

Progress Report

Link Light Rail Program



**S. 200th Link Extension opens for Revenue Service
September 24, 2016**

September | 2016



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

LINK LIGHT RAIL CURRENT SERVICE AND APPROVED EXTENSIONS



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 \$487.9M.

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.

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 is being developed through a design-build (DB) delivery strategy and the anticipated service launch is September 2016. The Sound Transit Board adopted the baseline capital budget of \$383M in 2011.

Federal Way Link Extension: Sound Transit has identified the route and station location requirements for the extension of light rail to the Federal Way Transit Center; with preliminary engineering to be completed on the segment extending from S. 200th St. to Kent/Des Moines in the vicinity of Highline Community College. The proposed budget for this effort is \$48.8M.

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.

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 \$449M in July 2016.

ST2 Light Rail Vehicles (LRV) Fleet Expansion: This project includes the design, manufacturing, inspection, testing and delivery of 122 low floor LRVs for service requirements of Northgate, East Link and Lynnwood Link Extensions. The Sound Transit Board adopted the baseline capital budget of \$733M in September 2015.



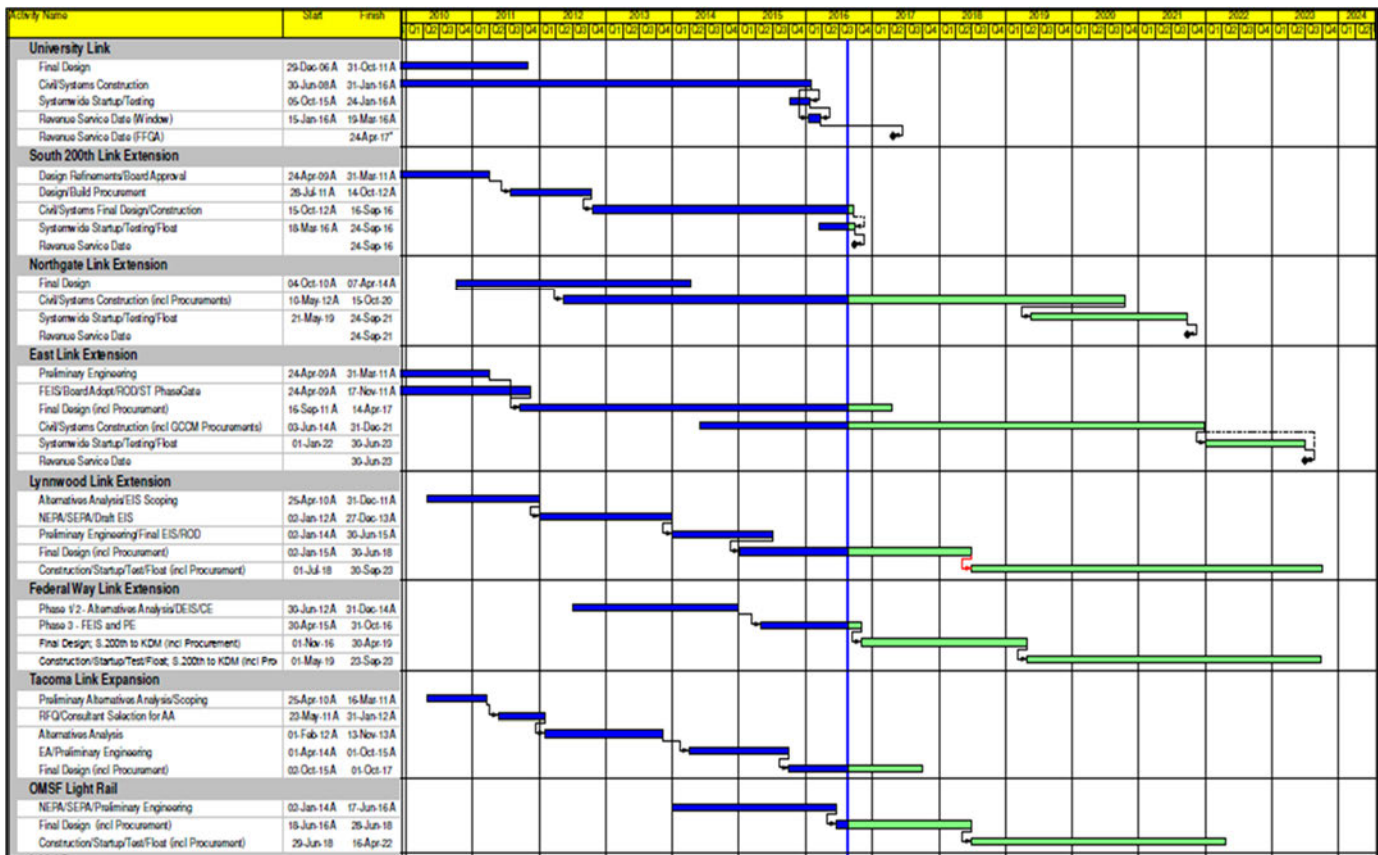
Link Light Rail Program Overview

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	\$1,509.2	\$1,495.4	\$46.3	\$1,555.5	\$200.5
Northgate Link Extension	\$1,899.8	\$1,136.0	\$739.0	\$763.7	\$1,899.8	\$0
Lynnwood Link Extension	\$487.9	\$158.1	\$68.4	\$329.8	\$487.9	\$0
East Link Extension	\$3,677.2	\$1,052.1	\$526.6	\$2,625.0	\$3,677.1	\$0
South 200th Link Extension	\$383.2	\$328.5	\$312.1	\$14.7	\$343.2	\$40.0
Federal Way Extension	\$48.8	\$37.7	\$32.6	\$11.1	\$48.8	\$0
Tacoma Link Extension	\$33.0	\$18.0	\$8.5	\$15.0	\$33.0	\$0
Link O & M Facility: East	\$449.2	\$35.6	\$33.8	\$413.6	\$449.2	\$0
ST2 LRV Expansion	\$733.0	\$4.9	\$1.8	\$728.1	\$733.0	\$0
Downtown Redmond Link Ext.	\$28.6	\$0.1	\$0.1	\$28.5	\$28.6	\$0
Total Link	\$9,496.6	\$4,280.3	\$3,218.4	\$4,975.8	\$9,256.1	\$240.5

Table in millions.

Program Schedule



Changes this period: None.

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.

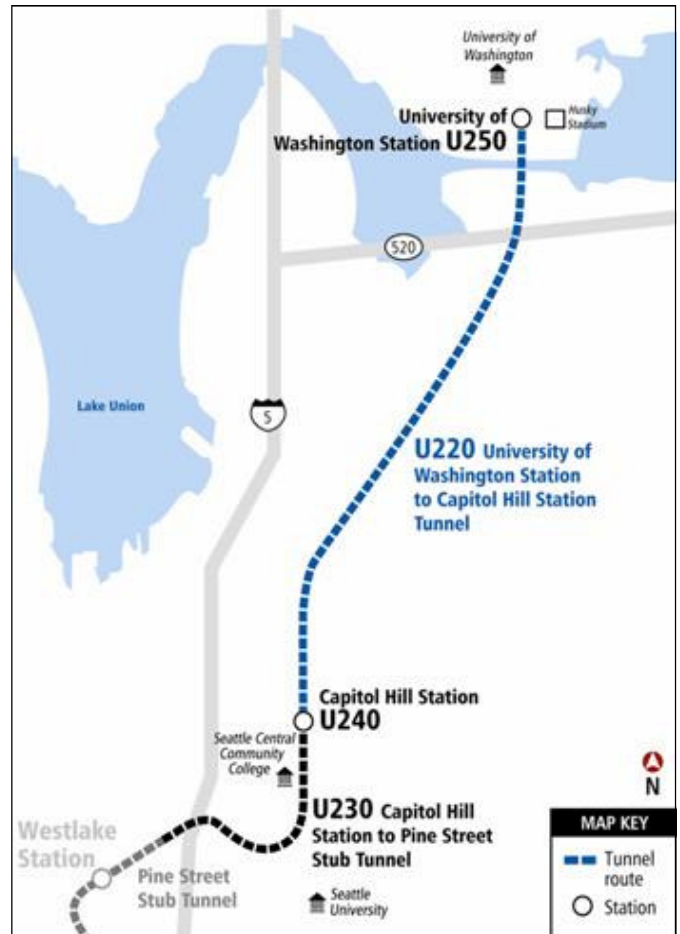
Tunnels: Two twin bored tunnels. Two contract segments: U220 starts at Husky Stadium, continues beneath SR 520 and the Montlake Cut south to the Capitol Hill underground station. U230 commences at Capitol Hill Station and proceeds south under the I-5 freeway to the PSST.

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

- Revenue Service commenced on March 19, 2016. Coordination between the Construction teams and the Operations group are ongoing to adjust the System for optimum operations. Contractors continue to perform punch list items but access to these activities poses to be challenging as they now have to work under Operations' rules and not Construction protocols. Availability of Operations personnel for oversight poses as a challenge as well as they are committed to prioritizing the Angle Lake Station opening over University Link.
- *U830 Systems:* Contractor is now collaborating to incorporate the South 200th Extension points into the newly installed operating systems. Contractor is currently focusing on the SCADA integration with South 200th Link Extension while continuing to perform punch list on U-Link and systems refinement to achieve optimal operation status. U-Link Systems has encountered some issues related to this infancy period.
- *Certification of Occupancy:* University Link continues to operate under a temporary certification of occupancy until all permit requires are fully met. The only outstanding item is the UL certification of low voltage cables in the tunnel—particularly the radiax cables that works as an antenna to the radio communication system.
- Commercial issues with prime contractors are being negotiated as the project proceeds through the close out process.

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 to the FTA's Standard Cost Categories (SCC) format. (Both tables' figures in millions.)

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commitment to Date*	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	\$ 115.23	\$ 113.55	\$ 80.41	\$ 79.76	\$ 88.23	\$ 25.32
PRELIMINARY ENGINEERING	\$ 24.39	\$ 24.26	\$ 24.26	\$ 24.26	\$ 24.26	\$ -
FINAL DESIGN	\$ 77.94	\$ 90.31	\$ 87.81	\$ 85.86	\$ 88.66	\$ 1.65
CONSTRUCTION SERVICES	\$ 68.53	\$ 94.81	\$ 86.70	\$ 86.52	\$ 88.72	\$ 6.10
3rd PARTY AGREEMENTS	\$ 18.65	\$ 18.65	\$ 12.01	\$ 11.28	\$ 13.55	\$ 5.10
CONSTRUCTION	\$ 1,180.00	\$ 1,158.18	\$ 993.09	\$ 982.46	\$ 1,022.58	\$ 135.60
VEHICLES	\$ 103.91	\$ 103.91	\$ 99.20	\$ 99.19	\$ 101.91	\$ 2.00
ROW	\$ 167.33	\$ 152.33	\$ 126.03	\$ 126.02	\$ 127.62	\$ 24.71
Capital Total	\$ 1,755.97	\$ 1,756.01	\$ 1,509.51	\$ 1,495.36	\$ 1,555.53	\$ 200.47
FINANCE COST	\$ 191.71	\$ 191.71	\$ 191.71	\$ 174.87	\$ 191.71	\$ -
Project Total	\$ 1,947.68	\$ 1,947.72	\$ 1,701.22	\$ 1,670.24	\$ 1,747.24	\$ 200.47

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

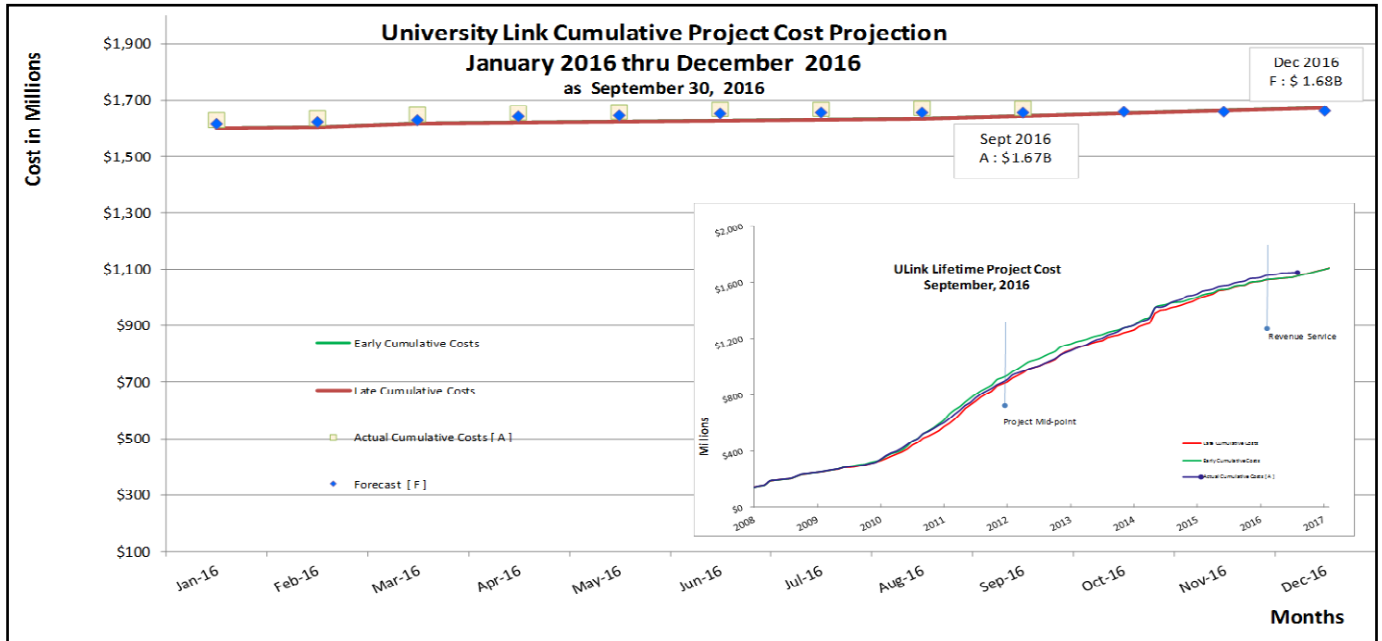
In September, the projected Estimated Final Cost (EFC) including Finance Cost remains at about \$1.75B. In this period, approximately \$0.5M was incurred and inching the project's Incurred to Date amount closer to \$1.5B (Finance Cost excluded). Direct construction cost in September is minimal as major construction activities have now winded down and only pertained to close out and follow on work. The direct construction EFC continues to trend approximately \$1B. This trend continues to be intact as the project is now completed with only miscellaneous follow on scope and commercial issues remain. Capitol Hill Contractor continues on their punch list work, the Systems (U830) Contractor continues to fine tune and optimizes the systems as well as the integration South 200th Link Extension systems points. The Total Incurred to Date for the Construction Phase is about \$982M with a current commitments about \$1.16B. Cost for LRV is at about \$99.2M. Cost of repairs are excluded from this project and tracked independently.

Construction EFC under the SCC format for this period remains stable and relatively unchanged at about \$1B. Construction SCC expenditures in September is about \$1M. This period, the bulk of U-Link construction cost has been attributed Station punch list and Systems testing and resolutions to change order work. Incurred to date for Construction under the SCC is approaching \$972M. Total capital cost incurred to date including non-construction cost (SCC 60 thru 90) now at \$1.5B or about 85% of total project budget scoped (excluding Finance 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	\$ 626.83	\$ 450.46	\$ 456.08	\$ 455.77	\$ 461.24	\$ (10.78)
20 Stations	\$ 366.33	\$ 350.75	\$ 344.52	\$ 342.30	\$ 353.09	\$ (2.33)
30 Support Facilities: Yards, Shops	\$ 7.01	\$ 24.83	\$ 22.86	\$ 22.82	\$ 24.50	\$ 0.33
40 Sitework & Special Conditions	\$ 59.03	\$ 67.39	\$ 57.00	\$ 54.67	\$ 56.83	\$ 10.56
50 Systems	\$ 69.63	\$ 116.42	\$ 100.35	\$ 96.24	\$ 102.89	\$ 13.53
Construction Subtotal (SCC 10-50)	\$ 1,128.82	\$ 1,009.85	\$ 980.81	\$ 971.80	\$ 998.54	\$ 11.31
60 Row, Land, Existing Improvements	\$ 167.33	\$ 125.77	\$ 126.03	\$ 126.02	\$ 126.60	\$ (0.83)
70 Vehicles	\$ 99.76	\$ 100.16	\$ 99.87	\$ 99.32	\$ 100.16	\$ 0.00
80 Professional Services	\$ 306.41	\$ 346.58	\$ 302.80	\$ 298.21	\$ 318.75	\$ 27.84
90 Unallocated Contingency	\$ 53.65	\$ 173.64	\$ -	\$ -	\$ 11.48	\$ 162.16
Capital Cost Total (SCC 10-90)	\$ 1,755.97	\$ 1,756.01	\$ 1,509.51	\$ 1,495.36	\$ 1,555.53	\$ 200.47
100 Finance Cost	\$ 191.71	\$ 191.71	\$ 191.71	\$ 174.87	\$ 191.71	\$ -
Project Total	\$ 1,947.68	\$ 1,947.72	\$ 1,701.22	\$ 1,670.24	\$ 1,747.24	\$ 200.47

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Link Light Rail University Link Extension

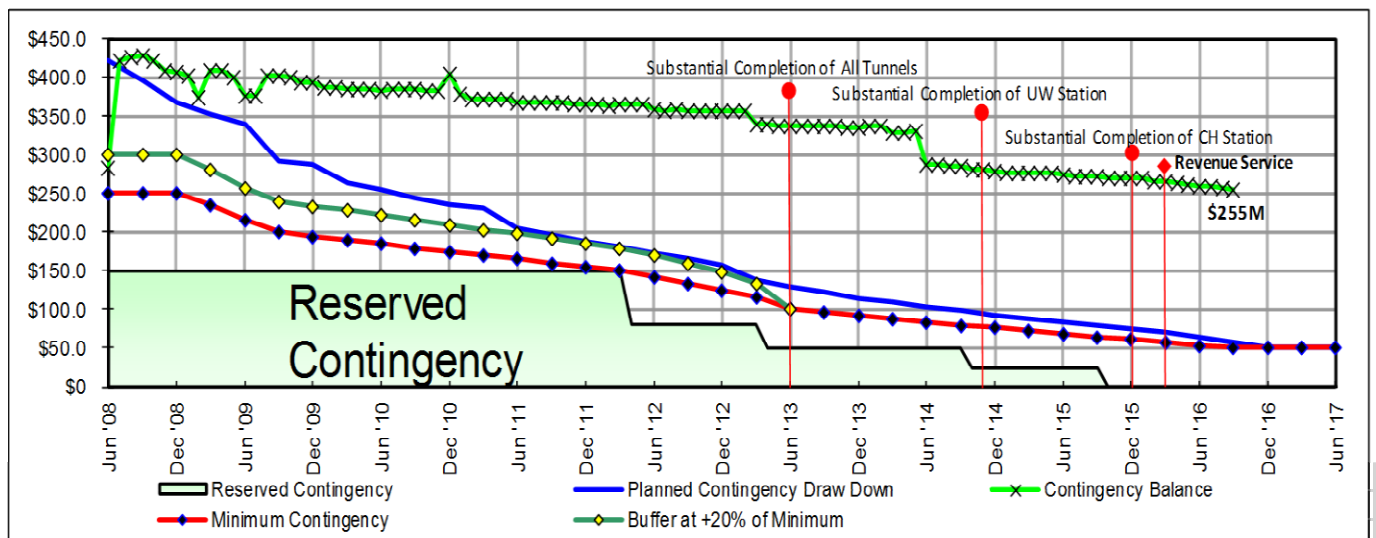


Total project cost incurred to date at August 2016 close including Finance Cost is at \$1.66B. The financing cost incurred to date is about \$175M. University Link projects the cost will be at approximately \$1.67B by December 2016 as close out activities continues. University Link EFC is projected at approximately \$200M under budget excluding financing cost.

Cost Contingency Management

Project contingencies remains at healthy at approximately \$256M due to the favorable construction bidding climate, ROW acquisition cost trends, diligent project risk management practices, and excellent tunneling conditions. August's overall contingencies notched down by about \$1.5M due to construction change orders and follow on project commitments. While major construction activities are now done, 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 78% of these contingencies will remain unused; thereby, generating approximately \$200M of budget savings excluding financing cost.

MINIMUM CONTINGENCY CURVES as of September 30, 2016 \$ in millions



Project Schedule Summary

Revenue Service began on March 19, 2016.

U240 Contractor achieved Substantial Completion in December 2015. A Temporary Certificate of Occupancy was achieved on Revenue Service date of March 19, 2016. The U830 Contract has not achieved Substantial Completion but System Integration Testing is complete. U835 EMI/Vibration Testing is completed. The U810 MOW Building is complete; close-out, punchlist work continue.

U240 Contract – Capitol Hill Station

Close-out Progress

The U240 Contractor achieved Substantial Completion on December 31, 2015. Punchlist and close-out work is underway.

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

- Finalize all punch list items throughout the station. This activity is on hold pending traction power support from Sound Transit operations group, which is anticipated to happen late 3rd or early 4th QTR 2016.
- 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.
- Contractor continues working on leak remediation. ST remains concerned about schedule to complete leak remediation work. A definitive date for completion of this work has not been determined, but anticipated to happen late 3rd QTR or early 4th QTR 2016.

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:	98%
Authorized Contingency	\$11,742,514
Contingency Drawdown	\$11,254,629
Contingency Index	1.02

U250 Contract –University of Washington Sta.

Close-out Progress

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

Close-out Activities

Current Period

- Continued closing out of all remaining commercial issues.

Next Period

- Continue closing out of all remaining commercial issues.

Closely Monitored Issues

- Multiple commercial issues remain unresolved. These issues continue to be reviewed and assessed by Sound Transit.
- Three Notices of Intent to Claim have been filed by the GC/CM. All three claims were denied. A request for mediation was received, and rejected until all claim issues can be mediated at one time.

Cost Summary

Present Financial Status	Amount
U250 Contractor - Hoffman Construction Co.	
Original Contract Value	141,745,898
Change Order Value	8,659,062
Current Contract Value	150,404,959
Total Actual Cost (Incurred to date)	150,229,022
Financial Percent Complete:	99%
Physical Percent Complete:	99%
Authorized Contingency	9,152,295
Contingency Drawdown	8,659,062
Contingency Index	1.04

U810 Contract – *Maintenance of Way*

Close-out Progress

Punchlist work and commissioning of equipment continued.

Close-out Activities

Current Period

- Continued processing outstanding commercial issues.

Next Period

- Continue processing outstanding commercial issues.

Closely Monitored Issues

- ST and Contractor continue to review outstanding commercial issues and continue working towards a possible negotiated settlement.

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

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

Close-out Progress

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

Close-out Activities

Current Period

- Completed trackwork as-builts.
- 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 documentation.
- Continue work on commercial closure of the project.

Closely Monitored Issues

- None to report.

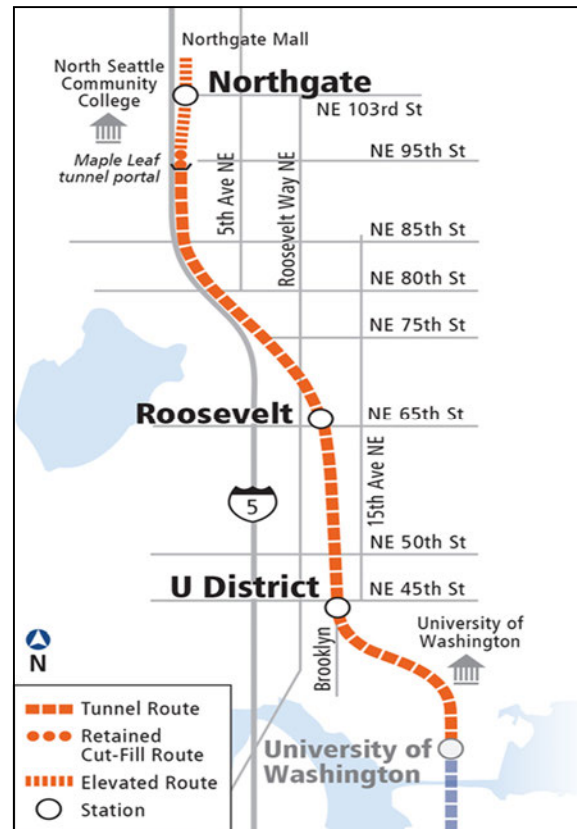
Cost Summary

Present Financial Status	Amount
U830 GC/CM Contractor - Stacy & Witbeck	
Original Contract Value	\$119,167,433
Change Order Value	\$4,304,041
Current Contract Value	\$123,471,474
Total Actual Cost (Incurred to date)	\$119,779,994
Financial Percent Complete	97.0%
Physical Percent Complete:	99.0%
Authorized Contingency	\$5,958,373
Contingency Drawdown	\$4,304,041
Contingency Index	1.4

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



Map of Northgate Link Extension route and stations.

Key Project Activities

- JCM completed mining from UDS to UWS and holed through headwall at UWS on September 1.
- Provided project update to the ST Board and prepared response to a Board member's request for Roosevelt Station TOD plans.
- Progressing various Final Design contract packages. (*See Final Design section for details.*)
- *For N125 TBM Tunnels*, Contractor continued demobilization of tunnel mining facilities and completed dewatering well operations at UWS.
- *For N160 – Northgate Station* – Issued Notice to Proceed to Absher Construction for station construction contract. Held the construction kickoff meeting with Contractor. JCM continued demobilization.
- *For N180 Trackwork*, ST continued to await FTA response on request for waiver for ultra-straight rail.

Closely Monitored Issues

- *Cross passage work schedule* -A high proportion of cross passage activities are continuing to slip on the schedule. This continues to cause concern and will need to be addressed in the next schedule review meeting.

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	\$40.7	\$41.7	\$147.9	\$0.0
PRELIMINARY ENGINEERING	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$0.0
FINAL DESIGN	\$129.2	\$129.2	\$116.7	\$100.0	\$129.2	\$0.0
CONSTRUCTION SERVICES	\$118.3	\$118.3	\$84.8	\$40.3	\$118.3	\$0.0
3rd PARTY AGREEMENTS	\$11.8	\$11.8	\$9.9	\$5.8	\$11.8	\$0.0
CONSTRUCTION	\$1,328.0	\$1,328.0	\$775.5	\$443.3	\$1,328.0	\$0.0
ROW	\$127.3	\$127.3	\$93.4	\$92.9	\$127.3	\$0.0
PROJECT CONTINGENCY	\$22.2	\$22.2	\$0.0	\$0.0	\$22.2	\$0.0
Total	\$1,899.8	\$1,899.8	\$1,136.0	\$739.0	\$1,899.8	\$0.0

The Estimated Final Cost (EFC) for the project as of this reporting period is \$1,899.8M, which is equal to the current project budget. This period approximately \$11.7M was incurred, of which \$8.5M was for the N125 tunneling contract, the N111 Utility Relocation and N113 OH Power Relocation projects at Northgate, and other miscellaneous construction; \$0.3M was incurred for civil and systems final design and design support during construction; and \$1.4M 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	\$599.6	\$489.1	\$304.3	\$595.1	\$4.5
20 STATIONS	\$376.1	\$386.7	\$134.3	\$37.0	\$386.7	\$0.0
30 SUPPORT FACILITIES: YARD, SHOP	\$5.3	\$5.3	\$6.4	\$5.2	\$6.4	(\$1.1)
40 SITEWORK & SPECIAL CONDITIONS	\$140.8	\$190.5	\$132.4	\$90.9	\$191.6	(\$1.1)
50 SYSTEMS	\$110.9	\$95.1	\$3.2	\$0.9	\$97.4	(\$2.3)
Construction Subtotal (SCC 10 - 50)	\$1,228.7	\$1,277.2	\$765.3	\$438.3	\$1,277.2	\$0.0
60 ROW, LAND, EXISTING IMPROVEMENTS	\$119.9	\$119.9	\$93.4	\$92.9	\$119.9	\$0.0
80 PROFESSIONAL SERVICES	\$420.7	\$427.1	\$277.4	\$207.8	\$427.0	\$0.1
90 CONTINGENCY	\$130.4	\$75.6	\$0.0	\$0.0	\$75.6	(\$0.1)
Capital Total (SCC 10 - 90)	\$1,899.8	\$1,899.8	\$1,136.0	\$739.0	\$1,899.8	\$0.0

The Estimated Final Cost (EFC) for some contract packages have been reassessed and revised as a result of updated design development estimates and the award of Contract N125 at an amount lower than the adopted budget. The current adopted budget values have been updated to reflect the 2016 budget revisions and updated contingency amounts.

Cost Contingency Management

Compared to the baseline amount of \$396M, the Total Contingency has decreased by \$37M to \$359M, which is 30.9% of project work remaining. During this reporting period, a net decrease of \$0.1M in the overall project contingency occurred. Detailed information is provided below.

