

Progress Report

Link Light Rail Program



Setting deck forms at the Northgate Station

OCTOBER | 2017

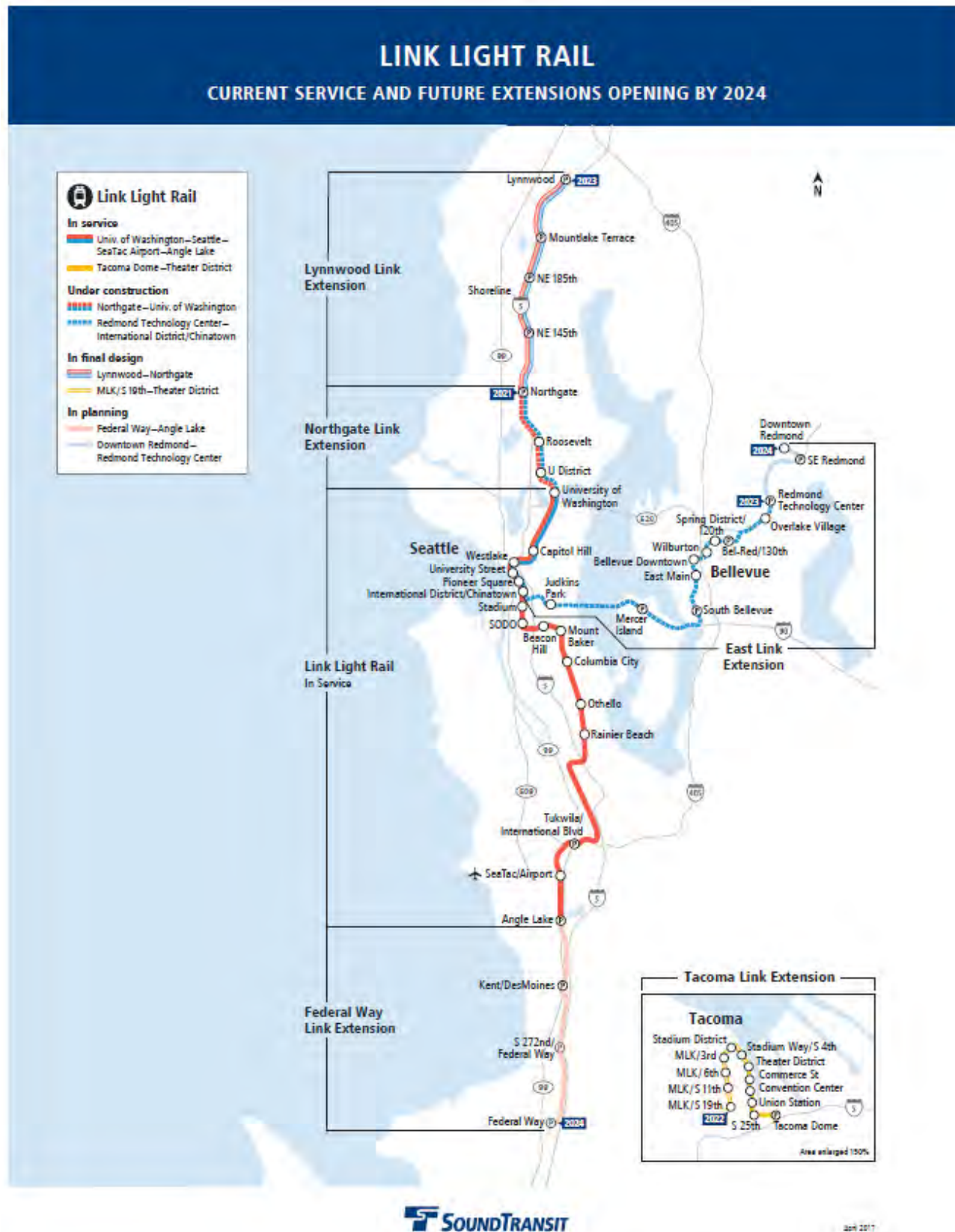


This page left intentionally blank.



TABLE of CONTENTS

Program Overview.....	1
University Link Extension	3
Northgate Link Extension.....	9
Lynnwood Link Extension.....	29
I-90 Two-Way Transit & HOV Operations (Stage 3)	39
East Link Extension.....	43
Downtown Redmond Link Extension	61
W. Seattle & Ballard Link Extensions	63
S. 200th Link Extension	65
Federal Way Transit Extension	69
Tacoma Link Extension	73
Link Operations & Maintenance Facility: East	77
LRV Fleet Expansion.....	85
Staffing Report	88



Map of Sound Transit's current and future light rail projects.

Projects

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. The project is in Final Design and Construction. 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 proposed budget for this project is \$488.4M.

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 Center is forecast for early 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: The Downtown Redmond Link Extension builds new light rail from the Redmond Technology Center 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 \$28.6M.

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 5 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 9 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 (DB) 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. The current budget for this project is \$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.

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 pays, 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.

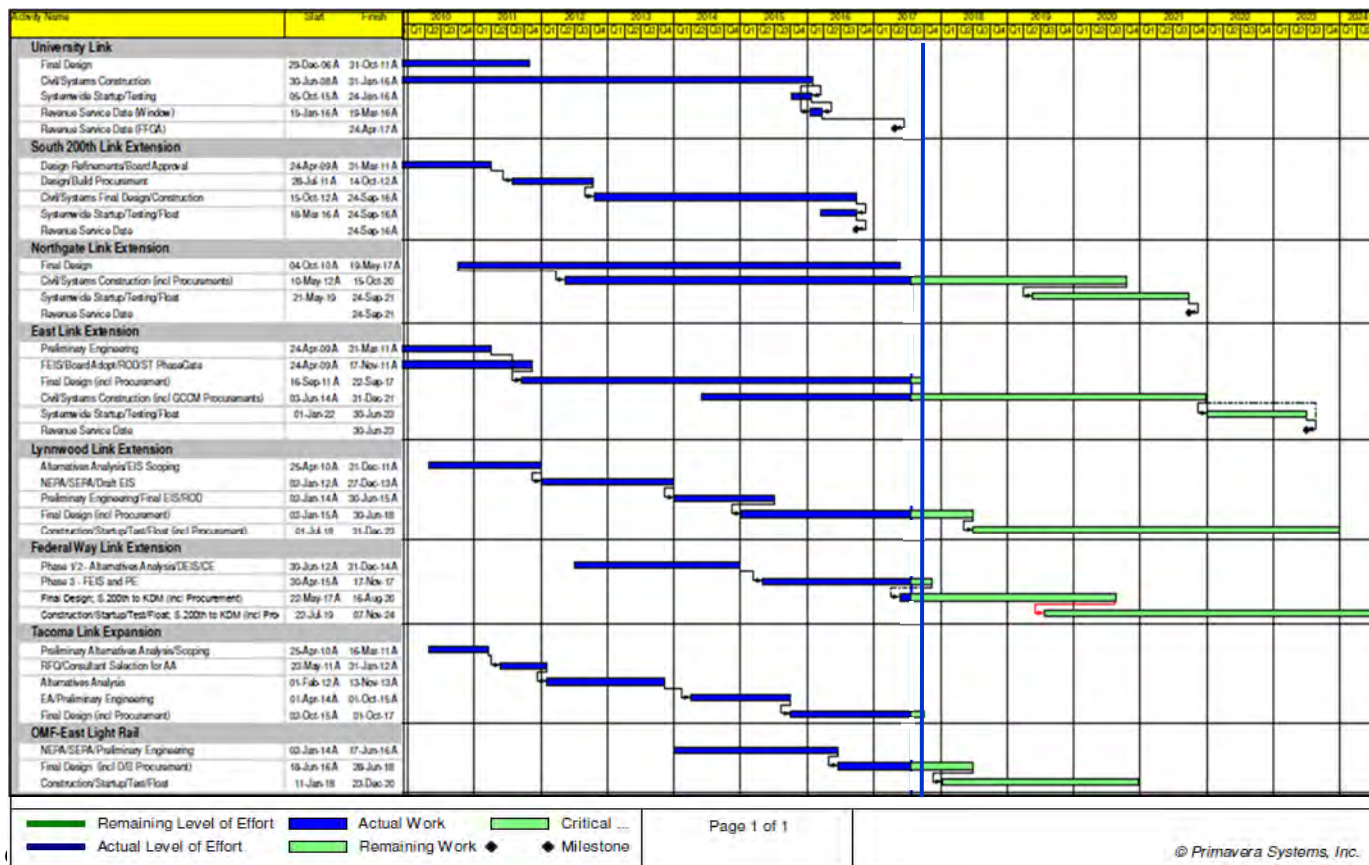
Light Rail Vehicle (LRV) Fleet Expansion: This project includes the design, manufacturing, inspection, testing and delivery of 152 low floor LRVs for service requirements of Northgate, East Link and Lynnwood Link Extensions. The Sound Transit Board adopted the baseline capital budget of \$740.7M in September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

Program Budget

Project	Adopted Budget	Committed to Date	Incurred to Date	Forecast to Complete	Estimated Final Cost	Adopted Budget vs. EFC
University Link	\$1,756.0	\$1,512.9	\$1,503.4	\$41.2	\$1,554.1	\$201.9
Northgate Link Extension	\$1,899.8	\$1,595.4	\$993.8	\$252.0	\$1,847.4	\$52.4
Lynnwood Link Extension	\$488.4	\$232.2	\$173.7	\$256.1	\$488.4	\$0
East Link Extension	\$3,677.2	\$2,808.7	\$955.8	\$868.5	\$3,677.2	\$0
Downtown Redmond Link	\$28.6	\$14.9	\$7.5	\$13.8	\$28.6	\$0
West Seattle & Ballard Link	\$285.9	\$25.0	\$0.7	\$260.9	\$285.9	\$0
South 200th Link Extension	\$383.2	\$330.8	\$327.5	\$1.8	\$332.6	\$50.6
Federal Way Link Extension	\$412.6	\$57.2	\$52.1	\$355.4	\$412.6	\$0
Tacoma Link Extension	\$217.3	\$24.2	\$20.7	\$193.1	\$217.3	\$0
Link O & M Facility: East	\$449.2	\$337.3	\$110.5	\$111.9	\$449.2	\$0
ST2 LRV Expansion	\$740.7	\$653.7	\$74.0	\$87.0	\$740.7	\$0
Total Link	\$10,338.9	\$7,592.3	\$4,219.9	\$2,441.7	\$10,034.1	\$304.9

Table in millions.

Program Schedule



Link Light Rail University Link Extension



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:** 2 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.
- System:** 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 on March 19, 2016.



Key Project Issues

- U830 Systems:** Contractor is currently focusing on punch list on ULINK and systems refinement to achieve optimal operation status. U-Link Systems has encounter some issues related to this infancy period and is working to resolve them.
- Certification of Occupancy:** University Link continues to operate under a temporary certification of occupancy until all permit requirements are fully met. The final items remaining are the utilities as-built to be submitted to City of Seattle (SPU). Final review of the emergency ventilation systems by the Seattle Fire Department (SFD) is complete and has been accepted by SFD.
- Commercial issues with all prime Civil Contractors (with the exception of Capitol Hill Station Contractor) have been negotiated as the project proceeds through the close out process. Ongoing review of commercial issues with Systems Contractor.
- Miscellaneous follow-on commitments and restoration work remains. Before and After Study commitment to initiate in 2018.

Project Cost Summary

The U-Link project cost is summarized in two types of cost classifications. In the first table, cost is classified in accordance with Sound Transit's Work Breakdown Structure (WBS); and in the second table, cost is summarized in accordance with the Standard Cost Classification (SCC).

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commitment to Date*	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	\$ 115.2	\$ 113.6	\$ 82.4	\$ 81.5	\$ 88.2	\$ 25.4
PRELIMINARY ENGINEERING	\$ 24.4	\$ 24.3	\$ 24.3	\$ 24.3	\$ 24.3	\$ -
FINAL DESIGN	\$ 77.9	\$ 90.3	\$ 88.0	\$ 86.2	\$ 88.7	\$ 1.6
CONSTRUCTION SERVICES	\$ 68.5	\$ 94.8	\$ 86.9	\$ 86.6	\$ 88.7	\$ 6.1
3rd PARTY AGREEMENTS	\$ 18.6	\$ 18.6	\$ 11.7	\$ 11.3	\$ 13.2	\$ 5.4
CONSTRUCTION	\$ 1,180.0	\$ 1,158.2	\$ 994.0	\$ 987.9	\$ 1,022.3	\$ 135.8
VEHICLES	\$ 103.9	\$ 103.9	\$ 99.2	\$ 99.2	\$ 101.9	\$ 2.0
ROW	\$ 167.3	\$ 152.3	\$ 126.4	\$ 126.4	\$ 126.8	\$ 25.5
Capital Total	\$ 1,756.0	\$ 1,756.0	\$ 1,512.9	\$ 1,503.4	\$ 1,554.1	\$ 201.9
FINANCE COST	\$ 191.7	\$ 191.7	\$ 191.7	\$ 174.9	\$ 191.7	\$ -
Project Total	\$ 1,947.7	\$ 1,947.7	\$ 1,704.6	\$ 1,678.3	\$ 1,745.8	\$ 201.9

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

In October, the 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 \$490K and continues to inch the project's Incurred to Date amount about \$1.5B (Finance Cost excluded). Direct construction activities pertain to close out and miscellaneous follow on work. The construction EFC continues to be approximately \$1B. The trend continues to hold as the project is essentially completed with only miscellaneous follow on scope and commercial issues remaining. Systems (U830) continues optimization process with some operational equipment purchases trailing. The Total Incurred to Date for the Construction Phase is about \$987M and LRV is at about \$99.2M. Cost of LRV repairs were excluded from this project and tracked independently.

Construction EFC under the SCC format remains relatively unchanged at about \$1B. Construction SCC expenditures to date is about \$976M 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 \$1.50B or about 85% of total project budget scoped (excluding Finance Cost). Total project cost incurred to date at the end of October 2017 including Finance Cost is at \$1.67B. 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.

Project Elements by SCC	Baseline Budget	Current Adopted Budget	Commitment to Date*	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track Elements	\$ 626.8	\$ 450.5	\$ 455.5	\$ 455.5	\$ 461.2	\$ (10.8)
20 Stations	\$ 366.3	\$ 350.8	\$ 344.8	\$ 343.0	\$ 353.1	\$ (2.3)
30 Support Facilities: Yards, Shops	\$ 7.0	\$ 24.8	\$ 23.5	\$ 23.5	\$ 24.8	\$ 0.0
40 Sitework & Special Conditions	\$ 59.0	\$ 67.4	\$ 57.1	\$ 54.9	\$ 56.9	\$ 10.5
50 Systems	\$ 69.6	\$ 116.4	\$ 100.1	\$ 99.1	\$ 102.4	\$ 14.0
Construction Subtotal (SCC 10-50)	\$ 1,128.8	\$ 1,009.9	\$ 981.0	\$ 976.0	\$ 998.4	\$ 11.5
60 Row, Land, Existing Improvements	\$ 167.3	\$ 126.6	\$ 126.4	\$ 126.4	\$ 125.8	\$ 0.8
70 Vehicles	\$ 99.8	\$ 100.2	\$ 99.9	\$ 99.9	\$ 100.2	\$ 0.0
80 Professional Services	\$ 306.4	\$ 346.6	\$ 305.6	\$ 301.2	\$ 318.3	\$ 28.3
90 Unallocated Contingency	\$ 53.7	\$ 172.8	\$ -	\$ -	\$ 11.5	\$ 161.3
Capital Cost Total (SCC 10-90)	\$ 1,756.0	\$ 1,756.0	\$ 1,512.9	\$ 1,503.4	\$ 1,554.1	\$ 201.9
100 Finance Cost	\$ 191.7	\$ 191.7	\$ 191.7	\$ 174.9	\$ 191.7	\$ -
Project Total	\$ 1,947.7	\$ 1,947.7	\$ 1,704.6	\$ 1,678.3	\$ 1,745.8	\$ 201.9

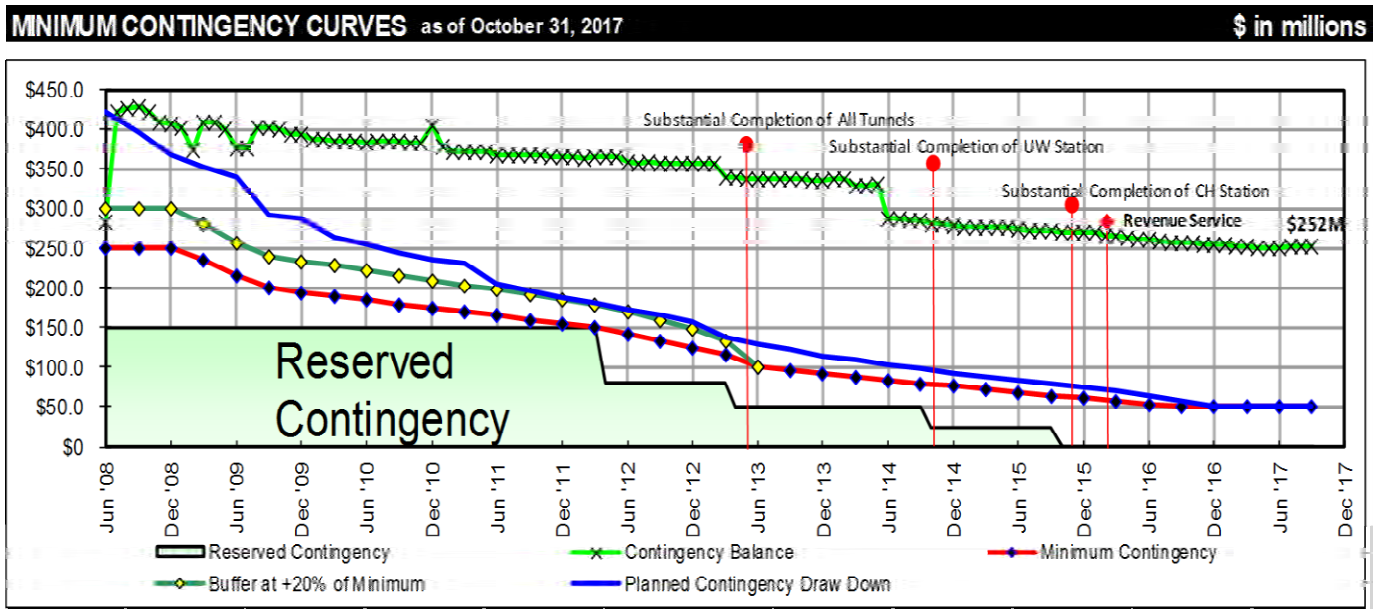
(*)Totals may not equal column sums due to rounding of line entries.

Link Light Rail University Link Extension



Cost Contingency Management

At this close out stage of the total project contingencies remains very healthy at approximately \$252M. Multitudes of favorable factors contributed to this positive stage that ranges from construction bidding climate, ROW acquisition cost trends, diligent project risk management practices, to excellent tunneling conditions. In September, overall contingencies decreased due to miscellaneous closed out and follow-on project commitments. While major construction activities are now complete, there are still considerable follow-on scope to complete (pertaining to close-out of the project, systems adjustments to optimize the operating systems as well as settlement of commercial issues). Barring any catastrophic event, the likelihood that this contingency stays on trend is high. The forecast indicates that approximately 80% of these contingencies will be remain unused; thereby, generating at least \$200M of budget savings excluding financing cost.



U240 Contract – Capitol Hill Station

Close-out

The U240 Contractor achieved Substantial Completion on December 31, 2015.

Close-out Activities

Current Period

- Continued negotiating and finalizing outstanding commercial issues. The latest round of mediation was successful in resolving some subcontractor claims, but a final settlement with the general contractor has not been reached.

Next Period

- Continue negotiating and finalizing commercial issues.

Closely Monitored Issues

- Multiple commercial issues remain open including various notice of intents to claim and actual claims. These claims continue to be reviewed and assessed by Sound Transit and the Contractor.

Cost Summary

Present Financial Status	Amount
U240 Contractor - Turner Construction Co	
Original Contract Value	\$104,850,276
Change Order Value	\$11,254,629
Current Contract Value	\$116,104,905
Total Actual Cost (Incurred to date)	\$113,926,440
Financial Percent Complete:	98%
Physical Percent Complete:	99%
Authorized Contingency	\$11,742,514
Contingency Drawdown	\$11,254,629
Contingency Index	1.02

U250 Contract –University of Washington Sta.

Close-out

Milestone #7, Substantial Completion, was granted in November 2014. U250 achieved acceptance on April 26, 2016.

Close-out Activities

- All outstanding claims have been verbally settled and will continue moving through the formal execution phase. A final settlement change order will be issued to the Contractor.

Cost Summary

Present Financial Status	Amount
U250 Contractor - Hoffman Construction Co.	
Original Contract Value	\$141,745,898
Change Order Value	\$ 8,568,882
Current Contract Value	\$150,314,781
Total Actual Cost (Incurred to date)	\$150,254,810
Financial Percent Complete:	99%
Physical Percent Complete:	99%
Authorized Contingency	\$9,152,295
Contingency Drawdown	\$8,568,882
Contingency Index	1.06

U810 Contract – *Maintenance of Way*

Close-out

ST and contractor have settled on a final contract amount.

Close-out Activities

No more updates.

U830 Contract – *Track, Signal, Traction Power and Communications*

Close-out

Revenue Service on March 19, 2016. Punchlist and close-out work continue.

Close-out Activities

Current Period

- Ongoing work on Systems punch list items; delivery of spare parts; and finalizing O&M Manuals, As-built drawings, and other final project documentation.
- Ongoing work on commercial closure of the U830 project. ST working closely with the GC/CM and the EC/CMs to ensure rapid and fair commercial settlement of claims.

Next Period

- Continue Systems punch list, spare parts delivery, and finalizing O&M Manuals and other final project documentation.
- Continue work on commercial closure of the project.

Closely Monitored Issues

- None to report.

Cost Summary

Present Financial Status	Amount
U810– Forma Construction (Design/Build)	
Original Contract Value	\$11,998,725
Change Order Value	\$501,013
Current Contract Value	\$12,499,738
Total Actual Cost (Incurred to date)	\$12,438,547
Financial Percent Complete	99%
Physical Percent Complete:	99%
Authorized Contingency	\$959,898
Contingency Drawdown	\$501,013
Contingency Index	1.9

Cost Summary

Present Financial Status	Amount
U830 GC/CM Contractor - Stacy & Witbeck	
Original Contract Value	\$119,167,433
Change Order Value	\$3,849,463
Current Contract Value	\$123,016,897
Total Actual Cost (Incurred to date)	\$121,998,784
Financial Percent Complete	99.2%
Physical Percent Complete:	99.0%
Authorized Contingency	\$5,958,373
Contingency Drawdown	\$3,849,463
Contingency Index	1.5

This page left intentionally blank.

Link Light Rail Northgate Link Extension

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 94 th Street on the east side of I-5, then transitioning to an aerial structure running north to the Northgate Mall.
Stations:	The <i>U District Station (UDS)</i> is an underground station located on the west side of the UW campus near Brooklyn Ave. and NE 45 th St. The <i>Roosevelt Station (RVS)</i> is an underground station located near NE 65 th St. and 12 th Ave NE. The <i>Northgate Station</i> is an elevated station located at the southwest edge of the Northgate Mall property.
Systems:	Include Signals, track electrification, and SCADA communications.
Budget:	\$1.899 Billion
Service:	September 2021
Phase:	Construction



Map of Northgate Link Extension route and stations.

Key Project Activities

- The CM team issued a notice of Partial Substantial Completion for the tunnels from Roosevelt to U-District.
- *For N125 TBM Tunnels*, Work in tunnels continues with installation of electrical overhead work and the fire and standpipe system south of U-District and north of Roosevelt, Fuko hose grouting and punch list items.
- *For N140 University District Station*, Contactor completed reinforcing steel installation for the invert bottom mat, the north headwall and the standees for the top mat; placed a total of 4,670 cubic yards of concrete for the central and north invert slab.
- *For N150 Roosevelt Station*, Contractor removed mobile crane from station box. Crews placed concrete wall extensions on north elevated deck, columns at south platform level and center platform level topping slab. Concrete work for the station structure continues.
- *For N160 Northgate Station*, Staff met with SDOT, Seattle Public Utilities, US Fish & Wildlife Service, National Marine Fisheries Service and WA Department of Ecology to coordinate expected environmental permitting requirements for SDOT's ped/bike bridge. Met with WSDOT and King County Metro staff to clarify scope, schedule and funding sources for future amendments to airspace leases.

- *Guideway*- Crews continued concrete placement on columns and caps. *Station*- Crews continued to set shoring towers for station platform deck and beams. *Garage* - Crews continued work on walls, columns, and ramps.
- *For N180 Trackwork*, Columbia Precast Plant has started production of the 5 Hz 7'-10" floating slabs; 36% of the 5Hz 3'-10" floating slabs have been produced. Staff met internally to discuss Major Public Project Construction Variance permit extension and presentation needs.

Closely Monitored Issues

- The CM team issued a letter to the N125 Contractor (JCM) noting their concern that Elcon Electric work south of U-District will not be complete by mid-November to meet Milestone 5A. This work is critical to tunnel completion. Failure to meet this date has the potential to impact work by the N140 and N180 contracts.

Project Cost Summary

The Northgate Link project cost is summarized below by two cost categories. In the first table, the cost is summarized in accordance with Sound Transit's 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.

Cost Summary by Phase

Project Phase	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	\$147.9	\$147.9	\$52.1	\$52.0	\$133.2	\$14.7
PRELIMINARY ENGINEERING	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
FINAL DESIGN	\$129.2	\$129.2	\$116.7	\$106.8	\$134.4	\$(5.3)
CONSTRUCTION SERVICES	\$118.3	\$118.3	\$97.7	\$58.6	\$110.9	\$7.5
3rd PARTY AGREEMENTS	\$11.8	\$11.8	\$10.0	\$6.4	\$12.4	\$(0.6)
CONSTRUCTION	\$1,343.0	\$1,343.0	\$1,209.8	\$661.3	\$1,335.5	\$7.6
ROW	\$112.3	\$112.3	\$94.0	\$93.6	\$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	\$1,595.4	\$993.8	\$1,847.4	\$52.4

The Estimated Final Cost (EFC) for the project as of this reporting period is \$1,847.4M, which is \$52.4M below the current project budget. This period approximately \$25.9M was incurred, of which \$22.4M was 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; \$1.7M was incurred for civil and systems final design and design support during construction; and \$1.3M was for construction management. The remaining expenditures were for third party coordination, permits, staff, legal, right-of-way and other direct charges.

Cost Summary by SCC

SCC Element	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 GUIDEWAY & TRACK	\$595.6	\$547.6	\$506.0	\$402.9	\$535.0	\$12.6
20 STATIONS	\$376.1	\$429.0	\$415.6	\$121.2	\$445.7	\$(16.7)
30 SUPPORT FACILITIES: YARD, SHOP	\$5.3	\$5.3	\$6.4	\$5.4	\$6.4	\$(1.1)
40 SITEWORK & SPECIAL CONDITIONS	\$140.8	\$225.1	\$164.9	\$114.4	\$220.1	\$4.9
50 SYSTEMS	\$110.9	\$95.1	\$106.8	\$9.0	\$102.8	\$(7.7)
Construction Subtotal (SCC 10 - 50)	\$1,228.7	\$1,302.1	\$1,199.7	\$652.9	\$1,310.1	\$(8.1)
60 ROW, LAND, EXISTING IMPROVEMENTS	\$119.9	\$110.9	\$94.0	\$93.6	\$105.5	\$5.4
80 PROFESSIONAL SERVICES	\$420.7	\$429.1	\$301.7	\$247.3	\$426.3	\$2.7
90 CONTINGENCY	\$130.4	\$57.8	\$0.0	\$0.0	\$5.4	\$52.3
Capital Total (SCC 10 - 90)	\$1,899.8	\$1,899.8	\$1,595.4	\$993.8	\$1,847.4	\$52.4

Link Light Rail Northgate Link Extension



Cost Contingency Management

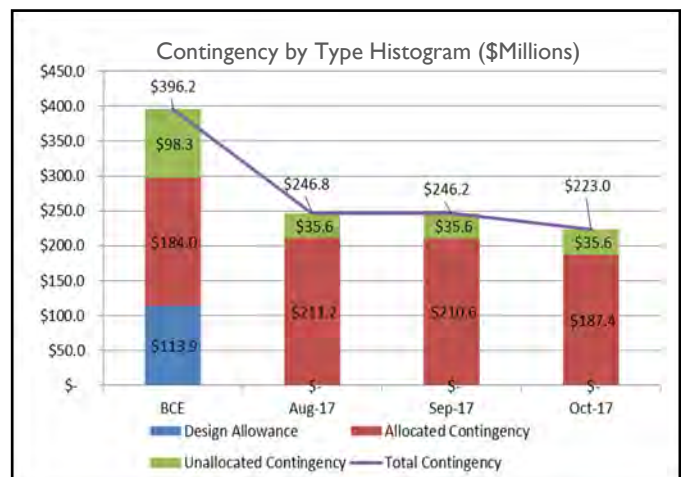
Compared to the baseline amount of \$396.2M, the Total Contingency has decreased by \$173.2M to \$223M, which is 26.1% of project work remaining. During this reporting period, a decrease of \$23.2M in the overall project contingency occurred. Detailed information is provided below.

Design Allowance (DA) – The baseline Design Allowance of \$113.9 M has been fully depleted and all major contracts have been awarded.

Allocated Contingency (AC)– Compared to the baseline amount of \$184.0M, Allocated Contingency has increased by \$3.4M to \$187.4M. During this reporting period, a decrease of \$20.3M occurred in the AC following correction of an administrative error that reclassified uncommitted funds as contingency. A decrease of \$1.4M occurred due to the execution of change orders on the N125 Tunnel Contract, the N150 and N160 Station Finishes contracts, and the N180 Trackwork contract.

Unallocated Contingency (UAC) – Compared to the baseline amount of \$98.3M, Unallocated Contingency has decreased by \$62.7M to \$35.6M. No changes to UAC occurred during this period.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ 113.9	5.3%	\$ -	0.0%
Allocated Contingency	\$ 184.0	8.6%	\$ 187.4	22.0%
Unallocated Contingency	\$ 98.3	4.6%	\$ 35.6	4.2%
Total	\$ 396.2	18.6%	\$ 223.0	26.1%



Project Schedule

The N125 Tunneling Contractor (JCM) is continuing to work toward achievement of Milestone 5A Completion of Tunnels between RVS & UDS, scheduled for November 15. Resource management within the electrical subcontractor remains a significant concern. JCM continues to forecast a 12 day late achievement of Milestone 6 Substantial Completion on February 23, 2018 (includes 27 days of ST controlled float), with a January 26, 2018 completion of work.

The N140 U District Station contractor, Hoffman Construction, completed the platform level slabs and the first wall pour. Wall waterproofing in ongoing. The south basement level 3 support columns and elevator shear walls are in progress. The Contractor expects to begin second shift work in November.

At Roosevelt Station (RVS), the N150 contractor, Hoffman Construction, has completed the final platform level topping slab. Center walls are being formed and poured. The north Basement Level 2 slab is in progress. Falsework for the Center Basement Level 2 slab is being put in place.

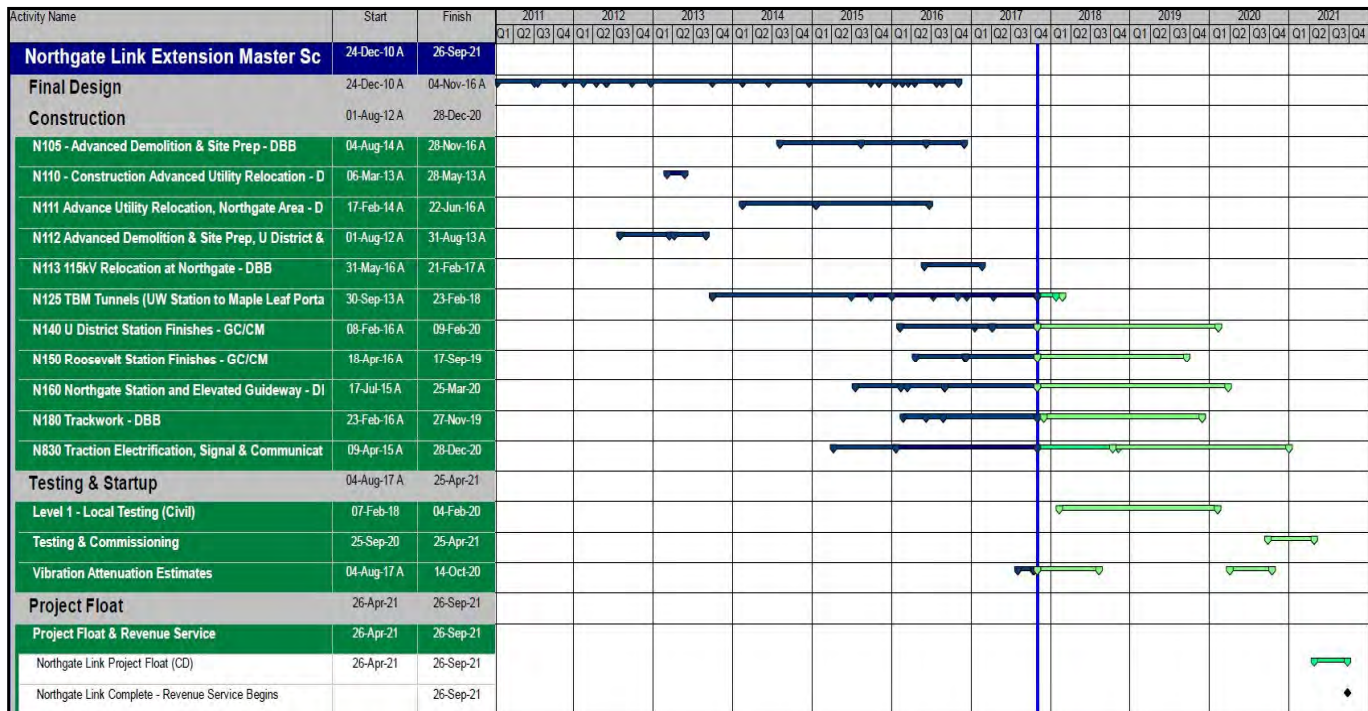
The N160 Contractor, Absher is continuing cap and girder erection north of the Station, and column construction south of the station. Deck and beam construction continue at the station, along with post-tensioning. Shotcreting of Garage walls and Form Rebar Pour (FRP) of support columns is continuing. Absher is assembling the Peri formwork system for the Garage level B3.

The N180 Trackwork contract is currently in production casting of the 3'10" slabs (40/week) and production of the 7'10" slabs has begun. Isolation pad manufacturer, Scougal Rubber, has sourced material from a different supplier in an effort to resolve the Long Term Creep Test failures. Stacy & Witbeck, Inc. (SWI) is continuing to work with the supplier to determine the cause and find a solution. ST has issued the Ultra-Straight Rail (USR) Welding specification. This change has resulted in a request for additional time from SWI, due to the lower production rate during rail welding and grinding. ST is evaluating this request.

The N830/E750 Systems contractor, Mass Electric, is continuing to work on early engineering. The work at Convention Place Station is continuing under a provisional sum.

The Teamster Union strike impacts are being evaluated by ST's Construction Manager.

Revenue Service date for Northgate Link Extension is scheduled in September 2021. See schedule in the following page.



