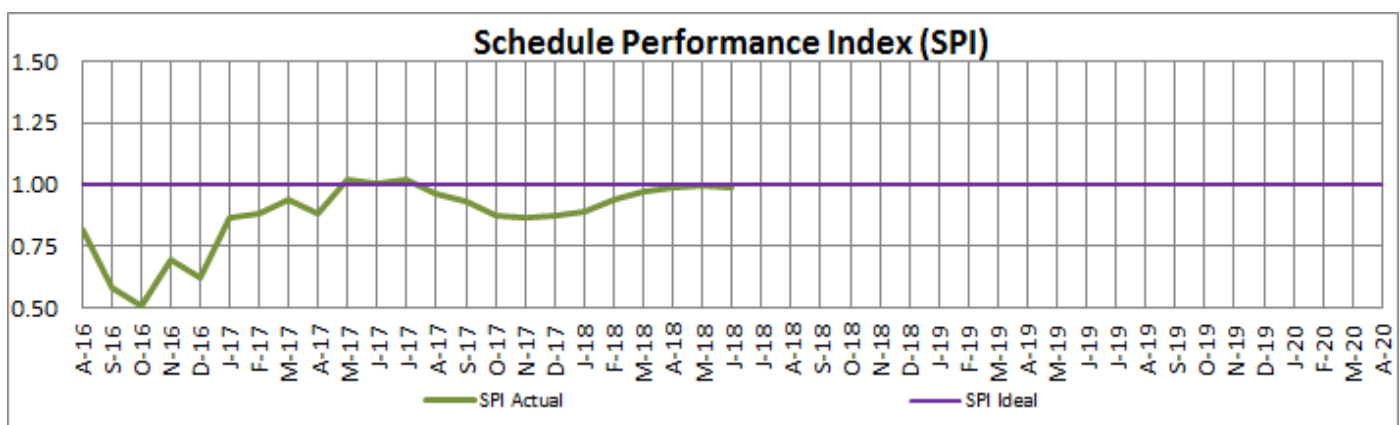
Sound Transit executed a professional services contract with LTK Engineering in July 2016 to perform systems final design along the entire Lynnwood Link alignment. Design services include preparation of comprehensive systems contract documents for construction, design coordination and cooperation with the civil final designer and GC/CM contractors, permit support, third party coordination support, risk assessment support, value engineering and constructability support, schedules and cost estimating.

Current Progress

- Continuing work in support of the Systems In-Progress 90% submittal in August 2018.

Schedule Performance Index

The cumulative Schedule Performance Index (SPI) trends at 0.99 through June 2018, which means that cumulative amount of work accomplished is consistent with the amount of work originally planned.



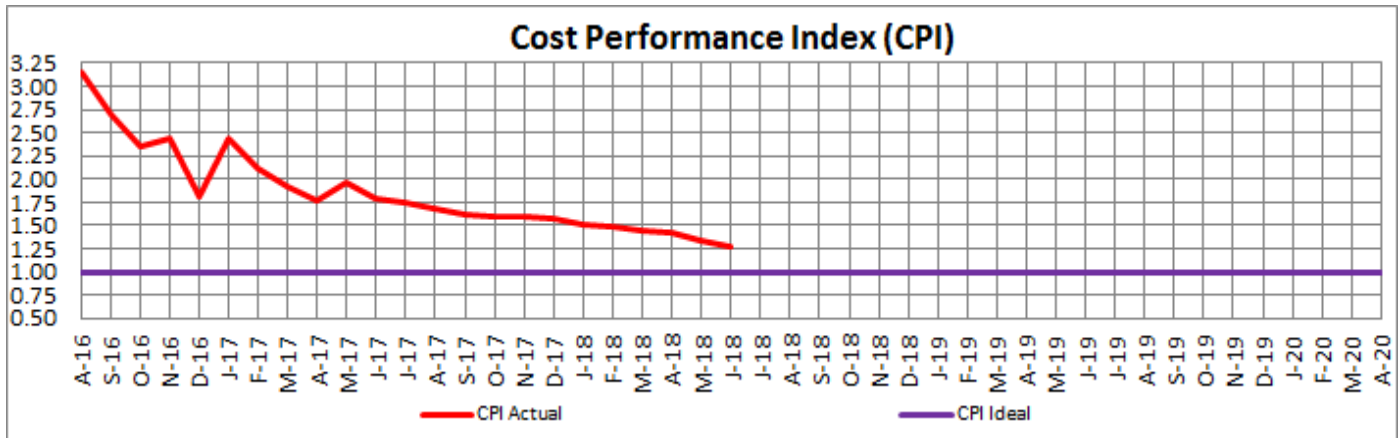
Link Light Rail

Lynnwood Link Extension



Cost Performance Index

\$4.7 M of the total contract amount, 50%, has been spent through June 2018. The systems final design percent complete is 64%, with an earned value of \$6.0 M. The cumulative Cost Performance Index (CPI) through June is 1.28 indicating that expenditures are significantly lower than the earned value of work performed.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$4.7M
% Spent	50%
Earned Value	\$6.0M
% Complete	64%
SPI	0.99
CPI	1.28

Civil Construction Management Overview

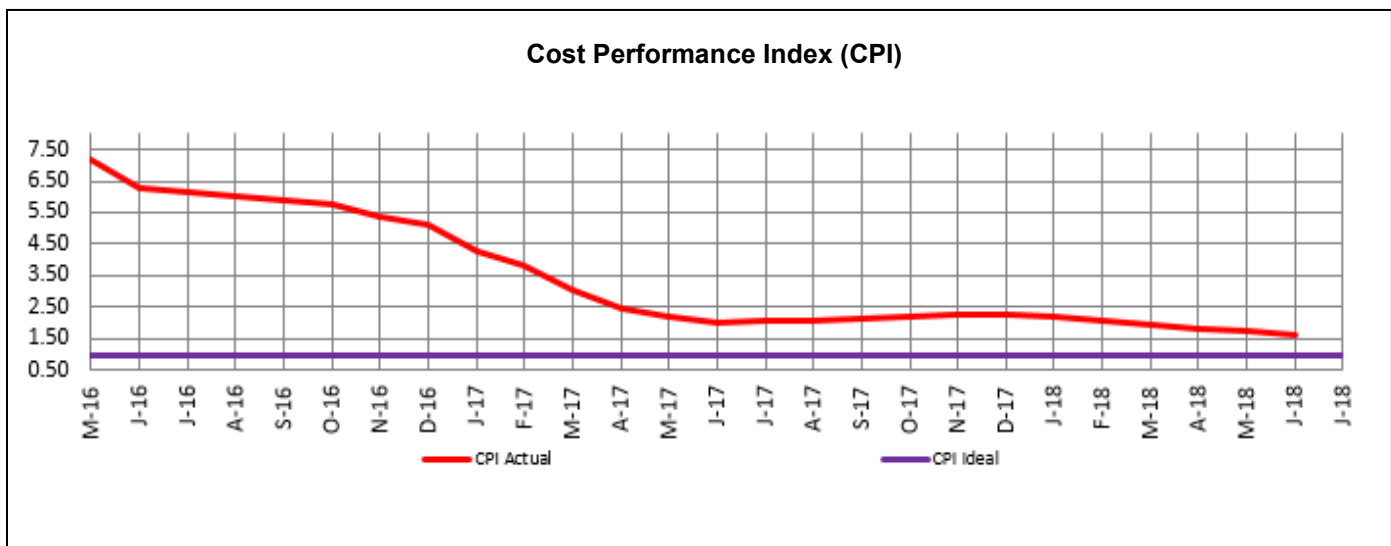
Sound Transit executed a professional services contract with PGH Wong in May 2016 to perform civil Construction Management (CMC) Services, including procurement support, permit support, contract document review, construction estimate reviews, participation in value engineering, risk assessments and constructability reviews, construction management support and oversight of early works by adjacent private and public developments, and public and private utility relocations.

Current Progress

- Coordinating meetings with design, GC/CM, and Sound Transit teams.
- Coordination on various preconstruction activities including cost estimates, schedule, and constructability.
- Coordinating with GC/CMs and Final Designer in review of the Civil In-Progress 90% design package.

Cost Performance Index

\$4.5 M of the total contract amount, 61%, is spent through June 2018, with an earned value of \$7.5 M. The cumulative Cost Performance Index (CPI) is 1.65, indicating that expenditures are significantly lower than the earned value of work performed. Phase 1 of the contract was planned to end in January 2018. It has extended as design has extended. There is no additional cost to earn against their spent so CPI is trending downward. Phase 2 of the contract will be implemented in late 2018.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$4.5M
% Spent	61%
Earned Value	\$7.5M
CPI	1.65

Link Light Rail

Lynnwood Link Extension



GC/CM Pre-Con Overview - L200 Northgate to NE 200th Street

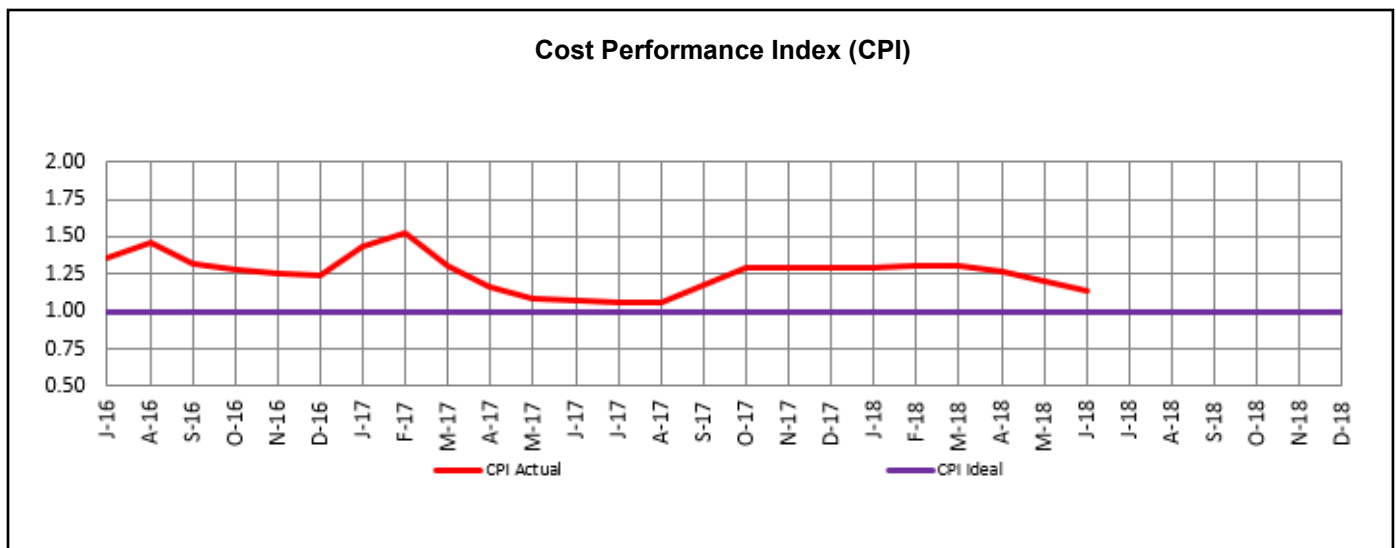
Sound Transit executed a professional services contract with Stacy & Witbeck Kiewit Hoffman in June 2016 to perform GC/CM pre-construction services for the L200 segment, including assistance in preparation of final construction plans including traffic control, preparation of schedules, reviewing right-of-way needs, identifying potential early work, assisting in risk assessments, value engineering and constructability workshops, preparing cost estimates, and completing reviews of contract documents.

Current Progress

- Coordinating meetings with design, Construction Management Consultant, and Sound Transit teams.
- Progress on various preconstruction activities including cost estimates, schedule, and constructability.
- Coordinating with CMC and Final Designer in review of the Civil In-Progress 90% design package.

Cost Performance Index

\$3.8 M of the total contract amount, 75%, is spent through June 2018, with an earned value of \$4.3M. The cumulative Cost Performance Index (CPI) is 1.14, indicating that expenditures are lower than the earned value of work performed. The pre-construction schedule has been extended; CPI is anticipated to trend closer to 1.0 in the future.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$3.8M
% Spent	75%
Earned Value	\$4.3M
CPI	1.14

GC/CM Pre-Con Overview - L300 NE 200th St. to Lynnwood Transit Center

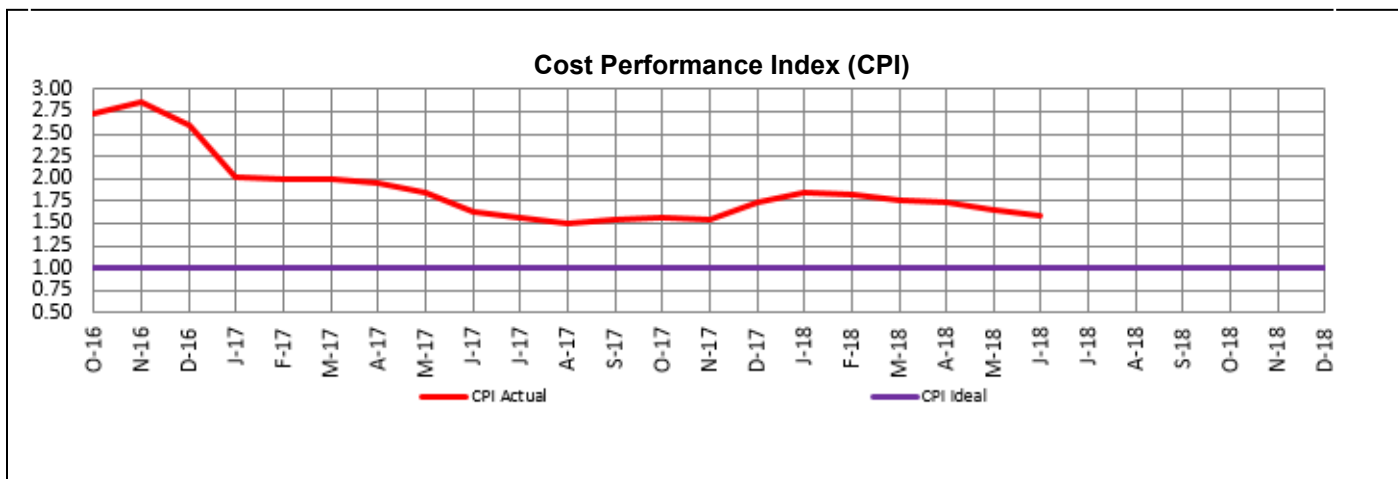
Sound Transit executed a professional services contract with Skanska in October 2016 to perform pre-construction services for the L300 segment, including assistance in preparation of final construction plans including traffic control, preparation of schedules, reviewing right-of-way needs, identifying potential early work, assisting in risk assessments, value engineering and constructability workshops, preparing cost estimates, and completing reviews of contract documents.

Current Progress

- Coordinating meetings with design, Construction Management Consultant, and Sound Transit teams.
- Progress on various preconstruction activities including cost estimates, schedule, and constructability.
- Coordinating with CMC and Final Designer in review of the Civil In-Progress 90% design package.

Cost Performance Index

\$3.1 M of the total contract amount, 58%, has been spent through June 2018, with an earned value of \$4.9 M. The cumulative Cost Performance Index (CPI) is 1.58, indicating that expenditures are significantly lower than the earned value of work performed. The pre-construction schedule has been extended; CPI is anticipated to trend closer to 1.0 in the future.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$3.1M
% Spent	58%
Earned Value	\$4.9M
CPI	1.58

Link Light Rail

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

Project Summary

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

Phase Construction

Budget \$225.6 Million

Schedule Construction Complete: 2nd QTR 2018



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

Major Contracts

	Scope	Agreement/Contract Amount
WSDOT	Final Design	\$ 20,942,000
WSDOT	CM Services	\$ 16,358,000
IMCO	Construction	\$122,021,000
City of Mercer Is	Transportation Mitigation	\$10,050,000

Key Project Activities

- **Work outside the tunnels:** Update and track equipment warranty items, finalize BIM software, complete Operations and Maintenance manuals, finalize irrigation system maintenance crew training; continue troubleshooting minor issues with other systems .
- **Mercer Island Tunnel:** Continue to track warranty and equipment lists, continue testing/troubleshooting minor issues with other systems .
- **Mount Baker Ridge Tunnel (MBRT):** Continue to track warranty and equipment lists, resolve continue testing/troubleshooting minor issues with other systems, and finalize other punchlist items.
- **SCADA:** Continue tracking equipment warranty lists and submit final documentation.
- **Simplex:** Continue tracking equipment warranty lists and submit final documentation.

Closely Monitored Issues

While the center roadway turnover to Sound Transit was completed on schedule, Substantial Completion continues to slip; achievement of Substantial Completion is anticipated for 3rd Quarter 2018, due to the following:

- Challenges continue with MBRT emergency generator synchronization. Additional testing is required.

Project Cost Summary

The following tables summarize the cost information for the I-90 Two-way Transit and HOV Operations (Stage 3) project. WSDOT has caught up on their invoice submittals, allowing resolution to past over-accruals and a more realistic expenditure forecast. With the Project nearing Substantial Completion, future expenditures continue tapering off as anticipated; June's monthly expenditure was \$227.5K. Tables below are in millions.

Cost Summary by Phase

Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$3.6	\$3.6	\$2.3	\$2.3	\$3.6	\$0.0
Preliminary Engineering	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$0.0
Final Design	\$22.1	\$22.1	\$18.7	\$18.0	\$22.1	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$198.3	\$198.3	\$182.5	\$165.0	\$198.3	\$0.0
Total	\$225.6	\$225.6	\$205.1	\$186.8	\$225.6	\$0.0

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

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
40 Sitework & Special Conditions	\$180.6	\$190.7	\$182.5	\$165.0	\$190.7	\$0.0
80 Professional Services	\$26.3	\$26.3	\$22.6	\$21.8	\$26.3	\$0.0
90 Unallocated Contingency	\$18.7	\$8.7	\$0.0	\$0.0	\$8.7	\$0.0
Total	\$225.6	\$225.6	\$205.1	\$186.8	\$225.6	\$0.0

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

Link Light Rail

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

Cost Contingency Management

In the table below, the Allocated Contingency includes both WSDOT-controlled construction contingency and the total ST-controlled allocated contingencies. Due to several executed change orders in this period that resulted in a net credit of \$401K, WSDOT reallocated the credit amounts to the current Construction Allocated Contingency status by the same amount.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$0.0	0.0%	\$0.0	0.0%
Allocated Contingency	\$17.0	7.5%	\$2.6	6.6%
Unallocated Contingency	\$18.7	8.3%	\$8.7	22.3%
Total	\$35.7	15.8%	\$11.2	28.9%

Note: Table in millions.

Project Schedule

Project Milestones for construction are indicated below; forecast dates were submitted by WSDOT as anticipated dates, but have not at this time been accepted. Ongoing negotiations between WSDOT and the contractor to resolve commercial issues have pushed the forecast Substantial and Physical Completion dates into 3rd QTR 2018.

Contract	Final Tunnel Commissioning Complete		Substantial Completion		Center Roadway Turnover		Physical Completion	
	Baseline	Forecast / Actual	Baseline	Forecast / Actual	Baseline	Forecast / Actual	Baseline	Forecast / Actual
I-90 Two-Way Transit & HOV Operations Stage 3	2/16/2017	Q3/2018	2/20/2017	Q3/2018	5/31/2017	6/14/2017 A	5/31/2017	Q3/2018

Changes from previous update are indicated in **RED**; A indicates Actual



ECP Monitor configuration testing & demo

This page left blank intentionally.

Link Light Rail

East Link Extension

Project Summary

Scope

Limits	Fourteen-mile extension from Downtown Seattle to Mercer Island, Bellevue and the Overlake area of Redmond.
Alignment	East Link Extension expands light rail to East King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond.
Stations	Judkins Park, Mercer Island, South Bellevue, East Main, Bellevue Downtown, Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village and Redmond Technology
Systems	Signals, traction electrification, and communications (SCADA).
Phase	Construction
Budget	\$3.677 Billion (Baseline April 2015)
Schedule	Revenue Service: June 2023



Map of East Link Extension Alignment.

Key Project Activities

Seattle to South Bellevue

- **Floating Bridge Retrofit (E130):** Ongoing phases of post tensioning work and electrical retrofit for cathodic protection; ongoing structural retrofit of transition spans; continue OCS base installations.
- **Mercer Island (E130):** Ongoing retrofit of tunnel electrical and structural modifications; ongoing construction of Mercer Island Station head house structures and TPSS sites 3 and 4; ongoing rail delivery and welding.
- **IDS to Mt. Baker Tunnel (E130):** Ongoing retrofit of tunnel electrical and structural modifications; commenced clearing TPSS #2 site for structure construction.

South Bellevue to Redmond

- **South Bellevue (E320):** Ongoing forms, rebar installation, construction of columns, pier caps and straddle bent; coordination of private utility relocation work; commenced structural fill and station tub false work at the parking garage site.
- **Downtown Bellevue Tunnel (E330):** Completed excavating the invert of the shaft; continued reinforcing for the adit shaft breakout to the adit tunnel and applied smoothing layer shotcrete for the shaft.
- **Downtown Bellevue to Spring District (E335):** Commenced forming and rebar installation of bottom slab and road panels at 110th Ave. Set girders over 116th and 8th Ave. Continued form work for base slab of span over I-405.
- **Bel-Red (E340):** Continue relocations and installations of both wet and dry utility work. Form, pour and strip retaining wall is ongoing. Decommission wells at various locations.
- **SR520 to Redmond Technology Station (E360):** Design—Systems, OVS Station, and OVS Pedestrian Bridge design continue IFC validation. Construction—Four columns and caps were placed. Walls 13A, B5, B6, S8, and 16 development is ongoing.
- **Systems (E750):** Continue with submittals, components and product design. Coordinated Installation Plan discussions between civil and system contractors.

Environmental

- Conducted environmental compliance weekly inspection for East Link.
- Oversaw wetland mitigation construction at Sweyolocken blueberry farm, stream restoration at West Tributary to Kelsey Creek (E340) and Stream enhancement at Coal Creek (E320).
- Working with volunteers to monitor peregrine falcon nest (E130).

Closely Monitored Issues

- Completing remaining property acquisitions and easements.
- Timely submissions and issuance of construction permits.
- With ongoing construction in all segments, construction safety and environment compliance are priorities.
- Unidentified commercial utility connections within roadways and private properties continues to be challenging.

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) continues to be projected at approximately \$3.68B. This period's expenditure is about \$59M, pushing the total project expenditure to date cost from \$1.29B to \$1.35B. Project commitments has risen to over \$3B with all major construction contracts in place and construction is on-going throughout the alignment.