Design Allowance – The baseline Design Allowance of \$113.9M has been fully depleted following the receipt of updated construction cost estimates on the N140, N150, and N160 Station Finishes contracts. DA has been utilized as scope development has progressed to 90% on N140, and 100% on N150 and N160. No changes to DA occurred during this period.

Link Light Rail Northgate Link Extension

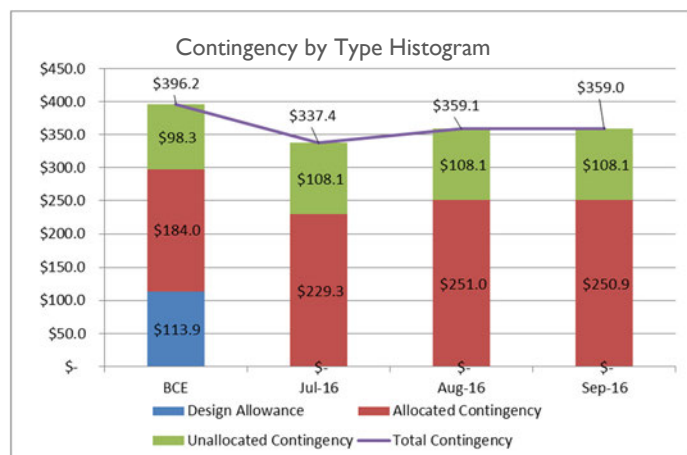


Cost Contingency Management, continued

Allocated Contingency – Compared to the baseline amount of \$184.M, Allocated Contingency has increased by \$66.9M to \$250.M. During this reporting period, AC was decreased by a total of \$0.1M as a result of contract change orders issued on the N113 and N125 contracts.

Unallocated Contingency – Compared to the baseline amount of \$98.3M, Unallocated Contingency has increased by \$9.8M to \$108.1M. 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%	\$ 250.9	21.6%
Unallocated Contingency	\$ 98.3	4.6%	\$ 108.1	9.3%
Total	\$ 396.2	18.6%	\$ 359.0	30.9%



Project Schedule

The N105 Contractor Pellco Construction completed the remainder of the demolition, grading, utilities, and asphalt paving at Site C near Northgate Station (Silver Platters). Lighting and striping are scheduled for early October, with Substantial Completion expected by October 7. At the Key Bank site near UDS, demolition and UST removal are complete and excavation of both the east and west sides of the site is underway. Completion of the work at the Key Bank site is now scheduled for late December 2016, a two week improvement over the last reporting period schedule forecast.

Work on the N111 contract is complete. Close-out is ongoing.

The N113 SCL 115kV Relocation contractor Potelco completed the pole foundations and 6 of 8 pole installations. Stringing of the conductor is scheduled for October, as well as removal of the existing conductor across I-5 and along 1st Ave NE. Substantial Completion is indicated as January 5, 2017 in the latest schedule update.

The N125 Tunneling Contractor achieved hole-through of the final tunnel segment at UWS on September 1 and is continuing cross passage construction all along the tunnel alignment. The Contractor's September schedule update has not been received by ST, it is anticipated that it will continue to show negative float in achievement of the contract milestones.

The N140 U District Station 100% Design was submitted last period. Hoffman is currently preparing subcontractor bid packages. ST continues to work with the City of Seattle on the Master Use Permit, SIP, and Building Permits and should be able to resolve all comments by November 2016.

The N150 Roosevelt Station GC/CM (Hoffman) is continuing to bid major subcontractor bid packages. ST is still reviewing the initial cost estimate. MACC negotiations have been pushed back into September/October. Board approval is still scheduled for November 2016.

Project Schedule, continued

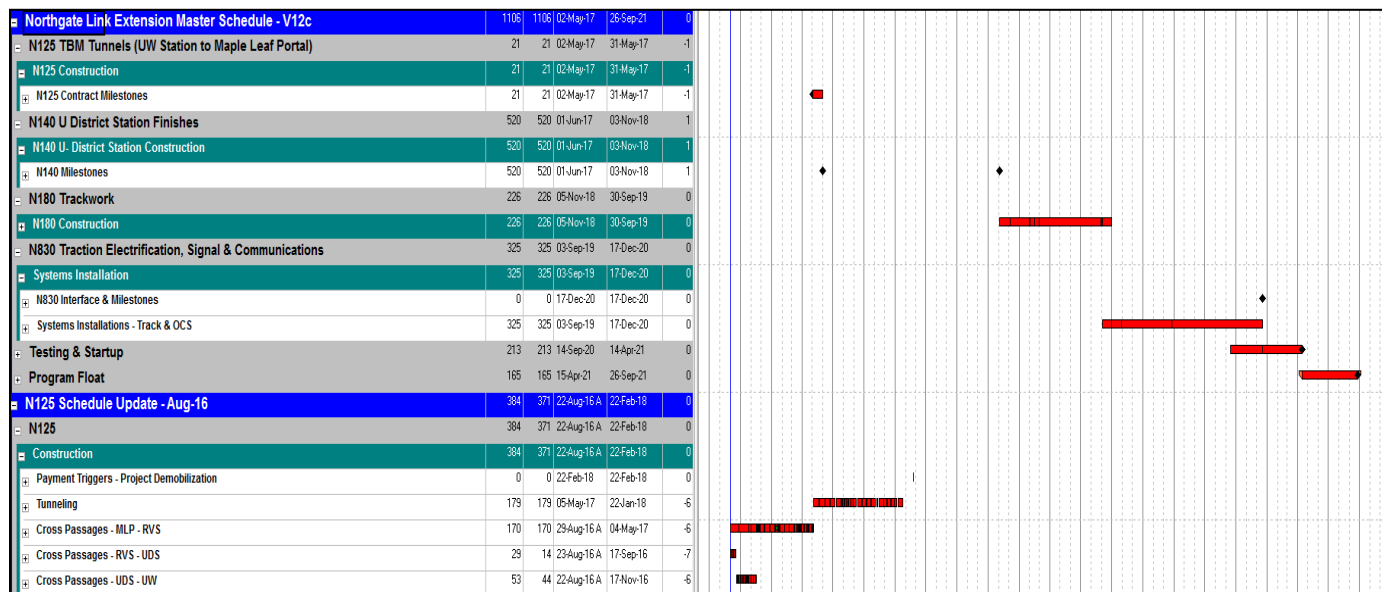
The N160 Northgate Station construction Notice to Proceed was issued on September 2 to Absher Construction. Absher is currently mobilizing personnel, performing the tenant improvements for CM office space at the Silver Platters building, and preparing submittals.

The N180 Trackwork contractor, Stacy and Witbeck, is proceeding with pre-construction submittals, in preparation of procuring rail, and pre-cast track slabs. ST is still awaiting a decision from FTA on the Buy America waiver request for the Ultra-Straight Rail and exploring procurement options with the Contractor.

Activity Name	Ong Dur	Start	Finish	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Northgate Link Extension Master Schedule - V12c														
N105 Advanced Demolition & Site Prep														
N105 Final Design	350	16-Jun-14 A	02-Nov-15 A											
N105 - Contract Procurement	205	13-Aug-15 A	06-Jun-16 A											
N105 IFB	26	28-Sep-15 A	02-Nov-15 A											
N105 Construction Summary	202	07-Jun-16 A	25-Dec-16											
N110 Advanced Utility Relocation, Roosevelt Area														
N110 - Roosevelt Advance Utility Relocation Construction	0	06-Mar-13 A	28-May-13 A											
N111 Advance Utility Relocation, Northgate Area														
N111 Advance Utility Relocation Final Design	447	31-May-12 A	14-Feb-14 A											
N111 - Ad, Bid & Award	201	17-Feb-14 A	16-Jan-15 A											
N111 Advance Utility Relocation Construction	464	19-Jan-15 A	26-Apr-16 A											
N112 Advanced Demolition & Site Prep, U District & Roosevelt														
N112 Roosevelt Station Site Prep	114	01-Aug-12 A	15-Mar-13 A											
N112 U District Station Site Prep	90	08-Apr-13 A	31-Aug-13 A											
N113 115kV Relocation at Northgate														
N113 SCL 115kV Relocation Final Design & Procurement	587	18-Dec-14 A	26-Jul-16 A											
N113 SCL 115kV Relocation Construction	266	31-May-16 A	20-Feb-17											
N125 TBM Tunnels (UW Station to Maple Leaf Portal)														
N125 Tunnel & Station Shell Construction	1099	30-Sep-13 A	19-Feb-18											
Tunneling - NB Bore/TBM No. 1 - UDS to UW	100	04-Jan-16 A	26-May-16 A											
Tunneling - SB Bore/TBM No. 1 - UDS to UW	277	24-Mar-16 A	27-Aug-16 A											
Roosevelt Station - Utilities & Box Excavation	379	07-Oct-13 A	17-Mar-15 A											
Maple Leaf Portal - Utilities/Portal Construction/Launch Prep	379	28-Oct-13 A	15-Aug-14 A											
U-District Station - Utilities & Box Excavation	379	10-Dec-13 A	12-Aug-15 A											
Tunneling - NB Bore/TBM No. 1 - MLP to RVS	156	09-Jul-14 A	25-Mar-15 A											
Tunneling - NB Bore/TBM No. 1 - RVS to UDS	162	03-Apr-15 A	16-Jul-15 A											
Tunneling - SB Bore/TBM No. 2 - MLP to RVS	166	20-Nov-14 A	13-Aug-15 A											
Tunneling - SB Bore/TBM No. 2 - RVS to UDS	102	21-Jul-15 A	10-Jan-16 A											
Cross Passages - RVS-UDS	363	19-Jun-15 A	14-Feb-17											
Cross Passages - MLP-RVS	197	12-Oct-15 A	07-Jul-17											
Cross Passages - UDS-UW	320	24-Nov-15 A	23-Mar-17											
Maple Leaf Portal - Post-Tunneling	497	09-Sep-16 A	18-Jan-18											
N140 U District Station Finishes														
N140 U District Station Final Design	745	05-Jul-11 A	19-Aug-16 A											
N140 Prepare Bid Packages, Negotiate MACC	199	08-Feb-16 A	17-Nov-16											
N140 Bid Work Packages, Negotiate MACC, Contract Executi	274	08-Feb-16 A	10-Mar-17											
N140 U District Station Construction	1021	11-Mar-17	26-Dec-19											
N150 Roosevelt Station Finishes														
N150 Roosevelt Station Final Design	657	21-Jul-11 A	15-Apr-16 A											
N150 Bid Work Packages, Negotiate MACC, Contract Executi	180	18-Apr-16 A	04-Jan-17											
N150 Roosevelt Station Construction	997	05-Jan-17	28-Sep-19											
N160 Northgate Station and Elevated Guideway														
N160 Northgate Station & Guideway Final Design	637	04-Jun-12 A	18-Mar-16 A											
N160 MACC Negotiations & Construction Contract Approval	143	17-Jul-15 A	12-Feb-16 A											
SPG Nordstrom Deck Construction	250	25-Nov-15 A	23-Nov-16											
N160 Advertise, Bid & Award	123	14-Mar-16 A	02-Sep-16 A											
N160 Northgate Station & Guideway Construction	1248	02-Sep-16 A	31-Jan-20											
N180 Trackwork														
N180 Trackwork Final Design	1006	16-Feb-12 A	19-Feb-16 A											
N180 Prepare IFB Plan Set	24	19-Jan-16 A	19-Feb-16 A											
N180 Advertise, Bid & Award	131	23-Feb-16 A	25-Aug-16 A											
N180 Construction	771	03-Oct-16	29-Oct-19											
N180 Northgate Trackwork Construction	427	20-Feb-18	29-Oct-19											
N830 Traction Electrification, Signal & Communications														
N830 Systems Final Design	973	21-Dec-12 A	04-Nov-16											
N830 Systems GC/CM Contract Procurement	199	09-Apr-15 A	19-Jan-16 A											
N830 Systems Precon Services/Submittals/Procurement	0	19-Jan-16 A	04-Dec-18											
N830 Systems Installation	532	05-Nov-18	17-Dec-20											
Testing & Startup														
Northgate Link Testing, Commissioning, Start-up	146	14-Sep-20	14-Apr-21											
Program Float														
Northgate Link Project Float (CD)	165	15-Apr-21	26-Sep-21											

Critical Path Analysis

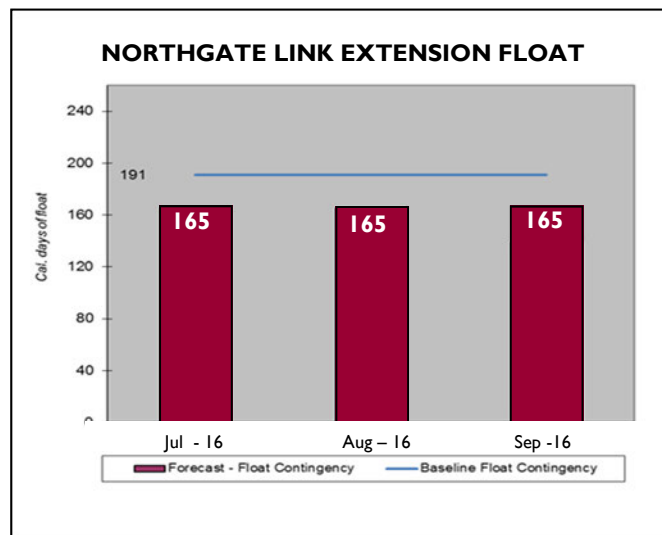
The longest path through the Northgate projects is now driven by the N125 contract and turnover of the UDS box to N140, and subsequently to the N830 Systems contract. The N160 contract is near critical due to access dates on site and overall duration of the contract.



Critical Path Float

The Northgate Link Project currently retains 165 days of unallocated project float. To date, ST has been able to work with both the GC/CM contractors for the stations and the N125 Contractor to explore means of performing concurrent operations in order to maintain the overall project schedule.

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



Construction Safety

Data/ Measure	September 2016	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	11	46
Days Away From Work Cases	1	2	4
Total Days Away From Work	0	5	219
Restricted or Modified Work Cases	0	4	22
Total Days Restricted or Modified Work	5	33	896
First Aid Cases	1	21	46
Reported Near Mishaps	1	8	49
Average Number of Employees on Worksite	319	-	-
Total # of Hours (GC & Subs)	50,451	50,9374	1,778,574
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	3.96	4.32	5.17
DART Rate	3.96	2.36	2.92
<i>Recordable National Average</i>	<i>3.60</i>	<i>3.60</i>	<i>3.60</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>7.20</i>	<i>7.20</i>	<i>7.20</i>
<i>DART WA State Average</i>	<i>3.30</i>	<i>3.30</i>	<i>3.30</i>

Right of Way

The U District and Roosevelt stations require 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 will result in owner and tenant, residential and commercial relocations.

Roosevelt Station – All parcels have been acquired. One parcel de-certified.

U District Station – All parcels have been acquired. One parcel de-certified.

Northgate Station - Arbitration scheduled for two parcels.

Tunnel Easements: All parcels have been acquired.

Line Section	Total Parcels Certified	Offers Made	Signed Agreements	Admin. Settlements	Possession and Use (P&U)	Closings to date	Baseline Relocations Required	Relocations Completed
U District Station	15	15	0	0	0	15	3	3
Roosevelt Station	19	19	0	0	0	18	26	26
Tunnel Easements	190	188	0	0	0	188	0	0
Northgate Station	11	11	1	0	2	6	13	13
Total	235	233	1	0	2	227	42	42

Quality Assurance Activities

Activities

- None to report.

Issues

- None to report.

Summary

Description	Sep 2016	Notes
No. of Audits Planned	0	None
No. of Audits Completed	0	None
Reports in Progress	1	N160 100% Design Submittal
No. of Audits Postponed	0	None

Sound Transit Board Actions

Board Action	Description	Date
	<i>None to report.</i>	

Community Outreach

- Distributed construction alerts regarding the transmission pole foundation drilling (N. 115th St.).
- Emailed weekly updates regarding surface cross passage work.
- Met with management of Northgate area business park to discuss construction coordination protocol.

Business Mitigation

- Checked in with U District businesses on their progress around cross passage 28.

Environmental

- None to report.

Final Design Overview

Sound Transit has executed two key contracts with professional services consultants for the Final Design of the Northgate Link Extension. Jacobs Associates (JA) is providing civil engineering and architectural final design services. LTK Engineering Services (LTK) is providing systems engineering final design services.

Final Design Activities

Contract Package N140 - U District Station Civil and Finishes:

- Continued responses to 100% review comments.
- Began development of IFB package.

Contract Package N150 - Roosevelt Station Civil and Finishes:

- Continued bid support as needed.

Contract Package N830 – Traction Electrification, Signals, and Communications:

- Completed N830/E750 100% drawings and specifications and submitted package on Sept 6.
- Completed the Safety Certification Verification Matrix for N830/E750.

Final Design Schedule

The table below summarizes the current civil Final Design submittal schedule for each contract package.

Work Packages	60%		90%		100% to ST	
	Plan	F/A*	Plan	F/A*	Plan	F/A*
N105 Key Bank Demolition and Remediation	7/31/2014	7/31/2014A	10/3/2014	10/3/2014A	2/23/2015	6/18/2015A
N111 Advanced Utility Relocation – Northgate	12/21/2012	5/23/2013A	3/29/2013	10/14/2013A	7/12/2013	1/31/2014A
N113 115kV Relocation at Northgate	10/29/2013	11/21/2014A	3/27/2014	8/5/2015A	6/19/2014	10/2/15A
N140 U District Station Finishes	12/24/2011	4/27/2012A	9/18/2012	12/11/2015A	5/10/2013	8/12/16A
N150 Roosevelt Station Finishes	4/13/2012	2/27/2012A	1/28/2013	12/18/2014	10/23/2013	11/20/15A
N160 Northgate Sta. Civil/Finishes/Guideway	6/27/2012	10/5/2012A	4/17/2013	3/7/2014A	11/26/2013	2/5/16
N180 Trackwork	8/23/2012	8/23/2012A	5/22/2013	4/8/2013A	8/26/2013	1/14/16A
N830 Traction Electrification, Signals, Communications	12/12/2012	12/20/2012A	4/10/2014	1/29/16	12/9/2014	9/6/16

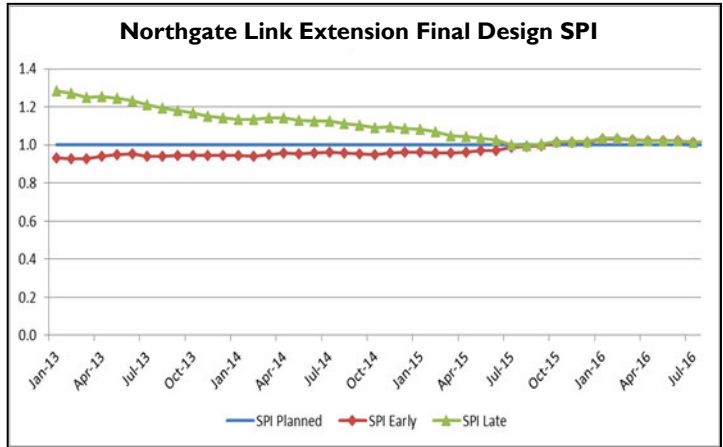
F/A* = Forecast/Actual

Link Light Rail Northgate Link Extension - Final Design



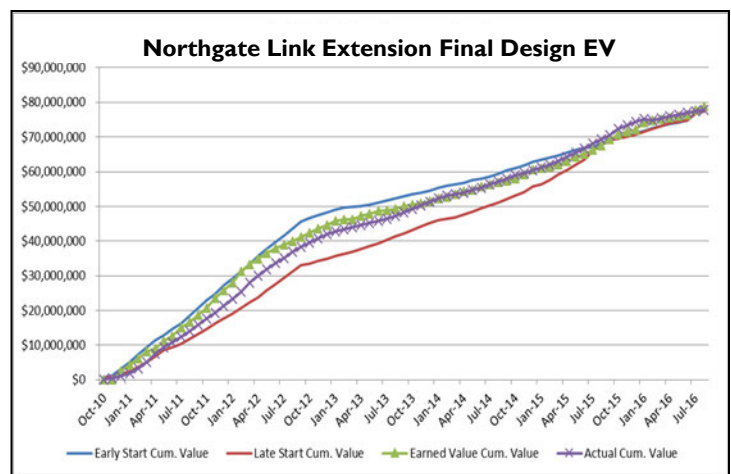
Final Design Schedule Performance

For Final Design activities only, the Schedule Performance Index (SPI) reported this period is 1.01 based on the early start date, and the late start SPI is also 1.01. The final major deliverable for N140 100% design has been provided under the Civil Final Design contract, with final adjustments pending for the 100% pricing set. The Systems N830 100% package was delivered in September.



Final Design Cost Performance

Through this period, the total amount spent on the civil final design contract (including DSDC) is \$86.4M, which is approximately 88% of the total contract amount including change orders. For final design activities only, the total amount spent is \$78.0M, which is 99% of the current final design contract value. The consultant reported 100% complete for final design activities, resulting in an Earned Value of \$78.9M. The cumulative CPI remains 1.0, which indicates that overall expenditures are in line with planned cost.



Other Key Final Design Activities

Geotechnical Investigation

- None to report.

Surveying and ROW

- Edited parcel maps as requested by ST.

Traffic Engineering Report

- None to report.

Permits

- Incorporated N140 90% SIP comments.
- Responded to N160 90% SIP comments.

Noise Mitigation for At Grade and Elevated Guideway

- None to report.

Ground Borne Noise and Vibration

- None to report.

Construction Cost Estimating

- Responded to comments on N140 100% estimate.
- Assisted with N150 cost estimate/pricing set reconciliation.

Quality Assurance

- Provided assistance with SSIMS Hazard mitigation.

Design and Project Integration

- Integration and coordination with Systems Consultant (LTK) and continued as required.

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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.

N110 Utility Relocation at Roosevelt Station Area - Relocation of electrical and communication facilities at the Roosevelt Station site. (Complete)

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

N112 U District and Roosevelt Station Site Preparation - Demolition of existing structures, grading and paving at the U District and Roosevelt Station sites. (Complete)

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

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

A = Actual

Contract N105- Advanced Demolition and Site Prep

Current Progress

The N105 Contractor, Pellco Construction, has completed the bulk of the work at Site C, with only Lighting and Striping remaining. Excavation and soil nails are underway at the Key Bank Site.

Schedule Summary

The September schedule update submitted by Pellco, shows an improvement in the completion date to the end of December 2016. The delay incurred at the Key Bank Building has been analyzed and ST has offered a ten day time extension, which would consume the allotted Owner Controlled Float. Pellco is currently reviewing the analysis.

Activity ID	Activity Name	OD	Start	Finish	2016						
					Jun	Jul	Aug	Sep	Oct	Nov	Dec
133	Pellco Construction - Northgate Link Extension: Adv		07-Jun-16 A	30-Dec-16	[Gantt bar spanning Jun to Dec]						
78	Construction - Northgate Site		07-Jun-16 A	25-Oct-16	[Gantt bar spanning Jun to Oct]						
78	Milestones		07-Jun-16 A	07-Oct-16	[Gantt bar spanning Jun to Oct]						
66	Submittals / Preliminary Activities		07-Jun-16 A	25-Oct-16	[Gantt bar spanning Jun to Oct]						
63	Pre-Construction Submittals		07-Jun-16 A	23-Sep-16 A	[Gantt bar spanning Jun to Sep]						
66	Materials Submittals		07-Jun-16 A	25-Oct-16	[Gantt bar spanning Jun to Oct]						
4	Mobilization		20-Jun-16 A	22-Jun-16 A	[Gantt bar spanning Jun]						
65	Site Work		22-Jun-16 A	03-Oct-16	[Gantt bar spanning Jun to Oct]						
50	Demolition		22-Jun-16 A	09-Sep-16 A	[Gantt bar spanning Jun to Sep]						
20	Site Restoration		25-Aug-16 A	03-Oct-16	[Gantt bar spanning Aug to Oct]						
4	Closeout And Demobilization		04-Oct-16	07-Oct-16	[Gantt bar spanning Oct]						
133	Construction - Key Bank Site		07-Jun-16 A	30-Dec-16	[Gantt bar spanning Jun to Dec]						
133	Milestones		07-Jun-16 A	30-Dec-16	[Gantt bar spanning Jun to Dec]						
4	Mobilization		25-Jul-16 A	26-Jul-16 A	[Gantt bar spanning Jul]						
97	Site Work		22-Jun-16 A	13-Dec-16	[Gantt bar spanning Jun to Dec]						
55	Site Preparation		22-Jun-16 A	20-Sep-16 A	[Gantt bar spanning Jun to Sep]						
39	Excavate Petro		14-Sep-16 A	28-Nov-16	[Gantt bar spanning Sep to Nov]						
32	Excavate Laundry		17-Sep-16 A	15-Nov-16	[Gantt bar spanning Sep to Nov]						
18	Site Utilities And Finishes		16-Nov-16	13-Dec-16	[Gantt bar spanning Nov to Dec]						
12	Closeout And Demobilization		14-Dec-16	30-Dec-16	[Gantt bar spanning Dec]						

Link Light Rail Northgate Link Extension - Construction



Key Activities

Current Period

Northgate Site

- Completed installation of new pedestrian crossing concrete ramp and sidewalk.
- Paved the site with asphalt pavement.
- Reinstalled existing light poles on new concrete bases.
- Installed wooden light poles and placed concrete at the pole bases.
- Installed new light fixtures on wooden poles and commenced wiring of fixtures.
- Continued clean-up of site and began demobilization of equipment.

Key Bank Site

- Performed pull test on east excavation test soil nails with favorable results.
- Installed lift 1 of 4 at east excavation soil nails.
- Installed shotcrete lift 1 of 4 at east excavation.
- Commenced east excavation lift 2 of 4.
- Completed installation of lift 1 of 4 at west excavation soil nails.

Next Period

Northgate Site

- Install pavement markings and parking stall wheel stops.
- Complete wiring of light fixtures.
- Install parking lot signage.
- Complete clean-up of site and demobilization of equipment.

Key Bank Site

- Complete east excavation lift 2 of 4.
- Commence installation of east excavation lift 2 of 4 soil nails.
- Shotcrete west excavation lift 1 of 4.

Closely Monitored Issues

- Contractor requested additional compensation for contaminated material removal quantities due to Department of Ecology Contained-Out determination.
- Contractor requested an additional 12 days for asbestos abatement changed condition at the Key Bank Site.

Cost Summary

Present Financial Status	Amount
NI05 Contractor - Pellco Construction	
Original Contract Value	\$2,691,500
Change Order Value	\$ -
Current Contract Value	\$2,691,500
Total Actual Cost (Incurred to date)	\$1,248,515
Financial Percent Complete:	46.4%
Physical Percent Complete:	60.0%
Authorized Contingency	\$269,150
Contingency Drawdown	\$ -
Contingency Index	N/A



Installation of asphalt paving at parking lot.

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Contract N111 – Advanced Utility Relocation

Close-out Schedule

The N111 contract was Substantially Complete on April 26, 2016. The infrastructure has been turned over to Seattle City Light. Walsh Constructors have demobilized from the site. No further schedule updates will be made for this project. ST and Walsh are in the process of completing the remaining change orders and negotiating extended overhead and entitlement. Walsh's final schedule update was rejected because the schedule did not represent a time impact analysis that could be used to determine entitlement.

Key Activities

Current Period

- Contractor working to complete final close-out paperwork.

Next Period

- Continue contract close-out tasks.
- Make final progress payment.
- Issue Acceptance.

Closely Monitored Issues

- Contractor has submitted an RFC for extended overhead costs, but without required cost and schedule substantiation. A formal response is being prepared.