Link Light Rail Northgate Link Extension



Critical Path Analysis

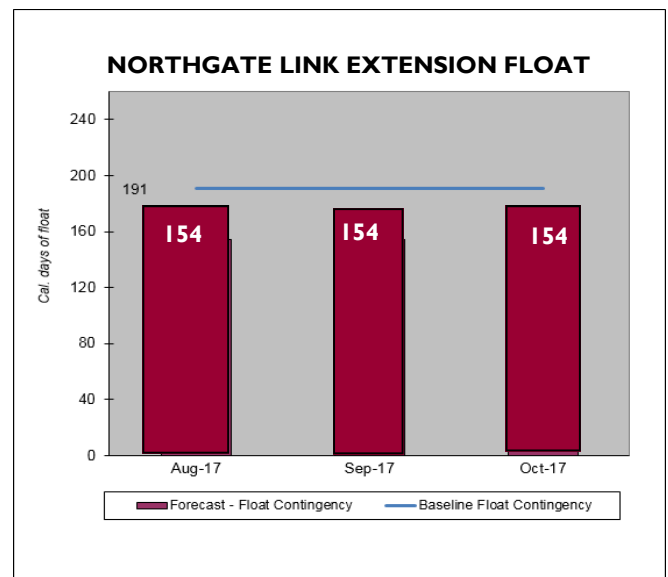
The critical path for the Northgate Link Extension is unchanged and driven by the N140 UDS contract through handover of the tunnels to the N180 Trackwork contractor. Hoffman construction is currently working a 10-hour day at the UDS site and will add a second shift in November. Contract interface meetings between the N140 and N180 teams are ongoing and have been successful in coordinating early work. The completion of N125 work at the Maple Leaf Portal remains critical to allowing the N180 Trackwork contractor access to the tunnels for Trackwork construction between UDS and MLP. ST is looking at allowing N180 access to MLP in mid-to-late February, ahead of the March contract access date.

Activity Name	Start	Finish	2017			2018				2019				2020				2021			
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Northgate Link Extension Master Schedule - V12c	18-Jul-17 A	26-Sep-21																			
Construction	18-Jul-17 A	28-Dec-20																			
N140 U District Station Finishes - GC/CM	18-Jul-17 A	19-Dec-18																			
N180 Trackwork - DBB	20-Dec-18	17-Sep-19																			
N830 Traction Electrification, Signal & Communications - GC/CM	18-Sep-19	28-Dec-20																			
Testing & Startup	25-Sep-20	25-Apr-21																			
Testing & Commissioning	25-Sep-20	25-Apr-21																			
Project Float	26-Apr-21	26-Sep-21																			
Project Float & Revenue Service	26-Apr-21	26-Sep-21																			

Critical Path Float

The Northgate Link Project currently retains 154 days of unallocated project float. The N40 baseline schedule has been accepted and the CPM Schedule is unchanged.

The Revenue Service date for the Northgate Link Extension remains September 2021.



Construction Safety

Data/ Measure	October 2017	Year to Date	Project to Date
Recordable Injury/Illness Cases	2	21	75
Days Away From Work Cases	0	2	6
Total Days Away From Work	62	140	359
Restricted or Modified Work Cases	2	11	34
Total Days Restricted or Modified Work	15	131	1,028
First Aid Cases	9	33	84
Reported Near Mishaps	6	21	75
Average Number of Employees on Worksite	489	-	-
Total # of Hours (GC & Subs)	<i>178,867</i>	<i>1,152,313</i>	<i>3,125,185</i>
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	2.24	3.64	4.80
DART (Days Away, Restricted or Modified) Rate	2.24	2.26	2.56
<i>Recordable National Average</i>	<i>3.50</i>	<i>3.50</i>	<i>3.50</i>
<i>DART National Average</i>	<i>2.00</i>	<i>2.00</i>	<i>2.00</i>
<i>Recordable WA State Average</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>
<i>DART WA State Average</i>	<i>3.90</i>	<i>3.90</i>	<i>3.90</i>

*Number totals may differ from other reports due to the timing of reporting periods.

Right of Way

The U District and Roosevelt stations required the acquisition of a range of property interests including fee takings for stations and staging areas; tunnel easements are required for the running tunnel. These acquisitions are complete with the exception of one remaining parcel at the Northgate Station area which was forecast to settle in the 2nd QTR 2017 but has been moved out to 4th QTR 2017 to accommodate King County's Board schedule. The right-of-way program status is summarized in the following table.

	Total Parcels Certified	Offers Made	Signed Agree- ments	Admin. Settle- ments	Posses- sion and Use (P&U)	Closings to date	Baseline Relocations Required	Relocations Completed
Total	235	233	0	0	0	231	42	42

Community Outreach

- Published monthly electronic newsletter.
- Distributed various construction alerts which included the following:
 - Street restorations at cross-passages.
 - Decommissioning of observation wells along the alignment.
 - Concrete pour at U District Station site.
 - Restoration of instrumentation sites on UW campus.
- Outreach staff greeted UW students and answered questions about the project at the “Up Your Ave” event.
- Responded to questions regarding temporary noise variance and noise data collection at Roosevelt Station.
- Briefed Roosevelt High School PTA on construction progress.
- Continued post construction notifications for residents along the Northgate alignment.

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Environmental

- None to report.

This page left blank intentionally.

Link Light Rail

Northgate Link Extension - Construction



Major Construction Contract Packages

Below are the major construction contract packages for the Northgate Link Extension 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.

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.

Construction Schedule Highlights

Package	Bid Advertisement	NTP	Substantial Completion
N105-Advance Demolition & Site Prep	Mar 2016A	May 2016A	Nov 2016A
N111-Advanced Utility Relocation	Sept 2014A	Jan 2015A	Apr 2016A
N113-SCL 115kV Relocate	Feb 2016A	June 2016A	Feb 2017A
N125-Station Box Exc. & TBM Tunnels	Jan 2013A	Sep 2013A	Feb 2018
N140-U District Station Finishes	Oct 2013A (GC/CM-Precon)	April 2017A (construction)	Jan 2020
N150-Roosevelt Station Finishes	Apr 2013A (GC/CM-Precon)	Dec 2016A (construction)	Sep 2019
N160-Northgate Station & Guideway & Parking Garage	Apr 2016A	Sept 2016A	Jan 2020
N180-Trackwork to Northgate Station	Apr 2016A	Sept 2016A	Oct 2019
N830-Traction Power, Signals & Com	May 2015A (GC/CM-RFQ)	Jun 2017A (construction)	Dec 2020

A = Actual

Contract N125 – TBM Tunnels

Current Progress

The N125 contractor, JCM, is continuing work toward completion of the Cross Passages, and Maple Leaf Portal (MLP) Structure. The tunnel segment between U District Station (UDS) and Roosevelt Station (RVS) has been completed and punchlist work is underway.

UDS—JCM continues to access the cross passages between UW Station (UWS) and UDS via UDS. The focus of the work is on completing the electrical scope.

Tunnel Finishes – Crews are installing Fire Stand Pipe, Handrail, and Electrical.

Cross Passage Construction—Work in progress at the end of this period includes: surface restorations at cross passage locations, continuing firestand pipe installation, and electrical installations. Installation of tunnel signage and handrailing is underway. Punchlist work continues between UDS and RVS.

MSE Wall—Construction of the walls and cross braces continues at MLP.

Schedule Summary

JCM has not submitted an updated schedule for October. The September schedule indicated a late achievement of Milestone No. 6 Substantial Completion of February 23, 2018, 13 days behind schedule, which includes the ST controlled float. Completion of construction is currently expected to be in late January to mid-February 2018. Achievement of Milestone No. 5A Completion of Tunnels Between RVS and UWS is still forecast as mid-November. The longest path through the schedule still consists of the work to complete the Maple Leaf Portal.

Activity ID	Activity Name	Start	Finish	2017				2018		
				Sep	Oct	Nov	Dec	Jan	Feb	Mar
N125 TBM Tunnels		01-Feb-14 A	23-Feb-18							
N125		01-Feb-14 A	23-Feb-18							
Construction		01-Feb-14 A	23-Feb-18							
Payment Triggers - Project Demobilization		29-Jan-18	23-Feb-18							
Submittals - Prepare		02-Oct-17	27-Oct-17							
Submittals - Review & Approve		24-Feb-14 A	26-Nov-17							
Station Work MLP		01-Feb-14 A	06-Oct-17							
Station Work UW		02-Oct-17	20-Oct-17							
Tunneling		01-Nov-14 A	06-Feb-18							
Cross Passages - MLP - RVS		02-May-16 A	19-Dec-17							
Cross Passages - UDS - UW		17-Mar-17 A	23-Oct-17							
Cross Passages - Additional SEM Measures		01-Mar-16 A	02-Oct-17							
MLP Final Work		20-Jul-17 A	26-Jan-18							

Link Light Rail Northgate Link Extension - Construction



Key Activities

Current Period

- Continued post-construction building surveys at surface along tunnel alignment.
- Continued electrical tie-in conduit installations and welding of fire standpipe tie-ins at cross passages.
- Continued installation of tunnel handrails and overhead electrical.
- Continued pulling feeder cables.
- Continued repairing walkway and cable trough concrete defects.
- Continued installation of rebar and formwork for east and west wall fascia panels and sound wall barrier at MLP.

Next Period

- Continue internal electrical/tie-ins and conduit installation at cross passages.
- Continue punch list work items in tunnels and cross passages.
- Continue installation of tunnel fire standpipes and handrails.
- Continue segment patching and leak repairs.
- Continue feeder cable pulling.
- Complete restoration of surface instrumentation on UW campus.
- Continue rebar and formwork installation and concrete pours at MLP.

Closely Monitored Issues

- Concerns regarding Elcon's ability to meet the Milestone 5A date have been raised with JCM, and a letter requesting a recovery schedule has been issued. Elcon's rate of progress in the past week has been further affected by problems with long wire pulling operations in the SB Tunnel. The rate of progress in tunnels between Maple Leaf Portal and Roosevelt Station, leading to Milestone 6, is also slower than needed to meet the milestone date.

Cost Summary

Present Financial Status	Amount
<i>NI25 Contractor - JCM Northlink</i>	
Original Contract Value	\$440,321,000
Change Order Value	\$57,996,440
Current Contract Value	\$498,317,440
Total Actual Cost (Incurred to date)	\$483,287,715
Financial Percent Complete:	97%
Physical Percent Complete:	97%
Authorized Contingency	\$66,048,150
Contingency Drawdown	\$57,996,440
Contingency Index	1.11



Installing tunnel handrails in the NB tunnel.

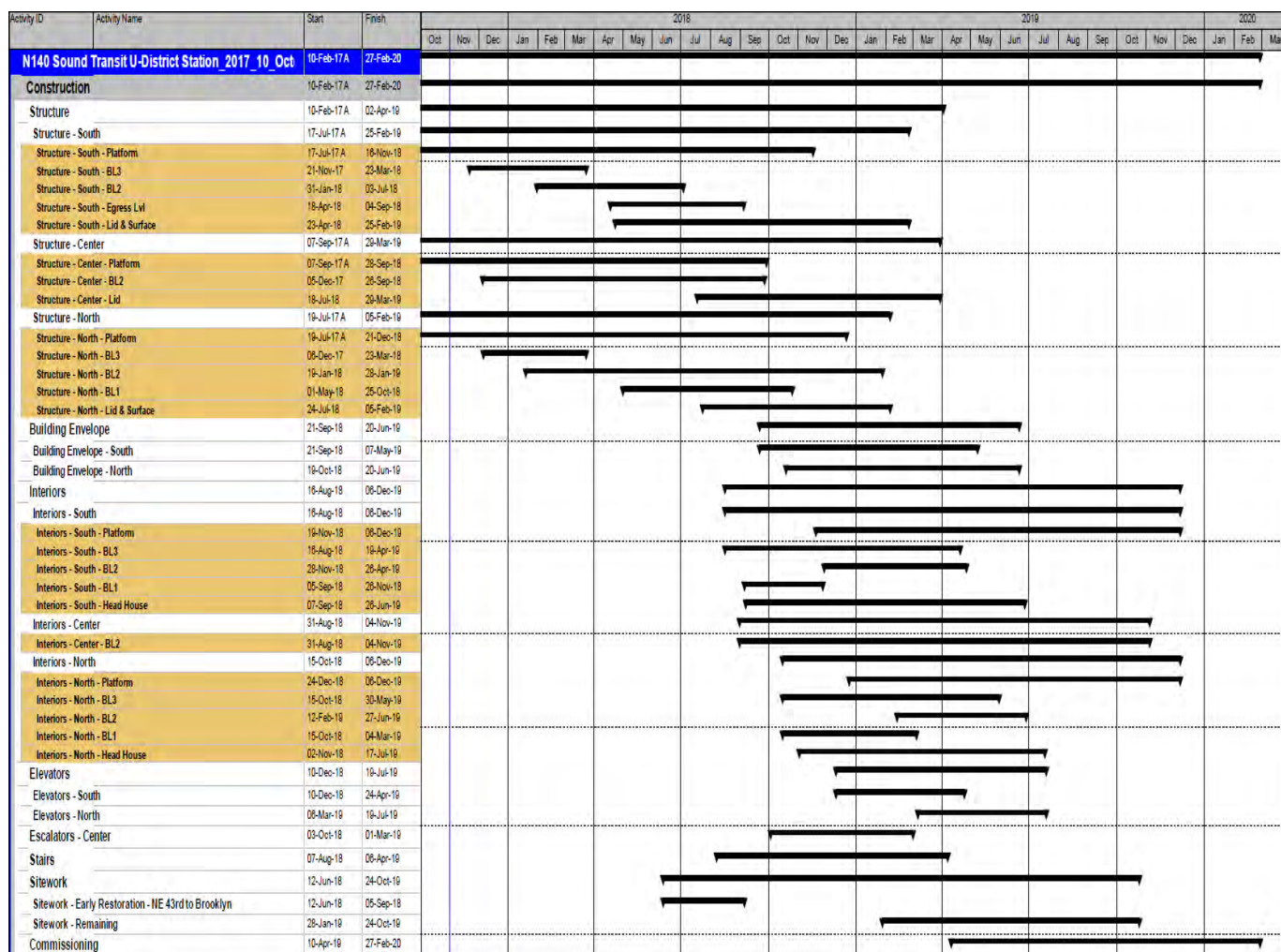
Contract N140 – U District Station Finishes

Current Progress

The N140 contractor, Hoffman Construction, completed the center and north platform level invert slabs. Columns, pedestals, and elevator shear walls are in progress.

Schedule

Sound Transit accepted the baseline CPM schedule and the N140 Contractor has submitted an update for October. The October schedule update shows a negative 14 days in achieving Substantial Completion, however, the completion of the resolution for the Teamster Strike will likely readjust the contract milestones to account for the negative float.



Link Light Rail Northgate Link Extension - Construction



Key Activities

Current Period

- Continued to prepare and process submittals and RFIs.
- Continued prefabrication of vertical reinforcing steel for columns and walls.
- Completed installation of power and systems duct bank runs for second invert concrete placement.
- Commenced installation of top mat reinforcing steel for second invert pour at the north end, as well as installation of dowel bars and sanitary piping for the second invert slab concrete placement.
- Crews completed welding of grounding wires along east, south and west walls in preparation for first invert concrete pour at the south end.
- Continued waterproofing installation at the west wall and south headwall.
- Completed installation of waterproofing at the east wall.
- Placed 4,670 cubic yards of concrete for the central and north invert slab.

Next Period

- Continue to process submittals and RFIs.
- Continue installation of waterproofing for side walls and south headwall.
- Continue installation of wall rebar mats for side walls and south headwall.
- Continue rebar and formwork for columns.
- Continue installation of temporary power.
- Continue elevator shear wall install rebar mats, formwork, and place concrete.

Closely Monitored Issues

- Teamsters strike caused some delays with concrete deliveries due to backlog in the market. Contractor is working on a time impact analysis and reviewing options to recover time, including Saturday work.

Cost Summary

Present Financial Status	Amount
NI40 Contractor - Hoffman Construction	
Original Contract Value	\$159,836,68
Change Order Value	\$0
Current Contract Value	\$159,836,68
Total Actual Cost (Incurred to date)	\$20,857,632
Financial Percent Complete:	13%
Physical Percent Complete:	13%
Authorized Contingency	\$7,991,834
Contingency Drawdown	\$0
Contingency Index	N/A



ESI forms at UDS.

Contract N150 – Roosevelt Station Finishes

Current Progress

Hoffman Construction has completed the platform level and is currently working on the center and south walls and Basement Level 3 deck. The north Basement Level 2 deck construction is in progress.

Schedule

The project schedule below was impacted by the Teamster's strike and exhibits negative nine days of float. This represents the time impact and the milestone will be revised in the schedule upon completion of the change order.

Activity ID	Activity Name	Start	Finish	2018												2019												2020				
				O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F
N150 - Roosevelt Station Finishes		13-Feb-17 A	17-Sep-19																													
CONSTRUCTION		13-Feb-17 A	17-Sep-19																													
MOBILIZATION		13-Feb-17 A	03-Jun-19																													
STRUCTURE		13-Feb-17 A	01-Jul-19																													
BASE SLAB / INVERT SLAB / WATERPROOFING		13-Feb-17 A	20-Jul-17 A																													
SOUTH STATION		14-Jul-17 A	30-Apr-18																													
CENTER STATION		14-Jun-17 A	01-Jul-19																													
NORTH STATION		17-May-17 A	31-May-18																													
INTERIORS		21-Mar-18	17-Jan-19																													
SOUTH		01-May-18	27-Dec-18																													
CENTER		21-Mar-18	17-Jan-19																													
NORTH		14-May-18	17-Jan-19																													
HEADHOUSE		20-Mar-18	14-May-19																													
SOUTH		20-Mar-18	02-May-19																													
NORTH		10-Apr-18	14-May-19																													
BUS SHELTER		08-Jan-19	18-Feb-19																													
BIKE CAGE		22-Oct-18	07-Nov-18																													
ELEVATORS		28-Sep-18	31-May-19																													
ESCALATORS		04-Jun-18	06-Dec-18																													
STAIRS		23-May-18	19-Oct-18																													
CP-31		15-Jan-18	19-Apr-18																													
CONSTRUCTION ACCESS INFILL		04-Jun-19	09-Sep-19																													
START-UP & COMMISSIONING		09-Jan-19	17-Sep-19																													
SITE RESTORATION		30-May-18	08-Apr-19																													
ARTWORK		26-Jun-18	21-Jan-19																													
CLOSEOUT		17-May-19	14-Jun-19																													
MILESTONES		12-Jan-18	17-Sep-19																													
N830 TRACTION ELECTRIFICATION, SIGNALS, COMMUNICATI		26-Sep-18	07-Dec-18																													

Link Light Rail Northgate Link Extension - Construction



Key Activities

Current Period

- Commenced de-tensioning and waterproofing tie-backs on north slab.
- Commenced placement of columns on north elevated deck.
- Formed and poured the north escalator column and center basement level beams.
- Completed south (final) platform topping slab.
- Continued work on reinforcing for escalator support columns, and rebar for center deck and south walls.
- Commenced the electrical branch rough-in and rebar for the south track level slab.
- Placed concrete for north elevated deck as well as completed installation of inserts, embeds and bottom mat rebar in same area.
- Continued work on the escalator support columns and began rebar for various sections and formwork for the south track level slab.

Next Period

- Continue to prepare, review and respond to submittals and RFIs.

- Continue de-tensioning and waterproofing tie-backs at north Basement Level (BL) 2 slab.
- Continue placement of columns on BL 2 north elevated deck.
- Form and pour south C5 escalator column.
- Continue formwork and reinforcing for lift 2 of center walls 1A/2A and 3A/4A.
- Commence formwork for south BL-3 elevated deck. .

Closely Monitored Issues

- ST to continue coordinating preliminary design for escalator control rooms with Labor & Industries. Design team is working with ST to provide changes related to escalator control rooms and revised escalator supports. These activities are being tracked in order to ensure release of submittals for escalator fabrication queue which is scheduled in 4th QTR 2017.
- Notice of Impact of Concrete Supply time impact analysis is zero cost and 12 additional calendar days to the critical path milestones. The Contractor has updated the time impact analysis and is working on narrative.

Cost Summary

Present Financial Status	Amount
N150 Contractor - Hoffman Construction	
Original Contract Value	\$152,291,184
Change Order Value	\$ 914,315
Current Contract Value	\$153,072,001
Total Actual Cost (Incurred to date)	\$43,949,791
Financial Percent Complete:	29%
Physical Percent Complete:	20%
Authorized Contingency	\$7,614,559
Contingency Drawdown	\$914,315
Contingency Index	1.6



View of Roosevelt Station box from north headwall.

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

Current Progress

The N160 Contractor is progressing with the A series columns (Guideway Units 1 & 2), column caps, beams, and post-tensioning for the B series bents (Guideway Units 4 & 5) and track slabs for the Station spans (Guideway Unit 3). Planning for the detention vaults is also underway.

At the Parking Garage Basement Level 3 wall and supporting column construction is ongoing, as is shotcreting of the perimeter walls.

Schedule

The N160 Contractor's October schedule update forecasts a completion of March 23, 2020, 26 days behind schedule. The negative float is in part due to the Contractor's failure to revise the milestone dates in accordance with agreed upon impact for the Teamster's Strike and the post-tensioning delays. The Parking Garage completion, Milestone No. 3, is now shown as completing on 8-Aug-18, an improvement from the 15th shown in September. This slip does not impact the Systems Access date of 1-May-18. The critical path for the project remains in the station construction.

Activity ID	Activity Name	Start	Finish	2015												2016														
				Oct	N	D	J	F	M	Apr	M	J	Jul	A	S	Oct	N	D	J	F	M	Apr	M	J	Jul	A	S	Oct	N	D
N160 - Northgate Station Finishes																														
1.00	- General Requirements	31-Aug-16 A	25-Mar-20																											
1.05	- Project Summary	03-Jan-17 A	19-Nov-19																											
Summary Budget Section / Provisional Sums																														
1.10	- Project Start-up	31-Aug-16 A	12-Apr-18																											
1.20	- Contractual Milestones	31-Mar-18	25-Mar-20																											
1.30	- Contractual Constraints	17-Oct-16 A	09-Aug-19																											
1.40	- Completion of Major Elements of Work	16-Mar-18	19-Nov-19																											
2.00	- Procurement	02-Sep-16 A	07-Oct-19																											
2.10	- Construction Plans	02-Sep-16 A	22-May-17 A																											
2.20	- Construction Engineering	12-Sep-16 A	26-Mar-18																											
2.30	- Trade Packaging	02-Sep-16 A	01-Oct-19																											
2.40	- Long Lead Materials	12-Sep-16 A	07-Oct-19																											
2.50	- Mock-ups	17-Feb-17 A	31-Oct-18																											
3.00	- Preparatory Work	17-Oct-16 A	25-Mar-20																											
3.10	- Maintenance of Traffic	17-Oct-16 A	25-Mar-20																											
3.20	- Environmental	17-Oct-16 A	25-Mar-20																											
3.40	- Mobilization	24-Oct-16 A	18-Jun-19																											
4.00	- Earthwork & Utilities	04-Jan-17 A	25-Mar-20																											
4.10	- Storm Drainage Vaults/FC Structures	29-Nov-17	06-Nov-18																											
4.20	- Storm Drainage Conveyance	09-Jan-17 A	20-Sep-19																											
4.30	- Water	19-Mar-18	08-Apr-19																											
4.40	- Sewer	25-Apr-17 A	04-Apr-19																											
4.50	- Roadway Electrical & In-Ground Systems	23-Feb-18	12-Apr-19																											
4.60	- Grading & Ditches	12-Oct-18	09-Aug-19																											
4.70	- Mass Excavation & Shoring	04-Jan-17 A	25-Mar-20																											
4.80	- Walls	03-Apr-17 A	26-Jun-19																											
5.00	- Guideway (inc. Station Unit)	03-Jan-17 A	03-Jan-19																											
5.40	- Station Unit	03-Jan-17 A	12-Jun-18																											
5.60	- GW Unit 5	08-Mar-17 A	29-Jun-18																											
5.50	- GW Unit 4	25-Apr-17 A	02-Nov-18																											
5.30	- GW Unit 3	15-Mar-17 A	23-Oct-18																											
5.20	- GW Unit 2	30-Mar-17 A	03-Jan-19																											
5.10	- GW Unit 1	16-Jun-17 A	09-Nov-18																											
6.00	- Station Finishes	21-Feb-18	19-Nov-19																											
6.10	- Station North	21-Feb-18	16-Aug-19																											
6.20	- Station South	10-May-18	01-Aug-19																											
6.30	- Station Mezzanine	28-Aug-18	03-Jul-19																											
6.40	- Station Platform	11-Dec-18	19-Nov-19																											
7.00	- Garage	27-Jun-17 A	31-Jul-18																											
7.10	- Garage Structure	10-Jul-17 A	22-Mar-18																											
7.20	- Garage Finishes	15-Jan-18	31-Jul-18																											
8.00	- At-Grade Restoration	22-Sep-17 A	28-Jan-20																											
8.10	- Maple Leaf Portal	08-Mar-19	13-Aug-19																											
8.20	- North TPSS & Signal Bungalow (W of R02; at Bents A1 & A2)	18-Dec-17	17-Apr-19																											
8.30	- North Signal Bungalow (E of R02; at Bent B6)	02-May-18	19-Oct-18																											
8.40	- Civil Restoration	22-Sep-17 A	28-Jan-20																											
9.00	- Transition to Operations	04-Jan-19	05-Jan-19																											
10.00	- Project Close-out	07-Feb-18	25-Mar-20																											
10.10	- Occupancy Testing/Inspections	29-Jan-20	25-Mar-20																											
10.20	- Punchlist	29-Jan-20	02-Mar-20																											
10.30	- O&M's/ Warranties / As-Builts / Training	26-Dec-19	25-Mar-20																											
10.10	- Commissioning	07-Feb-18	17-Nov-19																											
11.00	- Deleted Activities	01-Mar-17 A	13-Feb-18																											
12.00	- Modifications / Change Orders	10-Feb-17 A	29-Jan-20																											

Link Light Rail Northgate Link Extension - Construction



Key Activities

Current Period

- *Guideway:* Continued to place precast curb on track slabs in station area; stressed continuity bars at B7 and B8, and began removing shoring; Continued falsework, rebar, PT and concrete placement for B-line caps; Grouted PT tendons in C-line caps and completed void repairs; Continued rebar cages for A-line columns.
- *Parking Garage:* Continued conduit, piping, and rebar installation and began concrete placement for interior & exterior columns and walls; Completed shotcrete at south and north walls and began west and east walls at B4-B2 levels; Began setting tables for Level B3 deck and beams.
- *Utility & Drainage Work:* TESC Maintenance ongoing; Began layout and preparation for FC-1 drainage vault.
- *Offsite Fabrication:* Girder fabrication ongoing; Continued pre-cast stair and curb fabrication; Continued structural steel and handrails fabrication.

Next Period

- *Guideway:* Continue formwork, rebar and concrete placement for columns/caps; Continue falsework and concrete for straddle bents; Prep for girder erection.
- *Parking Garage:* Continue wall and column rebar and concrete placement; Complete shotcrete placement at exterior walls and columns; Continue forming and placing exterior cast-in-place columns; Continue setting shoring and deck for Level B3 floor and beams, and begin concrete placement of L3 deck.
- *Utility & Drainage Work:* Begin installation of FC-1 drainage vault.

Closely Monitored Issues

- Concrete consolidation in areas of congested reinforcement – contractor will increase consolidation efforts to ensure quality.
- Schedule slippage on elevated structure – contractor to provide means of recovery.
- Labor shortages for skilled tradespeople may impact schedule.

Cost Summary

Present Financial Status	Amount
N160 Contractor - Absher Construction	
Original Contract Value	\$174,000,000
Change Order Value	\$ 3,999,999
Current Contract Value	\$177,999,999
Total Actual Cost (Incurred to date)	\$62,185,168
Financial Percent Complete:	35%
Physical Percent Complete:	35%
Authorized Contingency	\$17,400,000
Contingency Drawdown	\$ 3,999,999
Contingency Index	1.55



Stressing multi-strand tendons at C1 platform cap.

Contract N180 – Trackwork UWS to Northgate Station

Current Progress

The N180 Contractor continues to focus on procurement, submittals, and manufacturing of the pre-cast floating slabs. The Contractor received dates from British Steel for the roll dates of the Ultra-Straight Rail (USR) and is working on the shipping points. ST is reviewing the impact of the USR Welding on the schedule. The pre-cast yard in Woodland has moved into production casting of the 3'10" slabs at a rate of 40/week. The 7'10" slabs are moving toward production status. A new material source has been secured for the Isolation Pads. The N180 Contractor has been meeting with the N140, N160, and N150 contractors to work on the interface and access coordination at the station locations.

Schedule Summary

Below is the latest schedule for N180.

Activity ID	Activity Name	Start	Finish	2018												2019													
				Oct	N	D	J	F	M	Apr	M	J	Jul	A	S	Oct	N	D	J	F	M	Apr	M	J	Jul	A	S	Oct	N
N180 - Trackwork		25-Aug-16 A	27-Oct-19																										
Construction		25-Aug-16 A	27-Oct-19																										
Mobilization		25-Aug-16 A	27-Oct-19																										
Submittals		25-Aug-16 A	01-Sep-19																										
Procurement		07-Oct-16 A	18-May-19																										
Work Area 1 (N06 - UWS to UDS Tunnels)		06-Dec-17	07-Mar-19																										
Work Area 2.1 and 2.2 (N07 - U-District Station)		15-Nov-17	15-Mar-19																										
Work Area 3 (N08 - UDS to RVS Tunnels)		11-Jan-18	17-Sep-18																										
Work Area 4 (N09 - Roosevelt Station)		12-Mar-18	27-Sep-18																										
Work Area 5 (N10 - RVS to MLP Tunnels)		22-Mar-18	21-May-19																										
Work Area 6 (MLP and At Grade Guideway)		12-Mar-18	28-Jun-19																										
Work Area 7 (Elevated Guideway South of NGS)		02-Jan-19	30-Jul-19																										
Work Area 7.1 (N11 - Northgate Station)		02-Jan-19	29-May-19																										
Work Area 7.2 (Elevated Guideway North of NGS)		04-Jan-19	11-Jul-19																										

Link Light Rail Northgate Link Extension– Construction



Key Activities

Current Period

- *Columbia Precast Plant (CPP)*: Continued to cast six 3'-10" floating slabs per day; total slab production to date: 534 out of 1,366; 7'-10" floating slabs are in production with 3 of 252 cast to date.
- *Scougal Facility*: Continued fabrication of the 5Hz tapered side and end separation pads and tapered side shim pads.
- Continued qualification testing for main, side, and separation pads using new rubber supply.
- Progress Rail continued qualification testing of hi-resilience direct fixation (DF) fasteners.
- Procurement of ultra-straight rail spreader beam is complete and ready for delivery.
- British Steel continued preparation for rolling of ultra-straight rail.
- Continued coordination with N140 on drop pipes and ventilation plan.

Next Period

- Continue production of floating slabs and begin fabricating 7'-10" rebar cages.
- Scougal to continue LTC test and provide preliminary data of all other qualification testing.
- Scougal to continue producing tapered side shim pads.
- Progress Rail to continue qualification testing of Hi-resilience DF fasteners.
- Kelley Engineered Equipment continuing fabrication and assembly of Floating Slab Gantry.

Closely Monitored Issues

- Scougal has not been able to achieve a passing Long Term Creep (LTC) test at their facility or at Dynamark. All other qualification testing has passed. Scougal/SWI has sourced a new rubber supplier in an effort to correct this problem.

Cost Summary

Present Financial Status	Amount
N180 Contractor - Stacy and Witbeck, Inc.	
Original Contract Value	\$71,455,950
Change Order Value	\$1,599,820
Current Contract Value	\$73,055,770
Total Actual Cost (Incurred to date)	\$11,943,498
Financial Percent Complete:	16%
Physical Percent Complete:	12%
Authorized Contingency	\$10,718,393
Contingency Drawdown	\$1,599,820
Contingency Index	1.10



Valley Processing Site Visit - Actual N180 elastomer coming off the cooling belts, being palletized for delivery to Scougal Rubber.

This page left blank intentionally.

Link Light Rail Lynnwood Link Extension



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:	NE 145th (Shoreline), NE185th (Shoreline), Mountlake Terrace Transit Center, Lynnwood Transit Center
Systems:	Signals, traction power, and communications (SCADA).
Budget:	\$488.4 Million Pre-baseline Budget; excludes Construction (Year of Expenditure Dollars)
Phase:	Final Design
Const. Starts:	2018
Service:	Mid 2024



Map of Lynnwood Link Extension Alignment.

Key Project Activities

- L200 60% civil design submitted in February 2017; reviews completed in March 2017.
- L300 60% civil design submitted in March 2017; reviews completed in April 2017.
- L800 60% systems design submitted in June; reviews completed in August 2017.
- Conducted VE reviews with 3rd party jurisdictions in September 2017.
- WSDOT completed engineering review of L200 Temporary Construction Air Space Lease (TCAL) and Air Space Lease (ASL); review began on August 7, 2017; L300 submitted to WSDOT on July 3, 2017.
- Continuing right of way acquisition and pre-construction planning.
- Resumed Civil Design activities on October 9, and currently working to incorporate cost savings ideas into design.

Project Cost Summary

The Lynnwood Link 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.

Commitment and Actuals under Construction Phase is related to Construction Permits for early demolition work associated with ROW Property Acquisitions.

Cost Summary by Phase

Project Phase	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
Administration	\$88.3	\$18.7	\$18.4	\$88.3	\$0.0
Preliminary Engineering	\$42.0	\$39.1	\$39.1	\$42.0	\$0.0
Final Design	\$111.5	\$82.5	\$45.7	\$111.5	\$0.0
Construction Services	\$104.9	\$19.7	\$8.0	\$104.9	\$0.0
3rd Party Agreements	\$17.4	\$7.2	\$2.9	\$17.4	\$0.0
Construction	\$0.5	\$0.2	\$0.2	\$0.5	\$0.0
Light Rail Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$123.8	\$64.9	\$59.4	\$123.8	\$0.0
Total	\$488.4	\$232.2	\$173.7	\$488.4	\$0.0

Cost Summary by SCC

SCC Element	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget 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	\$0.5	\$0.2	\$0.2	\$0.5	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.5	\$0.2	\$0.2	\$0.5	\$0.0
60 Row, Land	\$123.8	\$64.9	\$59.4	\$123.8	\$0.0
80 Professional Services	\$364.1	\$167.1	\$114.1	\$364.1	\$0.0
90 Unallocated Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total (10 - 90)	\$488.4	\$232.2	\$173.7	\$488.4	\$0.0

Link Light Rail Lynnwood Link Extension



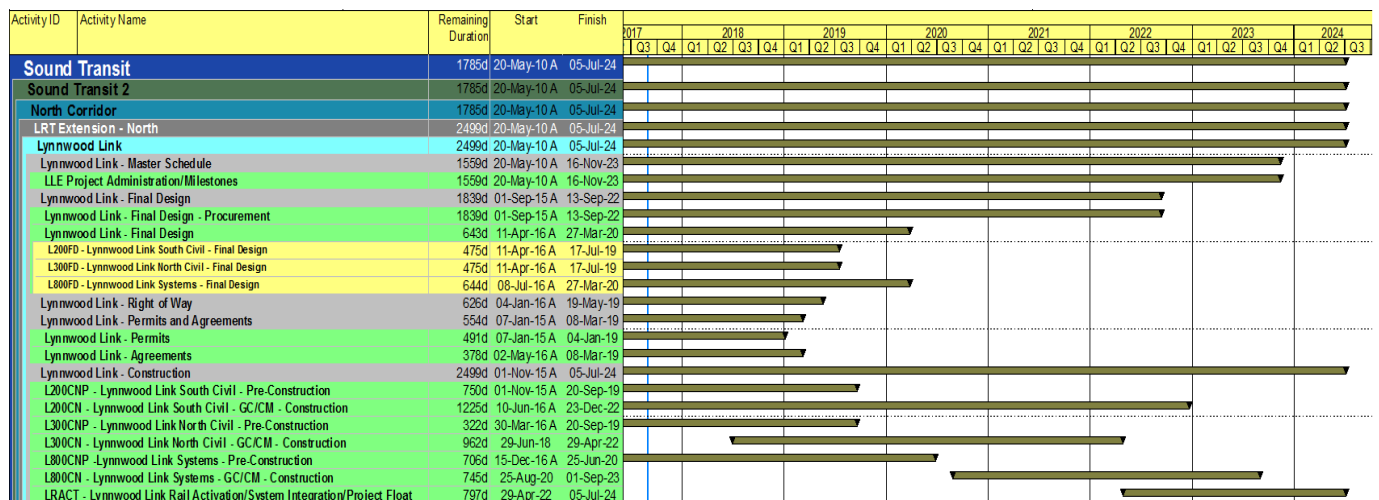
Risk Management

The Lynnwood Link Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It 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, 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 most recent Lynnwood Link Quarterly Risk Review Workshop was held in May 2017. The project will undergo a full quantitative risk assessment in November 2017.