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	\$71.4	\$71.2	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.8	\$54.7	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$245.5	\$207.4	\$283.0	\$0.0
Construction Services	\$257.5	\$257.5	\$196.8	\$60.7	\$257.5	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$38.5	\$17.0	\$52.2	\$0.0
Construction	\$2,544.3	\$2,544.3	\$2,141.6	\$672.6	\$2,544.3	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$298.2	\$298.2	\$266.3	\$263.3	\$298.2	\$0.0
Total	\$3,677.2	\$3,677.2	\$3,014.9	\$1,347.0	\$3,677.2	\$0.0

Link Light Rail East Link Extension

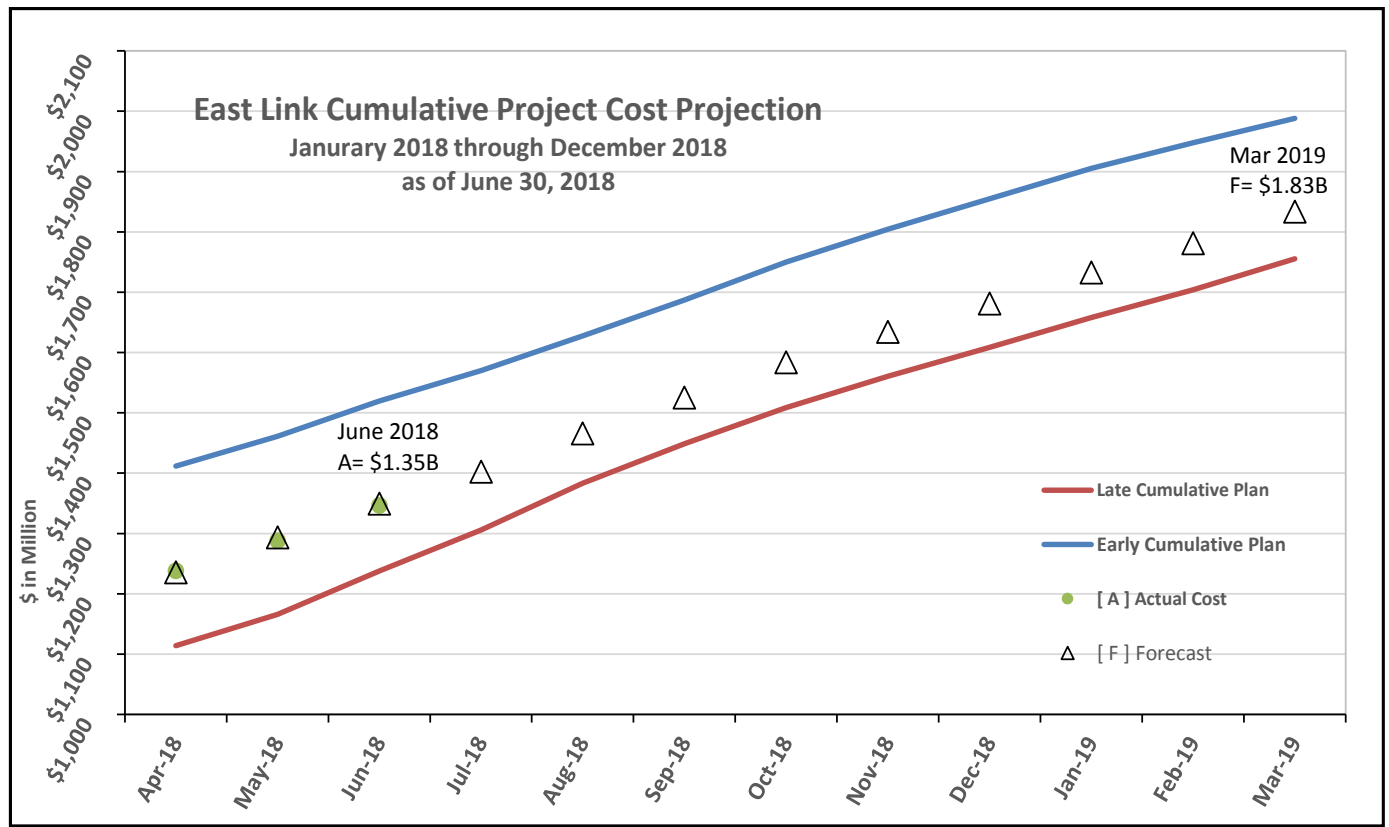


Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$744.6	\$949.7	\$885.4	\$333.7	\$962.1	(\$217.5)
20 Stations	\$397.7	\$474.2	\$433.0	\$96.8	\$470.7	(\$73.0)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$568.3	\$455.4	\$193.2	\$598.2	\$210.3
50 Systems	\$353.8	\$367.9	\$345.3	\$39.0	\$329.2	\$24.6
Construction Subtotal (10 - 50)	\$2,304.6	\$2,360.1	\$2,119.1	\$662.7	\$2,360.1	(\$55.5)
60 Row, Land	\$288.5	\$288.5	\$266.3	\$263.3	\$288.5	\$0.0
70 Vehicles (non-revenue)	\$2.8	\$2.8	\$0.0	\$0.0	\$2.8	\$0.0
80 Professional Services	\$898.4	\$889.1	\$629.5	\$421.0	\$889.2	\$9.2
90 Unallocated Contingency	\$182.9	\$136.6	\$0.0	\$0.0	\$136.6	\$46.2
Total (10 - 90)	\$3,677.2	\$3,677.2	\$3,014.9	\$1,347.0	\$3,677.2	(\$0.0)

Project Cash Flow Projection

The East Link cost projection continues to progress within the planned expenditure as construction activities continue to pickup. This period's project expenditure topped out at approximately \$59M where Construction Phase is responsible for over 90% or approximately \$53.2M of June's expenditure. Total project cost incurred to date approached \$1.35B, to which about \$672.6M was recorded in the Construction Phase. The project expenditures continue to pick up and is currently predicted to increase to approximately \$1.83B by March 2019, reflecting continued active construction through summer.



Risk Management

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

The 2nd QTR 2018 risks update for each of the major contract packages is currently taking place and is anticipated to complete by mid-August. ST included participation of construction management consultants and construction contractors in its risks management program.

The following are the top project wide risks:

- Coordination and completion of the relocations of public and private utilities.
- Compliance with environmental requirements.
- Competitiveness in the construction market and potential shortage of skilled labor.
- Timely completion of the I-90 floating bridge post tensioning in the Summer of 2018.

Contingency Management

East Link project budget was baselined on April 2015 with a total contingency of \$795.9M. At the end of June 2018, all major construction contracts have been procured, the total contingency balance stands at \$425.1M (previously \$427.6M). The current contingency balance is consistent with the project's planned contingency drawdown.

Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. DA is unchanged this period with a balance at \$3.6M and is expected to be fully drawn when all construction scope are executed.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC decreased by a net amount of ~\$1.1M from \$285.9M to \$284.9M. This contingency draw is primarily driven by aggregation of construction change orders throughout the project.

Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remains unchanged at \$136.6M.

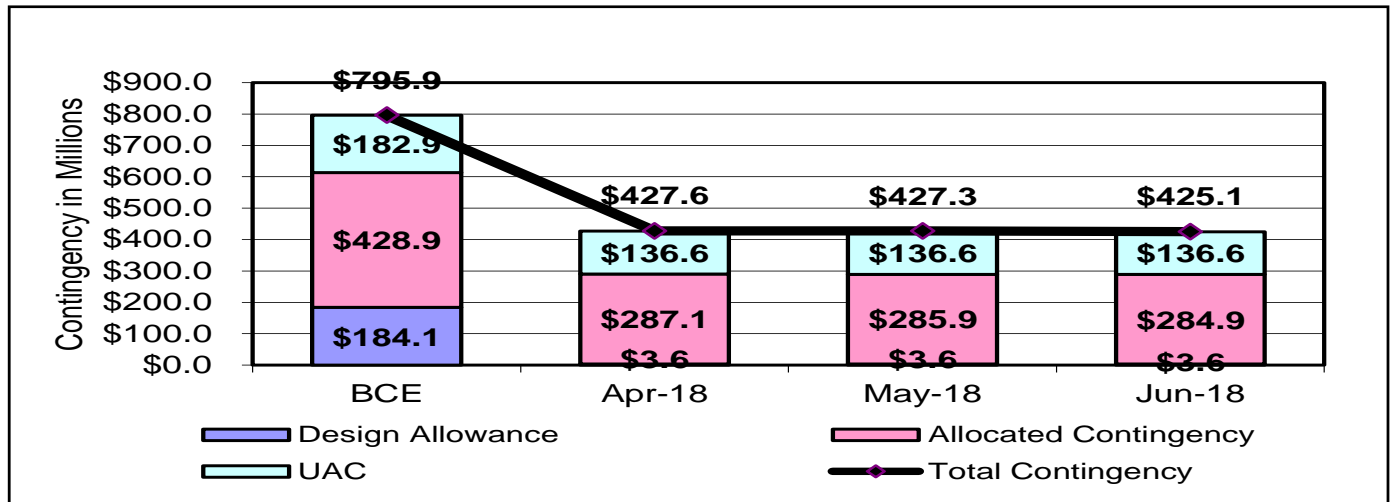
Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$3.6	0.2%
Allocated Contingency	\$428.9	11.7%	\$284.9	12.2%
Unallocated Contingency	\$182.9	5.0%	\$136.6	5.9%
Total	\$795.9	21.6%	\$425.1	18.2%

Note: Table in millions.

Link Light Rail East Link Extension

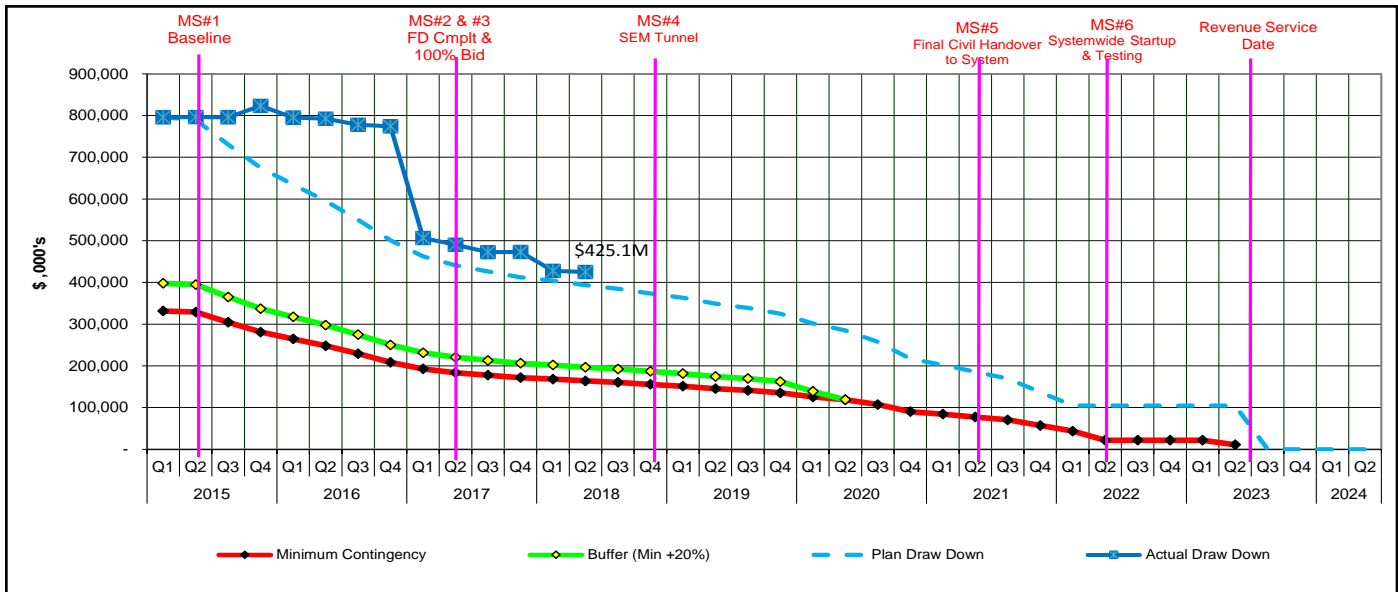


Contingency by Type



Contingency Drawdown

At the end of the 2nd QTR 2018, East Link Project's total contingency drawdown plan is trending as planned. Total contingencies balance is approximately \$425.1M and with all major construction contracts procured, remains above the baseline drawdown projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels.



Graph for Quarter ending June 2018

Project Schedule

The Integrated Master Schedule is presented below.

E130 completed reaction frame installation and began installing post-tensioning strands; work continued on Mercer Island Station and D2 roadway seismic retrofit.

E320 continued placing falsework for bents and piers for the aerial guideway; stone column work in the trench was completed; demolition along 111th PI SE was completed.

E330 continues to make progress in tunnel excavation and is forecast to “hole through” in mid-July.

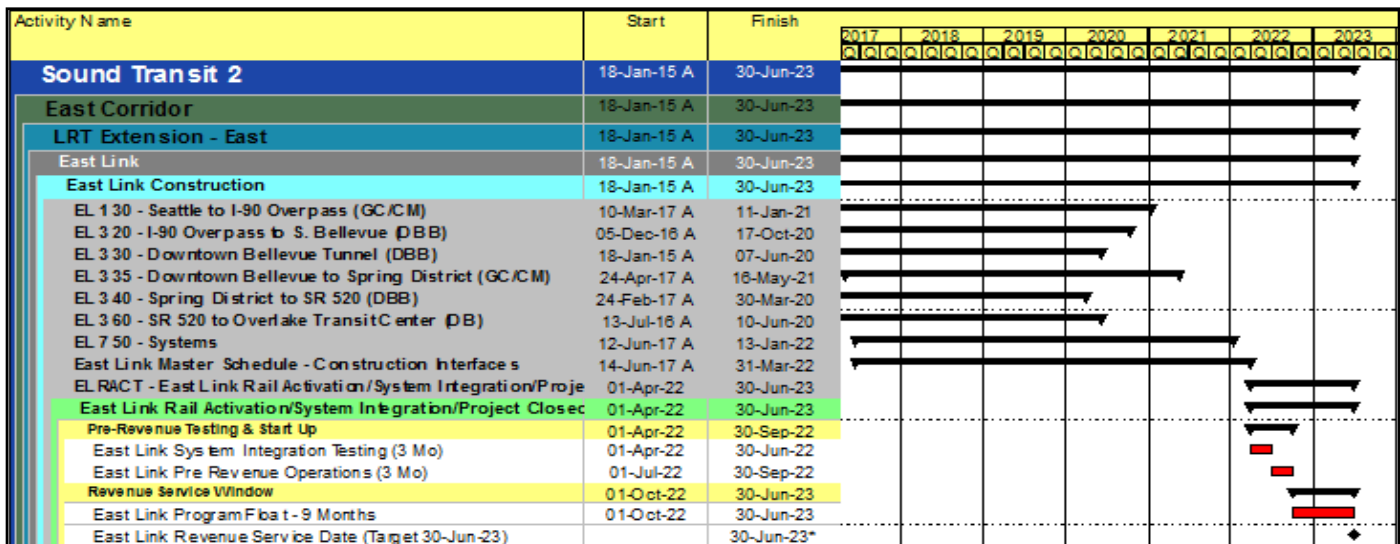
E335 completed columns for aerial guideway and began setting girders; completed formwork for base slab over I-405; and continued work on the trench wall in the Spring District.

E340 completed utility work on 130th and reopened the street to traffic; completed wall footings and continued pouring walls; and continued falsework installation along the guideway.

E360 continued foundational work at Redmond Technology Station; placing columns for the aerial guideway; girder placement is still on hold pending review of the fall hazard plan.

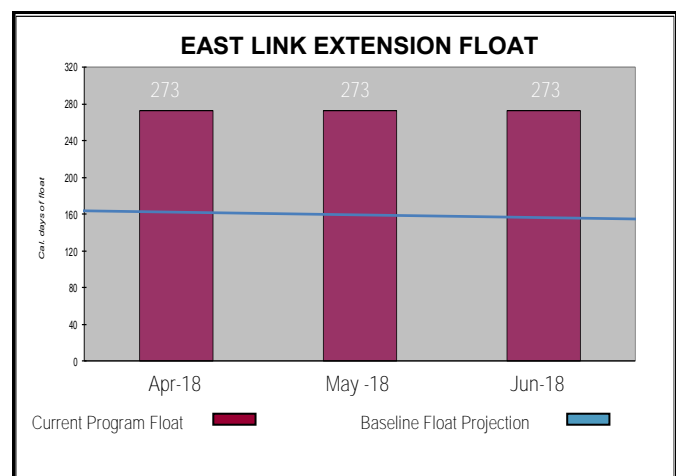
E750 Systems contractor continued product and component designs. This phase of work will be on-going for the next year. The physical construction on Northgate Link will occur before commencing on East Link. Systems construction on East Link is anticipated to start on the eastern segment of E130 in Summer of 2019.

All contracts are forecast to complete on or before target. Revenue Service is forecasted in June 2023.



Project Float

East Link was baselined with 273 days of program float. No float has been used to date.

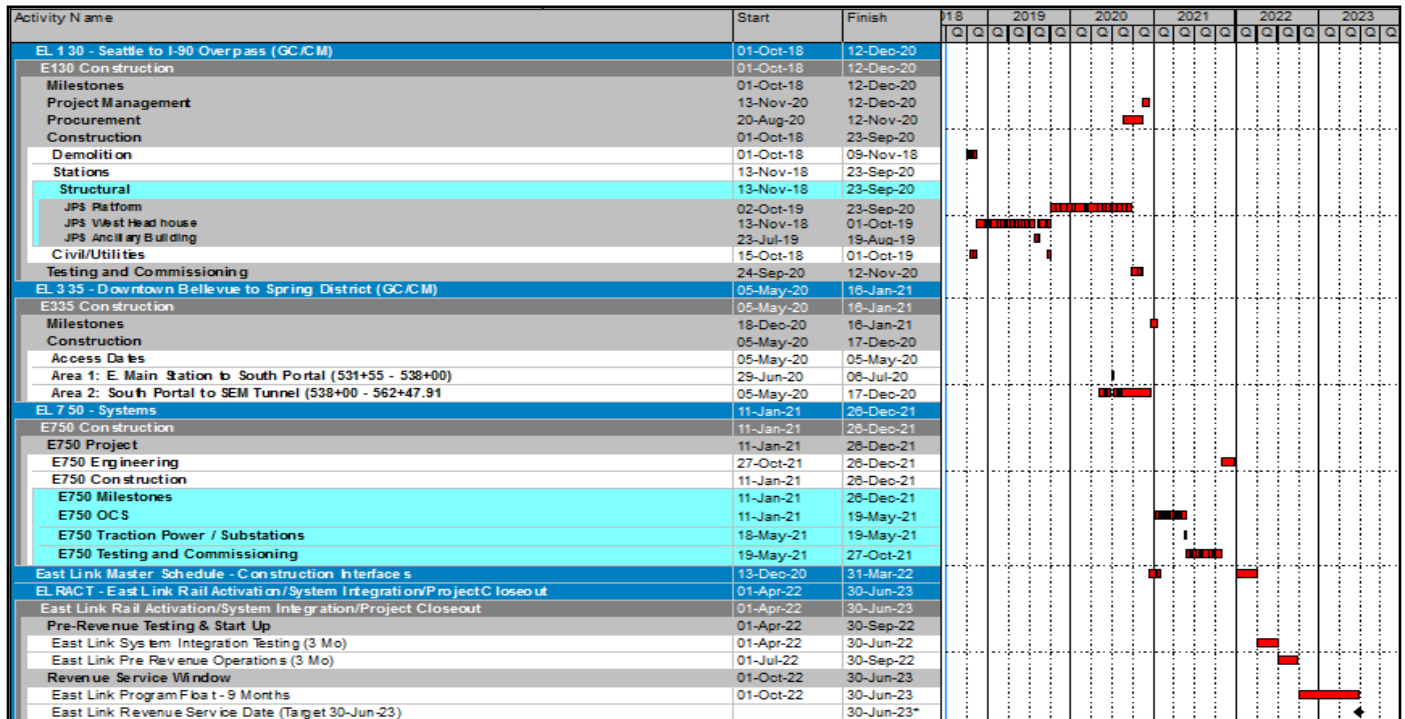


Link Light Rail East Link Extension



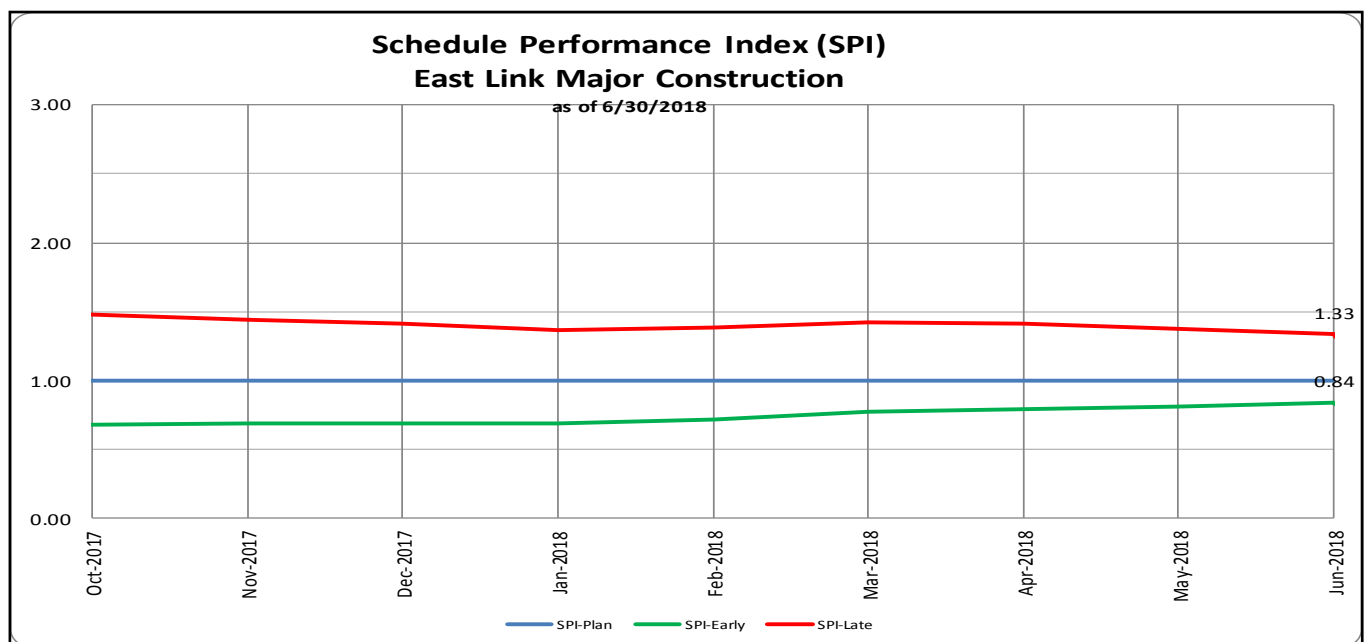
Critical Path Analysis

The East Link critical path currently runs concurrently through Judkins Park Station on E130 and East Main Station and the Downtown Bellevue Tunnel on E335 through handovers to E750 in early 2021.



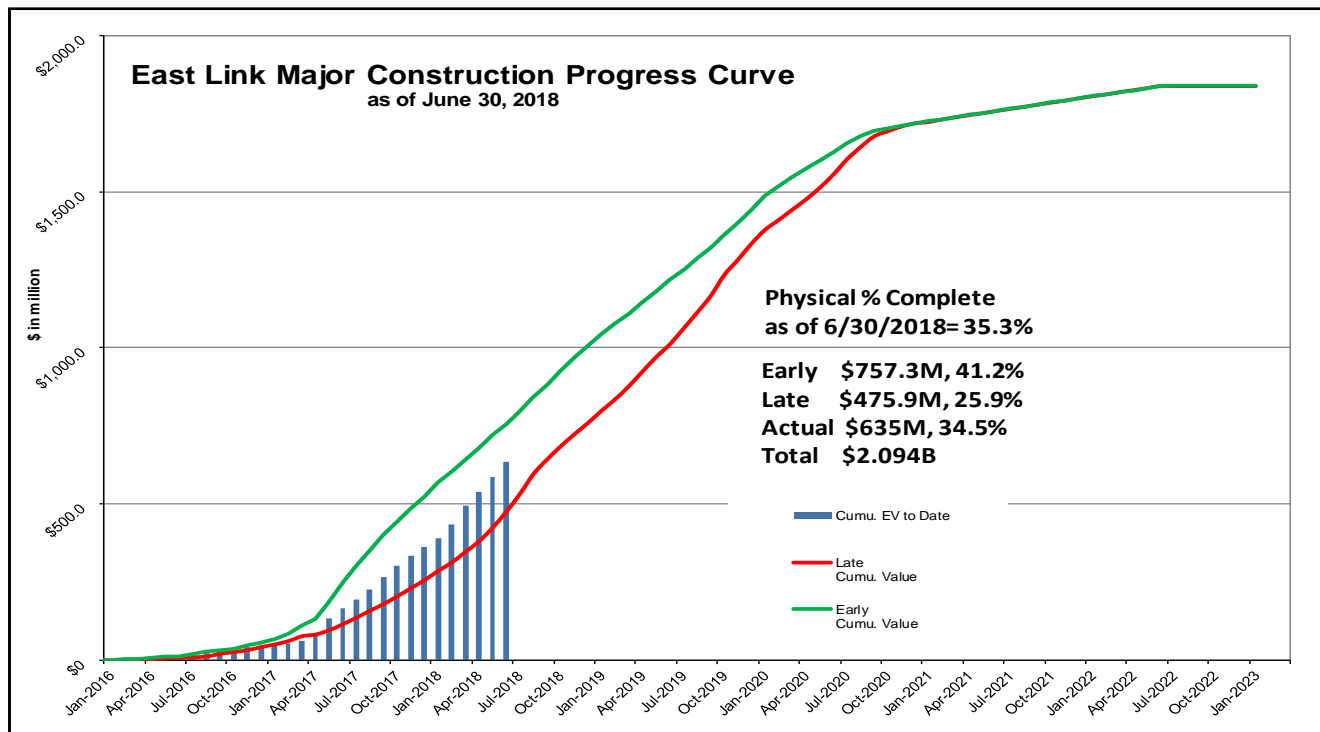
Schedule Performance Index

The early Schedule Performance Index (SPI) for East Link's Major Construction Packages is at 0.84 for this period, which continues the upward trend of previous months. The late SPI is at 1.33 showing that in general, performance is satisfactory.



Project Cash Flow Projection

All seven major construction contractors are now mobilized. All major civil work is well underway. The overall East Link Major Construction percent complete analysis is based on a weighted measurement among the seven major construction contracts' schedule, duration and cost. The graph below shows the aggregate cost progression for these construction contracts. As of the end of June, performance is trending appropriately between the early/late projection as drawn from the master schedule. The overall physical percent complete for East Link construction is approximately 35.3%.



Right-of-Way

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

East Link Ext Extension Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
237	244	234	223	227	220
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Community Outreach

- On-going distribution of weekly construction alerts for maintenance of traffic activities for Mercer Island, Bellevue and Redmond.
- Communications coordination with WSDOT and Mercer Island of I-90 post-tensioning work on the floating bridge in mid-July. Work will include westbound, overnight closures on I-90.
- Began notifications and briefings for the closure of a pedestrian path between the SR 520 bus stop at NE 40th Street and the Overlake Transit Center through the Redmond Technology Station construction site starting as soon as July 9, 2018.
- Coordinated many briefings and meetings with impacted neighbors on a variety of concerns for all projects.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Construction Safety

Data/ Measure	June 2018	Year to Date	Project to Date
Recordable Injury/Illness Cases	4	16	29
Days Away From Work Cases	0	2	3
Total Days Away From Work	11	63	65
First Aid Cases	11	45	75
Reported Near Mishaps	5	56	148
Average Number of Employees on Worksite	1,018	-	-
Total # of Hours (GC & Subs)	163,377	897,739	1,600,192
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	4.90	3.56	3.62
LTI Rate	0.00	0.45	0.37
Recordable National Average	3.20	3.20	3.20
LTI National Average	1.30	1.30	1.30
Recordable WA State Average	6.40	6.40	6.40
LTI WA State Average	2.10	2.10	2.10

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.