Cost Summary

Present Financial Status	Amount
<i>N111 Contractor - Walsh Construction</i>	
Original Contract Value	\$9,370,000
Change Order Value	\$800,970
Current Contract Value	\$10,170,970
Total Actual Cost (Incurred to date)	\$9,812,850
Financial Percent Complete:	97%
Physical Percent Complete:	99%
Authorized Contingency	\$937,000
Contingency Drawdown	\$800,970
Contingency Index	1.16

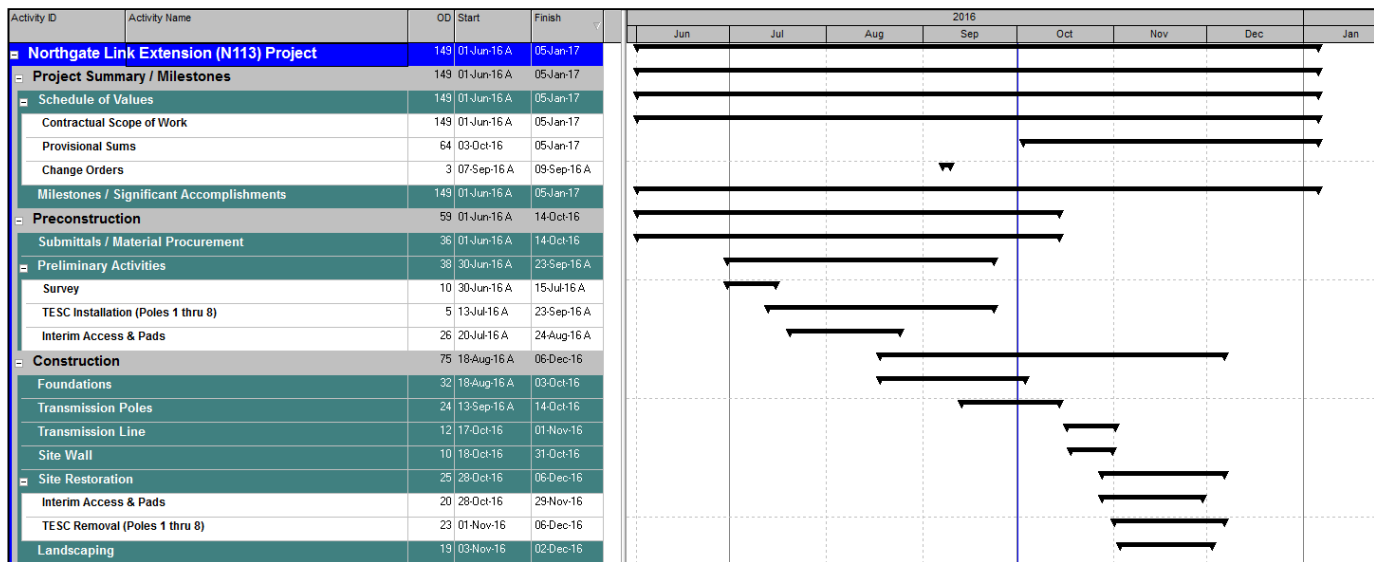
Contract N113– 115kv Relocation at Northgate Station

Current Progress

The N113 Contractor completed the foundations for all pole locations, and installed Poles 2, 3, 4, 5, 6, and 7. Poles 1 and 8 will be installed during the second SCL Outage, scheduled to start in mid-October.

Schedule Summary

The N113 Contractor’s September schedule update continues to forecast an on-time completion of the work. Potelco has addressed the majority of technical issues. The remaining issues do not warrant a resubmittal.



Link Light Rail Northgate Link Extension - Construction

Key Activities

Current Period

- Decommissioned wells located at Meridian and 113th, and wells located at the end of 115th.
- Coordinated with Seattle City Light to connect permanent power to the WSDOT signal at 103rd and 1st Ave.
- Installed Poles 2, 3, 4, 5, 6 and 7.

Next Period

- Complete connection of permanent power to the WSDOT signal at NE 103rd St and 1st Ave NE. Utility trench to be backfilled and the sidewalk restored with asphalt.
- Install Poles 1 and 8.

Closely Monitored Issues

- Rolling slowdown is scheduled for October 26. Working on required Construction Work Plans, Traffic Control Plans, and Permits in support of removing the existing 115kV aerial conductor.
- The second 115kV power outage is scheduled for October 17 through November 17.

Cost Summary

Present Financial Status	Amount
NI 13 Contractor - Potelco, Inc	
Original Contract Value	\$2,811,926
Change Order Value	\$ 34,000
Current Contract Value	\$2,845,926
Total Actual Cost (Incurred to date)	\$1,877,192
Financial Percent Complete:	66%
Physical Percent Complete:	60%
Authorized Contingency	\$281,194
Contingency Drawdown	\$ 34,000
Contingency Index	N/A



Potelco working with Seattle City Light during a night shift to coordinate permanent power connection for WSDOT signal.

Contract N125 – TBM Tunnels

Current Progress

JCM is currently continuing work on the Cross Passages, tunnel inverts, and troughs,

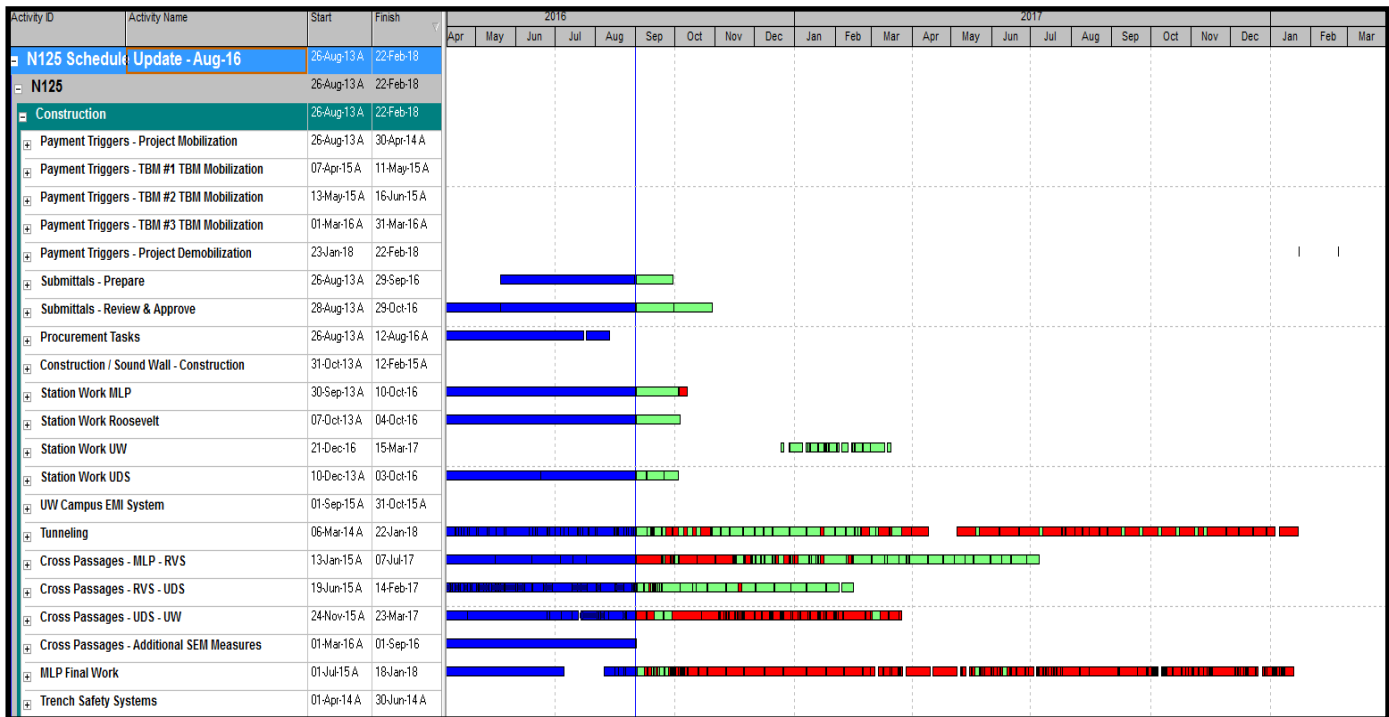
Tunneling Operations – TBM No. 1 holed-through at the UW Station on September 1. JCM is currently demobilizing operations in Area B in preparation of turnover to N160. Turnover is still scheduled for October 14, 2016.

Cross Passage Construction—Work in progress at the end of September included ground freezing and in-tunnel freezing at multiple cross passages; and waterproofing installation, crown excavation, invert rebar installation and finishing work at various other CPs along the alignment.

Schedule Summary

JCM has yet to submit the September schedule update.

It is anticipated that the critical path will remain in the Cross Passage construction. JCM is working on removing the conveyors, mucking operations, and treatment facilities in order to meet Milestone 4.

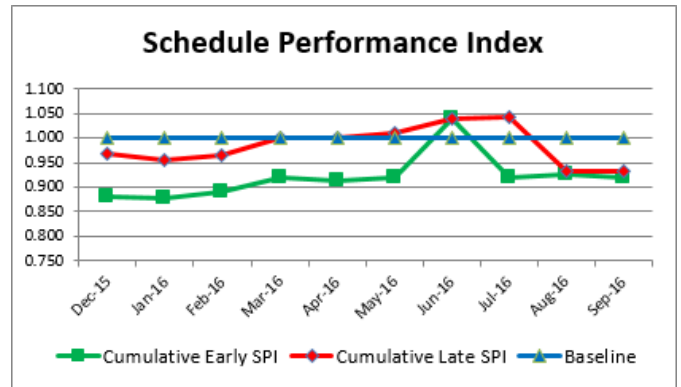


Link Light Rail Northgate Link Extension - Construction



Schedule Performance Index

The September schedule update reports a Performance Percent Complete of 84% with a Cost Percent Complete of 83.3%. The early SPI for this period remains 0.9, essentially unchanged from the 0.9 obtained in August. The SPI continues to lag due to the pace of the cross passage work in comparison to the target dates for this work.



Key Activities

Current Period

- Achieved hole-through at UWS to complete tunnel boring work.
- Continued installation of northbound (NB) tunnel fire standpipes, conduits, unistruts, and lighting assemblies.
- Completed removing TBM conveyor support from tunnel.
- Completed/continued various cross passage activities including, internal electrical work, repairing/patching spiles, draining holes and endcaps, installing endcaps rebar, installing arch lining formwork and waterproofing.
- Begin cleaning up SB tunnel from RVS to UDS.
- Complete removal of muck bin piles and temporary office trailers at MLP.
- Complete demobilization of baker tanks and treatment facilities at north lot of Area-B.
- Continue regrading of embankments of Area B.
- Begin demolition of temporary concrete slabs in the RVS shaft.

Next Period

- Complete removal of southbound (SB) TBM gantries through SB tunnel from UWS to UDS.
- Continue cross passage freezing, dewatering, excavation, support, and finishes.
- Continue installation of overhead electrical conduits in NB tunnel.
- Continue installation of permanent fire standpipe in NB tunnel.

Closely Monitored Issues

- A high proportion of cross passage activities are continuing to slip on the schedule. This continues to cause concern and will need to be addressed in the next schedule review meeting.

Cost Summary

Present Financial Status	Amount
NI25 Contractor - JCM Northlink	
Original Contract Value	\$440,321,000
Change Order Value	\$ 44,660,154
Current Contract Value	\$484,981,154
Total Actual Cost (Incurred to date)	\$408,021,663
Financial Percent Complete:	84%
Physical Percent Complete:	84%
Authorized Contingency	\$66,048,150
Contingency Drawdown	\$44,660,154
Contingency Index	1.24



SB TBM front shield on cradle in UWS Retrieval Shaft.

Contract N180 – Trackwork UWS to Northgate Station

Current Progress

The N180 Contractor, Stacy and Witbeck, received NTP on August 25, 2016, and has begun preparation of early submittals to ST. ST is also discussing the options for procurement of the Ultra-Straight Rail, through the N180 contract rather than as a separate procurement. A decision will be made once the outcome of the requested Buy America waiver is known.

A preliminary baseline schedule has been submitted and reviewed. The submission was found to be incomplete with inconsistencies in the duration of ST submittal reviews. The submission was returned with a “Revise and Resubmit” outcome.

Key Activities

Current Period

- Held preconstruction kickoff meeting.
- Began review of early submittals.

Next Period

- Process first progress payment.
- Begin procurement of long-lead items.

Closely Monitored Issues

- FTA Buy America waiver will be required to use foreign supplier of Ultra Straight Rail as no known domestic supplier exists.

Cost Summary

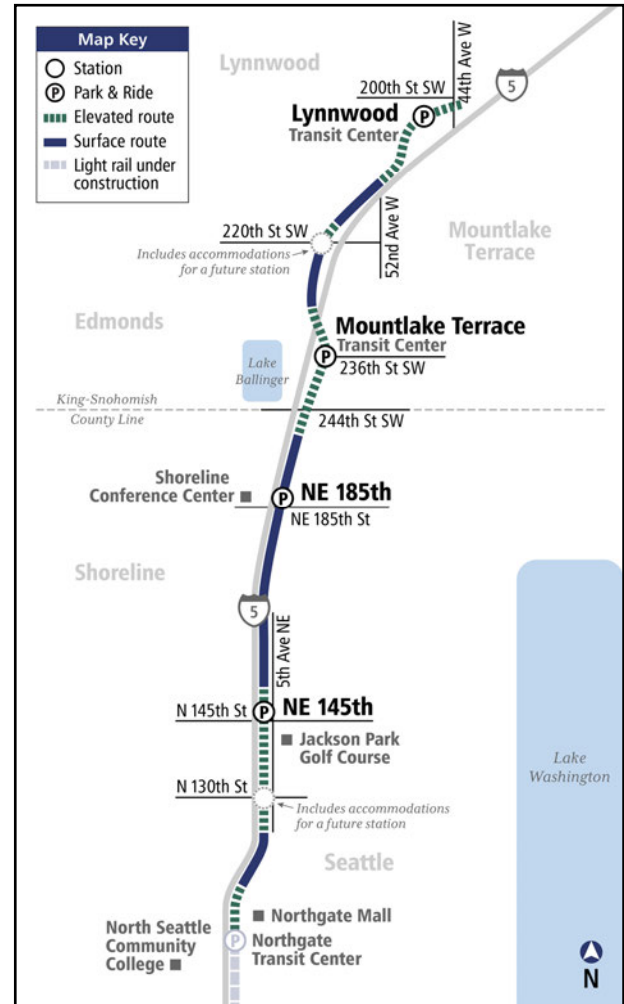
Present Financial Status	Amount
<i>N180 Contractor - Stacy and Witbeck, Inc.</i>	
Original Contract Value	\$71,455,950
Change Order Value	\$0
Current Contract Value	\$71,455,950
Total Actual Cost (Incurred to date)	\$0
Financial Percent Complete:	0%
Physical Percent Complete:	0%
Authorized Contingency	\$10,718,393
Contingency Drawdown	\$0
Contingency Index	N/A

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:** \$487.9 Million Phase Gate 4 budget; excludes Construction (Year of Expenditure Dollars)
- Phase:** Final Design
- Const. Starts:** 2018
- Service:** Late 2023



Map of Lynnwood Link Extension Alignment.

Key Project Activities

Final Design

- Executed Civil Final Design contract with HNTB Jacobs in April 2016. Advancing design to 60% and developing updated cost estimates.
- Executed Systems Final Design contract with LTK Engineering in July 2016.

Pre-Construction Services

- Executed Civil Construction Management contract with PGH Wong in May 2016.
- Executed GC/CM contract with Stacy and Witbeck-Kiewit-Hoffman for L200 (south segment) pre-construction services in May 2016. Reviewing in-progress 60% design and developing construction strategy.
- For L300 (North Segment), selected Skanska Constructors L300, JV as the GC/CM contractor with
- Anticipate starting Systems pre-construction services in 2017.

Third Parties

- Received Project Rating and Entry to Engineering Approval from FTA in February 2016.
- Executed a design review agreement with WSDOT.
- Advancing formal agreements with City of Seattle, City of Shoreline, City of Mountlake Terrace, City of Lynnwood, and utility providers.

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.

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	\$11.1	\$11.0	\$88.3	\$0.0
Preliminary Engineering	\$42.0	\$39.9	\$39.0	\$42.0	\$0.0
Final Design	\$111.5	\$79.9	\$7.9	\$111.5	\$0.0
Construction Services	\$104.9	\$12.7	\$1.2	\$104.9	\$0.0
3rd Party Agreements	\$17.4	\$2.0	\$0.7	\$17.4	\$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	\$123.8	\$12.5	\$8.5	\$123.8	\$0.0
Total	\$487.9	\$158.1	\$68.4	\$487.9	\$0.0

Cost Summary by SCC

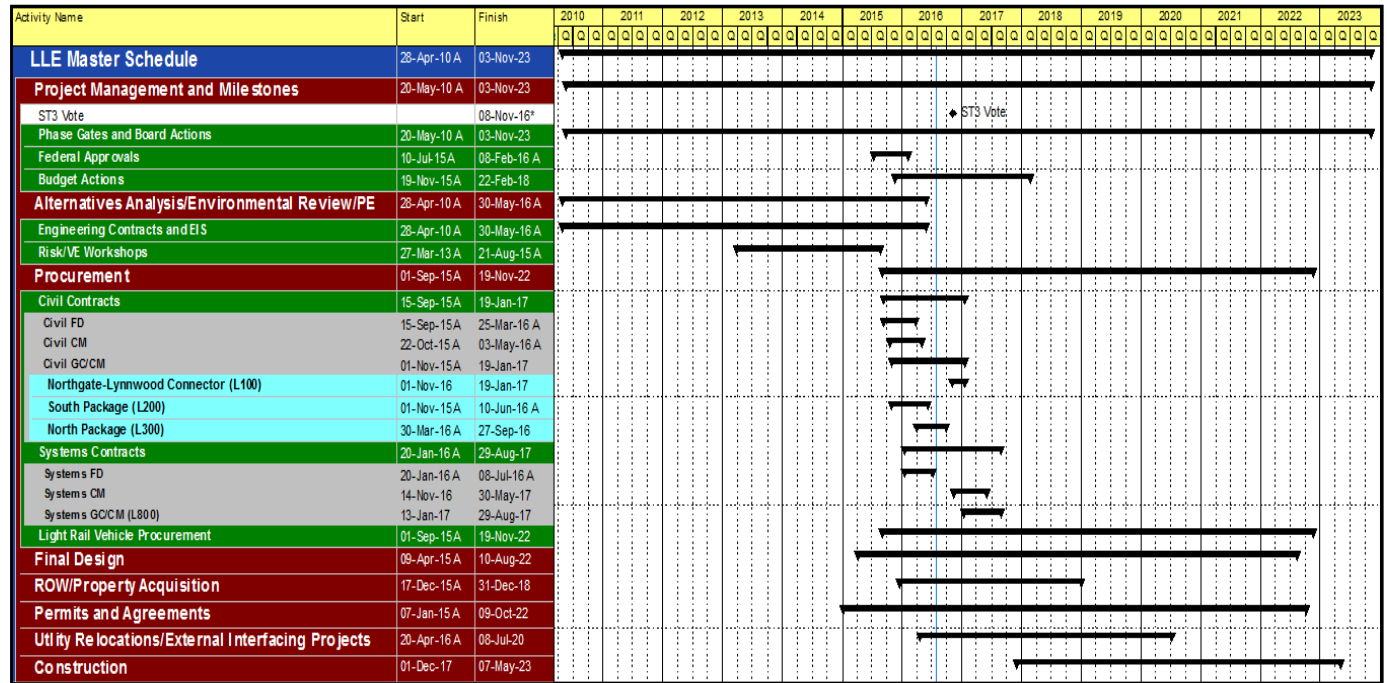
SCC Element	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
50 Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Subtotal (10 - 50)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$123.8	\$12.5	\$8.5	\$123.8	\$0.0
80 Professional Services	\$364.1	\$145.6	\$59.9	\$364.1	\$0.0
90 Unallocated Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total (10 - 90)	\$487.9	\$158.1	\$68.4	\$487.9	\$0.0

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 next Lynnwood Link Quarterly Risk Review Meeting is scheduled for October 2016.

Project Schedule

The project schedule is shown below.



Sound Transit Board Actions

Board Action	Description	Date
M2016-99	Execute a contract with Skanska Constructors L300 to provide pre construction services for the NE 200th Street to Lynnwood Transit Center contract in the amount of \$5,370,000 with a 10% contingency for a total authorized contract amount not to exceed	Sep 22

Community Outreach

- Participated in the Lynnwood Fair on with a project information table; interacted with 73 attendees and answered questions regarding project schedule and completion date, travel times and route, etc.
- Met with an impacted property owner and discussed the potential acquisition process and review revisions to the station site plan.
- Notified property owners regarding upcoming survey work on their property.
- Preparing for three upcoming workshops in November.

Quality Assurance Activities

Activities/Issues

- None to report.

Summary

Description	Sep 2016	Notes
No. of Audits Planned	0	None
No. of Audits Completed	0	None
Reports in Progress	1	LLE
No. of Audits Postponed	0	None

Environmental

- None to report.

Civil Final Design Overview

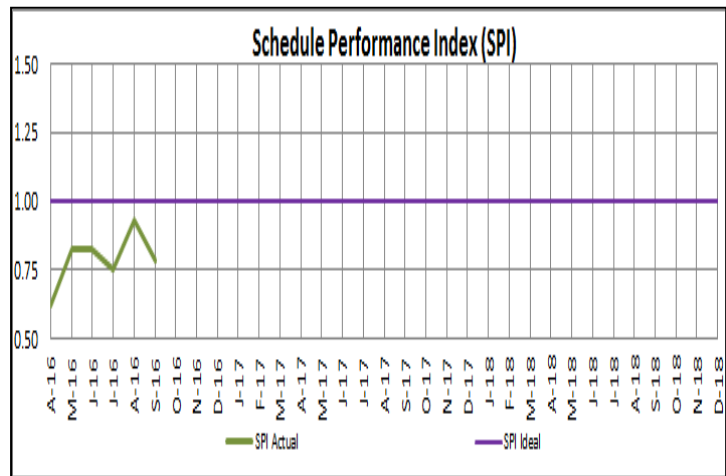
Sound Transit executed a professional services contract with HNTB Jacobs in April 2016 to perform Civil Final Design Services.

Civil Final Design Activities

- Reviewing preliminary engineering design, and preparing design methodologies.
- Progressing L100, L200 & L300 60% Design.

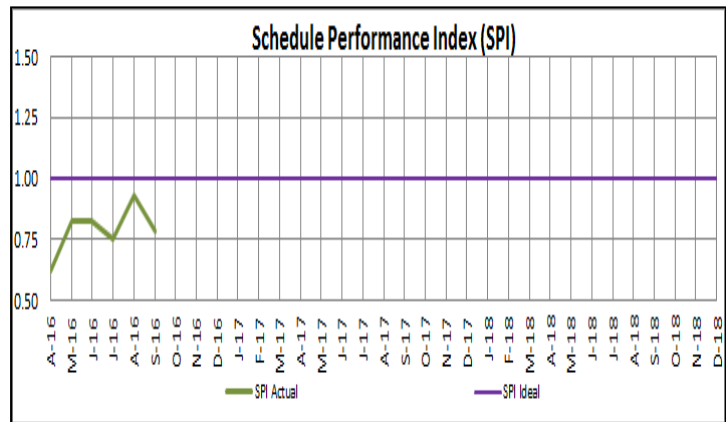
Civil Final Design SPI

The cumulative Schedule Performance Index (SPI) trends at 0.78 through September 2016, which means that cumulative work accomplished is less than work planned. Currently Civil Final Design is behind schedule due to modifications to the 30% design. Since the August reporting period Sound Transit approved HNTB | J's updated plan values. This resulted in updating the earned value data from the previous report.



Civil Final Design Cost Performance

\$7.7 M of the total contract amount, 11%, has been spent through September 2016. The Civil Final Design percent complete is 10%, with an earned value of \$7.3M. The cumulative Cost Performance Index (CPI) through September is 0.95 indicating that expenditures are less than the earned value.



Final Design Performance	Previous Period	Current Period	Cumulative To-date
Amount Invoiced	\$5,552,791	\$2,170,900	\$7,723,691
% Spent	8%	3%	11%
Earned Value	\$5,784,446	\$1,561,643	\$7,346,089
% Complete	8%	2%	10%
SPI	0.93	0.50	0.78
CPI	1.04	0.72	0.95

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

- Held Systems Final Design kickoff and coordination meetings.
- Continued coordinating Final Design Schedule and Earned Value data.

Systems Final Design SPI

As of September, LTK has not yet finalized the design schedule. Schedule Performance reporting will begin upon completion of schedule, in October 2016

Systems Final Design Cost Performance

\$66K of the total contract amount, 1%, has been spent through September 2016. The Systems Final Design percent complete will be reported starting October 2016 begin upon completion of LTK's earned value plan.

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

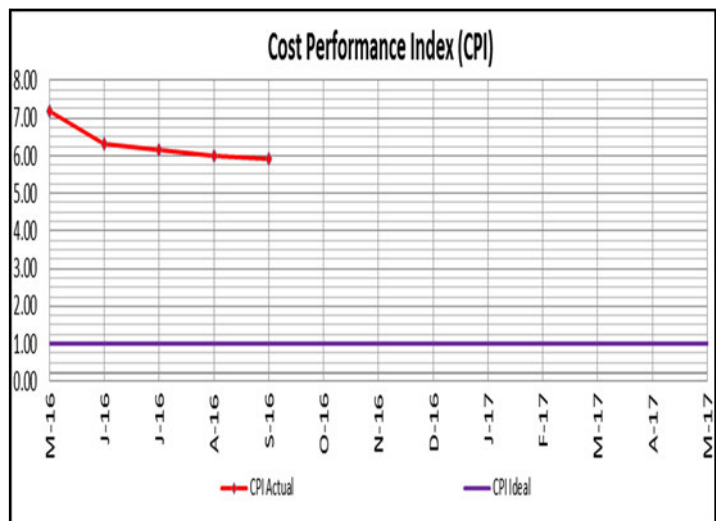
- Mobilizing Construction Management team, reviewing preliminary engineering design, cost estimates, and schedule.

Civil Construction Management SPI

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 Construction Management Cost Performance

\$232K of the total contract amount, 3.0%, is estimated to be spent through September 2016, with an earned value of \$1.4 M. The cumulative Cost Performance Index (CPI) through September is 5.9; indicating costs savings on the project. The monthly CPI for September was significantly high at 5.52. The consultant assumed more support staff would be engaged early in the contract schedule and that has not been the case. This is leading to the inflated CPI.



Final Design Performance	Previous Period	Current Period	Cumulative To-date
Amount Invoiced	\$178,347	\$53,859	\$232,206
% Spent	2%	1%	3%
Earned Value	\$1,071,809	\$297,571	\$1,369,380
CPI	6.01	5.52	5.90

GC/CM Pre-Construction Overview - L200 (South Segment)

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.

GC/CM Pre-Con Activities

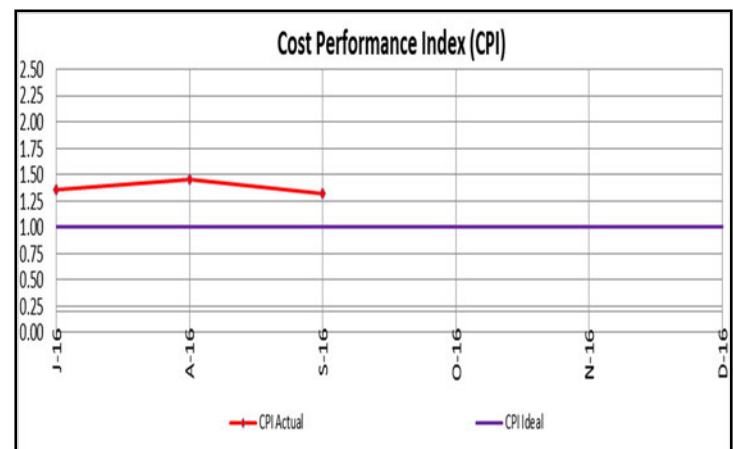
- Mobilizing Construction Management team, reviewing preliminary engineering design, cost estimates, and schedule.

GC/CM Pre-Con Schedule Performance

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.

GC/CM Pre-Con Cost Performance

\$789K of the total contract amount, 15%, is estimated to be spent through September 2016, with an earned value of \$1.0 M. The cumulative Cost Performance Index (CPI) through September is 1.32; indicating actual costs are lower than planned. The monthly CPI for September was low at 0.75.



Final Design Performance	Previous Period	Current Period	Cumulative To-date
Amount Invoiced	\$643,293	\$145,509	\$788,802
% Spent	12%	3%	15%
Earned Value	\$935,742	\$108,543	\$1,044,285
CPI	1.45	0.75	1.32

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



The project, when completed, will enable 24/7 HOV access on I-90 between Seattle, Mercer Island and Bellevue.

Scope: The I-90 Two-Way Transit and HOV Operations (Stage 3) project will provide 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, the installation of screening on the shared-use pathway on the I-90 floating bridge. Following completion of this project, the center roadway will be closed to allow the construction and operation of East Link Extension.

Budget: \$225.6 Million
Phase: Construction
Construction Start: January 2015
Construction Completes: June 2017

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* – Install pedestrian railing, tie rebar and grading for barrier at Island Crest Way, install roadway signs within project limits, stairwell, slip form barrier, work on water quality storm water retention facility at Mercer Island. Continue railing replacement on Homer Hadley Bridge.
- *Mercer Island Tunnel (MIT)* – Continued adjustable speed drive supply fan repair, westbound supply plenum upgrades, dual zone drain stands, EB Saccardo sprinkler hydro test, LIOP upgrades; substation US4 testing, ASD wiring revisions, install conduit at Egress doors, install pressurization fan feeders, wiring to signs, generator system installation, and install conduit for added fan sensors; corrective action at Substation 4 and fan motors.
- *Mount Baker Ridge Tunnel (MBRT)* – Continue installing egress sliding doors and pedestrian path doors, fan installation, welding and LV controls, import materials for Central fan room, exhaust port adjustments. Exhaust fan demolition and installation; Generator system installs, install conduit and racks for foam room tanks. Corrective action at MBRT substation 4 and fan motors.
- *SCADA* – Simplex interface, closed circuit panel production; existing panel retrofit design; control strategy meeting sessions.