Project Schedule

The project schedule is shown below.



Right-of-Way

The Right-of Way project for Lynnwood Link 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								
Line Section	Board Approved	Offers Made/In Negotiations	Signed Agreements	Possession and Use	Admin Settlement	Closings to date	Relocations Required	Parcels Vacated
L200— South Segment	181	78	5	0	0	40	166	67
L300—North Segment	40	12	0	0	0	9	25	4
Total*	221	88	5	0	0	49	191	71

*Note— number of totals may differ from other reports due to the timing of reporting periods.

L200 –Northgate to NE 200th Street Parcels

20 additional parcels approved by the Board; 2 additional offers made; 1 additional offer signed; 1 additional parcels closed; 7 additional relocation identified; 4 additional relocations vacated.

L300— NE 200th Street to Lynnwood Transit Center

4 additional parcels approved by the Board; 1 additional parcel vacated.

Sound Transit Board Actions

Board Action	Description	Date
R2017-36	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 Lynnwood Link Extension.	Oct 26

Community Outreach

- Project banner was produced and placed on the perimeter fence of the recently acquired property adjacent to the Lynnwood Transit Center.
- Property owners included on the September Board Resolution were invited to meet with the ST CEO Peter Rogoff and staff to answer questions about the acquisition process; 18 property owners attended the presentation and got their questions answered.

Link Light Rail Lynnwood Link Extension Final Design - Civil



Civil Final Design Overview

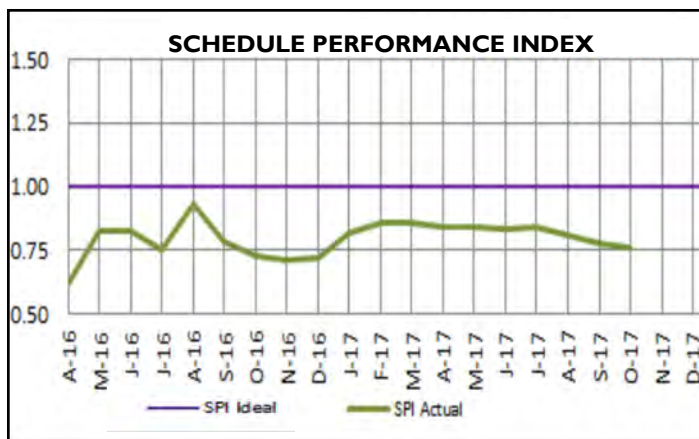
Sound Transit executed a professional services contract with HNTB Jacobs in April 2016 to perform Civil Final Design Services.

Civil Final Design Activities

- Cost Savings Ideas Development completed.
- Civil Final Design activities have restarted on October 9, 2017.
- Current focus is on incorporating costs savings ideas, advancing concepts to achieve concurrence and lock the track alignment and guideway column locations so follow on disciplines (Systems Final Design) can resume design activities.

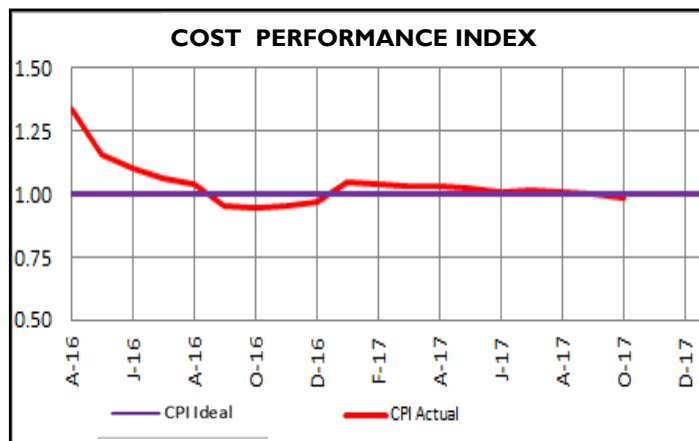
Civil Final Design Schedule Performance Index

The cumulative Schedule Performance Index (SPI) trends at 0.76 through October 2017, which means that cumulative work accomplished is less than work originally planned. The Civil Final Design cost savings ideas development was completed on October 9. While schedule performance is trending negatively, it is expected to increase over the next couple of reporting periods as civil design activities have restarted and cost savings ideas will be incorporated into the project design.



Civil Final Design Cost Performance Index

\$42.3M of the total contract amount, 58%, has been spent through October 2017. The Civil Final Design percent complete is 57%, with an earned value of \$41.5M. The cumulative Cost Performance Index (CPI) through October is 0.98 indicating that expenditures are slightly higher than the earned value of work performed.



Final Design Performance	Cumulative To-date
Amount Invoiced	\$42.3M
% Spent	58%
Earned Value	\$41.5M
% Complete	57%
SPI	0.76
CPI	0.98

Systems Final Design Overview

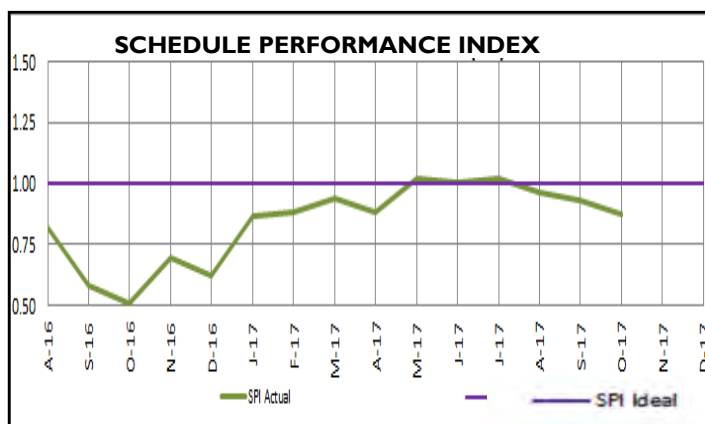
Sound Transit executed a professional services contract with LTK Engineering in July 2016 to perform Systems Final Design Services.

Systems Final Design Activities

- L800 60% cost estimate submitted to Sound Transit on August 25, 2017.
- L800 60% cost estimate reconciliation was completed on September 27, 2017.
- Systems Design currently on hold awaiting Civil Final Design track alignment and guideway column locations so design activities can resume.

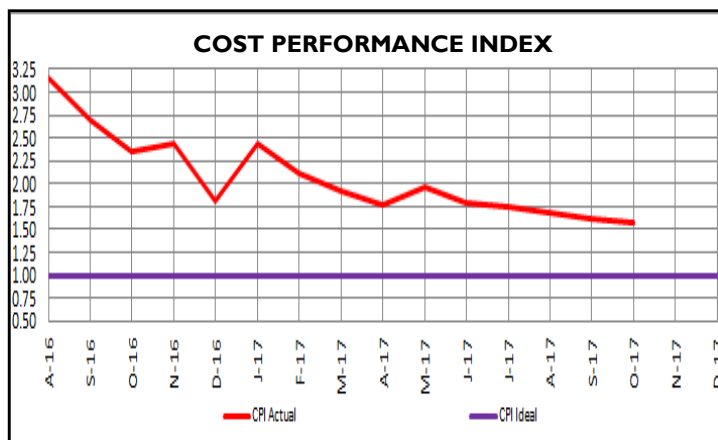
Systems Final Design SPI

The cumulative Schedule Performance Index (SPI) trends at 0.87 through October 2017, which means that cumulative work accomplished is behind the work originally planned. The monthly SPI for October was 0.00, indicating no work accomplished against the planned scope. This is directly attributed to the design hold due to cost savings ideas development. Over the October reporting period the civil design team has resumed design activities. As the Systems Final Design team is provided updated civil information, it is expected that SPI will start to trend positive as design ramps back up.



Systems Final Design Cost Performance

\$2.8M of the total contract amount, 30%, has been spent through October 2017. The Systems Final Design percent complete is 47%, with an earned value of \$4.5M. The cumulative Cost Performance Index (CPI) through October is 1.57 indicating that expenditures are significantly lower than the earned value of work performed.



Final Design Performance	Cumulative To Date
Amount Invoiced	\$2.8M
% Spent	30%
Earned Value	\$4.5M
% Complete	47%
SPI	0.87
CPI	1.57

Civil Construction Management Overview

Sound Transit executed a professional services contract with PGH Wong in May 2016 to perform Civil Construction Management (CMC) Services

Civil Construction Management Activities

- Coordinating meetings with design, GC/CM, and ST teams.
- Coordination on various preconstruction activities including cost estimates, schedule, and constructability.
- Coordinating GC/CM review of 60% submittals and Project wide effort towards value engineering.

Civil Construction Management Schedule Performance Index

Work by the CMC is on a level-of-effort basis to support Sound Transit during the final design/pre-construction period. Earned value for level-of-effort is calculated as equal to the planned value, so SPI = 1.00.

Civil CM Cost Performance Index

\$2.8M of the total contract amount, 37%, is spent through October 2017, with an earned value of \$6.2M. The cumulative Cost Performance Index (CPI) through October is 2.20; indicating significantly lower costs than expected on the contract. The Consultant assumed more support staff would be required early in the schedule and that has not been the case, leading to a high CPI. With the design work resuming and an extension to the pre-construction schedule, CPI is anticipated to trend closer to an expected value of 1.0 in the future.



Civil CM Performance	Cumulative To-date
Amount Invoiced	\$2.8M
% Spent	37%
Earned Value	\$6.2M
CPI	2.20

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.

L200 GC/CM Pre-Con Activities

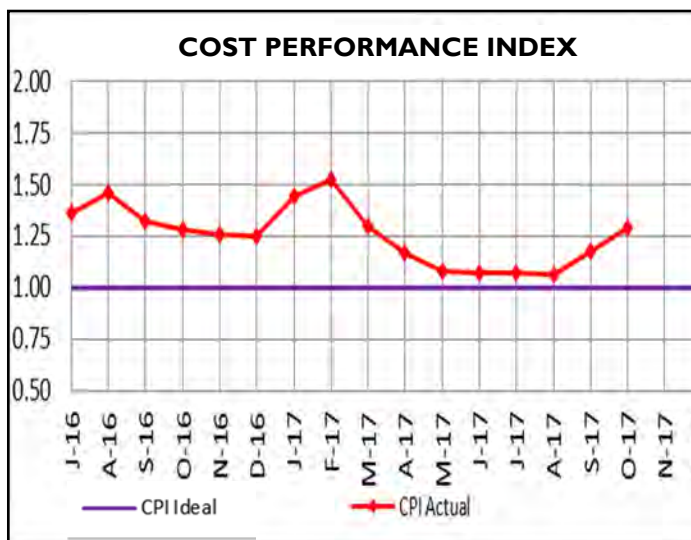
- Coordinating meetings with design, CM, and ST teams.
- Progress on various preconstruction activities including cost estimates, schedule, and constructability.
- Project wide effort towards value engineering.

L200 GC/CM Pre-Con Schedule Performance Index

Driving the L200 GC/CM Contract is the LLE Final Design contract; GC/CM Pre-Construction work is on a level-of-effort basis to support Sound Transit during the final design/pre-construction period. Earned value for level-of-effort is calculated as equal to the planned value, so SPI = 1.00.

L200 GC/CM Pre-Con Cost Performance Index

\$2.7M of the total contract amount, 53%, is spent through October 2017, with an earned value of \$3.5M. The cumulative Cost Performance Index (CPI) through October is 1.29; indicating actual costs are slightly lower than planned.



L200 GC/CM Performance	Cumulative To-date
Amount Invoiced	\$2.7M
% Spent	53%
Earned Value	\$3.5M
CPI	1.29

Link Light Rail Lynnwood Link Extension GC/CM Pre-Construction



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 GC/CM Pre-Construction Services for the L300 segment.

L300 GC/CM Pre-Con Activities

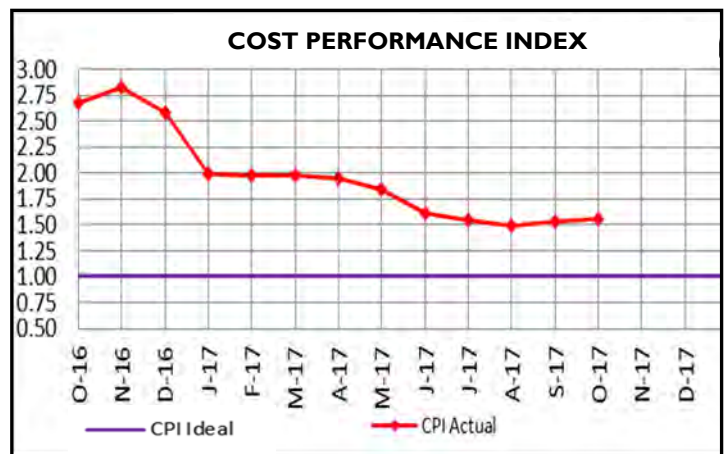
- Coordinating meetings with design, CM, and ST teams.
- Progress on various preconstruction activities including cost estimates, schedule, and constructability.
- Project wide effort towards value engineering.

L300 GC/CM Pre-Con Schedule Performance Index

Driving the L300 GC/CM Contract is the LLE Final Design contract; GC/CM Pre-Construction work is on a level-of-effort basis to support Sound Transit during the final design/pre-construction period. Earned value for level-of-effort is calculated as equal to the planned value, so SPI = 1.00.

L300 GC/CM Pre-Con Cost Performance Index

\$2.1M of the total contract amount, 39%, has been spent through October 2017, with an earned value of \$3.3M. The cumulative Cost Performance Index (CPI) through October is 1.56; indicating actual costs are lower than planned.



L300 GC/CM Performance	Cumulative To-date
Amount Invoiced	\$2.1M
% Spent	39%
Earned Value	\$3.3 M
CPI	1.56

This page intentionally left blank.

Link Light Rail

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



Scope: The I-90 Two-Way Transit and HOV Operations (Stage 3) project provides approximately four miles of the 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.

Budget: \$225.6 Million

Phase: Construction Roadway

Construction Start: January 2015

Construction Complete: December 2017



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

Key Project Activities

- Work outside the tunnels: Irrigation system restoration at several locations, UST sensor replacement and calibration at MI, warranty items, punch list items.
- Mercer Island Tunnel: Cleanup and warranty work, Phone PBX Programming by WSDOT, punch list items.
- Mount Baker Ridge Tunnel: Cleanup and warranty work, GE testing of generators, punch list items.
- Continue SCADA programming for phone off-hook status interface, video interface, training simulator, ECP Final Revision, punch list.
- Continue Simplex documentation submittals, clean-up work areas, resolve punch list items.

Closely Monitored Issues

While Center Roadway turnover to Sound Transit was completed, Substantial Completion continues to slip; achievement of Substantial Completion is anticipated for 4th Quarter 2017, due to the following

- Mercer Island & Mount Baker Ridge Tunnels LIOP Hardware Upgrade work has been postponed until the Work Plan & Commissioning Plans are submitted.
- Challenges continue with network programming tasks for Phase 3 commissioning and Simplex / SCADA video interface and integration.
- Due to a change in required traffic load rating, it will be necessary to replace several roadway catch basin frames and grates. Other additional work may be required.
- Programming for ITS incident signage will be performed by WSDOT, remedying cost risk of the Contractor performing this work.

Project Cost Summary

The following tables summarize the cost information for the I-90 Two-way Transit and HOV Operations (Stage 3) project. Total Project Costs expended during this period was \$1.1M. Tables in millions.

Cost Summary by Phase

Project Elements by Phase	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
Administration	\$3.6	\$3.6	\$2.2	\$2.2	\$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 Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$198.3	\$198.3	\$171.9	\$162.8	\$198.3	\$0.0
Total	\$225.6	\$225.6	\$194.4	\$184.6	\$225.6	\$0.0

Cost Summary by SCC

Project Elements by SCC	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
40 Sitework & Special Conditions	\$180.6	\$180.6	\$172.0	\$162.8	\$180.6	\$0.0
80 Professional Services	\$26.3	\$26.3	\$22.5	\$21.8	\$26.3	\$0.0
90 Unallocated Contingency	\$18.7	\$18.7	\$0.0	\$0.0	\$18.7	\$0.0
Project Total (SCC 10-90)	\$225.6	\$225.6	\$194.4	\$184.6	\$225.6	\$0.0

Cost Contingency Management

In the table below, the Allocated Contingency includes both WSDOT-controlled construction contingency and the total ST-controlled allocated contingencies.

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%	\$8.1	19.7%
Unallocated Contingency	\$18.7	8.3%	\$18.7	45.6%
Total	\$35.7	15.8%	\$26.8	65.3%

Note: Table in millions. Contract does not carry Design Allowance.

Contingency % of Work Remaining based on Contingency Remaining as a % Budget Remaining.

Allocated contingency includes WSDOT-controlled contingency & ST-controlled Contingency.

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

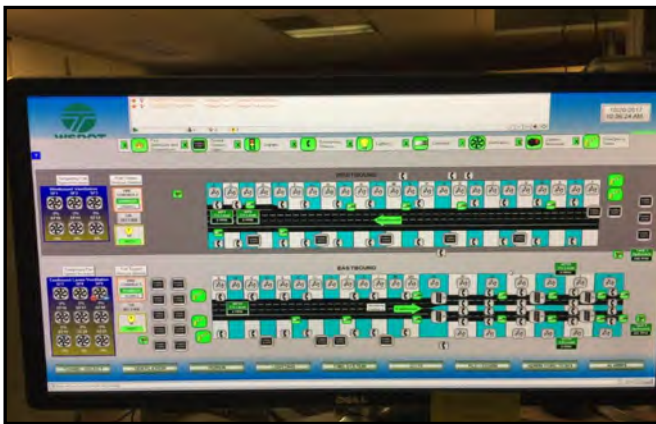


Project Schedule

Project Milestones for construction are indicated below; changes indicated in red were submitted by WSDOT as anticipated dates, but have not at this time been accepted:

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	9/1/2017	2/20/2017	12/15/2017	5/31/2017	6/14/2017 A	5/31/2017	12/15/2017

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



MBRT Fire Control System Graphics Screen

This page left intentionally blank.

Link Light Rail

East Link Extension



Scope

Limits/Alignment: Fourteen-mile extension from Downtown Seattle to Mercer Island, Bellevue and the Overlake area of Redmond. The extension includes 10 stations along the alignment that includes at-grade, elevated, bridges, new and retro-fitted tunnels.

Stations: Judkins Park, Mercer Island, South Bellevue, East Main, Bellevue Downtown, Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village and Redmond Technology Center (RTC).

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

Budget: \$3.677 Billion Year of Expenditure Dollars

Schedule: Revenue Service - June 2023



Map of East Link Extension Alignment.

Key Project Activities

Seattle to South Bellevue

- International District Station & Mt. Baker Tunnel: Review and verification of structure as-builts; ongoing site setup, including clearing and temporary facilities.
- Floating Bridge Retrofit: Post Tensioning Reaction Frame fabrication & delivery; pontoon wall coring for post tensioning ducts; deck barrier demo and retrofit; ongoing electrical power modifications.
- Mercer Island: Ongoing utility work and sound wall construction in the Mercer Island Station vicinity; installation of overhead catenary line foundations.

South Bellevue to Redmond

- *E320 South Bellevue:* Excavated and installed wall tie-backs. Formed, installed rebars and placed concrete for shaft columns and bent caps. Installed underground raceway and conduit for WSDOT roadway lighting. Began sheet pile installation, and joint utility trench work and tie-ins of utility vaults.
- *E330 Downtown Bellevue Tunnel:* Tunneling advances to about 830 linear feet without spiles due to favorable ground conditions; Working with Skyline building management and contractor to address voids behind and water intrusion through the east basement walls. Grouting of voids to begin once Right of Entry acquired.
- *E335 Downtown Bellevue to Spring Dist.:* Completed City Hall Garage driveway widening at 110th Ave NE and oversize vehicle parking, and 112th driveway. Commenced a nine month full closure of 110th Ave NE for the North Portal work. Continuation of tying the rebar cages for drilled shafts. Continued abatement activities within the Carriage Hill condominiums in preparation for demolition next period.
- *E340 Bel-Red:* Coordinating with 3rd party utilities for temporary aerial and pot holing along the alignment. Installation of the storm drain along 136th has begun. Commencing with column transition pours.
- *E360 SR520 to Redmond Technology Center:* Continued concrete placement on the infiltration vault at Overlake Village Station site. Installed temporary eco-block retaining wall for access road to Sweeper Site. Completion of demolition work at the current Overlake Transit Center site.

Closely Monitored Issues

- Completing remaining property acquisitions.
- Timely submissions and issuance of construction permits. The Mercer Island permit was issued as of this writing.
- E330 Downtown Bellevue Tunnel production rate rates improve but monitoring continues.
- Construction safety and environmental compliance.
- E340 Unidentified commercial utility connections within roadways and private properties has been challenging.

Project Cost Summary

The East Link project cost is summarized below in two cost categories. In the first table, the cost is summarized in accordance with Sound Transit's Work Breakdown Structure (WBS). The second table summarizes the project in accordance with the FTA's Standard Cost Category (SCC) format. The Estimated Final Cost (EFC) continues to be projected at approximately \$3.68B. This period's expenditure is about \$54.0M, increasing the total project cost from \$901.8M to \$955.8M. This period's project commitments increased approximately \$13M from \$2.795B to \$2.808B primarily driven by a resolution of real estate acquisitions and anticipated construction change orders.

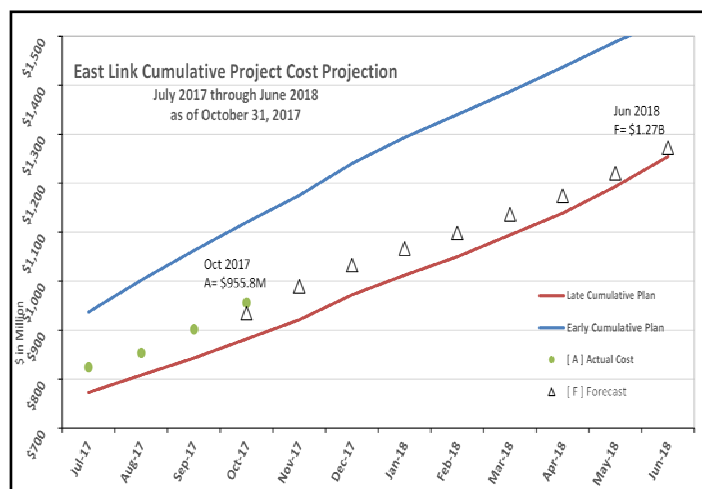
Cost Summary by Phase

Project Phase	Baseline Budget	Current Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Current Budget vs. EFC
Administration	186.2	186.2	63.4	\$62.7	186.2	\$0.0
Preliminary Engineering	55.9	55.9	54.8	\$54.7	55.9	\$0.0
Final Design	283.0	283.0	244.3	\$197.4	283.0	\$0.0
Construction Services	257.5	257.5	196.8	\$40.1	257.5	\$0.0
3rd Party Agreements	52.2	52.2	36.0	\$13.8	52.1	\$0.0
Construction	2,544.3	2,544.3	1,958.9	\$335.5	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	254.5	\$251.6	298.2	\$0.0
Total	3,677.2	3,677.2	2,808.7	\$955.8	3,677.2	\$0

Cost Summary by SCC

SCC Element	Baseline Budget	Current Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Current Budget vs. EFC
10 Guideway & Track	\$744.6	\$747.6	\$880.3	\$156.3	964.9	(\$217.4)
20 Stations	\$397.7	\$397.7	\$262.8	\$51.4	432.3	(\$34.6)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$806.0	\$450.4	\$106.7	589.8	\$216.2
50 Systems	\$353.8	\$353.8	\$344.1	\$15.7	328.4	\$25.4
Construction Subtotal (10 - 50)	\$2,304.6	\$2,305.1	\$1,937.6	\$330.1	2,315.5	(\$10.4)
60 Row, Land	\$288.5	\$288.5	\$254.5	\$251.6	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	\$899.7	\$616.6	\$374.1	889.1	\$10.6
90 Unallocated Contingency	\$182.9	\$181.0	\$0.0	\$0.0	181.2	(\$0.2)
Total (10 - 90)	\$3,677.2	\$3,677.2	\$2,808.7	\$955.8	3,677.2	(\$0.0)

The East Link (EL) cost projection continues to progress back to within the planned expenditure as construction activities continue to accelerate. This period's project expenditure topped out at approximately \$54.0M where Construction Phase is responsible for over 59% or \$32M of October's cost. ROW costs were for about 30% or approximately \$16M. Total project cost incurred to date is now about \$955.8M to which about \$335.5M recorded in the Construction Phase. The June 2018 lifetime project cost is predicted to be around \$1.3B reflecting continued active construction through winter and spring.



Risk and Contingency Management

Risk Management

The RCMP established 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. Sound Transit (ST) continuously monitors 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. This period, ST commenced the quarterly risks update for each of the major contract package. ST included participation of construction management consultants and construction contractors in its risks management program.

Contingency Status

East Link project budget was baselined on April 2015 with a total contingency of \$795.9M. At the end of October 2017, excepting the E335 Stations, all major construction contracts have been procured, the total contingency balance stands at \$473.0M (previously \$472.5M). The current contingency balance is consistent with the project's planned contingency drawdown.

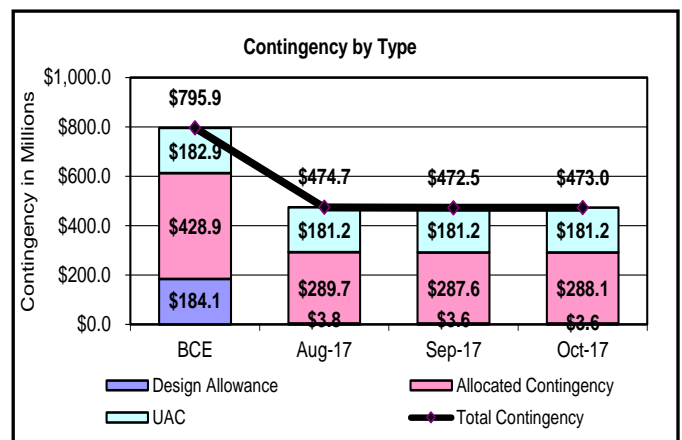
Design Allowance (DA) was established to account for unquantified scope at the time of the cost estimate. There is no change to the DA balance at \$3.6M in this period. DA balance is expected to be fully drawn when all construction scope are executed.

Allocated Contingency (AC) is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement. This period, AC increased by \$0.5M from \$287.6M to \$288.1M. This net increase is due to a reallocation from future commitment to establish a contract contingency within Final Design phase.

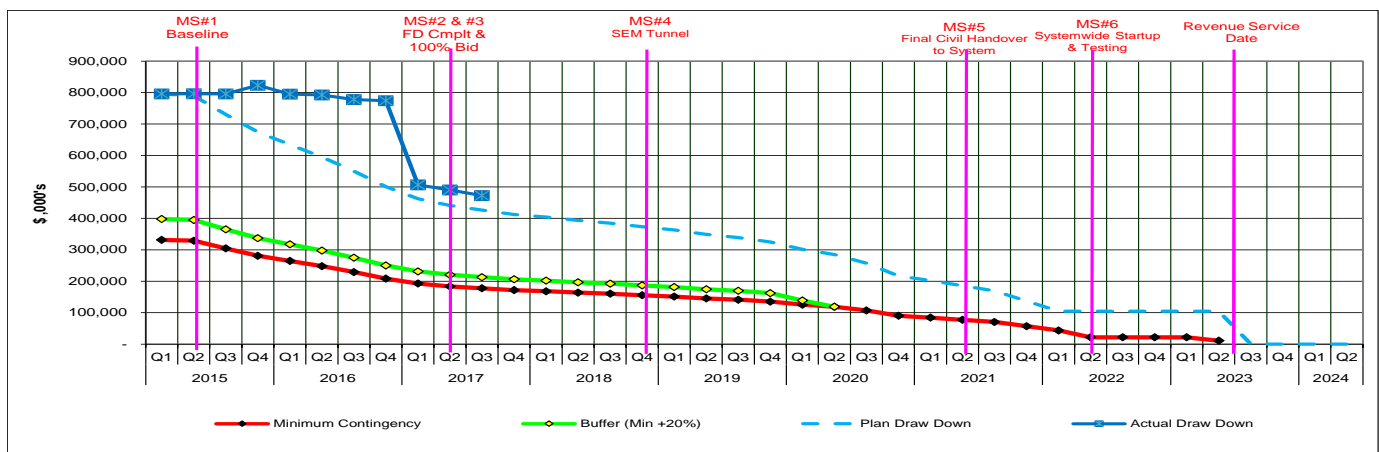
Unallocated Contingency (UAC) is used to address general project-wide cost risks and uncertainties. The UAC balance of \$181.2M continues to be stable compared to the initial balance of \$182.9M at Baseline Cost Estimate (BCE).

Contingency Status	BCE		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$3.6	0.1%
Allocated Contingency	\$428.9	11.7%	\$288.1	10.6%
Unallocated Contingency	\$182.9	5.0%	\$181.2	6.7%
Total:	\$795.9	21.6%	\$473.0	17.4%

Dollar figures on this page are displayed in millions.



Contingency Drawdown (Quarter Ending 10/31/2017)



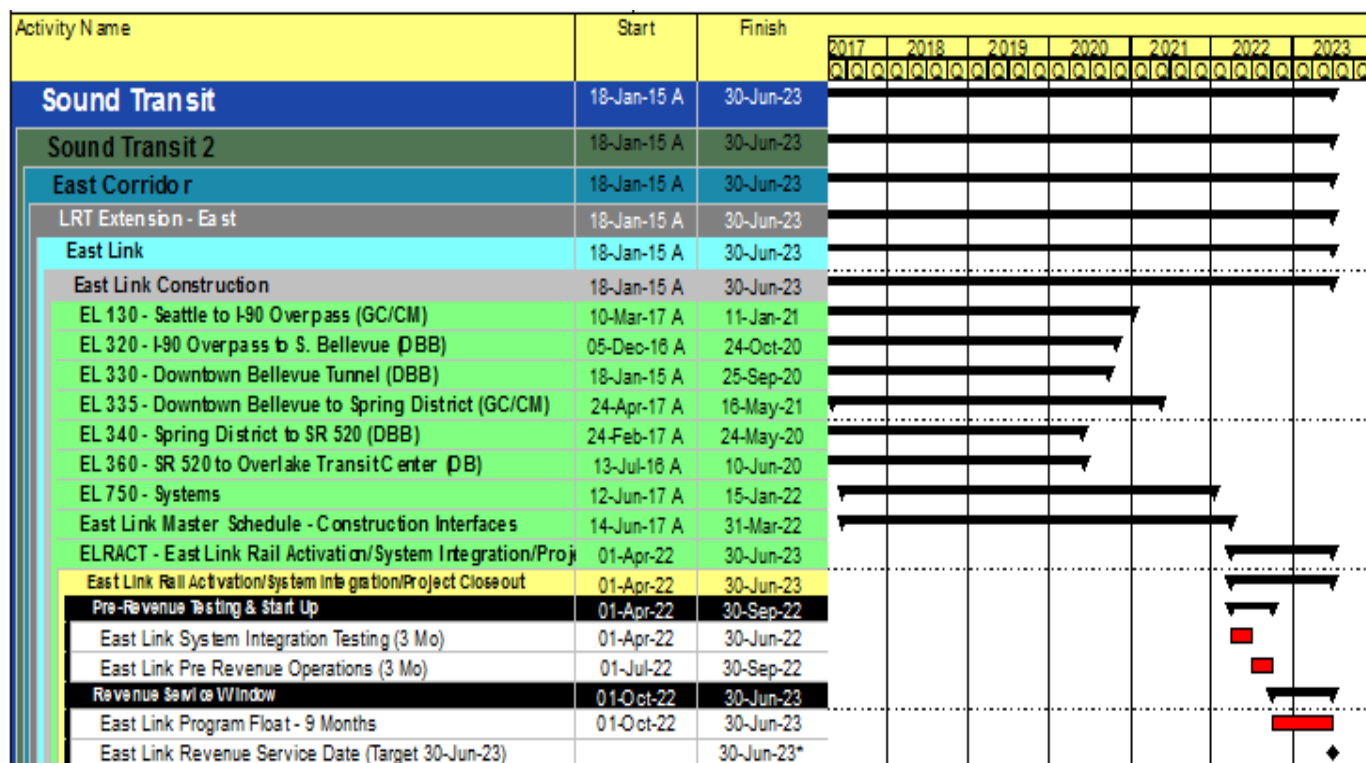
Project Schedule

Baseline schedules have been approved for all contracts and current updates have been incorporated into the Integrated Master Schedule below.

E130 loaded all reaction frame steel into Pontoon E and ballasted Pontoon P prior certain work activities on the floating bridge for the winter. All reaction frames for Pontoon P were fabricated and delivered to the site. Sitework continued for Mercer Island Station. E320 continued drilling shafts for the aerial guideway, relocating utilities, and began excavation for the parking garage. E330 continues tunneling. E335 continued demo and sitework and began drilling shafts for the aerial guideway and started installing piles for 120th St. Station. E340 continues relocating utilities and drilling shafts. E360 continued drilling shafts for the aerial guideway and pouring decks and walls for OVS. E750 Systems contractor continued product and component designs. They will complete this phase of work within the next two years and will begin construction in Northgate Link before commencing on East Link. Systems construction in East Link is anticipated to start on the eastern segment of E130 in Summer of 2019.

This period's schedule graphic excluded October updates for E320 or E340. These two schedules updates were rejected due to non-compliance with ST specifications. Contract scope continues on each project and updated schedules are anticipated by the November 2017 cycle.

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



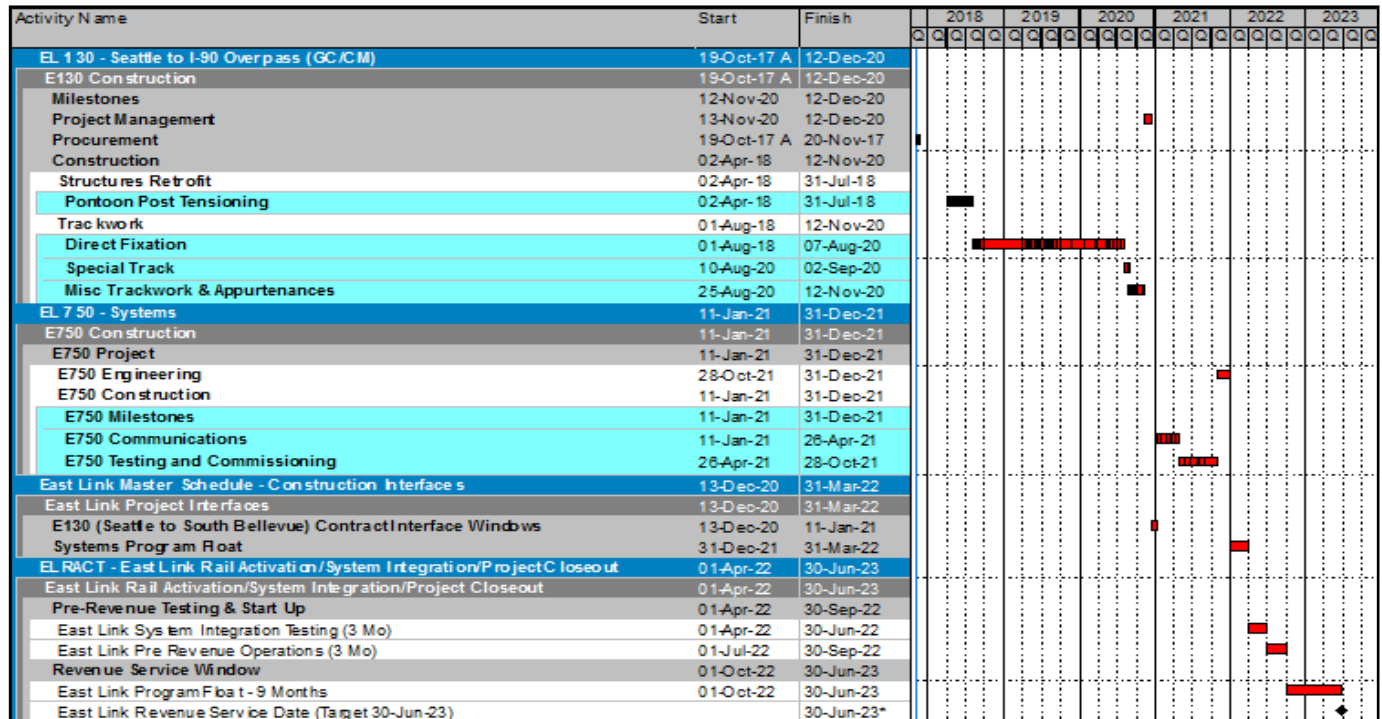
Link Light Rail

East Link Extension



Critical Path Analysis

The East Link critical path is currently running through the handover of the I-90 corridor from the E130 Contractor to the E750 Systems Contractor. The critical path for E130 is driven by the pontoon post-tensioning which accounts for the restricted work seasons on the floating bridge.