This page left blank intentionally.

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 Operational.

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

Status: See following pages under Contract E130.

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

Status: See following pages under Contract E320.

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

Status: See following pages under Contract E330.

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

Status: See following pages under Contract E335.

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

Status: See following pages under Contract E340.

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

Status: See following pages under Contract E360.

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

Status: Contractor continues with critical submittal, reviews of plans, component and product designs as well as meetings with civil contractors with regards to the Coordinated Installation Plan (CIP).



E335 Downtown Bellevue to Spring District: Rigging of girder during NE 8th St. closure.

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

Current Progress

D2 Structure & Mt. Baker Tunnel (West Segment): Continued seismic retrofit of Rainier Ave Bridge, Mount Baker Tunnel; Traction Power Substation (TPSS) #2 site clearing.

Floating Bridge Retrofit (Center Segment): Begin final phases of post tensioning work; ongoing electrical retrofit for cathodic protection and approach structural retrofit; installation of OCS bases.

Mercer Island (East Segment): Ongoing tunnel electrical/structural modifications; ongoing construction of Mercer Island Station and east/west head house structures; TPSS sites 3 & 4 construction; ongoing rail delivery and welding.

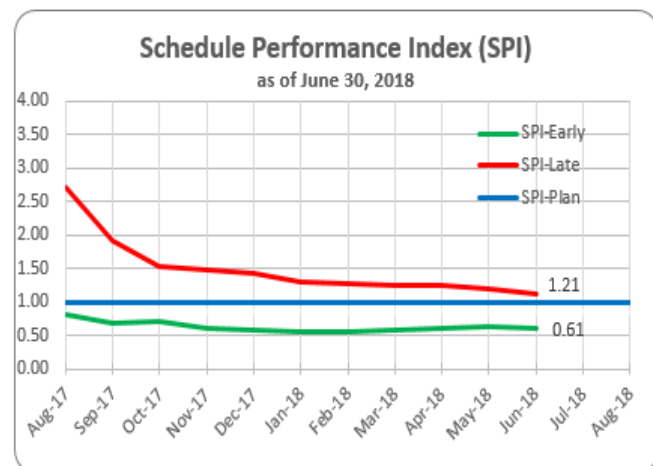
Schedule Summary

The critical path for this project continues to run through access to the D2 roadway and subsequent demolition of the Rainier Avenue Bridge, then through Judkins Park Station. Contractor is currently forecast to achieve all milestones on or ahead of target completion dates.

Activity Name	Start	Finish	2018	2019	2020
E130 Construction	10-Mar-17 A	11-Jan-21			
Milestones	10-Mar-17 A	11-Jan-21			
Access Milestones	10-Mar-17 A	12-May-17 A			
16. Notice to Proceed - Package 1	10-Mar-17 A				
16. Notice To Proceed - Remaining Scope	12-May-17 A				
Major Project Completion Milestones	17-Jul-19	11-Jan-21			
16. MSH#01 - Substantial Completion Mercer Island Station to East End Of Project (17-Jul-19)		17-Jul-19*			
16. MSH#02 - Substantial Completion Mercer Island Sta to West Mercer Island Lid (29-Jan-20)		26-Sep-19*			
16. MSH#03 - Substantial Completion of IDS Conversion (27-Feb-20)		23-Feb-20*			
16. ST E130 Work Complete		12-Nov-20			
16. MSH#04 - Substantial Completion All Work (12-Dec-20)		12-Dec-20*			
16. Acceptance		11-Jan-21			
Construction	20-Mar-17 A	10-Nov-20			
Preliminary Activities	03-Apr-17 A	25-Jun-20			
Site Work	23-Aug-17 A	26-Oct-18			
Demolition	20-Jul-17 A	04-Dec-18			
Tunnel Modifications	18-Sep-17 A	09-Apr-19			
Stations	15-Sep-17 A	23-Sep-20			
OCS Bases/Frames	02-Apr-18 A	10-Aug-20			
Civil/Utilities	05-Jul-17 A	10-Nov-20			
Electrical	20-Mar-17 A	17-Aug-20			
Structures Retrofit	20-Mar-17 A	10-Nov-20			
Trackwork	29-Jan-18 A	09-Nov-20			
Systems	28-Jun-17 A	10-Nov-20			
IDS Modification	16-Sep-19	23-Feb-20			

Schedule Performance Index

This period, the SPI early is 0.61, SPI late is 1.21. The early index indicates the Contractor is behind their early finish plans; the late index shows the Contractor is on target with their late finish plan. These figures support the fact the Contractor encountered challenges in the initial phases of the post-tensioning scope, and continues to catch up to their baseline plan; all remaining reaction frames have now been loaded into the pontoons. The anticipated completion of post tensioning work is 3rd QTR 2018 slightly behind the original anticipated mid-summer completion.



Link Light Rail East Link Extension

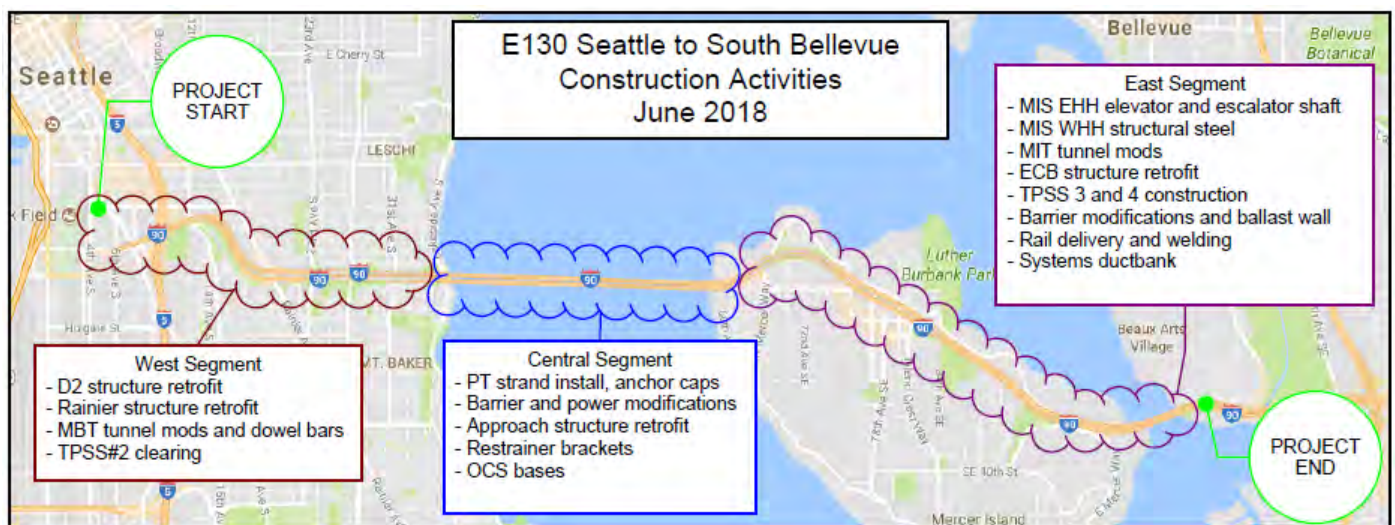
Next Period's Activities

- **West Segment:** Continue retrofit of tunnel electrical and structure seismic retrofit; continue excavation of Judkins Park Station site, begin structure construction.
- **HMH Floating Bridge (Center Segment):** Continue cathodic protection, OCS foundation activities; continue post tensioning work; continue as-built structure scanning; continue track deliveries.
- **East Segment:** Continue retrofit of tunnel electrical; continue MI Station construction, East Channel Bridge structure retrofit; distribute ballast for ballasted track.

Closely Monitored Issues

- Various methods to verify the location of post-tensioning are being discussed with the Contractor and WSDOT.
- Timely issuance of the Street Improvement Permit (SIP) by the City of Seattle.

E130 Construction Activities



Cost Summary

Present Financial Status	Amount
E130 Contractor - Kiewit-Hoffman	
Original Contract Value (incl. Phase 2 MACC)	\$665,000,000
Change Order Value	\$8,993,909
Current Contract Value	\$673,038,909
Total Actual Cost (Incurred to Date)	\$195,864,002
Financial Percent Complete	29.1%
Authorized Contingency	\$46,660,541
Contingency Drawdown	\$8,993,909
Contingency Index	1.5

Contract Value excludes Betterment



Fabricating forms for transverse PT anchorages on Pontoon F and O.

Contract E320 – South Bellevue

Current Progress

I-90 Flyover: Ongoing formation and installation of rebar and placement of concrete for shaft columns, piers and straddle bent.

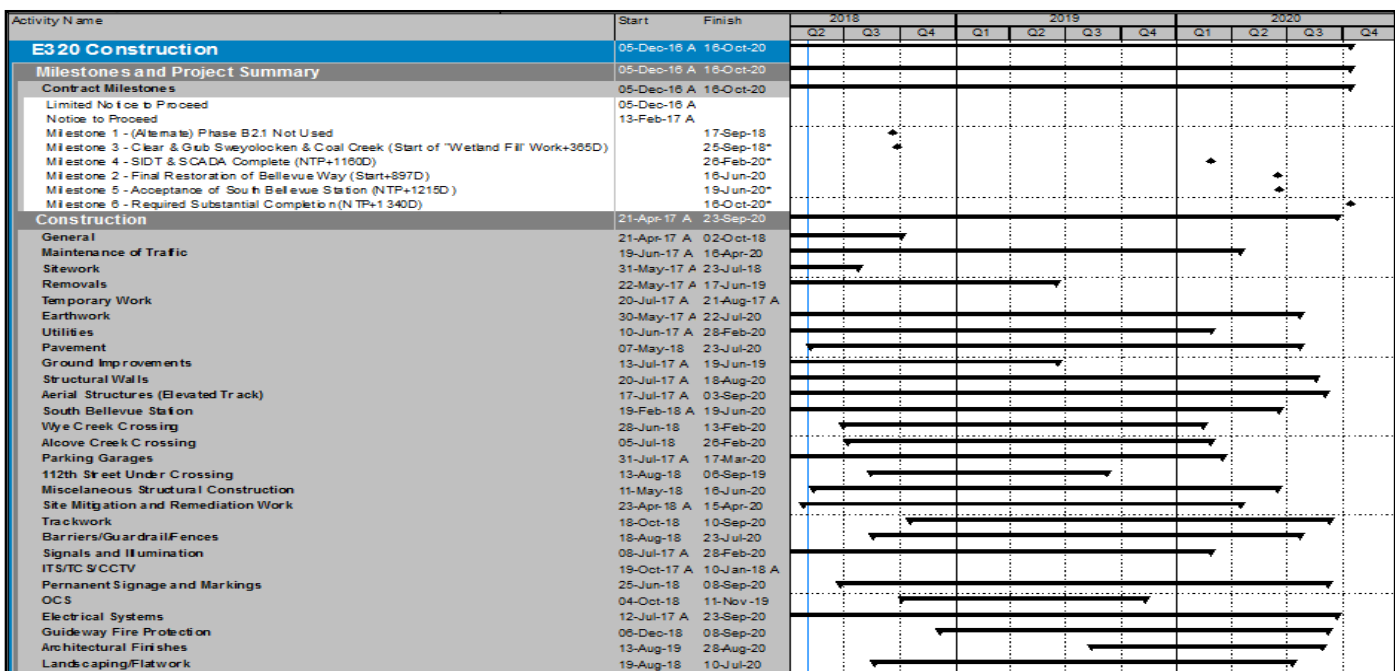
Park-and-Ride: Ongoing backfill of grade beams. Beginning installation of structural fill and station tub temperature false work.

Bellevue Way SE: Continued construction of access road and installation of embankment surcharge at Winters House. Drilling and installation of deep dewatering wells. Start tangent piles at Winters House.

Wye-to-East Main: Continued installation of underground PSE duct bank and other utility structure. Retaining wall and soil nailing work along 112th Ave SE.

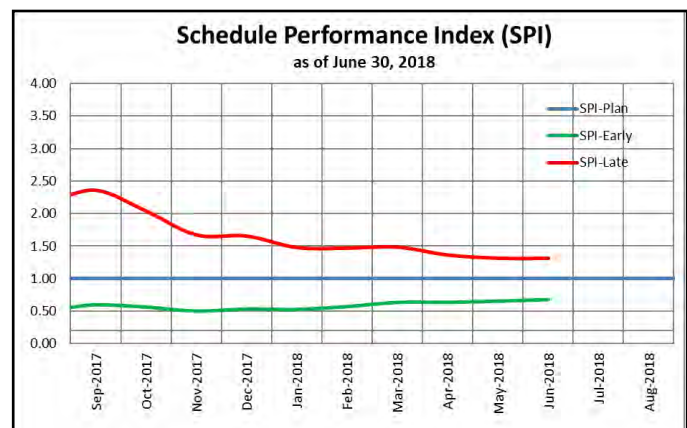
Schedule Summary

The Contractor's April update is shown below. The May schedule was rejected due to negative float ahead of Milestones 5 and 6 and the June update has not yet addressed the required recovery. ST is working with the Contractor to mitigate impacts. The critical path for this project currently runs through the 112th Undercrossing.



Schedule Performance Index

This period, the SPI early is at 0.7 and the SPI late is at 1.3. The numbers indicate that the Contractor continues to be behind the early finish plans, but maintains ahead of the late curve when compared to the baseline work plan. The SPI early and SPI late are holding steady compared to the previous month level.



Link Light Rail East Link Extension

Next Period's Activities

- Continue work on elevated guideway columns and shafts, as well as station and parking garage structures.
- Continue stone columns installation on Bellevue Way SE, as well as embankment surcharge at Winter House.
- Continue PSE underground duct bank and other utility works on 112th.

Closely Monitored Issues

- Working adjacent to wetland areas, environmental compliance concerns.
- Refinement to the three-lane reversible MOT on Bellevue Way SE.
- Clearing the area and guideway wall construction behind properties on hold for demolition to provide additional areas for mitigation of labor resources.



Cost Summary

Present Financial Status	Amount*
E320 Contractor - Shimmick/Parsons JV.	
Original Contract Value	\$319,859,000
Change Order Value	\$1,631,225
Current Contract Value	\$321,490,225
Total Actual Cost (Incurred to Date)	\$102,696,287
Financial Percent Complete	29.2%
Authorized Contingency	\$38,532,000
Contingency Drawdown	\$1,631,225
Contingency Index	6.9

* \$ Amount exclude betterment and STArt.



Installation of cage pick on I-90 guideway.

Contract E330 – Downtown Bellevue Tunnel

Current Progress

SEM Tunneling: Continued excavation and progressed approximately 187 LF this period, which completed about 1,898 LF of the total excavation of 1,994 LF. Continued hauling of muck offsite for disposal. Performed mine rescue training by Bellevue Fire Department.

Between Portals: Completed the initial lining on the shaft and excavating the invert of the shaft; continued installing re-inforcing for the adit shaft breakout to the adit tunnel and applied smoothing layer shotcrete for the shaft. Received electrical and fire inspection permit to install conduits in the tunnel and adit shaft.

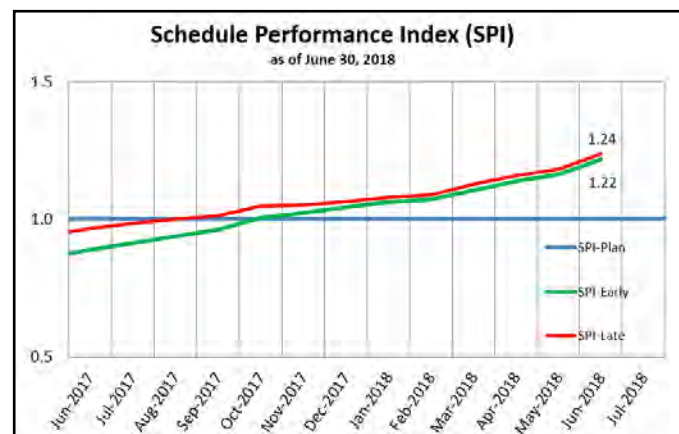
Schedule Summary

The critical path for this contract follows the tunnel excavation and the completion of the South Portal structure. Tunneling continues to exceed estimated production rates. The Contractor's cumulative rate is 4.8 LF/Day. The Contractor is now forecast to finish excavating in July 2018 and to achieve Substantial Completion ahead of their contractual requirements.

Activity Name	Start	Finish	2018		2019				
			Q3	Q4	Q1	Q2	Q3	Q4	Q1
E330 Construction	15-Dec-15 A	22-Mar-20							
CONSTRUCTION	15-Dec-15 A	22-Mar-20							
MILESTONES/CONSTRUCTION EASEMENTS	15-Dec-15 A	22-Mar-20							
MILESTONES	15-Dec-15 A	22-Mar-20							
CALCULATED MILESTONES	15-Dec-15 A	22-Mar-20							
L-NTP	15-Dec-15 A								
NTP	08-Feb-16 A								
MLST 1 - Acceptance of the 110th Ave Controlled Low Strength Material Work		14-Oct-16 A							
MLST 2 - Acceptance of CO #008 Work		14-Oct-16 A							
MLST 3 - Substantial Completion of all Work from Station EB 542+64.52 to Station EB 562+47.91		28-Sep-19							
MLST 4 - Substantial Completion Total Contract		22-Mar-20							
MOBILIZATION	08-Feb-16 A	28-Aug-18							
SITEWORK	29-Feb-16 A	22-Mar-20							
PRECONSTRUCTION	21-Mar-16 A	31-Dec-19							
TRAFFIC CONTROL	25-Mar-16 A	03-Sep-19							
SURVEY & MONITORING	29-Feb-16 A	03-May-18 A							
NORTH PORTAL AREA	13-Jun-16 A	14-Oct-16 A							
SOUTH PORTAL AREA	08-Feb-17 A	08-Apr-17 A							
SKYLINE BUILDING RETROFIT	29-Feb-16 A	22-Mar-20							
TUNNELING	01-Feb-17 A	03-Sep-19							
EXCAVATION	01-Feb-17 A	31-Jul-18							
FINAL TUNNEL LINING	01-Aug-18	27-Apr-19							
FINAL TUNNEL FINISHES	08-Mar-19	16-Jul-19							
MID TUNNEL	08-Mar-18 A	03-Sep-19							
DEMOBE	13-Mar-17 A	09-Jan-20							

Schedule Performance Index

For the month of June, the SPI early is at 1.22 and the SPI late is at 1.24. Project tunneling to date is (4.8 LF/Day) compared to originally planned (3.3 LF/Day). The trend is pointing to an early completion of tunneling, due to good ground conditions encountered during excavation.



Link Light Rail East Link Extension

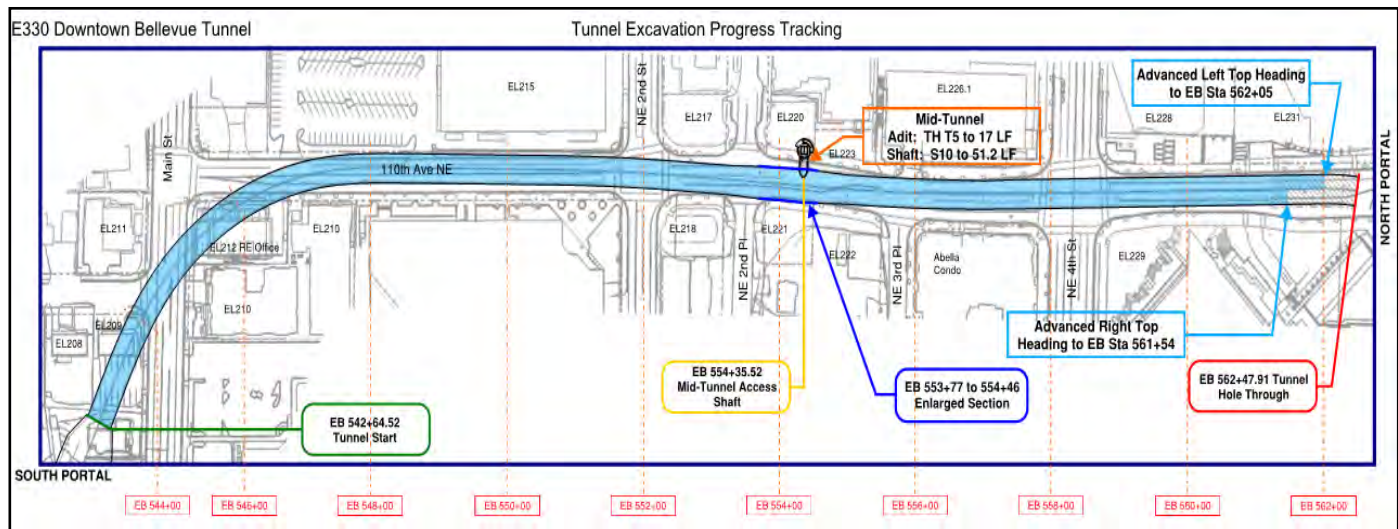
Next Period's Activities

- **SEM Tunneling:** Complete tunnel excavation and break through North Portal. Start tunnel cleaning and grinding activities from the North Portal working towards the South Portal. Continue tunneling traffic control and mid-tunnel access traffic control.
- **Between Portals:** Remove adit tunnel breakout wall from shaft side. Work on Engineering Judgement for fire rating of electrical hand holes which was a requirement from when City of Bellevue issued the electrical permit.

Closely Monitored Issues

- City of Bellevue issued additional permits for the installation of the electrical and fire alarm conduits in the tunnel. The additional permit requirements may result in changes to the drawings, and additional costs.
- Contractor tested efficiency of chemical grout to seal dripping areas in the tunnel. Results of the leak sealing are being monitored.
- Contractor monitoring the installation of waterproofing to ensure the bubbles observed during site trials are not in permanent work.

E330 Tunnel Excavation Progress Tracking (As of 6/29/2018)



Cost Summary

Preset Financial Status	Amount
E330 Contractor– Guy F Atkinson Construction, LLC.	
Original Contract Value	\$121,446,551
Change Order Value	\$1,480,108
Current Contract Value	\$122,926,659
Total Actual Cost (Incurred to Date)	\$86,398,753
Financial Percent Complete	70%
Authorized Contingency	\$12,144,655
Contingency Drawdown	\$1,480,108
Contingency Index	5.8



Tunnel excavation top heading.

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

Current Progress

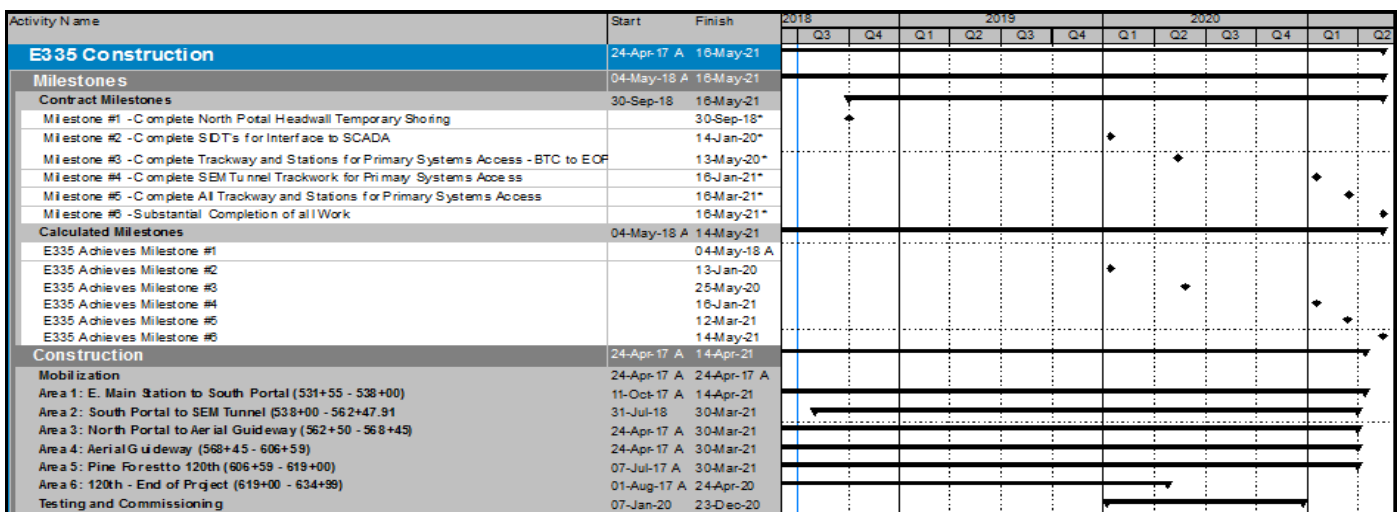
Area 3: North Portal/City Garage/BTC Station: Commenced forming and rebar installation of bottom slab and road panels at 110th Ave. Started work on mechanical and electrical rooms including placement of surge tank foundation and walls.

