

Adopted Transit Improvement Plan 2018



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Transit Improvement Plan Overview

The 2018 Transit Improvement Plan (TIP) provides a long-term forecast of project and transit mode costs, plus reserves set aside for potential future expenditures. The Sound Transit Board adopts the TIP and the annual budget to authorize spending for the budget year, as well as authorized project allocations to date.

Transit Modes

The TIP includes annual forecasts for six years of operating expenses for each of the agency's transit modes. The expense forecasts are developed in a detailed long-term operating and maintenance plan and reflect service plans contained in the 2018 Service Implementation Plan (SIP).

Projects

The TIP includes project scope, schedule, budget, and risk information for all active projects. Budget information is presented at the phase-level including life-to-date costs, annual spending forecasts for the upcoming six years, summarized costs for years beyond this six-year period, and the total authorized project allocation to date. Only Board-approved allocation amounts are included. Where a baseline budget has not been approved, the total allocation only includes the authorized phases. The baseline budget reflects the estimated costs for the entire project and is used to measure actual project budget performance. For most projects, Phase Gate status is also provided. For voter-approved projects, the cost estimate information is shown in the Projects section and in Appendix A.

Financial Plan

In addition to the TIP that is published annually, Sound Transit maintains a long-term agency financial plan – a model of forecasted cash flows through 2060. A review of agency programs against the financial plan ensures a balance of revenues and expenditures, as well as affordability of the overall program. Sensitivity analysis, using the financial plan, gauges the impact of potential changes in the economy as well as changes in project schedule and scope on overall program affordability.

Reserves

The TIP includes reserves that are set aside for both planned and unplanned expenditures. Reserves are not considered appropriations, and Board authorization is required to use reserved funds.

Project Budgeting

Project Prioritization Process

During the development of the budget, the agency follows an objective process to vet all proposed new projects and increases to existing projects that are not part of the voter-approved capital program. Projects are scored using objective criteria including: safety, sustainability, regulatory, financial, security, asset life, and impact on ridership. The goal is to identify high-value, high-priority projects and pair them with available resources.

TRANSIT IMPROVEMENT PLAN SUMMARY

(in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Transit Modes	\$0	\$321	\$325	\$338	\$365	\$384	\$439	\$0	\$2,173
Projects	6,086	1,943	1,831	1,454	1,084	470	518	548	13,933
Reserves	342	82	16	11	11	13	7	35	517
Total	\$6,428	\$2,347	\$2,172	\$1,803	\$1,460	\$867	\$963	\$583	\$16,623

Authorized Project Allocations and Phase Gate Process

Prior to 2010, the Sound Transit Board approved project budgets at the outset of a capital project. Since 2010, our approach to project budgeting has been modified to provide greater Board oversight and control. As projects reach key milestones, requests for budget approval to complete the next project phase are presented for Board approval. Phase Gate, our project management oversight process, confirms that the project is ready to move forward to the next phase and triggers the request to the Board for additional budget. There are exceptions to having projects pass through each gate in sequence, such as procurement-only projects and when alternative contracting methods have been selected, as in design-build.

Typical budget requests include funding for:

- Project development through preliminary engineering and environmental review;
- Final design and right-of-way acquisition;
- Baseline or total expected project budget.

The initial project development budget includes alternatives analysis to shape the scope of the project and selection of a preferred alternative, compliance with environmental requirements which may include an Environmental Impact Statement, development of operations and maintenance plans, and preliminary engineering for the preferred alternative.

A final design and right-of-way budget includes funding for all design work, including architectural, civil, structural, electrical, and HVAC systems through to construction procurement documentation, as well as purchase or lease of all property needed to build the project.

A baseline budget is established during final design when sufficient information is available to establish the cost of a project through construction. Project spending is benchmarked against the baseline through completion of the project. Projects are fully funded when the Board approves the baseline.

Cost Estimates

Sound Move, ST2, and ST3 are voter-approved segments of the capital project. All voter-approved projects have a cost estimate that originated from one of the three adopted plans (Sound Move, ST2, ST3). The original cost estimates, 2017 cost estimates, and 2018 cost estimates for ST2 and ST3 projects appear in Appendix A.

Our cost estimates are maintained on a current year, constant dollar basis. For instance, in the 2018 TIP, full project cost estimates are presented in constant 2017 dollars. The constant dollar presentation allows for comparison of estimated costs across multiple projects. However, the Board approves budgets in year-of-expenditure dollars to take into account the fact that project spending occurs over several years and so must be adjusted for inflation.

Angle Lake Station



Transit Modes

The 2018 TIP contains forecasted expenses to operate and maintain the regional transit system from 2018 through 2023. Operating expenses include the costs of third-party operators for light rail, commuter rail, and bus services, as well as Sound Transit's direct costs and administrative overhead for providing those services.

As a part of the annual budget, the Sound Transit Board approves spending for each of these modal services for the following fiscal year. The agency also maintains a Service Implementation Plan (SIP) that includes service level and expenditure forecasts for a six-year period. The SIP provides the service plan on which the Adopted 2018 Budget is based. Reviewed and recommended by the Operations and Administration Committee, the Board adopts the 2018 SIP at the same time as adopting the budget and TIP for 2018. The TIP only includes summary spending information for the six-year period described in the SIP. The SIP may be read at soundtransit.org.

Service levels provided by two of Sound Transit's four modes will increase:

- In the fourth quarter of 2017, two additional round trips, one peak and one reverse commute, for Sounder commuter rail service began. These two trips will operate for the full year in 2018.
- ST Express service levels will increase by 17,332 service hours: 8,760 hours will roll into the 2018 baseline service, plus 8,572 more hours added as the result of annualizing 15,000 hours approved in 2017.

- There are no changes planned for Link light rail or Tacoma Link light rail service.

In 2019, buses will no longer operate in the Downtown Seattle Transit Tunnel and Link light rail operations will take over all costs. Operating underground stations, such as Capitol Hill and University of Washington, is more expensive than anticipated, so projections are higher than in the Adopted 2017 TIP. In 2020 the Link Operations & Maintenance Facility East will open with all costs attributed to Link operations. Vehicle maintenance costs are expected to increase over this six-year time period due to aging of the fleet. In 2021 the Northgate Link Extension will begin revenue service with a full year of operations in 2022, and the East Link Extension will begin revenue service in 2023.

Sounder costs will increase in 2018 due to the full year of the two roundtrips added in 2017. In 2021 the new Sounder Maintenance Base is scheduled to open, and we expect our costs to decrease with the close out of our contract with Amtrak.

ST Express costs are expected to rise in 2018 due to the full year of 2017 service hour additions.

The expansion of Tacoma Link to the Hilltop area of Tacoma is currently in final design with projected revenue service opening in 2022. Expansion of the Tacoma Link Operations & Maintenance Facility is expected to be complete in 2021 and will trigger hiring as early as 2019. Staff, maintenance, insurance, and other costs will increase substantially once the expansion opens.

TRANSIT MODES SUMMARY (in millions)

	2018	2019	2020	2021	2022	2023	Total
Link Light Rail	\$120	\$120	\$121	\$146	\$155	\$204	\$866
Sounder Commuter Rail	54	59	63	58	60	63	358
ST Express Bus	142	141	146	151	157	157	892
Tacoma Link Light Rail	5	6	8	9	12	15	56
Total	\$321	\$325	\$338	\$365	\$384	\$439	\$2,173

Angle Lake Station



Projects

The Adopted 2018 TIP contains all Board-authorized project allocations for active projects. The majority of Sound Transit's projects support the planning, design, and construction of light rail, commuter rail, and express bus transit infrastructure as described in the capital plans. The TIP uses project categories, which align with common industry practice and provide transparency into the agency's investment in expanding service versus investment in existing assets. Projects are also reported by mode.

PROJECT DELIVERY SUMMARY BY PROJECT TYPE (in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total TIP
System Expansion									
Link	\$4,537	\$1,628	\$1,523	\$1,285	\$943	\$384	\$410	\$268	\$10,978
Sounder	667	39	96	4	2	0	0	0	809
Regional Express	194	63	53	39	5	3	3	27	387
Other	63	22	30	38	32	27	25	248	484
Subtotal	5,461	1,753	1,701	1,366	981	413	438	543	12,657
Enhancement	71	57	26	3	1	1	0	0	158
State of Good	161	55	25	4	21	2	2	3	272
Administrative	394	78	79	81	80	54	78	2	847
Total	\$6,086	\$1,943	\$1,831	\$1,454	\$1,084	\$470	\$518	\$548	\$13,933

PROJECT DELIVERY SUMMARY BY MODE (in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total TIP
Link	\$4,555	\$1,659	\$1,538	\$1,288	\$943	\$384	\$411	\$268	\$11,044
Sounder	730	50	107	5	2	0	0	0	894
Regional	331	106	68	39	24	3	3	27	602
Other	470	128	118	122	115	83	104	253	1,394
Total	\$6,086	\$1,943	\$1,831	\$1,454	\$1,084	\$470	\$518	\$548	\$13,933

The Projects section of the TIP document displays authorized project allocations primarily in terms of cash flow – what year dollars will be spent and on which phase of a project. The total budget to complete a project is not necessarily included in the TIP because the agency's Phase Gate process requires most project budgets be approved by the Board in phases, rather than all at once. There are a number of terms that require definition in order to clearly understand the following tables.

Authorized Project Allocation to Date: Current Board-authorized spending ceiling for a project.

Life to Date: Sum of all project expenditures prior to the budget year.

Cashflow: Annual projected expenditures are shown for six years beginning with the budget year.

Future: Refers to the sum of projected expenditures for years seven and beyond.

Total: The total Board-authorized project allocation to date. This may be just preliminary engineering, final design and right-of-way, or it could be the budget for the entire project.

Changes to Authorized Project Allocations to Date from 2017 TIP to 2018 TIP

The table below is a reconciliation of changes in authorized project allocations to date between the Adopted 2017 TIP and the Adopted 2018 TIP. Each change to a project is explained.

CHANGES TO AUTHORIZED PROJECT ALLOCATIONS FROM 2017 TO 2018 (in millions)

Project Type	Adopted 2017 TIP	2017 Closed Projects	2018 New Projects	Transfers/Increases/(Decreases)	2017 Board Actions	Adopted 2018 TIP
System Expansion						
Link Light Rail	\$9,684	\$0	\$126	\$328	\$840	\$10,978
Sounder Commuter	859	(81)	3	10	18	809
Regional Express Bus	290	(14)	22	42	46	387
Other	161	(2)	336	(12)	0	484
Subtotal	10,994	(97)	487	369	903	12,657
Enhancement	129	(3)	18	13	0	\$158
State of Good Repair	252	0	12	7	0	\$272
Administrative	844	0	0	3	0	\$847
Total	\$12,219	(\$100)	\$517	\$393	\$903	\$13,933

2017 Closed Projects – Closed projects are excluded from the 2018 TIP.

Eight projects completed Phase Gate 8 and were closed in July 2017:

- Regional Parking Pilot Project
- Kirkland Transit Center/3rd
- ST Express Mid-Day Bus Storage
- M ST-Lakewood Track & Signal
- Central & East HCT Study
- LRV On-Board Energy Storage
- OMF LRV Wash Heater System
- Link Remote Switch Heaters

2018 New Projects – Newly created projects for the 2018 budget year.

Twenty-eight projects are new for 2018:

- Tacoma Dome Link Extension will connect Federal Way to Tacoma and includes the Operations and Maintenance Facility South; \$125.7 million has been allocated for preliminary engineering.
- Sounder North Parking/Access will add parking and access improvements to Edmonds and Mukilteo Sounder stations; \$2.5 million has been allocated for preliminary engineering.
- SR 522 Bus Rapid Transit will develop a bus rapid transit program along the SR 522 corridor; \$18.6 million has been allocated for preliminary engineering.
- Bus on Shoulder will enable buses to use shoulders on freeways during periods of congestion; \$3.9 million has been allocated to begin preliminary engineering.
- Transit System Access Program for \$142.1 million to enable Sound Transit to partner with local jurisdictions to improve access to transit services.

- Innovation and Technology Program for \$106.6 million to fund research, analysis, and implementation of innovative best practices, partnerships, and technologies to increase ridership, further improve the rider experience, and enhance efficiency of regional mobility.
- Efficiency and Sustainability Program for \$25 million to fund cost efficiency and sustainability programs at existing facilities promoting energy, water, and waste conservation.
- Transit Oriented Development (TOD) Planning Program for \$30.2 million to provide analysis and support beyond the planning phase of TOD.
- ORCA Next Generation for \$31.5 million to provide funding for Sound Transit's share of costs related to the planning, development, and implementation of a next generation ORCA fare collection system.
- Digital Passenger Information System to enhance digital interfaces between Sound Transit, our transit partners, and our riders requires \$1.6 million to initiate the planning process for the new system.
- Tacoma Link Radio Upgrade for \$748 thousand, which will allow for one radio system to integrate with the intended radio system specified for the Tacoma Link Extension project.
- Everett Station Security Improvements for \$289 thousand which will add 40 CCTV cameras and 14 customer emergency stations to allow the security operations center to observe activity at the station, resulting in lower risk to the traveling public.
- Security Radio Project for \$293 thousand to upgrade and enhance the existing system for use in the Downtown Seattle Transit Tunnel, and to expand the number of users for the interoperable communication system. This will address the challenges of multiple users on the Sound Transit campus.
- Security Operations Center (SOC) Video Enhancements for \$188 thousand to add higher resolution monitors that will allow SOC staff to view more cameras simultaneously.
- Light Emitting Diode (LED) Lighting Program for \$1.5M to replace halogen lighting at Tukwila International Blvd Station and Airport Station and provide lower operating expenses and longer lasting lighting.
- Pierce Transit – Global Positioning System Repeater for \$1.7 million to enhance and extend radio and data transmission capabilities in the Sound Transit service area.
- Community Transit – On-Board Communication Upgrade for \$2.1 million to upgrade 166 buses to a communication system compatible with the Community Transit system to allow for seamless communications.
- Operations Maintenance Facility (OMF) upgrades for \$6.3 million to increase parking, add electrical charging units for non-revenue vehicles, improvements to the Link Control Center (LCC) to support additional staff, secure the LCC, limit access, and standardize offices to Sound Transit specifications.
- Bike Parking program establishment in the amount of \$640 thousand to replace current bike lockers in areas of high demand with on-demand lockers to increase availability.
- LRV Wireless Communication Upgrade for \$156 thousand that will support the timely transmission of passenger count data, maintenance records, and important rider information.
- Tacoma Link HVAC and Building System Upgrades to the maintenance facility for \$400 thousand to coordinate the improvements with the maintenance facility expansion, including in the Tacoma Link Extension project.
- Link SCADA System Support for \$250 thousand to manage the operational oversight and technical maintenance of the system.
- King Street Station Vertical Window Glazing for \$767 thousand to replace existing damaged glass on three platforms with acrylic windows to lower the risk of damage from vandalism.
- Othello Traction Power Sub-Station (TPSS) Parking Lot for \$379 thousand to allow maintenance access to the facility.
- Safety Oversight Approval Program (SOAP) for \$200 thousand to allow immediate funding for small safety improvements.
- SoDo and Martin Luther King Blvd (MLK) Hazard Mitigation for \$3.1 million to participate in a partnership with the Seattle Department of Transportation (SDOT) to address identified hazards near at-grade crossings.

- Link Light Rail Vehicle (LRV) Overhaul for \$10.1 million to address mid-life maintenance needs for the LRV fleet to realize the full life of the assets.
- Link Operating Technology Upgrades for \$500 thousand to maintain the IT hardware and software supporting Link.

Transfers-Increases-Decreases – Moving project budget to new or existing projects or with increases or decreases to project budgets.

- Tacoma Trestle project transferred \$48 thousand of landscape mitigation to the Environmental Mitigation and Monitoring program for long-term management.
- Small Works Program transferred \$397 thousand to Othello TPSS Parking Lot and OMF Expanded Parking projects, which are now stand-alone projects after exceeding the small works threshold.
- Downtown Redmond Link Extension project allocation is increased \$149.4 million to fund right of way acquisitions as the project continues to progress through the project preliminary engineering process.
- Lynnwood Link Extension project allocation is increased by \$179.0 million to fund early construction work as the project finalizes its baseline in 2018.
- Sounder South Expanded Service is increased by \$3.6M to complete the retaining wall requirements as part of Easement 4.
- Kent Station Access Improvements project allocation is increased by \$3.3 million to complete preliminary engineering on the preferred alternative.
- Auburn Station Access Improvements project allocation is increased by \$3.3 million to complete preliminary engineering on the preferred alternative.
- I-405 Bus Rapid Transit project allocation is increased by \$42.4 million to begin preliminary engineering and environmental review.
- Sounder Fleet Expansion is increased by \$17.7 million to fund the addition of one locomotive and three cab cars in response to increased ridership.
- Downtown Seattle Transit Tunnel (DSTT) Mitigation is increased by \$10 million to support Sound Transit's share of Seattle street design and construction improvements intended to mitigate the traffic impacts of buses moving from the DSTT to surface streets.
- Non-Revenue Support Vehicles increased by \$2.4 million to add an Under Bridge Inspection Truck (UBIT) ensuring Sound Transit bridges are inspected in a cost effective and timely manner, and seven vehicles, a forklift, and two electric cars for maintenance operations.
- Small Works Program increased by \$1.5 million to support the increase in projects and add an additional year to the program.
- Link Access Control project will increase by \$1.2 million to complete the upgrade of a universal system that controls access to Sound Transit facilities.
- Tacoma Dome parking structure improvements increased by \$3.1 million the agency's proportional contribution to maintain the Pierce Transit parking facility.
- Fare Administration will decrease by \$8.4 million as much of the scope of this project will be accomplished by the OCRA Next Generation project established in 2018.
- Research and Business Development Program was decreased by \$369 thousand as a portion of the program scope will be managed in the Fare Administration project.
- Information Technology Program increased by \$2.9 million to support administrative hardware and software needs of the agency.
- Secure Radio project was increased by \$662 thousand to increase scope to add redundant radio capabilities which was fully funded by a grant.
- Information Technology Infrastructure program increased by \$1.8 million to support growing information technology infrastructure and corresponding lifecycle needs.

2017 Board Actions – Actions the Board took in 2017 to establish or change the Project Allocation for an amount that is within the cost estimate for the project.

- Tacoma Link Extension was baselined, increasing the authorized project allocation by \$182.7 million. The project will extend the current Tacoma Link system by 2.4 miles to the Hilltop neighborhood.
- Light Rail Vehicle (LRV) Expansion project was increased by \$7.3 million to exercise a contract option for an additional 30 LRVs at highly favorable pricing. The new LRVs will support of Federal Way and Downtown Redmond Extension projects.
- Federal Way Link Extension increased the project allocation to date by \$363.8 million to commence final design and begin the right-of-way procurement process.
- West Seattle to Ballard Link Extension was established with a project allocation of \$285.9 million to begin the preliminary engineering and environmental review for Ballard, the new Downtown Tunnel, and West Seattle segments.
- I-405 Bus Rapid Transit project was initiated at \$45.7 million to coordinate civil design with WSDOT established projects and to fund early property acquisition.

Project Summaries and Detail Pages

In the Projects section, details pertaining to each project are provided as well as summaries of each program.

Cashflow by Budget Approval

These summary tables include three views of the annual project cashflows of all authorized project allocations to date:

- Authorized project allocations to date by project – Projects are grouped depending on the level of the allocation: Preliminary Engineering, Final Design & Right of Way and Baseline. Programs and reserves receive an authorized allocation for full funding when initiated.
- Subarea – Sound Transit’s five geographic subareas plus Systemwide.
- Phase – Project cost groupings such as agency administration, preliminary engineering, final design, construction, and system testing and startup.

Project Detail Pages

Each active project has a full page that covers scope, authorized project allocation to date, budget year activities and cash flow detail, phase gate status, and project risk information. For ST2 and ST3 projects, cost estimate updates are included. The following is an explanation of terms used in the project pages.

Authorized Project Allocation to Date (in YOE dollars)

Phase Gate Passed

The most recent gate passed indicates a project’s progress. Certain Sound Move projects pre-date implementation of our Phase Gate process and are not required to pass through gates that they would have if the process had been in place at that time.

Pending – Projects that will pass through Gate 1 before the end of the coming year.

Gate 1 – Enter Project Development

Gate 2 – Identify Alternatives

Gate 3 – Identify Preferred Alternative

Gate 4 – Enter Final Design

Gate 5 – Establish Baseline

Gate 6 – Proceed to Construction

Gate 7 – Transition to Operations

Gate 8 – Close Out Project

None – Projects that advanced through project development prior to implementation of Phase Gate (includes some Sound Move projects).

N/A – Projects not subject to the Phase Gate process, such as procurements, installation of equipment, etc.

Baseline

Baseline budget is the authorized project allocation to date for the entire project in year of expenditure dollars. The baseline budget is established once the project scope and schedule are defined.

2017 TIP

Authorized project allocation to date adopted by the Board in 2017 or prior.

2018 TIP

Authorized project allocation to date adopted by the Board in 2018 or prior.

Completion Schedule

Baseline Schedule

The year anticipated for commencement of revenue service at the time the baseline was adopted.

2017

The year anticipated for commencement of revenue service at the time the 2017 TIP is published.

2018

The year anticipated for commencement of revenue service at the time the 2018 TIP is published.

Project Financial Plan Estimate (2017 \$000)

This section of the project detail page is for ST2 & ST3 projects only and provides a history of the original cost estimate. Cost estimates are for the entire project scope and are periodically updated as new information becomes available. Estimates are also adjusted each year for inflation and stated in constant-year dollars. Cost estimates for the original cost estimate 2008 (ST2) and 2016 (ST3), 2017, and 2018 are stated in constant-2017 dollars. A summary of ST2 and ST3 project cost estimates is provided in Appendix A.

Cashflow (YOE \$000)

This portion of the project detail pages shows life to date spending, annual cashflow for six years plus the amount exceeding six years, and then total authorized project allocation to date by subarea and then by phase.

Project Risk Assessment

Explanation of the budget or schedule risk for the project.

System Expansion

As a relatively young transit system, the majority of Sound Transit's project budgets are focused on building light rail to connect the region. Both Sound Move, ST2, and most recently ST3 programs funded light rail facilities and tracks in tunnels, at grade, and elevated. By 2041, these programs will extend light rail north to Everett, south to Tacoma, and east to Downtown Redmond.