Closely Monitored Issues

- *Schedule Update:* IMCO requested for the use of Owner Controlled Float; no float has been granted; Contractor's schedule indicates that without granting use of the float, Substantial Completion Milestone will not be met. WSDOT and Sound Transit are closely monitoring progress and elevating issues as required.
- Monitoring progress on UL and contract required changes to ASD (Adjustable Speed Drive) and VFD (Variable Frequency Drive) fan motors.
- Unit Substations corrective action, prior to bringing fans online.
- SCADA implementation remains to be a major risk.

Project Cost Summary

Total Project Costs expended this period is \$6.5M. The following tables summarize the cost information for the I-90 Two-way Transit and HOV Operations (Stage 3) project. Tables in millions.

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	\$1.6	\$1.6	\$3.6	\$0.0
Preliminary Engineering	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$0.0
Final Design	\$22.1	\$22.1	\$18.6	\$17.9	\$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	\$166.3	\$113.1	\$198.3	\$0.0
Total	\$225.6	\$225.6	\$188.1	\$134.1	\$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	\$166.3	\$113.1	\$180.6	\$0.0
80 Professional Services	\$26.3	\$26.3	\$21.7	\$21.0	\$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	\$188.1	\$134.1	\$225.6	\$0.0

Cost Contingency Management

In the table below, the Allocated Contingency includes both WSDOT-controlled construction contingency & the total ST-controlled allocated contingencies. No change to the contingency level since last period.

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%	\$15.4	16.8%
Unallocated Contingency	\$18.7	8.3%	\$18.7	20.0%
Total	\$35.7	15.8%	\$34.2	37.0%

*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.*

Project Schedule

The Prime Contractor has submitted a request for the use owner's control float to mitigate anticipated delay for WSDOT consideration. Sound Transit is evaluating the potential impact to E130 schedule, and coordinating with WSDOT for mitigation. Should WSDOT & Sound Transit agree to allow the contractor to use this float, a schedule update may revise the remaining Project Milestones for construction; Current Project Milestones are indicated below:

Contract	Start of Final Tunnel Commissioning Period		Final Tunnel Commissioning Complete		Substantial Completion		Commence Final Pavement Marking		Physical Completion & Center Roadway Turnover	
	Baseline	Forecast / Actual	Baseline	Forecast / Actual	Baseline	Forecast / Actual	Baseline	Forecast / Actual	Baseline	Forecast / Actual
I-90 Two-Way Transit & HOV Operations Stage 3	12/6/2016	11/17/2016	2/16/2017	2/16/2017	2/20/2017	2/20/2017	5/20/2017	5/20/2017	5/31/2017	5/31/2017

Changes from previous update are indicated in **RED**

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Link Light Rail

East Link Extension



Map of East Link Extension Alignment.

Scope

- Limits:** Downtown Seattle to Mercer Island, Bellevue and the Overlake area of Redmond.
- Alignment:** East Link extends light rail 14 miles to East King County from Downtown Seattle serving Mercer Island via I-90, Bellevue and the Overlake area of Redmond, with ten new light rail stations. The alignment configuration includes at-grade, elevated, bridges, new and retrofitted tunnels.
- Stations:** Judkins Park (formerly Rainier), Mercer Island, South Bellevue, East Main, Bellevue Downtown, Wilburton (formerly Hospital), Spring District/120th, Bel-Red/130th, Overlake Village and Redmond Technology Center (RTC).
- Systems:** Signals, traction power, and communications (SCADA).
- Budget:** \$3.677 Billion Baseline Budget (Year of Expenditure Dollars)
- Phase:** Construction
- Construction Starts:** 2016
- Service:** June 2023

Key Project Activities

Seattle to South Bellevue

- The 90% Design Plans for the Floating Bridge, Fixed Structures, and Judkins Park and Mercer Island Stations is under review; the Pricing Set was submitted to Sound Transit on September 2, 2016.
- The DAP has been approved by the FHWA, and the PDA has started; the PDA is due in the 4th QTR 2016.
- Finalizing pricing set for transmittal to Contractor.
- LRRP approved Judkins Park Station design with one condition, minor refinements to the east entrance façade.
- East Link Construction Service Agreement is with the City of Seattle for signature. Sound Transit Met with SFD to draft task order for construction services.
- *Floating Bridge:* Met with the design and GC/CM teams to refine track attachment options on the I-90 floating bridge. GC/CM completed installation of elastomeric grout to plinths on the floating bridge mock-up; an electrical task force is working to create solutions for constraints associated with modifying electrical systems within the floating bridge that need to remain operational during construction.

South Bellevue to Redmond

- E320: Received approved Construction Noise Expanded Exempt Hours Permit.
- E330: Design of the proposed tunneling approach modification (3 Drift) continued. Excavation underway at south portal of downtown tunnel. Continued noise wall construction.
- E335: ST and 3rd Parties continued review of 100% submittal for 120th station and City Hall Plaza. Continued working with WSDOT to finalize the TCAL and ASL for work in I-405 ROW.
- E340: Continued working with Bellevue to finalize MOU-related revision in the vicinity of 130th Station.
- E360: Agreement regarding Frontier was approved at CCB and is being routed for signatures.

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 figures in both tables are shown in millions. The Estimated Final Cost (EFC) for this project is \$3,677.2M in year of expenditure dollars. Approximately \$24M was incurred this period.

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	\$186.2	\$186.2	\$49.7	\$49.6	\$186.2	\$0.0
Preliminary Engineering	\$55.9	\$55.9	\$54.5	\$54.4	\$55.9	\$0.0
Final Design	\$283.0	\$283.0	\$230.8	\$182.4	\$283.0	\$0.0
Construction Services	\$257.5	\$257.5	\$137.2	\$16.8	\$257.5	\$0.0
3rd Party Agreements	\$52.2	\$52.2	\$34.7	\$8.1	\$52.2	\$0.0
Construction	\$2,544.3	\$2,544.3	\$373.1	\$53.3	\$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	\$172.1	\$162.0	\$298.2	\$0.0
Total	\$3,677.2	\$3,677.2	\$1,052.1	\$526.6	\$3,677.2	\$0.0

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	\$744.6	\$744.6	\$174.6	\$24.9	\$727.1	\$17.5
20 Stations	\$397.7	\$397.7	\$73.7	\$2.3	\$431.4	(\$33.7)
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$808.5	\$808.5	\$97.4	\$24.1	\$795.9	\$12.5
50 Systems	\$353.8	\$353.8	\$6.3	\$0.4	\$352.6	\$1.2
Construction Subtotal (10 - 50)	\$2,304.6	\$2,304.6	\$352.0	\$51.6	\$2,307.0	(\$2.4)
60 Row, Land	\$288.5	\$288.5	\$172.1	\$161.9	\$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	\$900.3	\$528.1	\$313.0	\$897.8	\$2.4
90 Unallocated Contingency	\$182.9	\$181.0	\$0.0	\$0.0	\$181.0	\$0.0
Total (10 - 90)	\$3,677.2	\$3,677.2	\$1,052.1	\$526.5	\$3,677.2	\$0.0

Risk and Contingency Management

Contingency Status

Sound Transit has completed a draft Risk and Contingency Management Plan (RCMP) for East Link, and is currently addressing review comments from the Project Management Oversight Consultant (PMOC). The project's baseline budget, which was approved by the Sound Transit Board in April 2015, contained a total of \$795.9M contingency. This period, total contingency decreased by a net \$0.4M, to a new total amount of \$778.0M. The contingency balance remained higher than the anticipated draw down.

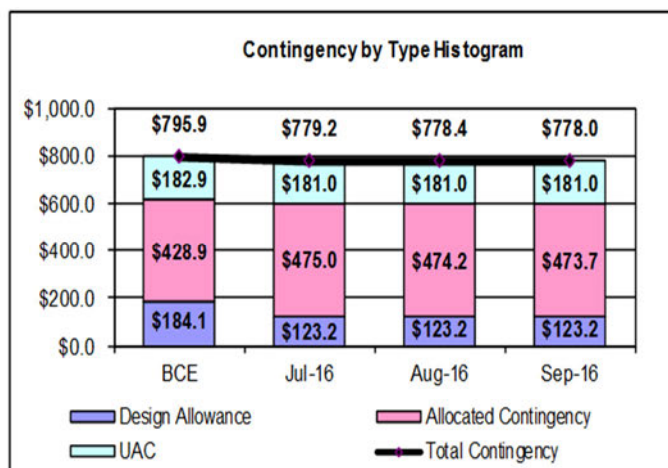
Design Allowance is used to account for scope that could not be quantified at the time of the cost estimate. The total amount of design allowance in the baseline cost estimate was \$184.1M. Design allowance had been drawn down in the prior periods to offset the increase in the base cost estimate as more design details are available for cost estimating. This period, the design allowance balance remained the same as the last period, which was \$123.2M. As the designs continue to be progressed to 100% level and the engineer's cost estimates are prepared, design allowance is expected to be reduced.

Allocated Contingency is used to address risks, complexity and unforeseen conditions during the execution of work, including procurement (market risk). This period, the total amount of allocated contingency decreased by a net \$0.4M. This was due to the execution of a change orders on the E330 contract and So. Bellevue to OTC Final Design. Total allocated contingency balance is now \$473.7M.

Unallocated Contingency is used to address general project-wide cost risks and uncertainties. The total amount of unallocated contingency UAC in the baseline cost estimate is \$182.9M. UAC had been drawn down to \$181.0M in the Fall of 2015, but has not been changed since then.

Contingency Status	BCE		Current Status	
	Amount	% of Total Budget	Remaining Amount	% of Work Remaining
Design Allowance	\$184.1	5.0%	\$123.2	3.9%
Allocated Contingency	\$428.9	11.7%	\$473.7	15.0%
Unallocated Contingency	\$182.9	5.0%	\$181.0	5.7%
Total:	\$795.9	21.6%	\$778.0	24.7%

Dollar figures on this page are displayed in millions.



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. 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.

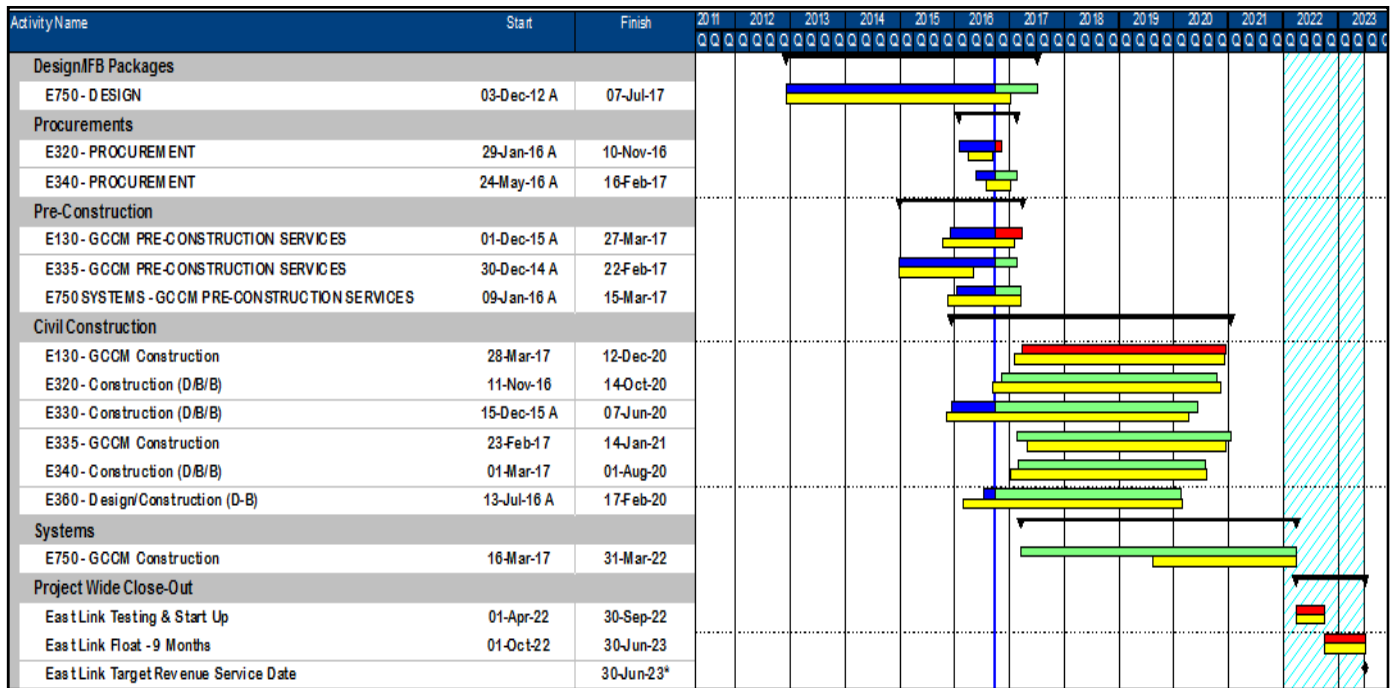
This period, Sound Transit continued the 3rd Quarter Risk Assessment Workshops. Sound Transit included participation of construction contractors who are already under contract (E130, E330, E335, E360 and E750) in its Risks Management Program.

Project Schedule

The East Link schedule was finalized through a thorough team review to ensure accuracy as ST ramps up the construction phase of the project. Revenue Service is forecasted for June 30, 2023.

East Link contract procurements continue:

- E335 GC/CM (Downtown Bellevue to Spring District) Pre-construction awarded 1st QTR 2015
- E130 GC/CM (I-90 Heavy Civil) Pre-construction and I-90 CMC awarded 4th QTR 2015
- E330 (Downtown Bellevue Tunnel) NTP issued February 8, 2016
- E750 GC/CM (East Link Systems) Pre-construction awarded 1st QTR 2016
- E360 D/B (SR520 to Overlake Transit Center) NTP issued July 13, 2016
- Systems Construction Management Consultant (CMC) Phase 1 (pre-construction services) awarded 3rd QTR 2016
- E320 (South Bellevue) to be awarded 4th QTR 2016
- E340 (Bel-Red) advertised 3rd QTR 2016



*Note: This schedule represents East Link Schedule Progress. EL Baseline Schedule is represented by lower bar (yellow).

Critical Path Analysis

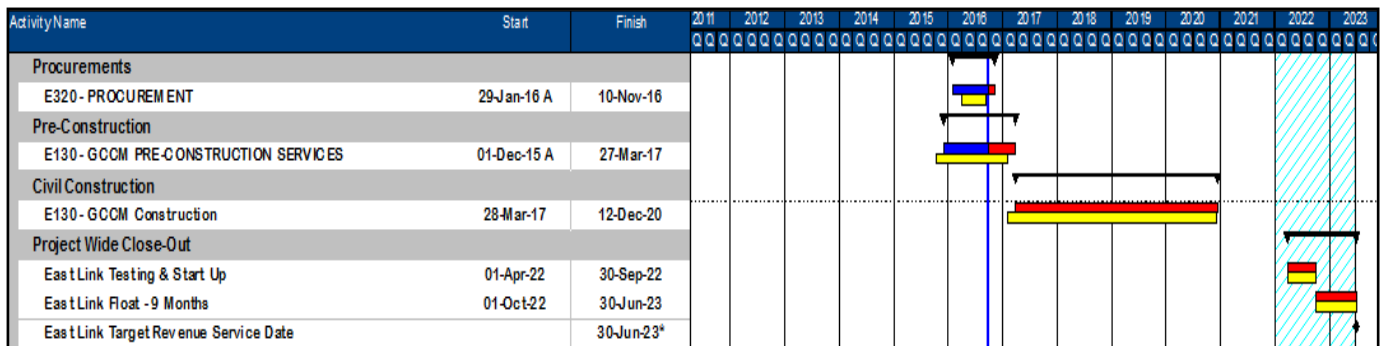
The critical path continues to run through completion of E130 design and MACC negotiations, which then drives E130 NTP for construction. Issuance of the Dean Street TCAL is on the near critical path with less than a month of float before becoming the critical driver for E130 NTP for construction. And, although the I-90 TCAL will not be activated before June 2017, the E130 PDA (to be signed with I-90 TCAL) needs to be signed prior to NTP, making I-90 TCAL near critical.

Link Light Rail East Link Extension



Critical Path Analysis, continued

The East Link critical path schedule is shown below.



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 will result in owner and tenant residential and commercial relocations. The East Link Extension included the advance acquisition of approximately one mile of an existing railroad parcel (“Bellevue Mile”) that the Sound Transit Board approved in June 2011. The right-of-way program status for this period is summarized in the following table. Market value trends in both residential and commercial properties are exhibiting strong upward pressure. Appraisals are being adjusted to reflect this increasing trend in the market. 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.

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
Seattle to S. Bellevue	2	1	0	0	0	0	0	0
S. Bellevue to RTC	237	207	1	23	11	134	229	184
Bellevue Mile	1	1	1	0	0	1	0	0
Total	240	209	2	23	11	135	229	184

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 due time.

Seattle to S. Bellevue

E130 IDS Rail Connection & IDS & I-90 Upgrades - Air Space Lease discussions with WSDOT continue.

S. Bellevue to RTC parcels

E320 S. Bellevue- 2 parcels closed. Air Space Lease discussions with WSDOT continue.

E330 Downtown Bellevue – One parcel closed; one parcel vacated.

E335 – One parcel granted P&U.

E340 Bel-Red - 2 parcels granted P&U; 3 parcels closed; 1 parcel vacated.

E360 SR 520 to OTC – One parcel signed. Air Space Lease discussions with WSDOT continue.

Construction Safety

Data/ Measure	September 2016	Year to Date	Project to Date
Recordable Injury/Illness Cases	0	0	0
Days Away From Work Cases	0	0	0
Total Days Away From Work	0	0	0
Restricted or Modified Work Cases	0	0	0
Total Days Restricted or Modified Work	0	0	0
First Aid Cases	1	4	4
Reported Near Mishaps	1	11	11
Average Number of Employees on Worksite	35	-	-
Total # of Hours (GC & Subs)	5,257	27,435	27,435
OSHA Incident Rates	Monthly Average	Year to Date	Project to Date
Recordable Injury Rate	0.00	0.00	0.00
DART Rate	0.00	0.00	0.00
<i>Recordable National Average</i>	<i>3.60</i>	<i>3.60</i>	<i>3.60</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>7.20</i>	<i>7.20</i>	<i>7.20</i>
<i>DART WA State Average</i>	<i>3.30</i>	<i>3.30</i>	<i>3.30</i>

Quality Assurance Activities

Activities

- None to report.

Issues

- None to report.

Summary

Description	Aug 2016	Notes
No. of Audits Planned	0	None
No. of Audits Completed	0	None
Reports in Progress	2	E750/N830 90% Design Submittal Audit & E335 100% Design Submittal
No. of Audits Postponed	0	None

Community Outreach

- Conducted door-to-door business briefings to over 50 Bel-Red business about Sound Transit's Business Construction Toolkit.
- Attended Surrey Down's Annual Neighborhood Picnic and discussed with approx. 100 attendees regarding upcoming construction in south Bellevue and the related closure of the South Bellevue Park-and Ride.
- Attended Bellevue College back to school event and provided information on South Bellevue construction.
- Provided a Downtown Redmond Link extension project update to the City of Redmond's Marymoor sub-area infrastructure committee and 10 business and property owners attended the meeting.

Environmental

- Continued developing environmental permit application packages. Environmental commitments are being incorporated into the design, program, and specifications of the project.

Sound Transit Board Actions

Board Action	Description	Date
	<i>None to report.</i>	

Link Light Rail East Link Extension Final Design - S. Bellevue to RTC

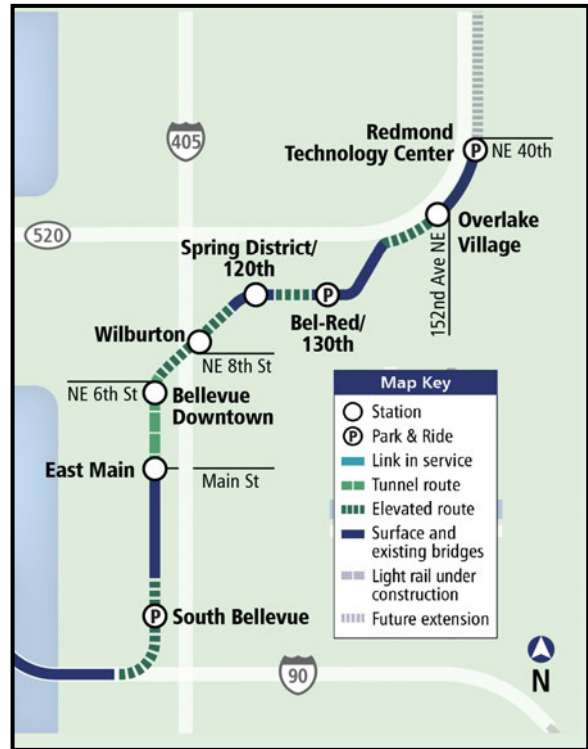


Final Design Scope

Final Design for the East Link Extension includes three major design contracts: two for civil improvements and one for systems improvements. This contract is for civil and architectural design services from South Bellevue to the Redmond Technology Center (RTC). The contract was awarded to H-J-H Final Design Partners, a joint venture of HNTB Corporation, Jacobs Engineering Group, Inc., and Hatch Mott MacDonald.

The scope of H-J-H services includes detailed designs of the corridor, preparation of comprehensive construction contract documents, permitting support, surveying, geotechnical investigations, right-of-way planning, third party coordination, systems coordination, cost estimating, scheduling, sustainability report, bid support, Preliminary Hazards Analysis, and community outreach.

The design is grouped into five Contract Packages: (1) E320 South Bellevue; (2) E330 Downtown Bellevue Tunnel; (3) E335 Downtown Bellevue to Spring District; (4) E340 Bel-Red, and (5) E360 SR-520 to Redmond Technology Center.



Map of South Bellevue to Redmond Technology Center.

Final Design Key Activities

E320 So. Bellevue

- Design of the E320 contract package is complete.
- Prepared to commence Design Services During Construction after construction contract is awarded.

E330 Downtown Bellevue Tunnel

- Design of the E330 contract package is complete.
- Continued Design Services During Construction.

E335 Downtown Bellevue to Spring District

- Completed QC of the E335 IFB Submittal.
- Completed plan and specification revisions for Spring District/120th Station, and coordinated the design with LTK, for systems related components.
- Provided responses to the City of Bellevue permit review comments.
- Continue the interface coordination on the City of Bellevue's 120th and 124th Ave NE Roadway Projects.

E340 Bel-Red

- Completed the design for One-way MOT on 136th Place NE and NE Spring Blvd.
- Completed QC of the E340 IFB Submittal.
- Coordination of work with PSE and Century Link.
- Prepared to commence Bid Support. IFB is planned to be advertised in early October 2016.

E360 SR 520 to Redmond Technology Center

- Continued Design Support for the E360 Design/Build Contract.

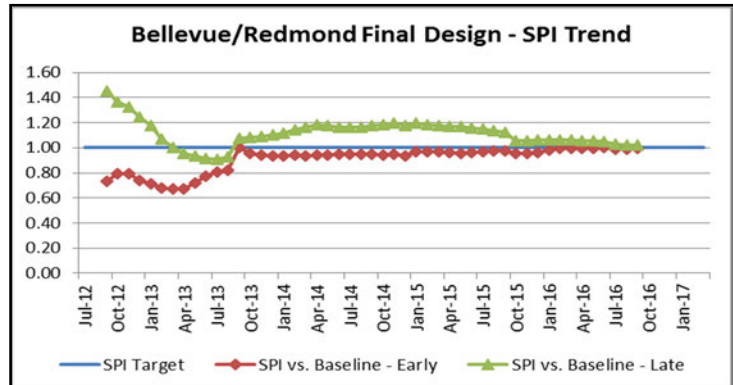
Final Design Schedule

The table below shows the design submittal dates for each of the contract.

Contract Packages	60% Submittal		90% Submittal		100% Submittal		IFB Submittal	
	Baseline*	Forecast/Actual	Baseline*	Forecast/Actual	Baseline*	Forecast/Actual	Baseline*	Forecast/Actual
E320 So. Bellevue	12/6/2013	12/6/2013	9/19/2014	9/19/2014	4/3/2015	4/3/2015	1/25/2016	1/25/2016
E330 Downtown Bellevue Tunnel	11/18/2013	11/18/2013	6/2/2014	6/2/2014	10/20/2014	10/20/2014	5/11/2015 6/15/2015 (2 nd IFB)	5/11/2015 6/15/2015 (2 nd IFB)
E335 Downtown Bellevue to Spring District	12/20/2013	12/20/2013	10/19/2015	10/19/2015	3/8/2016	3/8/2016	6/13/2016 (9/6/2016 - 120 th Sta.)	7/11/2016 (9/16/2016 - 120 th Sta.)
E340 Bel-Red	7/15/2013	7/15/2013	4/04/2014	7/21/2014	12/8/2014	12/8/2014	5/23/2016	9/20/2016
	Draft RFP Submittal		Final RFP Submittal		*Baseline schedule dates revised to reflect final contract packaging and construction delivery methods.			
	Baseline*	Forecast/Actual	Baseline*	Forecast/Actual				
E360 SR-520 to RTC	2/18/2014	2/18/2014	8/14/2015	8/14/2015				

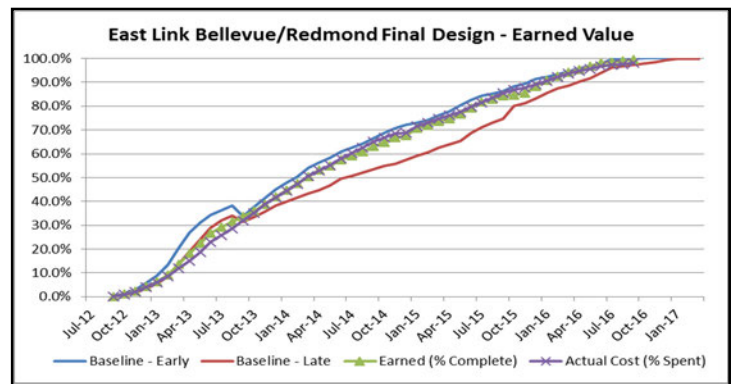
Final Design Schedule Performance

Excluding Other Direct Expenses (ODC's), Profits and DSDC, the cumulative Schedule Performance Index (SPI) reported this period is at 1.00. The IFB for each contract package has now been completed and submitted. Final Design scope is 99.9% complete.



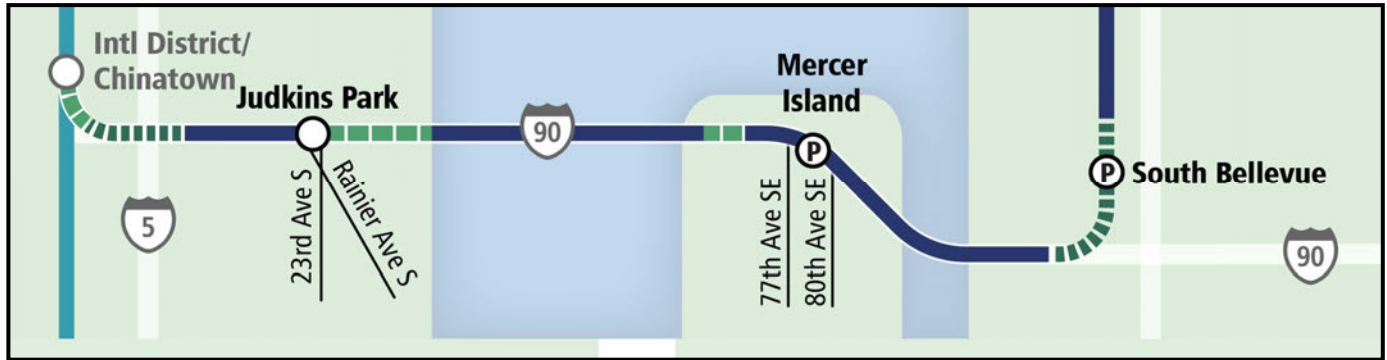
Final Design Cost Performance

Labor cost (for Phase 2 Final Design) to-date is \$84.8M, or 98.3% of the budget. Progress earned through the same period is 99.9% or \$86.2 M of earned value. This yields a cumulative Cost Performance Index (CPI) of 1.02, which indicates approximately on-budget cost efficiency of the current contract budget, including executed change orders. There are pending change orders that are being negotiated to address design and specifications changes prior to final IFB submittals. However, Estimate At Completion (EAC) is within the approved budget by Sound Transit Board.



Performance	Previous Period	Current Period	Cumulative To Date
Labor Amt. Invoiced	\$84,429,364	\$349,252	\$84,778,616
% Spent	98.2%	0.1%	98.3%
Earned Value	\$85,542,431	\$615,198	\$86,157,629
% Complete	99.5%	0.4%	99.9%
CPI	1.01	1.76	1.02

Link Light Rail East Link Extension Final Design - Seattle to S. Bellevue



Map of International District Station to South Bellevue.

Final Design Scope

Final Design for the East Link Extension is delivered by three major design contracts: two for civil improvements and one for systems improvements. This Contract is for the civil and architectural design services from International District Station (IDS) to South Bellevue. The contract was awarded to Parsons Brinkerhoff, Inc. (PB).