Area 4: Aerial Guideway: Completed pouring all columns of the aerial guideway. Set pre-cast girders over 116th and 8th Ave and started to set formwork for the overhang deck. Continued form work for base slab of span over I-405. Commenced construction of Hospital path with tree cutting, clearing, and grubbing.

Area 6: 120th-124th Trench/Station: Started mobilizing equipment and reinforcing steel placement for the 120th Station. Continued Spring District trench wall construction this period with concrete and reinforcement placement for the main trench section footing slab east of the Station box.

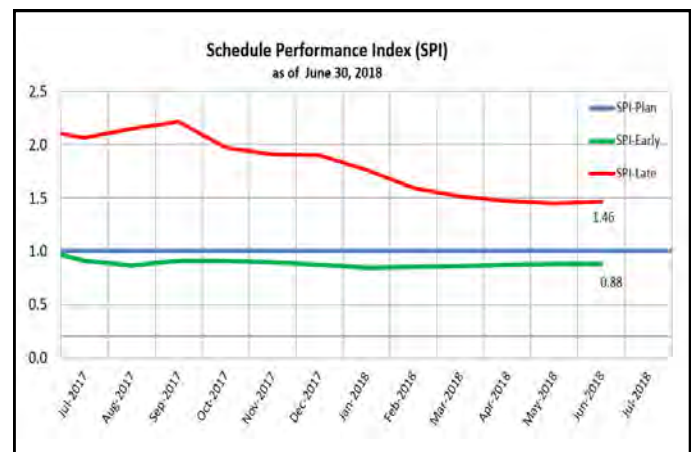
Schedule Summary

There are two primary critical paths for this contract, corresponding to the two handovers to the E750 Systems Contractor — one runs through the North Portal and BTC station work in Area 3, and the other follows access to the SEM tunnel (E330 contract) in Area 2 and goes through the South Portal and the South Portal Electrical Building. That work will not start until mid-2020. The Contractor is currently 12 days behind their first interface milestone but is resequencing some work surrounding girder placement to recover time.



Schedule Performance Index

This period, the SPI early is at 0.88 and the SPI late is at 1.46. The contractor continues to lag the early plan, but well ahead of the late finish plan when compared to the baseline work. Numbers are supported by the fact that delivery of girders and follow-on deck construction for spans is behind schedule. Trackway excavation and embankment in Area 5 has been partially completed, but the final cut/fill to grade and placement of sub-ballast will take place later than planned. Work at the North Portal Tunnel and open cut excavation at 120th to 124th are ahead of schedule while construction of track walls are behind.



Link Light Rail East Link Extension

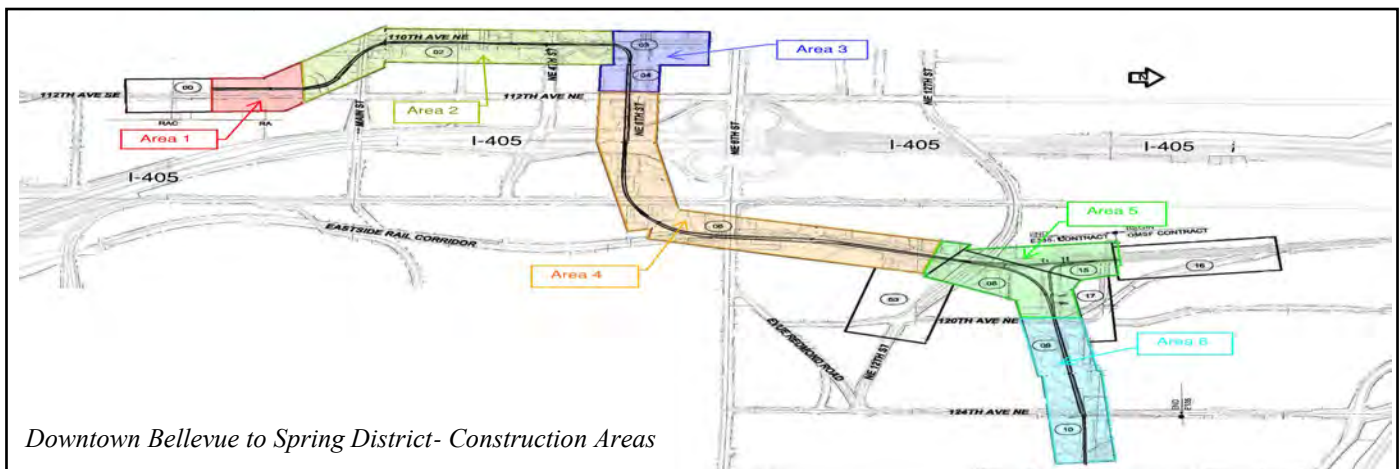
Next Period's Activities

- **Area 3:** N Portal/City Garage/BTC Station: Continue base slab reinforcing for the North Portal track area and interior wall placement for the City Hall Parking rebuild.
- **Area 4 :** Aerial Guideway: Continue formwork and reinforcing for long span base slab placement and construction of Hospital path with forming foundations.
- **Area 5:** Pine Forest: Install pre-cast track, cut to sub-grade and replace soft soils with quarry spalls, as needed.
- **Area 6:** 120th-124th Trench/Station: Commence below-slab plumbing and electrical and place concrete for footing slab for the 120th Station.

Closely Monitored Issues

- Recent RFIs have identified the need to revise the Wye special track work. The impact to this change has the potential to delay installation of Overhead Catenary System (OCS) pole foundation and System's OCS work.
- Completion of retained cut through the Spring District and undercrossing of 124th Ave NE is being delayed by challenges by Seattle City Light relative to the City of Bellevue's construction as it impacts their utility easement through the area. The issue was argued at State Supreme Court, decision is expected in early fall.

E335 Construction Work Areas



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	\$3,982,491
Current Contract Value	\$397,780,701
Total Actual Cost (Incurred to Date)	\$110,597,530
Financial Percent Complete	27.5%
Authorized Contingency	\$19,689,911
Contingency Drawdown	\$3,982,491
Contingency Index	1.4



Setting girders over 116th street Bellevue (Area 4)

Contract E340 – Bel-Red

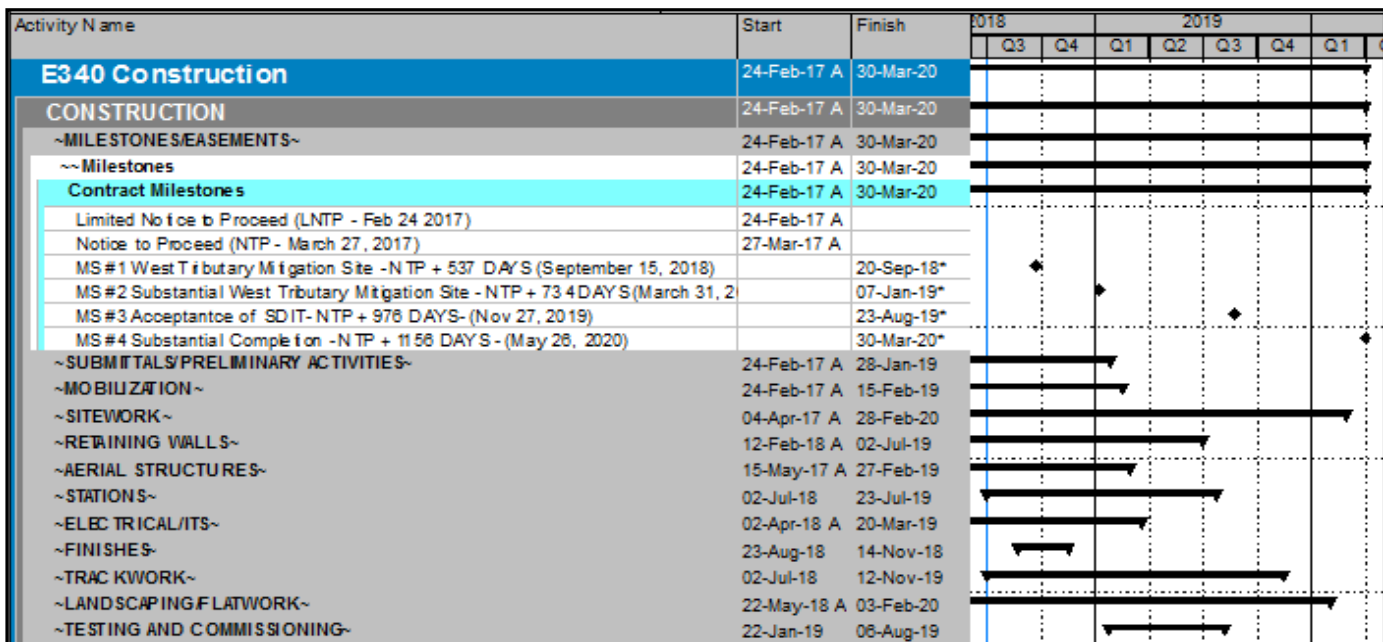
Current Progress

Street 130th Ave NE is now open for traffic. Finished dry utilities, sanitary sewer, storm drain and lighting foundations and conduit on 130th Ave. NE. Continue working on storm drain along 136th Place at various location. Continue installing false decking on the guideway. Install sanitary sewer on 134th Ave night shift night shift. Decommissioning of dewatering wells is still underway. Install production piles as well as piling for the temp shoring wall. Form, pour and strip retaining wall is ongoing; all wall footings are completed.

Schedule Summary

The Contractor was issued a Work Directive to proceed with precast trackwalls as a schedule mitigation measure. The critical path of this project now runs through the casting and placement of trackwall along 136th, followed by trackwork. The Contractor is forecast to finish ahead of their contractual milestone.

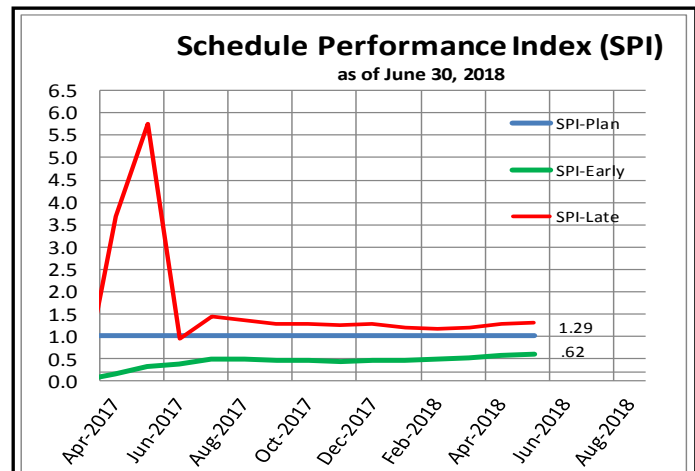
E340 is not on the critical path of East Link Project.



Schedule Performance Index

This period, the SPI early is at 0.62 and the SPI late is at 1.29. The late index indicates that the contractor continues to be ahead of the planned finish work; while the SPI early measures the Contractor's planned early finish is behind.

Some of the factors that contribute the Contractor to be ahead of the SPI late are completion of work within the closure of 130th Ave eight days ahead of schedule, soldier pile wall installation and procurement, light pole foundation installation.



Link Light Rail East Link Extension

Next Period's Activities

- Continue water line installation on 136th Place.
- Begin excavations on the Wetland Mitigation Site at Kelsey Creek.
- Finish installing production and temp piles. Continue with excavation and lagging, begin installing tie-backs.
- Begin excavation for South Station Wall
- Continue decommissioning contract wells.
- Continue forming for false decking, diaphragms and girder stops on the guideway.

Closely Monitored Issues

- Delayed start on west end of the project: West Trib, Mid-Lakes Pump Station, Force Main Re-lining and 124th Ave Bridge project cumulatively has potential to impact project.
- Disputed Seattle City Light property easements is impacting City of Bellevue's 124th Avenue bridge construction, Supreme Court ruling expected in early this summer.
- Ongoing utility conflicts (including un-marked/unidentified) encountered within the roadway and private properties.

Cost Summary

Present Financial Status	Amount
E340 Contractor– Max J Kuney	
Original Contract Value	\$93,170,012
Change Order Value	\$2,025,517
Current Contract Value	\$95,195,529
Total Actual Cost (Incurred to Date)	\$31,881,661
Financial Percent Complete	33%
Authorized Contingency	\$9,317,000
Contingency Drawdown	\$2,025,517
Contingency Index	1.54



Bridge Crew resumed fabrication of abutment wall concrete

Contract E360 – SR 520 to Redmond Technology Center (RTC)

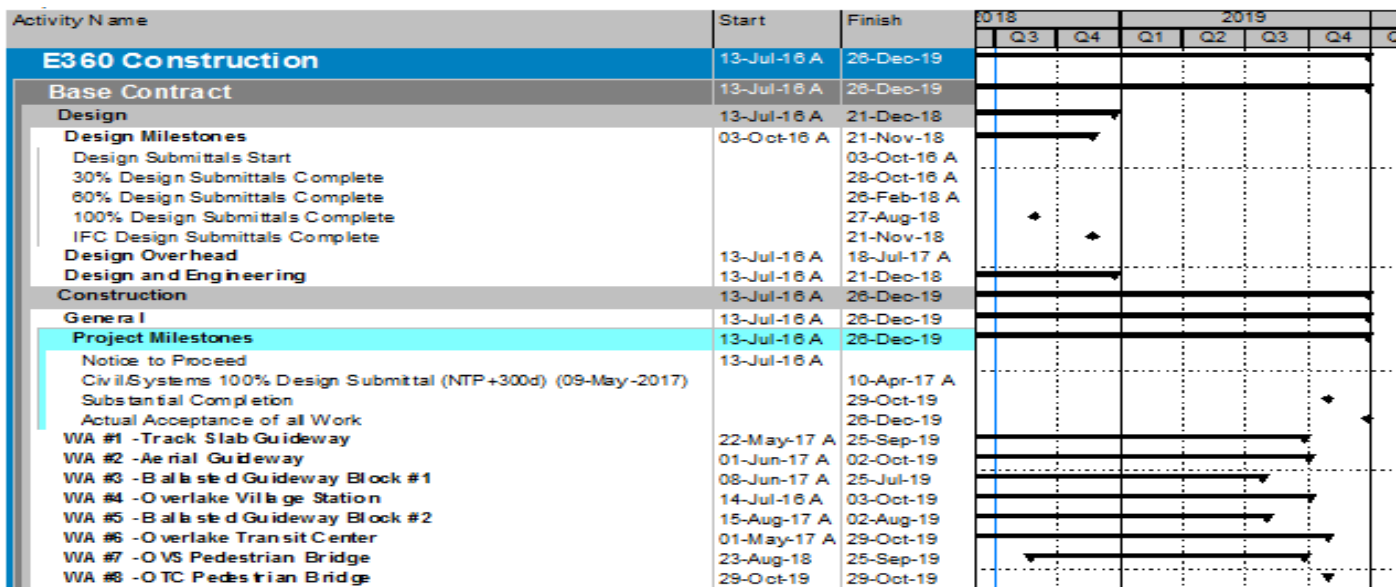
Current Progress

Design: Advanced design packages for the following areas: SR520 Permanent Roadway and Landscape Guideway 100% submittal preparation, Systems Design continue IFC validation (Rev 2 & 3), Civil Systems 100% submittal review/resolution, and continue IFC validation for Overlake Village Station (OVS). Continue 100% and IFC development for OVS pedestrian bridge substructure/superstructure design packages.

Construction: Aerial guideway structures continue in Work Area #2 with four columns, and four caps placed. Girder erection still on hold this month pending review of the fall hazard plan. Work Area #3/4 start sound wall grading and footing placement adjacent to OVS. Work Area #5 complete cast-in-place wall 13A and continue mass grading along the at-grade guideway. Begin barrier wall footing placement for wall B5 and 16. Work Area #6 (RTS) finalize WSDOT utility vault demolition and backfill. Start fascia for soil nail wall S8. Start footing and wall construction for Redmond Technology Station wall B6.

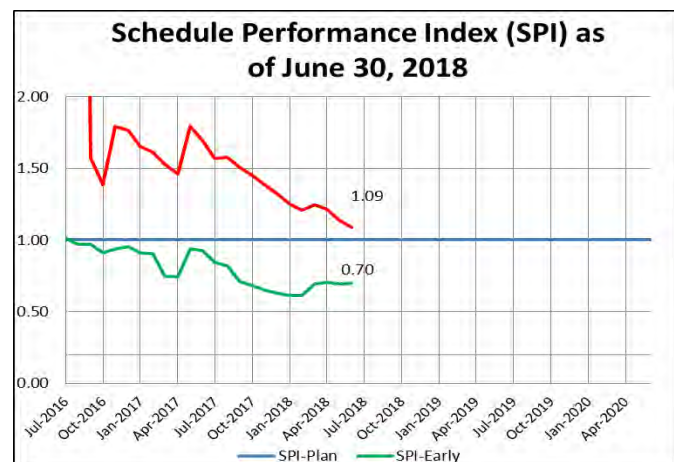
Schedule Summary

The critical path for this project currently goes through the structural work at Redmond Technology Station (formerly Overlake Transit Center). The contractor is currently forecast to complete this contract on schedule.



Schedule Performance Index

This period, the SPI early is 0.70 and SPI late is 1.09. The early SPI value continues to reflect slippage of early finish of baseline plan. ST directed stoppage of RTC Pedestrian Bridge due to Microsoft reevaluation of the bridge contributed to the slippage as well. Drilled shaft work continued to show excellent progress. Girder work is still on hold through the month of June pending review of the fall hazard plan.



Link Light Rail East Link Extension

Next Period's Activities

- **Design:** Civil SR520 100% and Landscaping Guideway design package 100% submit to ST for review. Continue civil system 100% ST review and resolution.
- **Work Area #2:** Ongoing column/cap placement and resuming girder installation. Begin precast deck placement.
- **Work Area #3/4:** Continue sound wall footing placement and begin lower sound wall form/reinforce/pour. Start MSE wall no. 06 and TPSS Vault construction.
- **Work Area #5:** Continue construction of footings/walls for track wall B5 and 16.
- **Work Area #6:** Continue wall S8 fascia. Wall no. B6 continue placement of footing and wall sections.

Closely Monitored Issues

- Microsoft continues on 60% designs for an alternative pedestrian bridge. Contract amendment will be required.
- Contractor, ST and City of Redmond continue to work out permitting issues having commercial impacts.
- Commercial Issues on Sales Tax Increase, Waterline Routing at Redmond Technology station, As-Built Specification and Barrier Impact Rating in Clear Zone.
- Clearance requirements between the WSDOT Aggregate Disposal Site access road and aerial guideway.
- Timeliness of Construction Work Plan submittals.
- Design QC process for remaining bid packages.
- Worker safety and post incident investigation.

E360 Construction Work Areas



Cost Summary

Present Financial Status	Amount
E360 Contractor— Kiewit-Hoffman	
Original Contract Value	\$225,336,088
Change Order Value	\$1,458,762
Current Contract Value	\$226,541,938
Total Actual Cost (Incurred to Date)	\$95,634,136
Financial Percent Complete	42.32%
Authorized Contingency	\$23,071,580
Contingency Drawdown	\$1,458,762
Contingency Index	6.3

Contract Value excludes Betterment



Overlake Village Station sound wall footing FRP.

This page left blank intentionally.

Link Light Rail

Downtown Redmond Link Extension

Project Summary

Scope

Limits The Downtown Redmond Link Extension builds new light rail from the Redmond Technology Station to downtown Redmond.

Alignment The extension starts at Redmond Technology Station 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 Planning

Budget \$178M through completion of Preliminary Engineering

Schedule Revenue Service: 2024



Map of Downtown Redmond Link Extension

Key Project Activities

- ST Board approved and awarded Design Build Project Management (DBPM) contract for Phase 1 of 2 scope.
- Obtained additional ST Board Authorization for right-of-way acquisitions.
- Continued working on resolving the comments on the 15% plan set.
- Continued partner agency agreements negotiations. Focusing on impact mitigation, staffing resources, permitting and design preferences.
- Continued drafting of RFQ/RFP for the Design Build contract package for Downtown Redmond Link Extension.
- Follow up to comments on NEPA Re-Evaluation/SEPA Addendum from FTA.

Project Cost Summary

Voters approved funding for preliminary engineering for the Redmond Link extension in the 2008 in the Sound Transit 2 ballot measure. In response to the 2007-2009 Great Recession, the ST Board suspended the project. In February 2016, the ST Board restored funding to support preliminary engineering of the project prior to funding approval for final design and construction as part of the Sound Transit 3 Plan. Table (below) figures in millions.

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

In this period, the Redmond Link project incurred approximately \$1.6M of expenses bring the total expenditure to date from \$16.7M to \$18.3M. Preliminary Engineering and Right of Way (ROW) activities continue to be the primary cost driver with approximately \$1.1M spent in the month. Agency Administration, primarily staffing cost amounting the rest of the monthly expenditure.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$4.9	\$3.0	\$2.9	\$4.9	\$0.0
Preliminary Engineering	\$21.3	\$17.7	\$14.0	\$21.3	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$2.0	\$0.0	\$0.0	\$2.0	\$0.0
3rd Party Agreements	\$2.8	\$0.3	\$0.3	\$2.8	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$147.0	\$3.6	\$1.2	\$147.1	\$0.0
Total	\$178.0	\$24.5	\$18.3	\$178.0	\$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	\$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	\$140.0	\$3.6	\$1.2	\$140.0	\$0.0
80 Professional Services	\$29.4	\$20.9	\$17.2	\$29.4	\$0.0
90 Unallocated Contingency	\$8.6	\$0.0	\$0.0	\$8.6	\$0.0
Total (10 - 90)	\$178.0	\$24.5	\$18.3	\$178.0	\$0.0

Link Light Rail

Downtown Redmond Link Extension



Risk Management

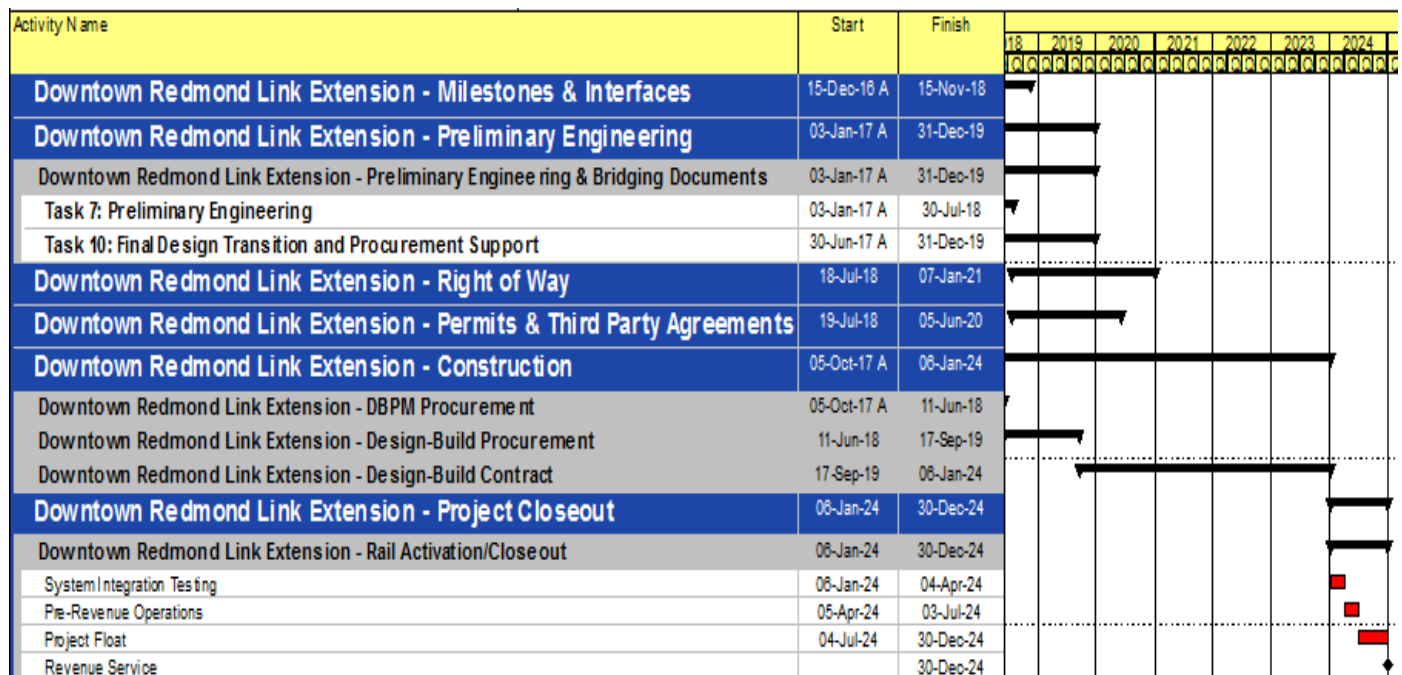
The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. It is Sound Transit's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

The project continues to develop its qualitative risk profile on an ongoing basis towards the Baseline of the project, anticipated to be around 4th QTR 2018. The project will complete a full quantitative risk assessment workshop in end of July 2018, and anticipates draft results by the early August 2018. Currently, the highest risk areas are:

- **Property acquisition** - market conditions; protracted durations of attaining control of properties; evolving design impacts property needs.
- **Permitting and 3rd party requirements** - construction adjacent to SR520; flood prone areas by Sammamish River and Bear Creek; archaeological discovery; betterment requests increases complexity of projects; construction impacts to traffic; stormwater discharge requirements by King County Parks; protracted negotiation with 3rd parties.
- **Construction market conditions** - inflationary pressure due to potential shortages of labor; higher materials pricing due to demand as well as regulations (tariffs and taxes).
- **Agency staffing capacity** - Developing and mobilizing resources and coordinating start up activities across multiple Link extensions within a short time frame.