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 result in owner and tenant residential and commercial relocations. Market value trends in both residential and commercial properties are exhibiting strong upward pressure. The overall impact on the Right-of-Way (ROW) budget is being closely monitored. Efforts are also underway to prioritize acquisitions by contract package to help ensure timely availability of property. Property acquisition is recognized as a high priority and the management team has formed an ad hoc ROW team consisting of internally involved departments to prioritize and manage the process. See right-of-way program status in the table below.

Several of the remaining properties needed for construction are City of Bellevue properties committed in the Memorandum of Understanding. The ST/City of Bellevue Steering Committee consisting of senior staff are collaborating to ensure timely transfer of these property rights consistent with the project schedule and priorities.

East Link Extension Property Acquisition Status								
Line Section	Board Approved	Offers Made/In Negotiations	Signed Agreements	Possession and Use	Admin Settlement	Closings to date	Relocations Required	Parcels Vacated
Total	244*	236	2	18	2	196	244	203

Note: Excluded from the table above are 9 parcels that were approved under a separate ST Board authorized agreement. These parcels are tracked in a working file and will be added to the table above in future reports. *Two City of Seattle parcels were added; did not need Board approval.

Right of Way, continued

E130 Seattle to South Bellevue - No new activity.

E320 South Bellevue - No new activity.

E330 Downtown Bellevue - No new activity.

E335 Downtown Bellevue to Spring District - Two parcels moved from Possession & Use (P&U) to closed.

E340 Bel-Red - Six parcel moved from P&U to closed.

E360 SR 520 to Redmond Technology Center - Two offers made for City of Bellevue parcels.

Construction Safety

Data/ Measure	October 2017	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	11	11
Days Away From Work Cases	0	1	1
Total Days Away From Work	0	2	2
Restricted or Modified Work Cases	1	7	7
Total Days Restricted or Modified Work	2	23	23
First Aid Cases	2	23	27
Reported Near Mishaps	18	58	71
Average Number of Employees on Worksite	777	-	-
Total # of Hours (GC & Subs)	109,480	478,539	51,4376
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	1.83	4.60	4.28
DART (Days Away, Restricted or Modified) Rate	1.83	3.34	3.11
<i>Recordable National Average</i>	3.50	3.50	3.50
<i>DART National Average</i>	2.00	2.00	2.00
<i>Recordable WA State Average</i>	7.00	7.00	7.00
<i>DART WA State Average</i>	3.90	3.90	3.90

Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

Environmental

- Continued developing environmental permit application packages. Environmental commitments are incorporated into the design, program, and specifications of the project.
- Coordinating with East Link project team to ensure environmental compliance with an emphasis on establishing and maintaining appropriate Best Management Practices (BMPs) in advance of construction activities.
- Participating in weekly environmental compliance walks in support of overall Construction Management effort.

Community Outreach

- Continued coordination with City of Mercer Island regarding lane and ramp closures.
- Various construction alerts were sent regarding weekly traffic impacts, start of north tunnel portal construction, night work at I-90, tree removal, etc.
- Held at plant salvage of Winter House plants and approx. 20 people attended.
- Attended Bellevue Mingle (Bellevue Downtown Association event) and shared information about downtown construction to around 100 attendees.
- Responded to questions of various individuals/businesses regarding construction in their neighborhood.
- Participated WSDOT/ST I-90 winter weather discussions.
- Coordinated the implementation of a jumper system with City of Bellevue Utilities to avoid disruption to the City Center building's water system.



Lowering anchor supports through hatch in Pontoon E at I-90.

Major East Link Construction Contract Packages

Below are the major construction contract packages for the East Link Extension with a brief scope description and status of each.

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

Status: Completed.

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: Contractor continues site and staging preparations including grading work and demolition works on I-90 as well as drainage and trenching and duct bank works near Bellevue Way SE.

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

Status: See following pages under 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 and reviews of plans.

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

Current Progress

- *D2 Structure & Mt. Baker Tunnel*: Review and verification of structure as-builts; ongoing site setup, including clearing and temporary facilities.
- *Floating Bridge Retrofit*: Post Tensioning Reaction Frame fabrication & delivery; pontoon wall coring for post tensioning ducts; deck barrier demo and retrofit; ongoing electrical power modifications.
- *Mercer Island*: Ongoing utility work and sound wall construction in the Mercer Island Station vicinity; installation of overhead catenary line foundations.

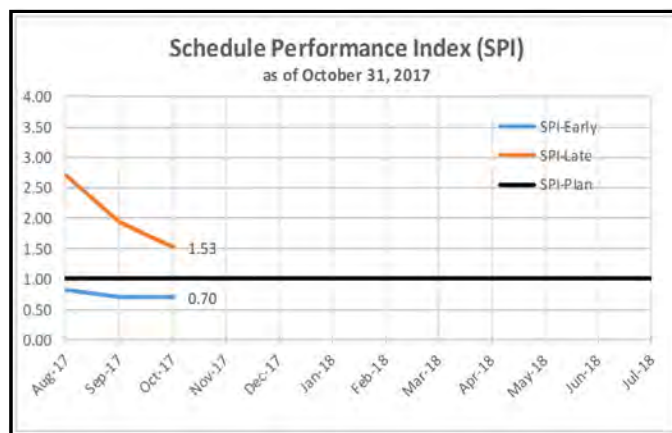
Schedule Summary

The primary critical path for this project goes through the Post-tensioning Retrofit work, constrained by the WSDOT-imposed work window; work activities are limited on the floating bridge from October 1, 2017 through March 31, 2018. Conditional approval to extend work beyond the October 1st date was granted, but limited by WSDOT to one weekend. Work in October included Pontoon Anchor Frame fabrication, delivery, and pre-staging; ITS and electrical relocation work; layout of post-tensioning deviator and anchor blocks; and, layout and coring of interior pontoon walls.

Activity Name	Start	Finish	2018					2019				2020				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
E130 Construction	20-Mar-17 A	11-Jan-21														
Milestones	17-May-19	11-Jan-21														
Major Project Complete Milestones	17-May-19	11-Jan-21														
16. MS#02 - Substantial Completion Mercer Island Sta to West Mercer Island Lid (29-Jan-20)		17-May-19*														
16. MS#01 - Substantial Completion Mercer Island Station to East End Of Project (17-Jul-19)		17-Jul-19*														
16. MS#03 - Substantial Completion of IDS Conversion (27-Feb-20)		23-Feb-20*														
16. ST E130 Work Complete		12-Nov-20														
16. MS#04 - Substantial Completion All Work (12-Dec-20)		12-Dec-20*														
16. Acceptance		11-Jan-21														
Construction	20-Mar-17 A	12-Nov-20														
Preliminary Activities	03-Apr-17 A	25-Jun-20														
Sitework	23-Aug-17 A	28-Oct-18														
Demolition	20-Jul-17 A	21-Dec-18														
Tunnel Modifications	18-Sep-17 A	14-Jun-19														
Stations	15-Sep-17 A	09-Sep-20														
OCSS Bases/Frames	03-Nov-17	22-Jan-20														
Civil/Utilities	05-Jul-17 A	19-Jun-20														
Electrical	20-Mar-17 A	18-Aug-20														
Structures Retrofit	20-Mar-17 A	10-Nov-20														
Trackwork	02-Apr-18	12-Nov-20														
Systems	28-Jun-17 A	02-Nov-20														
IDS Modification	18-Sep-17	23-Feb-20														

Schedule Performance Index

This period, the SPI early is 0.65, SPI late is 1.52. The early index indicates that the Contractor is behind their early finish plans; meanwhile, the late index shows that the Contractor is on target with their late finish plan. These figures support the fact that the Contractor has encountered challenges in the initial phases of the post-tensioning scope. Constrained by WSDOT's weather-dependent work window, half of the reaction frames needed were loaded into the floating bridge pontoons to complete installation during winter months. The other half will be loaded and installed in Spring 2018.



Link Light Rail East Link Extension - Construction

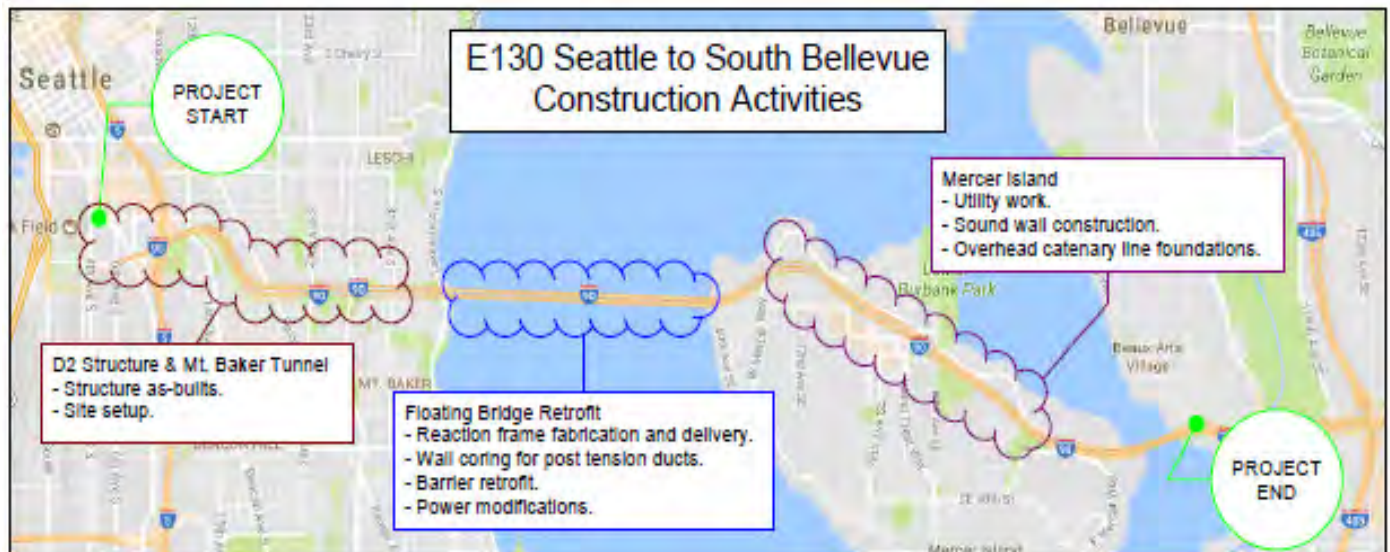
Next Period's Activities

- *East Side:* Continue layout of deviator blocks in east approach structure for post-tensioning (PT) and begin X-Ray/GPR scanning.
- *HMH Floating Bridge:* Continue anchor frame steel fabrication and shop assembly; continue layout and coring of pontoon interior walls; continue scanning and drilling of crossbeams at West elevated structure in preparation for restrainer bearing replacement.
- *West Side:* Continue installing temporary lighting in Mt. Baker Tunnel; begin ground anchor installation at Pier 2 West Approach; continue ITS survey and electrical demo work near Judkins Park Station.

Closely Monitored Issues

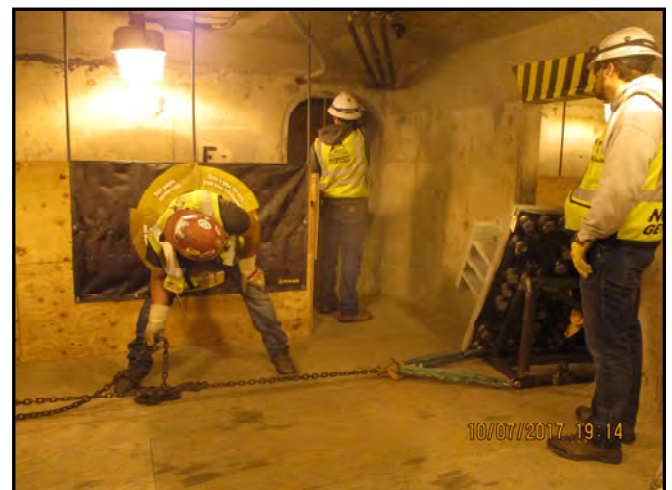
- Half of the PT anchor reaction frames were not loaded into pontoons. The Contractor anticipates loading the remaining anchor reaction frames in Spring of 2018. Working to minimize impacts to Summer 2018 work that is dependent upon the completion of this post tensioning scope.

E130 Construction Activities



Cost Summary

Present Financial Status	Amount
E130 Contractor - Kiewit-Hoffman, East Link Constructors	
Original Contract Value (includes Phase 2 MACC Negotiated)	\$665,000,000
Change Order Value:	\$500,000
Current Contract Value:	\$665,500,000
Total Actuals to Date:	\$77,069,038
Financial Percent Complete:	11.73%
Physical Percent Complete:	11.83%
Authorized Contingency:	\$46,660,541
Contingency Drawdown:	\$500,000
Contingency Index:	10.9



Dragging reaction frame anchor through first doorway

Contract E330 – Downtown Bellevue Tunnel

Current Progress

South Portal: The Contractor continued tunneling throughout October and excavation progressed approximately 146 feet this period, which is approximately 830 total feet of excavation to date. Good ground conditions being encountered decreases the need for ground spiles and has helped maintain the increased excavation rate at or around the 5ft/day mark compared to the base assumption of 3.3ft/day. Hauling of spoils offsite continues.

North Portal: Monitoring the strain gages in the Skyline garage wall and the piezometers in the immediate area in preparation of the grouting program. Grouting of voids to be performed once the building permit is acquired and a Right of Entry (ROE) is approved by the Skyline building management.

Between Portals: Continued to install and repair utility monitoring points along tunnel alignment.

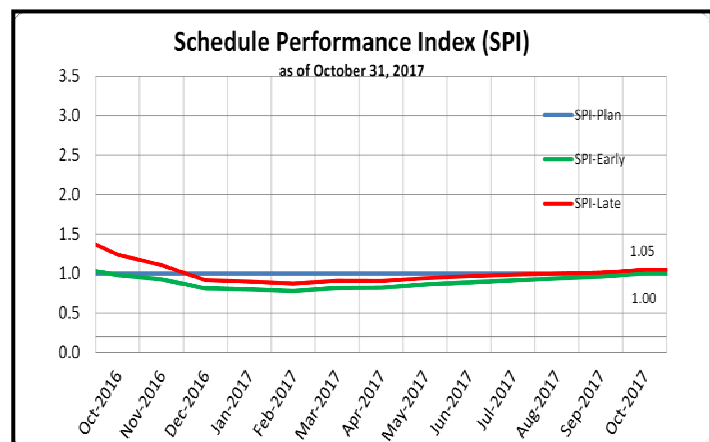
Schedule Summary

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. Overall tunnel production has reached 3.73 LF/Day. The contractor is now forecast to finish excavating in January 2019 and to achieve Substantial Completion on time.

Activity Name	Start	Finish	2018				2019				2020		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
E330 Construction	15-Dec-15 A	27-Aug-20											
CONSTRUCTION	15-Dec-15 A	27-Aug-20											
MILESTONES CONSTRUCTION EASEMENTS	15-Dec-15 A	20-May-20											
MILESTONES	15-Dec-15 A	20-May-20											
CALCULATED MILESTONES	15-Dec-15 A	20-May-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-18 A											
MLST 2 - Acceptance of CO#006 Work		14-Oct-18 A											
MLST 3 - Substantial Completion of all Work from Station EB 542+84.52 to Station EB 562		24-Jan-20											
MLST 4 - Substantial Completion Total Contract		20-May-20											
MOBILIZATION	08-Feb-16 A	25-Jan-19											
SITEWORK	29-Feb-16 A	27-Aug-20											
PRECONSTRUCTION	21-Mar-16 A	27-Aug-20											
TRAFFIC CONTROL	25-Mar-16 A	03-Dec-19											
SURVEY & MONITORING	29-Feb-16 A	12-Apr-18											
NORTH PORTAL AREA	13-Jun-16 A	14-Oct-18 A											
SOUTH PORTAL AREA	08-Feb-17 A	08-Apr-17 A											
SKYLINE BUILDING RETROFIT	29-Feb-16 A	20-May-20											
TUNNELING	01-Feb-17 A	31-Dec-19											
EXCAVATION	01-Feb-17 A	31-Dec-19											
FINAL TUNNEL LINING	27-Dec-18	26-Sep-19											
FINAL TUNNEL FINISHES	17-Apr-19	30-Dec-19											
MID TUNNEL	09-Mar-18	08-May-19											
DEMOBE	13-Mar-17 A	07-May-20											

Schedule Performance Index

This period, the SPI early is at 1.0 and the SPI late is at 1.05. The Early Index indicates that the Contractor is currently performing on plan when compared to the baseline schedule. The recent trend continues moving in the positive direction as shown with the SPI late index now hovering above the 1.0 mark with regards to tunnel excavation progress. The Contractor is anticipated to continue to improve progress in the near future with the improved ground conditions being encountered.



Link Light Rail East Link Extension - Construction



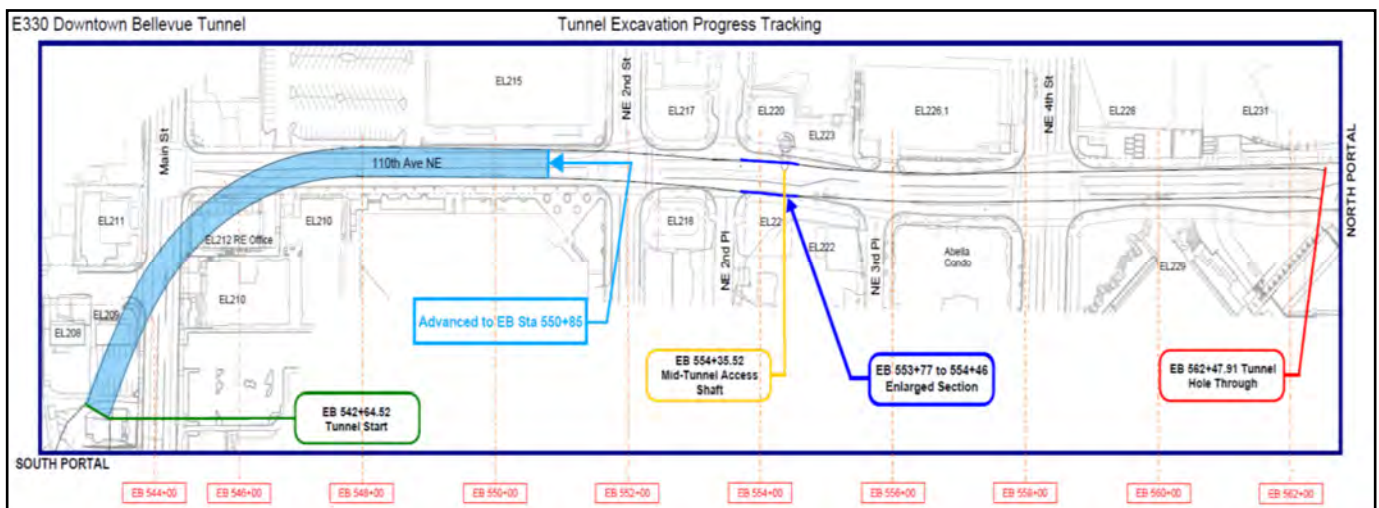
Next Period's Activities

- Continue tunnel excavation and extend ventilation lines.
- Working with Skyline building management and contractor to address voids behind and water intrusion through the East basement walls. Grouting of voids to begin once Right of Entry acquired.

Closely Monitored Issues

- Working with Skyline building management and the contractor to begin grouting voids behind Skyline basement lagging and execute Right Of Entry (ROE) to perform work. Grouting of the Skyline wall draft proposal under review.
- Sound Transit accepted the Contractor's revised SEM tunnel dewatering design recommendations and plan that foregoes surface dewatering in lieu of dewatering only from inside the tunnel but should the Contractor encounter water in the tunnel that could be reasonably removed using surface dewatering, the Contractor is responsible for the cost and time impact to the work.

E330 Tunnel Excavation Progress Tracking



As of Oct. 31, 2017

Cost Summary

Present Financial Status	Amount
E330 Contractor– Guy F Atkinson Construction, LLC.	
Original Contract Value	\$121,446,551
Change Order Value	\$2,178,741
Current Contract Value	\$123,625,292
Total Actual Cost (Incurred to date)	\$52,949,736
Financial Percent Complete:	42.1%
Physical Percent Complete:	43%
Authorized Contingency	\$12,144,655
Contingency Drawdown	\$2,178,741
Contingency Index	2.4



Probe drilling at tunnel top heading in the Downtown Bellevue Tunnel.

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

Current Progress

Area 1 – South Portal/East Main Station: Continued abatement activities within the Carriage Hill condominiums in preparation for demolition next period.

Area 3 – North Portal/City Garage/Bellevue Transit Center (BTC) Station: Completed City Hall Garage driveway widening at 110th Ave NE and oversize vehicle parking, and 112th driveway. Commenced a 9-month full closure of 110th Ave NE for the North Portal work. Utility line revisions were completed and excavation and lagging installation is to begin next month. Continued with formwork and rebar cage fabrication for drilled shafts, and continued with demolition of the City Hall Plaza.

Area 5 – Pine Forest Wall construction & Earthwork: Continued with excavation and installation of soldier pile wall.

Area 6 – 120th-124th Trench/Station: Continued trenching excavation for the 120th Station site.

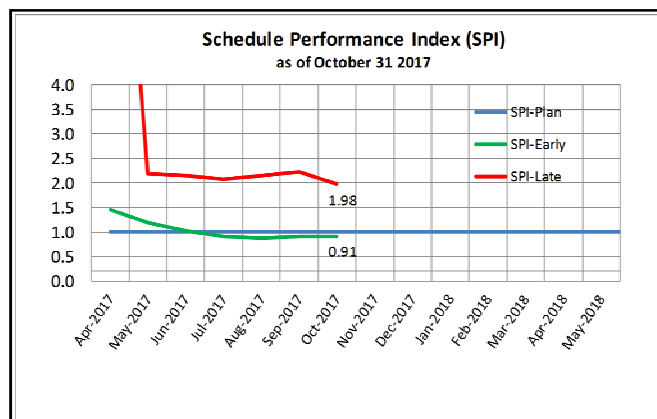
Schedule Summary

There are two primary critical paths for this project—one goes through the North Portal and BTC station work in Area 3, and the other follows access to the SEM tunnel in Area 2 and goes through the South Portal and the South Portal Electrical Building. Work in October included continuing demolition of existing properties, drilling shafts, advanced utility work, and pilings for the 120th Station.

Activity Name	Start	Finish	2018	2019	2020	2021
			Q4	Q1	Q2	Q3
E335 Construction	24-Apr-17	18-May-21				
Milestones	26-Jul-18	18-May-21				
Contract Milestones	26-Jul-18	18-May-21				
E335 Achieves Milestone #1		26-Jul-18				
Milestone #1 - C complete North Portal Headwall Temporary Shoring		30-Sep-18*				
E335 Achieves Milestone #2		13-Jan-20				
Milestone #2 - C complete SDT's for Interface to SCADA		14-Jan-20*				
Milestone #3 - C complete Trackway and Stations for Primary Systems Access - BTC to EOF		13-May-20*				
E335 Achieves Milestone #3		14-May-20				
Milestone #4 - C complete SEM Tunnel Trackwork for Primary Systems Access		16-Jan-21*				
E335 Achieves Milestone #4		16-Jan-21				
E335 Achieves Milestone #5		14-Mar-21				
Milestone #5 - C complete All Trackway and Stations for Primary Systems Access		16-Mar-21*				
Milestone #6 - Substantial Completion of all Work		16-May-21*				
E335 Achieves Milestone #6		16-May-21				
Construction	24-Apr-17	18-Apr-21				
Area 1: E. Main Station to South Portal (531+55 - 538+00)	11-Oct-17	18-Apr-21				
Area 2: South Portal to SEM Tunnel (538+00 - 562+47.91)	16-Mar-18	30-Mar-21				
Area 3: North Portal to Aerial Guideway (562+50 - 568+45)	24-Apr-17	30-Mar-21				
Area 4: Aerial Guideway (568+45 - 606+59)	24-Apr-17	30-Mar-21				
Area 5: Pine Forest to 120th (606+59 - 619+00)	07-Jul-17	30-Mar-21				
Area 6: 120th - End of Project (619+00 - 634+99)	01-Aug-17	24-Apr-20				
Testing and Commissioning	07-Jan-20	18-Dec-20				

Schedule Performance Index

This period, the early SPI is at 0.91 and the late SPI is at 1.98. The numbers indicate that the Contractor is behind the early finish when compared to the baseline plan. The Contractor continues to lag behind due to drilled shaft foundations, utilities, and self-performed building work. Specifically, installation of drilled shafts continue to lag which consequentially delays installation of the aerial guideway, as it follows after the shaft foundation work. The detention vault near the Bellevue Downtown Station was planned to be completed in October, but was pushed to November.



Link Light Rail East Link Extension - Construction



Next Period's Activities

- Continue tree protection, tree removal, TESC activities, and clearing and grubbing activities throughout alignment.
- Continued temporary CMU wall construction at the City Hall Garage.
- Continue formwork and rebar cage fabrication for drilled shaft installations.
- Continue with demolition work at Carriage Hills condominium buildings.
- Complete asphalt demolition and commence excavation and lagging installation for north portal.

Closely Monitored Issues

- Work continues on the City of Bellevue Zone 1B Project. This project continues to require access to the ground surface area. Coordination by the GC/CM with the City's contractor is actively underway, and although minor in nature, prolonged impacts are contributing to inefficiencies in completing work in the area.
- Station bids received to date do not appear to have resulted in the lower bid pricing expected via re-procurement, and may lead to budgetary concerns if bid trends continue. Pricing for schedule critical elements of the 120th Station was solicited to relieve pressure on the schedule. Two remaining bids (Wilburton and East Main) are due in early November.

Cost Summary

Present Financial Status	Amount
E335 Contractor– Stacy & Witbeck/ Atkinson Joint Venture (SWA-JV).	
Original Contract Value*	\$228,398,210
Change Order Value	\$661,380
Current Contract Value	\$229,059,590
Total Actual Cost (Incurred to date)	\$49,314,533
Financial Percent Complete:	21.4%
Physical Percent Complete:	21.4%
Authorized Contingency	\$11,419,911
Contingency Drawdown	\$661,380
Contingency Index	3.7

* Amounts excludes station scope.



Shoring walls at 120th

Contract E340 – Bel-Red

Current Progress

Contractor has poured 4 out of 10 column transition pours, remaining 6 column transition pours to be completed this month. Utility Contractor completed setting of all poles. Work continues on stringing cable and setting detention vaults. Installation of storm drain along 136th Place has begun. Reviews of environmental reports to determine extent and potential costs for contaminated soils and ground water. Removal of the abandoned gas pipeline under the existing roadway has begun.

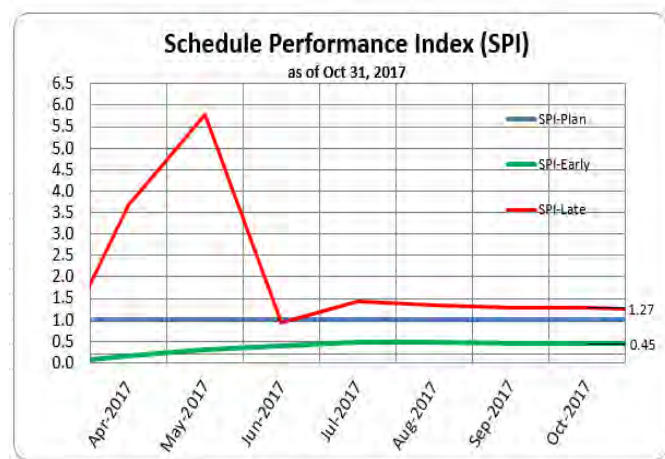
Schedule Summary

The latest schedule is the Contractor's September update. The October schedule submittal was rejected due to non-compliance with ST specification; however, work continues to progress. Work in October included continued utility relocation and drilled shafts for the aerial guideway. The critical path of this project runs through the retaining walls on the west end of the project, followed by trackwork.

Activity Name	Start	Finish	2018					2019					2020
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
E340 Construction	24-Feb-17 A	24-May-20											
CONSTRUCTION	24-Feb-17 A	24-May-20											
~MILESTONES/EASEMENTS~	11-Jul-18	24-May-20											
~~Milestones	11-Jul-18	24-May-20											
Calculated Milestones	11-Jul-18	24-May-20											
MS #3 - Actual Acceptance of Systems Interface Data Table (SDIT)	11-Jul-18	12-Jul-18											
MS #1 - Actual Complete Grading & Stabilization of West Tributary Wetland	29-Aug-18	30-Aug-18											
MS #2 - Actual Substantial Completion of West Tributary Wetland	23-Mar-19	24-Mar-19											
MS #4 - Actual Substantial Completion	23-May-20	24-May-20											
~SUBMITTALS/PRELIMINARY ACTIVITIES~	24-Feb-17 A	21-Dec-18											
~MOBILIZATION~	24-Feb-17 A	13-Dec-19											
~SITEWORK~	04-Apr-17 A	23-Apr-20											
~RETAINING WALLS~	21-Nov-17	18-Dec-19											
~AERIAL STRUCTURES~	15-May-17 A	08-Dec-19											
~STATIONS~	05-Oct-17	06-Nov-19											
~ELECTRICAL/ITS~	24-Oct-17	15-Apr-19											
~FINISHES~	07-May-18	26-Dec-18											
~TRACKWORK~	06-Apr-18	23-Apr-20											
~LANDSCAPING/FLATWORK~	18-Jun-18	27-Mar-20											
~TESTING AND COMMISSIONING~	01-Nov-19	10-Dec-19											

Schedule Performance Index

This period, the early SPI is at 0.44 and the late SPI is at 1.24. The late index indicates that the Contractor continues to be ahead of the contractor's planned late finish work. The early SPI is indexed behind the Contractor's planned early finish schedule. Both early and late indices have remained approximately the same as previous months which is supported by the fact that construction struggles to catch up from the earlier challenges derived from drilled shaft operations and dewatering issues in the summer. The Contractor has also transitioned into the utility relocation phase and is facing new challenges. Management is monitoring closely.



Link Light Rail East Link Extension - Construction



Next Period's Activities

- Complete temporary aerial utilities service connection.
- Finish remaining bridge column transition pours.
- Complete joint ductbank installation on 132nd Ave NE.
- Continue installation of the storm drain along 136th Place.
- Removal of abandoned OPL pipeline .
- Decommission the dewatering wells.

Closely Monitored Issues

- Utility duct bank AL36 work stopped due to changes by 3rd parties in vault depths .
- Utility Coordination (PSE, CenturyLink and Comcast) for temporary aerial system installation.
- Commercial utility connections unknowns being encountered within roadways and private properties.
- Schedule for road closures in coordination with other Sound Transit and City of Bellevue projects.
- Bellevue Projects with a delayed starts have potential to impact construction project schedule.
- Potential contaminated soil and water impacts.

Cost Summary

Present Financial Status	Amount
E340 Contractor– Max J Kuney	
Original Contract Value	\$93,170,012
Change Order Value	\$803,183
Current Contract Value	\$93,973,195
Total Actual Cost (Incurred to date)	\$17,230,163
Financial Percent Complete:	18.3%
Physical Percent Complete:	18.3%
Authorized Contingency	\$9,317,000
Contingency Drawdown	\$803,183
Contingency Index	1.5



Backfilling trench

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

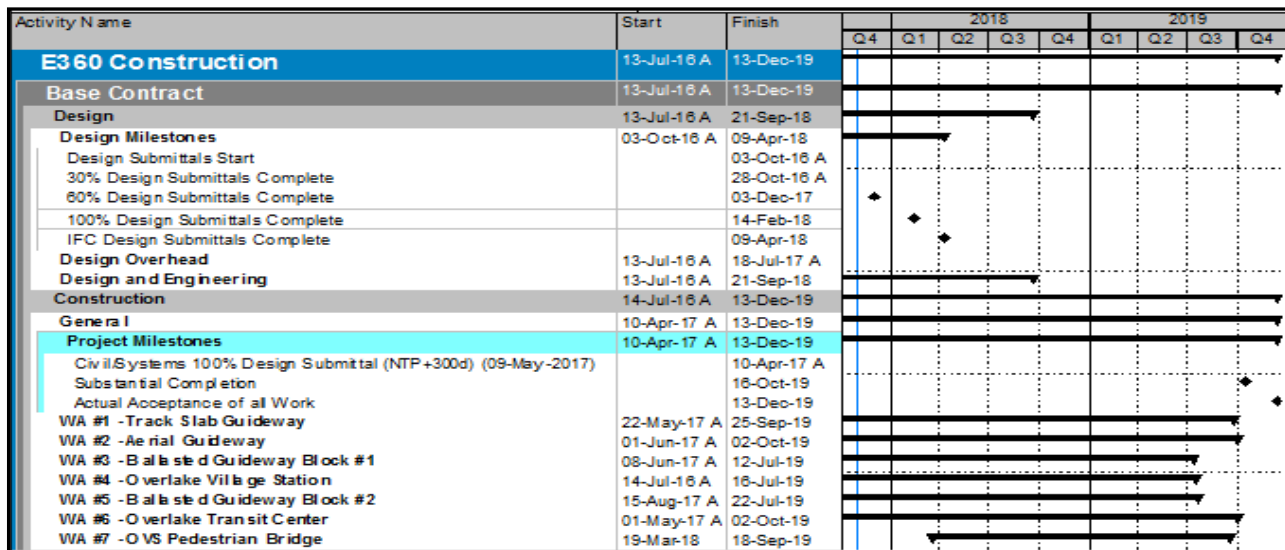
Current Progress

Design: The Design-Build Contractor (Kiewit-Hoffman East Link Constructors, or KH) team submitted Issued For Construction (IFC) sets for Design Packages 6 -Civil Systems and 13 -Facilities OTC Station. Design Packages 8 -Civil/ Systems Integration, 10 -Aerial Guideway Superstructure and 11 -Guideway Retaining Structure IFC documents were returned to KH revised and resubmit. OVS Ped Bridge design have been progressing and IFC package is scheduled to be submitted to ST in January 2018.

Construction: KH has proceeded with starter casing installation for guideway caissons. Park Place vault excavation and construction is underway. Ongoing construction of the Overlake Village Station vault continued through the month with wall completed, precast roof planks and drainage structures being set. Demolition of OTC leased office building completed after private utility work completes. Ongoing site preparation and access continues throughout the alignment.