The scope of the services includes detailed design of the corridor, preparation of comprehensive construction contract documents, permitting support, surveying, geotechnical investigation, right-of-way planning, third party coordination, systems coordination, cost estimating, scheduling, sustainability report, bid support, preliminary hazards analysis, and community outreach support.

The project in this segment has been aggregated into one Contract Package: E130 Rail Connection and Upgrades at IDS; seismic Retrofits of WSDOT Structures; and I-90 Civil/Architectural, which also includes the two at-grade stations, and Electrical/Mechanical Upgrades to existing Tunnels.

Final Design Key Activities

Design (Civil, Systems, Architecture, Art)

- The 90% Design Plans for the Floating Bridge, Fixed Structures, and Judkins Park and Mercer Island Stations is under review; the Pricing Set was submitted to Sound Transit on September 2, 2016.
- The DAP has been approved by the FHWA, and the PDA has started; the PDA is due 4th QTR 2016.
- Finalizing pricing set for transmittal to Contractor.

Third Party, Agreements, & Permits

- The East Link Construction Service Agreement is with the City of Seattle for signature. Met with the City of Seattle project manager to discuss funding and project coordination.
- The LRRP approved the Judkins Park Station design with one condition, minor refinements to the east entrance façade.
- Met with WSDOT to discuss the Design Review Task Order billings and the path to completion of design.
- Met with the City of Bellevue Parks Department to review the I-90 segments work plan for Enatai Beach Park.

Construction & Construction Management

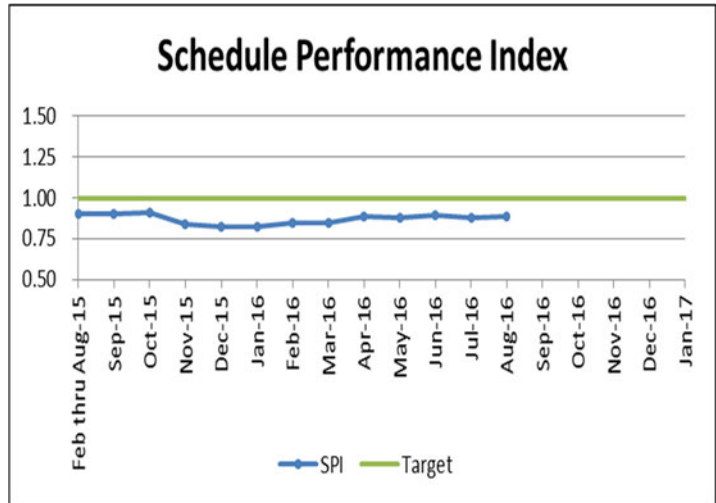
- GC/CM completed installation of elastomeric grout to plinths on the floating bridge mock-up.
- The final Subcontract Packaging Plan was submitted; development of the basis of understanding & scopes for negotiated support services during construction continues.
- Ongoing coordination with the WSDOT Bridge design office to define allowable work on the floating bridge during the winter months.
- A workshop was held with WSDOT, the GC/CM, and the design team; the workshop identified constraints associated with modifying electrical systems within the floating bridge that need to remain operational during construction.

Final Design Schedule

Contract Packages	60% Submittal		90% Submittal		100% Submittal	
	Baseline	Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual
EI 30 – Rail connection & IDS upgrades; Seismic retrofits; and I-90 Civil/Arch./Elect. & Mech. Upgrades	4/4/2014	7/11/2014	6/16/2016	7/1/2016	12/14/2016	8/15/2016

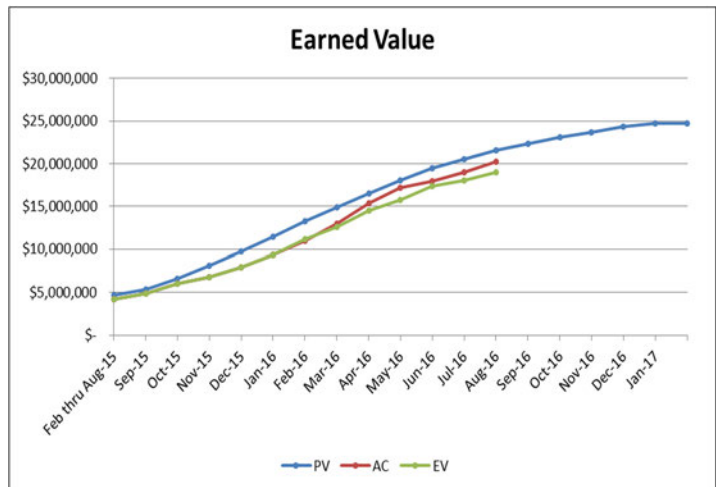
Final Design Schedule Performance

Excluding Other Direct Expenses (ODC's) and Profits, the Schedule Performance Index (SPI) reported this period is 0.88 when measuring against the Phase 2 Early Schedule Baseline, indicating the project continues to trend behind schedule by about a month. The below optimal schedule performance may be due to changes to design or additional analysis requested by third parties that the design team has to react to. As the Consultant realigns staff to perform remaining design tasks, the SPI is anticipated to approach 1.00 in the near future.



Final Design Cost Performance

Reporting is for Phase 2 Direct Labor & Overhead performance only, measured against the Phase 2 Cost to Complete, which is \$20.7M. Current CPI is 0.94, indicating the project is trending slightly over budget. The over budget trend may be due to additional work efforts to complete the 90% plans, and efforts to produce the complete Pricing Set. It is anticipated the CPI will continue to trend near 1.00 for the duration of final design. Cost performance will be closely monitored to ensure project completion in a cost-effective and successful manner.



Performance (DL+OH only)	Previous Period	Current Period	Cumulative To Date
Amount Invoiced	\$19,018,102	\$1,229,250	\$20,247,352
% Spent	87.1%	6.0%	98.2%
Earned Value	\$18,083,513	\$911,707	\$18,995,220
% Complete	77.6%	4.4%	82.0%
CPI	0.95	0.74	0.94

Final Design Scope

Final Design for the East Link Extension is delivered by three major design contracts: two for civil improvements and one for systems improvements. This contract is for the systems design services for the entire alignment. The contract was awarded to LTK Engineering Services, Inc. The scope of the services include detailed design of the corridor, preparation of comprehensive construction contract documents, 3rd party coordination, cost estimating, scheduling, and bid support.

Final Design Key Activities

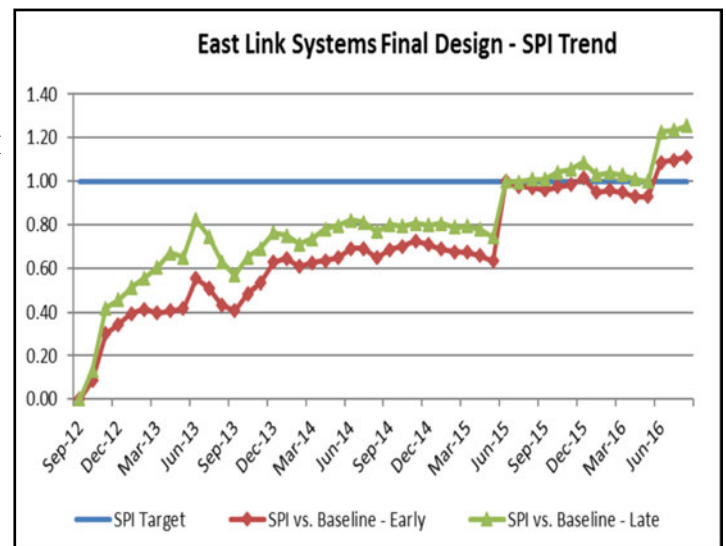
- The 100% design submittal was received on September 6th. This will be the basis for the GCCM cost estimate.
- The E130 Pricing Set design submittal was received by Sound Transit on September 9.
- The Safety Certification verification matrix for N830/E750 was provided to Sound Transit Safety on September 30.

Final Design Schedule

	60% Submittal		90% Submittal		100% Submittal		IFB Submittal	
	Baseline	Actual	Baseline	Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual
E750– LRT Systems	10/24/2014	10/24/2014 Actual	2/1/2016	1/29/2016 Actual	9/6/2016	9/6/2016	3/1/2017	3/1/2017

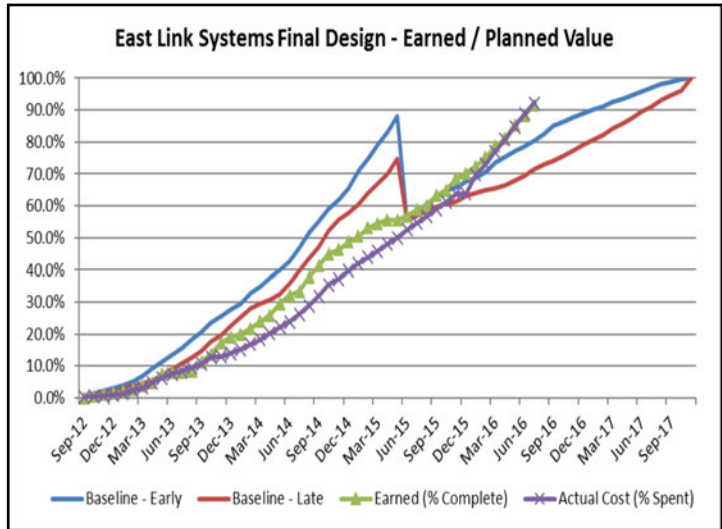
Final Design Schedule Performance

The project is 91.5% complete (Final Design) resulting in an Earned Value of \$16.1M. The project has an early SPI of 1.00 and a late SPI of 1.09 which indicates that the contract is on schedule.



Final Design Cost Performance

The project has spent approximately the project has spent approximately 91.7% (Final Design) of the budget resulting in CPI of 0.99. The current Estimate at Completion (EAC) is expected to be less than the current budget of \$17.9M.



Performance	Previous Period	Current Period	Cumulative To Date
Labor Amt. Invoiced	\$16,249,089	\$550,000	\$16,799,089
% Spent	90.7%	3.1%	93.8%
Earned Value	\$16,127,358	\$550,000	\$16,677,358
% Complete	91.5%	3.1%	94.6%
CPI	1.0	1.0	1.0

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: Continued work on the mock-up of track and plinths attachment on the floating bridge.

E160 Track Bridge System – Fabrication, delivery and install eight track bridges that will span over fixed structures and the floating bridge. [Furnish and Install]

Status: Incorporating E160 into 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: In procurement, pending ST Board approval of contract.

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

Status: See following pages.

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: Continued procurement of subcontract packages.

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

Status: Advertise 3rd QTR 2016

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: NTP issued on July 13, 2016.

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: GC/CM reviewing design documents, and coordinating with designers.

Contract E330 – Downtown Bellevue Tunnel

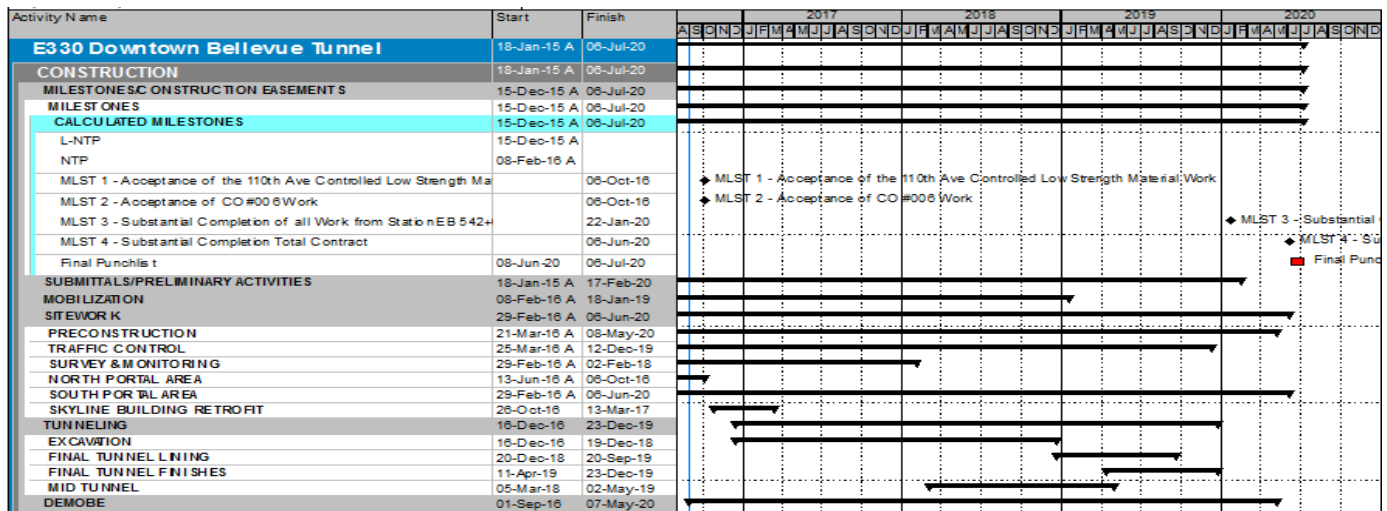
Current Progress

South Portal: The Contractor completed installation of the sound wall panels including installation of the sound absorbing material, gates, lighting, and exterior painting; also began soil nail wall excavation, completing lifts 1, and beginning on lift two during the month. The Contractor continued to maintain TESC and Traffic Control measures, and continued installation of tunnel monitoring equipment throughout the site.

North Portal: Site restoration around the CLSM work was completed, including the sidewalk and driveway pour back. Installation of the monitoring equipment for eighteen (18) out of thirty-seven (37) piezometers, inclinometers, and extensometers continued.

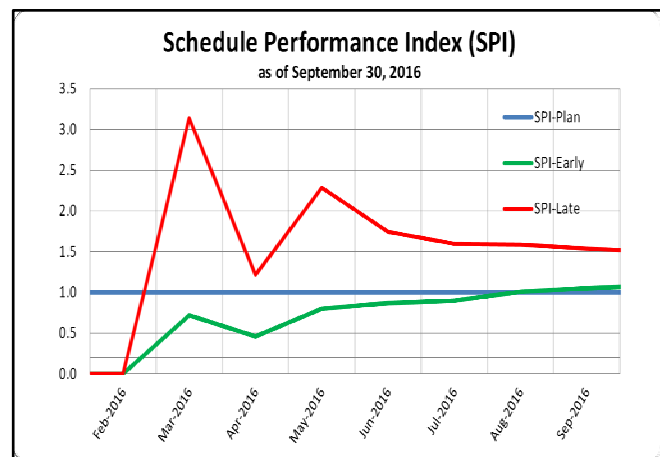
Schedule Summary

The critical path for this contract continues to follow the South Portal excavation through the tunnel excavation and the completion of the South Portal structure. The decision to use CLSM in lieu of the grouted pipe canopy at the North Portal allowed for a resequencing of work which removes the need for an interim interface with E335, providing some schedule relief. The contractor is currently modeling a change in excavation method for the southern 60% of the tunnel which, if approved, could realize up to three months of additional schedule savings.



Schedule Performance Index

This period, the SPI early (1.08) trends ahead of schedule and the SPI late (1.50) is holding its trend on completion ahead of the baselined schedule. The index indicates that the contractor continues trending in the positive direction and slightly ahead of the original base plan. This trend was supported by the fact that the South Portal activities, including the sound wall installation and hammerhead restoration were completed ahead of schedule, and the fact that the soil nail excavation commenced ahead of the baseline schedule. The soil nail excavation started on September 1, 2016 and the first lift was completed on September 20, 2016. The soil nail excavation wasn't scheduled to start until October 12, 2016 per the baseline schedule.



Link Light Rail East Link Extension - Construction



Next Period's Activities

- Layout Piezometers, Inclometers and Extensometers throughout the site. This activity could be delayed further if right of entries are not obtained in time.
- Continue excavation and installation of the soil nail walls at the South Portal. Lifts 2-4 should be completed and lift 5 started.
- Finish signage and seeding at the Hammerhead area. Light pole foundation schedule is unknown and to be scheduled by Sound Transit and PSE.

Closely Monitored Issues

- Alternate SEM excavation sequence proposed by the contractor decision continues to be pending, awaiting additional design reviews.
- Obtaining right of entry agreements and temporary construction easements for properties along alignment.
- The TCE for the Skyline property does not match the requirements in the Contract Documents. The TCE requires the use of property owner approved MEPS subcontractors, night and weekend only work hours, and performing work on one floor at a time. CMC team currently negotiating with the contractor and Skyline building management on a solution.

Cost Summary

Present Financial Status	Amount
E330 Contractor– Guy F Atkinson Construction, LLC.	
Original Contract Value	\$121,446,551
Change Order Value	\$933,055
Current Contract Value	\$122,379,606
Total Actual Cost (Incurred to date)	\$19,085,788
Financial Percent Complete:	15.6%
Physical Percent Complete:	15.6%
Authorized Contingency	\$12,244,655
Contingency Drawdown	\$933,055
Contingency Index	2.1



Excavation at the South Portal.

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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

Service: September 2016

Phase: Construction



Map of S. 200th Link Extension.

Key Project Activities

- *Design Build Guideway and Station (S440):* Guideway and Station opened for Revenue Service on September 24, 2016. The project team is working with the Contractor and Operations to identify remaining work to achieve Acceptance on the contract.
- *Design Build Parking Garage (S445):* The Parking Garage opened for Revenue Service on September 24 with the condition -the elevators would be operational in 45days. Elevator installation was completed and L&I inspections are underway.
- *Military Road/ South 200th (S446):* Construction work managed by WSDOT continues. Grading work continues at northeast corner area.
- *Roadway Improvements (S447):* Construction nearing completion (final grading and asphalt paving, traffic controllers) and punch list being developed.

Closely Monitored Issues

- Completion of Training, O&M Manuals and Safety Certification.

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 approved by ST Board in December 2015. 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	\$16.8	\$14.8	\$14.8	\$16.8	\$0.0
Preliminary Engineering	\$5.9	\$5.7	\$5.7	\$5.7	\$5.7	\$0.0
Final Design	\$20.0	\$9.9	\$8.7	\$8.7	\$8.8	\$1.1
Construction Services	\$15.1	\$17.3	\$16.2	\$15.7	\$16.7	\$0.6
3rd Party Agreements	\$6.9	\$7.1	\$5.7	\$3.8	\$5.9	\$1.2
Construction	\$275.7	\$282.9	\$234.6	\$225.4	\$245.8	\$37.1
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$43.5	\$43.5	\$42.9	\$38.0	\$43.5	\$0.0
Capital Total	\$383.2	\$383.2	\$328.5	\$312.1	\$343.2	\$40.0
Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total	\$383.2	\$383.2	\$328.5	\$312.1	\$343.2	\$40.0

The overall project Estimated Final Cost (EFC) for this period reflects \$343M, a savings projection of \$40M. This period incurred cost increased by approximately \$1.6M, of this \$0.7M was for construction activities (S440 Guideway & Station Design Build contract was \$0.3M, S445 Parking Garage Design Build contract was \$0.2M, and S447 was \$0.1M. Construction services were \$0.4M and the remaining expenditures for \$0.4M were related to administrative charges.

The EFC grouped by SCC is also reflecting \$343M, a savings projection of \$40M. 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	\$98.7	\$99.5	\$108.0	\$25.0
20 Stations	\$46.4	\$51.3	\$39.6	\$39.8	\$40.4	\$11.0
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	\$56.2	\$46.6	\$57.9	-\$2.6
50 Systems	\$30.8	\$19.9	\$19.2	\$19.1	\$19.3	\$0.7
Construction Subtotal	\$256.6	\$259.6	\$213.8	\$205.0	\$225.5	\$34.0
60 Row, Land, Existing Improve-	\$43.5	\$43.5	\$42.9	\$38.0	\$43.5	\$0.0
70 Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
80 Professional Services	\$64.1	\$72.1	\$71.8	\$69.2	\$68.0	\$4.1
90 Unallocated Contingency	\$19.0	\$8.0	\$0.0	\$0.0	\$6.2	\$1.9
Project Total (SCC 10-90)	\$383.2	\$383.2	\$328.5	\$312.1	\$343.2	\$40.0
100 Finance Cost	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Project Total (SCC 10-90)	\$383.2	\$383.2	\$328.5	\$312.1	\$343.2	\$40.0

Cost Contingency Management

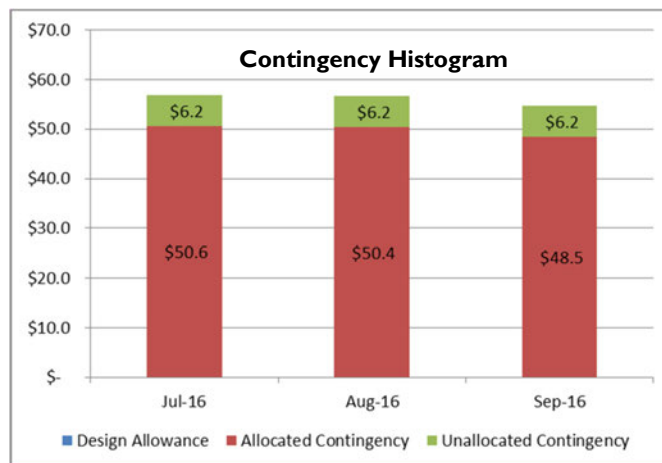
The overall project contingency balance as of this period is \$54.7M.

Design Allowance (DA): N/A

Allocated Contingency (AC): This period the AC shows a current balance of \$48.5M, a decrease of \$1.9M from the previous period. The reduction was primarily due to construction services phase, change order for DBPM contract (\$1.19M); construction change orders of \$.3M (S445 - \$205K and S440 - \$82K); and Administration commitments of \$.4M.

Unallocated Contingency (UAC): This period the UAC balance is \$6.2M, no change from previous period.

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%	\$48.5	155.9%
Unallocated Contingency	\$19.0	5.0%	\$ 6.2	19.9%
Total	\$75.5	20.0%	\$54.7	175.8%



Project Schedule

Revenue Service commenced on September 24, 2016. The S440 contractor continues to work on closeout and punchlist items. S445 DB Parking Garage Design/ Builder has opened to the public and continues to work on closeout documentation, punchlist items and the elevator inspections. Final L & I inspections are expected in October for both elevators. Plan B parking mitigation is in place until elevators are opened to the public.

Community Outreach

- Celebrated the opening day of the S. 200th Link Extension on September 24, 2016 with a dedication ceremony and an inaugural ride for the public.
- Invited impacted businesses to the inaugural ride for S.200th opening.



S. 200th Link Opening Day Celebration



S440 Contract—Design -Build (Guideway and Station)

Close-out Progress

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

Key Activities

Current Period

- Opened for Revenue Service on September 24, 2016.
- Continued punch list work for Guideway Substructure, Site Restoration, Landscaping, and Communication Systems.
- Safety certification and work around items continues.
- Continue troubleshooting cistern at Station (south plaza).
- Continue change order work and address contract close-out items.
- Continue coordination meetings for Systems Task Force, Commissioning, Change Management, and Punch List.
- Troubleshoot cistern at Station platform.

Next Period

- Continue punch list and work around work.
- Continue troubleshooting cistern and relocate cameras at Station plaza and platform.

Closely Monitored Issues

- Completion of Training and O&M Manuals, Safety Certification, and as-builts to transfer maintenance responsibilities to Operations and Facilities.

Cost Summary

Present Financial Status	Amount
S440 Contractor—PCL Civil Contractors, Inc.	
Original Contract Value	\$169,000,000
Change Order Value	\$4,862,840
Current Contract Value	\$173,862,840
Total Actual Cost (Amount Billed)	\$172,296,729
Financial Percent Complete:	99%
Physical Percent Complete:	99%
Authorized Contingency	\$13,520,000
Contingency Drawdown	\$4,862,840
Contingency Index*	2.8



First LRV arrives at Angle Lake Station on S200th Link Opening Day.

S445 Contract—Design -Build Parking Garage

Close-out Progress

The S445 parking garage is now open to the public without elevator service. Final inspections for elevators at the garage are expected next period.

Key Activities

Current Period

- Continue coordination meetings with ST, RE team and other third party agencies.
- Garage was open to the public on 9/24/2016. ADA parking was relocated to Level 2 until both elevators, Cab #1 and Cab #2, are approved by L&I for customer usage.
- Working on project closeout.
- Continued work on garage signage.
- Began clearing and demobilization of contractor staging area.

Next Period

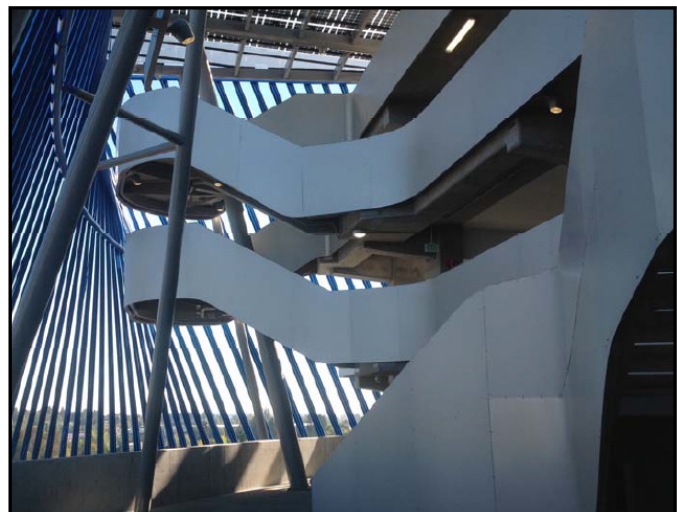
- Complete elevator controller programming and adjustments for Cab #1.
- Continue elevator controller programming and adjustments for Cab #2.
- Complete L&I inspection of Cab #1.
- Complete remaining installation of garage signage.
- Continue miscellaneous construction activities.
- Schedule preliminary punch list reviews.

Closely Monitored Issues

- No issues at this time.

Cost Summary

Present Financial Status	Amount
S445 Contractor—Harbor Pacific/Graham	
Original Contract Value	\$29,978,000
Change Order Value	\$2,258,778
Current Contract Value	\$32,236,778
Total Actual Cost (Amount Billed)	\$32,082,625
Financial Percent Complete:	99%
Physical Percent Complete:	99%
Authorized Contingency	\$2,798,240
Contingency Drawdown	\$2,258,778
Contingency Index*	1.23



Stairs 5 and 6 are completed at the garage.

S447 Contract – Station Area Roadway Improvements and Surface Parking

Current Progress

S447 Contractor continues punchlist work.

Key Activities

Current Period

- Continue weekly construction progress meetings.
- Continue coordination meetings.
- Graded, prepared subgrade and placed final asphalt paving.
- Installing traffic controller and service foundations at Des Moines Creek.
- Cameras and emergency phone work at surface parking lot, 80% completed.
- Punch list work ongoing.
- Held Progress, As-built, Change Management and Coordination meetings.

Next Period

- Continue punchlist work and any work around items.
- Install power service for Des Moines Creek.

Closely Monitored Issues

- None at this time.

Cost Summary

Present Financial Status	Amount
S447 Contractor – Johansen Excavating, Inc	
Original Contract Value	\$8,426,400
Change Order Value	\$2,642,640
Current Contract Value	\$11,069,040
Total Actual Cost (Amount Billed)	\$11,011,197
Financial Percent Complete:	99%
Physical Percent Complete:	99%
Authorized Contingency	\$2,642,640
Contingency Drawdown	\$2,642,640
Contingency Index*	1.0



Paving at S. 200th Street– vicinity of Des Moines Creek.



Link Light Rail S. 200th Link Extension – Design-Build

Link Light Rail Federal Way Extension

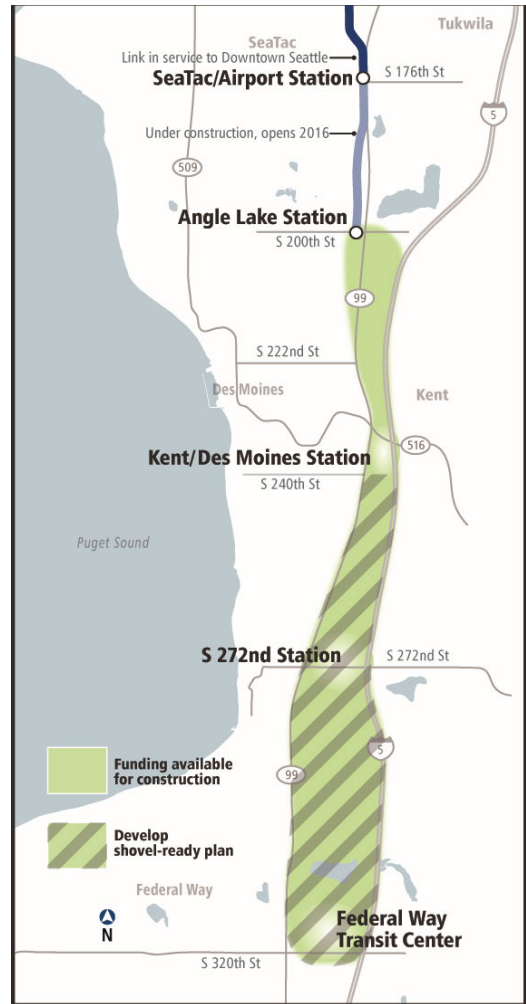


Scope

The Federal Way Link Extension includes alternatives analysis, environmental work and conceptual engineering for an extension of Link Light Rail from S. 200th St. in SeaTac to the Federal Way Transit Center. Preliminary engineering will be performed for the segment from S. 200th St. to Kent/Des Moines (in the vicinity of Highline College) and to the Federal Way Transit Center.