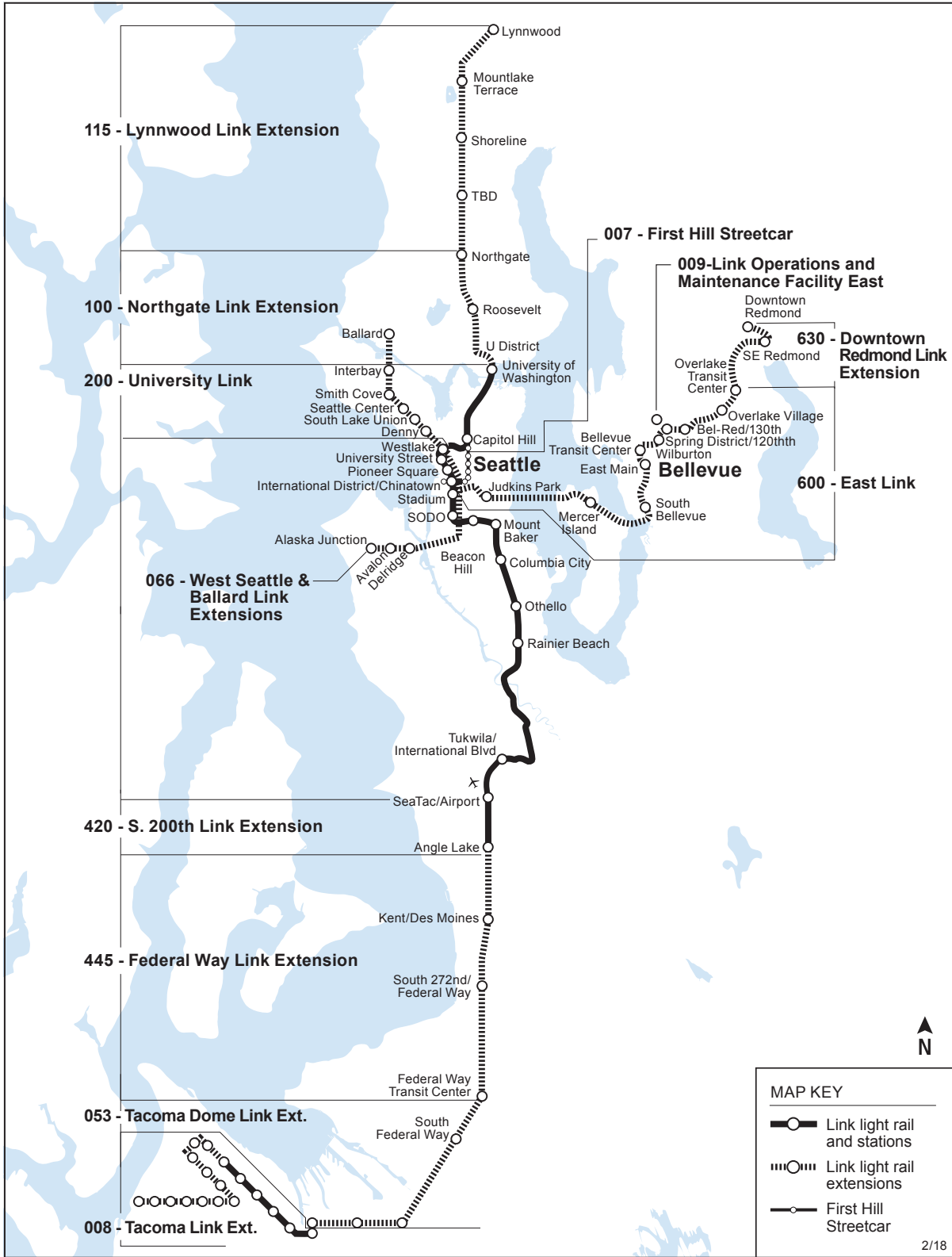
Commuter rail is focused on providing rail service between Everett and Seattle from the north and Dupont to Seattle from the south. Projects are now focused on rail station improvements among its 12 commuter rail stations, completion of track and signal improvements in Tacoma, and platform extensions allowing for larger trains.

Projects in support of Regional Express bus services are mostly completed, and the focus is now on the expansion of high occupancy vehicle (HOV) transit lanes on I-90.

2018 System Expansion Project Highlights

- Begin project development work on the following voter approved projects:
 - West Seattle & Ballard Link Extensions project combining three projects to leverage environmental review on the entire corridor.
 - Tacoma Dome Link Extension in combination with the Operations & Maintenance Facility South to leverage environmental review.
 - SR 522 and I-405 Bus Rapid Transit projects.
 - Bus on Shoulder Program.
- Continue East Link Extension construction of all seven segments in south Bellevue, downtown Bellevue-Spring District and Bel-Red area, with completion of tunneling in Bellevue.
- Commence project close-out activities on the completed I-90 Two-Way Transit and HOV Operations Stage 3 project.
- Complete final design and award construction contract to expand Tacoma Link.
- Focus on construction of stations for Northgate Link Extension and complete cross-passage connections to tunnels.
- Continue right of way procurement and establish baseline for Lynnwood Link Extension.
- Continue close-out activities for the University Link and South 200th Street Link Extensions.
- Achieve 60 percent design and establish baseline for Federal Way Link Extension to construct light rail from South 200th Street to Federal Way Transit Center.
- Continue preliminary engineering on the Downtown Redmond Extension, coordinate development agreements with affected jurisdictions, and award a design-build construction contract.

LINK LIGHT RAIL CAPITAL PROJECTS



TACOMA LINK LIGHT RAIL CAPITAL PROJECTS



2018 Cashflow by Budget Approval

(in thousands)

System Expansion

LINK

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Preliminary Engineering									
400034 Enhancements to Tacoma Link Extension	\$34	\$1,966	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
400053 Tacoma Dome Link Extension	494	10,250	15,225	19,400	39,500	21,950	18,854	0	125,673
400066 West Seattle & Ballard Link Extensions	2,155	25,500	34,510	45,500	58,995	78,000	41,236	0	285,896
4X630 Downtown Redmond Link Extension	10,137	157,268	10,621	0	0	0	0	0	178,026
Subtotal	12,821	194,983	60,356	64,900	98,495	99,950	60,090	0	591,595
Final Design & ROW									
4X115 Lynnwood Link Extension	199,202	251,680	110,048	37,695	28,579	22,435	14,252	3,447	667,338
4X445 Federal Way Link Extension	57,354	116,533	147,022	79,543	7,488	2,086	1,511	1,089	412,625
Subtotal	256,556	368,213	257,070	117,238	36,067	24,520	15,763	4,536	1,079,963
Baseline									
400008 Tacoma Link Extension	22,349	19,305	67,825	56,033	33,174	18,661	0	0	217,346
400009 Link Operations & Maintenance Facility: East	131,338	116,381	114,991	57,541	20,208	8,761	0	0	449,220
400032 Light Rail Vehicle Fleet Expansion	74,100	37,572	85,965	126,706	128,050	59,407	130,617	98,302	740,718
4X100 Northgate Link Extension	1,043,015	311,397	240,972	143,964	41,097	19,881	99,430	0	1,899,756
4X200 University Link Extension	1,504,671	5,454	7,421	70,903	167,557	0	0	0	1,756,007
4X420 South 200th Link Extension	327,798	424	7,318	47,700	0	0	0	0	383,241
4X600 East Link Extension	1,031,948	574,491	680,728	599,891	417,901	152,737	104,399	115,057	3,677,150
Subtotal	4,135,219	1,065,023	1,205,221	1,102,739	807,986	259,446	334,445	213,359	9,123,438
Reserve									
4X199 Northgate Link Extension Project Reserve	0	0	0	0	0	0	0	50,000	50,000
Subtotal	0	0	0	0	0	0	0	50,000	50,000
Operating									
400007 First Hill Streetcar	132,726	8	8	8	8	8	8	9	132,780
Subtotal	132,726	8	8	8	8	8	8	9	132,780
Total	\$4,537,322	\$1,628,227	\$1,522,654	\$1,284,884	\$942,556	\$383,923	\$410,306	\$267,903	\$10,977,775

2018 Cashflow by Subarea
(in thousands)

System Expansion
LINK

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$145,427	\$166,926	\$95,378	\$48,988	\$36,591	\$22,819	\$24,500	\$13,875	\$554,502
2 - North King	2,823,060	488,889	379,327	325,225	320,484	122,618	183,766	81,558	4,724,928
3 - South King	420,392	148,928	194,634	163,796	45,507	22,047	27,228	14,065	1,036,598
4 - East King	1,123,146	794,499	773,020	674,331	478,167	181,691	158,542	154,965	4,338,361
5 - Pierce	25,295	28,959	80,261	72,498	61,748	34,670	16,228	3,441	323,100
6 - Systemwide	2	26	35	46	59	78	41	0	286
Total	\$4,537,322	\$1,628,227	\$1,522,654	\$1,284,884	\$942,556	\$383,923	\$410,306	\$267,903	\$10,977,775

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$260,309	\$64,003	\$64,122	\$75,593	\$74,704	\$66,260	\$81,063	\$14,981	\$701,034
20-Prelim Engineering/Env Review	202,256	39,039	38,835	47,279	78,845	74,950	30,906	3,092	515,202
30-Final Design+Specifications	462,482	48,966	36,313	27,166	17,196	12,310	14,899	20,710	640,042
35-Third Party	173,977	25,732	20,523	21,520	19,892	12,828	7,594	2,624	284,691
40-Row Acquisition+Permits	697,390	425,816	158,847	74,072	33,855	3,633	9,111	10,506	1,413,230
50-Construction	2,337,420	894,376	987,781	798,529	518,856	111,258	73,951	49,728	5,771,899
55-Construction Services	222,992	88,771	113,916	93,571	66,912	35,771	44,396	21,431	687,759
70-Vehicles	170,440	41,524	101,101	139,844	124,873	56,799	126,186	94,831	855,597
80-System Testing+Startup	10,057	0	1,216	7,310	7,424	3,549	0	0	29,556
90-Contingency	0	0	0	0	0	6,565	22,200	50,000	78,765
Total	\$4,537,322	\$1,628,227	\$1,522,654	\$1,284,884	\$942,556	\$383,923	\$410,306	\$267,903	\$10,977,775

400007	First Hill Streetcar	Managed by: PEPD
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Scope: Provide funding for planning, design and construction of a street car providing connections between Capitol Hill and International District/Chinatown stations via the First Hill neighborhood. Revenue operations began in 2015. Balance of activity supports potential third party work request items related to the operation of the project.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue ST administrative tasks related to project monitoring and agreement maintenance.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 7-Transition to Operations		
Baseline: \$132,780	Baseline: 2015	Voter-Approved Cost Estimate: \$145,548
2017 TIP: \$132,780	2017 : 2015	2017 Cost Estimate: \$144,254
2018 TIP: \$132,780	2018 : 2015	2018 Cost Estimate: \$144,254

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$132,726	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$132,780
Total	\$132,726	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$132,780

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$235	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$289
35-Third Party	132,491	0	0	0	0	0	0	0	132,491
Total	\$132,726	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$132,780

Project Risk Assessment
N/A This project is complete and in operation.

400008	Tacoma Link Extension	Managed by: DECM
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Scope: Extension of light rail approximately 2.4 miles from the Theatre District in downtown Tacoma to the Hilltop neighborhood. The extension will be powered by four new traction power substations, will add six new stations, expand the Operations and Maintenance Facility (OMF) and add 5 new vehicles to the fleet. The alignment will travel at-grade along Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr. Way.

Changes to authorized project allocation since 2017: Increased by \$187.2 million to establish the project baseline budget of \$217.35 million by resolution of the ST Board (Resolution R2017-31, adopted 9/28/17).

Budget year activities: Complete final design, procurement for construction, begin construction work and execute phase 2 of construction management consultant contract.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	5-Establish Baseline				
Baseline:	\$217,346	Baseline:	2022	Voter-Approved Cost Estimate:	\$109,255
2017 TIP:	\$217,346	2017 :	2022	2017 Cost Estimate:	\$145,248
2018 TIP:	\$217,346	2018 :	2022	2018 Cost Estimate:	\$148,248

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$22,349	\$19,305	\$67,825	\$56,033	\$33,174	\$18,661	\$0	\$0	\$217,346
Total	\$22,349	\$19,305	\$67,825	\$56,033	\$33,174	\$18,661	\$0	\$0	\$217,346

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$5,593	\$2,465	\$2,358	\$2,342	\$2,255	\$1,935	\$0	\$0	\$16,948
20-Prelim Engineering/Env Review	5,559	0	0	0	0	0	0	0	5,559
30-Final Design+Specifications	8,439	653	688	500	500	50	0	0	10,830
35-Third Party	479	766	221	0	0	0	0	0	1,466
40-Row Acquisition+Permits	1,646	871	1,038	0	0	0	0	0	3,555
50-Construction	0	7,050	46,175	36,192	26,269	6,143	0	0	121,829
55-Construction Services	255	1,500	2,345	2,000	2,000	1,791	0	0	9,891
70-Vehicles	378	6,000	15,000	13,999	0	0	0	0	35,377
80-System Testing+Startup	0	0	0	1,000	2,150	2,176	0	0	5,326
90-Contingency	0	0	0	0	0	6,565	0	0	6,565
Total	\$22,349	\$19,305	\$67,825	\$56,033	\$33,174	\$18,661	\$0	\$0	\$217,346

Project Risk Assessment

Risks to project budget and schedule: Unidentified utility conflicts; Additional scope regarding roadway and street improvements; Unprotected intersections along the alignment may require signals or other electronic devices.

400009	Link Operations & Maintenance Facility: East	Managed by: DECM
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Scope: Link operations and maintenance facility (160,000 sq. ft.) located in the City of Bellevue that will maintain, store and deploy an expanded light fleet, including seven LRV service bays, an LRV wash facility and storage for up to 96 LRVs.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue design-build contract of Operation and Maintenance Facility, focusing on several design packages and permitting activities followed by construction. Potential for final payment on one or more property acquisitions/relocations to carry over into 1st Quarter from prior year.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 6-Proceed to Construction		
Baseline: \$449,220	Baseline: 2020	Voter-Approved Cost Estimate: \$329,862
2017 TIP: \$449,220	2017 : 2020	2017 Cost Estimate: \$419,655
2018 TIP: \$449,220	2018 : 2020	2018 Cost Estimate: \$413,922

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$27,581	\$24,440	\$24,148	\$12,084	\$4,244	\$1,840	\$0	\$0	\$94,336
North King	21,933	19,436	19,204	9,609	3,375	1,463	0	0	75,020
South King	25,217	22,345	22,078	11,048	3,880	1,682	0	0	86,250
East King	56,606	50,160	49,561	24,800	8,710	3,776	0	0	193,614
Total	\$131,338	\$116,381	\$114,991	\$57,541	\$20,208	\$8,761	\$0	\$0	\$449,220

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3,567	\$1,756	\$1,907	\$2,620	\$1,362	\$6,361	\$0	\$0	\$17,573
20-Prelim Engineering/Env Review	8,632	100	774	29	0	0	0	0	9,536
30-Final Design+Specifications	0	135	140	54	57	0	0	0	386
35-Third Party	64	130	1,746	1,026	142	0	0	0	3,107
40-Row Acquisition+Permits	98,105	31,700	3,803	921	0	0	0	0	134,529
50-Construction	19,624	77,025	100,643	49,781	15,281	2,400	0	0	264,753
55-Construction Services	1,347	5,535	5,978	3,111	3,366	0	0	0	19,337
Total	\$131,338	\$116,381	\$114,991	\$57,541	\$20,208	\$8,761	\$0	\$0	\$449,220

Project Risk Assessment

Permitting challenges and coordination efforts with third parties, stakeholders, and jurisdictions have the potential to impact budget and schedule for completing design and beginning construction activities.

400032 Light Rail Vehicle Fleet Expansion Managed by: DECM

Scope: Provide project management, design, manufacturing, delivery, assembly inspection and testing in the support of a procurement of 122 low floor light rail vehicles (LRVs) to meet fleet requirements to support revenue service for light rail system expansion projects, and to centralize procurement of 122 LRVs for ST2 (Northgate Link Extension, Lynnwood Link Extension and East Link Extension).

Vendor bids for the original 122 light rail vehicles produced significant unit cost savings allowing the agency to take advantage of savings and advantageous pricing to exercise an option to order 30 additional LRVs for the ST3 (Federal Way Link and Downtown Redmond Link Extensions) into the project increasing the total procurement to 152.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete preliminary/final design reviews, and operating and maintenance manuals. Continue mobilizing component manufacturers as designs are approved.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$740,718	Baseline:	2024	Voter-Approved Cost Estimate:	\$614,869
2017 TIP:	\$740,718	2017 :	2024	2017 Cost Estimate:	\$684,989
2018 TIP:	\$740,718	2018 :	2024	2018 Cost Estimate:	\$900,919

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$9,040	\$4,584	\$10,488	\$15,458	\$15,622	\$7,248	\$15,935	\$11,993	\$90,368
North King	22,082	11,196	25,618	37,758	38,159	17,703	38,924	29,294	220,734
South King	9,781	4,960	11,347	16,725	16,903	7,842	17,241	12,976	97,775
East King	30,603	15,517	35,504	52,329	52,885	24,535	53,945	40,599	305,917
Pierce	2,593	1,315	3,009	4,435	4,482	2,079	4,572	3,441	25,925
Total	\$74,100	\$37,572	\$85,965	\$126,706	\$128,050	\$59,407	\$130,617	\$98,302	\$740,718

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$600	\$530	\$563	\$643	\$659	\$391	\$803	\$2,177	\$6,367
55-Construction Services	2,631	1,518	2,018	2,218	2,518	2,217	3,628	1,293	18,040
70-Vehicles	70,870	35,524	83,384	123,845	124,873	56,799	126,186	94,831	716,311
Total	\$74,100	\$37,572	\$85,965	\$126,706	\$128,050	\$59,407	\$130,617	\$98,302	\$740,718

Project Risk Assessment

Timely completion and commissioning of the Operations and Maintenance Facility East's yard to receive the new LRVs; Coordination of the retrofitting of Automatic Train Protection on the existing LRVs is critical to minimize impacts to Link operations; Difficulty in meeting the magnetic frequency and vibration standards may lead to production and delivery delays.

400034	Enhancements to Tacoma Link Extension	Managed by: FIT
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Scope: Engineering and streetscape design for transit access improvements and station area enhancements around the Tacoma Link Extension project. This project is also focused on job access needs and identifying barriers that currently limit the Tacoma Hilltop residents from participation in existing workforce training and apprenticeship programs. The City of Tacoma and Sound Transit received a \$2.0 million grant from the Federal Transit Administration for this project. Sound Transit is the designated recipient and needs to administer the grant while the City of Tacoma will execute the scope and provide \$500,000 in local matching funds.

The scope of this project is independent of the Tacoma Link Extension project. Grant is awarded in 2016.

Changes to authorized project allocation since 2017: None.

Budget year activities: Provide grant administration for a \$2.0 million grant from the Federal Transit Administration. The City of Tacoma will manage the project and provide \$500,000 in local matching funds.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$2,000	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$2,000	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$34	\$1,966	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$34	\$1,966	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
35-Third Party	\$34	\$1,966	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$34	\$1,966	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000

Project Risk Assessment
Although the risk is low in both schedule and budget, this project will be managed by a third party and Sound Transit will submit costs for reimbursement. In situations such as this, the risk of not recovering funds due to ineligibility or a delay in schedule always exists.

400053	Tacoma Dome Link Extension	Managed by: PEPD
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Scope: Extension of light rail approximately 9.7 miles from Federal Way to Tacoma via at grade and elevated alignment. Includes elevated stations in South Federal Way, Fife, and East Tacoma, and an at-grade, retained-cut station at the Tacoma Dome. Preliminary engineering includes the Link Operations and Maintenance Facility: South (OMF South) that will provide light rail vehicle (LRV) storage and maintenance capacity for accommodating Link expansion south to Tacoma. Upon completion of preliminary engineering the Federal Way Link Extension and the OMF: South will be tracked separately. Expenditures prior to 2018 represent pre-project development costs.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Initiate and conduct technical work and outreach efforts to support the development of the environmental impact statement and the identification of alternatives leading to the selection of a preferred alternative.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 1-Enter Project Development		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$2,233,056
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: \$2,233,056
2018 TIP: \$125,673	2018 : 2030	2018 Cost Estimate: \$2,233,056

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$201	\$4,182	\$6,212	\$7,915	\$16,116	\$8,956	\$7,692	\$0	\$51,275
Pierce	292	6,068	9,013	11,485	23,384	12,994	11,162	0	74,398
Total	\$494	\$10,250	\$15,225	\$19,400	\$39,500	\$21,950	\$18,854	\$0	\$125,673

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$494	\$2,850	\$3,700	\$4,400	\$4,650	\$5,250	\$5,504	\$0	\$26,848
20-Prelim Engineering/Env Review	0	6,400	10,275	13,000	32,600	14,200	10,600	0	87,075
35-Third Party	0	500	500	1,000	1,000	1,000	1,750	0	5,750
40-Row Acquisition+Permits	0	500	750	1,000	1,250	1,500	1,000	0	6,000
Total	\$494	\$10,250	\$15,225	\$19,400	\$39,500	\$21,950	\$18,854	\$0	\$125,673

Project Risk Assessment
Project issues and risks identified at this stage require the coordination and approval of multiple stakeholders and include: establishing Light Rail as a permitted use in affected cities; geotechnical challenges and potential archeological discoveries in the Tacoma area; and the complexity of the Puyallup River bridge crossing.

400066	West Seattle & Ballard Link Extensions	Managed by: PEPD
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Scope: Extension of light rail approximately 4.7 miles from Downtown Seattle to the Alaska Junction neighborhood of West Seattle via elevated and at-grade alignment and approximately 5.4 miles from Downtown Seattle to Ballard via elevated guideway and tunnel. Includes an at-grade station (Stadium) and elevated stations in SODO, Delridge, Avalon, Alaska Junction, Ballard, Smith Cove, and Interbay and underground (tunnel) stations at Seattle Center and South Lake Union. Preliminary engineering includes both segments; upon completion of preliminary engineering these segments will be tracked as West Seattle Link Extension and Ballard Link Extension. Expenditures prior to 2018 represent pre-project development costs.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Begin alternatives development and evaluation; conduct feasibility studies on key project scope assumptions in the ST3 Plan, and begin stakeholders engagement.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 1-Enter Project Development		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$6,474,597
2017 TIP: \$285,896	2017 : N/A	2017 Cost Estimate: \$6,474,597
2018 TIP: \$285,896	2018 : 2041	2018 Cost Estimate: \$6,474,597

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$41	\$485	\$656	\$865	\$1,121	\$1,482	\$783	\$0	\$5,432
North King	2,002	23,690	32,059	42,270	54,806	72,462	38,308	0	265,597
South King	41	485	656	865	1,121	1,482	783	0	5,432
East King	43	510	690	910	1,180	1,560	825	0	5,718
Pierce	26	306	414	546	708	936	495	0	3,431
Systemwide	2	26	35	46	59	78	41	0	286
Total	\$2,155	\$25,500	\$34,510	\$45,500	\$58,995	\$78,000	\$41,236	\$0	\$285,896

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,032	\$5,500	\$7,118	\$9,000	\$10,000	\$12,000	\$18,430	\$0	\$63,080
20-Prelim Engineering/Env Review	1,102	18,500	25,013	34,000	45,995	60,500	20,306	0	205,416
35-Third Party	0	1,000	1,400	1,500	2,000	4,000	1,500	0	11,400
40-Row Acquisition+Permits	22	500	978	1,000	1,000	1,500	1,000	0	6,000
Total	\$2,155	\$25,500	\$34,510	\$45,500	\$58,995	\$78,000	\$41,236	\$0	\$285,896

Project Risk Assessment

Project issues and risks identified at this stage include: Reaching stakeholder consensus on a preferred alternative; Complexity of alignments in constrained environment with challenging topography; Two bridge crossings; Complexity associated with a tunnel through mature urban environment; Construction effects in constrained environment; Potential effect on Central Link operations during construction; ROW and property impacts.