Project Schedule

The project schedule is presented below. The project is currently updating environmental analysis ahead of the ST Board adopting the project to be built. Property acquisitions have begun. The RFP will be finalized after conducting a Value Analysis and Quantitative Risk Assessment in July. The project is anticipated to be baselined in 4th QTR 2018 after which the RFP will be issued. Project is currently forecast for completion near the end of 2024.



Right-of-Way

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

Downtown Redmond Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
83	64	0	0	1514	0
<i>* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.</i>					

- On 6/28/2018 - Board Motion R2018-20 authorized additional parcels.
- Total Acquisitions was increased by twenty-one (21) parcels needed for the project.

Community Outreach

- Multiple meetings with potentially impacted property owners to provide updated project information and real estate process information and timing.
- Engaged Microsoft employees during their unveiling of their campus redevelopment plans.

Sound Transit Board Actions

Board Action	Description	Date
R2018-20	Authorizes the CEO 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 Downtown Redmond Link Extension.	6/28/2018
M2018-73	Authorizes the CEO to execute a contract with WSP USA, Inc. to provide design build project management services for the Downtown Redmond Link Extension in the amount of \$1,663,998 with a contingency of \$166,002 for a total authorized contract amount not to exceed \$1,830,000.	6/14/2018

Link Light Rail

West Seattle and Ballard Link Extensions

Project Summary

Scope

Limits The West Seattle extension includes 4.7 miles of light rail from downtown Seattle to West Seattle's Junction neighborhood. The Ballard extension includes 7.1 miles of light rail from downtown Seattle to Ballard's Market Street area.

Alignment The West Seattle extension route is assumed to run primarily on elevated guideway with a new rail-only bridge over the Duwamish River. The Ballard extension route is assumed to run through a new downtown Seattle rail-only tunnel, elevated guideway, and a rail-only bridge over Salmon Bay.

Stations Five stations planned for West Seattle Segment. Nine stations planned for the Ballard segment.

Phase Planning

Budget \$286M through completion of Preliminary Engineering

Schedule Revenue Service: 2030 (West Seattle), 2035 (Ballard)



Map of Project Alignment

Key Project Activities

- Conducted Agency Workshops in early June related to the Chinatown/International District and SODO stations and alignments. Began evaluation of new concepts as recommended by the Elected Leadership Group.
- Held the Inter-agency Group meeting on June 13th. Presented Level 2 alternatives and evaluation criteria, and provided station planning update.
- Held the Stakeholder Advisory Group meeting on June 20th. Presented Level 2 alternatives and evaluation criteria, and provided updates on Chinatown/International District and SODO concepts that are under evaluation.
- Conducted station planning charrette for the Interbay and Ballard Stations on June 28th.
- Continued to work with City of Seattle regarding engineering, station planning, permitting and external engagement.
- Continue engagement with WSDOT, Port of Seattle, KC Metro and Tribes regarding alternatives development process.
- Began summer outreach at fairs and festivals around the City.

Project Cost Summary

The West Seattle and Ballard Link Extensions are voter-approved projects under the ST3 Plan. The Current 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 no later than 2022.

Out of the total Authorized Project Allocation, it is anticipated that the project would incur approximately \$25M in 2018 for alternatives development and evaluation; conducting feasibility studies on key project scope assumption in the ST3 Plan, project administration and stakeholder engagement. Year-to-date, the project has incurred approximately \$10M.

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

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$63.1	\$3.3	\$2.8	\$63.1	\$0.0
Preliminary Engineering	\$205.4	\$24.4	\$9.3	\$205.4	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$11.4	\$0.0	\$0.0	\$11.4	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$6.0	\$0.1	\$0.1	\$6.0	\$0.0
Total	\$285.9	\$27.9	\$12.2	\$285.9	\$0.0

Cost Summary by SCC

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$5.0	\$0.1	\$0.1	\$5.0	\$0.0
80 Professional Services	\$263.4	\$27.8	\$12.1	\$263.4	\$0.0
90 Unallocated Contingency	\$17.5	\$0.0	\$0.0	\$17.5	\$0.0
Total (10 - 90)	\$285.9	\$27.9	\$12.2	\$285.9	\$0.0

Link Light Rail

West Seattle and Ballard Link Extensions



Risk Management

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

Project issues and risks identified at this stage include:

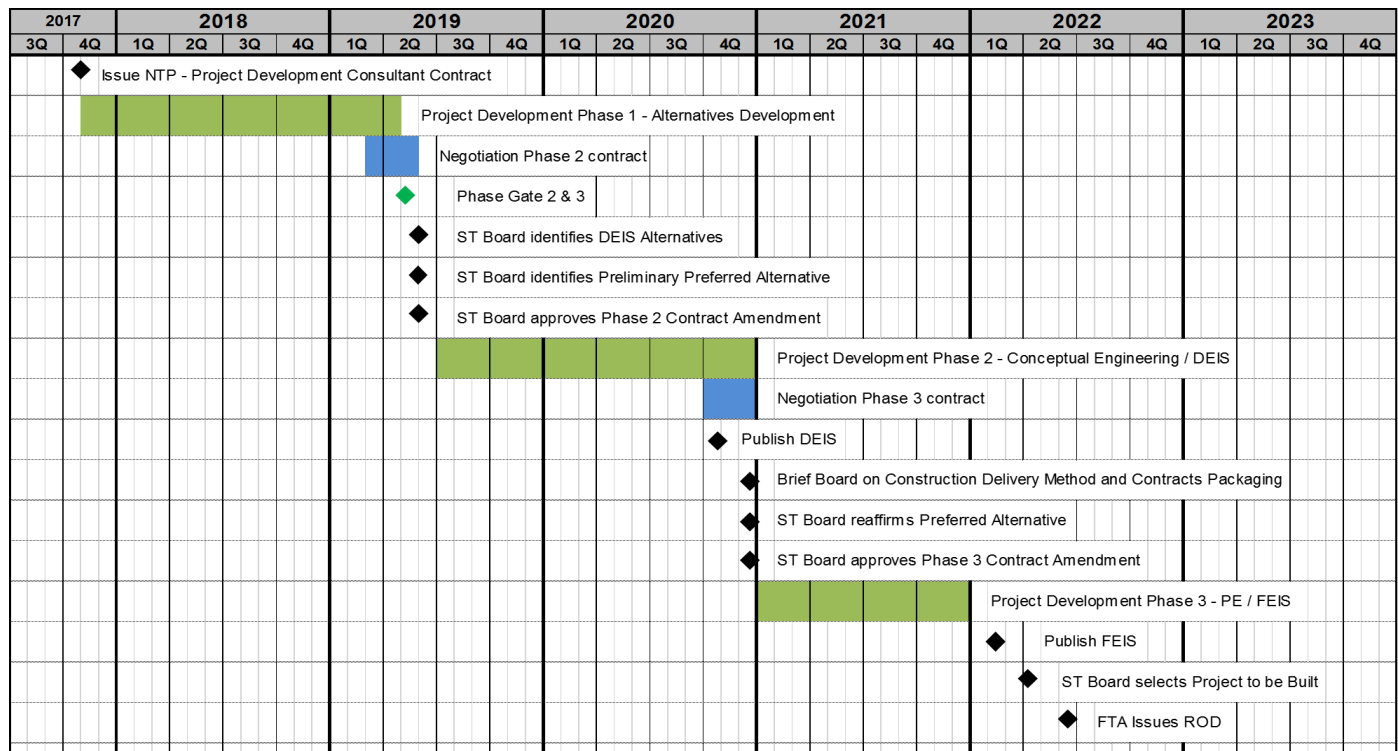
- Reaching stakeholder consensus on a preferred alternative;
- Complexity of alignments in constrained environment with challenging topography and waterway crossings;
- Complexity associated with tunneling through a mature urban environment;
- Potential construction effects in a constrained environment;
- Potential effect on Central Link operations during construction;
- ROW and property impacts.

Project Schedule

The preliminary project schedule through the ST Board selection of the project to be built and FTA issuance of ROD is presented below. Sound Transit is developing the master project schedule in Primavera P6, which is supported by a detailed schedule of Phase 1, Alternatives Development, created by the project development consultant.

Final Design is expected to begin in 2022.

Revenue Service between West Seattle and Downtown Seattle is targeted for 2030, and revenue service between Ballard and Downtown Seattle is targeted for 2035.



Community Outreach

- Began outreach during the summer at fairs and festivals around Seattle area.
- Preparation for six station planning charrettes, which take place in June through September.
- Started planning for upcoming neighborhood forums, SAG and ELG meetings for Level 2 evaluation and screening activities.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Link Light Rail

S. 200th Link Extension

Project Summary

Scope

Limits	South 200th Link Extension consists of 1.6-mile extension of light rail from the SeaTac/Airport Station to South 200th Street
Alignment	The extension continues in an aerial configuration heading south of the existing SeaTac/Airport Station, east of Air Cargo Road across South 188th Street, and continuing south along the east side of 28th Avenue South to the elevated Angle Lake Station located at South 200th Street. A passenger pickup/drop-off area, bus transfer, plaza, and a minimum 1,050-space structured park and ride facility is located at Angle Lake Station. Up to 70 additional spaces were developed for interim parking while Angle Lake Station is the interim southern terminus of the Link system. Guideway/Station and Parking Garage/Plaza was delivered under a Design Build contract.
Stations	Angle Lake Station is located at South 200th Street
Systems	Signals, track electrification, and SCADA communications
Budget	\$383.2 Million
Schedule	Revenue Service began on September 24, 2016



Map of S. 200th Link Extension

Key Project Activities

- **Design Build (DB) Guideway and Station (S440):** Contract closeout and issue Final Acceptance are pending. Claim settled with Contractor; CO pending.
- **DB Parking Garage (S445):** Contractor to complete façade repairs and working toward achieving Final Acceptance on the contract.
- **Roadway Improvements (S447):** Closeout complete.
- **Military Road/South 200th Intersection (S446):** WSDOT 1yr plant establishment and contract closeout by Oct 2018.
- **Project Wide:** Conclude project activities by end of 4th QTR 2018; ST in discussions with City of SeaTac ADA Ramps pending.

Closely Monitored Issues

- **S445:** Garage façade panels require repairs due to strong winds. ST awaits a plan from the Contractor.

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.

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	\$16.1	\$17.1	\$16.3	\$16.2	\$16.5	\$0.6
Preliminary Engineering	\$5.9	\$5.7	\$5.7	\$5.7	\$5.7	\$0.0
Final Design	\$20.0	\$9.5	\$8.7	\$8.7	\$8.7	\$0.8
Construction Services	\$15.1	\$17.3	\$17.1	\$17.1	\$17.1	\$0.2
3rd Party Agreements	\$6.9	\$7.1	\$5.7	\$3.8	\$3.3	\$3.7
Construction	\$275.7	\$282.9	\$239.6	\$238.5	\$243.1	\$39.8
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$43.5	\$43.5	\$38.0	\$38.0	\$38.1	\$5.5
Capital Total	\$383.2	\$383.2	\$331.2	\$328.1	\$332.7	\$50.6
Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total	\$383.2	\$383.2	\$331.2	\$328.1	\$332.7	\$50.6

The overall project Estimated Final Cost (EFC) for this period reflects \$332.6M, a savings projection of \$50.6M. This period incurred cost was increased by approximately \$0.02M and consist mostly of staff time in Administration phase.

The EFC grouped by SCC is also reflecting \$332.6M, a savings projection of \$50.6M. The work remaining can be achieved under the adopted budget.

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	\$144.8	\$133.0	\$100.3	\$100.4	\$109.5	\$23.5
20 Stations	\$46.4	\$51.7	\$42.0	\$42.0	\$42.3	\$9.5
30 Support Facilities: Yards, Shops	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$34.6	\$55.3	\$55.6	\$54.5	\$55.0	\$0.3
50 Systems	\$30.8	\$19.9	\$20.4	\$20.4	\$20.4	-\$0.4
Construction Subtotal (10 - 50)	\$256.6	\$259.9	\$218.4	\$217.3	\$227.1	\$32.8
60 Row, Land, Existing Improvements	\$43.5	\$43.5	\$38.0	\$38.0	\$38.1	\$5.5
70 Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
80 Professional Services	\$64.1	\$72.5	\$74.7	\$72.8	\$65.7	\$6.8
90 Unallocated Contingency	\$19.0	\$7.3	\$0.0	\$0.0	\$1.8	\$5.5
Capital Total (10 - 90)	\$383.2	\$383.2	\$331.2	\$328.1	\$332.7	\$50.6
100 Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total	\$383.2	\$383.2	\$331.2	\$328.1	\$332.7	\$50.6

Cost Contingency Management

S. 200th Link Extension was baselined with a total contingency amount of \$75.6M, the Total Contingency has decreased by \$23.3M to \$52.2M. During this reporting period, there was no change to project contingency. Detailed information is provided in the table below.

Design Allowance (DA): N/A

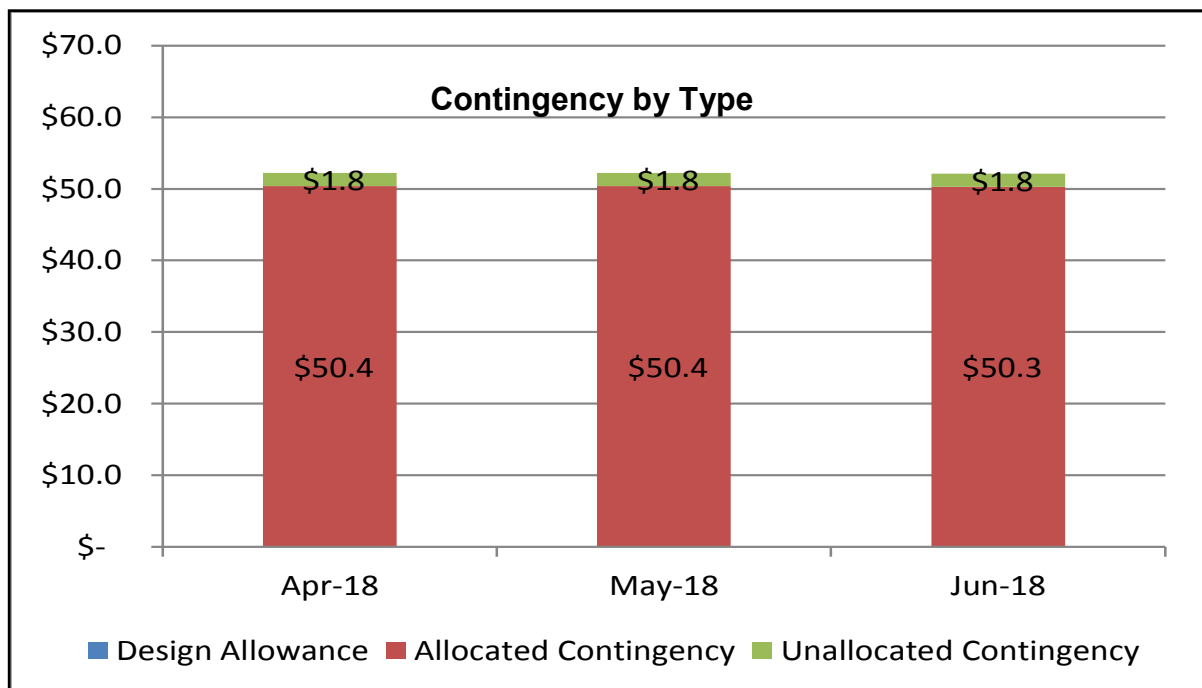
Allocated Contingency (AC): The AC balance is \$50.4M, overall reflecting no change. However a minor amount of \$0.1M reduced AC due to S440 last change order (\$0.07M) and a new City of SeaTac agreement for conducting a required parking study.

Unallocated Contingency (UAC): This period the UAC balance is \$1.8M, reflecting no change.

Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$26.7	7.0%	\$ -	0.0%
Allocated Contingency	\$29.8	8.0%	\$50.3	1106.5%
Unallocated Contingency	\$19.0	5.0%	\$ 1.8	39.6%
Total	\$75.6	20.0%	\$52.1	1146.1%

Table figures are shown in millions.



Contract S440—Design -Build (Guideway and Station)

Close-out Current Progress

- Contractor finalize closeout items.
- Executed bonding change order.
- SCU claim resolved, CO pending.
- ST approved CADD As-builts were transmitted to City.

Next Period's Activities

- Complete closeout activities.
- Execute last change order and resolve claim.
- Issue Final Acceptance to Contractor.

Closely Monitored Issues

- None to report.

Cost Summary

Present Financial Status	Amount
S440 Contractor—PCL Civil Contractors, Inc	
Original Contract Value	\$169,000,000
Change Order Value	\$6,968,767
Current Contract Value	\$175,968,767
Total Actual Cost (Incurred to Date)	\$175,924,620
Financial Percent Complete	99.9%
Physical Percent Complete	100%
Authorized Contingency	\$13,520,000
Contingency Drawdown	\$6,968,767
Contingency Index	1.0

Contract S445—Design -Build Parking Garage

Close-out Current Progress

Substantial Completion issued on December 21, 2016.

- No more updates.

Cost Summary

Present Financial Status	Amount
S445 Contractor—Harbor Pacific/Graham.	
Original Contract Value	\$29,978,000
Change Order Value	\$2,607,828
Current Contract Value	\$32,585,828
Total Actual Cost (Incurred to Date)	\$32,582,606
Financial Percent Complete	100%
Physical Percent Complete	100%
Authorized Contingency	\$2,798,240
Contingency Drawdown	\$2,607,828
Contingency Index	1.0

Link Light Rail

Federal Way Link Extension

Project Summary

Scope

Limits	The Federal Way Link Extension adds approximately 7.8 miles of light rail from the Angle Lake Station in the City of SeaTac to the Federal Way City Center.
Alignment	The extension generally parallels SR 99 and I-5 freeway.
Stations	Stations at Kent/Des Moines, South 272nd Star Lake Park –and-Ride and the Federal Way Transit Center
Systems	Signals, traction power, and communications (SCADA)
Phase	Preliminary Engineering/Final Design
Budget	\$412.6 Million through Final Design
Schedule	Revenue Service: December 2024



Map of Federal Way Link Extension.

Key Project Activities

- Held baseline Risk Assessment (RA) workshop with FTA/PMOC, ST preparing risk modeling results. FTA performing their independent risk assessment.
- Continued preparations for Entry to Engineering (EIE) and Full Funding Grant Agreement (FFGA) applications. EIE submission is scheduled for next month. Developing FFGA roadmap.
- Stipend Agreement is scheduled for July 2018 Board.
- Await FTA concurrence to perform advance demolition work for ST owned nuisance properties; demolition solicitation package in preparation. Advertising late August and Capital Committee mid Sept 2018.
- Continued working with WSDOT for Construction Agreement regarding scope requirements and cost. Risk and cost reimbursement issues are being discussed.
- ST staff continue Air Space Lease (ASL) / Temporary Construction Air Space Lease Letter of Concurrence (TCAL LOC) coordination with WSDOT; agreement scheduled for August 2018 Board.
- Land exchange agreement with WSDOT moving forward; ST Legal reviewing.
- Continued working with cities to finalize Development and Transit way agreements with all four cities.
- Continued permitting requirement and required DB activity discussions with Authority Having Jurisdiction (AHJ).
- Continued ROW acquisition and relocation activities; relocation volume is concerning due to limited housing availability.

Project Cost Summary

In March 2017, the Sound Transit Board authorized the Federal Way Link Extension Project to advance through Final Design, increasing the authorized project allocation from \$48.8M to \$412.6M. Board approval for Baselineing the project to release the entire project budget will be sought in 3rd QTR 2018.

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

This period approximately \$2.2M was incurred, of which \$0.1M was for Right-of-Way property acquisitions and relocations, \$0.1M was Construction Services, \$0.7M mostly for staff (Admin), \$1M for PE services, and \$0.2M for third party and other FD services.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$14.9	\$11.7	\$11.9	\$14.9	\$0.0
Preliminary Engineering	\$43.4	\$43.1	\$42.4	\$43.4	\$0.0
Final Design	\$2.4	\$0.9	\$0.7	\$2.4	\$0.0
Construction Services	\$45.7	\$4.6	\$0.9	\$45.7	\$0.0
3rd Party Agreements	\$18.6	\$3.7	\$2.3	\$18.6	\$0.0
Construction	\$13.5	\$0.0	\$0.0	\$13.5	\$0.0
ROW	\$274.1	\$33.8	\$14.1	\$274.1	\$0.0
Total	\$412.6	\$97.8	\$72.3	\$412.6	\$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
20 Stations	\$0.0	\$0	\$0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0	\$0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$8.1	\$0.0	\$0.0	\$8.1	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$8.1	\$0.0	\$0.0	\$8.1	\$0.0
60 Row, Land	\$274.1	\$33.8	\$14.1	\$274.1	\$0.0
80 Professional Services	\$123.2	\$64.0	\$58.2	\$123.2	\$0.0
90 Unallocated Contingency	\$7.3	\$0.0	\$0.0	\$7.3	\$0.0
Total (10 - 90)	\$412.6	\$97.8	\$72.3	\$412.6	\$0.0

Link Light Rail

Federal Way Link Extension



Risk Management

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

The most recent Quarterly Risk Register review update was held in May 2018, plus an ST internal Risk Assessment workshop for baselining was held. Below are the top project wide risks. In addition, next month a Risk Assessment Workshop will be held with FTA/PMOC and preliminary results from May will be presented to them.

- Availability of federal funding remains uncertain and may impact schedule and funding resources.
- Volatility in construction market and unanticipated jurisdictional stakeholder requirements may drive project cost higher than PE cost estimate.
- Property acquisition and relocations completed in time for construction.
- Volume of residential relocations continues to be a concern due to limited housing availability.

Project Schedule

The project schedule is presented below. Record of Decision (ROD) was received in March 2017. Statement of Qualifications were received in June from potential Design-Build contractors. Real Estate acquisitions continue and additional detail has been added to the master schedule to monitor any impacts to the project. Project Baseline and Final Entry to Engineering submittal and the Request for Proposal issuance to the proposers is expected in 3rd QTR 2018.

Revenue Service expected in 4th QTR 2024.