Key Project Activities/Issues

- Completed Phase 1 work (Alternatives Analysis) in Sept. 2013.
- DEIS alternatives identified by the Board in Sept. 2013.
- Executed Phase 2 contract amendment with HDR for Conceptual Engineering and Draft EIS work in October 2013.
- Published Draft EIS on April 2015. Comment period ended May 26, 2015.
- Board identified a Preferred Alternative and approved Phase 3 contract amendment on July 23, 2015.
- Executed Phase 3 contract amendment with HDR for Final EIS and Preliminary Engineering on July 24, 2015.
- ST Board approved contract amendment in February 2016 to extend Preliminary Engineering from Kent/Des Moines to the Federal Way Transit Center.



Map of Federal Way Link Extension.

Project Cost Summary

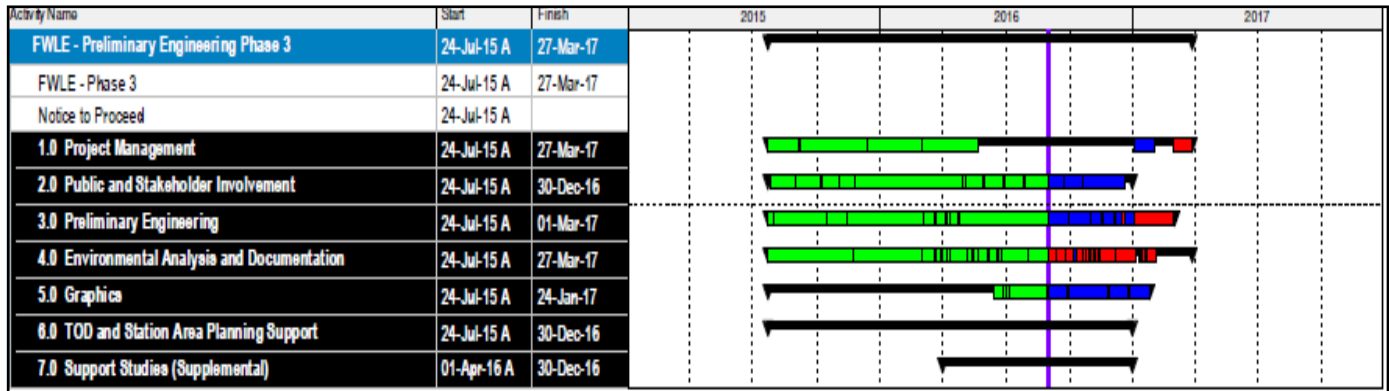
In July 2015, the Sound Transit Board identified the preferred alternative and station locations and approved the Federal Way Link Extension Phase 3 (PE and Final EIS) contract amendment.

The Federal Way Link Extension is currently funded through the completion of preliminary engineering (PE) and environmental documentation, with the exception of the segment from Kent/Des Moines to Federal Way, which is only funded through environmental documentation. 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	\$9.4	\$4.8	\$4.9	\$4.6	\$9.4	\$0.0
Preliminary Engineering	\$33.3	\$30.7	\$26.6	\$2.7	\$33.3	\$0.0
Third Parties	\$2.4	\$1.2	\$0.5	\$1.2	\$2.4	\$0.0
Right of Way	\$3.6	\$1.0	\$0.7	\$2.6	\$3.6	\$0.0
Total	\$48.8	\$37.7	\$32.6	\$11.1	\$48.8	\$0.0

Project Schedule

The Final EIS and Preliminary Engineering was extended to 1st QTR 2017.



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

- Hosted briefings for SeaTac for residents in various neighborhoods including Mansion Hill, and Newport Village.
- Attended an ST community meeting to inform Federal Way business owners about the proposed project.

Environmental

- None to report.

Phase 3 Preliminary Engineering (PE)

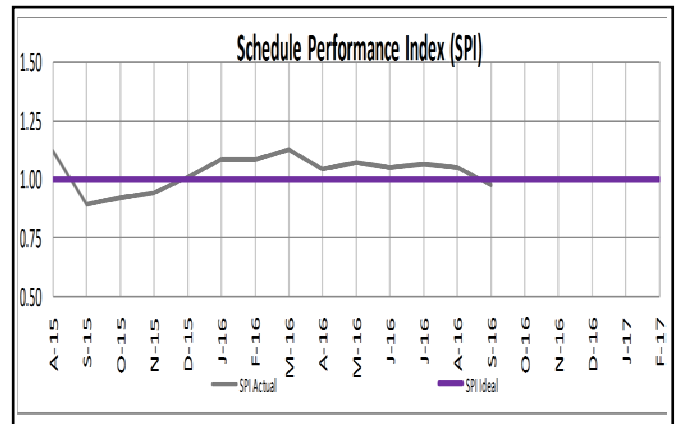
In July 2015, Sound Transit executed an amendment to the professional services agreement with HDR Engineering, Inc. for Phase 3 professional services, including completion of a Final Environmental Impact Statement (FEIS) using the preferred alternative and the other alternatives in the Draft EIS, preliminary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

- Distributed Pre-Final PE submittal for internal and third party review. Continued coordination with third parties regarding design, permitting and construction coordination issues.
- Continued development of the Final EIS. Current activities include review of administrative drafts by FTA.
- Continued coordination with potentially affected property owners including neighborhood briefings and one-on-one meetings.
- Continued discussion of term sheets with affected jurisdictions to address code/permitting requirements and design review process for next phase of project development.
- Initiated discussion with FTA regarding New Starts requirements for Entry to Engineering.

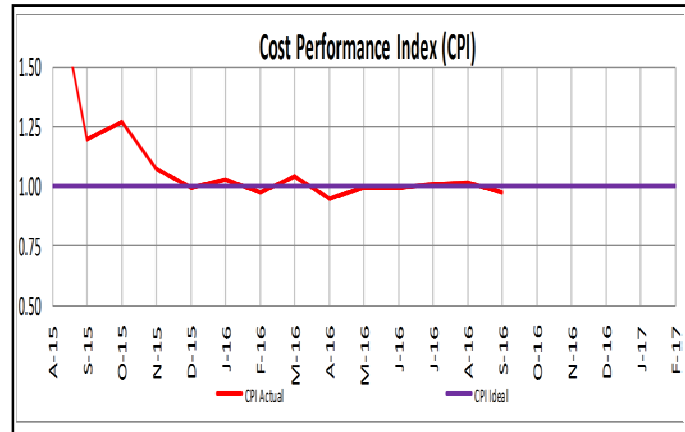
Phase 3 Schedule Performance

The cumulative Schedule Performance Index (SPI) is 0.98 through September 2016, indicating the overall amount of work accomplished is slightly less than planned. Review of the consultants draft Phase 3 schedule indicates that completion of the FEIS document is currently on the critical path.



Phase 3 Cost Performance

\$25.9M of the total contract amount, approximately 86%, has been spent through September 2016. Phase 3 expenditures totaled \$14.0M, approximately 77% of the Phase 3 contract total. The Phase 3 percent complete reported at 75%, with an earned value of \$13.7M. The cumulative Cost Performance Index (CPI) is 0.98, indicating costs are on track with work accomplished. Based on the current trend, the Phase 3 cost is expected to be on budget.



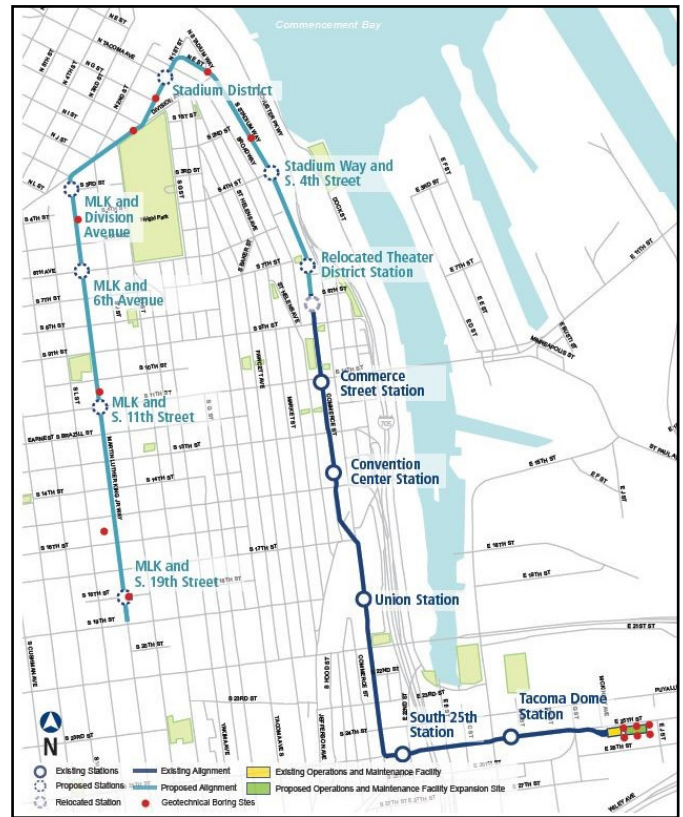
Phase 3 Performance	Previous Period	Current Period	Cumulative To Date
Amount Invoiced	\$13,367,580	\$686,840	\$14,054,419
% Spent	73%	4%	77%
Earned Value	\$13,428,552	\$219,395	\$13,737,958
% Complete	73%	2%	75%
SPI	1.04	0.18	0.98
CPI	1.08	0.32	0.98

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 extension 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:** \$33.02 Million Phase Gate 4 budget; excludes Construction (Year of Expenditure Dollars)
- Phase:** Final Design
- Const. Starts:** 2018



Map of Tacoma Link Extension.

Key Project Activities

Final Design

- Executed the contract for the Final Design Consultant.

Pre-Construction Services

- Continue procuring CMC contract in 3rd QTR 2016.

Third Parties

- Advancing formal agreements with City of Tacoma and utility providers.

Right of Way

- Continued early right of way property acquisition activities as they relate to the expansion of the Operations and Maintenance.

Project Cost Summary

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	\$10.6	\$2.6	\$2.6	\$10.6	\$0.0
Preliminary Engineering	\$5.9	\$5.6	\$5.6	\$5.9	\$0.0
Final Design	\$10.8	\$7.6	\$0.0	\$10.8	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.5	\$0.0	\$0.0	\$0.5	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Vehicles	\$2.0	\$2.0	\$0.2	\$2.0	\$0.0
ROW	\$3.2	\$0.2	\$0.1	\$3.2	\$0.0
Total	\$33.0	\$18.0	\$8.5	\$33.0	(\$0.0)

Cost Summary by SCC

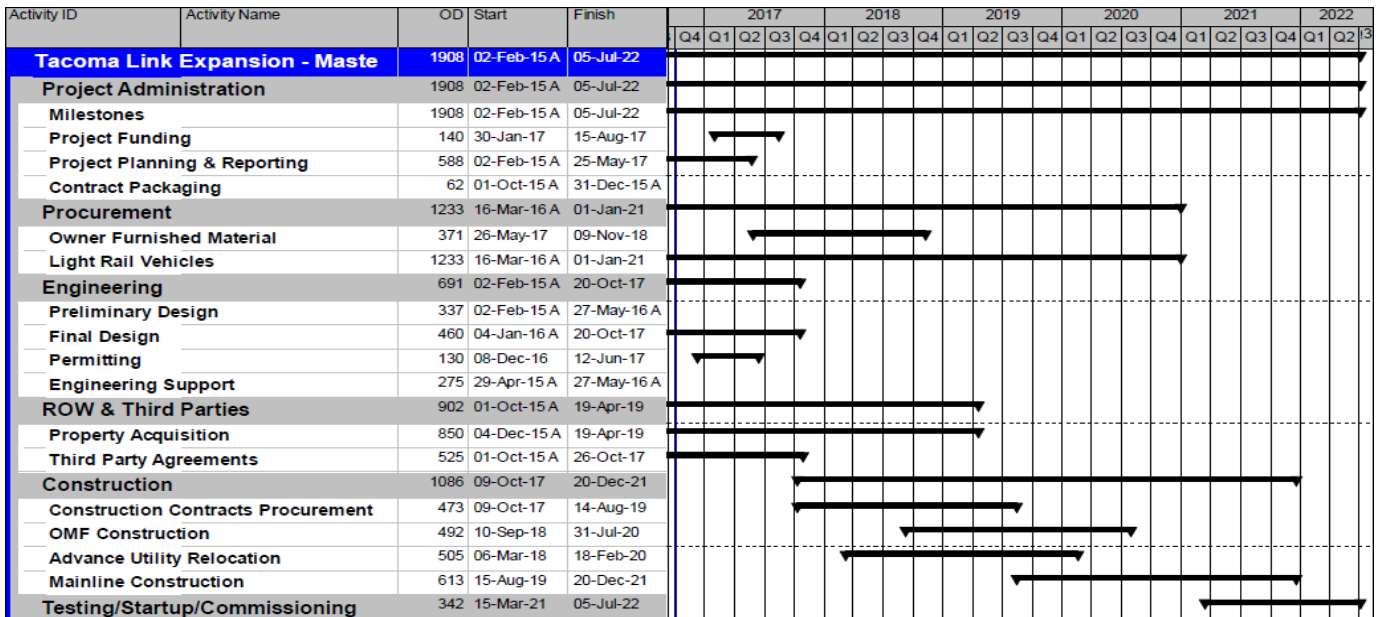
Project Elements by SCC	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
40 Sitework & Special Conditions	\$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)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
60 Row, Land	\$3.2	\$0.2	\$0.1	\$3.2	\$0.0
70 Vehicles (non-revenue)	\$2.0	\$2.0	\$0.2	\$2.0	\$0.0
80 Professional Services	\$27.8	\$15.8	\$8.2	\$27.8	\$0.0
90 Unallocated Contingency	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total (10 - 90)	\$33.0	\$18.0	\$8.4	\$33.0	(\$0.0)

Risk Management

The Tacoma Link Risk and Contingency Management Plan (RCMP) will be 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 Tacoma Link Quarterly Risk Review Meeting is targeted for November 2016.

Project Schedule

NTP for the Final Design was issued on the on August 25, 2016. The preliminary schedule submitted by HDR indicates delivery of 60% designs in the 1st QTR 2017. ST is continuing efforts to finalize the Work Order with the City of Tacoma for support of the project as well as amending the Right of Use Agreement. Phase 3 of the project is complete. ST has made an offer on the property for the new OMF and is awaiting a counter offer from the current owner. ROW is also working on strategies to reduce the time needed to acquire the TCE’s.



Sound Transit Board Actions

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

Motion Number	Description	Date
	None to report.	

Community Outreach

- None to report.

Environmental

- None to report.

Phase 3 Preliminary Engineering

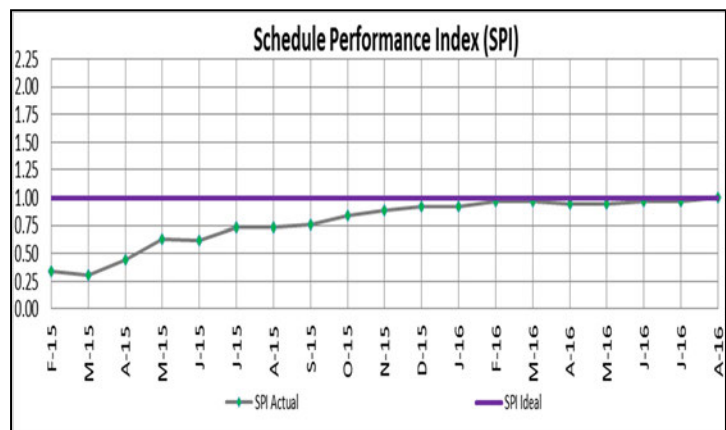
In February 2015 Sound Transit executed an amendment to the professional services agreement with CH2M Hill, Inc. for Phase 3 professional services, including preliminary engineering and environmental work.

Phase 3 Key Activities

- Continued contract closeout documentation and final invoice prep.

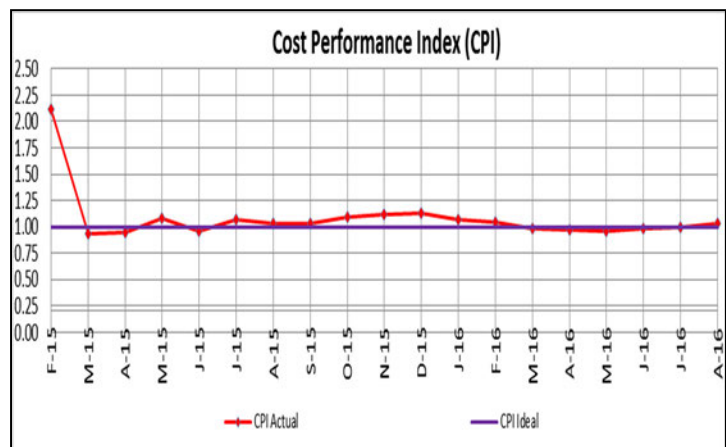
Phase 3 Schedule Performance

The cumulative Schedule Performance Index (SPI) for the Phase 3 contract is 1.00 through August, as the project was completed in August. Consistent with the original Phase 3 schedule, planned values for the project ended in September. A change order was executed to the contract and a revised cash flow was established with this month's reporting. The Phase 3 work is now finished (100% complete overall). *No more updates for the SPI.*



Phase 3 Cost Performance

\$5.35M of the total contract amount, approximately 99%, has been spent through August. Phase 3 contract expenditures through August totaled \$2.5 M, approximately 98% of the Phase 3 contract total. The Phase 3 contract percent complete reported at the end of August is 100%, with an earned value of \$2.56 M. The cumulative Cost Performance Index (CPI) through August is 1.03; indicating costs saving on the project. The monthly CPI for August was significantly high at 10.27, driven by expenditures to complete work related to Station Platform Refinements and DAHP coordination. *No more updates for the CPI.*



Phase 3 Performance	Previous period	Current Period	Cumulative To-Date
Amount Invoiced	\$2,468,546	\$10,897	\$2,479,443
% Spent	98%	1%	99%
Earned Value	\$2,445,754	\$111,455	\$2,557,719
% Complete	95%	5%	100%
SPI	0.96	6.44	1.00
CPI	0.99	10.27	1.03

Link Light Rail

Link Operations and Maintenance Facility: East



Project Summary

Scope: The Link Operations and Maintenance Facility: East (OMFE) 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 Million (Baselined July 2016)

Schedule: Project completion December 2020

Phase: Proceed to Construction

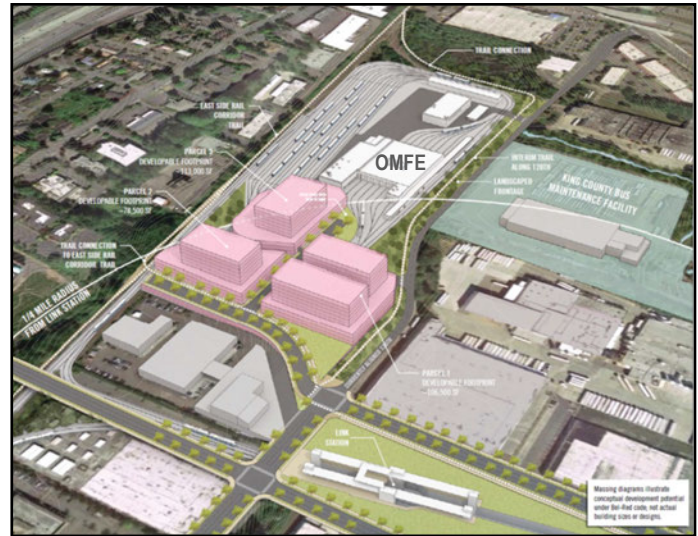


Illustration of OMFE site

Key Activities

- Weekly coordination meetings are held with the consultant and ST Operations/Facilities to review the project on-going procurement.
- The three top-ranked Design-Build teams received the RFP in early September. One-on-one meetings with proposers began in September.
- DBPM procurement continues, anticipate ST Board action to award contract December 2016.
- Environmental permit work underway for applications with City of Bellevue.
- Continue discussions with City of Bellevue regarding permit process and early permits.
- Meetings with Bellevue regarding TOD continue.
- King County wastewater agreement needs to be finalized by Utility Engineer.
- Electrical service needs being summarized internally to advance PSE discussions.

Closely Monitored Issues

- Property acquisition activities continue to be challenging. One property remains with FTA for review. Formulating meetings and offers for property acquisition.

Project Cost Summary

In July 2016, the Sound Transit Board authorized the project to be baselined (Gate 5) and advance to construction (Gate 6). This increased the Adopted Capital Budget for the OMFE from \$133.6M to \$449.2M. The OMFE 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	\$2.0	\$2.0	\$17.6	\$0.0
Preliminary Engineering	\$9.5	\$9.5	\$8.9	\$8.4	\$9.5	\$0.0
Final Design	\$0.4	\$0.4	\$0.0	\$0.0	\$0.4	\$0.0
Construction Services	\$19.3	\$19.3	\$0.0	\$0.0	\$19.3	\$0.0
3rd Party Agreements	\$3.1	\$3.1	\$0.0	\$0.0	\$3.1	\$0.0
Construction	\$264.8	\$264.8	\$0.0	\$0.0	\$264.8	\$0.0
ROW	\$134.5	\$134.5	\$24.7	\$23.5	\$134.5	\$0.0
Total	\$449.2	\$449.2	\$35.6	\$33.8	\$449.2	\$0.0

The Estimated Final Cost (EFC) for the project as of this reporting period is \$449.2M, which is equal to the current project budget. This period, approximately \$0.4M was incurred, of which \$0.2M was for PE services. The remaining expenditures were for right-of-way, staff and other direct charges.

The Estimated Final Cost (EFC) reflects the current adopted budget values due to project baselined this period. ROW and Professional Services categories are active at this stage of the project.

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	\$37.9	\$37.9	\$0.0	\$0.0	\$37.9	\$0.0
20 Stations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
30 Support Facilities: Yards, Shops	\$104.8	\$104.8	\$0.0	\$0.0	\$104.8	\$0.0
40 Sitework & Special Conditions	\$43.6	\$43.6	\$0.0	\$0.0	\$43.6	\$0.0
50 Systems	\$43.0	\$43.0	\$0.0	\$0.0	\$43.0	\$0.0
Construction Subtotal (SCC 10-50)	\$229.3	\$229.3	\$0.0	\$0.0	\$229.3	\$0.0
60 Row, Land, Improvements	\$134.5	\$134.5	\$24.7	\$23.4	\$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	\$10.9	\$10.1	\$71.6	\$0.0
90 Unallocated Contingency	\$13.8	\$13.8	\$0.0	\$0.0	\$13.8	\$0.0
Project Total (SCC 10-90)	\$449.2	\$449.2	\$35.5	\$33.5	\$449.2	\$0.0

Cost Contingency Management

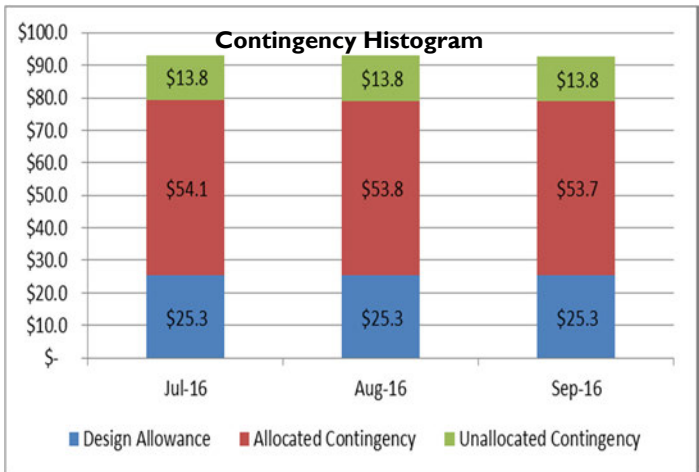
Compared to the baseline amount of \$93.2M, the Total Contingency is \$92.8M. During this period, a net decrease of \$0.1M in overall project contingency occurred. Detailed information is provided below.

Design Allowance (DA) – The baseline DA of \$25.3M reflects no changes this period.

Allocated Contingency (AC) – Compared to the baseline amount of \$54.1M, AC has reduced to \$53.7M, a reduction of \$0.1M due to the ROW, PE and Admin phases.

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%	\$ 25.3	6.1%
Allocated Contingency	\$ 54.1	12.0%	\$ 53.7	12.9%
Unallocated Contingency	\$ 13.8	3.1%	\$ 13.8	3.3%
Total	\$ 93.2	20.7%	\$ 92.8	22.3%



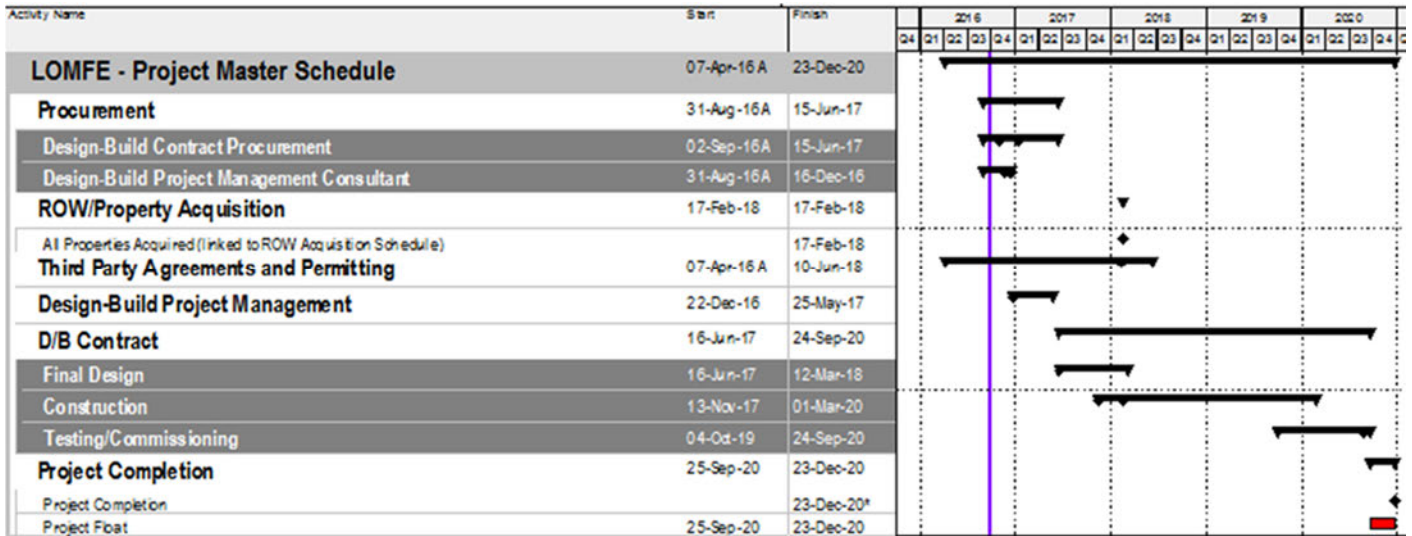
Risk Management

The Project has a Risk Register and is actively managing risks. The following are the top five risks:

- Volatility in property values around the Bel-Red area.
- City of Bellevue requesting additional site improvements not included in the agreements.
- Authorities Having Jurisdiction not fully communicating all of their requirements to Sound Transit.
- Changes in storm water facility estimate assumptions by DB contractor.
- Designing and procuring special track-work.