4X100	Northgate Link Extension	Managed by: DECM
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Scope: Extension of light rail approximately 4.3-miles from the University of Washington Station north under the campus via twin bored tunnels to an underground U District Station along Brooklyn Avenue NE between NE 43rd and NE 45th Streets, and underground Roosevelt Station along 12th Avenue NE between NE 65th Street and NE 67th Street, and continuing to an elevated station in Northgate along 1st Avenue NE spanning NE 103rd Street. The Northgate Link Extension is scheduled to be completed in September 2021 and will provide an interim terminus for Link at Northgate until the Lynnwood Link Extension is in service, currently anticipated in 2023.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete construction of tunnel cross passages and handover tunnel to trackwork contractor. Complete rail procurement and pre-fabrication of floating slab segments and begin cable, floating slab and track installation in tunnels. Continue construction at U District Station, Roosevelt Station, Northgate Station and elevated guideway, and parking garage at the Northgate site. Begin Systems installation. Finalize right-of-way acquisitions and update the Washington Department of Transportation (WSDOT) Temporary Construction Airspace Lease Agreement for the King Country Metro (KCM) Bus Layover facility.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$1,899,756	Baseline:	2021	Voter-Approved Cost Estimate:	\$1,894,174
2017 TIP:	\$1,899,756	2017 :	2021	2017 Cost Estimate:	\$2,061,700
2018 TIP:	\$1,899,756	2018 :	2021	2018 Cost Estimate:	\$2,061,700

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,043,015	\$311,397	\$240,972	\$143,964	\$41,097	\$19,881	\$99,430	\$0	\$1,899,756
Total	\$1,043,015	\$311,397	\$240,972	\$143,964	\$41,097	\$19,881	\$99,430	\$0	\$1,899,756

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$54,855	\$14,655	\$13,384	\$11,860	\$10,543	\$9,498	\$30,084	\$0	\$144,879
20-Prelim Engineering/Env Review	15,077	0	0	0	0	0	0	0	15,077
30-Final Design+Specifications	107,794	5,492	5,852	4,980	582	100	7,367	0	132,167
35-Third Party	6,483	1,484	1,128	1,092	696	250	667	0	11,800
40-Row Acquisition+Permits	93,662	681	10,646	200	0	0	7,111	0	112,300
50-Construction	703,788	275,209	196,816	109,901	16,375	5,887	22,116	0	1,330,093
55-Construction Services	61,355	13,876	11,930	10,864	7,626	2,773	9,885	0	118,310
80-System Testing+Startup	0	0	1,216	5,067	5,274	1,373	0	0	12,930
90-Contingency	0	0	0	0	0	0	22,200	0	22,200
Total	\$1,043,015	\$311,397	\$240,972	\$143,964	\$41,097	\$19,881	\$99,430	\$0	\$1,899,756

Project Risk Assessment

Multiple contract interfaces between the tunneling, station finishes, trackwork and systems contractors; Ongoing coordination with Lynnwood Link extension on the track realignment at the Northgate station; Third party coordination, especially with UW, for vibration testing and systems installation; Vertical transportation vendor issues.

4X115**Lynnwood Link Extension****Managed by: DECM**

Scope: Extension of light rail approximately 8.5 miles from Northgate Station in Seattle through Shoreline and Mountlake Terrace to the Lynnwood Transit Center. The project alignment is primarily along I-5 and includes at-grade, elevated and retained cut/fill segments, adding four stations at NE 145th Street, NE 185th Street, Mountlake Terrace Transit Center and Lynnwood Transit Center. These stations will add a total of 2,675 parking stalls for daily riders.

Changes to authorized project allocation since 2017: Increased by \$179.0 million: \$67.1 million for pre-construction services activities; and \$111.9 million for property acquisitions.

Budget year activities: Continue final design, right of way, and pre-construction services activities in preparation for establishment of the project baseline.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Funding Commitment (\$000)	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 4-Enter Final Design			
Baseline: \$0	Baseline: N/A	2017 \$000s \$1,531,880	Voter-Approved Cost Estimate: \$1,797,752
2017 TIP: \$488,361	2017 : 2023	YOE \$000s \$2,934,813	2017 Cost Estimate: \$1,531,880
2018 TIP: \$667,338	2018 : 2023		2018 Cost Estimate: \$1,531,880

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$108,765	\$137,417	\$60,086	\$20,581	\$15,604	\$12,249	\$7,781	\$1,882	\$364,366
North King	90,438	114,263	49,962	17,114	12,975	10,185	6,470	1,565	302,971
Total	\$199,202	\$251,680	\$110,048	\$37,695	\$28,579	\$22,435	\$14,252	\$3,447	\$667,338

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$19,836	\$10,960	\$12,165	\$12,165	\$12,030	\$12,683	\$8,466	\$0	\$88,305
20-Prelim Engineering/Env Review	39,053	0	0	0	0	0	0	2,947	42,000
30-Final Design+Specifications	50,132	29,906	14,914	5,000	5,000	4,000	2,500	0	111,453
35-Third Party	3,285	7,403	2,791	1,500	1,000	771	650	0	17,400
40-Row Acquisition+Permits	78,211	141,879	15,570	0	0	0	0	0	235,660
50-Construction	192	34,000	33,403	0	0	0	0	0	67,595
55-Construction Services	8,492	27,532	31,205	19,030	10,549	4,980	2,636	500	104,925
Total	\$199,202	\$251,680	\$110,048	\$37,695	\$28,579	\$22,435	\$14,252	\$3,447	\$667,338

Project Risk Assessment

Differing site and underground utility conditions; third party approvals – cities, Washington State Department of Transportation (WSDOT), Federal Highway Administration (FHWA); Impacts to Intelligent Transportation Systems above what is assumed in 60% design; market conditions – price escalation, labor shortages; and Federal Transit Administration (FTA) requirements for New Starts grant application process has the potential to impact the schedule for completion of final design.

4X199 Northgate Link Extension Project Reserve Managed by: DECM

Scope: Project reserve created for the Northgate Link Extension that, if required, can be directed to mitigate budget risks associated with project construction. Funding for the reserve originated from unused funds in the project reserve that was set up for the Initial Segment. The project reserve cannot be used for additional scope and its use requires super-majority approval by the Board.

Changes to authorized project allocation since 2017: None

Budget year activities: N/A

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	None				
Baseline:	\$50,000	Baseline:	2021	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$50,000	2017 :	2021	2017 Cost Estimate:	N/A
2018 TIP:	\$50,000	2018 :	2021	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
90-Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000

Project Risk Assessment

This project reserve was established to mitigate potential project risks especially during tunnel activities. As the tunnel activity is substantially complete the risk is lower.

4X200**University Link Extension****Managed by: DECM**

Scope: Extension of light rail approximately 3.15-miles entirely underground from east from the Downtown Seattle Transit Tunnel, under I-5 to an underground Capitol Hill Station that will serve the First Hill/Capitol Hill urban center. The tunnel route crosses under the Lake Washington Ship Canal to an interim terminus in an underground University of Washington Station near Husky Stadium. University Link Extension will generate high ridership by connecting the three major population and employment centers of Downtown Seattle, Capitol Hill, and the University District.

University Link opened for revenue service on March 19, 2016. Project close-out is anticipated in 2019 with a projected budget surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue closeout activities. Optimization and fine tuning of Link operating systems. Resolve outstanding commercial items.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	7-Transition to Operations				
Baseline:	\$1,756,007	Baseline:	2016	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$1,756,007	2017 :	2016	2017 Cost Estimate:	N/A
2018 TIP:	\$1,756,007	2018 :	2016	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,504,671	\$5,454	\$7,421	\$70,903	\$167,557	\$0	\$0	\$0	\$1,756,007
Total	\$1,504,671	\$5,454	\$7,421	\$70,903	\$167,557	\$0	\$0	\$0	\$1,756,007

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$81,705	\$3,249	\$1,672	\$12,354	\$14,574	\$0	\$0	\$0	\$113,554
20-Prelim Engineering/Env Review	24,261	0	0	0	0	0	0	0	24,261
30-Final Design+Specifications	86,530	380	1,106	2,292	0	0	0	0	90,308
35-Third Party	11,314	0	0	1,004	6,328	0	0	0	18,646
40-Row Acquisition+Permits	126,428	0	0	0	25,904	0	0	0	152,332
50-Construction	979,961	1,325	681	52,525	114,291	0	0	0	1,148,783
55-Construction Services	86,585	500	1,246	23	6,460	0	0	0	94,814
70-Vehicles	99,193	0	2,716	2,000	0	0	0	0	103,909
80-System Testing+Startup	8,694	0	0	706	0	0	0	0	9,400
Total	\$1,504,671	\$5,454	\$7,421	\$70,903	\$167,557	\$0	\$0	\$0	\$1,756,007

Project Risk Assessment

N/A - The project is complete and in operation.

4X420**South 200th Link Extension****Managed by: DECM**

Scope: Extension of light rail approximately 1.6 miles south from Sea-Tac/Airport Station to Angle Lake Station at South 200th Street. The design features an elevated light rail guide way, an elevated station, and detached park-and-ride facility at South 200th with a parking capacity of 1,050. The project was delivered through a design-build (DB) delivery strategy.

South 200th Link Extension opened for revenue service on September 24, 2016. Project close-out is anticipated in 2019 with a projected budget surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue project closeout activities.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	7-Transition to Operations				
Baseline:	\$383,241	Baseline:	2016	Voter-Approved Cost Estimate:	\$440,208
2017 TIP:	\$383,241	2017 :	2016	2017 Cost Estimate:	\$447,516
2018 TIP:	\$383,241	2018 :	2016	2018 Cost Estimate:	\$447,516

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$327,798	\$424	\$7,318	\$47,700	\$0	\$0	\$0	\$0	\$383,241
Total	\$327,798	\$424	\$7,318	\$47,700	\$0	\$0	\$0	\$0	\$383,241

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$16,142	\$149	\$667	\$184	\$0	\$0	\$0	\$0	\$17,142
20-Prelim Engineering/Env Review	5,698	0	0	0	0	0	0	0	5,698
30-Final Design+Specifications	8,739	0	0	785	0	0	0	0	9,523
35-Third Party	3,782	0	0	3,303	0	0	0	0	7,085
40-Row Acquisition+Permits	37,991	0	0	5,558	0	0	0	0	43,549
50-Construction	237,027	275	6,611	37,109	0	0	0	0	281,022
55-Construction Services	17,056	0	40	225	0	0	0	0	17,322
80-System Testing+Startup	1,363	0	0	537	0	0	0	0	1,900
Total	\$327,798	\$424	\$7,318	\$47,700	\$0	\$0	\$0	\$0	\$383,241

Project Risk Assessment

N/A - The project is complete and in operation.

4X445 Federal Way Link Extension Managed by: DECM

Scope: Extension of light rail approximately 7.8 miles from S. 200th Street in the city of SeaTac to the Federal Way Transit Center. The extension generally parallels SR 99 and I-5 freeway with stations at Kent/Des Moines, South 272nd Star Lake park-and-ride and the Federal Way Transit Center. An increase of approximately 2,200 parking stalls for this extension.

Changes to authorized project allocation since 2017: None.

Budget year activities: Conclude the environmental process and preliminary engineering. Transition to final design and initiate right-of-way acquisition activities.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Funding Commitment (\$000)	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 4-Enter Final Design			
Baseline: \$0	Baseline: N/A	2017 \$000s \$1,617,253	Voter-Approved Cost Estimate: \$1,140,867
2017 TIP: \$412,625	2017 : 2024	YOE \$000s \$2,056,218	2017 Cost Estimate: \$1,140,867
2018 TIP: \$412,625	2018 : 2024		2018 Cost Estimate: \$1,617,253

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$57,354	\$116,533	\$147,022	\$79,543	\$7,488	\$2,086	\$1,511	\$1,089	\$412,625
Total	\$57,354	\$116,533	\$147,022	\$79,543	\$7,488	\$2,086	\$1,511	\$1,089	\$412,625

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$9,097	\$3,804	\$1,575	\$439	\$0	\$0	\$0	\$0	\$14,915
20-Prelim Engineering/Env Review	39,804	3,000	605	0	0	0	0	0	43,409
30-Final Design+Specifications	298	700	868	508	0	0	0	0	2,374
35-Third Party	1,639	2,240	3,653	3,269	3,160	2,086	1,511	1,089	18,646
40-Row Acquisition+Permits	6,516	100,129	107,500	55,612	4,328	0	0	0	274,085
50-Construction	0	2,000	11,524	0	0	0	0	0	13,524
55-Construction Services	0	4,660	21,298	19,714	0	0	0	0	45,672
Total	\$57,354	\$116,533	\$147,022	\$79,543	\$7,488	\$2,086	\$1,511	\$1,089	\$412,625

Project Risk Assessment

Uncertainties exist in design and third party coordination that could present schedule risks; Market conditions – price escalation, labor shortages; Instability in property values may also impact cost.

4X600	East Link Extension	Managed by: DECM
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Scope: Extension of light rail approximate 14 miles to East King County from downtown Seattle. and serving Mercer Island via I-90, Bellevue and the Overlake area of Redmond, with ten new light rail stations along the alignment that includes at-grade, elevated, bridges, and new and retrofitted tunnels. Revenue service to the Overlake Transit Center is forecasted for mid-2023.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete of final design and right-of-way acquisitions. Continue heavy construction and tunneling work in Bellevue. Continue design-build activities for SR 520 to Redmond Technology Center segment. Anticipate notices to proceed (NTP) for Seattle to South Bellevue segment; South Bellevue segment and Bel-Red segment to commence construction activities.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$3,677,150	Baseline:	2023	Voter-Approved Cost Estimate:	\$3,620,104
2017 TIP:	\$3,677,150	2017 :	2023	2017 Cost Estimate:	\$3,373,370
2018 TIP:	\$3,677,150	2018 :	2023	2018 Cost Estimate:	\$3,373,370

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$6,192	\$3,447	\$4,084	\$3,599	\$2,507	\$916	\$626	\$690	\$22,063
East King	1,025,756	571,044	676,643	596,291	415,393	151,820	103,772	114,367	3,655,087
Total	\$1,031,948	\$574,491	\$680,728	\$599,891	\$417,901	\$152,737	\$104,399	\$115,057	\$3,677,150

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$65,636	\$15,326	\$18,342	\$19,577	\$18,623	\$18,135	\$17,768	\$12,794	\$186,200
20-Prelim Engineering/Env Review	54,714	41	250	250	250	250	0	145	55,900
30-Final Design+Specifications	200,549	11,700	12,745	13,047	11,057	8,160	5,033	20,710	283,000
35-Third Party	14,294	8,082	8,607	7,827	5,567	4,721	1,516	1,535	52,150
40-Row Acquisition+Permits	254,657	9,400	11,800	9,781	1,373	633	0	10,506	298,150
50-Construction	396,827	497,492	591,929	513,022	346,639	96,828	51,834	49,728	2,544,300
55-Construction Services	45,271	32,450	37,056	36,387	34,392	24,010	28,247	19,638	257,450
Total	\$1,031,948	\$574,491	\$680,728	\$599,891	\$417,901	\$152,737	\$104,399	\$115,057	\$3,677,150

Project Risk Assessment

Managing interface coordination with multiple civil contracts to maintain the project schedule including those managed by third parties and the systems contractor. Risk of schedule delay is present due to limited availability of skilled labor in a competitive construction market, and potential inefficiencies inherent in multi-level coordination with both public and private utilities and local jurisdictions.

4X630**Downtown Redmond Link Extension****Managed by: PEPD**

Scope: Extension of light rail approximately 3.7 miles from Overlake Transit Center to Redmond Terminal Station in Downtown Redmond with two planned stations. In 2016 the Board approved budget to complete preliminary engineering to establish route and station locations for the future extension of East Link to Downtown Redmond.

As the project develops, this project name will remain but as described in the scope above combines with the capital program project - Redmond Technology Center to Downtown Redmond which funds the construction element of the project.

Changes to authorized project allocation since 2017: Increased by \$149.4 million for property acquisitions.

Budget year activities: Continue preliminary engineering and right of way acquisitions, coordinate design and develop agreements with City of Redmond, Washington Department of Transportation (WSDOT) and King County.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	3-Identify Preferred Alternative	Baseline:	N/A	Voter-Approved Cost Estimate:	\$1,128,425
Baseline:	\$0	2017 :	2024	2017 Cost Estimate:	\$1,128,425
2017 TIP:	\$28,617	2018 :	2024	2018 Cost Estimate:	\$1,157,139
2018 TIP:	\$178,026				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$10,137	\$157,268	\$10,621	\$0	\$0	\$0	\$0	\$0	\$178,026
Total	\$10,137	\$157,268	\$10,621	\$0	\$0	\$0	\$0	\$0	\$178,026

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,518	\$2,753	\$663	\$0	\$0	\$0	\$0	\$0	\$4,934
20-Prelim Engineering/Env Review	8,357	10,998	1,917	0	0	0	0	0	21,272
35-Third Party	110	2,161	479	0	0	0	0	0	2,750
40-Row Acquisition+Permits	152	140,156	6,762	0	0	0	0	0	147,070
55-Construction Services	0	1,200	800	0	0	0	0	0	2,000
Total	\$10,137	\$157,268	\$10,621	\$0	\$0	\$0	\$0	\$0	\$178,026

Project Risk Assessment

The authorized project allocation to date for the right of way phase is consistent with the Agency's Financial Plan. Due to market pricing pressure on right of way acquisition, the allocation to this phase faces a higher than normal inflationary pressure to the property acquisition budget. Potential changes to the design, new environmental issues and an additional scope demand from third party could present budget and schedule risks.

2018 Cashflow by Budget Approval

(in thousands)

System Expansion SOUNDER

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Preliminary Engineering									
300004 Sounder Maintenance Base	\$2,728	\$5,276	\$963	\$0	\$0	\$0	\$0	\$0	\$8,968
300019 Lakewood Station Improvements	278	0	125	0	0	0	0	0	404
300035 Kent Station Access Improvements	707	2,651	800	0	0	0	0	0	4,158
300040 Auburn Station Access Improvement	672	2,652	834	0	0	0	0	0	4,158
300087 North Sounder Parking and Access Improvements	6	718	1,050	737	0	0	0	0	2,511
Subtotal	4,392	11,297	3,772	737	0	0	0	0	20,198
Final Design & ROW									
300017 Puyallup Station Improvements	3,460	6,015	1,534	0	0	0	0	0	11,009
300018 Sumner Station Improvements	6,160	3,935	3,604	1,679	1,664	0	0	0	17,042
3X510 Sounder South Expanded Service	194,864	5,050	5,474	180	0	0	0	0	205,568
Subtotal	204,483	15,001	10,612	1,859	1,664	0	0	0	233,619
Baseline									
300021 Tacoma Trestle Track & Signal	113,663	5,864	41,490	0	0	0	0	0	161,017
300026 Sounder Yard Expansion	16,031	100	4,419	0	0	0	0	0	20,550
300027 Point Defiance Bypass	75,126	100	8,444	0	0	0	0	0	83,670
3X135 D St-M St Track & Signal	152,875	50	5,336	0	0	0	0	0	158,262
3X206 Mukilteo Station, S Platform	16,272	440	0	1,601	0	0	0	0	18,313
3X236 Tukwila Station	37,284	1,305	7,380	0	0	0	0	0	45,969
Subtotal	411,251	7,859	67,070	1,601	0	0	0	0	487,781
Program									
7X755 Sounder Fleet Expansion	46,922	5,263	15,014	0	0	0	0	0	67,200
Subtotal	46,922	5,263	15,014	0	0	0	0	0	67,200
Total	\$667,048	\$39,420	\$96,469	\$4,197	\$1,664	\$0	\$0	\$0	\$808,798

2018 Cashflow by Subarea
(in thousands)

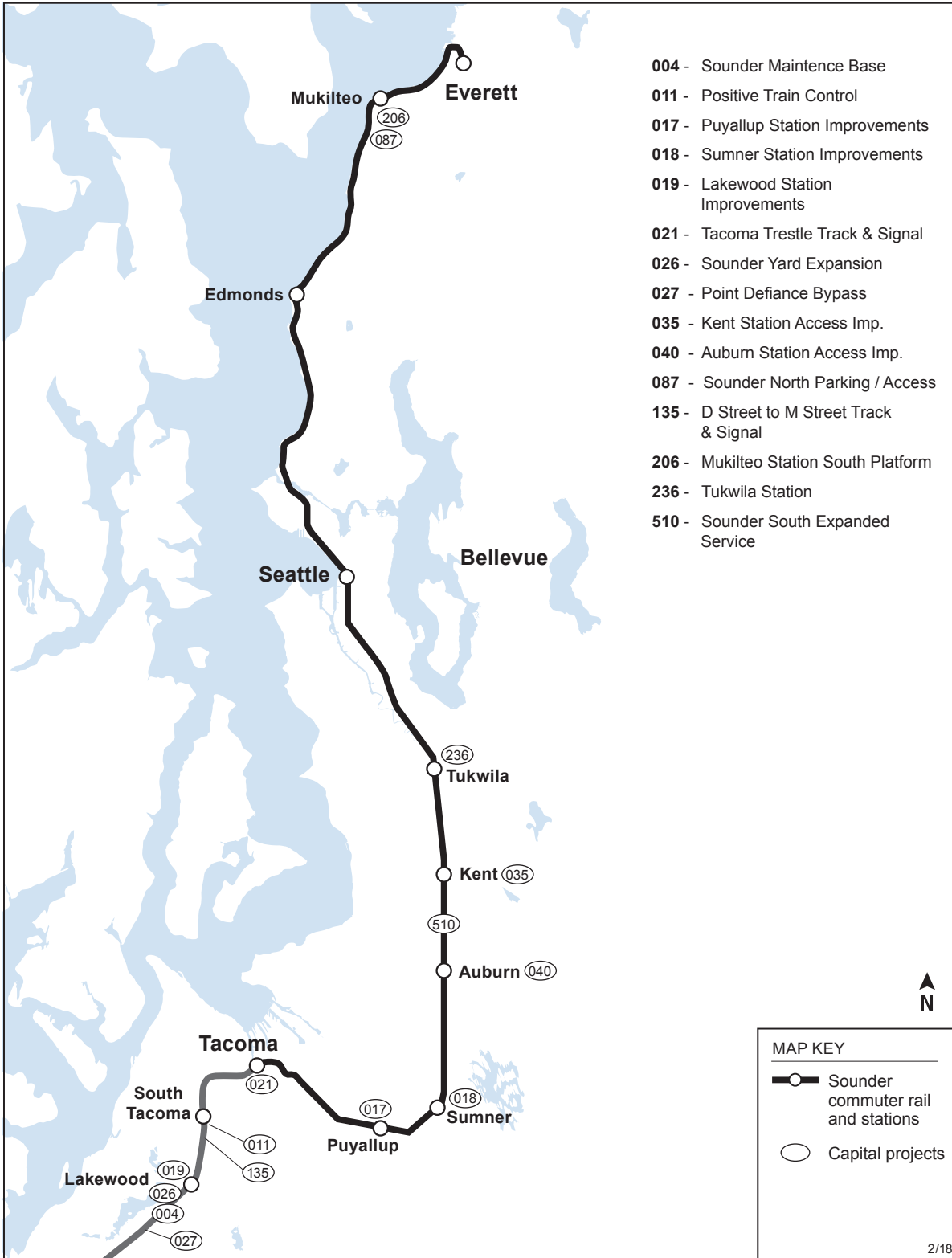
System Expansion
SOUNDER

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$16,687	\$1,949	\$1,194	\$2,338	\$0	\$0	\$0	\$0	\$22,169
3 - South King	47,095	6,661	11,339	0	0	0	0	0	65,094
5 - Pierce	603,265	30,810	83,936	1,859	1,664	0	0	0	721,535
Total	\$667,048	\$39,420	\$96,469	\$4,197	\$1,664	\$0	\$0	\$0	\$808,798