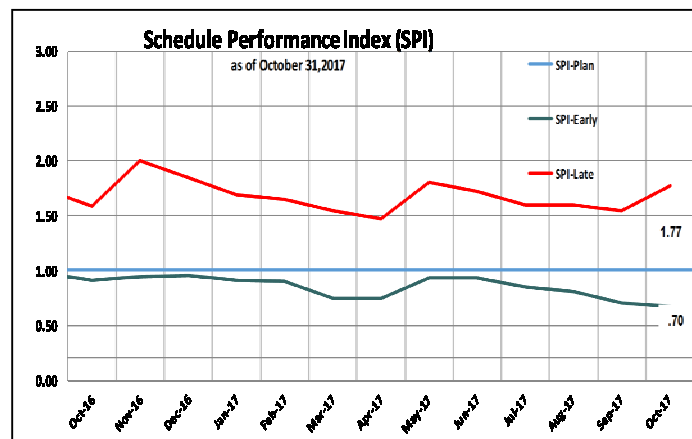
Schedule Summary

The Contractor is approaching 100% on most design packages. Construction continued in October with demolition, drilled shafts for the aerial guideway, and decks and walls at Overlake Village Station. The critical path for this contract runs through the aerial guideway and direct fixation trackwork. The Contractor's current projected completion is two months ahead of Sound Transit's baseline milestone.



Schedule Performance Index

This period, the SPI early is 0.70 and SPI late is 1.77. The SPI Early value continues reflecting slippage of early finishes of baseline planned work. SPI Late Index is still ahead of late finishes on the planned work. The SPIs mixed trend is supported by the fact that design packages have slowed down thus impacting the start of the construction scope. The DB team continues to progress the design to the IFC stage with major structural package and 100% Station packages due in November.



Link Light Rail

East Link Extension - Design– Build



Next Period's Activities

- Civil Systems IFC to be finalized. Aerial Guideway IFC comments addressed and issued. OVS Ped Bridge/Station and OTC Station 100% design ongoing.
- OVS vault construction pour topping slab, drainage mat, drainage structures set and backfill complete.
- DB Contractor will continue casing installation in Work Area 2 (Aerial Guideway).
- Park Place Vault 330 complete and wall construction commencing.
- Continue site preparation and demolition for RTC construction.

Closely Monitored Issues

- *Alternative RTC Ped Bridge* - Contractor and Microsoft are working on 60% designs for an alternative RTC Ped Bridge. Once design, costs and schedule are developed. The revised bridge will be constructed as part of the E360 contract.
- Contractor, Sound Transit and City of Redmond continue to work out permitting issues.
- Continue ongoing discussion with ST and Microsoft about the necessary easement for soil nail walls under Augusta Drive. Easement granted on Oct 30, 2017.
- ST and the Contractor must resolve and negotiate changes related to Sales Tax Increase, Microsoft Temp Offices, Track/Fasteners/Clips, the RTC Temporary Drainage, and the OVS Infiltration Vault base modification.
- Implementation of Safety Certification for mitigating hazards. Development of Safety and Security Certification Plan (SSCP).

Cost Summary

Present Financial Status	Amount
E360 Contractor— Kiewit-Hoffman	
Original Contract Value	\$225,336,088
Change Order Value	\$26,331
Current Contract Value	\$225,851,841
Total Actual Cost (Amount Billed)	\$51,847,665
Financial Percent Complete:	23.0%
Physical Percent Complete:	23.0%
Authorized Contingency	\$23,071,580
Contingency Drawdown	\$556,176
Contingency Index*	2.4



OVS Infiltration Vault CIP Wall Placement

This page left intentionally blank.

Link Light Rail Downtown Redmond Link Extension

Scope

The Downtown Redmond Link Extension builds new light rail from the Redmond Technology Center 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. The current budget for this project through completion of PE is \$28.6M, excluding real estate acquisitions.

Key Project Activities/Issues

- In June 2017, ST Board identified proposed refinements to the alignment and station profile of the project and authorized staff to complete additional environmental review as appropriate.
- ST completed a project delivery method workshop, which resulted in the selection of Design/Build alternative delivery method. Preliminary engineering will be completed through the development of bridging documents and project requirements for subsequent design/build solicitation in 2018.
- Working internally to prepare procurement documents for the project Design/Build Project Management Services Contract. Advertisement of RFQ is anticipated in December 2017.
- Began negotiation with PE consultant to augment the scope of work to support Design/Build procurement and project delivery method.



Map of Downtown Redmond Link Extension.

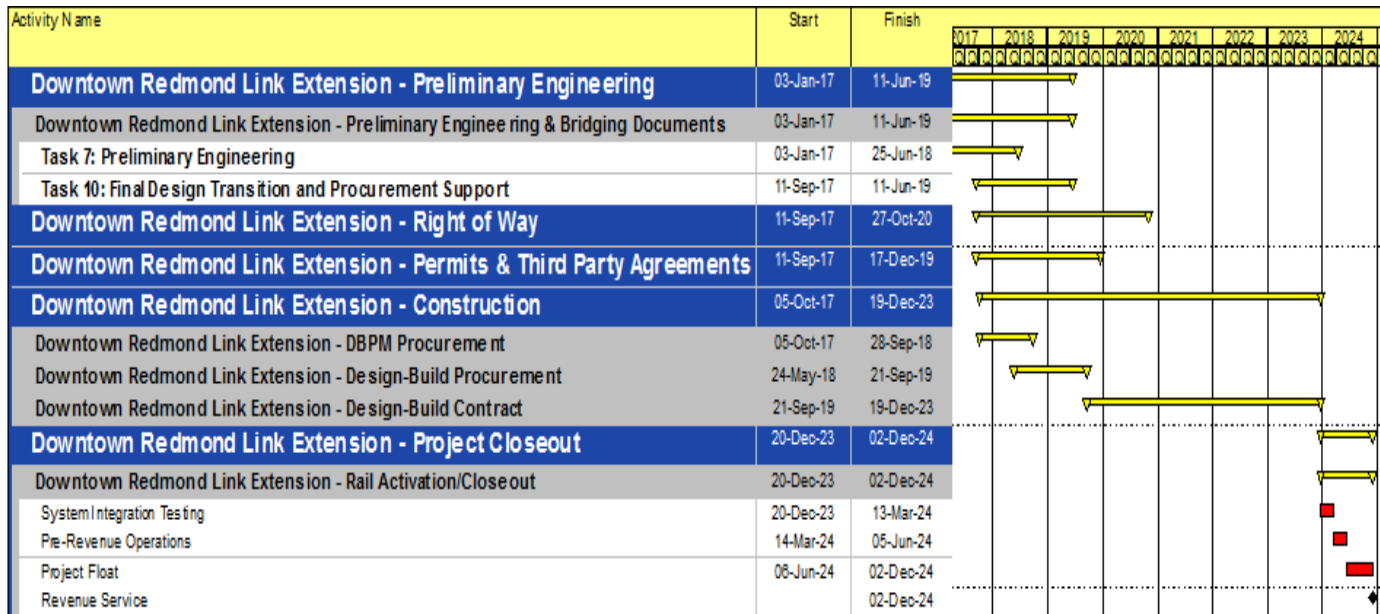
Project Cost Summary

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 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.

Project Phase	Current Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Current Budget versus EFC
Administration	\$5.3	\$1.1	\$1.1	\$5.3	\$0.0
Preliminary Engineering	\$19.8	\$13.3	\$6.3	\$19.8	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$2.5	\$0.3	\$0.1	\$2.5	\$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	\$1.1	\$0.1	\$0.1	\$1.1	\$0.0
Total	\$28.6	\$14.9	\$7.5	\$28.6	\$0.0

Project Schedule

Downtown Redmond Link is currently undergoing Environmental Analysis ahead of the ST Board adopting the project to be built. Preparations are underway to begin early property acquisition in 2018. The project is anticipated to be base-lined in 4th QTR 2018. DB contract RFP is anticipated to be issued in the 4th QTR 2018. The project is currently forecast for completion near the end of 2024. The project schedule is below.



Sound Transit Board Actions

Board motions and resolutions directly related to Downtown Redmond Link Extension is summarized in the table below.

Motion Number	Description	Date
	None this period.	

Community Outreach

- Continued meeting with property owners regarding refinements on the project's route, profile and stations.
- Continued planning outreach activities to gather public input on project requirements.
- Provided notifications about planned closures of 152nd Avenue NE in late October.
- Provided a project briefing at the Meadows Homeowners' Association monthly board meeting and 20 people attended.

Environmental

- None to report.

Link Light Rail West Seattle & Ballard Link Extensions



Scope

The West Seattle segment includes 4.7 miles of light rail from downtown Seattle to West Seattle's Junction neighborhood and also includes five light rail stations. The route will run primarily on elevated guideway with a new rail-only bridge over Duwamish River. Revenue Service by 2030.

The Ballard segment includes 7.1 miles of light rail from downtown Seattle to Ballard's Market Street area and also 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. Revenue Service begins by 2035.

Key Project Activities

- Awarded a contract to HNTB Corporation to provide project development services. Notice to Proceed for Phase 1, Alternatives Development was issued on October 5th, 2017.
- Began mobilization of consultant and agency project staff to the co-located, cross-functional project office, as called for in the System Expansion Implementation Plan (SEIP).
- Finalized the Partnering Agreement with City of Seattle. Seattle City Council and Sound Transit Board are expected to approve the agreement in December 2017.
- Continued to meet with the neighborhood groups and key stakeholders of the projects regularly.



Map of West Seattle & Ballard Link Extensions

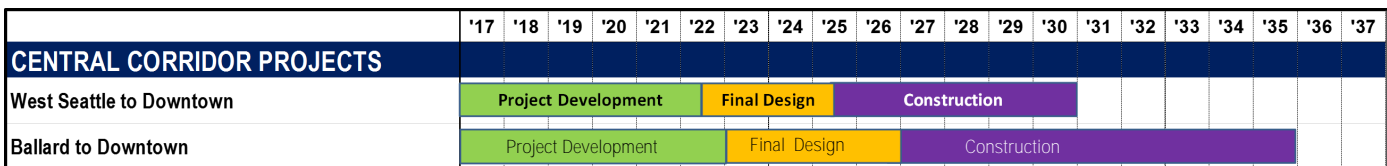
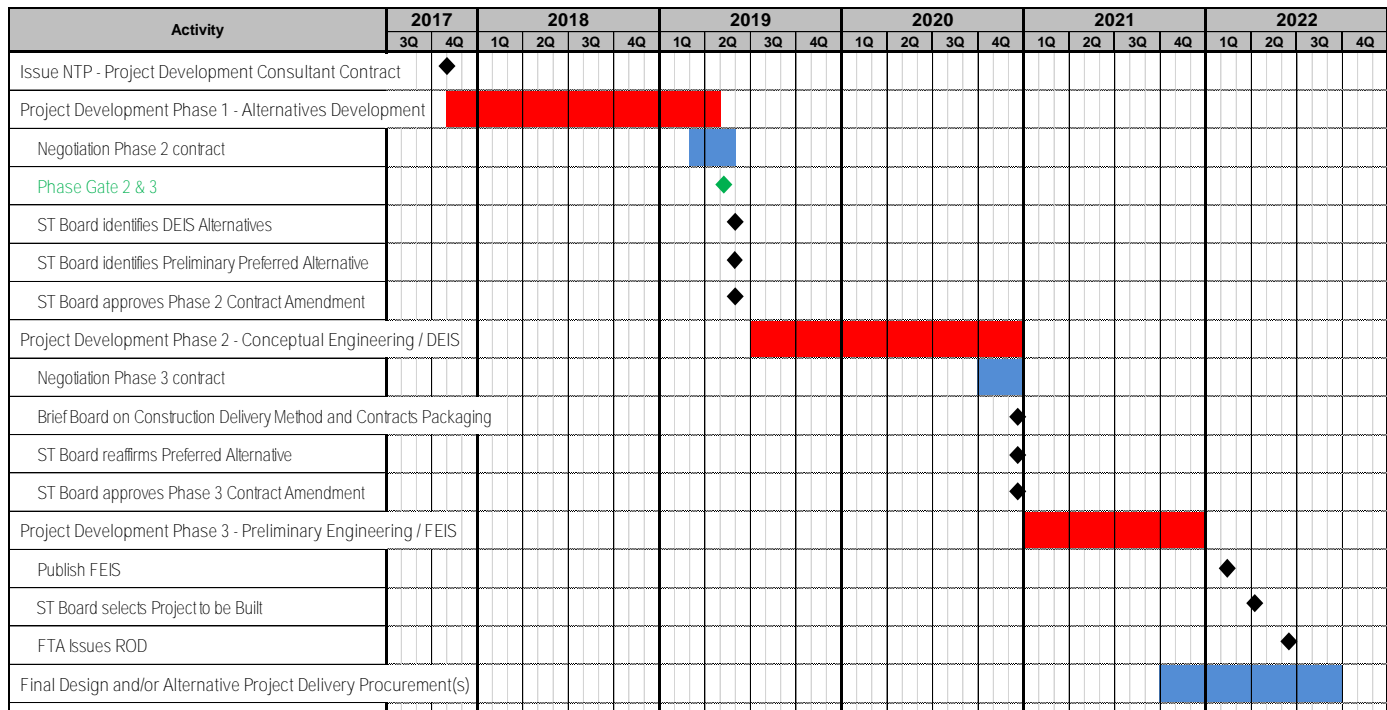
Project Cost Summary

The West Seattle and Ballard Link Extensions are voter-approved projects under the ST3 Plan. The ST Board approved budget allows staff to retain a consultant team to begin 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. Table (below) figures in millions.

Project Phase	Current Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Current Budget versus EFC
Administration	\$63.1	\$0.6	\$0.6	\$63.1	\$0.0
Preliminary Engineering	\$205.4	\$24.4	\$0.2	\$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	\$0.0	\$0.0	\$6.0	\$0.0
Total	\$285.9	\$25.0	\$0.7	\$285.9	\$0.0

Project Schedule

The preliminary project schedule is presented below.



Sound Transit Board Actions

Board motions and resolutions directly related to West Seattle & Ballard Link Extensions are summarized in the table below.

Motion Number	Description	Date
	None this period.	

Community Outreach

The community engagement effort will include the formation of three key stakeholder groups, including an elected leadership group, a stakeholder group and an interagency group. In addition, ST's standard community engagement efforts, including open houses, community meetings, and events, will be conducted as well as one on one coordination with the City of Seattle and other agencies or groups with a key interest in project development. The comments gathered at public sessions will support the decision-making process for the project.

Environmental

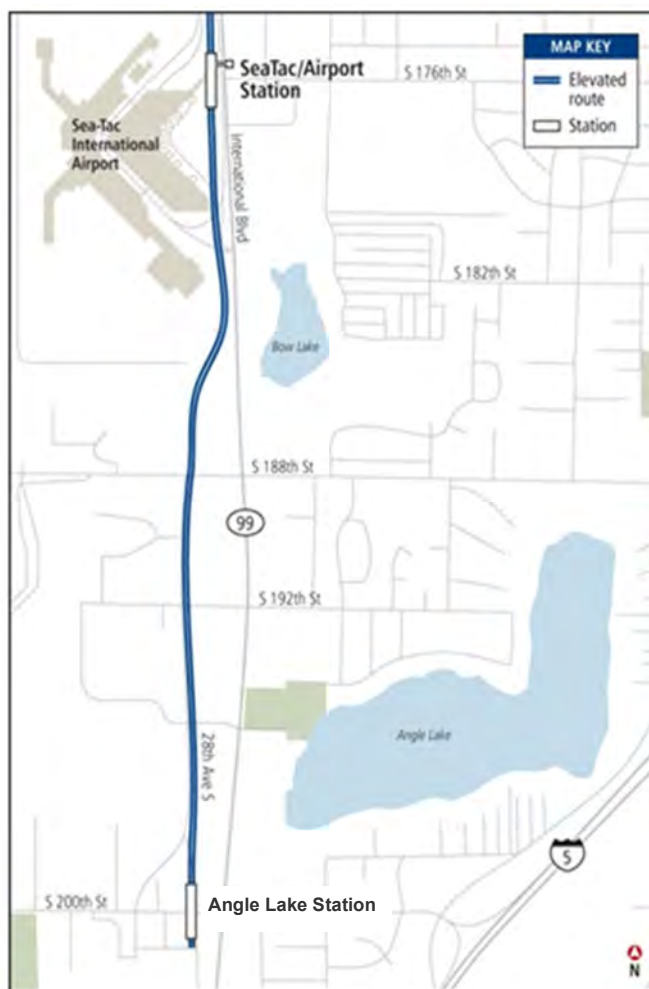
- None to report this period.

Link Light Rail

S. 200th Link Extension

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 700-space structured park and ride facility will be located at Angle Lake Station. Up to 400 additional spaces may be developed for interim parking while Angle Lake Station is the interim southern terminus of the Link system. Guideway/Station and Parking Garage/Plaza are being delivered under a Design Build contract.
- Station:** 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 Guideway and Station (S440):* The project team continued working with the Contractor and Operations to finalize remaining work to achieve Acceptance on the contract.
- *Design Build Parking Garage (S445):* The project team continued working toward achieving Acceptance on the contract.
- *Military Road/South 200th (S446):* WSDOT finalizing closeout activities.
- *Roadway Improvements (S447):* Closeout completed.
- *Project-wide:* Goal to conclude all closeout work by end of 4th Quarter 2017. Follow-on work items also expected to be completed by 4th QTR 2017.

Closely Monitored Issues

- *S440:* Completion of Training, O&M Manuals – corrective actions need to be completed.

Project Cost Summary

The South 200th Link Extension cost is summarized into two cost tables. The current Adopted Budget column reflects the 2016 Adopted Budget. 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.

Cost Summary by Phase

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
Administration	\$16.1	\$17.1	\$16.1	\$16.1	\$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	\$3.8
Construction	\$275.7	\$282.9	\$239.3	\$238.2	\$243.1	\$39.8
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$43.5	\$43.5	\$38.1	\$38.0	\$38.1	\$5.4
Capital Total	\$383.2	\$383.2	\$330.8	\$327.5	\$332.6	\$50.6
Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total	\$383.2	\$383.2	\$330.8	\$327.5	\$332.6	\$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 increased by approximately \$0.2M, of this \$0.14M was in the construction phase for S440 contract and minor follow-on work activities, followed by \$0.05 in the administration phases. All other phases had minor cost activity that were immaterial.

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

Project Elements by SCC	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track Elements	\$144.8	\$133.0	\$100.2	\$100.2	\$109.6	\$23.4
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	\$54.4	\$55.0	\$0.3
50 Systems	\$30.8	\$19.9	\$20.3	\$20.3	\$20.3	-\$0.4
Construction Subtotal (SCC 10-50)	\$256.6	\$259.9	\$218.1	\$217.0	\$227.1	\$32.8
60 Row, Land, Existing Improvements	\$43.5	\$43.5	\$38.1	\$38.0	\$38.1	\$5.4
70 Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
80 Professional Services	\$64.1	\$72.5	\$74.6	\$72.5	\$65.6	\$6.8
90 Unallocated Contingency	\$19.0	\$7.3	\$0.0	\$0.0	\$1.8	\$5.5
Project Total (SCC 10-90)	\$383.2	\$383.2	\$330.8	\$327.5	\$332.6	\$50.6
100 Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total (SCC 10-90)	\$383.2	\$383.2	\$330.8	\$327.5	\$332.6	\$50.6

Link Light Rail S. 200th Link Extension



Cost Contingency Management

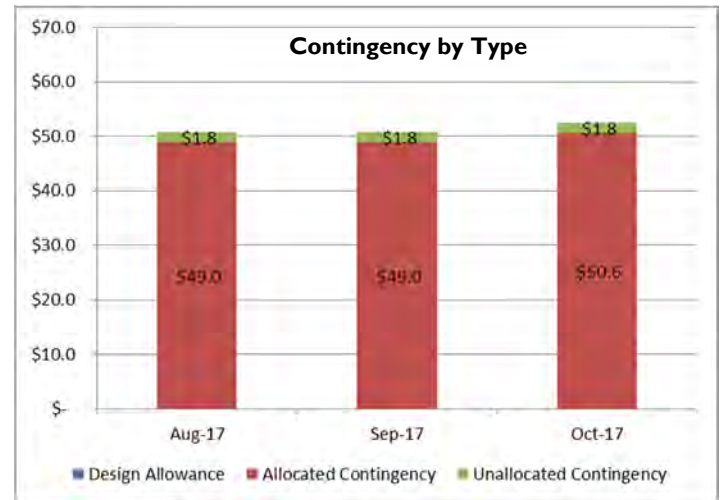
The overall project contingency balance as of this period is \$52.4. Table (below) figures in millions.

Design Allowance (DA): N/A

Allocated Contingency (AC): This period the AC balance is \$50.6M, reflecting a change of approximately \$1.7M due to unspent provisional sum funds from S440 contract (now in closeout) that were returned to contingency.

Unallocated Contingency (UAC): This period the UAC balance is \$1.8M, reflecting no change. Note: August and September values inadvertently reported \$2.6M, however the value should have been \$1.8M. The delta of \$0.8M was already included in the project savings of \$50.6M.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$26.7	7.0%	\$ -	0.0%
Allocated Contingency	\$29.8	8.0%	\$50.6	987.7%
Unallocated Contingency	\$19.0	5.0%	\$ 1.8	35.1%
Total	\$75.5	20.0%	\$52.4	1022.9%



S440 Contract—Design -Build (Guideway and Station)

Close-out

Revenue Service began on September 24, 2016. The S440 Contractor continues to work on closeout and punchlist items.

Close-out Activities

Current Period

- Coordinate replacement of E-clips on guideway.
- Completed work arounds and one safety certification remains open.
- Continued closeout activities: finalizing last few change orders, Station As-Built, and Safety Certification.

Next Period

- Continue replacement work for E-clips.
- Continue closeout activities.
- Issue Final Acceptance to Contractor.

Closely Monitored Issues

- None to report.

S445 Contract—Design -Build Parking Garage

Close-out

Substantial Completion issued on December 21, 2016.

Close-out Activities

Current Period

- No further work is required by Contractor.

Next Period

- 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	\$8,490,373
Current Contract Value	\$177,490,373
Total Actual Cost (Amount Billed)	\$175,761,970
Financial Percent Complete:	99.2%
Physical Percent Complete:	100%
Authorized Contingency	\$13,520,000
Contingency Drawdown	\$8,490,373
Contingency Index*	1.6

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 (Amount Billed)	\$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 Extension



Scope

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 –and-Ride and the Federal Way Transit Center. The current budget for this project is \$412.6M.

Key Project Activities/Issues

- Continued to work with FTA & PMOC in preparations for Entry to Engineering and Full Grant Funding Agreement applications.
- Planning a VE study workshop, with City partners, incorporating lessons learned from Lynnwood and East Link Extensions.
- ROW properties (full and partial) continues to be certified and approved by Board in stages.
- Continued to work with each of the cities staff to coordinate code changes required to build the project and include changes in future development agreements.
- Coordination continues with WSDOT regarding project needs, WSDOT's SR509 project, air space leases and temporary construction easements.
- ST/King County/Federal Way Public Schools staff working together to evaluate land exchange feasibility on Mark Twain Elementary school and Redondo Park & Ride.



Map of Federal Way Link Extension.

Project Cost Summary

In March 2017, the Sound Transit Board authorized the Federal Way Link Extension Project to advance through Gate 4 (Final Design), increasing the authorized project allocation from \$48.8M to \$412.6M. Board approval for Gate 5 to release the entire project budget will be sought in May 2018. Table (below) figures in millions.

Phase	Adopted Budget	Commitment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget Versus EFC
Administration	\$14.9	\$8.4	\$8.2	\$6.5	\$14.9	\$0.0
Preliminary Engineering	\$40.4	\$39.1	\$38.9	\$1.2	\$40.4	\$0.0
Final Design	\$2.4	\$0.0	\$0.0	\$2.3	\$2.4	\$0.0
Construction Services	\$45.7	\$0.0	\$0.0	\$45.7	\$45.7	\$0.0
Third Parties	\$18.6	\$3.3	\$1.7	\$15.4	\$18.6	\$0.0
Construction	\$25.5	\$0.0	\$0.0	\$25.5	\$25.5	\$0.0
Right of Way	\$265.1	\$6.4	\$3.2	\$258.7	\$265.1	\$0.0
Total	\$412.6	\$57.2	\$52.1	\$355.4	\$412.6	\$0.0

Project Schedule

The project schedule is presented below. ROD was received in March 2017. ST will issue an RFQ for potential Design-Build contractors in 1st QTR 2018. Real Estate acquisitions are now underway and additional detail has been added to the master schedule to monitor any impacts to the project. Project Baseline has been delayed to 3rd QTR 2018 to allow time for completion of independent cost estimate and risk assessment.

Activity Name	Remaining Duration	Start	Finish	2017	2018	2019	2020	2021	2022	2023	2024	2025
Sound Transit	2618d	01-Jul-16	31-Dec-24									
Sound Transit 2	2618d	01-Jul-16	31-Dec-24									
South Corridor	2618d	01-Jul-16	31-Dec-24									
Federal Way - Master Schedule	2618d	01-Jul-16	31-Dec-24									
Federal Way Link Extension - Master Schedule	2618d	01-Jul-16	31-Dec-24									
Preliminary Engineering	296d	01-Jul-16	23-Aug-18									
ROW/Property Acquisition	815d	30-Sep-16	24-Jan-20									
TCAL/ASL	273d	18-Mar-17	31-Jul-18									
Property Acquisition	815d	30-Sep-16	24-Jan-20									
Third Party Agreements and Permitting	735d	01-Jul-16	05-Nov-19									
Federal Way Link - Design-Build Construction Management Consultant - Contract	2618d	14-Nov-16	31-Dec-24									
Federal Way Link - Construction Management Consultant - Bid/Solicitation	87d	14-Nov-16	26-Jan-18									
Construction Management Consultant - Contract Duration	2531d	27-Jan-18	31-Dec-24									
Federal Way Design/Build Contract	2288d	11-Mar-17	05-Feb-24									
Federal Way Link Extension - Design/Build Contract - Procurement	555d	11-Mar-17	10-May-19									
Design	472d	10-May-19	23-Aug-20									
Construction	1511d	18-Dec-19	05-Feb-24									
Rail Activation	2536d	22-Jan-18	31-Dec-24									
Systems Integration & Testing	90d	06-Feb-24	05-May-24									
Safety and Security Certification	2536d	22-Jan-18	31-Dec-24									
Pre-Revenue Service	60d	06-May-24	04-Jul-24									
Pre-Revenue Service	60d	06-May-24	04-Jul-24									
Revenue Service/Project Float	180d	05-Jul-24	31-Dec-24									
ST-controlled Float	180d	05-Jul-24	31-Dec-24									
Revenue Service (12/31/2024)	0d		31-Dec-24*									

Right-of-Way

The Right-of-Way project for Federal Way Link Extension involves the acquisition, including owner and tenant relocations as appropriate, of a range of property interests. Property interests includes compensable (e.g. fee acquisitions, permanent and temporary construction easements and non-compensable rights - e.g. rights of entry). As of this period, a total of 159 parcels are certified for the project; 3 additional parcels closed; 1 additional relocation identified.

Federal Way Link Extension Property Acquisition Status								
	Board Approved	Offers Made/In Negotiations	Signed Agreements	Possession and Use	Admin Settlement	Closings to date	Relocations Required	Parcels Vacated
Total	159	21	4	0	0	2	185	0

*Number totals may differ from other reports due to the timing of reporting periods.

Sound Transit Board Actions

Board motions and resolutions directly related to Federal Way Link Extension is summarized in the table below.

Motion Number	Description	Date
	None to report.	

Community Outreach

- Continued meeting with property owners regarding the ST Board decision on the project's route, profile and station areas.
- Continued meeting with various business and property owners to discuss impacts to their properties.

Environmental

- None to report.

Phase 3 Preliminary Engineering (PE)

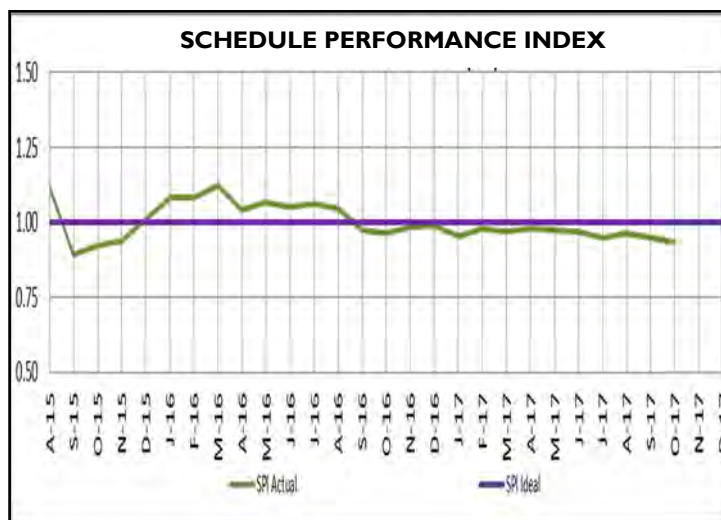
In July 2015, Sound Transit executed an amendment to the professional services agreement with HDR Engineering, Inc. for Phase 3 professional services, including completion of a Final Environmental Impact Statement (FEIS) using the preferred alternative and the other alternatives in the Draft EIS, preliminary 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.

Phase 3 Key Activities

- Record of Decision (ROD) from FTA received and moving toward Entry to Engineering.
- Resolution of Pre-Final PE submittal comments by third parties and initiation of development of project requirements associated with RFP development for design-build contract.
- Continued discussion with FTA regarding New Starts requirements for Entry to Engineering.
- Agreements setup with affected cities for design review and RFP preparation.
- Ratings submittal package submitted in September.
- Continued property acquisition.

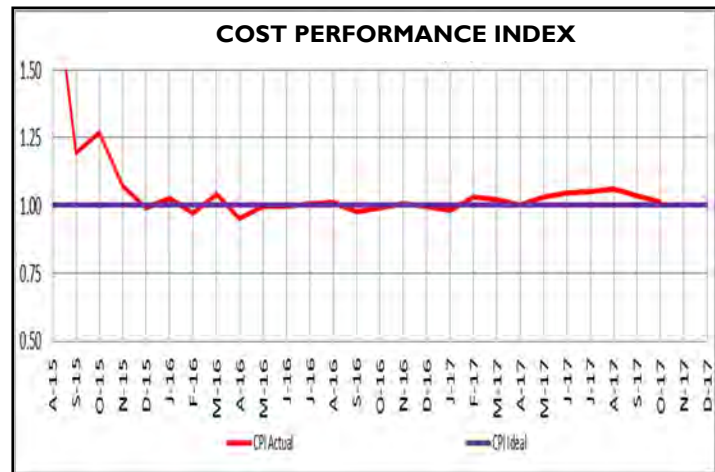
Phase 3 Schedule Performance

The cumulative Schedule Performance Index (SPI) is 0.94 through October 2017, indicating the overall amount of work accomplished is near planned. A new plan has been developed to incorporate new scope to extend the consultant contract for assistance in RFP process of DB contract and in ROW acquisition support.



Phase 3 Cost Performance

Phase 3 expenditures through October 2017 totaled \$27.2M, approximately 91% of the total contract. The Phase 3 percent complete is reported at 93%, with an earned value of \$27.7M. The cumulative Cost Performance Index (CPI) is 1.02 indicating costs are on track with work accomplished.



Phase 3 Performance	Cumulative To Date
Amount Invoiced	\$27.2M
% Spent	91%
Earned Value	\$27.7M
% Complete	93%
SPI	0.94
CPI	1.02

Link Light Rail Tacoma Link Extension



Scope

Limits: City of Tacoma

Alignment: 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 Expansion will travel at-grade along Stadium Way, North 1st. Street, Division Avenue, and Martin Luther King Jr. Way.

Stations: Relocated Theater District Station, Stadium Way & 4th St, Stadium District, MLK Jr. Way and Division, MLK Jr. Way and 6TH Ave, MLK Jr. Way and S. 11th St., and MLK Jr. Way and S. 19th St.

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

Budget: \$217.3 Million Phase Gate 5

Phase: Final Design and Construction

Const. Starts: 2018

Service: May 2022



Map of Tacoma Link Expansion.

Key Project Activities

Final Design

- Design consultant submitted the 90% design package for ST review; review and reconciliation of comments are in process.
- Continued work with City of Tacoma on issues regarding Overhead Contact System pole placement along Stadium Way and Commerce St. and treatment of unsignalized intersections.

Pre-Construction Services

- Construction Management Consultant's (CMC) Resident Engineer and ST staff continued to review maintenance of traffic plans and provide constructability reviews.

Third Parties

- Provided additional information to FTA and PMOC for inclusion into independent risk assessment report.
- Issued final risk assessment report to FTA for review.

Right of Way

- Continued right of way property acquisition activities as they relate to required temporary construction easements (TCE) along the alignment.

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 Tacoma Link 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

WBS Phase Elements	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
Administration	\$16.9	\$5.2	\$5.1	\$16.9	\$0.0
Preliminary Engineering	\$5.6	\$5.6	\$5.6	\$5.6	\$0.0
Final Design	\$10.8	\$7.8	\$7.7	\$10.8	\$0.0
Construction Services	\$9.9	\$0.5	\$0.1	\$9.9	\$0.0
3rd Party Agreements	\$1.4	\$1.1	\$0.3	\$1.4	\$0.0
Construction	\$127.1	\$0.0	\$0.0	\$127.1	\$0.0
Vehicles	\$35.4	\$2.0	\$0.3	\$35.4	\$0.0
ROW	\$3.5	\$2.0	\$1.6	\$3.5	\$0.0
Contingency	\$6.5	\$0.0	\$0.0	\$6.5	\$0.0
Total	\$217.3	\$24.2	\$20.7	\$217.3	\$0.0

Cost Summary by SCC

Project Elements by SCC	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget 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)	\$127.1	\$0.0	\$0.0	\$127.1	\$0.0
60 Row, Land	\$3.5	\$2.0	\$1.6	\$3.5	\$0.0
70 Vehicles (non-revenue)	\$35.4	\$2.0	\$0.3	\$35.4	\$0.0
80 Professional Services	\$44.7	\$20.2	\$18.8	\$44.7	\$0.0
90 Unallocated Contingency	\$6.5	\$0.0	\$0.0	\$6.5	\$0.0
Total (10 - 90)	\$217.3	\$24.2	\$20.7	\$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.

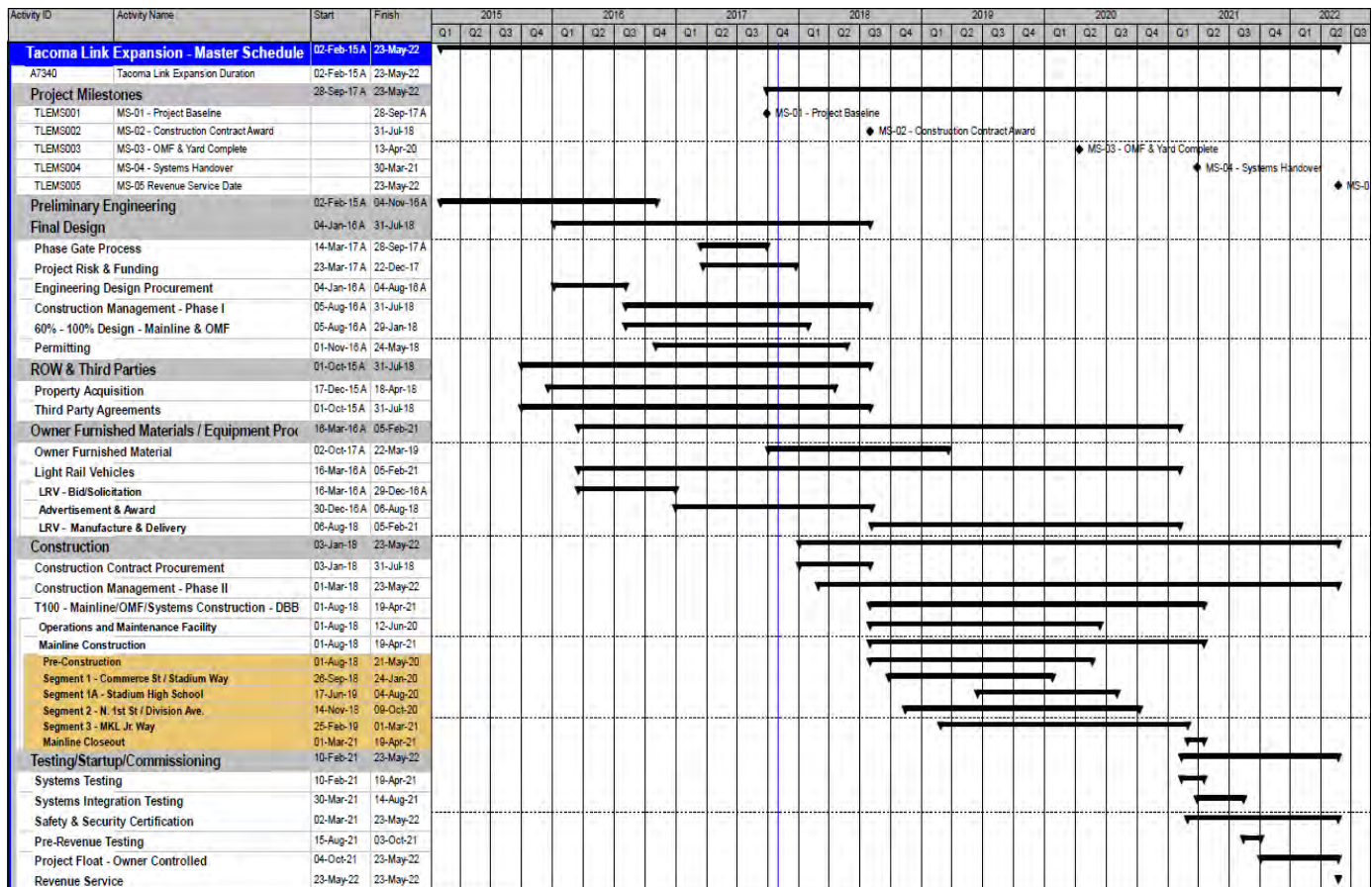
The Baseline Risk Assessment was conducted in May 2017. The 3rd QTR 2017 Risk Review Meeting was held in August 31, 2017. The 4th QTR 2017 Risk Review Meeting is scheduled for December 2017.