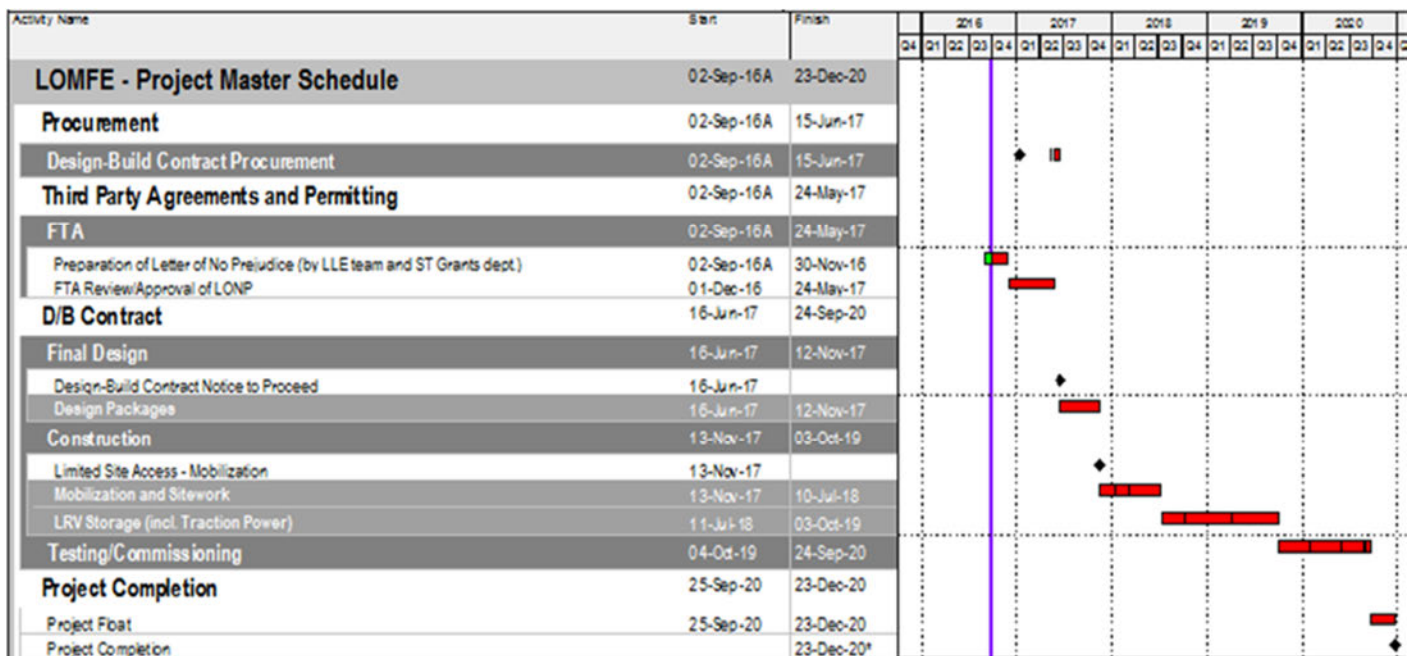
Project Schedule

The project schedule is presented below as baselined this period. The RFP for the Design-Build contractor was issued in early September. Property acquisitions are on schedule to be completed in late 2017 or early 2018, in time for construction to start as planned.



Critical Path Analysis

The project critical path this period is through the Letter of No Prejudice to allow work to progress ahead of the Full Funding Grant Agreement for Lynnwood Link Extension. The current conceptual construction plan shows a critical path through the foundation design and subsequently the construction of the LRV storage yard.



Sound Transit Board Actions

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

Motion Number	Description	Date
	<i>None to report.</i>	

Environmental

- None to report.

Community Outreach

- None to report.

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 (OMFE) in September 2014.

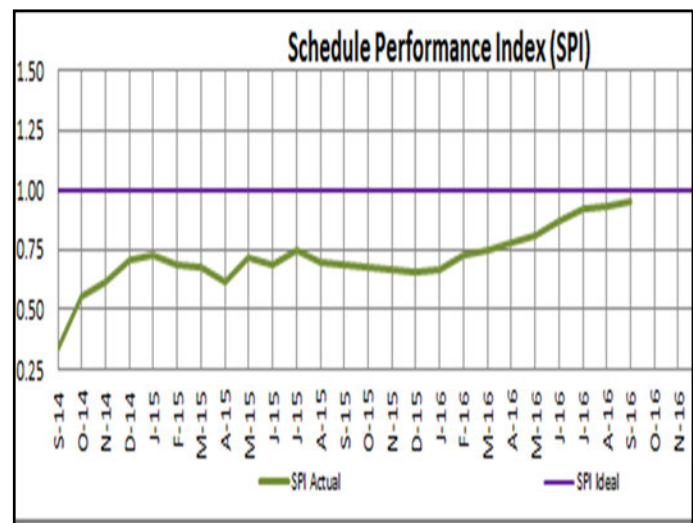
Phase 2 Key Activities

- RFP issued to shortlisted proposers on September 2.
- Began one-on-one meetings with proposer teams
- Drafting agreement with King County regarding mainline sewer replacement - continues.
- Met with PSE regarding service substation arrangement and PSE reconfiguration timing.
- Reallocated HZ contract funds to support procurement activities.
- HZ supporting addenda and RFI issuance during procurement.
- Project costs have been updated through Memo building upon the July 2015 PE estimate – realigned estimate SCC codes for track / yard per Project Control request.

Phase 2 Schedule Performance

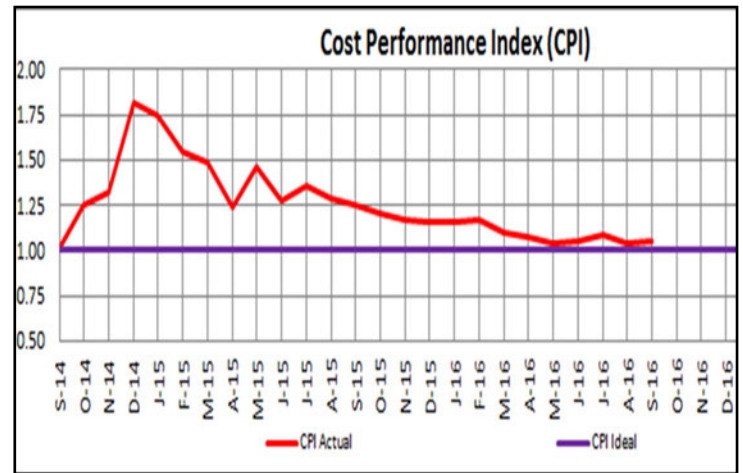
The cumulative Schedule Performance Index (SPI) trends at 0.95 through September 2016, which means that cumulative work accomplished is less than work planned.

Change Order 008 incorporated Phase 2A of the project on February 2016. The remaining Phase 2 scope has been re-negotiated to reflect the recent Design Build Project Delivery decision. The consultant has been directed to focus efforts on delivering Design Build bridging documents to help inform the procurement of the final design build team starting February 2016 as Phase 2A.



Phase 2 Cost Performance

\$4.8M of the total Phase 2 contract amount, approximately 90%, was spent through September 2016. The Phase 2 percent complete is 95%, with an earned value of \$5.M. The cumulative Cost Performance Index (CPI) is 1.05, meaning that expenditures are less than the earned value.



Phase 2 Performance	Previous Period	Current Period	Cumulative To Date
Amount Invoiced	\$4,764,571	\$56,778	\$4,821,349
% Spent	89%	1%	90%
Earned Value	\$4,949,817	\$130,766	\$5,080,583
% Complete	93%	2%	95%
SPI	0.93	0.00	0.95
CPI	1.04	2.30	1.05

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Link Light Rail ST2 LRV Fleet Expansion



Project Summary

Scope: Design, manufacturing, assembly, inspection, testing and delivery of 122 low floor light rail vehicles for service requirements of Northgate, East Link and Lynnwood Link Extensions.

Budget: \$733 Million (Baseline September 2015)

Schedule: Project completion 3rd QTR 2024



Simulation of the new LRV.

Key Activities

- Negotiated with Siemens for manufacture and delivery of LRVs. Received Sound Transit Board approval for contract award and Notice-to-Proceed to be issued next period (October 10, 2016).

Project Cost Summary

The ST2 LRV Fleet Expansion 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. TIFIA is financing 28% of this project.

To date, approximately \$1.7M has been expended; Buy America Audit was performed, and preparation of the conformed specifications.

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	\$4.7	\$4.7	\$0.1	\$0.2	\$4.7	\$0.0
Construction Services	\$14.1	\$14.1	\$4.8	\$1.6	\$14.1	\$0.0
Vehicles	\$714.2	\$714.2	\$0.0	\$0.0	\$714.2	\$0.0
Total	\$733.0	\$733.0	\$4.9	\$1.8	\$733.0	\$0.0

Cost Summary by SCC

SCC Element	Baseline Budget	Current Adopted Budget	Commitment	Incurred to Date	Estimated Final Cost	Adopted Budget
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	\$696.7	\$696.7	\$4.8	\$1.6	\$696.7	\$0.0
80 Professional Services	\$4.5	\$4.5	\$0.1	\$0.2	\$4.5	\$0.0
90 Contingency	\$31.7	\$31.7	\$0.0	\$0.0	\$31.7	\$0.0
Capital Total (SCC 10-90)	\$733.0	\$733.0	\$4.9	\$1.8	\$733.0	\$0.0

Cost Contingency Management

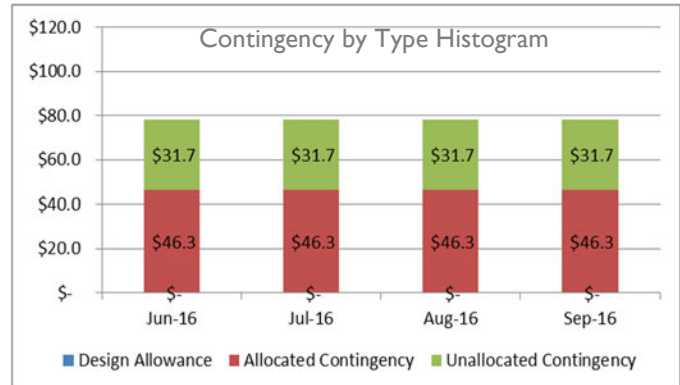
The project's baseline budget, which was approved by the Sound Transit Board in September 2015 and includes a total of \$78.0M of Total Contingency. Overall contingency is currently 10.7% of remaining work.

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

Allocated Contingency – The project baseline contains \$46.3M of allocated contingency. There was no change in allocated contingency this period.

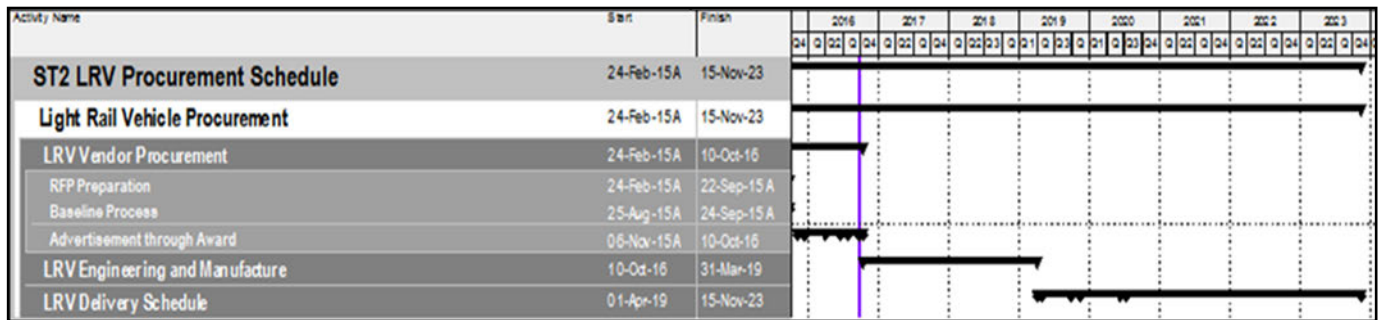
Unallocated Contingency – The project baseline contains \$31.7M of unallocated contingency. There was no change in unallocated contingency this period.

Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	\$ -	0.0%	\$ -	0.0%
Allocated Contingency	\$ 46.3	6.4%	\$ 46.3	6.3%
Unallocated Contingency	\$ 31.7	4.3%	\$ 31.7	4.3%
Total	\$ 78.0	10.7%	\$ 78.0	10.7%



Project Schedule

The ST2 LRV Expansion project schedule is shown below.



Sound Transit Board Actions

Motion Number	Description	Date
M2016-101	Execute a contract with Siemens Industry, Inc. to provide 122 light rail vehicles for the ST2 light rail expansion projects, including Northgate Link, East Link and Lynnwood Link in the amount of \$517,621,239, with a 7% contingency for a total authorized contract amount not to exceed \$553,854,725.	Sep 22

Link Light Rail Staffing Report



Project Staffing – Link Light Rail Program – August 2016

Staffing variance reported in the following section is relative to the April 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
Architect	East Link Extension	2014 Attrition
Sr. Civil Engineer	East Link Extension	2016 Attrition*
Sr. Systems Engineer	Traction Power	2016 Attrition*
Project Control Specialist	East Link Extension	2016 Attrition
Sr. Civil Engineer	Right-of-Way	2016 Attrition
Document Control Coordinator	Federal Way Link Extension	2016 Attrition
Community Outreach Specialist	South Corridor	2016 Attrition
Assistant Permit Administrator	Fed. Way/Lynnwood Link Extensions	April 2016

*Attrition resulting from internal promotion.

Recruiting is on-going for the following design, engineering and construction management staff.

Position	Project Assignment	Planned Hire Date
Construction Manager	Systems	April 2014
Construction Manager	O&M Facility: East	2015 Reclass.
Sr. Project Manager	O&M Facility: East	2015 Reclass.
Sr. Project Manager	Northgate Link Extension	2016 Attrition*
Deputy Director	Civil & Structural Engineering	2016 Attrition*
Civil Engineer	Right-of-Way	2016 Attrition*
Civil Engineer	East Link Extension	2016 Attrition*
Community Outreach Specialist	East Link Extension	2016 Attrition*
Design Technology Specialist	Civil and Structural Engineering	2016 Attrition*
Electrical Engineer	Systems Engin. and Integration	2016 Attrition*
Director	Civil and Structural Design	2016 Attrition
Sr. Design Technology Specialist	Civil and Structural Engineering	2016 Attrition
Deputy Director	Systems Engin. and Integration	2016 Attrition
Sr. Systems Engineer	LRV Procurement and Testing	2016 Attrition
Director	Architecture and Art	2016 Attrition
Deputy Director	Real Property	2016 Attrition
Sr. Real Property Agent	Appraisals	2016 Attrition
Construction Manager	Federal Way Link Extension	March 2016
Deputy Executive Director	Project Management	April 2016

*Attrition resulting from internal promotion.

Project Staffing – Link Light Rail Program continued

There were 547.4 (98% 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 August. Staffing for the each of the Link Extensions with the exception of the Lynnwood, Northgate and Tacoma Link Extensions was above plan.

Project	August 2016 -Staffing Plan Variance Summary											
	Consultant Staff				Sound Transit Staff				Total (YTD)			
	FTE		Variance		FTE		Variance		FTE		Variance	
	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan	Planned	Actual	FTE	% of Plan
University Link Extension	0.0	10.8	10.8		20.3	11.6	-8.7	57%	20.3	54.4	34.1	268%
Northgate Link Extension	73.9	70.3	-3.6	95%	47.7	37.6	-10.1	79%	121.6	126.5	4.9	104%
South 200th Extension	9.4	19.8	10.4	211%	17.5	30.1	12.7	173%	26.8	46.1	19.3	172%
East Link Extension	132.4	154.4	22.0	117%	79.7	72.2	-7.5	91%	212.1	263.2	51.1	124%
Lynnwood Link Extension	115.0	93.2	-21.8	81%	40.3	39.7	-0.6	99%	155.3	70.3	-85.0	45%
Tacoma Link Expansion	11.0	0.4	-10.6	4%	13.0	7.2	-5.8	56%	24.0	9.3	-14.7	39%
Total	341.7	348.9	7.2	102%	218.5	198.5	-20.0	91%	560.1	569.7	9.6	102%

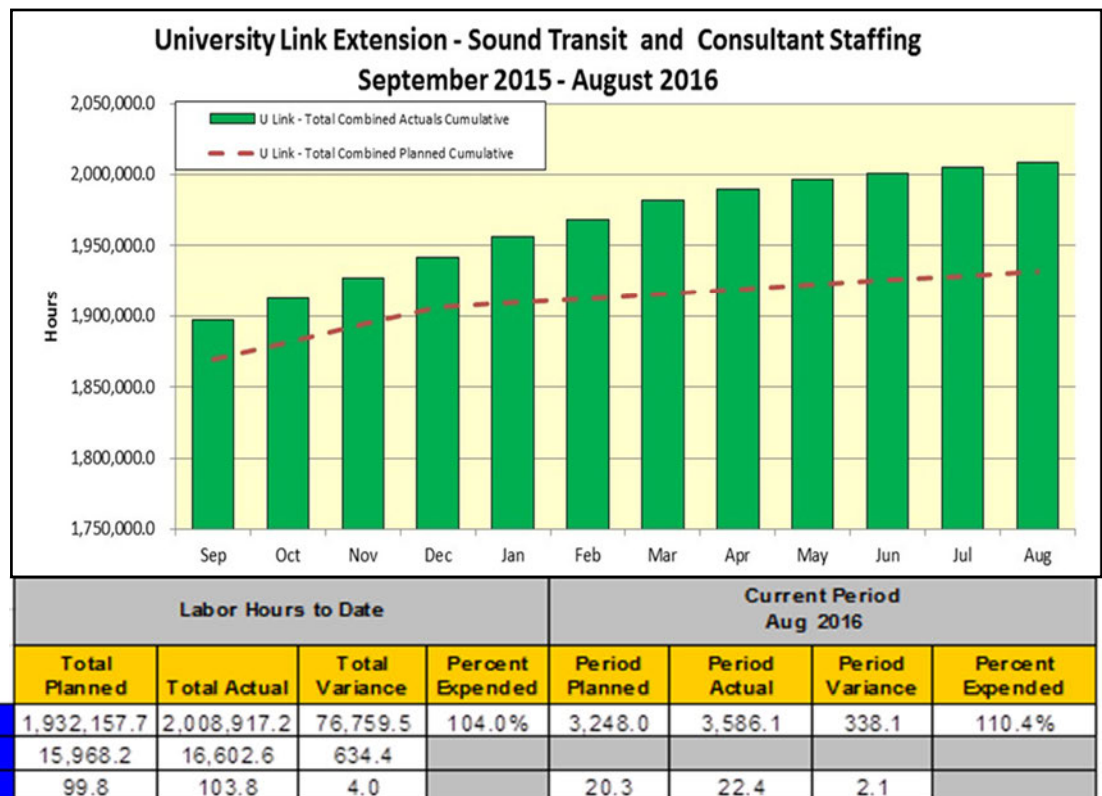
Link Light Rail Staffing Report



University Link Extension Staffing

Total Internal and External Staffing – University Link Extension

There were 22.4 FTE assigned to the University Link Extension in August including 10.8 consultant and 11.6 internal FTE. As was expected with the wrapping up of operational work arounds, and resolution of punch list items, staffing for the month decreased 15% (4.1 FTE) from July. Consultant staffing was well ahead of plan as the 2016 Staffing Plan assumed that all construction and system testing would be completed in late 2015 and did not account for on-going resolution of punch list items and work arounds. Staffing for the University Link Extension was 2.1 FTE above plan (110% of plan). Year-to-date staffing (54.4 FTE/mo.) is trending 168% (34.1 FTE/mo.) above plan. Cumulatively, since August 2006, average monthly project staffing is within 4% (4 FTE/mo.) of plan.



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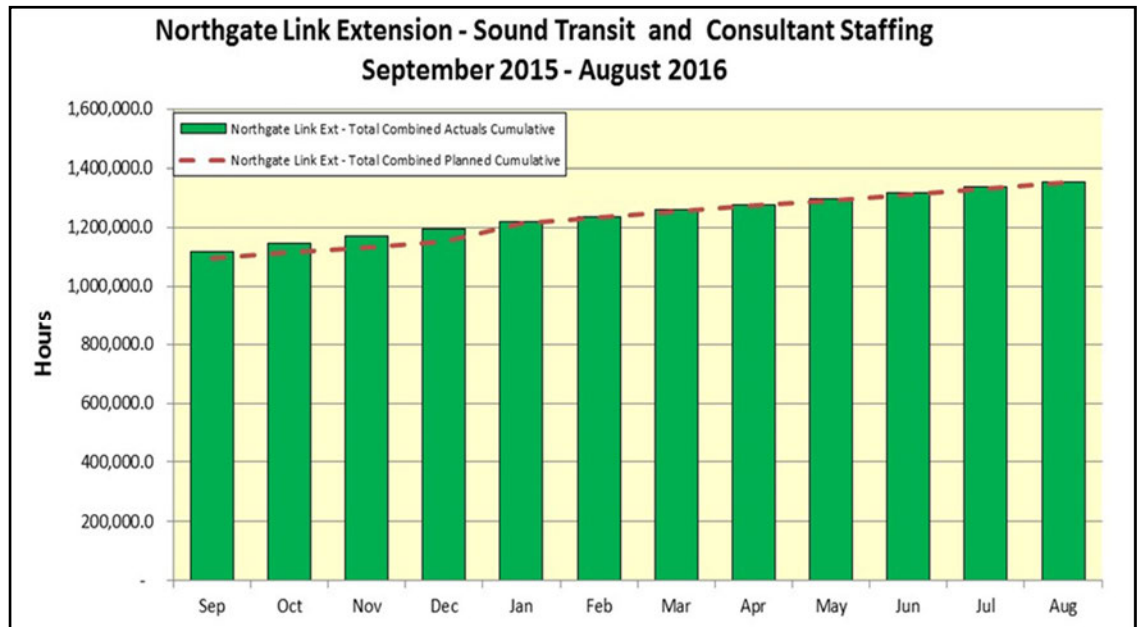
Link Light Rail Staffing Report



Northgate Link Extension Staffing

Total Internal and External Staffing – Northgate Link Extension

During August, 37.6 internal and 70.3 consultant FTE were assigned to the Northgate Link Extension. This is 13% (16.2 FTE) below staffing in July and is 11% (13.7 FTE) below plan; average year to date staffing of 126.5 FTE/mo. is trending 4% (4.9 FTE/mo.) above plan. Cumulatively since January 2011 average monthly staffing is trending with plan.

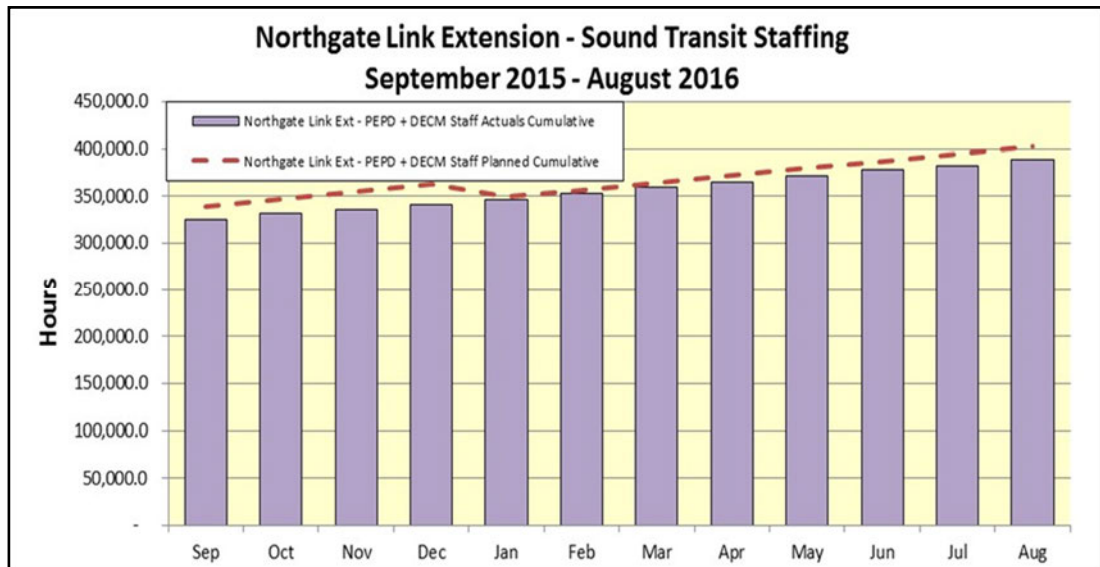


	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	1,350,733.5	1,355,661.0	4,927.4	100.4%	19,460.8	17,261.7	-2,199.1	88.7%
Monthly Average	19,863.7	19,936.2	72.5					
Monthly FTE	124.1	124.6	0.5		121.6	107.9	-13.7	

Northgate Link Extension Staffing

Internal Resource Commitments to Northgate Link Extension

Internal staffing in August (37.6 FTE) increased 18% (6.9 FTE) from July and was 21% (10.1 FTE) below plan. Cumulatively, since January 2011, average monthly internal staffing (35.7 FTE/mo.) is trending within 4% of plan.



	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	402,511.5	388,485.2	-14,026.4	96.5%	7,636.8	6,014.1	-1,622.7	78.8%
Monthly Average	5,919.3	5,713.0	-206.3					
Monthly FTE	37.0	35.7	-1.3		47.7	37.6	-10.1	

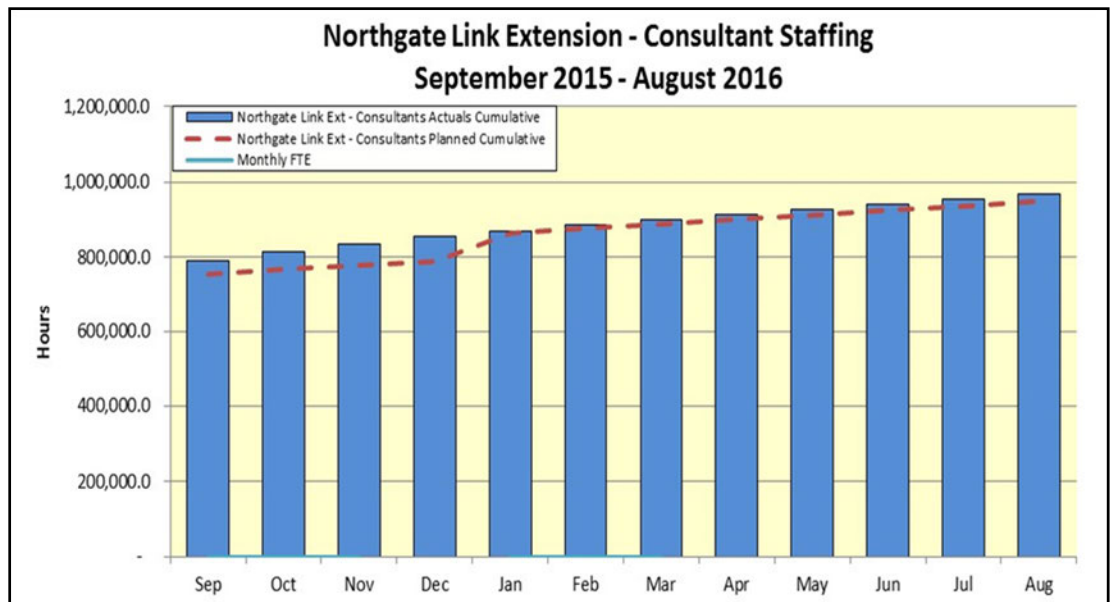
Link Light Rail Staffing Report



Northgate Link Extension Staffing

Consultant Resource Commitments to Northgate Link Extension

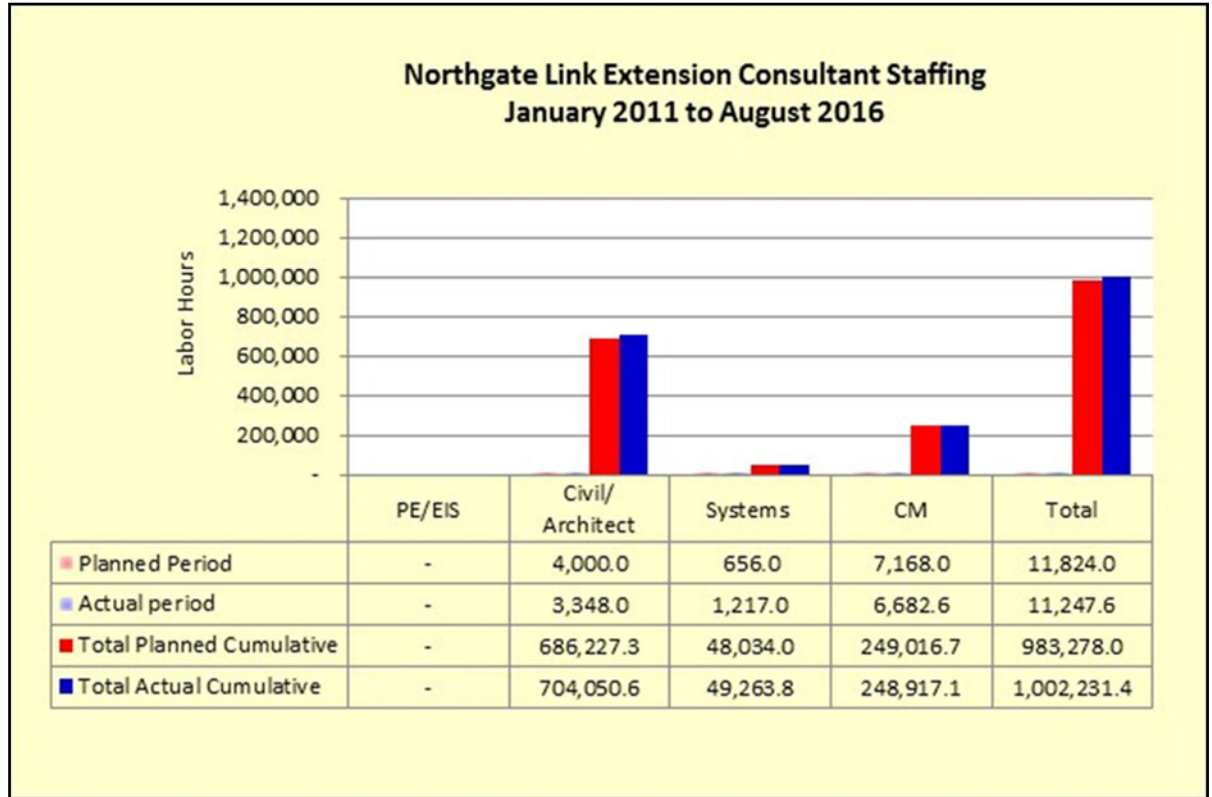
In August, 70.3 consultant FTE were assigned to the Northgate Link Extension; consultant staffing was below plan by 5% (3.6 FTE) and was 25% (23 FTE) below July staffing. Cumulatively, since January 2011, average monthly consultant utilization (88.9 FTE/mo.) is trending 2% above plan.