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
02-Operation+Maintenance-Agency	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42
10-Agency Administration	24,836	3,086	6,444	436	0	0	0	0	34,802
20-Prelim Engineering/Env Review	15,492	8,192	3,952	315	0	0	0	0	27,951
30-Final Design+Specifications	35,465	535	5,615	228	0	0	0	0	41,844
35-Third Party	1,532	4,993	4,858	1,727	1,664	0	0	0	14,774
40-Row Acquisition+Permits	249,923	9,468	8,522	91	0	0	0	0	268,005
50-Construction	261,902	6,630	44,731	1,294	0	0	0	0	314,558
55-Construction Services	20,950	1,253	7,331	105	0	0	0	0	29,640
70-Vehicles	55,860	5,263	15,014	0	0	0	0	0	76,138
80-System Testing+Startup	1,046	0	0	0	0	0	0	0	1,046
Total	\$667,048	\$39,420	\$96,469	\$4,197	\$1,664	\$0	\$0	\$0	\$808,798

SOUNDER CAPITAL PROJECTS



300004**Sounder Maintenance Base****Managed by: PEPD**

Scope: Construction of a new, approximately 40,000 square-foot railroad storage facility on the Sounder Rail Yard site between Steilacoom Boulevard SW and 100th Street SW in the City of Lakewood. The single-story building would contain maintenance bays, material storage areas, offices and facilities for employees. Supporting facilities such as roadways, site lighting, drainage facilities, and required utility infrastructure are included in the project.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue preliminary engineering and right of way appraisals and acquisitions. Phase gates 3&4 are anticipated in June 2018 and the project will enter final design

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	3-Identify Preferred Alternative				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$193,014
2017 TIP:	\$8,968	2017 :	2019	2017 Cost Estimate:	\$168,818
2018 TIP:	\$8,968	2018 :	2023	2018 Cost Estimate:	\$168,818

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$409	\$791	\$144	\$0	\$0	\$0	\$0	\$0	\$1,345
Pierce	2,319	4,485	819	0	0	0	0	0	7,623
Total	\$2,728	\$5,276	\$963	\$0	\$0	\$0	\$0	\$0	\$8,968

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$689	\$80	\$171	\$0	\$0	\$0	\$0	\$0	\$940
20-Prelim Engineering/Env Review	1,826	2,603	607	0	0	0	0	0	5,036
40-Row Acquisition+Permits	213	2,593	185	0	0	0	0	0	2,992
Total	\$2,728	\$5,276	\$963	\$0	\$0	\$0	\$0	\$0	\$8,968

Project Risk Assessment

Completion of the Sounder South Ridership Forecast and Fleet Size Analysis requires modification to conceptual design which may result in impact to the project cost and schedule.

300017**Puyallup Station Improvements****Managed by: DECM**

Scope: Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Puyallup Station. The purpose of the project is to provide increased parking access of approximately 650 stalls and improve access to the existing Sounder Puyallup Station for Sounder riders, bicyclists, bus riders and drivers. The project is being delivered via a design-build contracting strategy.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete design-build bridging documents, right-of-way appraisals and acquisitions. Start the Request for Proposal (RFP) process for the design-build and design-build/project management contracts.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	4-Enter Final Design			Voter-Approved Cost Estimate:	\$76,012
Baseline:	\$0	Baseline:	N/A	2017 Cost Estimate:	\$64,274
2017 TIP:	\$11,009	2017 :	2018	2018 Cost Estimate:	\$64,274
2018 TIP:	\$11,009	2018 :	2021		

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$3,460	\$6,015	\$1,534	\$0	\$0	\$0	\$0	\$0	\$11,009
Total	\$3,460	\$6,015	\$1,534	\$0	\$0	\$0	\$0	\$0	\$11,009

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$850	\$280	\$93	\$0	\$0	\$0	\$0	\$0	\$1,223
20-Prelim Engineering/Env Review	2,053	402	541	0	0	0	0	0	2,996
35-Third Party	0	100	5	0	0	0	0	0	105
40-Row Acquisition+Permits	557	5,108	890	0	0	0	0	0	6,555
55-Construction Services	0	125	5	0	0	0	0	0	130
Total	\$3,460	\$6,015	\$1,534	\$0	\$0	\$0	\$0	\$0	\$11,009

Project Risk Assessment

Uncertainties in right of way acquisition, third party and jurisdictional requirements present budget and schedule risks.

300018**Sumner Station Improvements****Managed by: DECM**

Scope: Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Sumner Station. The purpose of the project is to provide increased parking access of approximately 400-600 stalls and improve access to the existing Sounder Puyallup Station for Sounder riders, bicyclists, bus riders and drivers. The project is being delivered via a design-build contracting strategy.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete design-build bridging documents, right-of-way acquisitions. Start the Request for Proposal (RFP) process for the design-build contract and award the design-build/project management contract.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	4-Enter Final Design				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$53,542
2017 TIP:	\$17,042	2017 :	2020	2017 Cost Estimate:	\$49,068
2018 TIP:	\$17,042	2018 :	2021	2018 Cost Estimate:	\$49,068

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$6,160	\$3,935	\$3,604	\$1,679	\$1,664	\$0	\$0	\$0	\$17,042
Total	\$6,160	\$3,935	\$3,604	\$1,679	\$1,664	\$0	\$0	\$0	\$17,042

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$846	\$456	\$131	\$0	\$0	\$0	\$0	\$0	\$1,433
20-Prelim Engineering/Env Review	2,058	402	536	0	0	0	0	0	2,996
35-Third Party	340	1,172	2,820	1,664	1,664	0	0	0	7,658
40-Row Acquisition+Permits	2,818	1,498	98	0	0	0	0	0	4,414
50-Construction	97	0	0	16	0	0	0	0	113
55-Construction Services	0	408	20	0	0	0	0	0	428
Total	\$6,160	\$3,935	\$3,604	\$1,679	\$1,664	\$0	\$0	\$0	\$17,042

Project Risk Assessment

Uncertainties in right of way acquisition, third party and jurisdictional requirements present budget and schedule risks.

300019 Lakewood Station Improvements Managed by: DECM

Scope: Construction of a pedestrian bridge in the city of Lakewood connecting the community to the northwest of Lakewood Station with the station. This work is partly funded by a capped contribution from Sound Transit. Additional access improvements contemplated in ST2 and reflected in the ST2 cost estimate were evaluated through the Station Access and Demand Study project and may be proposed in the future.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project on hold.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending	Baseline:	N/A	Voter-Approved Cost Estimate:	\$47,625
Baseline:	\$0	2017 :	2016	2017 Cost Estimate:	\$40,512
2017 TIP:	\$404	2018 :	2016	2018 Cost Estimate:	\$40,512
2018 TIP:	\$404				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$278	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$404
Total	\$278	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$404

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$27	\$0	\$13	\$0	\$0	\$0	\$0	\$0	\$40
35-Third Party	252	0	112	0	0	0	0	0	363
Total	\$278	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$404

Project Risk Assessment	
N/A	

300021**Tacoma Trestle Track & Signal****Managed by: DECM**

Scope: Construction of a double-track replacement for the single-track Tacoma Trestle between the Tacoma Dome Station and M Street. Construction will be completed in 2Q 2018.

Changes to authorized project allocation since 2017: Moved \$48 thousand from project budget to Environmental Monitoring Program budget.

Budget year activities: Reach completion of construction activities.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$161,065	Baseline:	2015	Voter-Approved Cost Estimate:	\$82,826
2017 TIP:	\$161,065	2017 :	2018	2017 Cost Estimate:	\$160,246
2018 TIP:	\$161,017	2018 :	2018	2018 Cost Estimate:	\$160,246

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$113,663	\$5,864	\$41,490	\$0	\$0	\$0	\$0	\$0	\$161,017
Total	\$113,663	\$5,864	\$41,490	\$0	\$0	\$0	\$0	\$0	\$161,017

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4,498	\$814	\$2,782	\$0	\$0	\$0	\$0	\$0	\$8,094
20-Prelim Engineering/Env Review	4,062	0	0	0	0	0	0	0	4,062
30-Final Design+Specifications	10,707	200	4,292	0	0	0	0	0	15,198
35-Third Party	287	60	1,435	0	0	0	0	0	1,781
40-Row Acquisition+Permits	6,666	0	3,395	0	0	0	0	0	10,061
50-Construction	83,062	4,290	26,887	0	0	0	0	0	114,240
55-Construction Services	4,382	500	2,699	0	0	0	0	0	7,581
Total	\$113,663	\$5,864	\$41,490	\$0	\$0	\$0	\$0	\$0	\$161,017

Project Risk Assessment

There is a risk as the project approaches completion that a construction claim would have impact to the project budget.

300026**Sounder Yard Expansion****Managed by: DECM**

Scope: Increase track capacity at the layover facility in Lakewood to store up to seven train sets. The project will also complete drainage improvements and increase electrical power to accommodate additional wayside power and yard lighting. The increase in capacity is needed for the additional ST2 Sounder South service that began in 2016 before the Sounder Yard & Shops Facility project is complete. Funds budgeted in 2019 are considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$20,550	Baseline:	2014	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$20,550	2017 :	2017	2017 Cost Estimate:	\$22,563
2018 TIP:	\$20,550	2018 :	2017	2018 Cost Estimate:	\$22,563

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$8,432	\$53	\$2,324	\$0	\$0	\$0	\$0	\$0	\$10,809
Pierce	7,599	47	2,095	0	0	0	0	0	9,741
Total	\$16,031	\$100	\$4,419	\$0	\$0	\$0	\$0	\$0	\$20,550

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,192	\$70	\$163	\$0	\$0	\$0	\$0	\$0	\$1,425
20-Prelim Engineering/Env Review	1,208	0	596	0	0	0	0	0	1,804
40-Row Acquisition+Permits	185	0	215	0	0	0	0	0	400
50-Construction	12,245	30	3,245	0	0	0	0	0	15,521
55-Construction Services	1,200	0	200	0	0	0	0	0	1,400
Total	\$16,031	\$100	\$4,419	\$0	\$0	\$0	\$0	\$0	\$20,550

Project Risk Assessment

N/A

300027 **Point Defiance Bypass** **Managed by: DECM**

Scope: Sound Transit will administer the construction of the Point Defiance Bypass Project which will construct a new second track adjacent to Sound Transit's existing main line between South Tacoma (South 66th Street Bridge) and Lakewood (Bridgeport Way) and install new rails, ties, and ballast on Sound Transit's existing track between Lakewood and Nisqually. Improvements will be made at the connection to BNSF's main line near Nisqually and safety improvements will be made at some existing at-grade crossings within the project corridor.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	7-Transition to Operations				
Baseline:	\$83,670	Baseline:	2015	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$83,670	2017 :	2017	2017 Cost Estimate:	N/A
2018 TIP:	\$83,670	2018 :	2017	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$75,126	\$100	\$8,444	\$0	\$0	\$0	\$0	\$0	\$83,670
Total	\$75,126	\$100	\$8,444	\$0	\$0	\$0	\$0	\$0	\$83,670

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
02-Operation+Maintenance-Agency	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42
10-Agency Administration	2,702	50	407	0	0	0	0	0	3,159
30-Final Design+Specifications	103	0	97	0	0	0	0	0	200
40-Row Acquisition+Permits	52	0	348	0	0	0	0	0	400
50-Construction	65,372	50	4,201	0	0	0	0	0	69,623
55-Construction Services	6,856	0	3,390	0	0	0	0	0	10,246
Total	\$75,126	\$100	\$8,444	\$0	\$0	\$0	\$0	\$0	\$83,670

Project Risk Assessment
N/A

300035**Kent Station Access Improvements****Managed by: PEPD**

Scope: Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Kent Station. The purpose of the project is to provide increased parking access of approximately 500 stalls and improve access to the existing Sounder Kent Station for Sounder riders, bicyclists, bus riders and drivers. The project is being delivered via a design-build contracting strategy.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue conceptual engineering design, environmental documentation, and right of way appraisals.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	3-Identify Preferred Alternative				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$39,462
2017 TIP:	\$831	2017 :	2018	2017 Cost Estimate:	\$65,000
2018 TIP:	\$4,158	2018 :	2023	2018 Cost Estimate:	\$65,000

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$707	\$2,651	\$800	\$0	\$0	\$0	\$0	\$0	\$4,158
Total	\$707	\$2,651	\$800	\$0	\$0	\$0	\$0	\$0	\$4,158

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$221	\$340	\$256	\$0	\$0	\$0	\$0	\$0	\$817
20-Prelim Engineering/Env Review	486	2,235	520	0	0	0	0	0	3,241
40-Row Acquisition+Permits	0	76	24	0	0	0	0	0	100
Total	\$707	\$2,651	\$800	\$0	\$0	\$0	\$0	\$0	\$4,158

Project Risk Assessment

Inability to achieve local jurisdiction consensus on scope may impact project budget and schedule.

300040 Auburn Station Access Improvement Managed by: PEPD

Scope: Project includes alternatives identification, screening, environmental documentation, design and construction of station additional parking of 500-600 parking stalls while providing access improvements at or around the existing Sounder Auburn Station for Sounder riders, bicyclists, bus riders and drivers. The project is being delivered via a design-build contracting strategy.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue conceptual engineering design, environmental documentation, and right of way appraisals.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	3-Identify Preferred Alternative	Baseline:	N/A	Voter-Approved Cost Estimate:	\$41,287
Baseline:	\$0	2017 :	2018	2017 Cost Estimate:	\$60,000
2017 TIP:	\$831	2018 :	2023	2018 Cost Estimate:	\$60,000
2018 TIP:	\$4,158				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$672	\$2,652	\$834	\$0	\$0	\$0	\$0	\$0	\$4,158
Total	\$672	\$2,652	\$834	\$0	\$0	\$0	\$0	\$0	\$4,158

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$185	\$341	\$291	\$0	\$0	\$0	\$0	\$0	\$817
20-Prelim Engineering/Env Review	486	2,235	520	0	0	0	0	0	3,241
40-Row Acquisition+Permits	0	76	24	0	0	0	0	0	100
Total	\$672	\$2,652	\$834	\$0	\$0	\$0	\$0	\$0	\$4,158

Project Risk Assessment

Inability to achieve local jurisdiction consensus on scope may impact project budget and schedule.

300087 North Sounder Parking and Access Improvements Managed by: PEPD

Scope: Provide additional parking at Mukilteo and Edmonds Sounder Stations and an opportunity for access improvements prioritized per Sound Transit's Access Policy

Changes in project allocation since 2017: New project.

Budget year activities: Begin procurement process and issue request for proposal for preliminary engineering consultant to begin alternatives development and screening.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$44,030
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	\$44,030
2018 TIP:	\$2,511	2018 :	2020	2018 Cost Estimate:	\$44,030

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$6	\$718	\$1,050	\$737	\$0	\$0	\$0	\$0	\$2,511
Total	\$6	\$718	\$1,050	\$737	\$0	\$0	\$0	\$0	\$2,511

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$6	\$325	\$325	\$326	\$0	\$0	\$0	\$0	\$982
20-Prelim Engineering/Env Review	0	315	632	315	0	0	0	0	1,262
35-Third Party	0	61	61	63	0	0	0	0	185
40-Row Acquisition+Permits	0	17	32	33	0	0	0	0	82
Total	\$6	\$718	\$1,050	\$737	\$0	\$0	\$0	\$0	\$2,511

Project Risk Assessment

The project is very early in the development process with potential challenges in city coordination on parking and access improvements to Sounder stations, in right of way acquisition, and coordination with BNSF for North Sounder Parking.

3X135**D St-M St Track & Signal****Managed by: DECM**

Scope: Design and construct a 1.4 mile rail connection between Tacoma Dome Station and Sound Transit owned right-of-way at the Lakewood Subdivision Line. Construction included; rail work, an overpass at Pacific Avenue, roadway improvements, utility relocations and centralized traffic control for the rail line. The project completed construction and began Sounder service between Lakewood and Tacoma in October 2012. Follow-on work identified is complete. Legal issues need resolution prior to project completion anticipated by the end of 2018.

Funds cash flowed in 2019 are considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Finalize completed improvements/follow-on work with local jurisdiction and closeout this project.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	7-Transition to Operations				
Baseline:	\$161,581	Baseline:	2012	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$158,262	2017 :	2016	2017 Cost Estimate:	N/A
2018 TIP:	\$158,262	2018 :	2016	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$152,875	\$50	\$5,336	\$0	\$0	\$0	\$0	\$0	\$158,262
Total	\$152,875	\$50	\$5,336	\$0	\$0	\$0	\$0	\$0	\$158,262

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$8,933	\$50	\$623	\$0	\$0	\$0	\$0	\$0	\$9,606
20-Prelim Engineering/Env Review	1,733	0	0	0	0	0	0	0	1,733
30-Final Design+Specifications	17,308	0	804	0	0	0	0	0	18,112
35-Third Party	605	0	241	0	0	0	0	0	846
40-Row Acquisition+Permits	42,144	0	1,485	0	0	0	0	0	43,629
50-Construction	66,980	0	1,583	0	0	0	0	0	68,563
55-Construction Services	5,173	0	600	0	0	0	0	0	5,773
70-Vehicles	8,953	0	0	0	0	0	0	0	8,953
80-System Testing+Startup	1,046	0	0	0	0	0	0	0	1,046
Total	\$152,875	\$50	\$5,336	\$0	\$0	\$0	\$0	\$0	\$158,262

Project Risk Assessment

The project is complete and in operation.

3X206**Mukilteo Station, S Platform****Managed by: DECM**

Scope: The Mukilteo Station South Platform project includes the second platform, stair, and elevator towers for both platforms and the pedestrian bridge connecting them.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue follow-on work and project closeout. Budget projected in 2020 should be considered surplus.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$18,313	Baseline:	2009	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$18,313	2017 :	2016	2017 Cost Estimate:	N/A
2018 TIP:	\$18,313	2018 :	2016	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$16,272	\$440	\$0	\$1,601	\$0	\$0	\$0	\$0	\$18,313
Total	\$16,272	\$440	\$0	\$1,601	\$0	\$0	\$0	\$0	\$18,313

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,567	\$100	\$0	\$111	\$0	\$0	\$0	\$0	\$1,777
30-Final Design+Specifications	2,271	10	0	228	0	0	0	0	2,509
35-Third Party	34	0	0	1	0	0	0	0	35
40-Row Acquisition+Permits	1,720	0	0	58	0	0	0	0	1,778
50-Construction	8,956	310	0	1,098	0	0	0	0	10,363
55-Construction Services	1,725	20	0	105	0	0	0	0	1,850
Total	\$16,272	\$440	\$0	\$1,601	\$0	\$0	\$0	\$0	\$18,313

Project Risk Assessment

N/A - The project is complete and in operation.

3X236**Tukwila Station****Managed by: DECM**

Scope: Construction of a new permanent commuter rail station to replace the existing temporary Tukwila Sounder Station on Sound Transit owned property at Longacres Way in Tukwila. The project includes two 600-foot-long platforms with shelters, ADA compliant ramps, stairs, ticket vending machines, improvements to the underpass connecting the two platforms, a bus transit area with shelters, 390 car parking stalls, 68 bicycle parking spaces, and underground water quality and stormwater detention facilities.
Funds cash flowed in 2019 are considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete follow-on work and project close out.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$45,969	Baseline:	2010	Voter-Approved Cost Estimate:	\$43,631
2017 TIP:	\$45,969	2017 :	2016	2017 Cost Estimate:	\$54,148
2018 TIP:	\$45,969	2018 :	2016	2018 Cost Estimate:	\$54,148

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$37,284	\$1,305	\$7,380	\$0	\$0	\$0	\$0	\$0	\$45,969
Total	\$37,284	\$1,305	\$7,380	\$0	\$0	\$0	\$0	\$0	\$45,969

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,837	\$30	\$906	\$0	\$0	\$0	\$0	\$0	\$2,773
20-Prelim Engineering/Env Review	1,101	0	0	0	0	0	0	0	1,101
30-Final Design+Specifications	4,600	25	299	0	0	0	0	0	4,924
40-Row Acquisition+Permits	10,376	0	633	0	0	0	0	0	11,009
50-Construction	17,756	1,200	5,125	0	0	0	0	0	24,081
55-Construction Services	1,614	50	417	0	0	0	0	0	2,081
Total	\$37,284	\$1,305	\$7,380	\$0	\$0	\$0	\$0	\$0	\$45,969

Project Risk Assessment

N/A. The project is complete and in operation.

3X510**Sounder South Expanded Service****Managed by: DECM**

Scope: Purchase of four additional commuter rail easements between Seattle and Lakewood from Burlington Northern Santa Fe (BNSF) Railroad. BNSF is responsible for track and signal improvements; Sound Transit maintains responsibility for environmental permitting and mitigation. The fourth easement payment was made in 2015.

Sound Transit is working with BNSF and federal and local environmental regulatory agencies on environmental impacts and mitigation. A fish passage culvert will be designed by ST and construction will be performed by King County. Construction to be complete by April 2019.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete design and prepare to begin construction of fish culvert during the construction window in 2019

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	4-Enter Final Design	Baseline:	N/A	Voter-Approved Cost Estimate:	\$248,230
Baseline:	\$0	2017 :	2018	2017 Cost Estimate:	\$314,704
2017 TIP:	\$201,968	2018 :	2019	2018 Cost Estimate:	\$314,704
2018 TIP:	\$205,568				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$194,864	\$5,050	\$5,474	\$180	\$0	\$0	\$0	\$0	\$205,568
Total	\$194,864	\$5,050	\$5,474	\$180	\$0	\$0	\$0	\$0	\$205,568

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,266	\$150	\$283	\$0	\$0	\$0	\$0	\$0	\$1,700
20-Prelim Engineering/Env Review	479	0	0	0	0	0	0	0	479
30-Final Design+Specifications	477	300	123	0	0	0	0	0	900
35-Third Party	14	3,600	186	0	0	0	0	0	3,800
40-Row Acquisition+Permits	185,192	100	1,193	0	0	0	0	0	186,485
50-Construction	7,435	750	3,689	180	0	0	0	0	12,054
55-Construction Services	0	150	0	0	0	0	0	0	150
Total	\$194,864	\$5,050	\$5,474	\$180	\$0	\$0	\$0	\$0	\$205,568

Project Risk Assessment

Construction of the environmental fish passage culvert is restricted to a window of time during the fish cycle posing a schedule risk; and cost risk related to possible ROW access required during construction.