Activity Name	Start	Finish	2018	2019	2020	2021	2022	2023	2024	
			Q	Q	Q	Q	Q	Q	Q	Q
			Q	Q	Q	Q	Q	Q	Q	Q
Sound Transit	01-Jul-16 A	31-Dec-24								
LRT Extension - South	01-Jul-16 A	31-Dec-24								
Federal Way Link Extension - Master Schedule	01-Jul-16 A	31-Dec-24								
Federal Way Link Extension - Master Schedule	01-Jul-16 A	31-Dec-24								
Milestones	23-Aug-18	31-Dec-24								
MS 01 - Baseline Project (Q3 2018)		23-Aug-18*								
MS 02 - NTP to Design/Build Contractor (Q3 2019)		21-Aug-19*								
MS 03 - ROW Acquisitions Complete (Q1 2020)		14-Feb-20								
MS 04 - 50% Design/Construction Complete (Q4 2021) (*based on contract duration)		31-Dec-21*								
MS 05 - All Drilled Shafts/Foundations/MSE Walls Complete (Q1 2022)		02-Jun-22								
MS 06 - Design/Build Contractor - Substantial Completion - (Q4 2023) - System Integration C		01-Sep-23								
MS 07 - Revenue Service w/Float (Q4 2024)		31-Dec-24								
Preliminary Engineering	01-Jul-16 A	31-Dec-23								
Third Party Agreements and Permitting	01-Jul-16 A	21-Feb-21								
Federal Way Link - Design-Build Construction Management Consultant - Contract	14-Nov-16 A	31-Dec-24								
Federal Way Design/Build Contract	11-Mar-17 A	20-Aug-19								
Federal Way Link Extension - Design/Build Contract - Procurement	11-Mar-17 A	20-Aug-19								
Federal Way Link Extension - Right of Way	01-May-18 A	24-Feb-20								
Federal Way - D/B Design Packages	12-Aug-19	12-Dec-20								
Federal Way - D/B Construction	21-Aug-19	31-Oct-23								
Federal Way Link Extension - Rail Activation	01-Apr-18 A	31-Dec-24								
Federal Way Link Extension - Rail Activation	01-Apr-18 A	31-Dec-24								
Rail Activation	01-Apr-18 A	31-Dec-24								
LRV Procurement/Manufacture/Delivery	01-Apr-18 A	05-Dec-23								
Pre-Revenue Service	02-Sep-23	31-Oct-23								
Project Float	01-Nov-23	31-Dec-24								
Revenue Service	31-Dec-24	31-Dec-24								

Right-of-Way

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

Federal Way Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
257	259	39	19	388	31
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Community Outreach

- Ongoing communication with property owners regarding FWLE route, profile, station areas and acquisition and relocation.
- Outreach event at Federal Way Farmers Market on 6/16/18 was well attended, provided general FWLE Project updates and spoke with 120 people about the project.
- Outreach event at Des Moines Waterfront Farmers Market on 6/23/18 was well attended. Provided general FWLE Project updates and spoke with 175 people about the project.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Phase 3 Preliminary Engineering (PE)

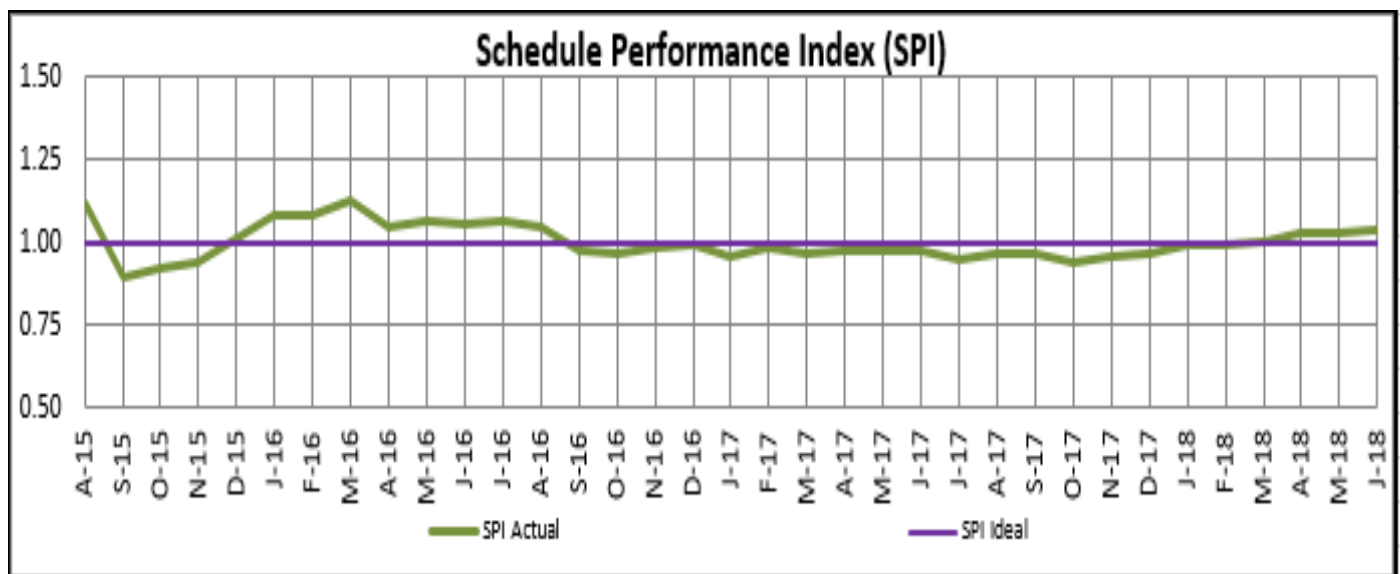
In July 2015, Sound Transit executed an amendment to the professional services agreement with HDR Engineering, Inc. for Phase 3 professional services, including completion of a Final Environmental Impact Statement (FEIS) using the preferred alternative and the other alternatives in the Draft EIS, preliminary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

Current Progress

- Final RFP Document completed.
- Efforts to finalize responses to cities on the respective development and transit way agreement continued.
- Corridor wide study of property acquisition report completed.
- The NEPA/SEPA re-Evaluation task related to traffic mitigation work; environmental permitting continued.
- Worked on cost estimate reconciliation with the independent cost estimate prepared .
- Finalized all Phase I ESAs with the approved scope.

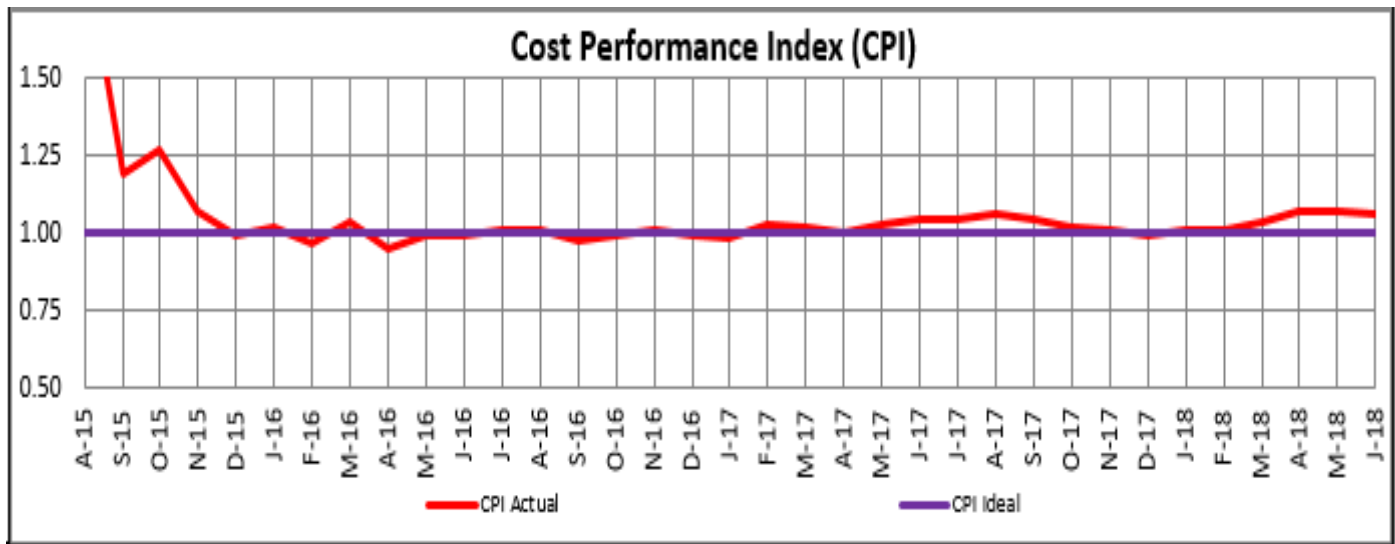
Schedule Performance Index

The cumulative Schedule Performance Index (SPI) is 1.05 through May 2018, indicating the overall amount of work accomplished is as planned. The consultant is now fully engaged on the new scope incorporated, to assist in RFP process of DB contract and in ROW acquisition support .



Cost Performance Index

Phase 3 expenditures through June 2018 totaled \$33.4 M, approximately 90% of the amended total contract. The Phase 3 percent complete is reported at 96%, with an earned value of \$35.6. The cumulative Cost Performance Index (CPI) is 1.06 showing costs are on track with work accomplished. The Consultant is engaged in assistance in RFP process of DB contract and in ROW acquisition support.



Cost Summary

Contract	Cumulative To-date
Amount Invoiced	\$33.4M
% Spent	90%
Earned Value	\$35.6M
% Complete	96%
SPI	1.05
CPI	1.06

Link Light Rail

Tacoma Link Extension

Project Summary

Scope

Limits City of Tacoma

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

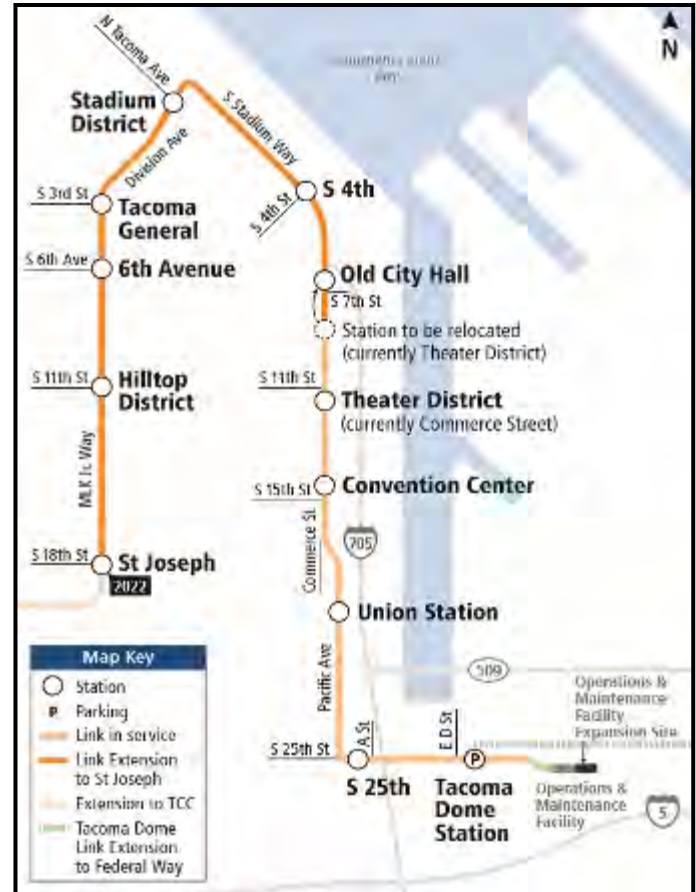
Stations Old City Hall, S. 4th, Stadium District, Tacoma General, 6th Avenue, Hilltop District, and St. Joseph.

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

Phase Final Design and Construction

Budget \$217.3 Million (Baselined September 2017)

Schedule Revenue Service: May 2022



Map of Tacoma Link Extension.

Key Project Activities

Final Design

- Design consultant completed bid support activities.
- Facilitated meeting with State Safety Oversight Office (SSO), Tacoma Fire and Police Departments and City of Tacoma staff to review SSO June 2018 Hazardous Analysis Review of the project.
- Project staff continued design conformance verification activities.

Pre-Construction:

- ST staff prepared ST Board materials for construction contract award in July.

Right-of-Way

- Right-of-Way property acquisition activities continued as they relate to required temporary construction easements (TCE) along the alignment.

Vehicles

- Ongoing meetings with representatives from Brookville Equipment Corporation on Tacoma Link Extension LRVs.

Project Cost Summary

In September 2017, Sound Transit Board adopted the Tacoma Link Extension baseline schedule and budget by increasing the authorized project allocation from \$34.6M to \$217.3M. 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. To date, most of the expenditures have been from Administration, Design, 3rd Party, and ROW.

Bids were received for the construction contract (T100) on May 23, 2018. The lowest apparent bid was 15% over the engineer's estimate. Project staff have requested a meeting with the lowest apparent bidder to assist in identification of cost drivers. Award of the construction contract will require budget amendments to address phase level budget transfers.

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	\$16.9	\$16.9	\$6.7	\$6.7	\$16.9	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$10.8	\$10.8	\$10.4	\$9.1	\$10.8	\$0.0
Construction Services	\$9.9	\$9.9	\$8.9	\$0.4	\$9.9	\$0.0
3rd Party Agreements	\$1.5	\$1.5	\$1.3	\$1.0	\$1.5	\$0.0
Construction	\$127.2	\$127.2	\$7.2	\$0.0	\$127.2	\$0.0
Vehicles	\$35.4	\$35.4	\$31.2	\$0.5	\$35.4	\$0.0
ROW	\$3.6	\$3.6	\$2.0	\$1.8	\$3.6	\$0.0
Contingency	\$6.6	\$6.6	\$0.0	\$0.0	\$6.6	\$0.0
Total	\$217.3	\$217.3	\$73.3	\$25.0	\$217.3	\$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	\$21.9	\$21.9	\$0.0	\$0.0	\$21.9	\$0.0
20 Stations	\$1.8	\$1.8	\$0.0	\$0.0	\$1.8	\$0.0
30 Support Facilities	\$26.6	\$26.6	\$0.0	\$0.0	\$26.6	\$0.0
40 Sitework & Special Conditions	\$40.0	\$40.0	\$7.2	\$0.0	\$40.0	\$0.0
50 Systems	\$25.0	\$25.0	\$0.0	\$0.0	\$25.0	\$0.0
Construction Subtotal (10 - 50)	\$115.4	\$115.4	\$7.2	\$0.0	\$115.4	\$0.0
60 Row, Land	\$3.6	\$3.6	\$2.0	\$1.8	\$3.6	\$0.0
70 Vehicles (non-revenue)	\$35.4	\$35.4	\$31.2	\$0.5	\$35.4	\$0.0
80 Professional Services	\$56.4	\$56.4	\$32.9	\$22.8	\$56.4	\$0.0
90 Unallocated Contingency	\$6.6	\$6.6	\$0.0	\$0.0	\$6.6	\$0.0
Total (10 - 90)	\$217.3	\$217.3	\$73.3	\$25.0	\$217.3	\$0.0

Risk Management

The Tacoma Link Risk and Contingency Management Plan (RCMP) was completed in 2nd QTR 2017. This establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It will provide a tool for the project team to proactively manage risks on the project. It is Sound Transit's responsibility for continuously monitoring project status and associated risks, taking mitigation actions for known risks identified on the risk register, and effectively responding in a timely manner to those risks that pose a significant impact to the project cost or schedule forecast. The next quarterly risk review is for 3rd QTR 2018 and is scheduled for September 2018.

The Baseline Risk Assessment was conducted in May 2017. The following are the top project wide risks:

- Unidentified utility conditions under the proposed alignment or delay in completion of relocations.
- Roadway improvements and modifications along MLK are greater than anticipated requiring additional scope.
- Utility relocation associated with the tunnels on MLK.
- Unknown subsurface conditions under the proposed alignment (old Tracks) or OCS pole locations.

Contingency Management

Tacoma Link Extension was baselined on September 2017 with a total contingency of \$33.9M. Since baselining, there were draw downs on AC and UAC to address Final Design Change Orders and the Procurement of the Tacoma LRV contract. With the Final design completed, DA was reallocated to AC.

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

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC was unchanged at \$17.4M.

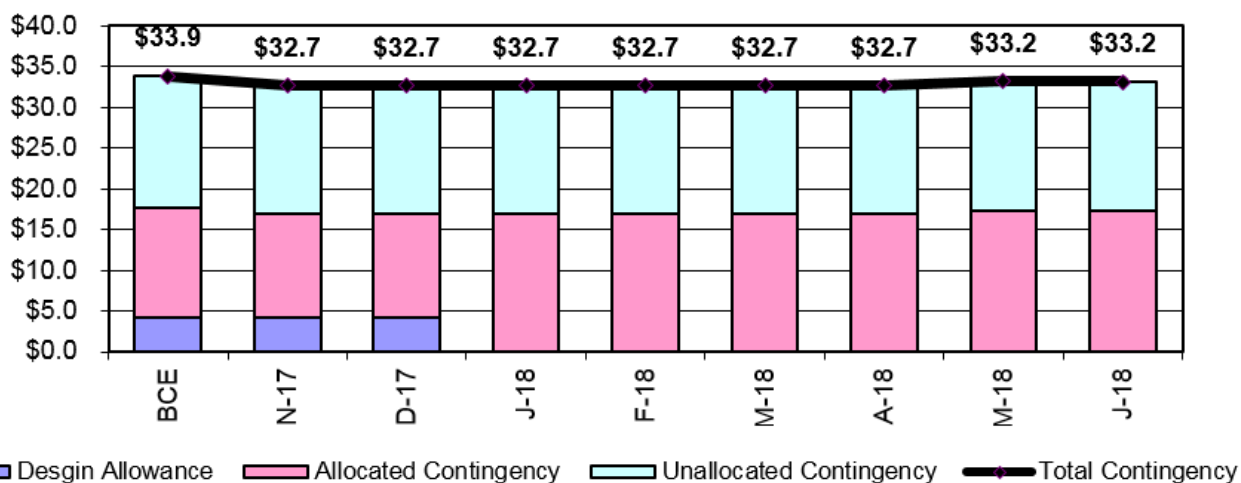
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance remained stable with a net amount of \$15.8M.

Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$4.2	2.2%	\$0.0	0.0%
Allocated Contingency	\$13.5	6.8%	\$17.4	9.0%
Unallocated Contingency	\$16.1	8.2%	\$15.8	8.2%
Total	\$33.9	17.2%	\$33.2	17.3%

Table figures are shown in millions.

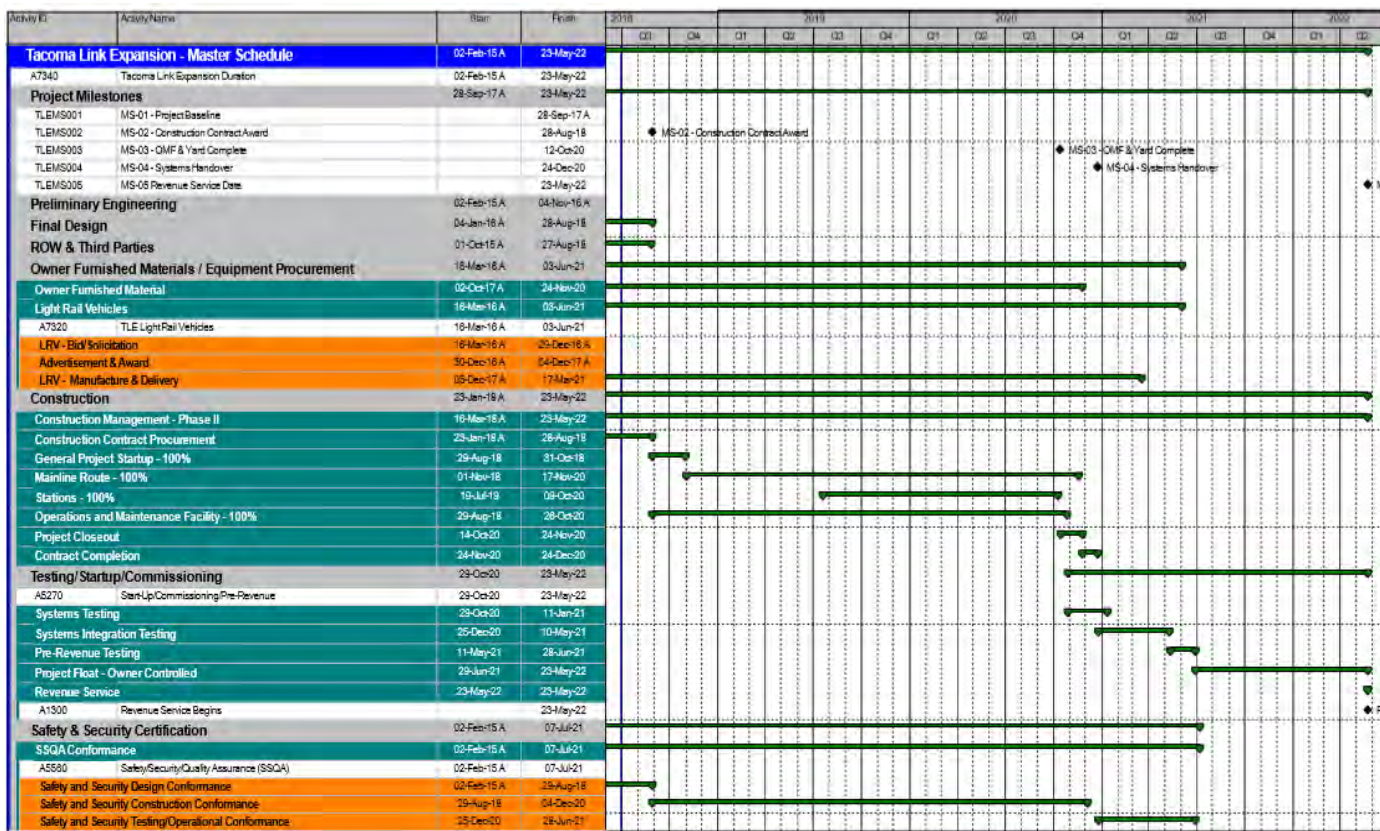
Contingency by Type Histogram (\$ Millions)



Project Schedule

The Master Schedule has been updated through the end of June. Work in progress includes the Contract Award Phase for the T100 contract. The bids for the T100 contract were received on May 23rd, and Notice of Intent to Award (NOITA) was issued with the team working toward Board Approval still scheduled for late July 2018. The Project Float remains 329 days.

The Revenue Service date remains May 2022.



Link Light Rail

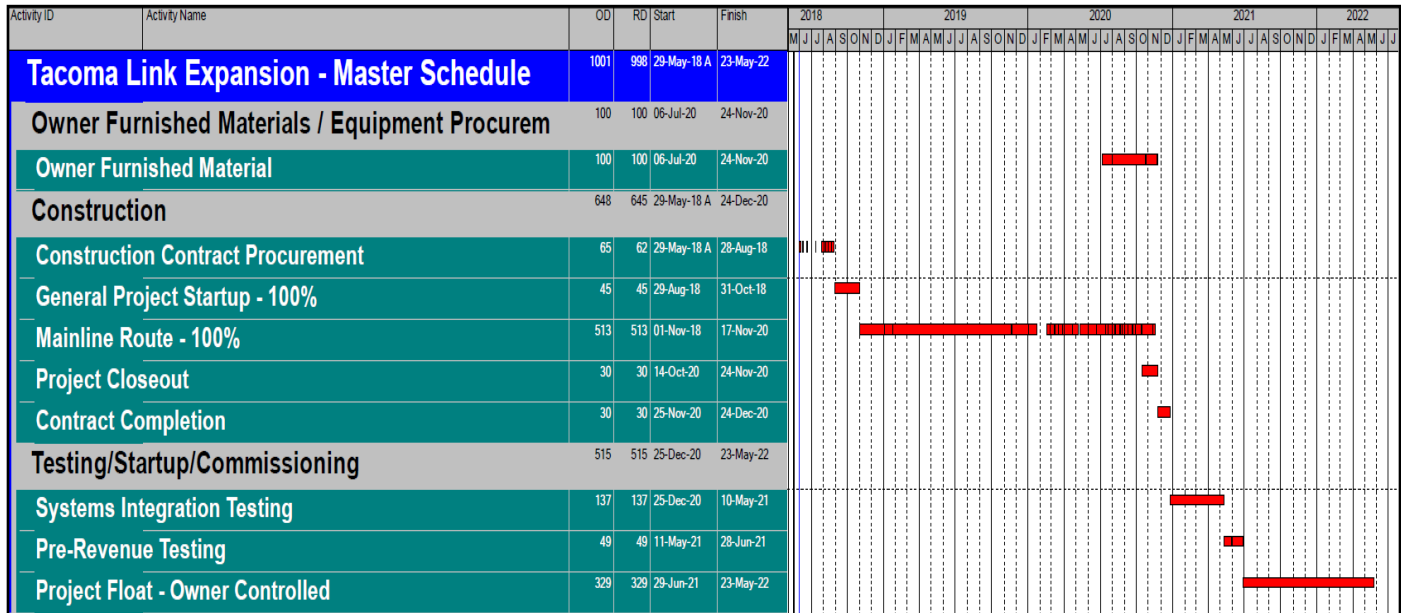
Tacoma Link Extension



Critical Path Analysis

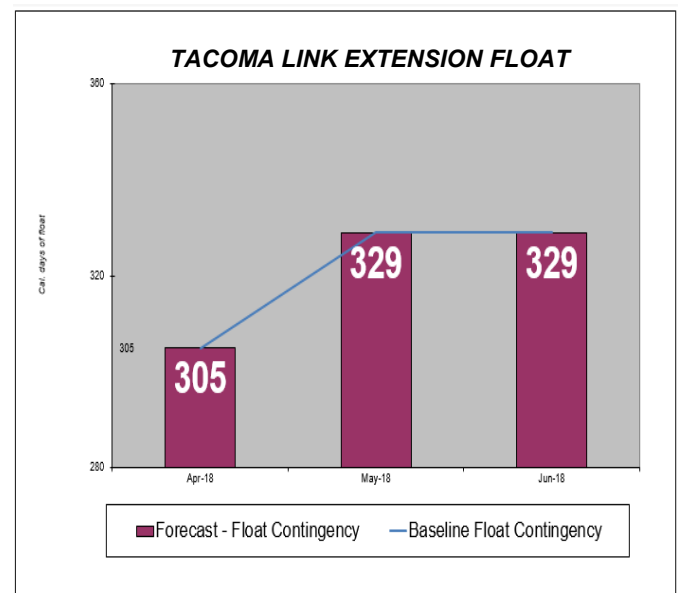
The critical path for Hilltop Tacoma Link is driven by contract award and execution of the T100 construction contract. Once awarded, the critical path runs through the completion of the water service work being performed by TPU in Segment 4a Roadway MLK Way – Division to S. 6th ST on the Mainline Route.

Vehicle Delivery is not on the critical path as the LRV contractor is currently forecasting shipment earlier than original target date of June 2020. The project retains adequate float at 329 calendar days.



Project Float

The Tacoma Link Extension project currently forecasts 329 days of unallocated project float.



Right-of-Way

The Tacoma Link Operations and Maintenance Facility will be expanded to the east and five new vehicles will be purchased. 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. Design efforts have reduced the total acquisitions required from 140 to 22 parcels.

Tacoma Link Extension Property Acquisition Status					
ACQUISITION				RELOCATION	
Total Acquisitions	Board Approved	Offers Made to date	Closings to date	Relocations Required	Relocations Completed to date
22	22	22	11	1	1
* All numbers are cumulative totals, except where noted. Number of totals may differ from other reports due to the timing of reporting periods.					