	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	948,222.0	967,175.8	18,953.8	102.0%	11,824.0	11,247.6	-576.4	95.1%
Monthly Average	13,944.4	14,223.2	278.7					
Monthly FTE	87.2	88.9	1.7		73.9	70.3	-3.6	

Northgate Link Extension Staffing

Consultant Resource Commitments to Northgate Link Extension



Consultant utilization by discipline follows:

- Civil/architecture consultant utilization in August (20.9 FTE) was 49% (20 FTE) below July staffing and was 16% (4.1 FTE) below plan. Cumulatively since January 2011, average civil engineering/architecture consultant staffing of 64.7 FTE/mo. continues to trend within 3% of plan.
- Systems consultant utilization (7.6 FTE) was 17.5% (1.1 FTE) above July and was 86% (3.5 FTE) above plan. Since January 2011, average monthly Systems consultant staffing (1.3 FTE/mo.) is trending within 10%.
- CM consultant staffing in August (41.8 FTE) was 8.7% (3.9 FTE) below July staffing and was 7% (3.0 FTE) below plan. Cumulatively, since January 2011, average monthly CM consultant staffing (22 FTE/mo.) is trending with plan.

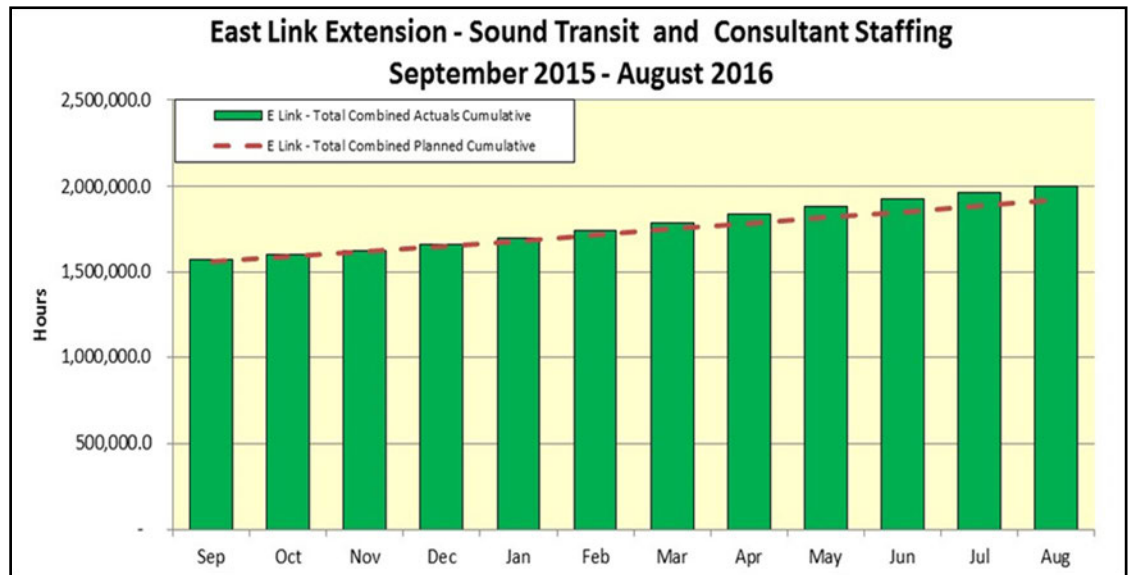
Link Light Rail Staffing Report



East Link Extension Staffing

Total Internal and External Staffing – East Link Extension

Staffing for the East Link Extension in August (226.5 FTE) increased 8% (17.3 FTE) from July and was 6.8% (14.4 FTE) above plan. Year-to-date staffing of 263.2 FTE/mo. is 24% (51.1 FTE/mo.) above plan; cumulatively since January 2011, average monthly staffing of 183.8 FTE/mo. is 4.1% (7.2 FTE/mo.) above plan.

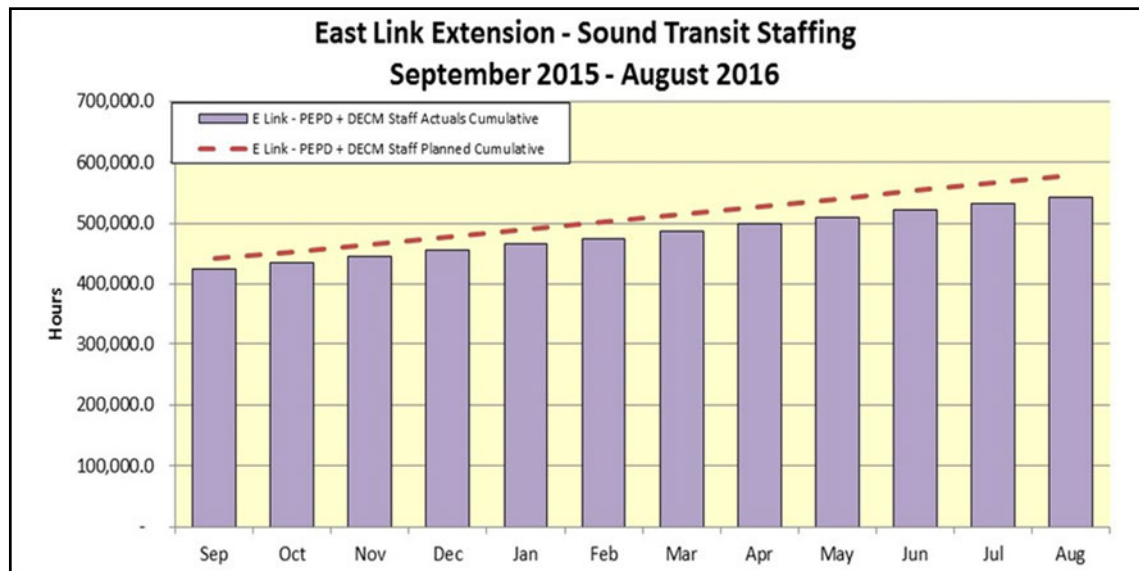


	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	1,921,949.9	2,000,057.5	78,107.6	104.1%	33,932.4	36,241.4	2,309.0	106.8%
Monthly Average	28,264.0	29,412.6	1,148.6					
Monthly FTE	176.6	183.8	7.2		212.1	226.5	14.4	

East Link Extension Staffing

Internal Resource Commitments to East Link Extension

During August internal staffing for the East Link Extension (72.2 FTE) was 7% (4.7 FTE) above July staffing and was 9.5% (7.6 FTE) below plan. Cumulatively, since January 2011, average monthly internal staffing 49.9 FTE/mo. is trending 6% (3.2 FTE/mo.) below plan.



	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	578,530.2	543,214.0	-35,316.2	93.9%	12,753.6	11,545.3	-1,208.3	90.5%
Monthly Average	8,507.8	7,988.4	-519.4					
Monthly FTE	53.2	49.9	-3.2		79.7	72.2	-7.6	

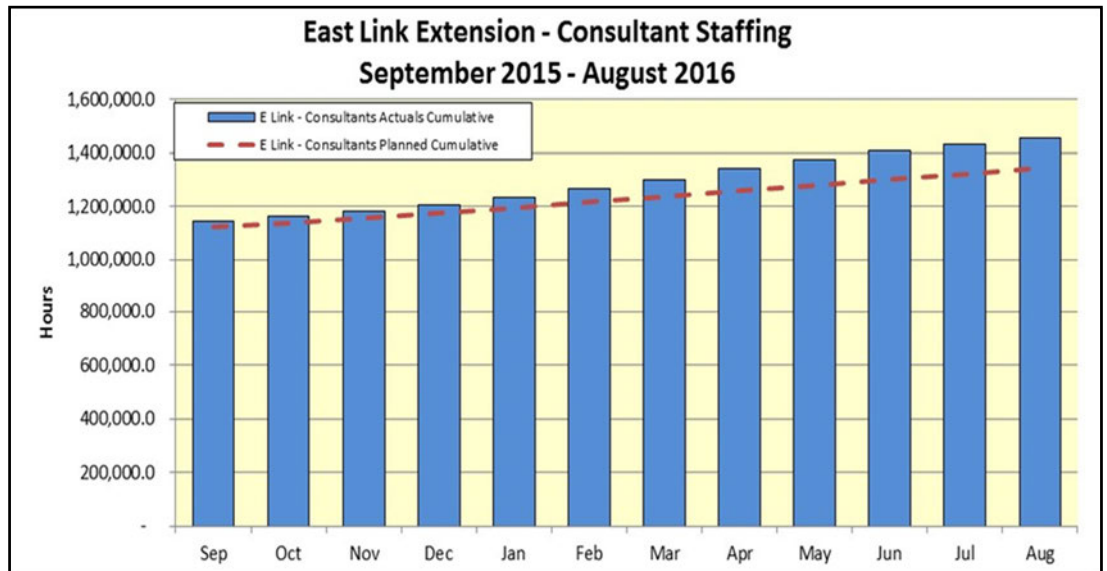
Link Light Rail Staffing Report



East Link Extension Staffing

Consultant Resource Commitments to East Link Extension

There were 154.4 consultant FTE assigned to the East Link Extension during August. Consultant staffing increased 9% (12.6 FTE) from July and was 16.6% (22 FTE) above plan. Cumulatively since January 2011, average monthly consultant staffing is trending 8.4% (10.4 FTE/mo.) above plan.

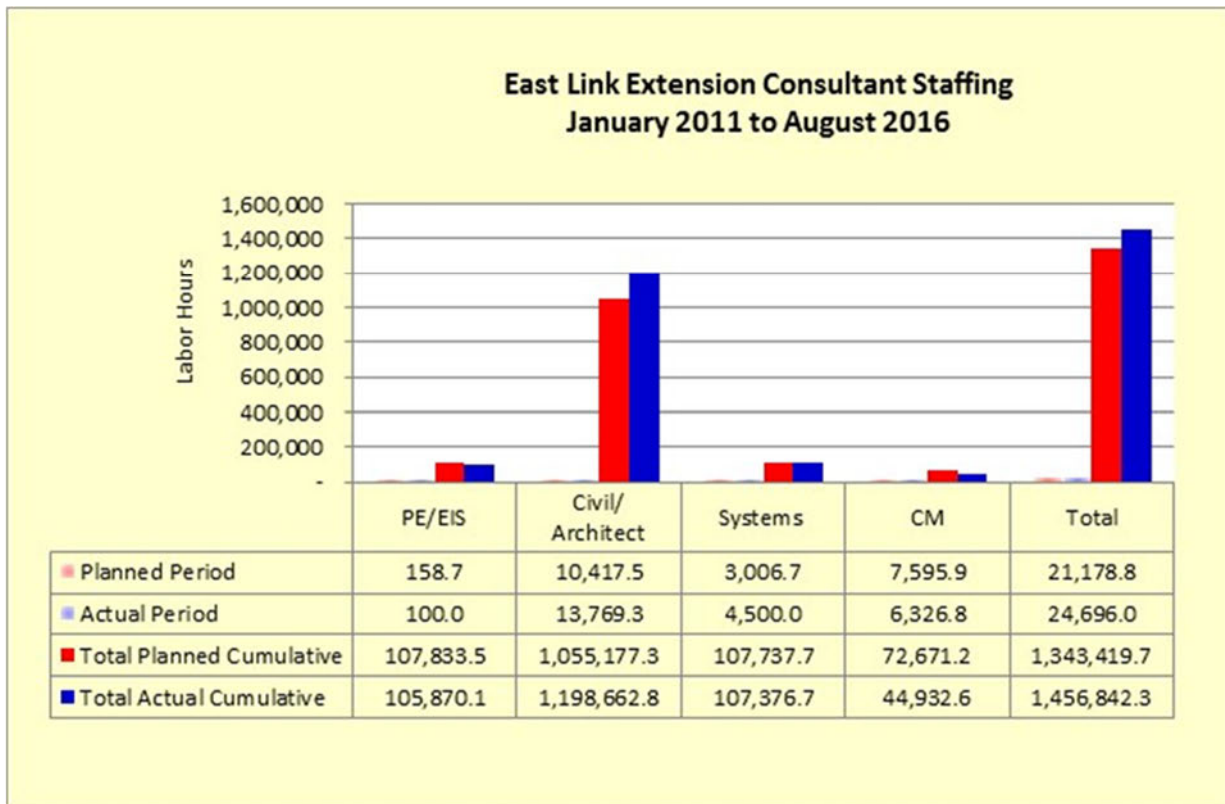


	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	1,343,419.7	1,456,843.5	113,423.8	108.4%	21,178.8	24,696.1	3,517.3	116.6%
Monthly Average	19,756.2	21,424.2	1,668.0					
Monthly FTE	123.5	133.9	10.4		132.4	154.4	22.0	

East Link Staffing

Consultant Resource Commitments to East Link, continued

In August, civil engineering consultant staffing (86.1 FTE) was 56% of consultant staffing. Civil engineering consultant staffing was 4.9% (4.1 FTE) above July staffing and 32% (21 FTE) above plan. Systems consultant staffing (28.1 FTE) was 50% (9.3 FTE) above plan and was 5.7% (1.7 FTE) below August staffing. There were 0.6 consultant FTE performing Preliminary Engineering (PE) and 39.5 FTE (17% below plan) providing construction management. Construction management consultant staffing increased 35.4% (10.3 FTE) above July staffing.



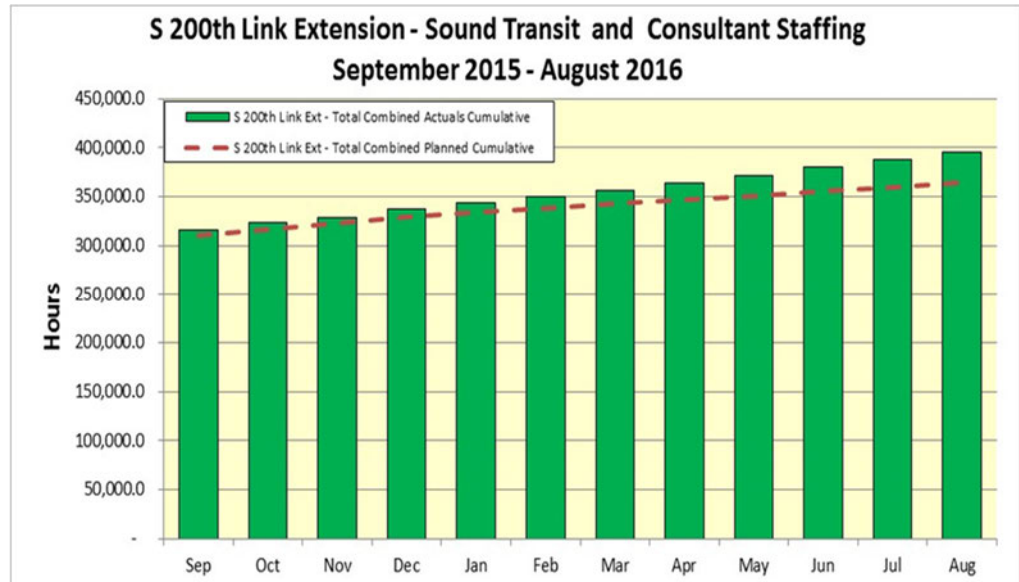
Link Light Rail Staffing Report



S. 200th Link Extension Staffing

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

Staffing for the South 200th Link Extension in August (49.9 FTE) was 87% (23.2 FTE) above plan and 4% (1.9 FTE) above July staffing. Year-to-date staffing is 46.1 FTE/mo. and is 72% (19.3 FTE/mo.) above plan. Since January 2011, average monthly internal and consultant staffing (36.3 FTE/mo.) is 8.6% (2.9 FTE) above plan.

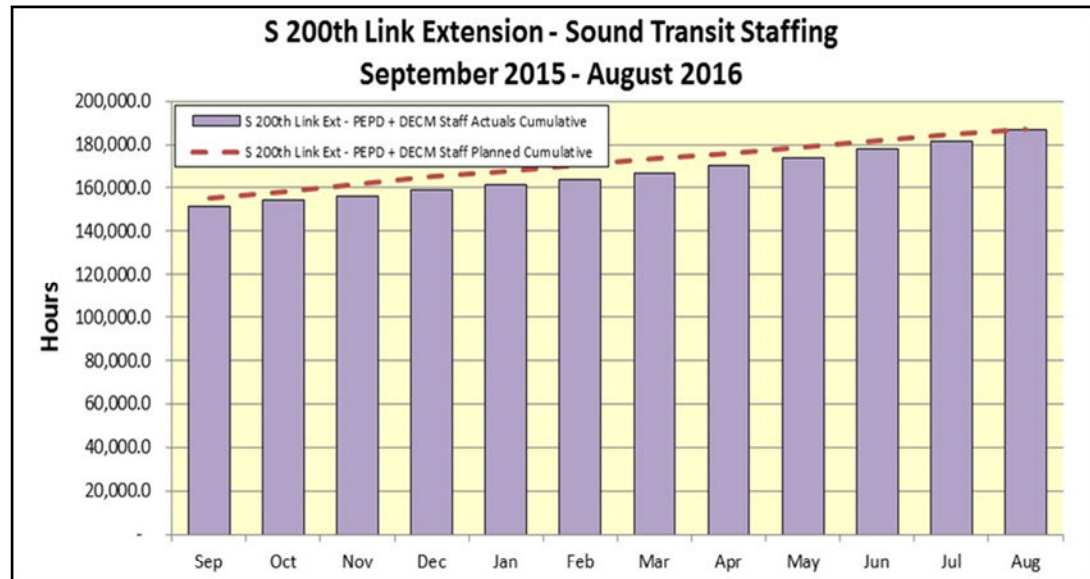


	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	363,848.8	395,221.3	31,372.5	108.6%	4,285.9	7,991.3	3,705.4	186.5%
Monthly Average	5,350.7	5,812.1	461.4					
Monthly FTE	33.4	36.3	2.9		26.8	49.9	23.2	

S. 200th Link Extension Staffing

Internal Resource Commitments South Link to S.200th Link Extension

Internal staffing in August (30.1 FTE) increased 23% (7.1 FTE) from July and was 74% (12.8 FTE) above plan. Cumulatively, since January 2011, average monthly internal staffing is trending with plan.



	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	187,290.5	186,511.8	-778.8	99.6%	2,779.2	4,823.0	2,043.8	173.5%
Monthly Average	2,754.3	2,742.8	-11.5					
Monthly FTE	17.2	17.1	-0.1		17.4	30.1	12.8	

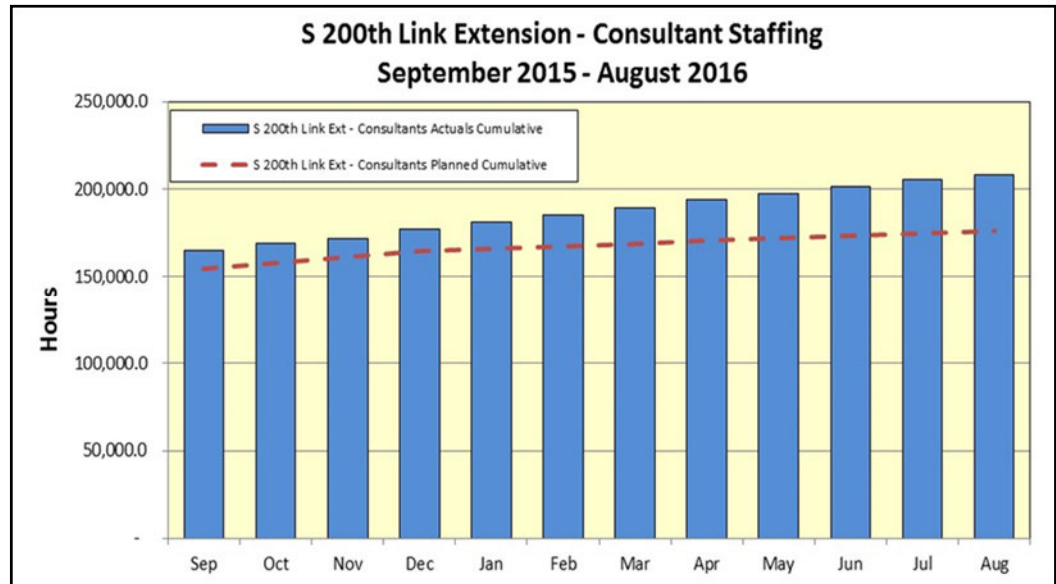
Link Light Rail Staffing Report



S. 200th Link Extension Staffing

Consultant Resource Commitments to S. 200th Link Extension

Consultant staffing on the S. 200th Link Extension in August (19.8 FTE) decreased 21% (5.2 FTE) from July and was 111% (10.4 FTE) above plan. Cumulatively since January 2011, average consultant staffing (19.2 FTE/mo.) is trending 18.2% (3 FTE/mo.) above plan.

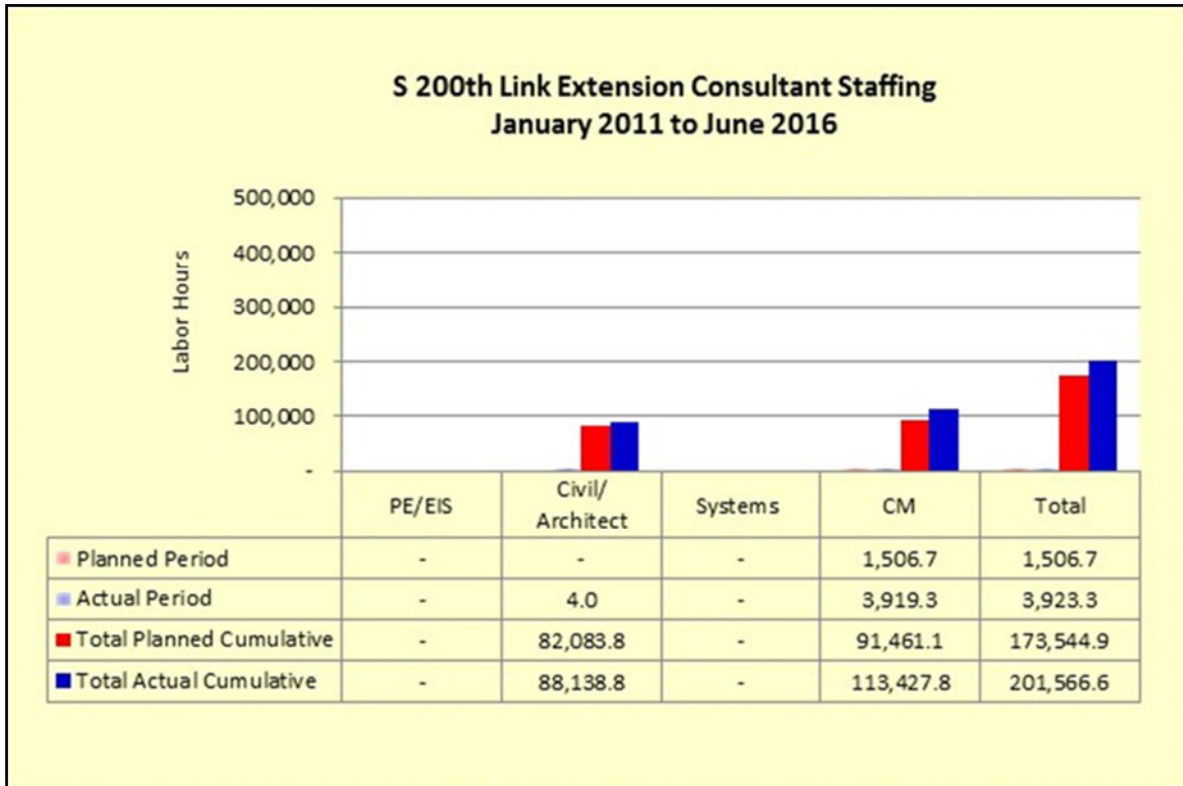


	Labor Hours Jan 2011 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	176,558.3	208,709.5	32,151.3	118.2%	1,506.7	3,168.3	1,661.6	210.3%
Monthly Average	2,596.4	3,069.3	472.8					
Monthly FTE	16.2	19.2	3.0		9.4	19.8	10.4	

S. 200th Link Extension Staffing

Consultant Resource Commitments to S. 200th Link Extension

Design/build project management consultants accounted for 100% of consultant staffing in August.



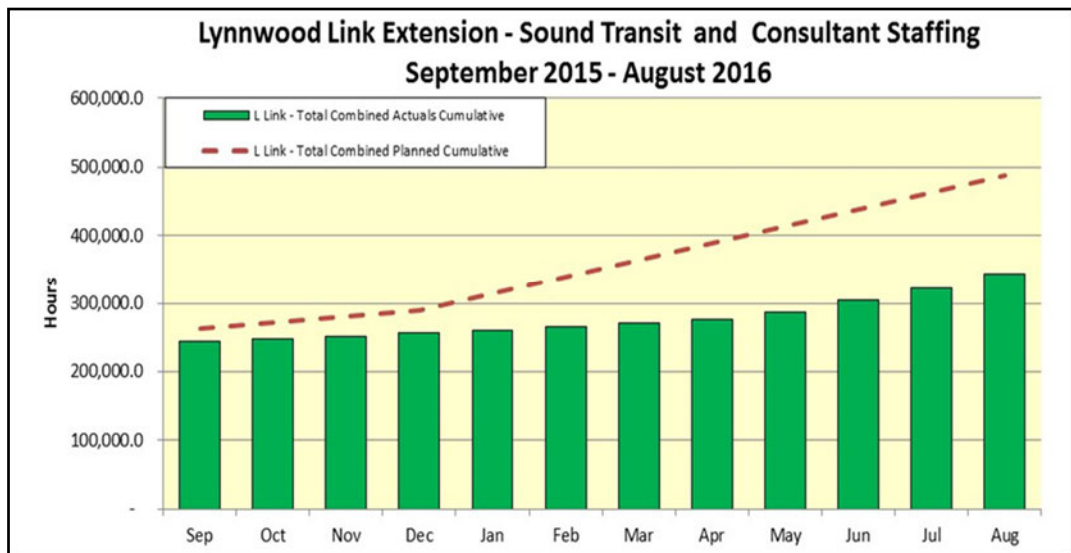
Link Light Rail Staffing Report



Lynnwood Link Extension Staffing

Total Internal and Consultant Staffing – Lynnwood Link Extension

During August Lynnwood Link Extension staffing was 132.9 FTE (86% of plan) and included 93.2 consultant FTE (81% of plan) and 39.7 internal FTE (99% of plan). Internal staffing for August was 21% (8.2 FTE) above July staffing; consultant staffing increased 22% (16.8 FTE) in August. Year-to-date staffing (70.3 FTE/mo) for the Lynnwood Link Extension is 45% of plan.



	Labor Hours Jan 2013 - Aug 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	487,596.9	343,776.9	-143,820.0	70.5%	24,849.6	21,267.5	-3,582.1	85.6%
Monthly Average	11,081.7	7,813.1	-3,268.6					
Monthly FTE	69.3	48.8	-20.4		155.3	132.9	-22.4	

Over 83% of consultant staffing (77.2 FTE) were civil engineering consultants. Additional consultant staffing (13 FTE) provided construction management and systems design (3 FTE) support. Since January 2013, average project staffing for the Lynnwood Link Extension (48.8 FTE/mo.) is 29.5% (20.4 FTE/mo.) below plan.

Tacoma Link Extension

Total Internal and Consultant Staffing – Tacoma Link Extension

During August there were 7.7 FTE (32% of plan) assigned to the Tacoma Link Expansion including 0.4 consultant FTE (4% of plan) and 7.3 internal FTE (56% of plan). Year-to-date staffing is 9.3 FTE/mo. (39% of plan). The plan assumed that the final design and construction management consultant team would be in place by January; design will begin in 3rd QTR 2016.

All consultant staff assigned to the project were supporting preliminary engineering.

	Labor Hours Jan 2016				Current Period Aug 2016			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	30,758.4	12,065.8	-18,692.6	39.2%	3,844.8	1,228.7	-2,616.1	32.0%
Monthly Average	3,844.8	1,508.2	-2,336.6					
Monthly FTE	24.0	9.4	-14.6		24.0	7.7	-16.4	

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
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