7X755	Sounder Fleet Expansion	Managed by: Operations
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Scope: Fleet expansion to add train sets to support additional trips between Seattle and Lakewood. The number of coaches and cab cars that will be procured will be refined based on ridership trends and forecasts. In 2012, three locomotives were ordered and received from Motive Power, Inc. Nine cabs were ordered in 2013 from Bombardier and were received in 2015 and 2016.

During 2017, the Board adopted Resolution R2017-28 increasing the project allocation to date for this project by \$17,670,000 to add three cab cars and one locomotive to the fleet.

Changes to authorized project allocation since 2017: Increased by \$17.6M to purchase one refurbished Tier 3 locomotive and three new passenger cars.

Budget year activities: Payment for one refurbished locomotive.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$38,830
2017 TIP: \$67,200	2017 : 2017	2017 Cost Estimate: \$48,595
2018 TIP: \$67,200	2018 : 2019	2018 Cost Estimate: \$48,595

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$46,922	\$5,263	\$15,014	\$0	\$0	\$0	\$0	\$0	\$67,200
Total	\$46,922	\$5,263	\$15,014	\$0	\$0	\$0	\$0	\$0	\$67,200

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15
70-Vehicles	46,907	5,263	15,014	0	0	0	0	0	67,185
Total	\$46,922	\$5,263	\$15,014	\$0	\$0	\$0	\$0	\$0	\$67,200

Project Risk Assessment
Procurement of locomotive is dependent on a qualified locomotive being available as well as the cab cars. The low number of cab cars requires a collective of several small orders to generate a large enough order to make the procurement cost effective for both the manufacturer and the agency. As such the anticipated schedule for procurement must address several variables to be successful.

2018 Cashflow by Budget Approval
(in thousands)

System Expansion

REGIONAL EXPRESS

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Preliminary Engineering									
500005 ST Express Bus Base	\$1,156	\$587	\$3,799	\$266	\$0	\$0	\$0	\$0	\$5,808
500050 I-405 Bus Rapid Transit	501	35,553	35,270	14,302	2,427	0	0	0	88,053
500051 SR 522 Bus Rapid Transit	295	5,781	5,781	5,807	892	0	0	0	18,556
500086 Bus on Shoulder Project	24	1,180	821	1,853	0	0	0	0	3,878
Subtotal	1,976	43,101	45,671	22,228	3,319	0	0	0	116,295
Final Design & ROW									
500030 Bothell Transit Related Improvements	6	0	5,034	0	0	0	0	0	5,040
Subtotal	6	0	5,034	0	0	0	0	0	5,040
Baseline									
5X387 I-90 Two-Way Transit & HOV Operations, Stage 3	183,397	4,955	1,800	1,050	1,850	2,800	2,800	26,996	225,648
Subtotal	183,397	4,955	1,800	1,050	1,850	2,800	2,800	26,996	225,648
Program									
700720 ST Express Fleet Expansion	8,451	15,357	0	15,948	0	0	0	0	39,757
Subtotal	8,451	15,357	0	15,948	0	0	0	0	39,757
Total	\$193,830	\$63,414	\$52,505	\$39,226	\$5,169	\$2,800	\$2,800	\$26,996	\$386,740

2018 Cashflow by Subarea
(in thousands)

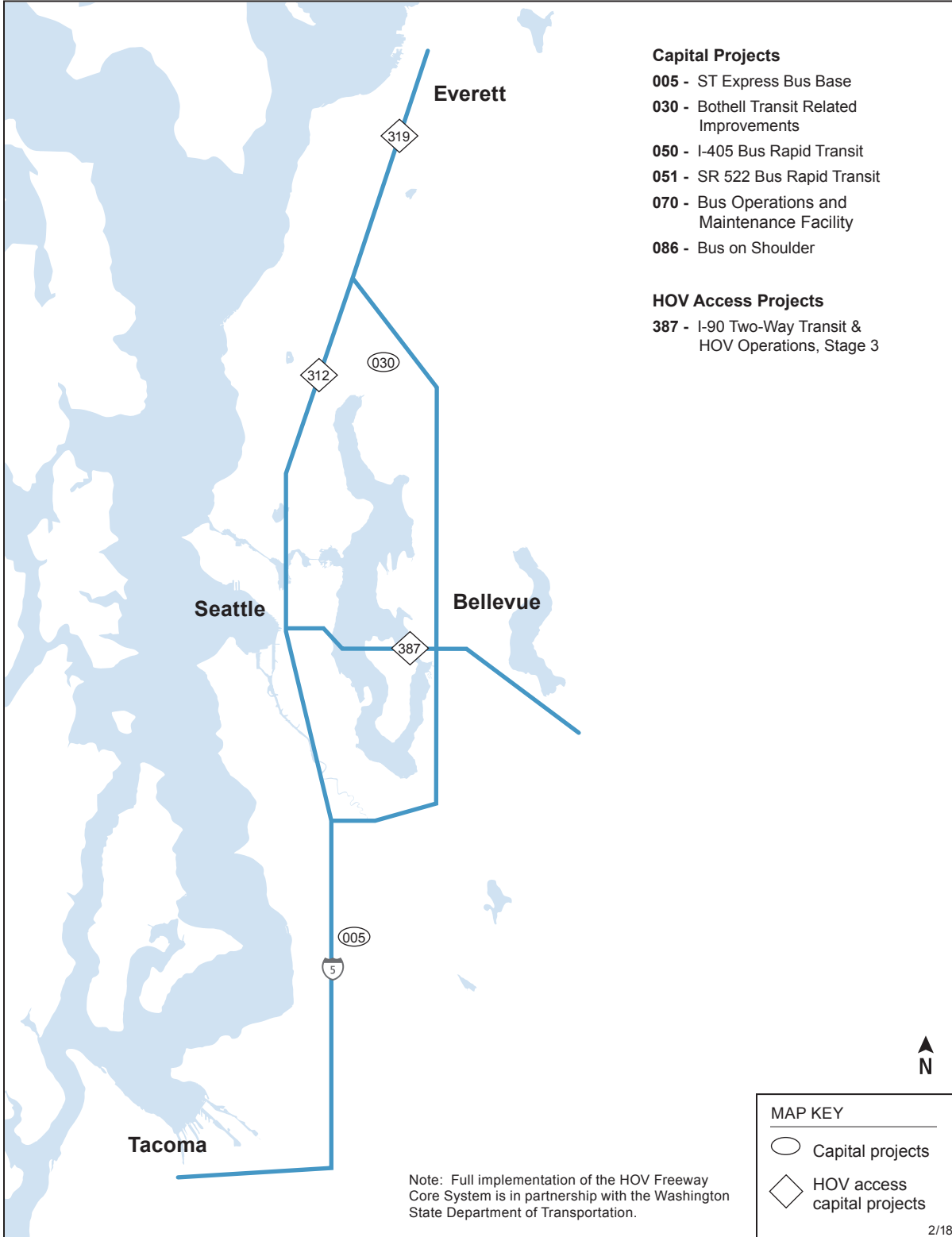
System Expansion
REGIONAL EXPRESS

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$1,288	\$3,603	\$2,125	\$3,149	\$80	\$0	\$0	\$0	\$10,245
2 - North King	168	3,284	3,284	3,298	507	0	0	0	10,540
3 - South King	1,166	9,435	7,953	5,337	498	0	0	0	24,388
4 - East King	190,568	45,900	37,939	26,112	4,083	2,800	2,800	26,996	337,198
5 - Pierce	640	1,156	1,169	1,316	0	0	0	0	4,281
Total	\$193,829	\$63,378	\$52,470	\$39,212	\$5,167	\$2,800	\$2,800	\$26,996	\$386,652

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3,329	\$6,236	\$6,460	\$6,258	\$2,323	\$50	\$50	\$992	\$25,698
20-Prelim Engineering/Env Review	2,347	15,746	16,244	13,417	0	0	0	0	47,754
30-Final Design+Specifications	18,005	40	0	0	0	0	0	4,076	22,121
35-Third Party	0	1,180	5,412	412	208	0	0	0	7,212
40-Row Acquisition+Permits	96	19,824	22,639	2,191	838	0	0	0	45,588
50-Construction	161,602	5,030	1,750	1,000	1,800	2,750	2,750	21,928	198,610
70-Vehicles	8,451	15,357	0	15,948	0	0	0	0	39,757
Total	\$193,830	\$63,414	\$52,505	\$39,226	\$5,169	\$2,800	\$2,800	\$26,996	\$386,740

REGIONAL EXPRESS CAPITAL PROJECTS



500005	ST Express Bus Base	Managed by: PEPD
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Scope: Sound Transit is evaluating constructing an ST Express Bus Base for operating and maintaining the ST Express bus fleet. The Board has approved initial project development activities including confirmation of fleet operating assumptions, development of facilities and site programming evaluations and review of alternative project delivery methods.

Changes to authorized project allocation since 2017: None.

Budget year activities: Resume conceptual engineering and environmental documentation upon direction of the Board.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 1-Enter Project Development		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$217,582
2017 TIP: \$5,808	2017 : 2019	2017 Cost Estimate: \$210,299
2018 TIP: \$5,808	2018 : 2019	2018 Cost Estimate: \$210,299

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$207	\$105	\$680	\$48	\$0	\$0	\$0	\$0	\$1,040
South King	134	68	441	31	0	0	0	0	674
East King	538	273	1,766	124	0	0	0	0	2,701
Pierce	278	141	912	64	0	0	0	0	1,394
Total	\$1,156	\$587	\$3,799	\$266	\$0	\$0	\$0	\$0	\$5,808

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$356	\$72	\$376	\$40	\$0	\$0	\$0	\$0	\$844
20-Prelim Engineering/Env Review	798	505	3,380	80	0	0	0	0	4,763
40-Row Acquisition+Permits	3	10	42	146	0	0	0	0	201
Total	\$1,156	\$587	\$3,799	\$266	\$0	\$0	\$0	\$0	\$5,808

Project Risk Assessment
Uncertainties exist in siting, design, environmental, third party and jurisdictional requirements that present budget and schedule risks.

500030 **Bothell Transit Related Improvements** **Managed by: PEPD**

Scope: Capital contribution to transit center/park-and-ride project near SR 527/Bothell Way NE and NE 185th Street in the downtown Bothell area. Sound Transit and the city of Bothell would enter into an memorandum of understanding to confirm the responsibilities of each party, the project capital component(s) to receive funding, and the financial participation schedule.

Changes to authorized project allocation since 2017: None.

Budget year activities: None anticipated.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$6,539
2017 TIP:	\$5,040	2017 :	2018	2017 Cost Estimate:	\$5,040
2018 TIP:	\$5,040	2018 :	2019	2018 Cost Estimate:	\$5,040

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$6	\$0	\$5,034	\$0	\$0	\$0	\$0	\$0	\$5,040
Total	\$6	\$0	\$5,034	\$0	\$0	\$0	\$0	\$0	\$5,040

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$6	\$0	\$34	\$0	\$0	\$0	\$0	\$0	\$40
35-Third Party	0	0	5,000	0	0	0	0	0	5,000
Total	\$6	\$0	\$5,034	\$0	\$0	\$0	\$0	\$0	\$5,040

Project Risk Assessment	
N/A – This is a capped contribution project.	

500050 **I-405 Bus Rapid Transit** **Managed by: PEPD**

Scope: Design and establish a Bus Rapid Transit (BRT) system from the Lynnwood Transit Center to the Burien Transit Center via I-5, I-405, and SR 518, to include new and upgraded transit centers, flyer stops, new park-and-ride capacity, and access improvements to the stations. Additionally a bus operations and maintenance facility will be constructed to support both the I405 Bus Rapid Transit project and the SR 522 Bus Rapid Transit project.

Changes to authorized project allocation since 2017: Increased by \$42.4 million primarily for preliminary engineering.

Budget year activities: Present a budget amendment request to increase the project allocation to date to develop and issue request for proposal for preliminary engineering consultant to begin alternatives analysis for station locations, transit centers, and parking garages.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$950,093
2017 TIP:	\$45,650	2017 :	N/A	2017 Cost Estimate:	\$950,093
2018 TIP:	\$88,053	2018 :	2024	2018 Cost Estimate:	\$950,093

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$17	\$1,173	\$1,164	\$472	\$80	\$0	\$0	\$0	\$2,906
South King	103	7,288	7,230	2,932	498	0	0	0	18,051
East King	381	27,056	26,840	10,884	1,847	0	0	0	67,008
Total	\$500	\$35,518	\$35,235	\$14,287	\$2,425	\$0	\$0	\$0	\$87,965

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$408	\$3,785	\$3,785	\$4,068	\$1,627	\$0	\$0	\$0	\$13,673
20-Prelim Engineering/Env Review	0	11,704	8,988	8,288	0	0	0	0	28,980
35-Third Party	0	350	0	0	0	0	0	0	350
40-Row Acquisition+Permits	93	19,714	22,497	1,945	801	0	0	0	45,050
Total	\$501	\$35,553	\$35,270	\$14,302	\$2,427	\$0	\$0	\$0	\$88,053

Project Risk Assessment

This project is very early in the development process with right of way acquisition challenges, and the multi-jurisdiction coordination on stations and with WSDOT regarding dedicated lane for bus rapid transit usage.

500051**SR 522 Bus Rapid Transit****Managed by: PEPD**

Design and establish a Bus Rapid Transit (BRT) system from the South Shoreline light rail station at I-5 along the SR 522 corridor to UW Bothell with connecting service at lower frequencies to Woodinville, to include new and upgraded transit centers, new park-and-ride capacity, and access improvements to the stations

Changes in project allocation since 2017: New project.

Budget year activities: Continue procurement of preliminary engineering consultant to begin alternatives analysis for station locations, transit centers, and parking garages, as well as begin Third Party agreement with WSDOT for alternatives analysis

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$436,004
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	\$436,004
2018 TIP:	\$18,556	2018 :	N/A	2018 Cost Estimate:	\$436,004

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$168	\$3,284	\$3,284	\$3,298	\$507	\$0	\$0	\$0	\$10,540
East King	127	2,497	2,497	2,509	385	0	0	0	8,016
Total	\$295	\$5,781	\$5,781	\$5,807	\$892	\$0	\$0	\$0	\$18,556

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$295	\$1,882	\$1,882	\$1,882	\$647	\$0	\$0	\$0	\$6,588
20-Prelim Engineering/Env Review	0	3,437	3,437	3,438	0	0	0	0	10,312
35-Third Party	0	412	412	412	208	0	0	0	1,444
40-Row Acquisition+Permits	0	50	50	75	37	0	0	0	212
Total	\$295	\$5,781	\$5,781	\$5,807	\$892	\$0	\$0	\$0	\$18,556

Project Risk Assessment

The project is very early in the development process with challenges in multi-jurisdictional coordination on stations and dedicated lane for bus rapid transit usage, and in right of way acquisition

500086 **Bus on Shoulder Project** **Managed by: PEPD**

Scope: Enable buses to use shoulders on freeways and state route facilities during periods of congestion in general traffic and/or HOV lanes along I-5, I-405, SR 518 and SR 167.

Changes in project allocation since 2017: New project.

Budget year activities: initiate feasibility study task order with WSDOT to identify possible sites for future bus on shoulder operations, work order for construction of bus on shoulder site near Montlake Terrace (WSDOT had already completed PE work before this project was established)

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending			Voter-Approved Cost Estimate:	\$112,277
Baseline:	\$0	Baseline:	N/A	2017 Cost Estimate:	\$112,277
2017 TIP:	\$0	2017 :	N/A	2018 Cost Estimate:	\$112,277
2018 TIP:	\$3,878	2018 :	2020		

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$8	\$405	\$282	\$636	\$0	\$0	\$0	\$0	\$1,330
South King	8	405	282	636	0	0	0	0	1,330
Pierce	7	371	258	582	0	0	0	0	1,218
Total	\$24	\$1,180	\$821	\$1,853	\$0	\$0	\$0	\$0	\$3,878

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$24	\$332	\$332	\$217	\$0	\$0	\$0	\$0	\$905
20-Prelim Engineering/Env Review	0	100	439	1,611	0	0	0	0	2,150
35-Third Party	0	418	0	0	0	0	0	0	418
40-Row Acquisition+Permits	0	50	50	25	0	0	0	0	125
50-Construction	0	280	0	0	0	0	0	0	280
Total	\$24	\$1,180	\$821	\$1,853	\$0	\$0	\$0	\$0	\$3,878

Project Risk Assessment

The project is very early in the development process with challenges in coordination with WSDOT to determine where bus on shoulder is feasible and getting approval from FHWA and WSDOT for bus on shoulder operations

5X387

I-90 Two-Way Transit & HOV Operations, Stage 3

Managed by: DECM

Scope: Stage 3 of the I-90 Two-way Transit and HOV Operations project will provide reliable two-way transit and HOV operations eastbound and westbound on I-90 between 80th Avenue SE on Mercer Island and Rainier Avenue/I-5 in Seattle. This stage will also include the installation of screening on the shared pathway on the I-90 floating bridge. Upon completion of the Stage 3 project, the center roadway will be closed to allow the construction of East Link Extension to proceed.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue to follow the administrative process to complete the closeout of all open contracts.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction	Baseline:	N/A	Voter-Approved Cost Estimate:	\$109,222
Baseline:	\$225,648	2017 :	2017	2017 Cost Estimate:	\$225,648
2017 TIP:	\$225,648	2018 :	2017	2018 Cost Estimate:	\$225,648
2018 TIP:	\$225,648				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$183,397	\$4,955	\$1,800	\$1,050	\$1,850	\$2,800	\$2,800	\$26,996	\$225,648
Total	\$183,397	\$4,955	\$1,800	\$1,050	\$1,850	\$2,800	\$2,800	\$26,996	\$225,648

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$2,241	\$165	\$50	\$50	\$50	\$50	\$50	\$992	\$3,648
20-Prelim Engineering/Env Review	1,549	0	0	0	0	0	0	0	1,549
30-Final Design+Specifications	18,005	40	0	0	0	0	0	4,076	22,121
50-Construction	161,602	4,750	1,750	1,000	1,800	2,750	2,750	21,928	198,330
Total	\$183,397	\$4,955	\$1,800	\$1,050	\$1,850	\$2,800	\$2,800	\$26,996	\$225,648

Project Risk Assessment

Completion of Supervisory control and data acquisition (SCADA) system implementation and final commissioning may delay substantial completion and project closeout.

700720	ST Express Fleet Expansion	Managed by: Operations
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Scope: Procure and accept 38 buses to support the increase in peak hour bus service with an additional 32,000 hours of annualized peak hours in 2016 and an additional 15,000 hours of peak service hours to meet service level demands as a result of East Link construction, route congestion, ridership demands and appropriate bus spare ratio in 2017.

Changes to authorized project allocation since 2017: None.

Budget year activities: Accept delivery of 16 buses in 2018.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: None		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$43,242
2017 TIP: \$39,757	2017 : 2018	2017 Cost Estimate: \$61,066
2018 TIP: \$39,757	2018 : 2020	2018 Cost Estimate: \$61,066

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,056	\$1,920	\$0	\$1,994	\$0	\$0	\$0	\$0	\$4,970
South King	921	1,674	0	1,738	0	0	0	0	4,333
East King	6,119	11,119	0	11,546	0	0	0	0	28,784
Pierce	355	645	0	670	0	0	0	0	1,670
Total	\$8,451	\$15,357	\$0	\$15,948	\$0	\$0	\$0	\$0	\$39,757

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$8,451	\$15,357	\$0	\$15,948	\$0	\$0	\$0	\$0	\$39,757
Total	\$8,451	\$15,357	\$0	\$15,948	\$0	\$0	\$0	\$0	\$39,757

Project Risk Assessment
Some uncertainty exists with the composition of the fleet with bus type, size and fuel as well as our transit partners ability to base and maintain our buses as we approach base capacities.

2018 Cashflow by Budget Approval

(in thousands)

System Expansion
OTHER

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Preliminary Engineering									
600038 ORCA Next Generation	\$226	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$2,063	\$0	\$31,523
809100 ST3 Planning	22,866	3,000	1,600	551	0	0	0	24,631	52,648
Subtotal	23,092	4,527	5,251	12,935	7,637	4,035	2,063	24,631	84,171
Baseline									
6X668 SStart	17,829	2,134	4,900	5,455	3,128	854	156	14,812	49,267
Subtotal	17,829	2,134	4,900	5,455	3,128	854	156	14,812	49,267
Operating									
600668 SStart Operations & Maintenance	1,117	231	187	189	214	212	218	2,560	4,927
Subtotal	1,117	231	187	189	214	212	218	2,560	4,927
Program									
58 3X212 Fare Collection	8,513	195	254	735	397	360	299	4,118	14,870
59 5X410 Research & Technology	11,030	613	464	0	0	0	0	7,893	20,000
600016 Fare Administration	1,205	1,630	500	500	500	300	807	0	5,441
600039 Research and Business Development Program	51	300	225	192	375	0	0	0	1,143
600073 Transit System Access Program	0	7,750	12,750	12,000	12,000	12,000	11,754	73,885	142,139
600076 Innovation and Technology Program	6	4,250	3,200	4,181	5,689	7,272	8,066	73,939	106,604
601000 Efficiency & Sustainability Program	0	350	1,400	800	1,000	1,000	1,000	19,450	25,000
804300 Transit Oriented Development Planning Program	0	400	400	850	650	650	400	26,821	30,171
Subtotal	20,805	15,488	19,193	19,258	20,611	21,583	22,326	206,105	345,369
Total	\$62,843	\$22,379	\$29,531	\$37,836	\$31,589	\$26,684	\$24,763	\$248,108	\$483,733

2018 Cashflow by Subarea
(in thousands)

System Expansion
OTHER

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$3,747	\$1,825	\$3,105	\$3,116	\$2,815	\$2,584	\$2,454	\$17,393	\$37,040
2 - North King	4,433	2,103	3,740	3,721	3,182	2,649	2,438	18,842	41,109
3 - South King	6,654	2,067	3,603	3,732	3,175	2,732	2,529	19,547	44,039
4 - East King	7,949	2,518	4,627	4,718	3,771	2,844	2,511	21,963	50,901
5 - Pierce	4,676	1,796	3,015	3,092	2,795	2,617	2,494	17,629	38,114
6 - Systemwide	35,383	12,070	11,440	19,457	15,851	13,257	12,336	152,734	272,530
Total	\$62,843	\$22,379	\$29,531	\$37,836	\$31,589	\$26,684	\$24,763	\$248,108	\$483,733

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
01-Operation+Maintenance	\$376	\$96	\$100	\$103	\$106	\$109	\$112	\$487	\$1,488
02-Operation+Maintenance-Agency	741	135	87	86	108	103	106	2,073	3,439
10-Agency Administration	7,535	3,837	4,328	4,733	5,749	4,933	4,009	29,569	64,693
20-Prelim Engineering/Env Review	21,844	7,375	4,325	3,717	4,203	5,178	5,651	99,248	151,541
26-Research+ Technology	7,879	3,203	3,888	11,763	6,384	3,586	2,856	6,335	45,893
30-Final Design+Specifications	0	100	150	150	150	150	150	2,918	3,768
35-Third Party	0	5,000	10,000	10,000	10,000	10,000	10,000	69,385	124,385
40-Row Acquisition+Permits	7	0	0	200	300	350	250	8,189	9,296
50-Construction	7,942	1,000	2,279	2,160	1,997	1,960	1,612	15,544	34,494
61-Art	16,519	1,634	4,375	4,925	2,593	314	16	14,362	44,737
Total	\$62,843	\$22,379	\$29,531	\$37,836	\$31,589	\$26,684	\$24,763	\$248,108	\$483,733

3X212	Fare Collection	Managed by: FIT
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Scope: Maintain and upgrade Agency fare collection and enforcement systems, as required, including: Ticket Vending Machines (TVMs), One Regional Card for All (ORCA) payment reader system for Link, secure payment requirements, and electronic citation system and hardware for fare validation and enforcement.