Community Outreach

- Staffed the City of Tacoma Links to Opportunity project office weekly.
- Provided a project update at the monthly Dome District Meeting
- Provided a project update at the monthly Hilltop Business District Association Meeting
- Provided a project update at the quarterly Stadium Historical Business District Meeting

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Link Light Rail

Tacoma Dome Link Extension

Project Summary

Scope

Limits	Federal Way Transit Center to South Federal Way, Fife, East Tacoma, and Tacoma Dome
Alignment	The Tacoma Dome Link Extension expands light rail 9.7 miles from the Federal Way Transit Center to Tacoma. The representative alignment travels adjacent to I-5 with four stations.
Stations	South Federal Way, Fife, and East Tacoma (elevated stations) and Tacoma Dome (at-grade station)
Systems	Signals, traction power, communications (SCADA), Operations and Maintenance Facility South (OMF South)
Phase	Planning: Alternative Development
Budget	\$125.7 Million for Preliminary Engineering Phase 1—Alternative Development
Schedule	Revenue Service: December 2030



Map of Tacoma Dome Link Extension.

Key Project Activities

- Sound Transit Board approved Phase 1—Alternative Development budget in December 2017. Phase 1—Alternatives Development phase began in January 2018. Alternative development activities are on-going as per the schedule.
- Early Scoping period began April 2 and concluded May 3.
- Produced and distributed Early Scoping Summary Report.
- Held coordination meeting with staff of Puyallup Tribe of Indians.
- Began negotiations of Task Order with the cities of Milton, Federal Way and Tacoma.
- Began monthly coordination meetings with cities of Federal Way, Fife, Milton and Tacoma.
- Began pre-screen evaluation of OMF South locations.

Project Cost Summary

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

Project cost and monthly expenditures are on track with the planned monthly budget and are expected to complete this phase within the authorized budgeted amount.

Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$26.8	\$1.8	\$1.5	\$26.8	\$0.0
Preliminary Engineering	\$87.1	\$10.3	\$1.8	\$87.1	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$5.8	\$0.0	\$0.0	\$5.8	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$6.0	\$0.0	\$0.0	\$6.0	\$0.0
Total	\$125.7	\$12.1	\$3.3	\$125.7	\$0.0

Cost Summary by SCC

SCC Element	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$5.0	\$0.0	\$0.0	\$5.0	\$0.0
80 Professional Services	\$110.9	\$12.1	\$3.3	\$110.9	\$0.0
90 Unallocated Contingency	\$9.8	\$0.0	\$0.0	\$9.8	\$0.0
Total (10 - 90)	\$125.7	\$12.1	\$3.3	\$125.7	\$0.0

Link Light Rail

Tacoma Dome Link Extension



Risk Management

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

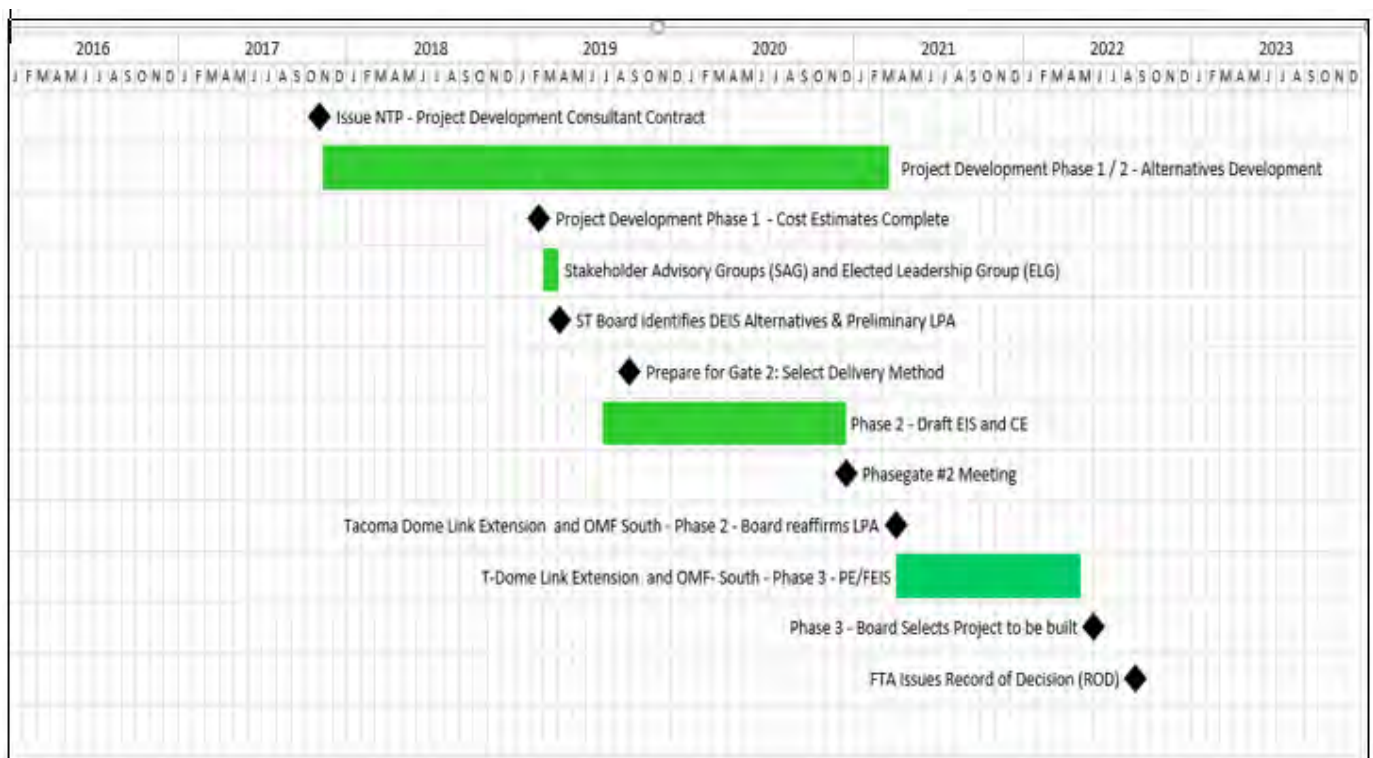
The first risk review workshop is scheduled in the 3rd QTR 2018. The following are the top project wide risks:

- Clearance of the Bonneville Power Administration high voltage transmission lines.
- Geotechnical challenges and potential environmental considerations at/near the Puyallup River and Tacoma Dome area.
- Timely approvals of necessary permitting requirements.
- Coordination with WSDOT's SR 167/Gateway project.
- Potential third party scope requests.

Project Schedule

Phase I Alternative Analysis —The HDR detailed schedule as of June 30, 2018 is remaining on target for completing level 1 and level 2 scoping and Final DEIS Alternatives Development and Preferred Alternative Identification in 2nd QTR. 2019 .

The critical path of this project runs through Phase 1 Alternatives Development level 1 and level 2 screening to preparing Capital Cost Estimating required for briefing the Sound Transit Board to help identify the Preferred Alternative.



Community Outreach

- Hosted TDLE Interagency Group Meeting.
 - Participated in Dome District Meeting.
 - Participated in Tacoma Pierce County Chamber Government Affairs Committee meeting.
 - Participated in Sound to Narrows event.
 - Conducted briefing for the Kiwanis Club of Tacoma.
 - Conducted inter with social service providers: Summit Olympus, Tacoma Public Schools, Tacoma Community House.
 - Conducted door to door notification of project information to multifamily properties in Fife.
 - Participated in Fife Music in the Park event.
 - Held coordination meeting with the Tacoma-Pierce Public Health Department.
-

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Link Light Rail

Link Operations & Maintenance Facility: East

Project Summary

Scope The Link Operations and Maintenance Facility: East (OMF East) project, located in the City of Bellevue, includes a 160,000 sq. ft. operations and maintenance facility that will maintain, store and deploy and expanded light rail fleet, including seven LRV service bays, a LRV wash facility and stor-

Phase Proceed to Construction

Budget \$449.2 Million (Baselined July 2016)

Schedule Project Completion: December 2020



Map of OMF East Site

Key Project Activities

- Continued 60% , 100% and IFC review of various design packages.
- Continued site preparation, including but not limited to clearing, grubbing, surface demolition; removal of utilities and dewatering.
- Completed King County sewer line bypass pump testing.
- Begun fabrication of pre-cast detention vault panels for the North Vault.
- Completed backfill over Vault B. Work on Vault A is ongoing.
- Continued working with the City of Bellevue on Property Exchange Agreement with plans to brief the City Council in Summer 2018.
- Grading and pre-loading of yard area continues.
- The East Rail Corridor (ERC) temporary trail is now to be open for public.

Closely Monitored Issues

- Elements of DB Contractor's proposal (shear wall elimination for future development) may require MOU amendment with City of Bellevue.
- Spur property exchange proposal with City of Bellevue may complicate the timing of the RFP for Transit Oriented Development.
- City issuance of building permit.

Project Cost Summary

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

The Estimated Final Costs (EFC), continues to be projected at approximately \$449.2M. This period's expenditure of about \$5.7M inches the total project cost incurred from \$152.2M to \$157.9M. The primary cost drivers during this period on the OMF East project comes from the design build (construction) phase at \$4.5M or roughly 79% of the total monthly expenditures. The next cost driver this period are the Administrative Phase and Right of Way Phase expenditure at about \$0.2M and \$0.3M respectively.

Cost Summary by Phase

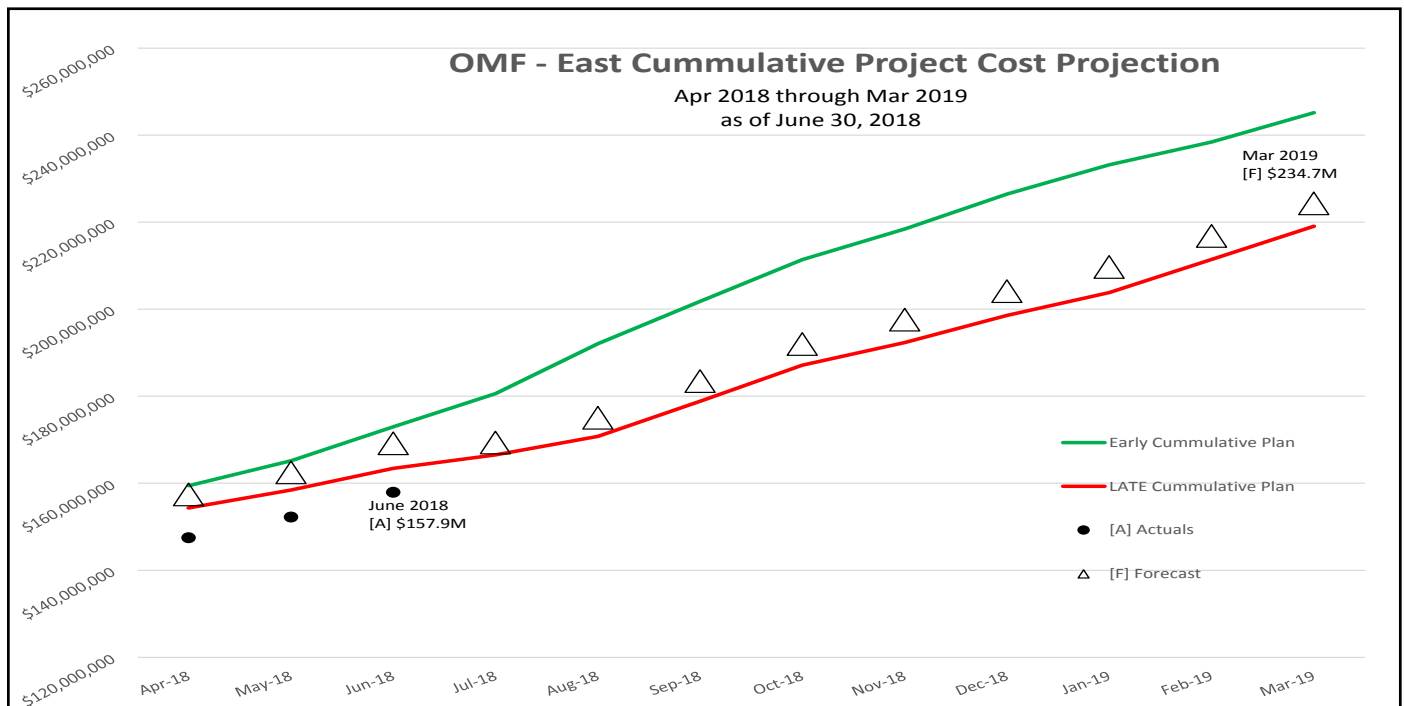
Project Phase	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$17.6	\$17.6	\$4.4	\$4.4	\$17.6	\$0.0
Preliminary Engineering	\$9.5	\$9.5	\$9.0	\$8.7	\$9.5	\$0.0
Final Design	\$0.4	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
Construction Services	\$19.3	\$19.3	\$17.6	\$3.1	\$19.3	\$0.0
3rd Party Agreements	\$3.1	\$3.1	\$0.3	\$0.1	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$222.5	\$40.6	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$101.5	\$101.0	\$134.5	\$0.0
Total	\$449.2	\$449.2	\$355.3	\$157.9	\$449.2	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
10 Guideway & Track	\$2.6	\$2.6	\$4.0	\$0.5	\$4.0	-\$1.5
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities: Yard, Shop	\$140.1	\$140.1	\$123.9	\$13.8	\$145.5	-\$5.4
40 Sitework & Special Conditions	\$43.6	\$43.6	\$39.6	\$5.8	\$41.5	\$2.1
50 Systems	\$43.0	\$43.0	\$38.5	\$4.3	\$38.5	\$4.6
Construction Subtotal (10 - 50)	\$229.3	\$229.3	\$206.0	\$24.3	\$229.5	-\$0.2
60 ROW, Land, Improvements	\$134.5	\$134.5	\$101.5	\$101.0	\$134.5	\$0.0
70 Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
80 Professional Services	\$71.6	\$71.6	\$47.9	\$32.5	\$71.4	\$0.2
90 Unallocated Contingency	\$13.8	\$13.8	\$0.0	\$0.0	\$13.8	\$0.0
Total (10 - 90)	\$449.2	\$449.2	\$355.3	\$157.9	\$449.2	\$0.0

Project Cash Flow Projection

The OMF East cost projection is trending late this period but anticipates to pick up through this summer. Total project expenditure incurred to date reached \$157.9M with Right-of-Way (ROW) phase cost being the largest driver at 64% and Construction Phase at about 26%. The projected cash flow was revised this period for the next nine months to reflect some current trends. The Design Builder's (DB) design completion continues slip specifically on Systems where some procurements were anticipated that did not occur. In addition, ROW acquisitions and relocation phase is reflecting some positive trends where anticipated cost may not materialized as forecast. The project is now trending to reach approximate \$235M by March of 2019 which is still within the lower bounds of the planned expenditures.



Risk Management

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

The project is currently working towards Milestone 2 completing ROW Acquisition and Mass Grading. The 2nd quarter 2018 OMF East quarterly risk register is currently being reviewed and updated. The current top actively managed risk areas continues to be the same as previous period and are listed below:

- **Permitting:** Delays in the approval process for permits will impact the project schedule
- **Design:** As the project approaches the 60% design milestone, changes made to scope or design will have greater cost impact than during the earlier design stages.
- **Scope:** Scope increase as a result of Third Parties or ST stakeholders requesting additional work will impact the project schedule and budget.

Contingency Management

The Link Operations and Maintenance Facility: East was baselined and approved by Sound Transit Board in July 2016 with a total contingency of \$93.2M. The Project's starting contingency balance as of the Notice to Proceed for Construction was \$71.6M. For this period, there was some minor change order in the design build contract that required a contingency drawdown. The current contingency balance remains practically unchanged at \$70M (previous quarter at \$70.1M).

Design Allowance (DA): N/A.

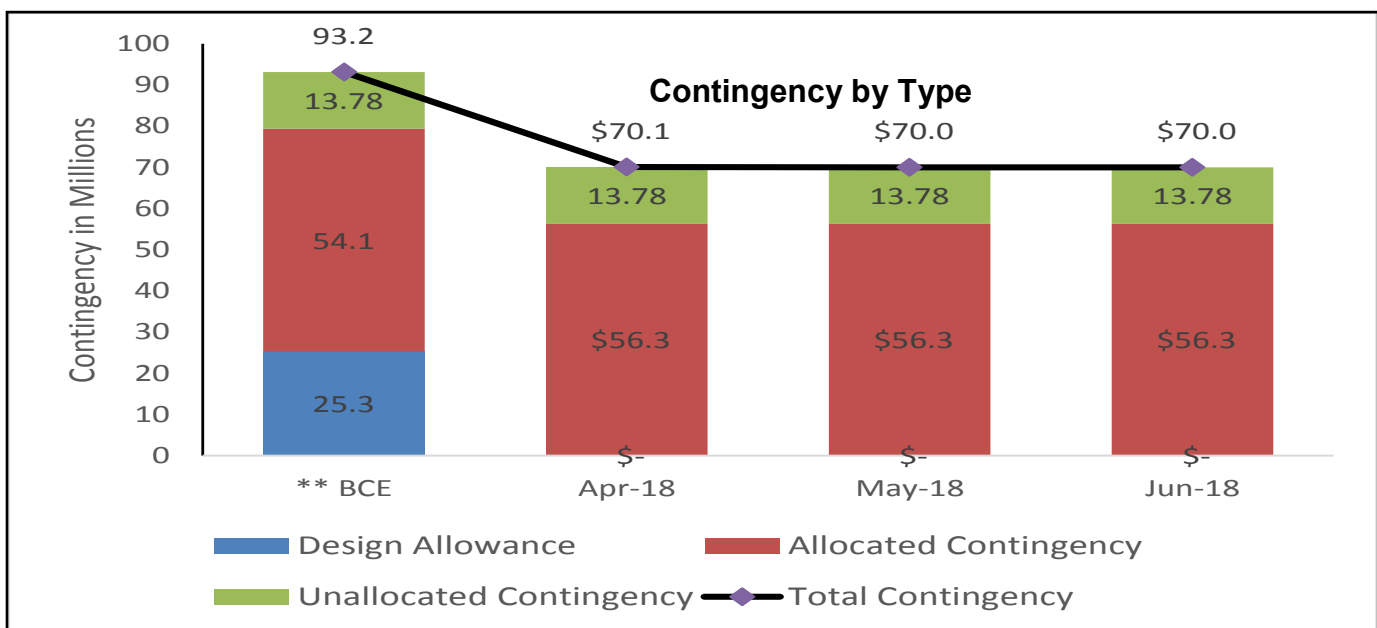
Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. Allocated contingency balance at the end of this period remains essentially unchanged from the previous period at about \$56.3M

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

Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$25.3	5.6%	\$ -	0.0%
Allocated Contingency	\$54.1	12.0%	\$56.3	19.0%
Unallocated Contingency	\$13.8	3.1%	\$13.8	4.6%
Total	\$93.2	20.7%	\$70.1	23.6%

Table figures are shown in millions.

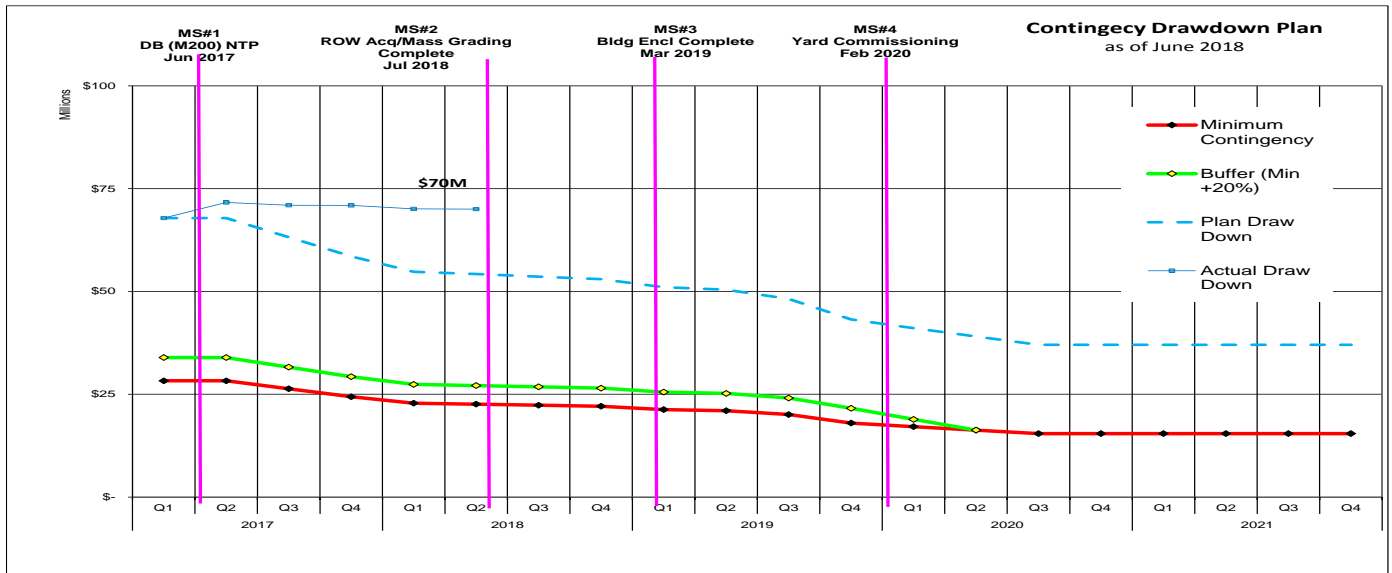


Link Light Rail

Link Operations & Maintenance Facility: East

Contingency Drawdown

At the end of the 2nd QTR 2018, OMF East Project's total contingency drawdown plan is trending positively. Total contingencies balance is at approximate \$70M and remains above all the baseline draw down projection and well above both the minimum contingency and the buffered (minimum plus 20%) contingency levels. The next update will be at end of the 3rd QTR 2018.



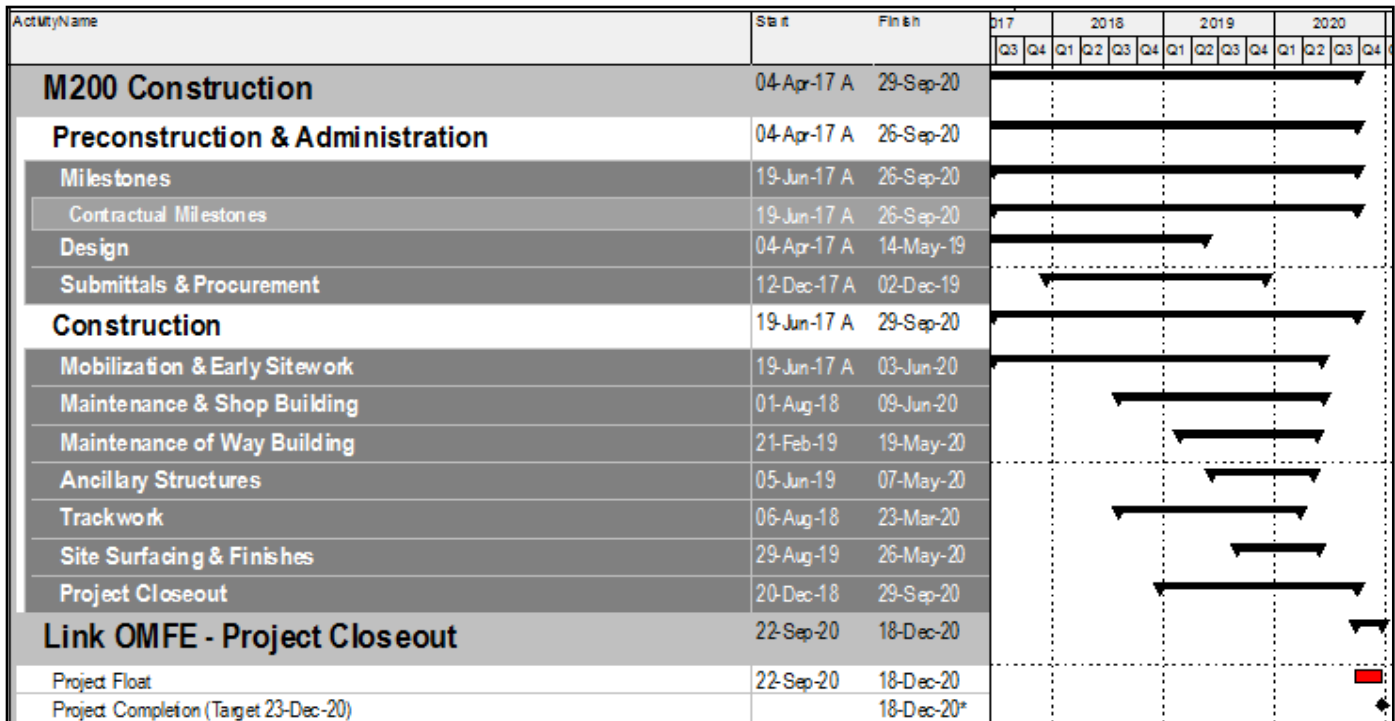
Graph for Quarter ending June 30, 2018



Drone photo of OMF East site looking south

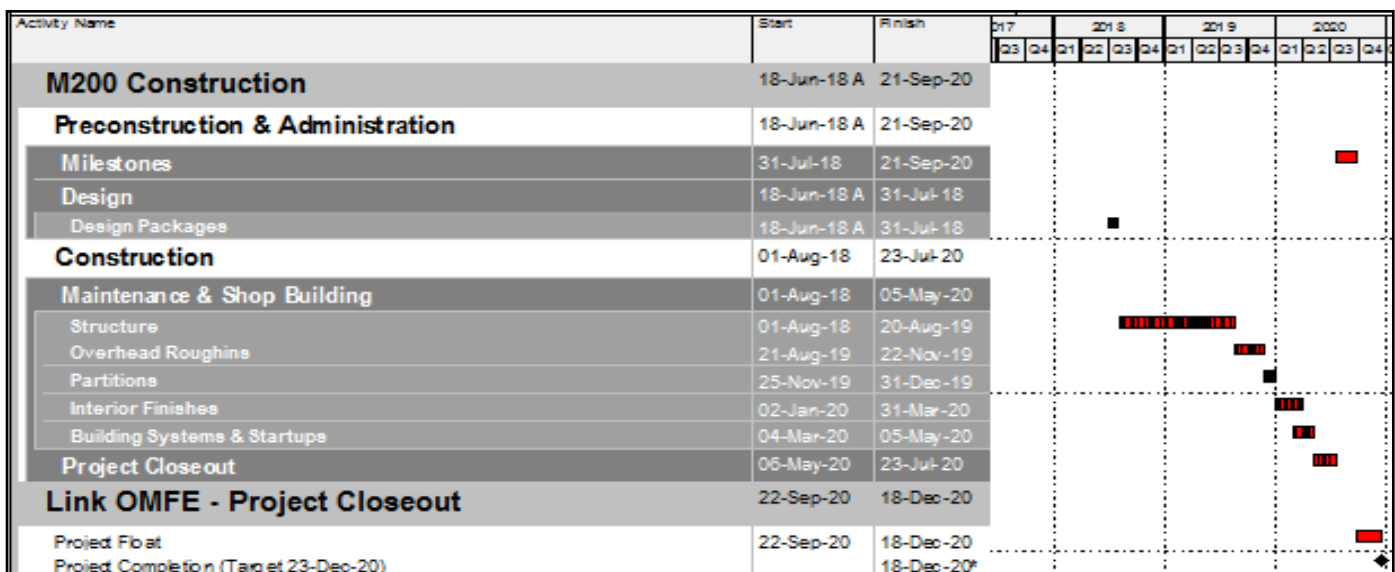
Project Schedule

The schedule for OMF East is now entirely within the M200 contract, which is presented below. The Contractor continues to progress as planned and is forecast to complete on target. The OMF East is expected to be available to begin receiving LRVs as needed in Summer 2020.