Link Light Rail Tacoma Link Extension



Project Schedule

The Master Schedule has been updated through the end of September. The project schedule and milestones have been baselined. The baselined project milestones are shown on the summary schedule below. Review of the 90% Final Design package and Cost Estimate was completed in October 2017. Permits for the TPSSs are under review by the City. Offers on TCE Batch No. 1 are expected to go out in November. ST issued a Notice of Intent to Award for the LRVs. LRV manufacturing is still scheduled to start in early January of 2018. Project Float remains 8 months. The Revenue Service date is May 23, 2022.



Community Outreach

- Presented a project update the Downtown On the Go transit advocacy board meeting.
- Met with the City of Tacoma staff to discuss construction schedule impact coordination with private developers; also continued ongoing traffic planning.
- Continued planning and development of Final Design/Pre-construction open house outreach material scheduled in November.
- Hosted information table at the Tacoma Link and Drink event.

Sound Transit Board Actions

Motion Number	Description	Date
M2017-148	ST board (1) increased the amount authorized to reimburse the City of Tacoma under the City Services Agreement with the City of Tacoma for expedited design, design review, and construction services for the Tacoma Link Extension by \$3,237,824, for a total authorized agreement amount not to exceed \$4, 39,924; (2) authorized acceptance of in-kind contributions from the City in an amount not to exceed \$5,819,176; and (3) authorized the CEO to execute work orders 5 through 10 under the agreement.	Oct 26

Final Design

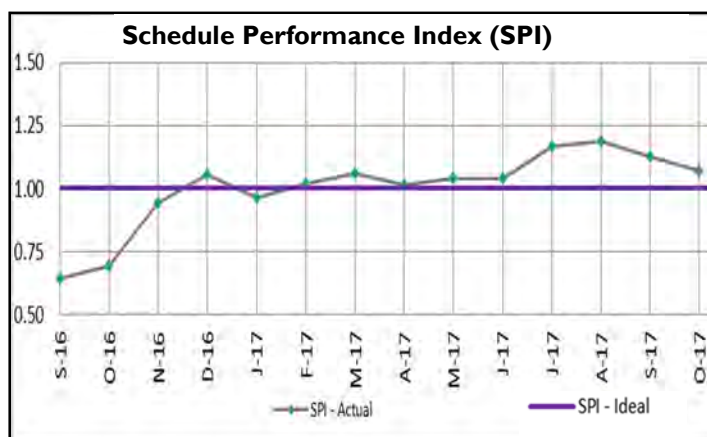
In July 2016 Sound Transit executed a contract with HDR Engineering, Inc. to provide civil and systems final design services for Tacoma Link.

Final Design Key Activities

- Civil/Track/Station Design. Civil and track design activities continued to focus on the design of 90% and resolution and incorporation of review comments.
- Continued coordination meetings with the City of Tacoma.
- Finalized work order development with the City of Tacoma for construction services as identified in the Construction Services Agreement.
- Finalized effort on BAFO proposals from LRV manufacturers and selected a manufacturer.

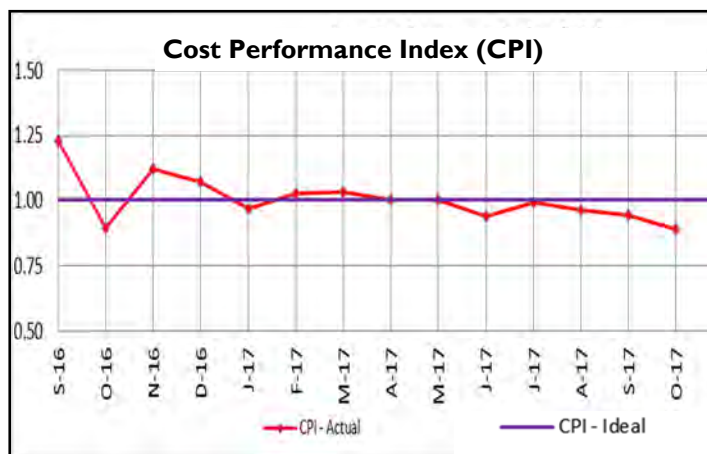
Final Design Schedule Performance

The cumulative Schedule Performance Index (SPI) for the Final Design contract is 1.07 through October, indicating that the contract work performed is ahead of the original plan. The consultant is scheduled to complete the design submittals earlier than anticipated.



Final Design Cost Performance

Based on Actuals, the Contract expenditures through October totaled \$7.8M, approximately 97% of the Final Design contract total. The Final Design contract percent complete reported at the end of October is 90%, with an earned value of \$6.9M. The cumulative Cost Performance Index (CPI) through October is 0.89; indicating expenditures greater than the budgeted cost for work performed. Additional scope in the Civil/Track/Station Design task is the greatest driver of the negative CPI along with the consultant accelerated schedule to complete the design submittals earlier than anticipated. There is one change request that was executed and another one in process. The combination of these two requests is anticipated to be sufficient for HDR to compete the Final Design contract.



Phase 3 Performance	Cumulative To-Date
Amount Invoiced	\$7.8M
% Spent	97%
Earned Value	\$6.9M
% Complete	90%
SPI	1.07
CPI	0.89

Link Light Rail

Link Operations and 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 storage for up to 96 LRVs.

Budget: \$449.2 Million (Baselined July 2016)

Schedule: Project completion December 2020

Phase: Proceed to Construction



Map of OMF East site.

Key Activities

- Stakeholder meeting held in Bellevue with the participation of King County Metro, King County Parks and Bellevue School District—The 112th/Spring Blvd bike connection was well received.
- Commenced removal of rails and ties from the Eastside Rail Corridor and Spur properties.
- Design-Builder reports that infiltration test results indicate infeasibility of proposed trackway infiltration approach—a change in storm design is being explored. This could result in a change in the Master Development Plan (MDP).
- The Draft 1st Amendment to Utility Extension Agreement related to the King County Sewer betterment is currently being reviewed by King County.
- Building salvage operations are currently being coordinated by the Contractor prior to demolition.

Closely Monitored Issues

- Property acquisition and tenant relocation schedule is on the critical path. One private parcel remains to be settled, two relocations to occur in December.
- Permit schedule for the MDP by the City Of Bellevue (COB) is pending and is a top schedule risk.
- Elements of DB Contractor's proposal (shear wall elimination for future development) may require MOU amendment with COB.
- City Of Bellevue adherence to the MOU and IA future development (TOD) intent potentially in question.
- King County betterment scope and schedule variance now being defined, requires additional property right which will be obtained by the County.

Project Cost Summary

The Adopted Capital Budget 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.

Cost Summary by Phase

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
Administration	\$17.6	\$17.6	\$3.3	\$3.2	\$17.6	\$0.0
Preliminary Engineering	\$9.5	\$9.5	\$9.0	\$8.6	\$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	\$0.8	\$19.3	\$0.0
3rd Party Agreements	\$3.1	\$3.1	\$0.3	\$0.0	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$220.0	\$12.0	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$87.2	\$85.8	\$134.5	\$0.0
Total	\$449.2	\$449.2	\$337.3	\$110.5	\$449.2	\$0.0

The Estimated Final Cost (EFC) for this reporting period is \$449.2M, which is equal to the current project budget. This period approximately \$5.8M was incurred, of which \$0.1M was Administration, ROW was \$1.6M, Construction Services was \$0.1M and Construction phase was \$4.0M for M200 contract design development.

Cost Summary by SCC

Project Elements by Phase	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track Elements	\$2.6	\$2.6	\$4.0	\$0.1	\$4.0	-\$1.5
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities: Yards, Shops	\$140.1	\$140.1	\$123.4	\$3.3	\$146.0	-\$5.9
40 Sitework & Special Conditions	\$43.6	\$43.6	\$38.2	\$1.1	\$41.3	\$2.3
50 Systems	\$43.0	\$43.0	\$38.3	\$1.0	\$38.3	\$4.7
Construction Subtotal (SCC 10-50)	\$229.3	\$229.3	\$203.9	\$5.5	\$229.7	-\$0.4
60 Row, Land, Improvements	\$134.5	\$134.5	\$87.2	\$85.8	\$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	\$46.2	\$19.2	\$71.2	\$0.4
90 Unallocated Contingency	\$13.8	\$13.8	\$0.0	\$0.0	\$13.8	\$0.0
Project Total (SCC 10-90)	\$449.2	\$449.2	\$337.3	\$110.5	\$449.2	\$0.0

Risk and Contingency Management

Risk Management

The Risk Contingency Management Plan (RCMP) established a risk management and oversight process for identifying, assessing, and monitoring risk and develop risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit (ST) continuously monitors 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 and/or schedule forecast. The OMF East quarterly risk register review meeting for 3rd QTR was held in September 2017. The current top actively managed risks are listed below.

- Third Party requesting additional site improvements not included in the agreements.
- Third Party not satisfied with progress on Master Development Plan causing reconsideration for use of a development agreement process and late permits.

Link Light Rail

Link Operations and Maintenance Facility: East



Risk Management, continued

- Third Party imposes additional scope or betterments through the permitting process.
- ST requirements potentially increase change items.
- Property acquisition and tenant relocation is an ongoing risk.

Contingency Status

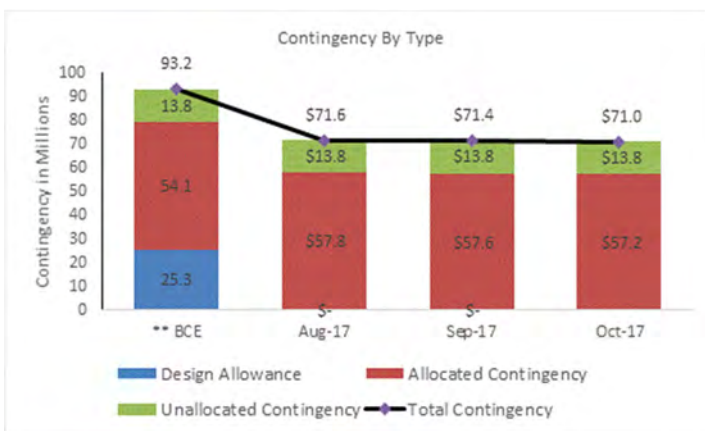
The Link Operations and Maintenance Facility East was baselined and approved by Sound Transit Board in July 2016 with a total contingency of \$93.2M. The contingency drawdown plan (shown below) excludes the Design Allowance amount as it was used when the design build contract was executed, therefore the starting contingency drawdown balance began at \$67.9M. As of this period, the total contingency balance remains at \$71.0M and is consistent with the project's planned contingency drawdown. Details are provided below.

Design Allowance (DA) – The baseline DA of \$25.3M has been fully depleted based on recent award of Design Build construction contract (M200).

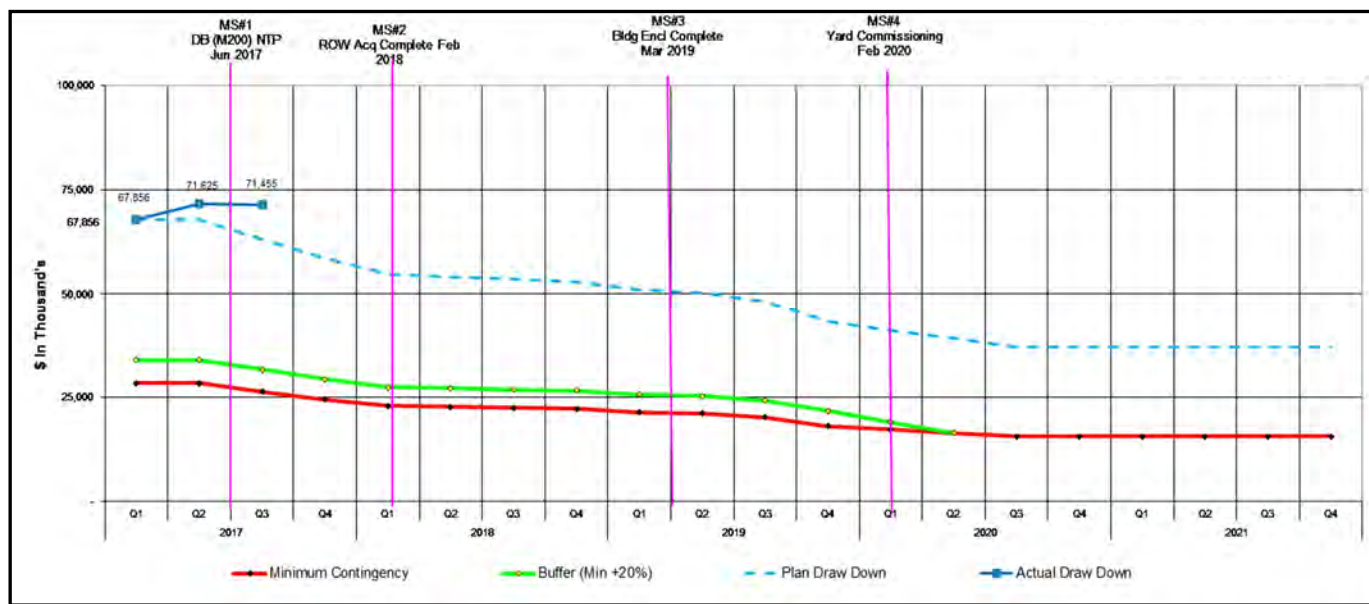
Allocated Contingency (AC) – Contingency dollars amounting to \$669K was drawn down during the third quarter for change orders. This resulted in a drop of the remaining allocated contingency to \$57.2M.

Unallocated Contingency (UAC) – The baseline UAC amount of \$13.8M reflects no changes this period.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$25.3	5.6%	\$ -	0.0%
Allocated Contingency	\$54.1	12.0%	\$57.2	16.9%
Unallocated Contingency	\$13.8	3.1%	\$13.8	4.1%
Total	\$93.2	20.7%	\$71.0	21.0%

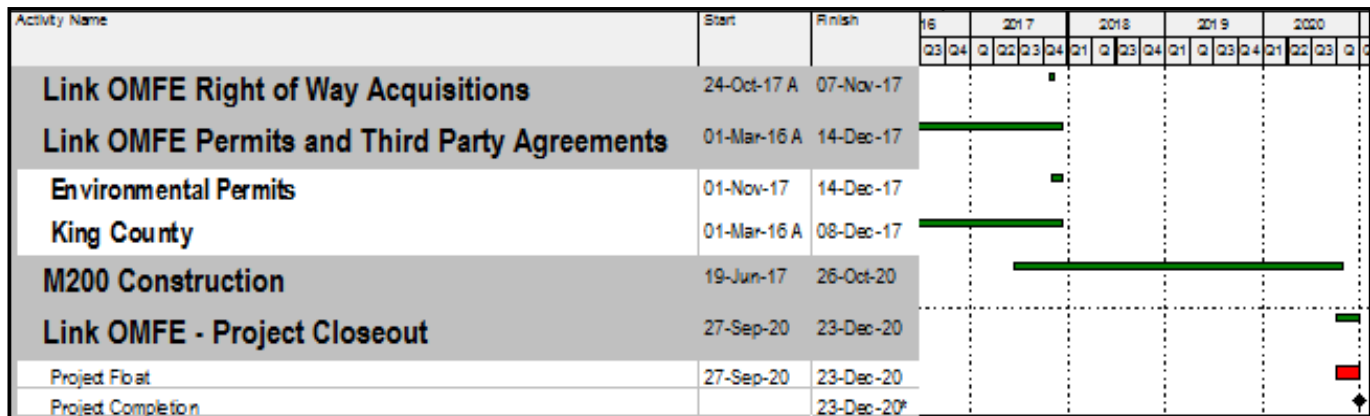


Contingency Drawdown



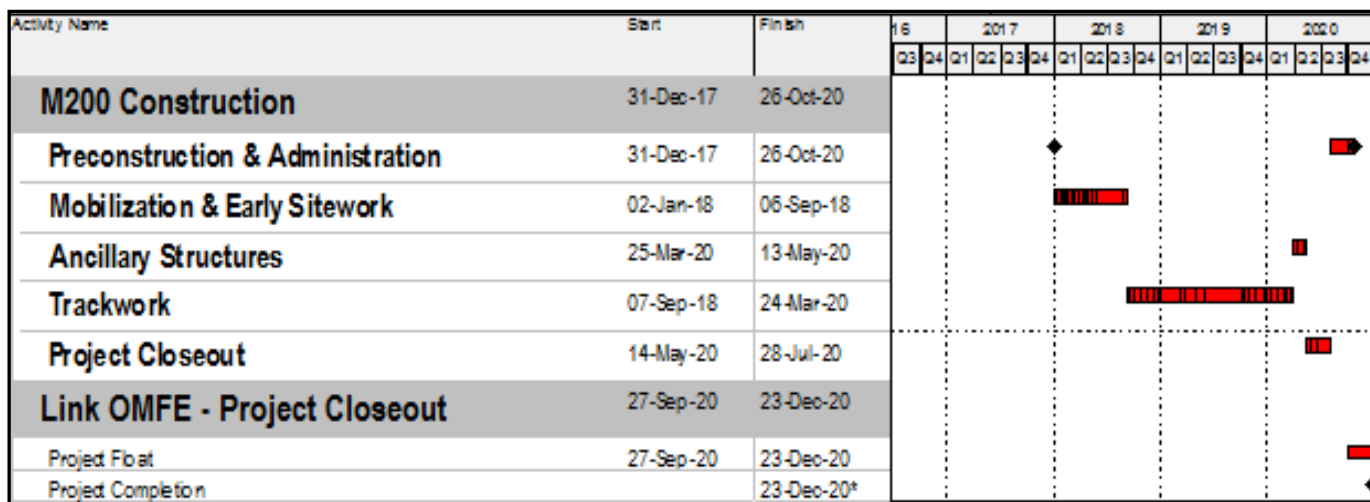
Project Schedule

The project schedule is presented below and reflected in the baseline. The Contractor has mobilized to the jobsite and has submitted the Master Development Plan application to the City of Bellevue. Design work has begun. Property acquisitions are trending ahead of schedule to be completed in late 2017, in time for construction to start as planned.



Critical Path Analysis

The critical path is now fully within the M200 contract. It runs through site preparation and building structures, with a parallel critical path running through the storage tracks. The two paths converge on Signal and Systems Commissioning.



Link Light Rail

Link Operations and Maintenance Facility: East



Right of Way

Filed condemnations and requested Possession and Use of all properties. Continued relocations of tenants and settling acquisitions. This period, one additional offer made, one additional P&U; and one additional parcel closed. The right-of-way program status is summarized below:

Link OMF East Property Acquisition Status								
	Board Approved	Offers Made/In Negotiations	Signed Agreements	Possession and Use	Admin Settlement	Closings to date	Relocations Required	Parcels Vacated
Total*	11	10	0	2	0	6	32	11

*Number totals may differ from other reports due to the timing of reporting periods.

Sound Transit Board Actions

Board motions and resolutions directly related to OMF East is summarized in the table below.

Motion Number	Description	Date
	None to report.	

Community Outreach

- Planning for OMF East groundbreaking with a December/January timeframe.
- Stakeholder meeting held on October 31st with next meeting in February/March 2018.
- Finalizing project information signage.

Environmental

- Wetland Mitigation Permit is under review by the City of Bellevue.



Aerial view drawing of the proposed OMF East site.

Phase 2 Preliminary Engineering and FEIS

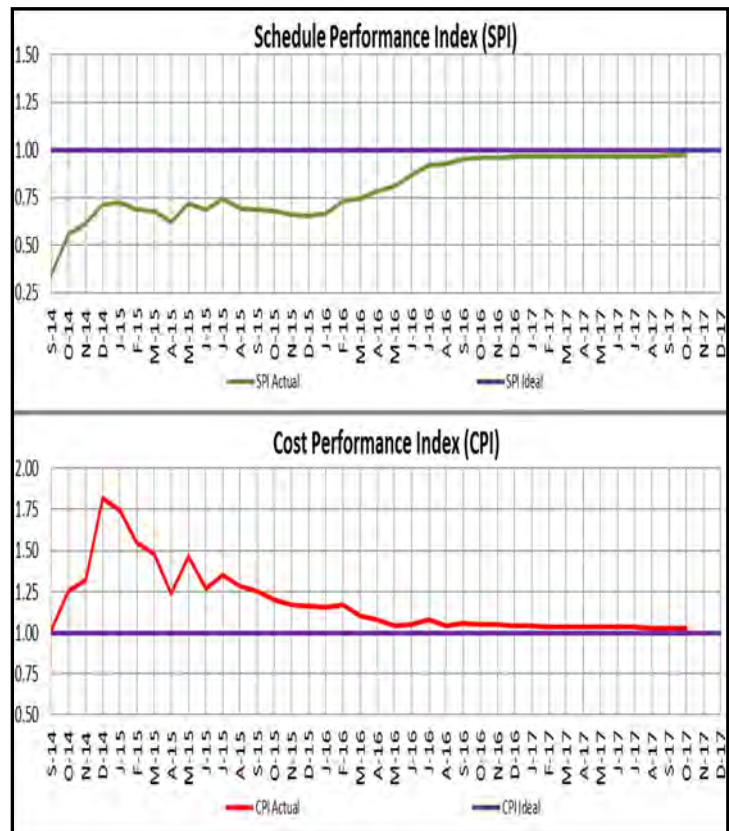
Sound Transit executed a professional services agreement with Huitt-Zollars, Inc. (HZ) for civil engineering and architectural design services and issued NTP for Phase 2, Preliminary Engineering and FEIS for the Link Operations and Maintenance Facility: East in September 2014.

Phase 2 Key Activities

- Continued working on draft agreement with King County regarding mainline sewer replacement.
- Worked on the JARPA Exhibits revisions.
- Coordinated permit support services payment concurrence with the City of Bellevue.
- Provided Mitigation Plan for Wetland Impacts, produced by ICF.

Phase 2 Schedule Performance

The cumulative Schedule Performance Index (SPI) trends at 0.97 through October 2017, which means that cumulative work accomplished is slightly less than work planned.



Phase 2 Cost Performance

\$5.0M of the total Phase 2 contract amount, approximately 94.5%, was spent through October 2017. The Phase 2 percent complete is 97%, with an earned value of \$5.2M. The cumulative Cost Performance Index (CPI) is 1.03, meaning that expenditures are slightly less than the earned value.

Phase 2 Performance	Cumulative To Date
Amount Invoiced	\$5.0M
% Spent	94.5%
Earned Value	\$5.2M
% Complete	97%
SPI	0.97
CPI	1.03

Link Light Rail OMF East - Design Build



Contract M200 - OMF East Design Build

Scope

Design and construct an O&M facility with offices and furnishings, storage yard for 96 LRVs, vehicle maintenance facility, Maintenance of Way (MOW) facility, bike trail, and light rail system elements [Traction Power Substation (TPSS), Overhead Catenary System (OCS), Communications and Supervisory Control & Data Acquisition (SCADA)] in Bellevue, WA.

Current Progress

Contractor conducted Public Design Review Meetings with the city of Bellevue and also conducted over the shoulder meetings with Sound Transit on Civil and Mechanical design packages. Continued Equipment layout workshops for OMF and MOW buildings. Subcontractors mobilized to site and started to work on the track rail demolitions along the East Rail Corridor. Completed the infiltration pit work that was started earlier this month. Contractor started the preparations for the site demolition work scope.

Schedule Summary

The Contractor's preliminary baseline schedule is presented below. This schedule has not been formally approved; however, it is unlikely that any major work elements will change prior to approval. The Contractor has submitted their Master Development Permit application to the City of Bellevue and is now in the review and comments process. They are working with the City to establish a clear timeline of all permit submittals and anticipated turnaround times. Design will continue throughout 2017 with construction beginning toward the end of the year, primarily to demolish existing buildings and construct the interim trail. Major sitework is planned for early 2018.

Activity Name	Start	Finish	16				2017				2018				2019				2020			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
M200 Construction	19-Jun-17	26-Oct-20																				
Preconstruction & Administration	19-Jun-17	26-Oct-20																				
Milestones	19-Jun-17	26-Oct-20																				
Administration	19-Jun-17	31-Jan-20																				
Coordination of Work by Others	06-Nov-17	19-Mar-20																				
Design	19-Jun-17	10-Jun-19																				
Design Packages	19-Jun-17	26-Jun-18																				
Permit Packages	19-Jun-17	12-Jun-18																				
Design Administration	19-Jun-17	10-Jun-19																				
Submittals & Procurement	10-Nov-17	22-Oct-19																				
Mobilization & Early Sitework	19-Jun-17	10-Dec-18																				
Mobilization	19-Jun-17	22-Jan-18																				
Pilot Infiltration Test Investigation	19-Jun-17	07-Jul-17																				
Demo & Abatement	01-Sep-17	24-Apr-18																				
Interim Trail Construction	17-Nov-17	29-Dec-17																				
Early Sitework	25-Apr-18	04-Oct-18																				
Site Utilities	24-Apr-18	10-Dec-18																				
South Stormwater Vaults (Near MOW)	28-Mar-18	28-Jun-18																				
North Stormwater Vault (Near OMF)	05-Jun-18	21-Aug-18																				
Maintenance & Shop Building	26-Jul-18	09-Jun-20																				
Maintenance of Way Building	21-Feb-19	27-May-20																				
Ancillary Structures	05-Jun-19	13-May-20																				
Traction Power Substation	05-Jun-19	23-Mar-20																				
Signal Houses	12-Jun-19	13-May-20																				
Guard House at Primary Entrance	26-Jun-19	12-Sep-19																				
Emergency Generator	25-Jul-19	18-Dec-19																				
Trackwork	07-Sep-18	27-Mar-20																				
Site Surfacing & Finishes	17-Oct-18	01-Jun-20																				
Project Closeout	09-Nov-18	20-Aug-20																				

Next Period's Activities

- Contractor to collaborate with Sound Transit and City of Bellevue to work on the issues found during the infiltration testing.
- Field office relocations will occur in November.
- Conduct TPSS and OCS over the shoulder design meetings.
- Prepare site for demolition activities.
- Provide cost estimates for the King County Sewer line.
- Over the shoulder reviews for MEP and exterior building scope of work.
- Revise the MDP with comments from City of Bellevue.

Cost Summary

Present Financial Status	Amount
M200 Contractor – Hensel Phelps	
Original Contract Value	\$218,912,000
Change Order Value	\$169,570
Current Contract Value	\$219,081,570
Total Actuals (Incurred to Date)	\$11,999,774
% of Authorized Billed to Date	5.5%
Physical Percent Complete	0%
Authorized Contingency	\$21,891,200
Contingency Drawdown	\$169,570
Contingency Index	NA



Began rail removal.

Link Light Rail Light Rail Vehicle Fleet Expansion



Project Summary

Scope: Design, manufacturing, assembly, inspection, testing and delivery of 152 low floor light rail vehicles for service requirements of Northgate, East Link and Lynnwood Link Extensions.

Budget: \$740.7 Million (Baseline September 2015)

Schedule: Project completion 3rd QTR 2024



Graphic simulation of the new light rail vehicles.

Key Activities

- Four Final Design Review (FDR) packages out of 20 FDR packages have been submitted.
- Vendor selection has been made for all the major and secondary systems.

Project Cost Summary

The LRV Fleet Expansion Project has an approved baseline budget of \$740.7M. The project cost is summarized below by two cost categorizations. In the first table, the cost is summarized in accordance with Sound Transit's Work Breakdown Structure (WBS) at the Phase Level. The second table summarizes the project in accordance with the FTA's Standard Cost Category (SCC) format. Both tables below are shown in millions.

In October, the project incurred to date costs have increased to \$74.0M from \$73.9M, with a slight increase of \$27K attributed all to Administrative and Construction Services.

Cost Summary by Phase

Project Phase	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget Vs. EFC
Administration	\$6.4	\$6.4	\$0.7	\$0.7	\$6.4	\$0.0
Construction Services	\$18.0	\$18.0	\$4.8	\$2.4	\$18.0	\$0.0
Vehicles	\$716.3	\$716.3	\$648.2	\$70.9	\$716.3	\$0.0
Total	\$740.7	\$740.7	\$653.7	\$74.0	\$740.7	\$0.0

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

Cost Summary by SCC

SCC Element	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget Vs. EFC
Construction Subtotal (SCC 10-50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 ROW, Land, Existing Improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
70 Vehicles	\$702.8	\$702.8	\$653.0	\$73.3	\$702.8	\$0.0
80 Professional Services	\$6.1	\$6.1	\$0.7	\$0.7	\$6.1	\$0.0
90 Contingency	\$31.7	\$31.7	\$0.0	\$0.0	\$31.7	\$0.0
Capital Total (SCC 10-90)	\$740.7	\$740.7	\$653.6	\$74.0	\$740.7	\$0.0

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

Cost Contingency Management

The project's baseline budget approved by the ST Board 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.

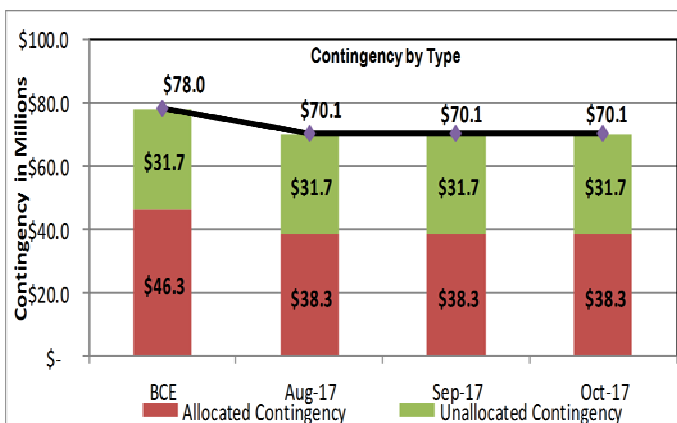
Design Allowance – This project contains \$0 design allowance.

Allocated Contingency – The project baseline's allocated contingency was \$46.3M. Due to a successful vehicle procurement and a lower than anticipated contract value the allocated contingency was realized at \$167.3M in October 2016. The current available allocated contingency is \$38.3M after executing a change order to add additional vehicles and spare parts to Siemens's contract.

Unallocated Contingency – The project baseline's unallocated contingency remained unchanged at \$31.7M.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ -	0.0%	\$ -	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%

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



Project Schedule

The LRV Fleet Expansion project schedule is shown below. Siemens is currently working on Final Design Review. Carshell design is completed and the systems engineering group has named all major systems vendors.

Activity Name	Start	Finish	17	2018	2019	2020	2021	2022	2023	2024
LRV Procurement Schedule	10-Oct-16 A	28-Aug-24	Q	Q	Q	Q	Q	Q	Q	Q
LRV Engineering and Manufacture	10-Oct-16 A	11-May-22								
LRV Design Reviews, Manufacturing, and System Tests	10-Oct-16 A	11-May-22								
LRV Delivery Schedule	21-Nov-18	28-Aug-24								
LRV #1-122 (122 LRV Base Order)	21-Nov-18	14-Nov-22								
Delivery of 1st LRV		21-Nov-18								
Delivery of 40th LRV - Northgate Link Vehicle Deliveries Complete		13-Mar-20								
Delivery of 42nd LRV - Max Capacity at Existing OMF at capacity (104 LRVs)		02-Apr-20								
Final Acceptance of Vehicles		14-Nov-22								
Delivery of 122nd LRV - Final ST2 Delivery		12-May-22								
LRV #123 - 152 (30 LRV Options) - Change Order #4	28-Feb-24	28-Aug-24								
Delivery of 152nd LRV - Final Delivery		28-Feb-24								
Final Acceptance of Vehicles		28-Aug-24								
Project Closeout	14-Nov-22	28-Aug-24								
LRV #1-122 - Base Order	14-Nov-22	11-Feb-23								
ST-Controlled Float	14-Nov-22	11-Feb-23								
LRV Procurement Complete - LRV #1 - #122		11-Feb-23								
LRV #123 - #152 - CO #4	28-Aug-24	28-Aug-24								
LRV Procurement Complete - LRV #123 - #152		28-Aug-24								

Link Light Rail Staffing Report



Project Staffing – Link Light Rail Program – September 2017

Staffing variance reported in the following section is relative to the May 2016 Agency Staffing Plan (Version 6). During this period, the following positions were filled to support the Link capital program:

Position	Project Assignment	Planned Hire Date
Civil Engineer	Non-Corridor Operations	2016 Attrition*
Deputy Director	Civil and Structural Engineering	2017 Attrition *
Sr. Civil Engineer	Non-Corridor Projects – Operations	2017 Attrition*
Electrical Engineer	Systems Integration and Testing	2017 Attrition*
Sr. Project Control Specialist	OMF East	2017 Attrition*
Civil Engineer	Utilities	2017 Attrition
Document Control Coordinator	System Expansion	2017 Attrition
Project Coordinator	Non-Corridor Projects	2017 Attrition
Real Property Coordinator	Right-of-Way	September 2017
Corridor Project Control Supervisor	South Corridor	September 2017
Construction Manager	Systems	August 2017
Project Control Specialist	South Corridor	August 2017
Project Director	West Seattle to Ballard Link Ext.	July 2017
Project Director	Downtown Redmond Link Ext.	July 2017
Project Director	Fed. Way to Tacoma Link Ext.	July 2017
Assistant Permit Administrator	Permits Administration	June 2017

*Internal Promotion

Recruiting is ongoing for the following DECM staff:

Position	Project Assignment	Planned Hire Date
Sr. Project Manager	Sounder Capital Program	2016 Attrition*
Sr. Project Manager	OMF East	2016 Attrition*
Deputy Director	Construction Management	2016 Attrition*
Construction Contracts Claims Sp.	Construction Management	2016 Attrition*
Executive Project Director	Executive Director's Office	2016 Reclass
Config. and Change Mgt. Coordinator	Project Controls	2017 Attrition*
Deputy Project Director	Northgate Link Extension	2017 Attrition*
Civil Engineer	East Link Extension	2017 Attrition*
Corridor Design Manager	Federal Way Link Extension	2017 Attrition*
Principal Construction Manager	South Corridor	2017 Attrition*
Principal Construction Manager	East Link Extension	2017 Attrition*
Principal Construction Manager	Northgate Link Extension	2017 Attrition*

Project Staffing – Link Light Rail Program continued

Position	Project Assignment	Planned Hire Date
Project Coordinator	Non-Corridor Projects	2017 Attrition
Risk Engineer Program Manager	Project Controls	2017 Attrition
Sr. Architect	East Link Extension	2017 Attrition
Project Coordinator	East Link	2017 Attrition
Design Technology Specialist	System Expansion Program	2017 Attrition
Systems Engineer	SCADA	2017 Attrition
Supervisor Community Outreach	South Corridor	2017 Attrition
Manager	Systems Testing	2017 Attrition
Sr. Systems Engineer	LRV Fleet Expansion	2017 Attrition
Sr. Systems Engineer	Operations Technology	January 2017
Sr. Systems Engineer	Operations Technology	January 2017
Sr. Civil Engineer	Northgate Link Extension	February 2017
Project Manager	Public Art (STart)	February 2017
Engineering Stds. Program Mgr.	Civil and Structural Engineering	April 2017
Chief Systems Engineer	Traction Power	April 2017
Sr. Scheduling Engineer	Right-of-Way	April 2017
Chief Systems Engineer	Signals	April 2017
Chief Systems Engineer	Communications	May 2017
Project Control Specialist	Federal Way Link Extension	June 2017
Manager	LRV Procurement and Testing	July 2017
Project Director	Bus Rapid Transit	July 2017
Manager	Civil Systems Integration	September 2017
Manager	Civil Systems Integration	September 2017
Construction Manager	Federal Way Link Extension	September 2017

Link Light Rail Staffing Report



There were 582 (92% of plan) consultant and internal staff full time equivalents (FTE) participating in the on-going planning, design and construction of Link light rail extensions in September. Staffing was within 10% of plan for the Northgate Link Extension. Staffing for the Federal Way and East Link Extensions was 124% and 143% of plan respectively; staffing for the Tacoma and Lynnwood Link Extensions was 76% and 49% of plan respectively. Staffing for the Link Operations & Maintenance Facility: East was 64% of plan.