Changes to authorized project allocation since 2017: None.

Budget year activities: Maintain ticket vending machines (TVMs) already in service by installing a system-wide upgrade to the operating software that will improve system security compliance and performance; continue implementation of electronic citation system for fare enforcement.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$14,870	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$14,870	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,890	\$43	\$56	\$163	\$88	\$80	\$66	\$914	\$3,301
South King	3,073	70	92	265	143	130	108	1,486	5,368
East King	238	5	7	21	11	10	8	115	416
Pierce	3,312	76	99	286	154	140	116	1,602	5,785
Total	\$8,513	\$195	\$254	\$735	\$397	\$360	\$299	\$4,118	\$14,870

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$421	\$195	\$0	\$0	\$0	\$0	\$41	\$244	\$901
20-Prelim Engineering/Env Review	150	0	0	0	0	0	0	0	150
50-Construction	7,942	0	254	735	397	360	258	3,874	13,820
Total	\$8,513	\$195	\$254	\$735	\$397	\$360	\$299	\$4,118	\$14,870

Project Risk Assessment

The current budget and schedule is based on early planning estimates for rehabilitation and replacement for these assets. The costs are at high risk until more detailed assessment of the condition of the fielded assets and associated repair and replacement costs are developed.

5X410 **Research & Technology** **Managed by: FIT**

Scope: Assess and implement new transit technologies to improve the agency's operational effectiveness, efficiency and customer experience. This program focuses on system wide security and safety technology, real-time service information and passenger communications, and deploying applications to manage operations better.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue work on open transit data and customer facing applications. Improve rider alert systems and Sounder real-time arrival/departure information.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$20,000	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$20,000	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$11,030	\$613	\$464	\$0	\$0	\$0	\$0	\$7,893	\$20,000
Total	\$11,030	\$613	\$464	\$0	\$0	\$0	\$0	\$7,893	\$20,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,505	\$150	\$0	\$0	\$0	\$0	\$0	\$1,445	\$3,100
20-Prelim Engineering/Env Review	1,987	0	0	0	0	0	0	113	2,100
26-Research+Technology	7,539	463	464	0	0	0	0	6,335	14,800
Total	\$11,030	\$613	\$464	\$0	\$0	\$0	\$0	\$7,893	\$20,000

Project Risk Assessment

Elements of this program are in various stages of design and include new technologies that require custom software development which creates budget and schedule risk while a project goes from an idea or concept to a fully scoped project. Extensive coordination with external agencies adds level of schedule risk.

600016	Fare Administration	Managed by: FIT
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Scope: Manage the fares, pricing and fare collection program for Sound Transit. Provides funding for the creation and installation of fare system enhancements to the existing regional smart card System (ORCA). Additional elements of the program include: monitoring fare revenues and tracking performance, establishing pricing for cash fares, retail passes and business accounts; managing fare change processes; Title Vi analyses and mitigation; administering Sound Transit fare policy; and maintaining fare elasticity and revenue projection models.

Changes to authorized project allocation since 2017: Reduced by \$8.4 million to recognize transfer of scope to the ORCA Next Generation project.

Budget year activities: Procure additional equipment for replacement prior to transition to next generation ORCA. Additional activities include, ongoing ORCA security updates, system enhancements, and fare change processes.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$13,806	2017 : 2023	2017 Cost Estimate: N/A
2018 TIP: \$5,441	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$1,205	\$1,630	\$500	\$500	\$500	\$300	\$807	\$0	\$5,441
Total	\$1,205	\$1,630	\$500	\$500	\$500	\$300	\$807	\$0	\$5,441

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20-Prelim Engineering/Env Review	1,089	200	50	0	0	0	14	0	1,353
26-Research+Technology	115	1,430	450	500	500	300	793	0	4,089
Total	\$1,205	\$1,630	\$500	\$500	\$500	\$300	\$807	\$0	\$5,441

Project Risk Assessment

ORCA is a regional universal fare payment system. The equipment and software technology that currently supports the program is approaching the end of its useful life. The risk to budget is the uncertainty of cost when the system scope to be designed and implemented has not been identified, nor has the associated equipment to support the program.

600038**ORCA Next Generation****Managed by: FIT**

Scope: Provide funding for Sound Transit's share of costs related to the planning, development and implementation of a next generation ORCA fare collection system. This system will replace the current regional ORCA fare collection system, which is nearing end of life. The next gen ORCA system will be an account-based system that will include the introduction of a customer mobile application, an improved website, new vending machines, an expanded retail network, faster product/value loading, and the flexibility to allow for additional integrations to improve customer experience and adapt as technology changes.

Changes in authorized project allocation since 2017: Increased by \$29.2 million.

Budget year activities: Issue contracts to Systems Integrator, Program Quality Assurance Consultant, and Data Storage and Reporting Platforms, to move from the procurement phase into the design phase of the program.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$2,297	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$31,523	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$226	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$2,063	\$0	\$31,523
Total	\$226	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$2,063	\$0	\$31,523

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$217	\$678	\$1,121	\$1,752	\$749	\$0	\$0	\$4,518
26-Research+Technology	226	1,310	2,974	11,263	5,884	3,286	2,063	0	27,005
Total	\$226	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$2,063	\$0	\$31,523

Project Risk Assessment

The program is schedule-driven so that it may be delivered prior to the sunset of the current ORCA system and in time for the region's planned transit expansions. While there is some schedule risk, it is actively being mitigated by focused schedule tracking and milestone achievement. Another key risk relates to the cutover from the current ORCA system to the next generation system. The program will work with the Systems Integrator to ensure that there will be as smooth a transition for customers as possible.

600039 Research and Business Development Program Managed by: PEPD

Scope: Research and develop business practices and strategic initiatives to improve regional mobility and system efficiency. Develop and implement programs to improve the match between market needs and system performance.

Changes to authorized project allocation since 2017: Reduced by \$369 thousand to reflect the reduction in project scope now assumed by the Fare Administration project.

Budget year activities: Research partnerships and vendor contract projects.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed:		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,508	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$1,143	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$51	\$300	\$225	\$192	\$375	\$0	\$0	\$0	\$1,143
Total	\$51	\$300	\$225	\$192	\$375	\$0	\$0	\$0	\$1,143

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34
20-Prelim Engineering/Env Review	16	300	225	192	375	0	0	0	1,108
Total	\$51	\$300	\$225	\$192	\$375	\$0	\$0	\$0	\$1,143

Project Risk Assessment

The project risk is minimal as the policy review is limited by available funds.

600073	Transit System Access Program	Managed by: PEPD
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Scope: Invest in additional non-motorized, transit, and pick-up/drop-off access improvements at and around Sound Transit passenger facilities, in partnership with host jurisdictions and operating partners.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Establish a strategic plan for the system access program, program an initial list of investments and establish baseline access data from existing Sound Transit facilities.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$106,350
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: \$106,350
2018 TIP: \$142,139	2018 : 2041	2018 Cost Estimate: \$106,350

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$1,550	\$2,550	\$2,400	\$2,400	\$2,400	\$2,351	\$14,777	\$28,428
North King	0	1,550	2,550	2,400	2,400	2,400	2,351	14,777	28,428
South King	0	1,550	2,550	2,400	2,400	2,400	2,351	14,777	28,428
East King	0	1,550	2,550	2,400	2,400	2,400	2,351	14,777	28,428
Pierce	0	1,550	2,550	2,400	2,400	2,400	2,351	14,777	28,428
Total	\$0	\$7,750	\$12,750	\$12,000	\$12,000	\$12,000	\$11,754	\$73,885	\$142,139

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$4,000	\$10,000
20-Prelim Engineering/Env Review	0	750	750	0	0	0	0	500	2,000
35-Third Party	0	5,000	10,000	10,000	10,000	10,000	10,000	69,385	124,385
50-Construction	0	1,000	1,000	1,000	1,000	1,000	754	0	5,754
Total	\$0	\$7,750	\$12,750	\$12,000	\$12,000	\$12,000	\$11,754	\$73,885	\$142,139

Project Risk Assessment

The risk for this project is that over the intended service life of this project the resources requested will exceed the resources available possibly affecting the ability to support qualifying projects.

600076 Innovation and Technology Program Managed by: PEPD

Scope: Approximately one-half of this program funds research, analysis and implementation of innovative best practices, partnership and technologies to increase ridership, improve service, and enhance efficiency of regional mobility outside of new investments in large capital projects. The other half of the program improves and maintains rider information technology systems.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Identify and initiate research on 3-5 pilot projects to test innovative approaches to improving agency performance, develop benchmark social equity performance measures of regional transit access and service quality and develop short term ridership forecasting tools for transit modes.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$79,763
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	\$79,763
2018 TIP:	\$106,604	2018 :	2041	2018 Cost Estimate:	\$79,763

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$6	\$4,250	\$3,200	\$4,181	\$5,689	\$7,272	\$8,066	\$73,939	\$106,604
Total	\$6	\$4,250	\$3,200	\$4,181	\$5,689	\$7,272	\$8,066	\$73,939	\$106,604

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$6	\$1,250	\$1,575	\$1,431	\$2,061	\$2,294	\$2,528	\$15,504	\$26,650
20-Prelim Engineering/Env Review	0	3,000	1,625	2,750	3,628	4,978	5,538	58,435	79,954
Total	\$6	\$4,250	\$3,200	\$4,181	\$5,689	\$7,272	\$8,066	\$73,939	\$106,604

Project Risk Assessment

There is always some risk in developing a program that is forward looking trying to predict future technology trends.

600668	STart Operations & Maintenance	Managed by: DECM
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Scope: Maintain Sound Transit art installations, including documentation, monitoring, cleaning, repair and occasional replacement. As part of the Sound Transit Art program (STart), the lifetime budget is set at ten percent of the total STart program.

Changes to authorized project allocation since 2017: None.

Budget year activities: Clean over 50 artworks at transit facilities through new on-call vendor. Additional artwork refurbishment and scheduled maintenance will be done at Sounder's Auburn Station, Kent Station, and Mukilteo Station, along with Link's SoDo Station, SeaTac Airport, and Tukwila International Boulevard Station.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$4,927	2017 : 2023	2017 Cost Estimate: N/A
2018 TIP: \$4,927	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$109	\$23	\$18	\$18	\$21	\$21	\$21	\$251	\$483
North King	261	54	44	44	50	50	51	599	1,153
South King	211	44	35	36	40	40	41	484	931
East King	455	94	76	77	87	86	89	1,042	2,005
Pierce	80	17	13	14	15	15	16	184	355
Total	\$1,117	\$231	\$187	\$189	\$214	\$212	\$218	\$2,560	\$4,927

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
01-Operation+Maintenance	\$376	\$96	\$100	\$103	\$106	\$109	\$112	\$487	\$1,488
02-Operation+Maintenance-Agency	741	135	87	86	108	103	106	2,073	3,439
Total	\$1,117	\$231	\$187	\$189	\$214	\$212	\$218	\$2,560	\$4,927

Project Risk Assessment
N/A

601000	Efficiency & Sustainability Program	Managed by: PEPD
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Scope: System wide resource conservation and pollution mitigation projects, with a focus on projects that reduce long-term operations & maintenance, utility and fuel costs. These projects will be focused on existing facilities and system wide improvements that provide resource conservation opportunities across new and existing facilities. The resource efficiency projects developed in this program will be managed by agency staff and planned, designed and constructed by consultants.

Changes to authorized project allocation since 2017: New program.

Budget year activities: Assess and prioritize energy efficiency audits and renewable energy assessments and resource efficiency improvements in the Planning, Environment and Project Department (PEPD) and the Operations Department.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$25,000	2018 : 2041	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$350	\$1,400	\$800	\$1,000	\$1,000	\$1,000	\$19,450	\$25,000
Total	\$0	\$350	\$1,400	\$800	\$1,000	\$1,000	\$1,000	\$19,450	\$25,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$150	\$150	\$150	\$150	\$150	\$150	\$2,918	\$3,818
20-Prelim Engineering/Env Review	0	100	75	75	100	100	100	1,945	2,495
30-Final Design+Specifications	0	100	150	150	150	150	150	2,918	3,768
50-Construction	0	0	1,025	425	600	600	600	11,670	14,920
Total	\$0	\$350	\$1,400	\$800	\$1,000	\$1,000	\$1,000	\$19,450	\$25,000

Project Risk Assessment
N/A

6X668	STart	Managed by: DECM
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Scope: The Sound Transit Art Program (STart) incorporates art into Sound Transit facilities. The artwork is intended to reflect the communities served and contribute to a positive experience for customers. The Board supports a public art budget of one percent of construction costs excluding tunneling for all Sound Move and ST2 projects. In 2010, Resolution No. R2010-21 consolidated the Sound Move and ST2 Art programs and established an Art Policy. Ten percent of the total Art program funding is earmarked for the maintenance of the art collection (see project 600668).

Changes to authorized project allocation since 2017: None.

Budget year activities: Begin the fabrication and installation of art projects for East Link and Northgate Link. Continue with artwork design for Lynnwood Link and Tacoma Link. Begin artwork design for Federal Way Link and Redmond Link, begin artwork planning for Sumner and Puyallup parking garages.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A			Voter-Approved Cost Estimate:	N/A
Baseline:	\$0	Baseline:	N/A	2017 Cost Estimate:	\$54,194
2017 TIP:	\$49,267	2017 :	2023	2018 Cost Estimate:	\$54,194
2018 TIP:	\$49,267	2018 :	2023		

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,747	\$209	\$480	\$535	\$307	\$84	\$15	\$1,452	\$4,828
North King	4,172	499	1,146	1,277	732	200	37	3,466	11,529
South King	3,370	403	926	1,031	591	161	29	2,800	9,312
East King	7,256	868	1,994	2,220	1,273	348	63	6,029	20,052
Pierce	1,284	154	353	393	225	61	11	1,066	3,547
Total	\$17,829	\$2,134	\$4,900	\$5,455	\$3,128	\$854	\$156	\$14,812	\$49,267

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,310	\$500	\$525	\$530	\$535	\$540	\$140	\$450	\$4,530
61-Art	16,519	1,634	4,375	4,925	2,593	314	16	14,362	44,737
Total	\$17,829	\$2,134	\$4,900	\$5,455	\$3,128	\$854	\$156	\$14,812	\$49,267

Project Risk Assessment

N/A

804300 Transit Oriented Development Planning Program Managed by: PEPD

Scope: Support Transit Oriented Development (TOD) planning and pre-development activities needed to identify, refine and shape the offering of TOD properties targeted by ST3 plan.

Changes to authorized project allocation since 2017: New program.

Budget year activities: Support the West Seattle-Ballard Link Extension, Downtown Redmond Link Extension, Federal Way Link Extension, Tacoma Dome Link Extension, I-405 BRT, and SR-522 BRT projects by funding the preparation of TOD implementation strategies and other pre-development activities for properties that may have joint development potential or that may become surplus to the agency.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	\$22,203
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	\$22,203
2018 TIP:	\$30,171	2018 :	2041	2018 Cost Estimate:	\$22,203

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$400	\$400	\$850	\$650	\$650	\$400	\$26,821	\$30,171
Total	\$0	\$400	\$400	\$850	\$650	\$650	\$400	\$26,821	\$30,171

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$125	\$150	\$250	\$250	\$200	\$150	\$5,009	\$6,134
20-Prelim Engineering/Env Review	0	275	250	400	100	100	0	13,624	14,749
40-Row Acquisition+Permits	0	0	0	200	300	350	250	8,189	9,289
Total	\$0	\$400	\$400	\$850	\$650	\$650	\$400	\$26,821	\$30,171

Project Risk Assessment	
N/A	

809100	ST3 Planning	Managed by: PEPD
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Scope: Support system expansion activities that are not corridor specific, including but not limited to ridership forecasting, operations analysis and pre-project development for future projects.

Changes to authorized project allocation since 2017: None.

Budget year activities: Update the regional ridership forecasting model to reflect current economic, transit system and demographic data, develop a light rail system operations plan and fleet forecasts for 2045 reflecting planned incremental system expansions and analyze the feasibility of bus-on-shoulder operation with Washington Department of Transportation (WSDOT).

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: \$64,099
2017 TIP: \$52,648	2017 : 2018	2017 Cost Estimate: \$37,112
2018 TIP: \$52,648	2018 : 2024	2018 Cost Estimate: \$37,112

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$22,866	\$3,000	\$1,600	\$551	\$0	\$0	\$0	\$24,631	\$52,648
Total	\$22,866	\$3,000	\$1,600	\$551	\$0	\$0	\$0	\$24,631	\$52,648

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4,258	\$250	\$250	\$251	\$0	\$0	\$0	\$0	\$5,009
20-Prelim Engineering/Env Review	18,601	2,750	1,350	300	0	0	0	24,631	47,632
40-Row Acquisition+Permits	7	0	0	0	0	0	0	0	7
Total	\$22,866	\$3,000	\$1,600	\$551	\$0	\$0	\$0	\$24,631	\$52,648

Project Risk Assessment
N/A

Enhancement

Although the majority of Sound Transit's projects are related to expanding the regional transit system, work is planned and ongoing to improve operating efficiency and effectiveness, improve the rider experience, increase system functionality, or reduce operating costs.

2018 Enhancement Project Highlights

- Install brighter, more energy efficient LED lighting and energy efficient upgrades at the Tukwila International Boulevard and SeaTac Airport Stations.
- Continue partnership with King County and the City of Seattle to fund street and signal improvements to mitigate the impact of buses moving from the Downtown Seattle Transit Tunnel (DSTT) to surface streets.
- Complete procurement and begin the installation of a second light rail vehicle lift at the Link Operations & Maintenance Facility (OMF).
- Partner with Pierce Transit to undertake a master planning process to determine the expansion of the Pierce Transit Maintenance Facility.
- Renovate the Operations and Maintenance Facility to secure the Link Control Center, renovate existing office spaces, increase onsite parking, and add electric charge station capacity at the facility.
- Upgrade the on-board communication systems on all Sound Transit buses operated by Community Transit to improve data transfer between the bus and the maintenance facility.
- Install a GPS Repeater to extend the radio and data communication range of Pierce Transit communication with Pierce Transit operated Sound Transit buses.
- Install CCTV cameras and customer emergency stations at the Everett Transit Center.