Critical Path Analysis

Due to an early finish of the structural fill preload, the critical path now goes through the main OMF building. Since the preload settlement period is an estimate, it is possible that the schedule savings of this early finish will not be realized and that the yard will become the critical path again later this year.



Link Light Rail

Link Operations & Maintenance Facility: East

Right-of-Way

All OMF East properties have now been vacated and are in the project's control. Only administrative functions remain in this phase of the project. *No more updates.*

Community Outreach

- Distributed construction alert for the temporary, one-way signalized traffic control on 120th Ave. NE.
- Coordinate with Bellevue School District and King County Metro on Beaver Dam mitigation

Sound Transit Board Actions

Board Action	Description	Date
	None to report this period.	



Design Builder's 3-D model of the OMF—East looking Southeast.

Contract M200 - OMF East Design Build

Current Progress

Design: Hensel Phelps (HP) advanced the following Design Packages (DP) - DP#003 (Trackwork /Systems) 60% comments went back to HP for review and incorporation. DP #002 (Civil) 100% review comments have been incorporated, IFC submittal is expected in July. DP#002B (Early Civil) IFC was approved in June. DP #004 100% (buildings) comments were sent back to HP for review and incorporation.

Construction: HP completed placing V-Floors, setting roof, and wall panels for Vault A. Continued King County sewer line bypass work through the weekend and expect completion in July. Completed grouting top panel keyways and backfilling over Vault B. North Vault fabrications are underway. Completed removing existing utilities at Gate 3 and west of MB017.

Next Period's Activities

- Continue DP #004 100% Submittal & Review
- Complete DP #002 IFC Submittal & Review
- Continue Storm Detention Vault construction and commenced backfilling certain area of the vault
- Complete King County sewer line pipe bypass and installation.
- Continue contaminated soils removal.

Closely Monitored Issues

- *Site infiltration issue:* Contractor has submitted an RFC stating differing site conditions on the soil infiltration rate. ST has rejected this change order and currently working on partnering activities to resolve the issue and find a path forward.
- Beaver Dam in the West Tributary continuation of discussion with stakeholders to provide options and plans for mitigation to allow OMF-East's site stormwater to be convey properly.

Cost Summary

Present Financial Status	Amount
M200 Contractor – Hensel Phelps	
Original Contract Value	\$218,912,000
Change Order Value	\$2,714,520*
Current Contract Value	\$221,626,520*
Total Actual Cost (Incurred to Date)	\$38,547,963
Financial Percent Complete	17.5%
Authorized Contingency	\$21,891,200
Contingency Drawdown	\$1,540,313
Contingency Index	2.20



Vault "A" sloped floor placement.

Link Light Rail

Light Rail Vehicle Fleet Expansion

Project Summary

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



Graphic simulation of the new light rail vehicles

Key Project Activities

- Final Design Review for communications and auxiliary power, car body and truck assemblies.
- Completed Truck Frame First Article Inspections.
- Roof panel and air ducts installations.
- Ongoing painting of car body from priming to paint curing and inspection.

Closely Monitored Issues

- Commercial dispute remains open with Siemens regarding lift design and jacking points on the LRV.
- Design for necessary antennae coverage for the provision of Wi-Fi facilities needed at OMF East & OMF-Forest Street.
- OMF Forest Street yard storage capacity in 2020 may limit Siemens LRV delivery schedule; production progress being monitored closely.
- Flame, smoke, and toxicity standard (NFPA-130) test waiver regarding a Siemens' adhesive product.



Primed Carbody getting baked in baking booth.



Truck Assembly Inspection

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.

In June 2018, the project incurred to date costs increased nominally by about \$310K. The incurred cost increased from \$74.8M to \$75.0M. The majority of this period's costs were attributed to design and inspection in the support of document reviews for the final design review (FDR) and monitoring of the production of car shells and truck frames.

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	\$6.4	\$6.4	\$0.9	\$0.9	\$6.4	\$0.0
Construction Services	\$18.0	\$18.0	\$4.9	\$3.2	\$18.0	\$0.0
Vehicles	\$716.3	\$716.3	\$648.2	\$70.9	\$716.3	\$0.0
Total*	\$740.7	\$740.7	\$654.0	\$75.0	\$740.7	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 ROW, Land, Improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
70 Vehicles	\$702.8	\$702.8	\$653.0	\$74.1	\$702.8	\$0.0
80 Professional Services	\$6.1	\$6.1	\$1.0	\$0.9	\$6.1	\$0.0
90 Contingency	\$31.7	\$31.7	\$0.0	\$0.0	\$31.7	\$0.0
Total *(SCC 10 - 90)	\$740.7	\$740.7	\$654.0	\$75.0	\$740.7	\$0.0

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

Risk Management

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

The project's qualitative risk register is currently being updated. The current top risk areas are listed below.

- Design of the propulsion and auxiliary power system taking longer than anticipated (System Requirements and Compatibility).
- Commissioning of LRVs is impacted due to lack of sufficient space, lift access or other resources at OMF (Forest St.).
- Limited yard storage capacity in 2020 may impact preventative maintenance or spares available to support peak service.
- Automatic Train Protection retrofit of existing fleet takes longer than expected.

Link Light Rail

Light Rail Vehicle Fleet Expansion



Contingency Management

The project's budget was Baseline in September 2015 contained a total of \$78.0M of Total Contingency. The project's Total Contingency is currently at \$70.1M or about 12% of remaining work in the project.

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

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. The project baseline's allocated contingency was \$46.3M. The current available allocated contingency is \$38.3M. No contingency was drawn this period.

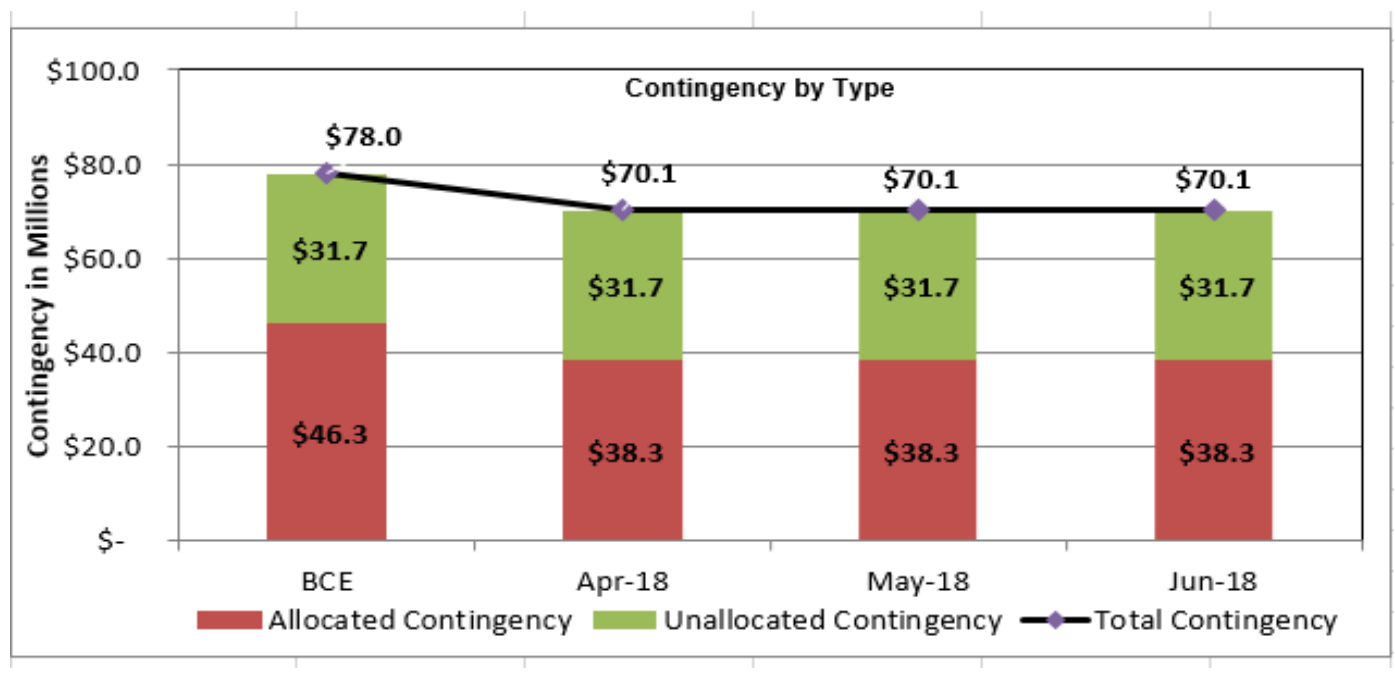
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The baseline UAC remained unchanged at \$31.7M.

Contingency Status

Contingency Type	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ 00.0	0.0%	\$ 00.0	0.0%
Allocated Contingency	\$ 46.3	6.4%	\$ 38.3	6.6%
Unallocated Contingency	\$ 31.7	4.3%	\$ 31.7	0.0%
Total	\$ 78.0	10.7%	\$ 70.1	12.0%

Table figures are shown in millions.

Contingency by Type



Project Schedule

The LRV Fleet Expansion project schedule is shown below. The progress schedule for June 2018 (see below) was established by using the last monthly schedule submittal and comparing them to the manufacturer weekly tasks and milestones during the weekly progress and coordination meeting. In addition, the manufacturer's monthly reports are reviewed to monitor for potential delays in any of the critically dependent events as identified on the schedule. This period's progress includes completion of final design reviews with the exception of the truck and lighting final designs which is to be completed in July 2018 and completion of first article of inspections for Coupler and Door. Car 1-A/B/C has roof panels installed and is preparing for initial water tight test.

Project completion for Light Rail Vehicle Expansion is scheduled to complete in August 2024.

Activity Name	Start	Finish	18	2019	2020	2021	2022	2023	2024	2025	2026	2027
LRV Procurement Schedule	24-Feb-18 A	28-Aug-24	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
LRV Vendor Procurement	24-Feb-18 A	10-Oct-18 A										
LRV Engineering and Manufacture	11-Oct-18 A	11-Oct-18 A										
LRV Design Reviews, Manufacturing, and System Tests	11-Oct-18 A	11-Oct-18 A										
LRV Delivery Schedule	04-Dec-18	28-Aug-24										
LRV #1-122 (122 LRV Base Order)	04-Dec-18	13-Jan-23										
Delivery of 1st LRV (BL 27-Mar-19)		04-Dec-18										
Delivery of 40th LRV - Northgate Link Vehicle Deliveries Complete (BL 26-Jun-20)		06-May-20										
Delivery of 42nd LRV - Existing OMF at capacity (104 LRVs) (BL 27-Jul-20)		26-May-20										
Final Acceptance of Vehicles (BL 28-Feb-23)		13-Jan-23										
Delivery of 122nd LRV - Final ST2 Delivery (BL 26-Aug-22)		07-Jul-22										
LRV #123 - 152 (30 LRV Options) - Change Order #4	28-Feb-24	28-Aug-24										
Delivery of 152nd LRV - Final Delivery (BL 28-Feb-24)		28-Feb-24										
Final Acceptance of Vehicles (BL 26-Aug-24)		28-Aug-24										

Critical Path Analysis

As of June 30, 2018 the manufacturer continues trending ahead of their baseline schedule; the delivery of the first LRV is projecting to be completed in late 4th Qtr 2018, current schedule is forecasting that LRV#001 is approximately 3 months ahead of the schedule target completion date of March 27, 2019. The critical path is completing the Carbody and Truck Final Design Reviews in July 2018 and completing all open FAIs in July 2018 in order for the major systems to be shipped and delivery to SII for complete equipment installation into LRV#001 by September 2018.

The delivery of all the light rail vehicles requirements for Northgate Link operations is currently anticipated approximately a year ahead of the start of revenue service. This is well within fleet requirement for a successful commissioning and testing of the LRVs prior to revenue simulation period. Consequentially, the planned deliveries and commissioning and testing of light rail vehicles are also ahead of requirements for East Link Extension.

Activity Name	Start	Finish	2018	2019	2020	2021	2022	2023	2024
ST2 Light Rail Vehicle Fleet Expansion	10-May-18	08-Jan-21	Q	Q	Q	Q	Q	Q	Q
Car Shell Production LRV#003 (to be used on LRV#004)	10-May-18	24-Jul-18							
Car Shell Production LRV#121	24-Nov-20	08-Jan-21							
ST3 LRV Manufacture and Delivery	02-Dec-20	29-May-24							
Car Shell Production LRV#122	02-Dec-20	14-Jan-21							
Car Shell Production LRV#0123	24-Mar-22	28-Apr-22							
Shipment and Arrival at O&M Facility LRV#151	29-Jan-24	02-Feb-24							
Shipment and Arrival at O&M Facility LRV#152	15-Feb-24	21-Feb-24							
Burn-In LRV#151	08-May-24	29-May-24							
Burn-In LRV#152	08-May-24	29-May-24							

Link Capital Program Staffing April – June 2018 (updated quarterly)

Recruiting Status

The following positions were filled in 2nd QTR 2018 to support the Link Capital Program:

Position
Deputy Director Northgate Link Extension*
Project Manager East Link Extension (2)
Assistant Permit Administrator (2)
Corridor Design Manager Lynnwood Link Extension*
Sr. Civil Engineer Non-corridor Projects
Engineering Standards Program Manager
Electrical Engineer
Sr. Mechanical Engineer
Engineer 1
Systems Construction Manager
Sr. Document Control Coordinator
Project Control Specialist (2)
Sr. Scheduling Engineer
Sr. Administrative Specialist
Outreach Specialist North Corridor
Outreach Specialist South Corridor
Architect (3)
Real Property Coordinator
Sr. Real Property Agent*

**Position filled with internal candidate*

As of the end of 2nd QTR 2018 recruiting was on-going for the following positions:

Position	Position
Sr. Project Manager - Operations and Maintenance Facility East	Sr. Project Control Specialist (3)
Executive Project Director	Project Control Coordinator
Business Efficiency and Compliance Manager	Risk Engineer Program Manager
Sr. Project Coordinator - East Link Extension	Risk Engineer
Assistant Permit Specialist	Project Control Supervisor
Track Engineer Manager	Principal Construction Manager (3)
Civil Engineer (2)	Construction Manager East Link Extension
Corridor Design Manager Non-corridor	Administrative Specialist
Sr. Corridor Design Manager	Community Outreach Specialist (3)
Sr. Civil Engineer - Right-of-Way	Sr. Project Manager – Sounder (2)
Manager Structural Engineering	Project Manager - Sounder (2)
Sr. Civil Engineer - Non-corridor projects	Sr. Project Coordinator
Sr. Civil Engineer BRT	Construction Manager - East Link Extension
Manager Engineering Light Rail Vehicles	Principal Construction Manager - W. Seattle – Ballard Link Extension
Sr. Systems Engineer - Signals	Principal CM Northgate Link Extension
Sr. Systems Engineer - Light Rail Vehicles	Assistant Property Manager
Manager Civil-Systems Integration	Property Management Coordinator
Sr. Fire Protection Engineer	Deputy Project Director OMF East
Sr. Systems Engineer	Sr. Project Coordinator
Community Outreach Specialist (3)	Capital Signage Specialist
Deputy Director - Northgate Link Extension	
Corridor Design Manager Non-corridor	

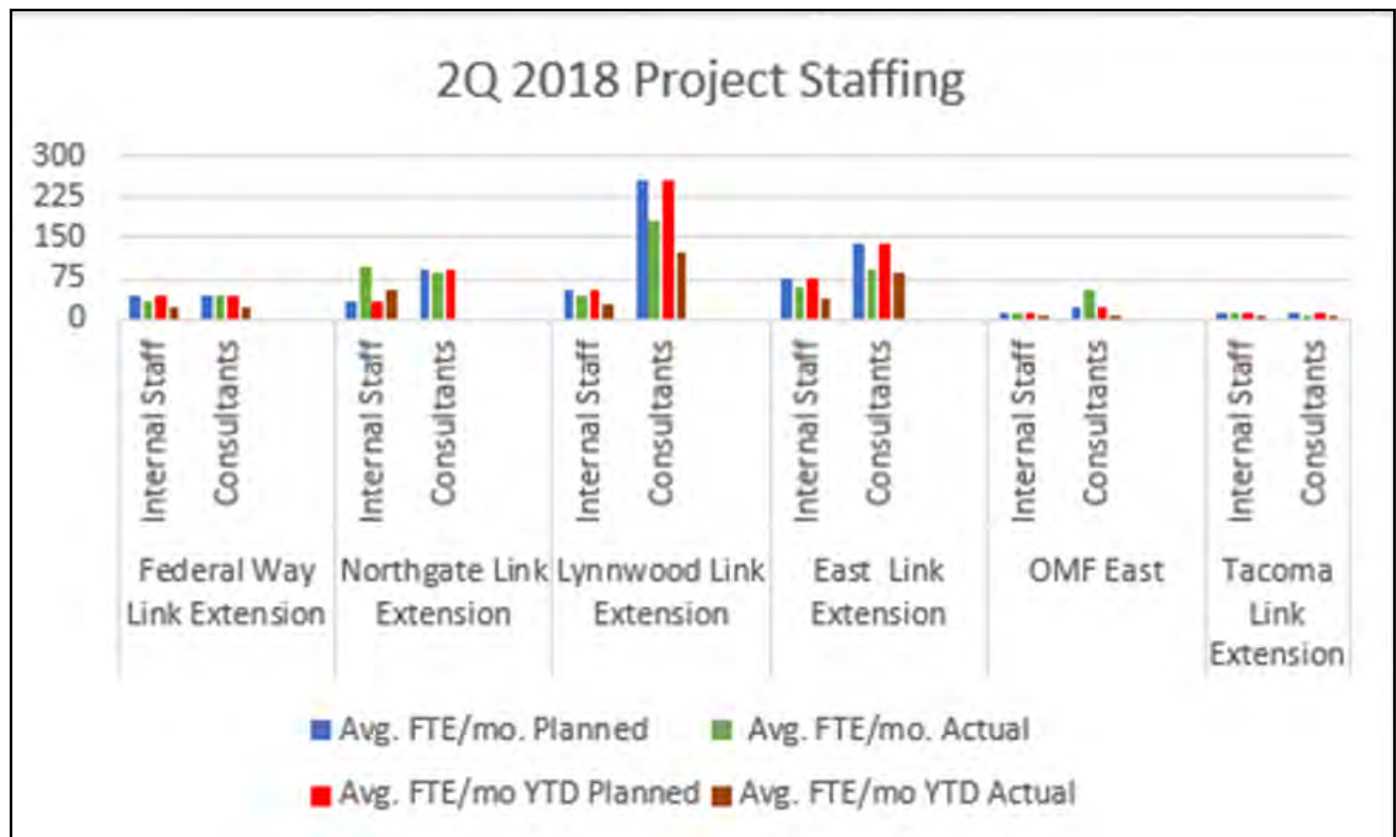
Link Light Rail Staffing Report



Staffing Variance relative to Plan

There were 257 internal and 451 consultant full time equivalents (FTE) supporting design and construction of Link light rail extensions (Table 1). Staffing for the Federal Way Link Extension and the OMF East was within 10% of plan. Staffing for the Northgate, Lynnwood, East, and Tacoma Link Extensions was 150%, 73%, 70%, and 66% of plan respectively.

Project	Consultants				Sound Transit Staff				Total (AVG. YTD)			
	FTE		Variance		FTE		Variance		FTE		Variance	
	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan
Federal Way Link Extension	41.0	41.2	0.2	0%	40.8	32.9	-7.9	-19%	81.8	74.1	-7.7	-9%
Northgate Link Extension	91.0	83.8	-7.2	-8%	30.4	98.1	67.8	223%	121.4	181.9	60.6	50%
Lynnwood Link Extension	255.0	179.6	-75.4	-30%	53.5	44.7	-8.7	-16%	308.5	224.3	-84.1	-27%
East Link Extension	140.0	88.4	-51.6	-37%	73.4	60.3	-13.1	-18%	213.4	148.7	-64.6	-30%
OMF East	19.0	54.0	35.0	184%	13.1	9.1	-3.9	-30%	32.1	63.1	31.1	97%
Tacoma Link Extension	12.0	4.0	-8.0	-67%	12.0	11.9	-0.1	-1%	24.0	15.9	-8.1	-34%
Total	558.0	451.0	-107.0	-19%	223.0	257.0	34.0	15%	781.0	708.1	-73.0	-9%



AA	Alternative Analysis	GC/CM	General Contractor /Construction Management
APE	Area of Potential Impact	HVAC	Heating, Ventilation and Air Conditioning
BCE	Baseline Cost Estimate	ICD	Integration Control Document
BCWS	Budgeted Cost of Work	IFB	Issue for Bids
BIM	Building Information Modeling	IFC	Industry Foundation Classes
BNSF	Burlington Northern Santa Fe Railway	IRT	Independent Review Team
CCB	Change Control Board	IWP	Industrial Waste Permit
CDF	Controlled Density Fill	JA	Jacobs Associates
CHS	Capitol Hill Station	JARPA	Joint Aquatic Resource Permit Application
CM	Construction Management	KCM	King County Metro
CMU	Concrete Masonry Unit	LNTP	Limited Notice to Proceed
CO	Change Order	LRRP	Light Rail Review Panel
CPI	Cost Performance Index	LRT	Light Rail Transit
CPM	Critical Path Method	LRV	Light Rail Vehicle
DAHP	Department of Archaeology & History Preservation	LTK	LTK Engineering Services
DART	Days Away, Restricted or Modified	MACC	Maximum Allowable Construction Cost
DB	Design -Build	MDA	Major Discharge Authorization
DBPM	Design-Build Project Management	MLK	Martin Luther King, Jr. Way
DECM	Design, Engineering and Construction Management	MOA	Memorandum of Agreement
DEIS	Draft Environmental Impact Statement	MOS	Minimum Operable Segment
DP	Design Package	MOU	Memorandum of Understanding
DPD	Seattle Department of Planning and Development	MPPCV	Major Public Project Construction Variance
DSC	Differing Site Conditions	MRB	Material Review Board
DSDC	Design Support During Construction	MTP	Montlake Triangle Project
DSTT	Downtown Seattle Transit Tunnel	MUP	Master Use Permit
EFC	Estimated Final Cost	NB	Northbound
EMI	Electro Magnetic Interference	NCR	Notification of Change Report
ERC	East Rail Corridor	NCTP	North Corridor Transit Partners
FD	Final Design	NEPA	National Environmental Policy Act
FHWA	Federal Highway Administration	NOAA	National Oceanic and Atmospheric Admin-
FSEIS	Final Supplemental Environmental Impact Statement	NTP	Notice to Proceed
FFGA	Full Funding Grant Agreement	OCS	Overhead Catenary System
FTA	Federal Transit Administration	OMF	Operations and Maintenance Facility
FTE	Full Time Employee	OMSF	Operations and Maintenance Satellite Facility

Link Light Rail

Acronyms



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