Staffing variance to plan for the month and year to date summary by project follows.

September 2017 Staff Variance												
	Consultant Staff				Sound Transit Staff				Total (AVG. YTD)			
	FTE		Variance		FTE		Variance		FTE		Variance	
Project	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan
Federal Way Link Extension	42.0	78.6	36.6	187%	37.9	20.7	-17.2	55%	79.9	64.0	-15.9	80%
Northgate Link Extension	71.1	87.2	16.1	123%	44.2	36.4	-7.8	82%	115.3	123.1	7.8	107%
OMF East	6.6	7.0	0.4	106%	16.7	9.1	-7.6	55%	23.3	9.0	-14.2	39%
East Link Extension	66.8	142.7	76.0	214%	72.1	55.6	-16.4	77%	138.8	152.3	13.5	110%
Lynnwood Link Extension	178.0	76.4	-101.6	43%	51.9	36.4	-15.5	70%	229.9	194.7	-35.2	85%
Tacoma Link Extension	24.0	14.7	-9.3	61%	18.1	17.2	-0.9	95%	42.1	46.2	4.2	110%
Total	388.5	406.5	18.1	105%	240.9	175.5	-65.4	73%	629.3	589.4	-39.9	94%

Operations & Maintenance Facility: East Staffing

Total Internal and External Staffing – OMF East

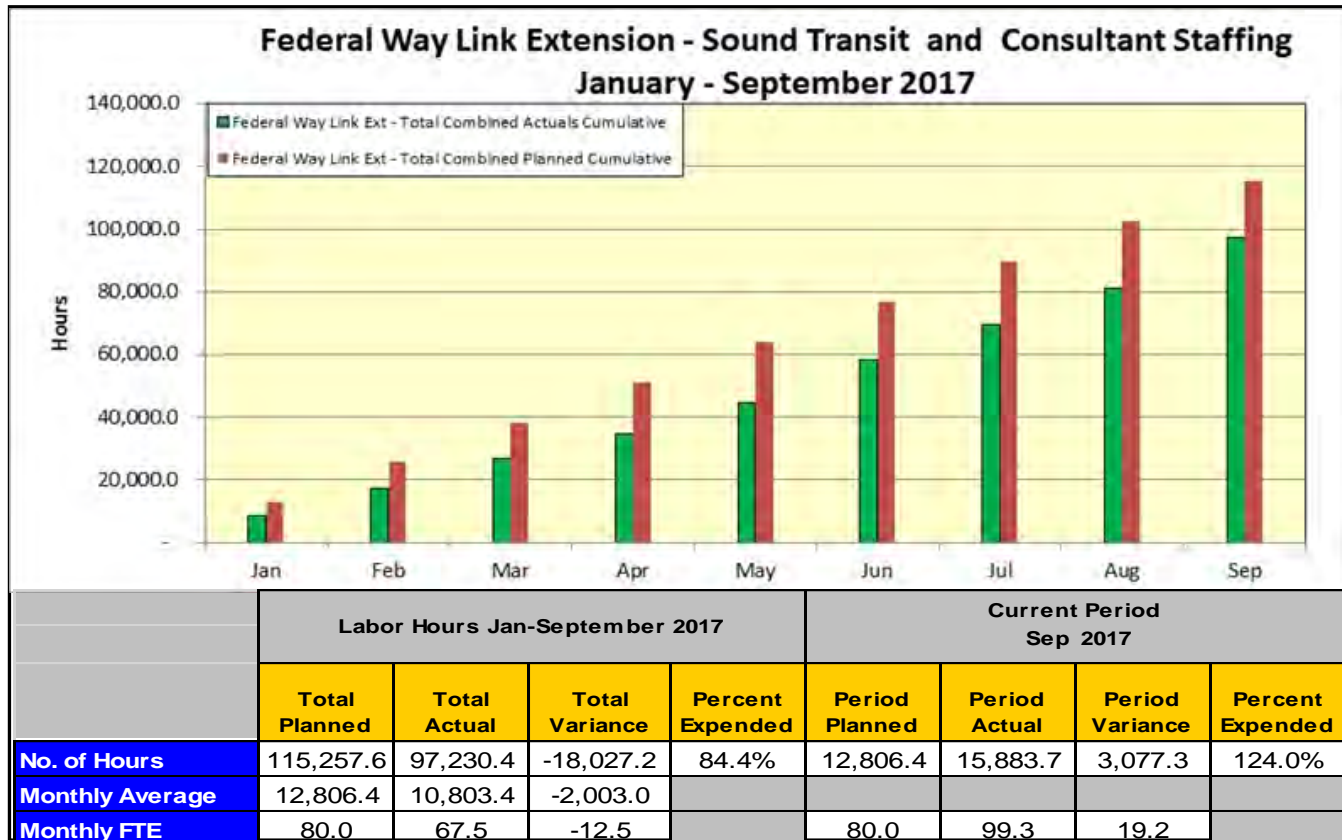
There were 9.1 internal and 7 consultant FTE participating in the Operations & Maintenance Facility: East project in September. This is 8% (1.2 FTE) above August staffing and 69% of plan. Average year-to-date staffing (9.8 FTE/mo.) is 58% (13.5 FTE/mo.) below plan. All consultant staffing in September was for the design-build project management services.

	Labor Hours to Date				Current Period Sep 2017			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	33,537.6	14,087.9	-19,449.7	42.0%	3,726.4	2,577.1	-1,149.3	69.2%
Monthly Average	3,726.4	1,565.3	-2,161.1					
Monthly FTE	23.3	9.8	-13.5		23.3	16.1	-7.2	

Federal Way Link Extension Staffing

Total Internal and External Staffing – Federal Way Link Extension

There were 99.3 (124% of plan) consultant and internal staff on the Federal Way Link Extension in September including 78.6 consultant FTE (187% of plan) and 20.7 internal FTE (55% of plan). Staffing was 33% (24.6 FTE) above August staffing; cumulatively from January 2017 average staffing is trending 16% (12.5 FTE/mo.) below plan. All consultant staff is supporting preparation of bridging documents for the Design-Build (D-B) contract.



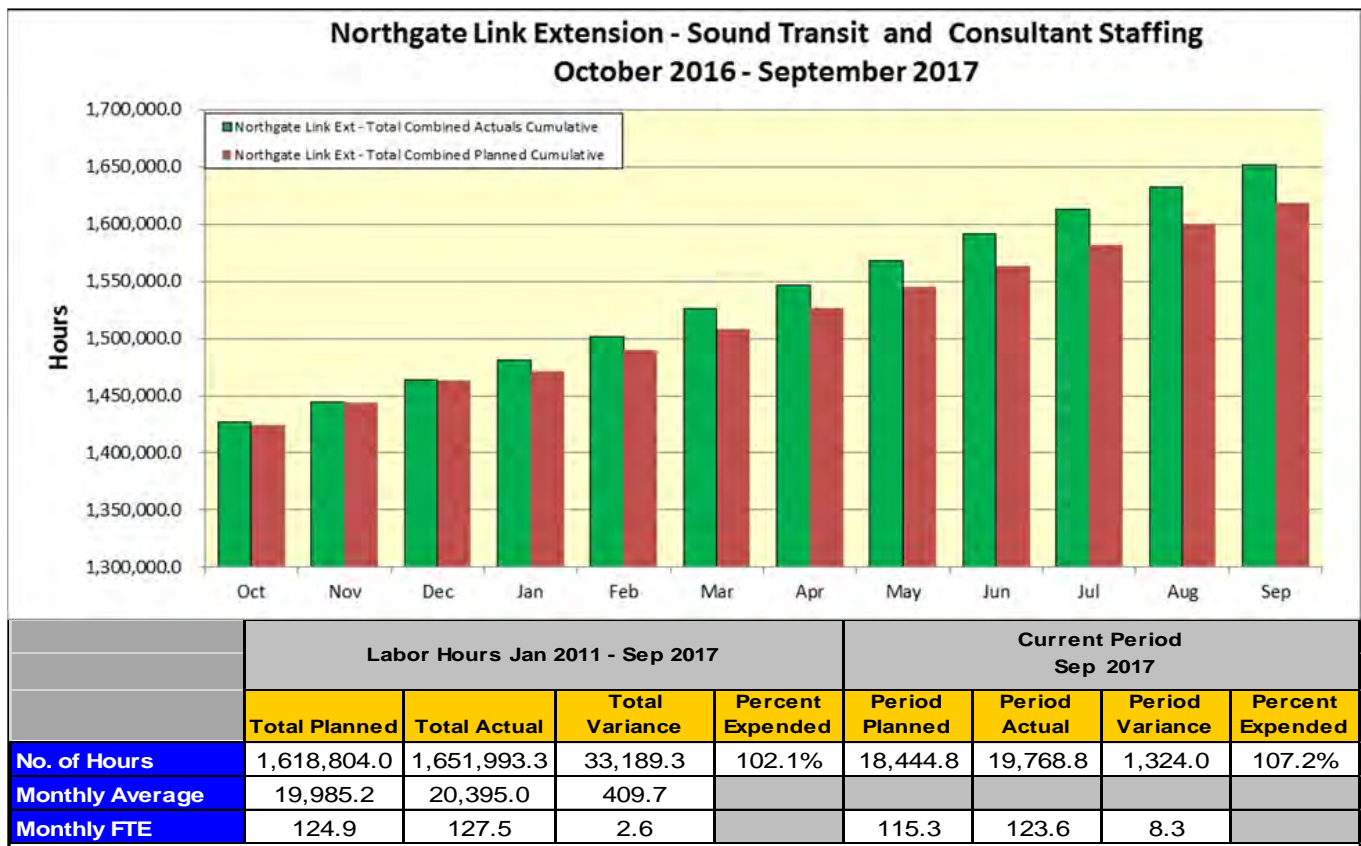
Link Light Rail Staffing Report



Northgate Link Extension Staffing

Total Internal and External Staffing – Northgate Link Extension

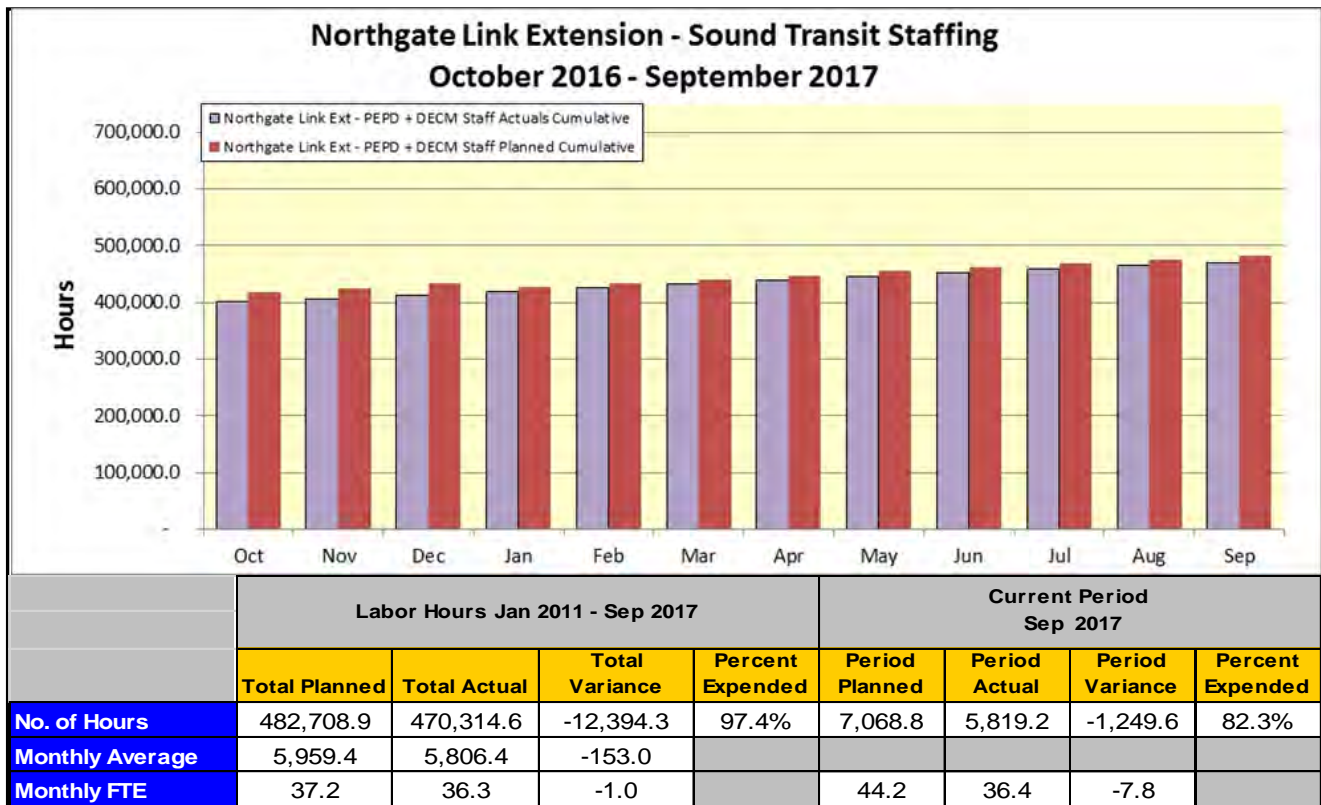
During September, 123.6 internal and consultant FTE were assigned to the Northgate Link Extension. This is 1% (0.6 FTE) above August staffing and is 7% (8.3 FTE) above plan. Average year-to-date staffing (123.1 FTE/mo.) is 7% (7.8 FTE/mo.) above plan; cumulatively since January 2011 average monthly staffing is trending with plan.



Northgate Link Extension Staffing

Internal Resource Commitments to Northgate Link Extension

Internal staffing in September (36.4 FTE) decreased 16% (5.9 FTE) from August and was 18% (7.8 FTE) below plan. Cumulatively, since January 2011, average monthly internal staffing (36.3 FTE/mo.) is 2.6% (1 FTE/mo.) below plan.



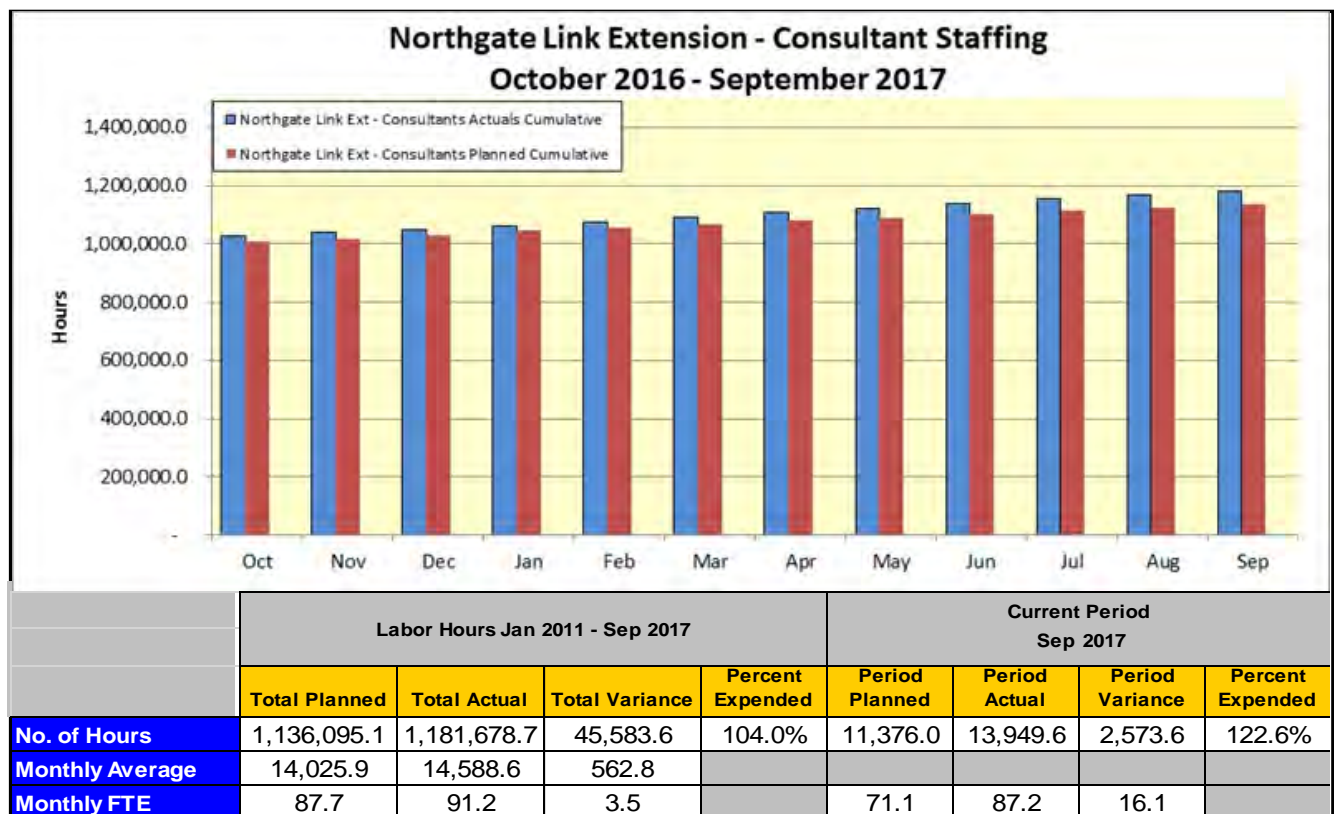
Link Light Rail Staffing Report



Northgate Link Extension Staffing

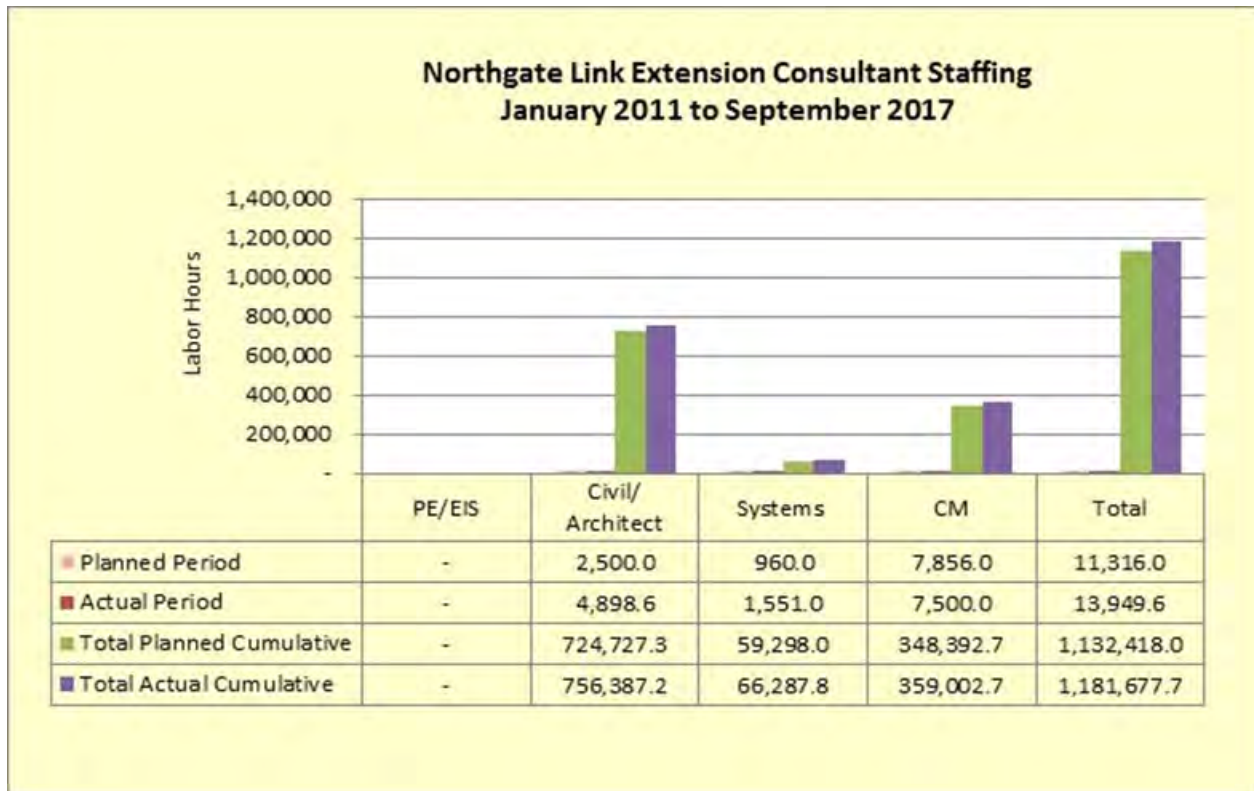
Consultant Resource Commitments to Northgate Link Extension

In September 87.2 consultant FTE were assigned to the Northgate Link Extension; consultant staffing was 8% (6.5 FTE) above August staffing and was 22% (16.1 FTE) above plan. Cumulatively, since January 2011, average monthly consultant utilization (91.2 FTE/mo.) is trending 4% (3.5 FTE/mo.) above plan.



Northgate Link Extension Staffing

Consultant Resource Commitments to Northgate Link Extension



Consultant utilization by discipline follows:

- Civil/architecture consultant utilization in September (30.6 FTE) was 13% (3.6 FTE) above August staffing and was 91% (14.6 FTE) above plan. Cumulatively since January 2011, average civil engineering/architecture consultant staffing of 58.4 FTE/mo. is trending 4% above plan.
- Systems consultant utilization in September (9.7 FTE) was 52% (3.3 FTE) above August and was 62% (3.7 FTE) above plan. Cumulatively, since January 2011, average monthly Systems consultant staffing (5.1 FTE/mo.) is trending 6% above plan.
- CM consultant staffing in September (46.9 FTE) was consistent with August staffing and was 5% (2.2 FTE) below plan. Cumulatively, since January 2011, average monthly CM consultant staffing (27.7 FTE/mo.) is 3% (0.8 FTE/mo.) above plan.

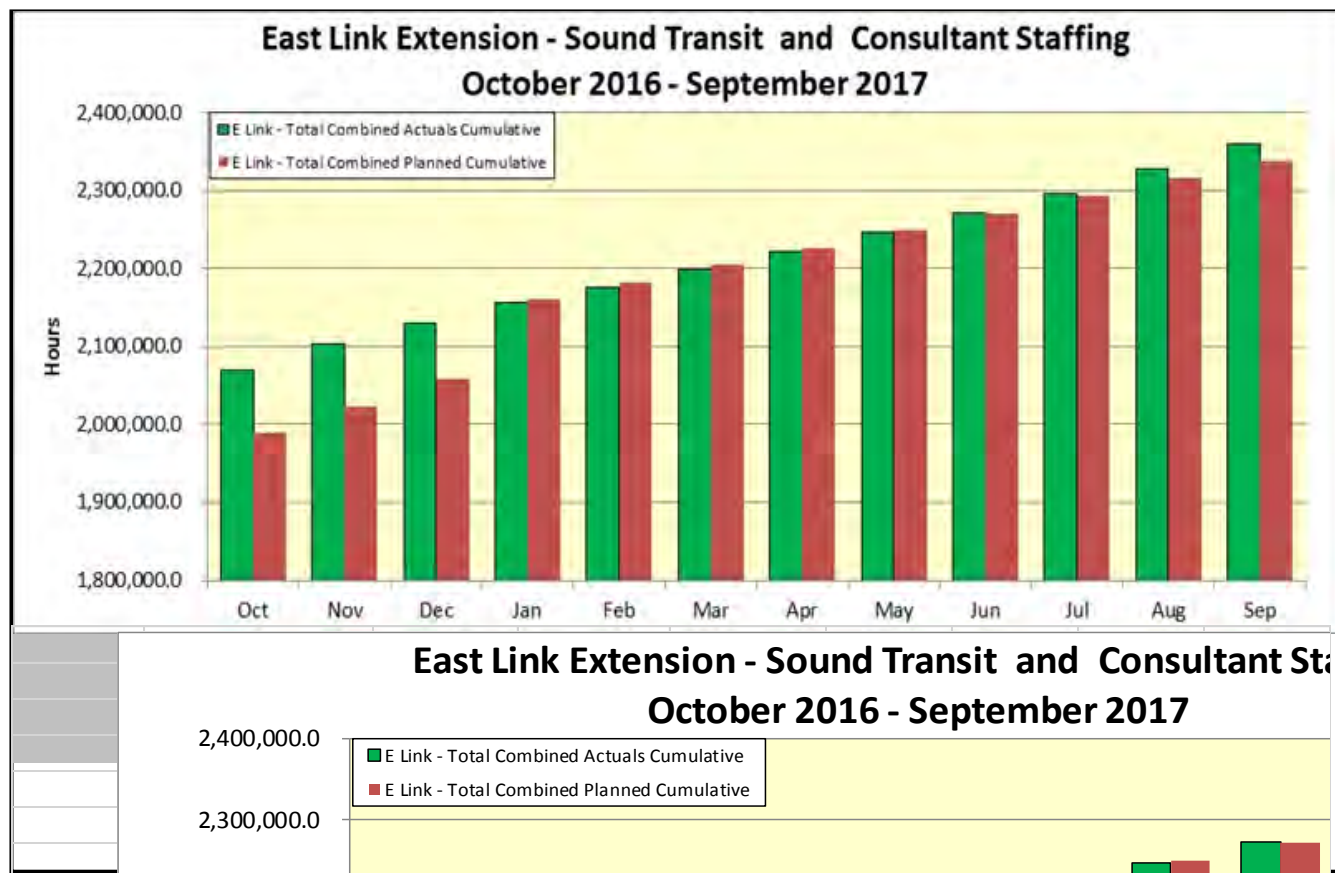
Link Light Rail Staffing Report



East Link Extension Staffing

Total Internal and External Staffing – East Link Extension

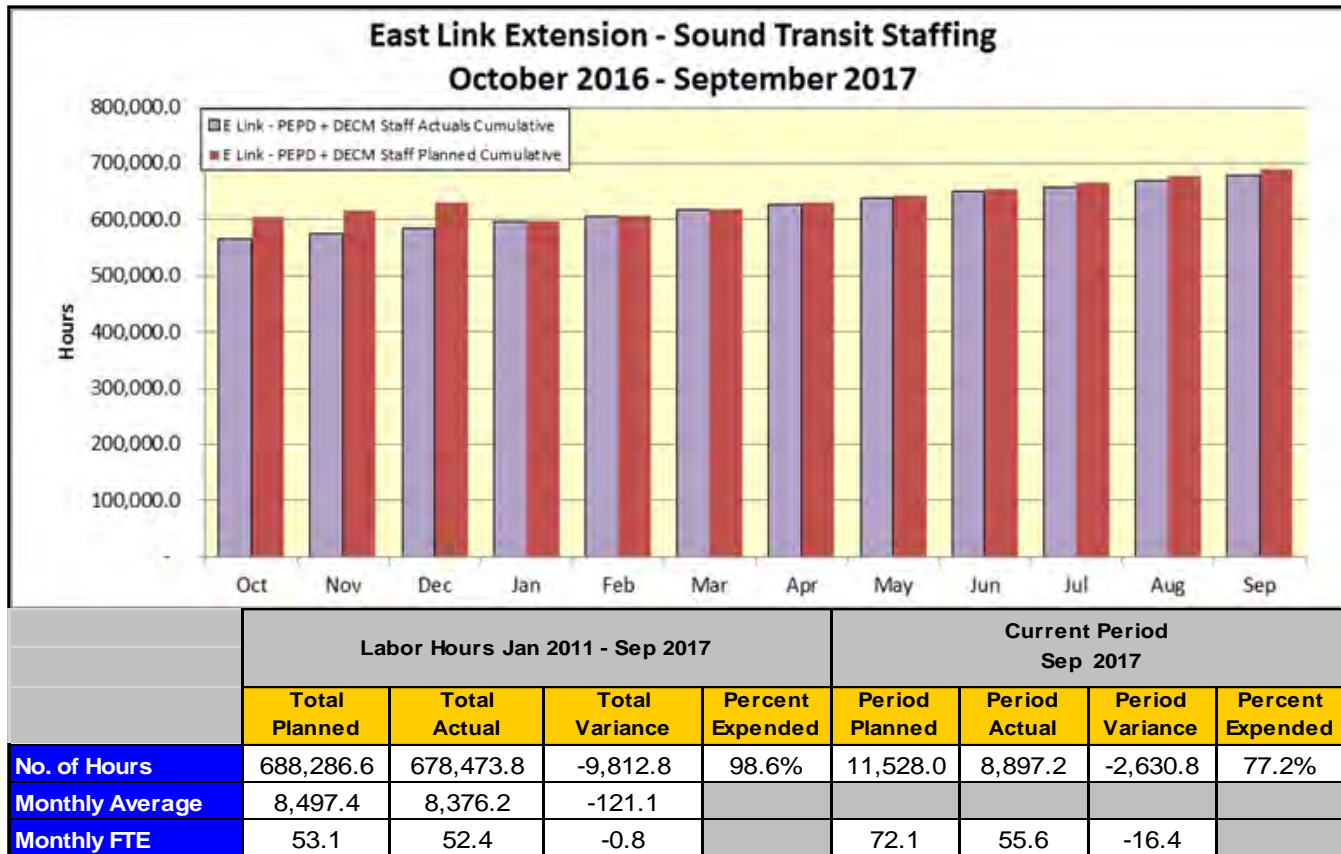
Staffing for the East Link Extension in September (198.3 FTE) increased 1% (1.7 FTE) from August and was 43% (59.5 FTE) above plan. Average year-to-date staffing of 152.3 FTE/mo. is 10% (13.5 FTE) above plan. Cumulatively since January 2011, average monthly staffing of 182.1 FTE/mo. is trending with plan.



East Link Extension Staffing

Internal Resource Commitments to East Link Extension

During September internal staffing for the East Link Extension (55.6 FTE) was 22% (12 FTE) below August staffing and was 23% (16.4 FTE) below plan. Cumulatively, since January 2011, average monthly internal staffing (52.4FTE/mo.) is trending with plan.



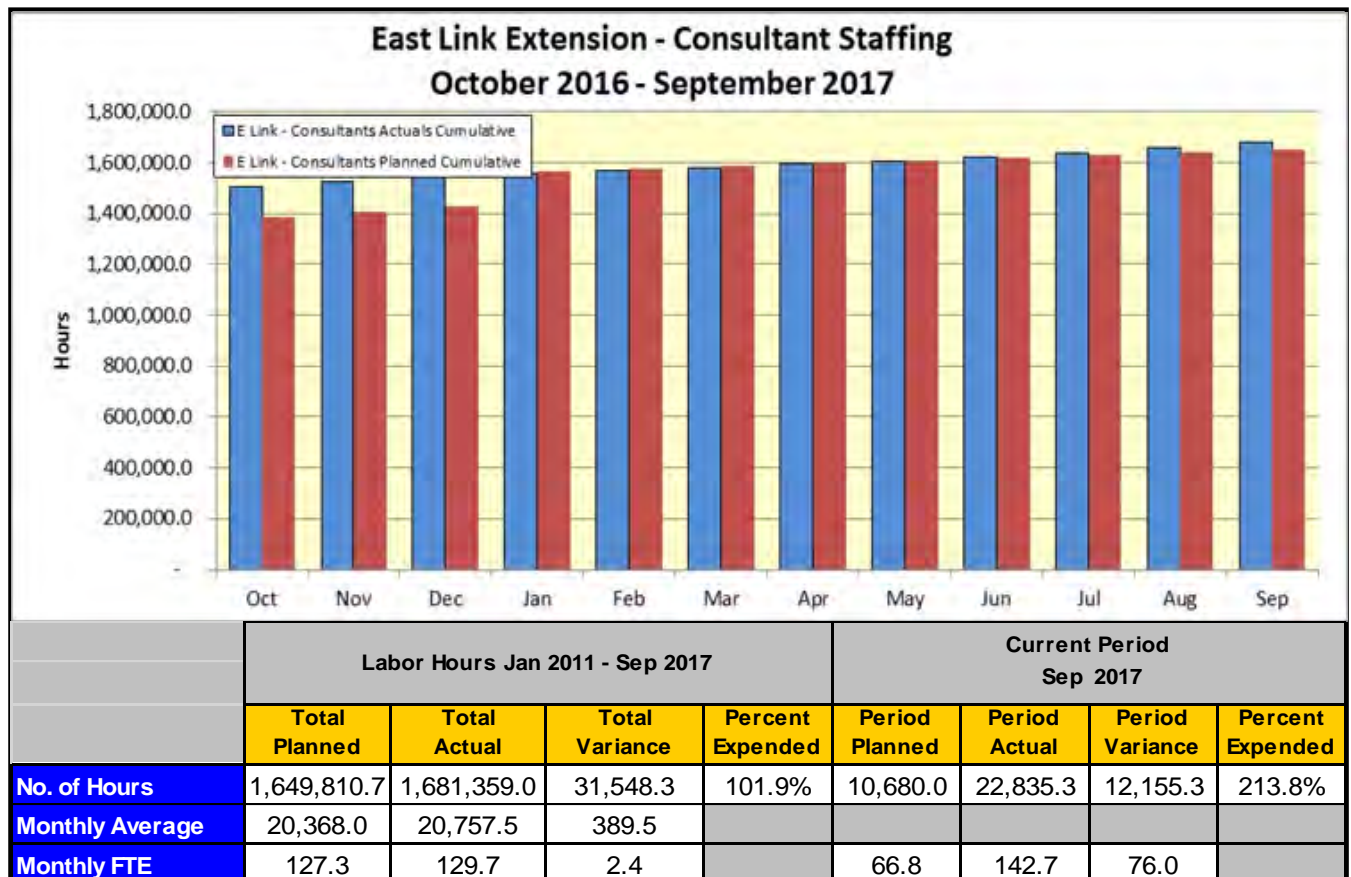
Link Light Rail Staffing Report



East Link Extension Staffing

Consultant Resource Commitments to East Link Extension

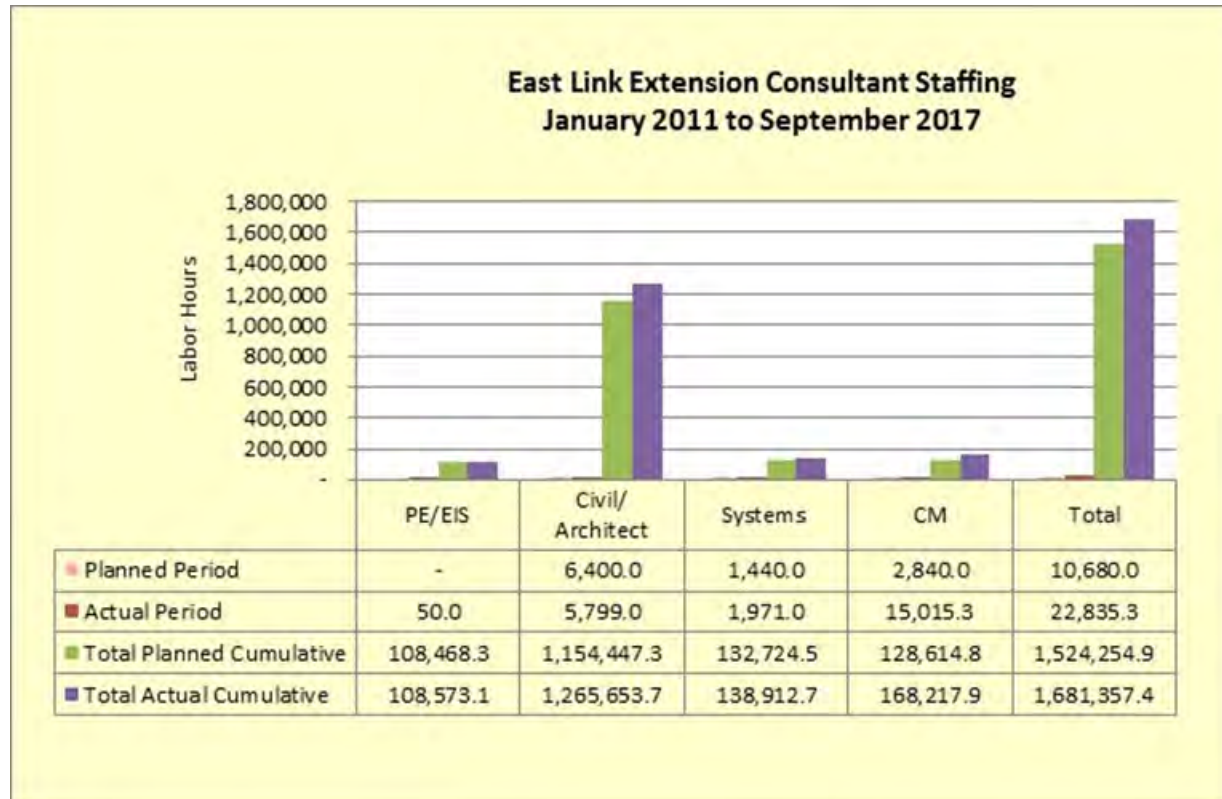
There were 142.7 consultant FTE assigned to the East Link Extension during September. Consultant staffing was 11% (13.7 FTE) above August and 114% (76 FTE) above plan. Cumulatively since January 2011, average monthly consultant staffing (129.7 FTE/mo.) is trending with plan.