2018 Cashflow by Budget Approval

(in thousands)

Enhancement

ALL MODES

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Preliminary Engineering									
400044 Link Operating Segment Systems Enhancements and Upgrades	\$5	\$1,395	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
600045 Opensidewalks Data Development	50	10	0	0	0	0	0	0	60
600084 Digital Passenger Information System	0	1,617	0	0	0	0	0	0	1,617
600085 SODO/MLK Hazard Mitigation	0	1,584	1,552	0	0	0	0	0	3,136
700723 Downtown Seattle Transit Tunnel Mitigation	408	9,070	2,856	0	0	0	0	0	12,334
700730 Operations & Maintenance Facility Light Rail Vehicle Lift	660	4,238	0	0	0	0	0	0	4,898
700793 Signage Improvements	358	773	0	0	0	0	0	0	1,131
Subtotal	1,481	18,687	4,408	0	0	0	0	0	24,577
Baseline									
300011 Positive Train Control	39,979	3,055	10,020	0	0	0	0	0	53,054
4X340 Noise Abatement	8,996	610	3,394	0	0	0	0	0	13,000
Subtotal	48,974	3,665	13,415	0	0	0	0	0	66,054
Operating									
5X261 Bus Maintenance Facility	9,257	12,776	0	0	0	0	0	0	22,033
600029 Tacoma Link Fare Collection	64	0	0	0	0	0	382	67	514
700676 Tacoma Link Radio Upgrade	0	748	0	0	0	0	0	0	748
700684 Light Rail Vehicle Wireless Communication Upgrade	0	156	0	0	0	0	0	0	156
700685 Everett Station Security Improvements	0	289	0	0	0	0	0	0	289
700686 Security Radio System	0	915	0	0	0	0	0	0	915
700687 Security Operations Center - Video Monitoring Improvements	0	188	0	0	0	0	0	0	188
700688 LED Lighting Program	0	1,500	0	0	0	0	0	0	1,500
700689 Pierce Transit - Global Positioning System Repeater	0	1,662	0	0	0	0	0	0	1,662
700690 Community Transit - On-Board Communication Upgrade	0	2,080	0	0	0	0	0	0	2,080
700691 Operations Maintenance Facility (OMF) - Link Control Center (LCC) Upgrades	0	400	0	0	0	0	0	0	400
700692 Operations Maintenance Facility (OMF) Expanded Parking	83	538	0	0	0	0	0	0	621

2018 Cashflow by Budget Approval

(in thousands)

Enhancement

ALL MODES

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
700693 Operations Maintenance Facility (OMF) - Renovations	0	3,225	2,100	0	0	0	0	0	5,325
700696 King St Station Platform Improvements	5	295	0	0	0	0	0	0	300
700697 LRV Between Car Barriers	412	108	0	0	0	0	0	0	520
700706 OMF Energy Efficiency	916	182	0	0	0	0	0	0	1,098
700707 Bellevue TC Security System	0	150	0	0	0	0	0	0	150
700708 Customer Emergency Stations	0	800	0	0	0	0	0	0	800
700710 Locomotive Inboard Cameras	0	300	0	0	0	0	0	0	300
700711 Sounder Passenger Emergency Intercom	0	1,500	0	0	0	0	0	0	1,500
700712 LRV Wheel Flat Software	0	250	0	0	0	0	0	0	250
700713 LRV Wash Bay Modifications	0	300	0	0	0	0	0	0	300
700724 Puyallup Station LED Lighting	144	34	0	0	0	0	0	0	178
700725 Sumner Station LED Lighting	99	35	0	0	0	0	0	0	134
700726 Kent Station Platform Lighting	134	102	0	0	0	0	0	0	236
700727 Kent Station Parking Lot Paving	73	627	0	0	0	0	0	0	700
700736 Union Station Garden Level Remodel	1,633	221	0	0	0	0	0	0	1,854
700774 Central Link HVAC - Instrument House and UPS Room	823	408	0	0	0	0	0	0	1,232
700775 Central Link Card Readers	131	292	0	0	0	0	0	0	423
700777 Central Link Overhead Catenary System Tie Switch	6	125	2,869	0	0	0	0	0	3,000
Subtotal	13,782	30,205	4,969	0	0	0	382	67	49,405
Program									
600080 Bike Parking Program	0	640	0	0	0	0	0	0	640
700781 Non-revenue Support Vehicles	1,247	674	1,157	1,450	0	0	0	0	4,528
7X753 Bike Locker Program	1,241	114	0	0	0	0	0	0	1,355
804100 Transit Oriented Development Property Disposition	3,924	2,660	1,850	1,430	1,073	678	0	0	11,615
Subtotal	6,412	4,088	3,007	2,880	1,073	678	0	0	18,138
Total	\$70,650	\$56,646	\$25,799	\$2,880	\$1,073	\$678	\$382	\$67	\$158,174

2018 Cashflow by Subarea
(in thousands)

Enhancement
ALL MODES

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$4,339	\$4,873	\$711	\$0	\$0	\$0	\$0	\$0	\$9,924
2 - North King	14,310	24,701	12,667	2,394	1,073	678	0	0	55,824
3 - South King	7,611	9,631	3,552	486	0	0	0	0	21,280
4 - East King	4,457	6,428	0	0	0	0	0	0	10,885
5 - Pierce	38,299	9,174	8,868	0	0	0	382	67	56,791
6 - Systemwide	1,633	1,838	0	0	0	0	0	0	3,471
Total	\$70,650	\$56,646	\$25,799	\$2,880	\$1,073	\$678	\$382	\$67	\$158,174

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4,809	\$3,575	\$1,418	\$250	\$95	\$0	\$0	\$0	\$10,146
20-Prelim Engineering/Env Review	261	190	150	150	100	94	0	0	945
30-Final Design+Specifications	904	2,735	407	0	0	0	0	0	4,045
35-Third Party	2,914	9,990	3,197	0	0	0	0	0	16,101
40-Row Acquisition+Permits	2,845	1,710	1,184	800	800	584	0	0	7,924
50-Construction	54,661	36,912	11,077	230	78	0	382	0	103,340
55-Construction Services	2,884	764	4,193	0	0	0	0	0	7,840
70-Vehicles	1,247	674	1,157	1,450	0	0	0	0	4,528
80-System Testing+Startup	125	75	1,290	0	0	0	0	0	1,490
90-Contingency	0	22	1,725	0	0	0	0	67	1,815
Total	\$70,650	\$56,646	\$25,799	\$2,880	\$1,073	\$678	\$382	\$67	\$158,174

400044 Link Operating Segment Systems Enhancements and Upgrades Managed by: DECM

Scope: Deliver enhancements and upgrades to systems on the existing Link operating segment, including AC power distribution, traction power, overhead catenary system, signals and communications systems upgrades, and enhancements to existing engineering infrastructure.

Changes to authorized project allocation since 2017: None.

Budget year activities: Perform upgrades to Link operating systems including engineering infrastructure and power, signal, and communication systems.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	None				
Baseline:		Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$1,400	2017 :	2017	2017 Cost Estimate:	N/A
2018 TIP:	\$1,400	2018 :	2018	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$4	\$932	\$0	\$0	\$0	\$0	\$0	\$0	\$935
South King	2	463	0	0	0	0	0	0	465
Total	\$5	\$1,395	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$5	\$180	\$0	\$0	\$0	\$0	\$0	\$0	\$185
30-Final Design+Specifications	0	185	0	0	0	0	0	0	185
50-Construction	0	950	0	0	0	0	0	0	950
55-Construction Services	0	80	0	0	0	0	0	0	80
Total	\$5	\$1,395	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400

Project Risk Assessment
Coordination with Link Operations to avoid impacts to light rail operations.

4X340	Noise Abatement	Managed by: DECM
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Scope: Design and construct a noise wall along the Link elevated guideway in Tukwila. Funding for the completion of the Residential Sound Insulation Program (RSIP) for residences impacted by noise from operations of Central Link in the Rainier Valley is included in this project.

Construction of the noise wall was completed in 2013. Environmental noise and vibration testing is expected to complete in 2017. Potential construction in 2018. Budget cash flow in 2019 reflects projected surplus budget.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete monitoring of noise levels to ensure regulatory compliance along the Initial Segment alignment.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 6-Proceed to Construction		
Baseline: \$13,000	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$13,000	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$13,000	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$6,142	\$417	\$2,318	\$0	\$0	\$0	\$0	\$0	\$8,876
South King	2,853	193	1,077	0	0	0	0	0	4,124
Total	\$8,996	\$610	\$3,394	\$0	\$0	\$0	\$0	\$0	\$13,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,027	\$10	\$163	\$0	\$0	\$0	\$0	\$0	\$1,200
30-Final Design+Specifications	5	0	55	0	0	0	0	0	60
40-Row Acquisition+Permits	16	0	84	0	0	0	0	0	100
50-Construction	5,860	500	2,090	0	0	0	0	0	8,450
55-Construction Services	2,088	100	1,002	0	0	0	0	0	3,190
Total	\$8,996	\$610	\$3,394	\$0	\$0	\$0	\$0	\$0	\$13,000

Project Risk Assessment
N/A

600029 Tacoma Link Fare Collection Managed by: FIT

Scope: Install and commission ticket vending machines at Tacoma Link stations, establish a spare parts inventory, set up fare collection and fare enforcement support, and conduct public outreach. No planned budgeted activity until 2023.

Changes to authorized project allocation since 2017: None.

Budget year activities: None.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$514	2017 :	2016	2017 Cost Estimate:	N/A
2018 TIP:	\$514	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$64	\$0	\$0	\$0	\$0	\$0	\$382	\$67	\$514
Total	\$64	\$0	\$0	\$0	\$0	\$0	\$382	\$67	\$514

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$64	\$0	\$0	\$0	\$0	\$0	\$382	\$0	\$447
90-Contingency	0	0	0	0	0	0	0	67	67
Total	\$64	\$0	\$0	\$0	\$0	\$0	\$382	\$67	\$514

Project Risk Assessment

Key project risks include: Further deferment of implementation; Next generation fare system changes across the region may affect contractor timelines for software and hardware development; Complications may be driven by the ability to reach intergovernmental agreements for fare enforcement, which may cause a delay once implementation is approved.

700676	Tacoma Link Radio Upgrade	Managed by: Operations
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Scope: Design, install and commission a new low-power Simulcast DMR radio system at each station and linking the repeaters via fiber optic with local managed Ethernet switches. Install a passive repeater at the existing TPSS.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Install the new radio system.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$748	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$0	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$748
Total	\$0	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$748

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$748
Total	\$0	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$748

Project Risk Assessment
The schedule could extend beyond 2018 depending on the length of engineering work and the installation of new communication cabinets.

700684	Light Rail Vehicle Wireless Communication Upgrade	Managed by: Operations
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Scope: Implement new wireless solution that will support timely transmission of APC data, LRV maintenance information, and future signage data such as passage alerts, emergency notifications and other important rider alerts.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Consulting services and implementing the upgrades.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$156	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$104	\$0	\$0	\$0	\$0	\$0	\$0	\$104
South King	0	52	0	0	0	0	0	0	52
Total	\$0	\$156	\$0	\$0	\$0	\$0	\$0	\$0	\$156

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
30-Final Design+Specifications	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$30
50-Construction	0	126	0	0	0	0	0	0	126
Total	\$0	\$156	\$0	\$0	\$0	\$0	\$0	\$0	\$156

Project Risk Assessment
It is unknown when the configuration of the wireless device on LRV can be performed. The tasks need to be added to the delivery schedule of LRVs

700691	Operations Maintenance Facility (OMF) - Link Control Center (LCC) Upgrades	Managed by: Operations
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Scope: With buses now being forecasted to be removed from the tunnel end of Q1 2019, the OMF will become the new primary location for the LCC. This project will implement upgrades and enhancements for the OMF location to allow full functionality of the control center at the OMF.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Upgrades and enhancements will be made to the OMF Link Control Center to allow full functionality as the Link primary control center.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$400	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$267	\$0	\$0	\$0	\$0	\$0	\$0	\$267
South King	0	133	0	0	0	0	0	0	133
Total	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400
Total	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Project Risk Assessment
N/A

700692	Operations Maintenance Facility (OMF) Expanded Parking	Managed by: Operations
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Scope: Design and construct fourteen new parking spaces on the east side of the OMF, north of the 1st floor entry. Establish and install a suitable amount of electrical vehicle chargers in those spaces for use by agency vehicles only. Expenditures prior to 2018 represent pre-project development costs.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Design and construction of the parking area.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$200	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$621	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$55	\$360	\$0	\$0	\$0	\$0	\$0	\$0	\$415
South King	27	179	0	0	0	0	0	0	206
Total	\$83	\$538	\$0	\$0	\$0	\$0	\$0	\$0	\$621

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$13	\$52	\$0	\$0	\$0	\$0	\$0	\$0	\$65
20-Prelim Engineering/Env Review	25	28	0	0	0	0	0	0	53
30-Final Design+Specifications	45	0	0	0	0	0	0	0	45
50-Construction	0	459	0	0	0	0	0	0	459
Total	\$83	\$538	\$0	\$0	\$0	\$0	\$0	\$0	\$621

Project Risk Assessment
N/A

700693	Operations Maintenance Facility (OMF) - Renovations	Managed by: Operations
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Scope: Renovate the Link OMF in Seattle, including: Resize enclosed offices for more efficient usage of space; Create additional workstations; Secure the area around the Link Control Center (LCC); Regroup divisions to be co-located for greater efficiency.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Begin construction of the administrative space in the OMF.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$5,325	2018 : 2019	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$2,154	\$1,403	\$0	\$0	\$0	\$0	\$0	\$3,557
South King	0	1,071	697	0	0	0	0	0	1,768
Total	\$0	\$3,225	\$2,100	\$0	\$0	\$0	\$0	\$0	\$5,325

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$225	\$100	\$0	\$0	\$0	\$0	\$0	\$325
30-Final Design+Specifications	0	180	0	0	0	0	0	0	180
50-Construction	0	2,820	2,000	0	0	0	0	0	4,820
Total	\$0	\$3,225	\$2,100	\$0	\$0	\$0	\$0	\$0	\$5,325

Project Risk Assessment
Minimal project risk.

700697	LRV Between Car Barriers	Managed by: Operations
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Scope: Procure and install platform mounted barriers to be install at 21 Link stations. Federal Transit Authority Regulation 49 CFR 38.85 requires barriers on the platform to prevent visually impaired riders from mistaking the space between light rail vehicles as an open door.

Changes to authorized project allocation since 2017: None.

Budget year activities: Procure and install barriers for 21 Link stations to prevent access to space between light rail vehicles.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$520	2017 : 2019	2017 Cost Estimate: N/A
2018 TIP: \$520	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$347	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$438
South King	65	17	0	0	0	0	0	0	82
Total	\$412	\$108	\$0	\$0	\$0	\$0	\$0	\$0	\$520

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$50
50-Construction	411	58	0	0	0	0	0	0	470
Total	\$412	\$108	\$0	\$0	\$0	\$0	\$0	\$0	\$520

Project Risk Assessment
N/A

700706	OMF Energy Efficiency	Managed by: Operations
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Scope: Replace existing Operations and Maintenance Facility (OMF) shop bay lighting (metal halide) with LED fixtures, and replace the direct digital controls on the HVAC system to allow integration with Union Station controls, to increase energy efficiency and reduce operating costs. Budget in 2018 is considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,098	2017 : 2019	2017 Cost Estimate: N/A
2018 TIP: \$1,098	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$612	\$122	\$0	\$0	\$0	\$0	\$0	\$0	\$733
South King	304	60	0	0	0	0	0	0	365
Total	\$916	\$182	\$0	\$0	\$0	\$0	\$0	\$0	\$1,098

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$916	\$182	\$0	\$0	\$0	\$0	\$0	\$0	\$1,098
Total	\$916	\$182	\$0	\$0	\$0	\$0	\$0	\$0	\$1,098

Project Risk Assessment
N/A

700712	LRV Wheel Flat Software	Managed by: Operations
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Scope: Based on agreements with the University of Washington (UW), Link light rail trains operating in the vicinity of the University must remain within agreed-upon vibrational criteria. To enable vehicle maintenance staff to more accurately and efficiently identify and remedy sources of vibration in light rail vehicles (LRVs), an additional axle identifier (transponder) software module that will interface with the existing LRV wheel flat detection system will be purchased and installed, including selection of a contractor experienced with the software to oversee its installation.

Changes to authorized project allocation since 2017: None.

Budget year activities: Purchase and install additional software module to enhance the existing LRV wheel flat detection system, including selection of contractor to oversee installation.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$250	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$250	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$167
South King	0	83	0	0	0	0	0	0	83
Total	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$250

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$50
30-Final Design+Specifications	0	150	0	0	0	0	0	0	150
50-Construction	0	50	0	0	0	0	0	0	50
Total	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$250

Project Risk Assessment
Careful planning is required so that installation does not impact daily train maintenance operations at the Operations and Maintenance Facility.

700713	LRV Wash Bay Modifications	Managed by: Operations
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Scope: Modify the Link light rail vehicle (LRV) car wash system at the Link Operations and Maintenance Facility, including upgrades to electrical and mechanical equipment, to provide automatic LRV forehead cleaning and eliminate manual washing. The project will be completed in 2017.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$300	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$300	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$200
South King	0	100	0	0	0	0	0	0	100
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$25
30-Final Design+Specifications	0	75	0	0	0	0	0	0	75
50-Construction	0	200	0	0	0	0	0	0	200
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Project Risk Assessment
Reduction in availability of the LRV wash system while modifications are installed.

700730	Operations & Maintenance Facility Light Rail Vehicle Lift	Managed by: Operations
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Scope: Design, procure and install a second lift in the Link Operations and Maintenance Facility. The installation of a second lift in support of operations is required to accommodate scheduled and unscheduled light rail vehicle (LRV) maintenance needs and capacity.

Changes to authorized project allocation since 2017: None.

Budget year activities: Fabricate and install second light rail vehicle (LRV) lift at the Link Operations and Maintenance Facility.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: 6-Proceed to Construction		
Baseline: \$4,898	Baseline: 2016	Voter-Approved Cost Estimate: N/A
2017 TIP: \$4,898	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$4,898	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$563	\$3,616	\$0	\$0	\$0	\$0	\$0	\$0	\$4,179
South King	97	622	0	0	0	0	0	0	719
Total	\$660	\$4,238	\$0	\$0	\$0	\$0	\$0	\$0	\$4,898

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$310	\$264	\$0	\$0	\$0	\$0	\$0	\$0	\$574
20-Prelim Engineering/Env Review	156	0	0	0	0	0	0	0	156
30-Final Design+Specifications	193	357	0	0	0	0	0	0	550
50-Construction	2	3,412	0	0	0	0	0	0	3,414
55-Construction Services	0	205	0	0	0	0	0	0	205
Total	\$660	\$4,238	\$0	\$0	\$0	\$0	\$0	\$0	\$4,898

Project Risk Assessment
Constructability of project, given the constraints of having to install the lift in an on-going working environment, creates challenges in both schedule and cost.

700774	Central Link HVAC - Instrument House and UPS Room	Managed by: Operations
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Scope: Install HVAC system in the uninterruptible power supply (UPS) rooms and signal houses: Install AC units in ten instrument houses along the Central Link corridor keep equipment inside the bungalows from overheating during periods of hot weather and to ensure the continued integrity of the signal equipment throughout the system. This is the current design standard for Link light rail. The budget in 2018 is considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project close out.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,232	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$1,232	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$551	\$273	\$0	\$0	\$0	\$0	\$0	\$0	\$824
South King	273	135	0	0	0	0	0	0	408
Total	\$823	\$408	\$0	\$0	\$0	\$0	\$0	\$0	\$1,232

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$291	\$153	\$0	\$0	\$0	\$0	\$0	\$0	\$443
30-Final Design+Specifications	136	0	0	0	0	0	0	0	136
40-Row Acquisition+Permits	6	30	0	0	0	0	0	0	36
50-Construction	391	226	0	0	0	0	0	0	616
Total	\$823	\$408	\$0	\$0	\$0	\$0	\$0	\$0	\$1,232

Project Risk Assessment
N/A

700775	Central Link Card Readers	Managed by: Operations
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Scope: Install card readers on all doors at Central Link stations' public areas to ensure secure premises, eliminate the need to issue keys to a large number of staff and ensure consistency in key control.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete card reader installation.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$423	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$423	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$88	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$283
South King	43	97	0	0	0	0	0	0	140
Total	\$131	\$292	\$0	\$0	\$0	\$0	\$0	\$0	\$423

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$57	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$77
30-Final Design+Specifications	0	50	0	0	0	0	0	0	50
50-Construction	74	175	0	0	0	0	0	0	249
55-Construction Services	0	25	0	0	0	0	0	0	25
90-Contingency	0	22	0	0	0	0	0	0	22
Total	\$131	\$292	\$0	\$0	\$0	\$0	\$0	\$0	\$423

Project Risk Assessment
The readers will be installed at multiple locations providing a slight risk to schedule and budget.

700777	Central Link Overhead Catenary System Tie Switch	Managed by: Operations
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Scope: Install the mechanical means to electrically bridge the Overhead Catenary System (OCS) section insulators at approximately 34 various locations throughout the Link alignment to allow inspection and maintenance of traction power substations without interrupting Link service.

Changes to authorized project allocation since 2017: None.

Budget year activities: Install tie switches to connect the overhead catenary system sections.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$3,000	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$3,000	2018 : 2019	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$4	\$84	\$1,919	\$0	\$0	\$0	\$0	\$0	\$2,007
South King	2	41	950	0	0	0	0	0	993
Total	\$6	\$125	\$2,869	\$0	\$0	\$0	\$0	\$0	\$3,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
30-Final Design+Specifications	0	75	0	0	0	0	0	0	75
50-Construction	5	50	2,869	0	0	0	0	0	2,924
Total	\$6	\$125	\$2,869	\$0	\$0	\$0	\$0	\$0	\$3,000

Project Risk Assessment
Project is intended to be completed by Link Maintenance staff. There is a risk to schedule if competing projects use limited resources initially allocated to this project.

700781	Non-revenue Support Vehicles	Managed by: Operations
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Scope: Purchase and replace maintenance vehicles to improve maintenance efficiencies for the Link light rail system.

Changes to authorized project allocation since 2017: Increased by \$2.4 million to purchase additional vehicles: three trucks for Maintenance of Way (MOW), four vans for Facilities, two electric cars for Rail Supervisors and a forklift. Additionally, the need for an Under Bridge inspection Truck (UBIT) was identified to support the requirement for bridge inspections.

Budget year activities: Replace four and purchase two additional maintenance vehicles. Take delivery of specialty Boom Truck.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$2,130	2017 : 2019	2017 Cost Estimate: N/A
2018 TIP: \$4,528	2018 : 2020	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$829	\$448	\$770	\$964	\$0	\$0	\$0	\$0	\$3,011
South King	418	226	388	486	0	0	0	0	1,517
Total	\$1,247	\$674	\$1,157	\$1,450	\$0	\$0	\$0	\$0	\$4,528

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$1,247	\$674	\$1,157	\$1,450	\$0	\$0	\$0	\$0	\$4,528
Total	\$1,247	\$674	\$1,157	\$1,450	\$0	\$0	\$0	\$0	\$4,528

Project Risk Assessment
The growth of the agency and the potential for changing vehicle needs could have budget implications.

700793	Signage Improvements	Managed by: DECM
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Scope: Sound Transit is modifying and updating signage at existing Link and Sounder stations and ticket vending machine (TVM) locations to improve wayfinding and reflect system expansion. Work includes design, fabrication, and installation of new signage elements.

Ticket vending machine signage reface work was completed in 2016.

Changes to authorized project allocation since 2017: None.

Budget year activities: Fabricate and install upgraded signage at King Street and International District/Chinatown stations and update SeaTac Airport wayfinding signage.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,131	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$1,131	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$3
North King	171	369	0	0	0	0	0	0	541
South King	184	397	0	0	0	0	0	0	580
East King	0	1	0	0	0	0	0	0	1
Pierce	2	4	0	0	0	0	0	0	6
Total	\$358	\$773	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$79	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$109
30-Final Design+Specifications	180	114	0	0	0	0	0	0	294
50-Construction	100	629	0	0	0	0	0	0	728
Total	\$358	\$773	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131

Project Risk Assessment
Both budget and schedule risk is ever present when coordinating with government entities or jurisdictions who want to ensure consistency and continuity of their signage requirements.

300011 Positive Train Control Managed by: DECM

Scope: Integrate command, control, communications, and information systems for controlling passenger train movements with safety, security, precision, and efficiency. These systems will improve railroad safety by significantly reducing the probability of collisions between trains, casualties to railway workers and damage to their equipment, and over speed accidents. Federal regulations had previously mandated that positive train control (PTC) be operational on all passenger rail systems by the end of December 2015, but this was recently extended by three years. The project was originally scheduled to be completed in 2015, however due to third party delays, it will now likely complete in third quarter of 2017. Budget displayed in 2019 is considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete testing and commissioning of the positive train control (PTC) system.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	6-Proceed to Construction				
Baseline:	\$53,054	Baseline:	2014	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$53,054	2017 :	2016	2017 Cost Estimate:	N/A
2018 TIP:	\$53,054	2018 :	2018	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$2,838	\$217	\$711	\$0	\$0	\$0	\$0	\$0	\$3,767
South King	1,759	134	441	0	0	0	0	0	2,334
Pierce	35,381	2,704	8,868	0	0	0	0	0	46,953
Total	\$39,979	\$3,055	\$10,020	\$0	\$0	\$0	\$0	\$0	\$53,054

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,459	\$25	\$754	\$0	\$0	\$0	\$0	\$0	\$2,238
30-Final Design+Specifications	226	0	52	0	0	0	0	0	279
35-Third Party	2,510	1,390	367	0	0	0	0	0	4,267
50-Construction	34,863	1,365	2,767	0	0	0	0	0	38,995
55-Construction Services	796	200	3,065	0	0	0	0	0	4,062
80-System Testing+Startup	125	75	1,290	0	0	0	0	0	1,490
90-Contingency	0	0	1,725	0	0	0	0	0	1,725
Total	\$39,979	\$3,055	\$10,020	\$0	\$0	\$0	\$0	\$0	\$53,054

Project Risk Assessment

Schedule impacts due to limited availability of contractor technical staff and high demand for their services, availability of Federal Railroad Administration staff for final certification, and BNSF implementation delays of their positive train control (PTC) system on the Seattle sub-division.