East Link Staffing

Consultant Resource Commitments to East Link, continued

In September, construction management consultant staffing (93.8 FTE) on the East Link Extension was 66% of consultant staffing; civil engineering consultant staffing (36.2 FTE) comprised 25% of consultant staffing. There were 12.3 and 0.3 consultant FTE s supporting systems design and preliminary engineering, respectively.



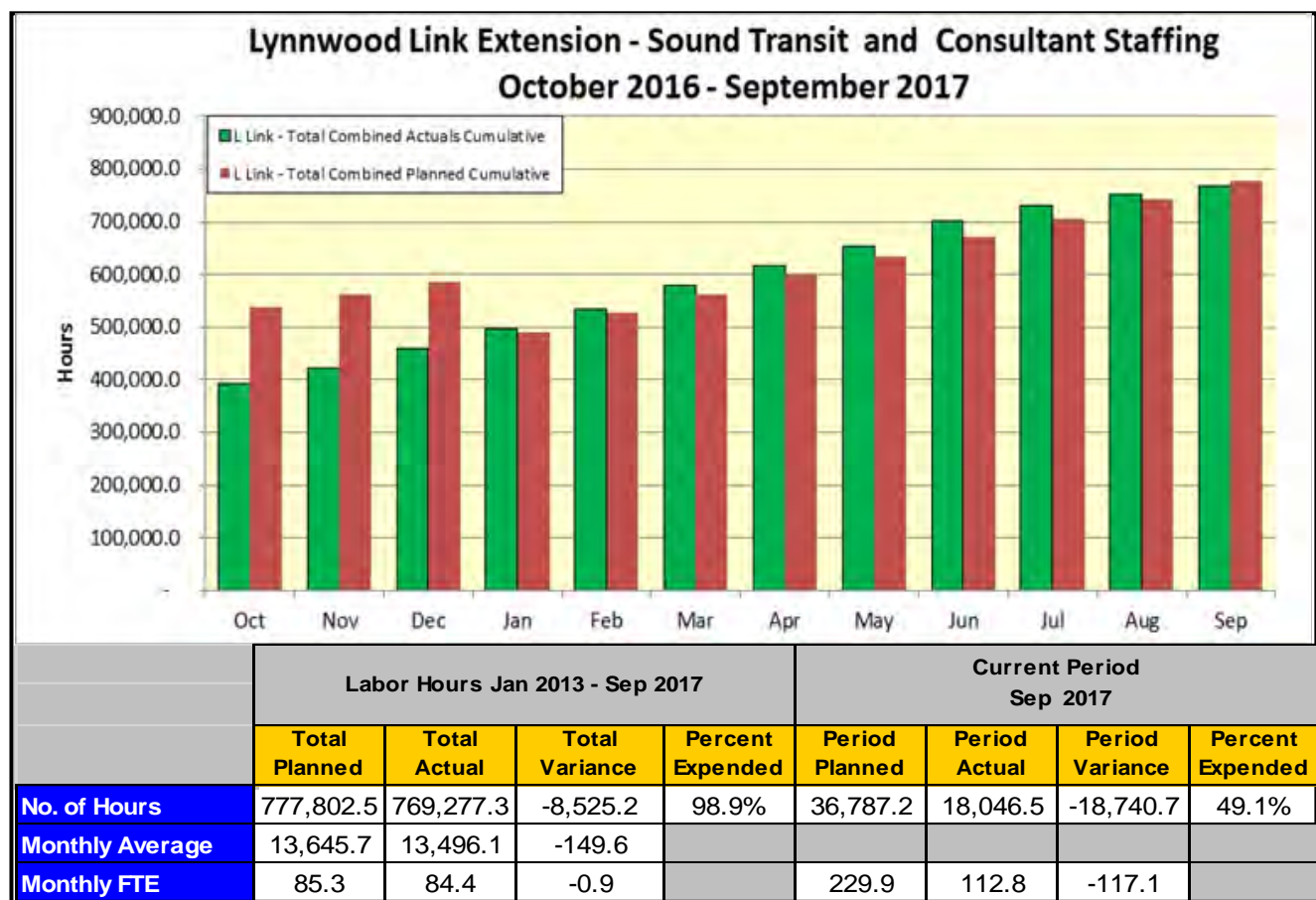
Link Light Rail Staffing Report



Lynnwood Link Extension Staffing

Total Internal and External Staffing – S. 200th Link Extension

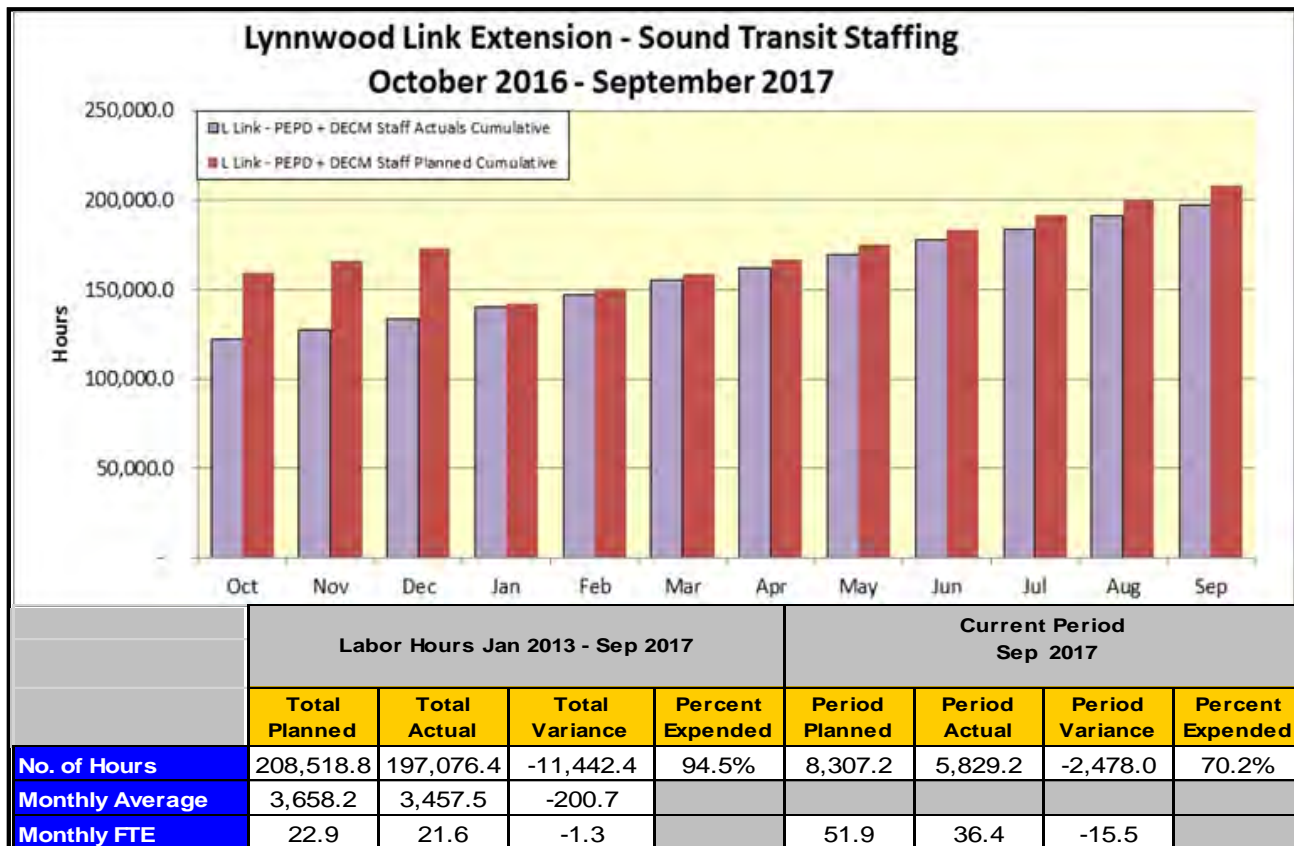
During September Lynnwood Link Extension staffing was 112.8 FTE (49% of, or 117.1 FTE below plan). There were 76.4 consultant FTE (57% below plan) and 36.4 internal FTE (70% of plan). Average year-to-date staffing of 194.7 FTE/mo is trending 15% (35.2 FTE/mo.) below plan; cumulatively since January 2013 staffing is averaging 84.4 FTE/mo. and is trending with plan.



Lynnwood Link Extension Staffing

Internal Staffing—Lynnwood Link

During September internal staffing for the Lynnwood Link Extension (36.4 FTE) was 22% (8.1 FTE) below August staffing and 30% (15.5 FTE) below plan. Cumulatively, since January 2013, average monthly internal staffing (21.6 FTE/mo.) is trending within 5% of plan.



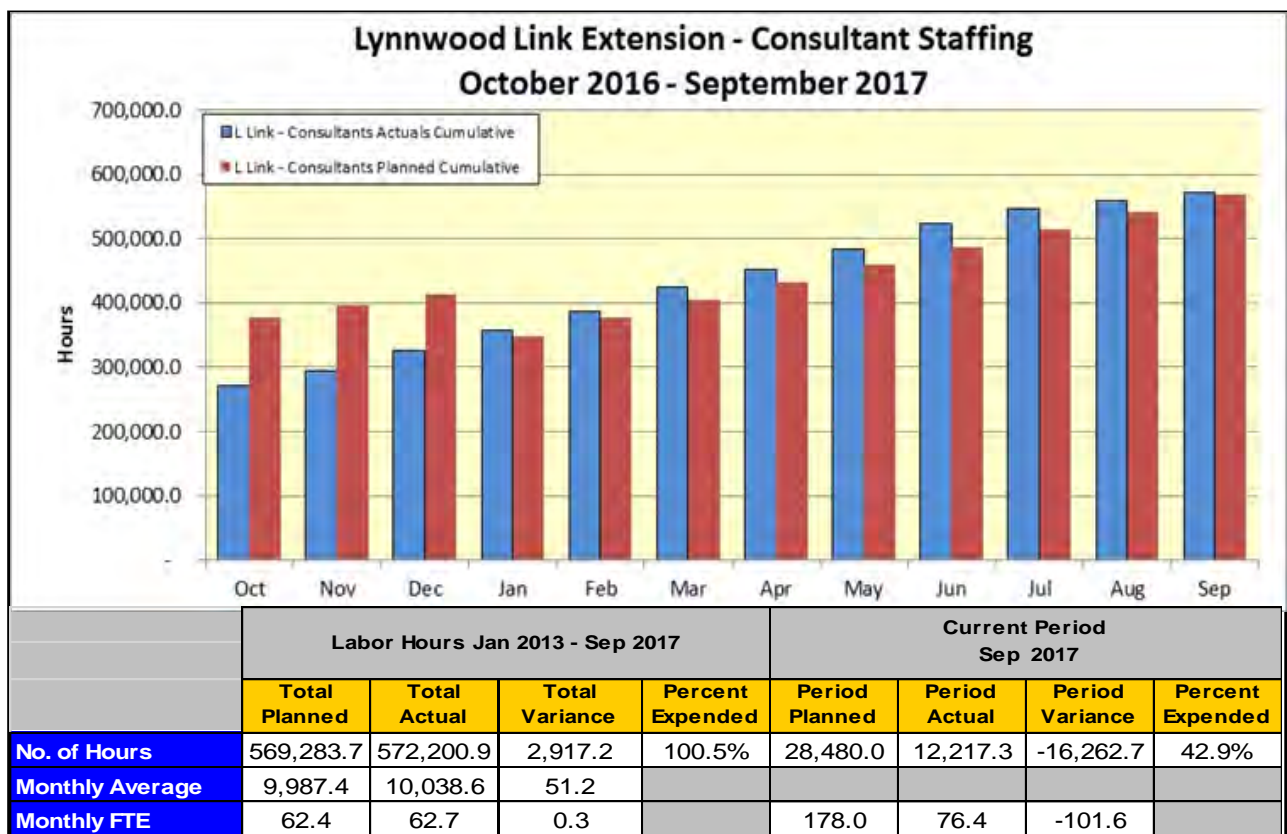
Link Light Rail Staffing Report



Lynnwood Link Expansion

Consultant Staffing—Lynnwood Link

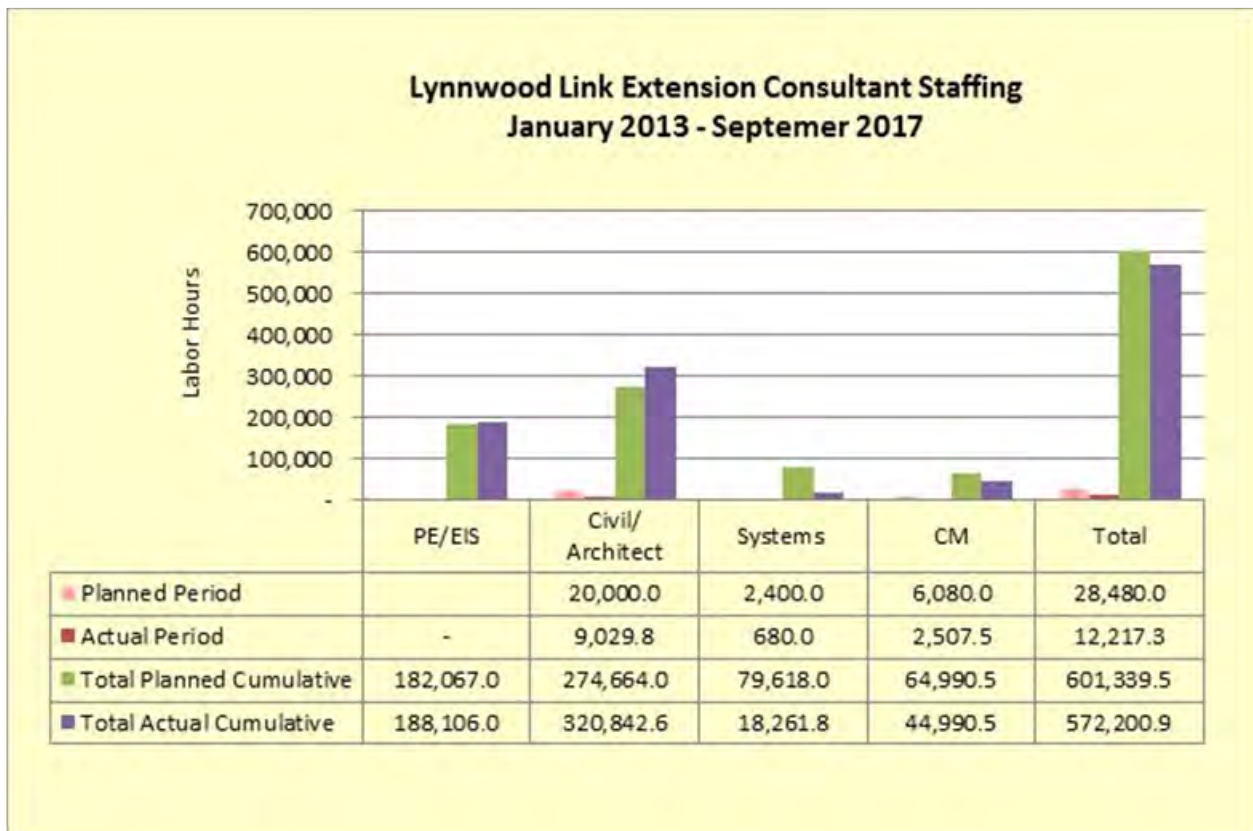
There were 76.4 consultant FTE assigned to the Lynnwood Link Extension during September. Consultant staffing decreased 5% (3.8 FTE) from August and was 57% (76 FTE) below plan. Cumulatively since January 2013, average monthly consultant staffing (62.5 FTE/mo.) is trending with above plan.



Lynnwood Link Extension Staffing

Consultant Resource Commitments to Lynnwood Link

Seventy-three percent of the Lynnwood Link consultant staffing (56.4 FTE) were supporting civil final design. Additional consultant staffing (15.7 FTE or 20% of consultant staffing) provided construction management and systems design (4.3 FTE or 6% of consultant staffing) support.



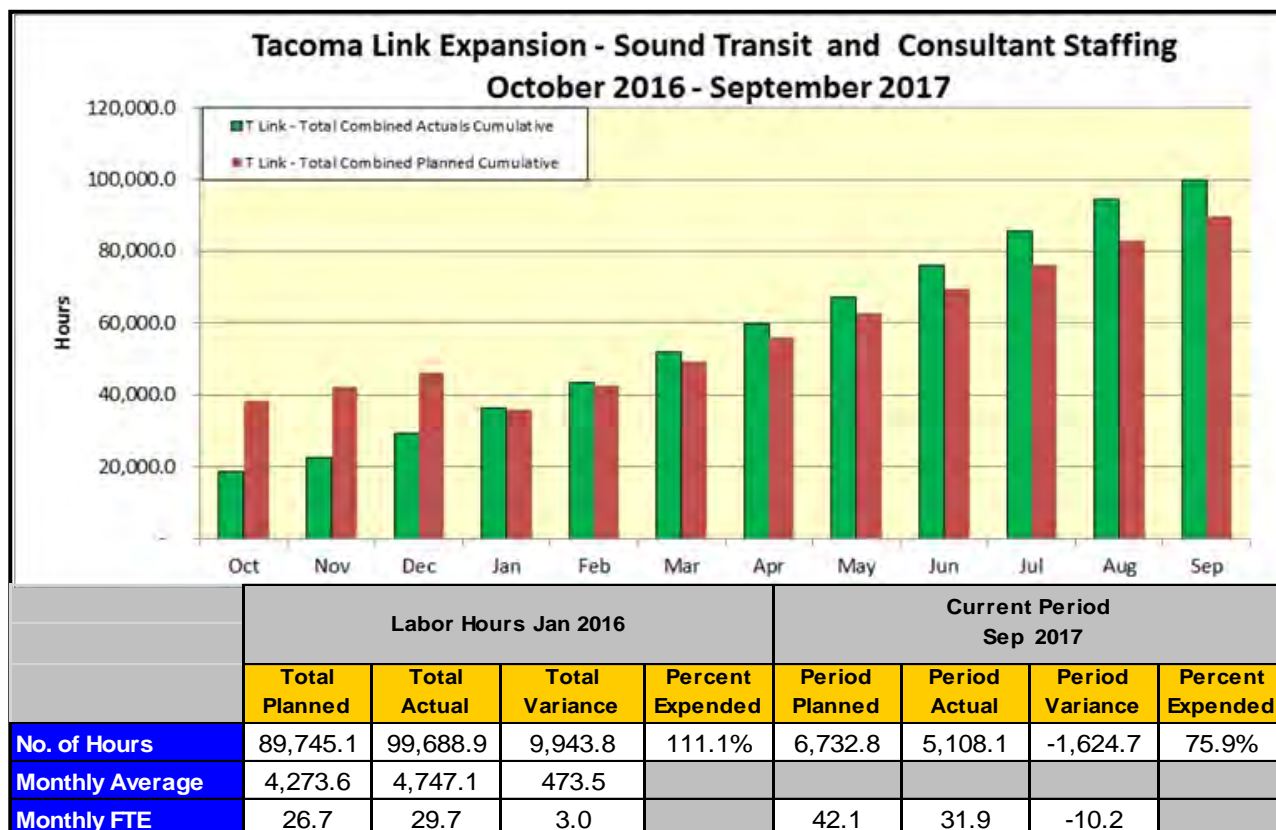
Link Light Rail Staffing Report



Tacoma Link Expansion

Total Internal and Consultant Staffing – Tacoma Link Expansion

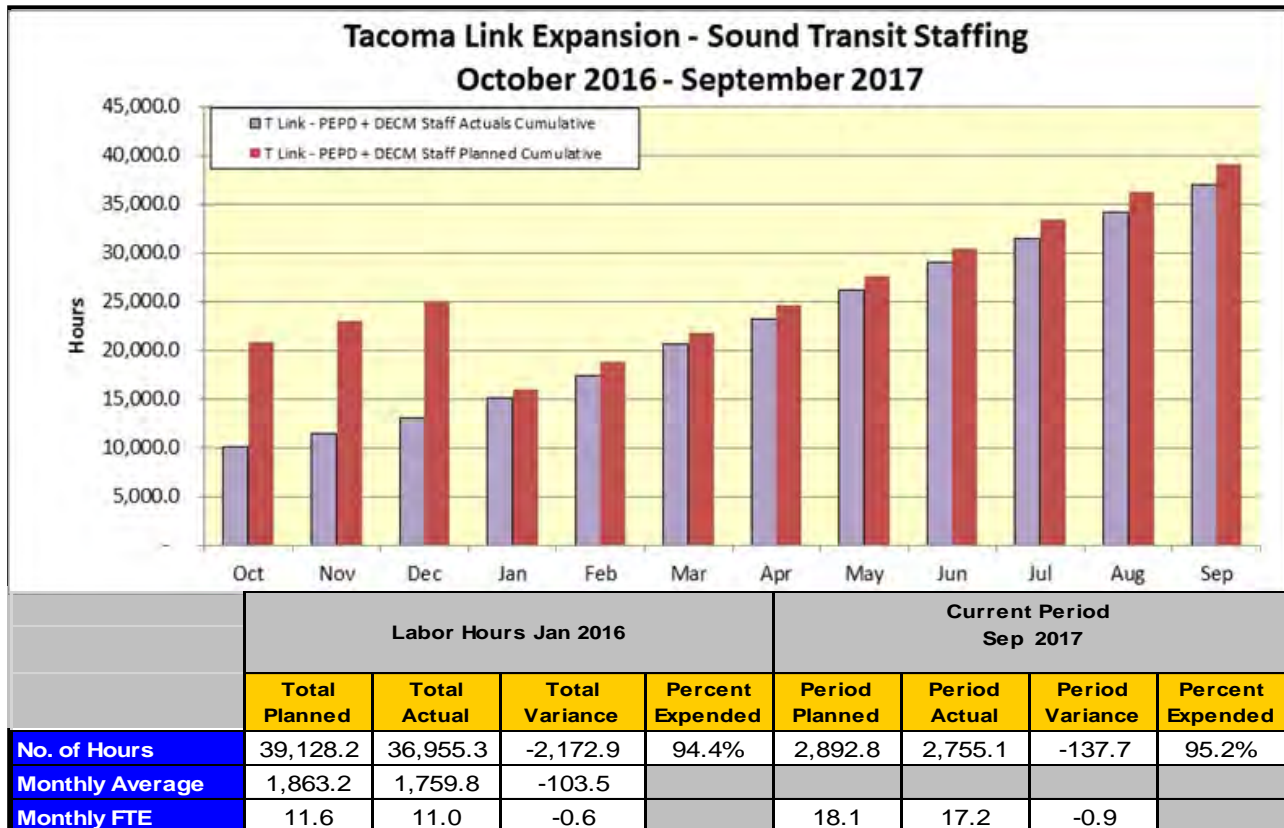
During September internal staffing for the Tacoma Link Extension (31.9 FTE) was 1% (0.3 FTE) above August staffing and was 5% (0.9 FTE) below plan. Cumulatively, since January 2016, average monthly internal staffing (11 FTE/mo.) is trending 5.6% (0.6 FTE/mo.) below plan.



Tacoma Link Expansion

Internal – Tacoma Link Expansion

During September, internal staffing for the Tacoma Link Extension (17.2 FTE) was 1% (0.3 FTE) above August staffing and was 5% (0.9 FTE) below plan. Cumulatively, since January 2016, average monthly internal staffing (11 FTE/mo.) is trending 5.6% (0.6 FTE/mo.) below plan.



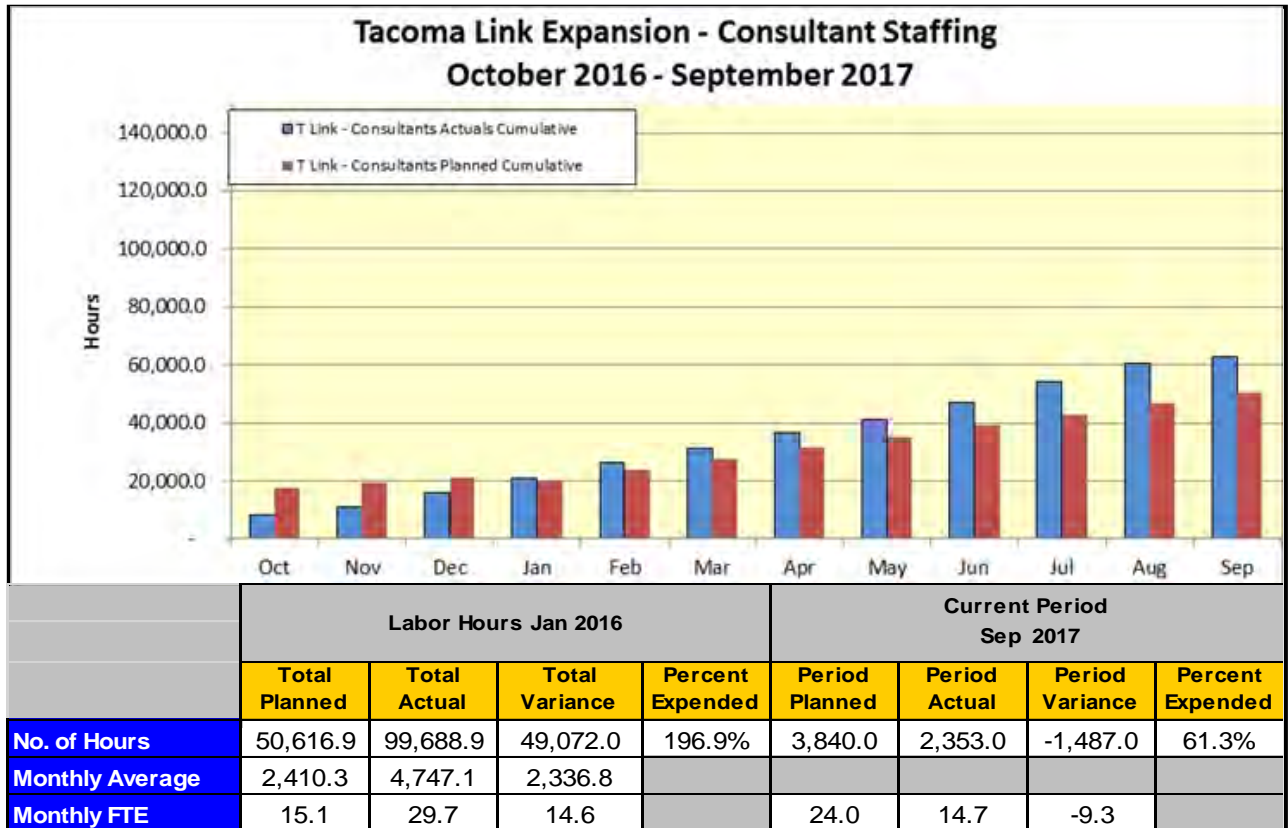
Link Light Rail Staffing Report



Tacoma Link Expansion

Consultant Resource Commitments – Tacoma Link Expansion

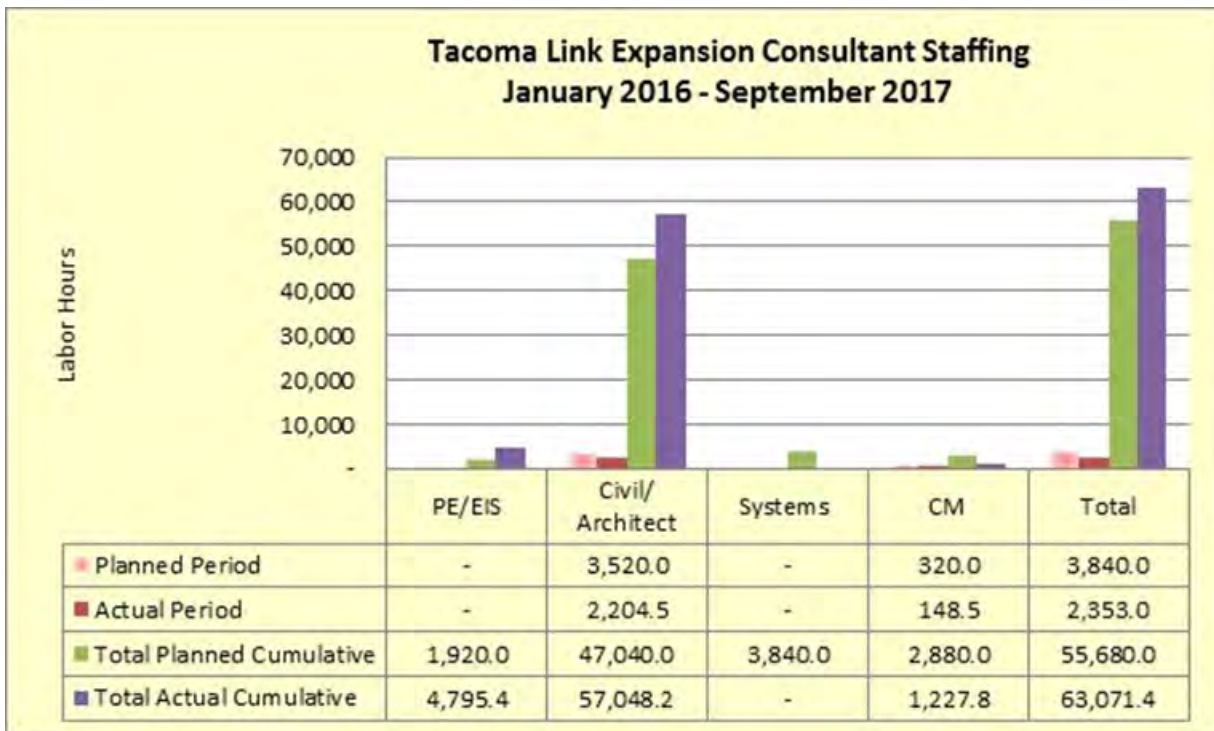
There were 14.7 consultant FTE assigned to the Tacoma Link Extension during September. Consultant staffing was 39% (9.3 FTE) below plan and was 62% (23.9 FTE) below August staffing. Cumulatively since January 2016, average monthly consultant staffing (29.7 FTE/mo.) is trending 97% (14.6 FTE/mo.) above plan.



Tacoma Link Expansion

Consultant Resource Commitments to Tacoma Link Expansion

Ninety-four percent of consultant staff assigned to the Tacoma Link Extension (13.8 FTE) were supporting final design; there was 0.9 FTE providing construction management support.



Link Light Rail

Acronyms



ACRONYMS

AA	Alternative Analysis
APE	Area of Potential Impact
BCE	Baseline Cost Estimate
BCWS	Budgeted Cost of Work
BIM	Building Information Modeling
BNSF	Burlington Northern Santa Fe Railway
CCB	Change Control Board
CDF	Controlled Density Fill
CHS	Capitol Hill Station
CM	Construction Management
CMU	Concrete Masonry Unit
CO	Change Order
CPI	Cost Performance Index
CPM	Critical Path Method
DAHP	Department of Archaeology & History Preservation
DART	Days Away, Restricted or Modified
DB	Design -Build
DECM	Design, Engineering and Construction Management
DEIS	Draft Environmental Impact Statement
DPD	Seattle Department of Planning and Development
DSC	Differing Site Conditions
DSDC	Design Support During Construction
DSTT	Downtown Seattle Transit Tunnel
EFC	Estimated Final Cost
EMI	Electro Magnetic Interference
FD	Final Design
FHWA	Federal Highway Administration
FSEIS	Final Supplemental Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
FTE	Full Time Employee
GC/CM	General Contractor /Construction Management
HVAC	Heating, Ventilation and Air Conditioning
ICD	Integration Control Document
IRT	Independent Review Team
IWP	Industrial Waste Permit
JA	Jacobs Associates
JARPA	Joint Aquatic Resource Permit Application
KCM	King County Metro
LNTF	Limited Notice to Proceed

ACRONYMS, continued

LRRP	Light Rail Review Panel
LRT	Light Rail Transit
LRV	Light Rail Vehicle
LTK	LTK Engineering Services
MACC	Maximum Allowable Construction Cost
MDA	Major Discharge Authorization
MLK	Martin Luther King, Jr. Way
MOA	Memorandum of Agreement
MOS	Minimum Operable Segment
MOU	Memorandum of Understanding
MPPCV	Major Public Project Construction Variance
MRB	Material Review Board
MTP	Montlake Triangle Project
MUP	Master Use Permit
NB	Northbound
NCR	Notification of Change Report
NCTP	North Corridor Transit Partners
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NTP	Notice to Proceed
OCS	Overhead Catenary System
OMF	Operations and Maintenance Facility
OMSF	Operations and Maintenance Satellite Facility
PE	Preliminary Engineering
PEP	Project Execution Plan
PEPD	Planning, Environment and Project Development
PMOC	Project Management Oversight Consultant
PSST	Pine Street Stub Tunnel
QA	Quality Assurance
QC	Quality Control
QTR	Quarter
RE	Resident Engineer
RFC	Request for Change
RFD	Request for Deviation
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
RIR	Recordable Injury Rates

ACRONYMS, continued

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 & 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
UAC	Unallocated Contingency
U-Link	University Link project
UDS	University District Station
USFWS	U.S. Fish and Wildlife Service
UW	University Of Washington
UST	Underground Storage Tank
UWS	University of Washington Station
VE	Value Engineering
VECP	Value Engineering Cost Proposal
WBS	Work Breakdown Structure
WSDOT	Washington Department of Transportation