700696	King St Station Platform Improvements	Managed by: Operations
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Scope: Participate in a local partnership to design and construction passenger access improvements to King Street Station improving access to Century Link Field. The partnership is between Sound Transit, Washington State Department of Transportation and Amtrak to improve special event train access to King Street Station. Special events requiring 7 car platform support limit train access to other platforms. This will allow improvements to track 9 for game days and special events reducing platform crowding and improving overall safety to passengers. This will be partially funded by a grant from the Federal Railway Administration.

Changes to authorized project allocation since 2017: None.

Budget year activities: Design and construct passenger access improvements to King Street Station to improve access to Century Link Field.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$300	2017 : 2019	2017 Cost Estimate: N/A
2018 TIP: \$300	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$5	\$295	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$5	\$295	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$25
20-Prelim Engineering/Env Review	0	25	0	0	0	0	0	0	25
30-Final Design+Specifications	0	50	0	0	0	0	0	0	50
50-Construction	4	196	0	0	0	0	0	0	200
Total	\$5	\$295	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Project Risk Assessment
Although the budget risk seems low the schedule risk is at higher risk given the requirements of two government entities and a private company to coordinate timing of installation of improvements.

700708	Customer Emergency Stations	Managed by: Operations
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Scope: Installation of customer emergency stations at the Kent and Auburn parking garages.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete the installation of customer emergency stations at the Kent and Auburn Sounder station parking garages.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed:		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$800	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$800	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Total	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$800

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Total	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$800

Project Risk Assessment
However slight, when installing this many stations (4 per floor) unexpected site conditions may result in schedule or budget changes.

700710	Locomotive Inboard Cameras	Managed by: Operations
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Scope: A new Federal Railroad Administration rule requires inboard facing cameras to monitor the actions of the engineers in handling a train. This project is for a total of 41 pieces of equipment.

Changes to authorized project allocation since 2017: None.

Budget year activities: Install inboard facing cameras to monitor the engineer on all of our cab cars and locomotives.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$300	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$300	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$44	\$0	\$0	\$0	\$0	\$0	\$0	\$44
South King	0	143	0	0	0	0	0	0	143
Pierce	0	114	0	0	0	0	0	0	114
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$30
30-Final Design+Specifications	0	30	0	0	0	0	0	0	30
50-Construction	0	240	0	0	0	0	0	0	240
Total	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Project Risk Assessment
The requirement for inward facing cameras is a mandated requirement, coordinating, type, installers and compatibility and approval across providers, labor and maintenance staffs, completing the bid documents prior to award and install has pushed the project into a one year delay. The risk continues to affect the schedule of the delivery of this project.

700711	Sounder Passenger Emergency Intercom	Managed by: Operations
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Scope: New FRA rule requires passengers to be able to speak directly with a train crew member. The new Bombardier Cab Cars are coming with a system to meet this new rule. However, this system will only allow passengers to talk directly with the engineer, not the conductor. There is an "Emergency Order" put out by the FRA that prohibits an engineer from being disturbed by a cell phone. This project upgrades this system which will require an upgrade on all cars with a Passenger Emergency Intercom (PEI) system that will enable passengers to speak directly to the conductor instead of the engineer so as not to allow passengers to disturb the engineer.

Changes to authorized project allocation since 2017: None.

Budget year activities: Install upgraded PEI system in all Sounder coach and cab cars.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,500	2017 : 2019	2017 Cost Estimate: N/A
2018 TIP: \$1,500	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$219	\$0	\$0	\$0	\$0	\$0	\$0	\$219
South King	0	713	0	0	0	0	0	0	713
Pierce	0	569	0	0	0	0	0	0	569
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150
30-Final Design+Specifications	0	300	0	0	0	0	0	0	300
50-Construction	0	1,050	0	0	0	0	0	0	1,050
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500

Project Risk Assessment
Scheduling adequate resources to the project has resulted in a one year delay of the project. Resource availability continues to be a risk to project schedule.

700724	Puyallup Station LED Lighting	Managed by: Operations
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Scope: Install energy efficient lighting at Puyallup Station. Work will result in receiving a utility incentive based upon the energy reduction achieved and will reduce energy consumption on a ongoing basis.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$178	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$178	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$144	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$178
Total	\$144	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$178

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
50-Construction	141	34	0	0	0	0	0	0	175
Total	\$144	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$178

Project Risk Assessment
Risk is minimal for a straight procurement

700725	Sumner Station LED Lighting	Managed by: Operations
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Scope: Install energy efficient lighting at Sumner Station. Work will result in receiving a utility incentive based upon the energy reduction achieved and will reduce energy consumption on a ongoing basis.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project closeout.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$134	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$134	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$99	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$134
Total	\$99	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$134

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
50-Construction	97	35	0	0	0	0	0	0	131
Total	\$99	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$134

Project Risk Assessment
Risk is minimal for a straight procurement.

700726	Kent Station Platform Lighting	Managed by: Operations
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Scope: Install energy efficient lighting at Kent Station. In late 2012 lighting was upgraded in the Kent Garage, this project will extend the upgrades to the platform, surface lots, pedestrian bridge, and bus loop areas. Work will result in receiving a utility incentive based upon the energy reduction achieved and will reduce energy consumption on an ongoing basis.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete installation and proceed to closeout the project.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$236	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$236	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$134	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$236
Total	\$134	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$236

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$134	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$236
Total	\$134	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$236

Project Risk Assessment
Risk is minimal for a straight procurement.

700727	Kent Station Parking Lot Paving	Managed by: Operations
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Scope: Design and install paved and landscaped commuter parking to an additional 36 standard spaces, 1 compact space and 2 Americans with Disabilities Act (ADA) spaces.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete site survey, environmental review and pause pending the integration of ST3 projects into the transit improvement plan.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$700	2017 : 2016	2017 Cost Estimate: N/A
2018 TIP: \$700	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$73	\$627	\$0	\$0	\$0	\$0	\$0	\$0	\$700
Total	\$73	\$627	\$0	\$0	\$0	\$0	\$0	\$0	\$700

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$2
20-Prelim Engineering/Env Review	72	67	0	0	0	0	0	0	139
50-Construction	0	559	0	0	0	0	0	0	559
Total	\$73	\$627	\$0	\$0	\$0	\$0	\$0	\$0	\$700

Project Risk Assessment
The risk of a changing scope could effect the ultimate budget as requirements may change.

5X261	Bus Maintenance Facility	Managed by: Operations
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Scope: Fund expansion of Sound Transit's fleet maintenance capacity through contributions to facilities managed by third party service providers. The cash flow is flexible as often no projects are planned for a given year.

Changes to authorized project allocation since 2017: None.

Budget year activities: Contribute funds to Pierce Transit for Bus Base Master Plan.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$22,033	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$22,033	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,463	\$2,019	\$0	\$0	\$0	\$0	\$0	\$0	\$3,481
South King	1,028	1,418	0	0	0	0	0	0	2,446
East King	4,388	6,056	0	0	0	0	0	0	10,444
Pierce	2,379	3,283	0	0	0	0	0	0	5,662
Total	\$9,257	\$12,776	\$0	\$0	\$0	\$0	\$0	\$0	\$22,033

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$26	\$501	\$0	\$0	\$0	\$0	\$0	\$0	\$527
20-Prelim Engineering/Env Review	8	0	0	0	0	0	0	0	8
40-Row Acquisition+Permits	59	0	0	0	0	0	0	0	59
50-Construction	9,164	12,275	0	0	0	0	0	0	21,439
Total	\$9,257	\$12,776	\$0	\$0	\$0	\$0	\$0	\$0	\$22,033

Project Risk Assessment

The schedule is flexible as it is predicated on partners to submit projects for participation. The schedules dates can change if no projects are planned.

600045 **Opensidewalks Data Development** **Managed by: PEPD**

Scope: Develop supervised method to predict the connectivity of sidewalk segments. Further the project will develop technology and community engagement and training methods and tools to support widespread crowd sourcing of sidewalk data that can be integrated into OpenStreetMap as well as downstream navigation tools such as Accessmap and the Puget Sound Regional Council (PSRC) maintained non-motorized connectivity tool. The remaining budget in 2018 is considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Project is complete.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$60	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$60	2018 :	2017	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$50	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Total	\$50	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$60

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$50	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Total	\$50	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$60

Project Risk Assessment	
N/A	

700689	Pierce Transit - Global Positioning System Repeater	Managed by: Operations
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Scope: Purchase and install necessary radio infrastructure on radio towers owned or used by Pierce Transit necessary to communicate with ST Express buses operated by Pierce Transit outside of Pierce Transit's standard data radio range.

Changes to authorized project allocation since 2017: New project.

Budget Year Activities: Procure and install radio infrastructure on radio towers owned or used by Pierce Transit necessary to communicate with ST Express buses operated by Pierce Transit outside of Pierce Transit's standard data radio range.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$1,662	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$0	\$1,662	\$0	\$0	\$0	\$0	\$0	\$0	\$1,662
Total	\$0	\$1,662	\$0	\$0	\$0	\$0	\$0	\$0	\$1,662

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$1,662	\$0	\$0	\$0	\$0	\$0	\$0	\$1,662
Total	\$0	\$1,662	\$0	\$0	\$0	\$0	\$0	\$0	\$1,662

Project Risk Assessment
There is significant schedule risk as we are financial contributors to the project but Pierce Transit will be the project Manager and Sound Transit has no input into the schedule or installation.

700690	Community Transit - On-Board Communication Upgrade	Managed by: Operations
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Scope: Purchase and install new on-board communications and data collection components, including base infrastructure, on buses based at Community Transit.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Procurement and installation of new on-board communications and data collection components, including base infrastructure, on buses based at Community Transit.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$2,080	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$2,080	\$0	\$0	\$0	\$0	\$0	\$0	\$2,080
Total	\$0	\$2,080	\$0	\$0	\$0	\$0	\$0	\$0	\$2,080

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$2,080	\$0	\$0	\$0	\$0	\$0	\$0	\$2,080
Total	\$0	\$2,080	\$0	\$0	\$0	\$0	\$0	\$0	\$2,080

Project Risk Assessment
The upgrade is intended for the current fleet. There will be some schedule risk as each bus will have to be pulled from the working service fleet to have the communication upgrade installed. Bus availability for the install will be important.

700707	Bellevue TC Security System	Managed by: Operations
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Scope: Procure and install security systems in the Bellevue Transit Center.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete the security systems installation at the Bellevue Transit Center.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$150	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$150	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Project Risk Assessment
The risk of budget or schedule changes is minimal given the scope of the project.

600080	Bike Parking Program	Managed by: PEPD
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Scope: Provide bicycle parking at Sound Transit facilities in response to demand or for maintenance, replacement or upgrade needs.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Replace the existing 16 bicycle lockers at Mercer Island Transit Center with on-demand lockers for greater capacity, move the existing Mercer Island Park and Ride lockers to Issaquah Transit Center to increase capacity, replace existing deteriorating 16 South of Kingdome/Downtown (SoDo) Station lockers with on-demand bike lockers to increase capacity, and a shelter with bike lockers at Capitol Hill Station, which currently has no secure bicycle parking.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$640	2018 : 2020	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$430	\$0	\$0	\$0	\$0	\$0	\$0	\$430
East King	0	210	0	0	0	0	0	0	210
Total	\$0	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$640

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$16
50-Construction	0	624	0	0	0	0	0	0	624
Total	\$0	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$640

Project Risk Assessment
This project is focused on addressing localized high demand for bike lockers in specific areas. The technology is provided by one vendor and is dependent on the vendor's ability to provide and support the equipment and the software.

600084 Digital Passenger Information System Managed by: FIT

Scope: Design and implement a digital information system for sharing passenger usage data to create a better user experience and a more efficient multi-modal transit system.

Changes to project allocation since 2017: New project.

Budget year activities: Establish preliminary engineering milestones, develop and refine project scope and determine program interface requirements with various agency affected systems.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	Pending				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$1,617	2018 :	2019	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$1,617	\$0	\$0	\$0	\$0	\$0	\$0	\$1,617
Total	\$0	\$1,617	\$0	\$0	\$0	\$0	\$0	\$0	\$1,617

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$898	\$0	\$0	\$0	\$0	\$0	\$0	\$898
30-Final Design+Specifications	0	720	0	0	0	0	0	0	720
Total	\$0	\$1,617	\$0	\$0	\$0	\$0	\$0	\$0	\$1,617

Project Risk Assessment

The project is just beginning to enter a discovery phase of the project to define the breadth of impact this program will have across 4 modes - Link, Sounder, Bus Rapid Transit and Regional Express. The scope of the project and estimate of cost to deliver the undefined scope can create cost volatility due to the uncertainty. The program will be following a phase gate process to ensure key decision makers are involved during the scoping and preliminary engineering processes.

600085 SODO/MLK Hazard Mitigation Managed by: DECM

Scope: Various at-grade crossings in 2016 and early 2017 met the threshold for Unacceptable Hazardous Conditions. As a result, three Sound Transit departments (Design Engineering & Construction Management, Safety and Quality Assurance, and Operations) and Seattle’s Department of Transportation (SDOT) partnered to assess the performance of at-grade crossings system wide and identify opportunities for enhancements.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Design and construct Holgate Street Sidewalk, install second pedestrian warning sign at Martin Luther King (MLK) stations, address illegal left turns along MLK, upgrade pedestrian warning signs, install second train warning devices at busway and MLK stations, and install CCTV cameras at Royal Brougham, Holgate, Lander, Othello, and Henderson.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$3,136	2018 :	2019	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$1,584	\$1,552	\$0	\$0	\$0	\$0	\$0	\$3,136
Total	\$0	\$1,584	\$1,552	\$0	\$0	\$0	\$0	\$0	\$3,136

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$127	\$25	\$0	\$0	\$0	\$0	\$0	\$152
20-Prelim Engineering/Env Review	0	71	0	0	0	0	0	0	71
30-Final Design+Specifications	0	365	300	0	0	0	0	0	665
50-Construction	0	868	1,101	0	0	0	0	0	1,969
55-Construction Services	0	154	125	0	0	0	0	0	279
90-Contingency	0	0	1	0	0	0	0	0	1
Total	\$0	\$1,584	\$1,552	\$0	\$0	\$0	\$0	\$0	\$3,136

Project Risk Assessment

As stated in the budget year activities there are several mitigation activities at two different locations. It is possible that additional mitigation requirements could be identified increasing the cost of the project.

700685	Everett Station Security Improvements	Managed by: Operations
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Scope: Install 40 CCTV Cameras and associated recording equipment. Install 14 CES' (Customer Emergency Stations) in areas around the station.

Changes to authorized project allocation since 2017: New project.

Budget year activities: To install 40 CCTV Cameras and associated recording equipment and to install 14 CES' (Customer Emergency Stations) in areas around the station.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$289	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$289	\$0	\$0	\$0	\$0	\$0	\$0	\$289
Total	\$0	\$289	\$0	\$0	\$0	\$0	\$0	\$0	\$289

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$289	\$0	\$0	\$0	\$0	\$0	\$0	\$289
Total	\$0	\$289	\$0	\$0	\$0	\$0	\$0	\$0	\$289

Project Risk Assessment
Transit systems staff have determined that given the systems are familiar and would be maintained by Sound Transit - Transit Systems staff that the risk is minimal..

700686	Security Radio System	Managed by: Operations
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Scope: Procure, upgrade and enhance Sound Transit 's security radio systems and equipment for expansion of security services into the Downtown Seattle Transit Tunnel. The project is revised to include additional \$662 thousand to reflect a federal Homeland Security Grant.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Procure, upgrade and enhance Sound Transit's security radio systems and equipment for expansion of security service into the Downtown Seattle Transit Tunnel.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$915	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$915	\$0	\$0	\$0	\$0	\$0	\$0	\$915
Total	\$0	\$915	\$0	\$0	\$0	\$0	\$0	\$0	\$915

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$915	\$0	\$0	\$0	\$0	\$0	\$0	\$915
Total	\$0	\$915	\$0	\$0	\$0	\$0	\$0	\$0	\$915

Project Risk Assessment
Some risk exists given the need for compatibility to our systems affecting schedule. Financial risk is minimized because the work is largely covered through a federal grant.

700687	Security Operations Center - Video Monitoring Improvements	Managed by: Operations
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Scope: Install approximately 10 additional monitors in the SOC, associated hardware and video processing equipment. Remove old equipment as necessary.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Install additional videos and associated equipment.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$188	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$188	\$0	\$0	\$0	\$0	\$0	\$0	\$188
Total	\$0	\$188	\$0	\$0	\$0	\$0	\$0	\$0	\$188

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$188	\$0	\$0	\$0	\$0	\$0	\$0	\$188
Total	\$0	\$188	\$0	\$0	\$0	\$0	\$0	\$0	\$188

Project Risk Assessment
Reliability of monitors, very low risk.

700688	LED Lighting Program	Managed by: Operations
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Scope: The lighting systems at several Link Stations opened in 2009 have been identified to be upgraded to Light Emitting Diode (LED) based fixtures to reduce annual energy costs and maintenance. The two most beneficial upgrade sites would be Tukwila International Blvd Station and Airport Station. Both of these stations were constructed under older Design Criteria Manual editions which allowed less efficient metal halide lighting.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Install LED lighting. Project activities will begin 1st Quarter of 2018 and complete by year end.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$1,500	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Total	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500

Project Risk Assessment
The current scope of work is focused on Airport Station and Tukwila Station. This is a contract award and install performed by an experienced contractor. This results in a low risk.

700723	Downtown Seattle Transit Tunnel Mitigation	Managed by: Operations
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Scope: This project reflects the Sound Transit contribution to the One Center City Plan partnership for a series of mitigation improvements, including street improvements in downtown Seattle, to mitigate impacts to bus operations as buses transition from the Downtown Seattle Transit Tunnel (DSTT) to surface streets to accommodate increased light rail activity in the tunnel.

Changes to authorized project allocation since 2017: Increased by \$10m to support additional mitigation improvements required for transition of buses from the Downtown Seattle Transit Tunnel (DSTT).

Budget year activities: Finalize capital improvements and develop agreements with the City of Seattle and King County Metro for shared contributions for additional mitigation.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$2,334	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$12,334	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$408	\$9,070	\$2,856	\$0	\$0	\$0	\$0	\$0	\$12,334
Total	\$408	\$9,070	\$2,856	\$0	\$0	\$0	\$0	\$0	\$12,334

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4	\$56	\$26	\$0	\$0	\$0	\$0	\$0	\$86
30-Final Design+Specifications	0	54	0	0	0	0	0	0	54
35-Third Party	404	8,600	2,830	0	0	0	0	0	11,834
50-Construction	0	360	0	0	0	0	0	0	360
Total	\$408	\$9,070	\$2,856	\$0	\$0	\$0	\$0	\$0	\$12,334

Project Risk Assessment
Project risk is low as Sound Transit's shared contributions will be determined based on agreements with other One Center City partners.

700736	Union Station Garden Level Remodel	Managed by: Operations
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Scope: Renovate Union Station's Garden Level: convert cubicle space from 8X8 to 6X8 configuration, add 7 enclosed offices, relocate 3 offices, create a new mailroom, install new carpet, purchase and install 132 cubicles, and install new data cabling to support additional staff and consultants.

Changes to authorized project allocation since 2017: None.

Budget year activities: Design and remodel the Prospector conference room improving power and HVAC support systems in conjunction with the remodel.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,854	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$1,854	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$1,633	\$221	\$0	\$0	\$0	\$0	\$0	\$0	\$1,854
Total	\$1,633	\$221	\$0	\$0	\$0	\$0	\$0	\$0	\$1,854

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
30-Final Design+Specifications	21	0	0	0	0	0	0	0	21
50-Construction	1,609	221	0	0	0	0	0	0	1,831
Total	\$1,633	\$221	\$0	\$0	\$0	\$0	\$0	\$0	\$1,854

Project Risk Assessment
There remains the potential for scope creep.

7X753

Bike Locker Program

Managed by: PEPD

Scope: Install new bicycle parking at various Sounder commuter rail, ST Express bus, and Link light rail stations. In addition, project-funded design and construction of a bicycle plaza adjacent to the light rail Columbia City station. In King County, Sound Transit will add bicycle parking spaces at six light rail and commuter rail stations (Tukwila Station, Kent Station, Auburn Station, Columbia City Station, Othello Station, and Rainier Beach Station). In Pierce County, Sound Transit will expand secured bicycle parking at Puyallup and Sumner Stations. The project will also add benches, lighting, signage, and other pedestrian and bicycle amenities at the commuter rail stations.

Changes to authorized project allocation since 2017: None.

Budget year activities: Rainier Beach Station.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$1,355	2017 :	2017	2017 Cost Estimate:	N/A
2018 TIP:	\$1,355	2018 :	2017	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$37	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$41
North King	612	56	0	0	0	0	0	0	668
South King	344	32	0	0	0	0	0	0	375
East King	19	2	0	0	0	0	0	0	20
Pierce	230	21	0	0	0	0	0	0	251
Total	\$1,241	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$1,355

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$304	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$304
30-Final Design+Specifications	98	0	0	0	0	0	0	0	98
40-Row Acquisition+Permits	13	0	0	0	0	0	0	0	13
50-Construction	825	114	0	0	0	0	0	0	939
Total	\$1,241	\$114	\$0	\$0	\$0	\$0	\$0	\$0	\$1,355

Project Risk Assessment	
N/A	

804100 Transit Oriented Development Property Disposition Managed by: PEPD

Scope: Provide planning and technical assistance to local jurisdictions and Sound Transit (ST) project teams to help identify and shape transit oriented development and joint development opportunities. Dispose of properties that have been declared surplus and are suitable for transit oriented development based on size and proximity to ST transit services.

Changes to authorized project allocation since 2017: None.

Budget year activities: Assess joint development and public/private or public/public partnerships opportunities to develop Sound Transit owned sites near transit stations.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$11,615	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$11,615	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$3,924	\$2,660	\$1,850	\$1,430	\$1,073	\$678	\$0	\$0	\$11,615
Total	\$3,924	\$2,660	\$1,850	\$1,430	\$1,073	\$678	\$0	\$0	\$11,615

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,171	\$680	\$350	\$250	\$95	\$0	\$0	\$0	\$2,546
20-Prelim Engineering/Env Review	0	0	150	150	100	94	0	0	494
40-Row Acquisition+Permits	2,751	1,680	1,100	800	800	584	0	0	7,715
50-Construction	2	300	250	230	78	0	0	0	860
Total	\$3,924	\$2,660	\$1,850	\$1,430	\$1,073	\$678	\$0	\$0	\$11,615

Project Risk Assessment
N/A

State of Good Repair

State of Good Repair projects extend the life of existing system assets and replace those at the end of their useful life. As the transit system ages, investment in maintaining our assets in a state of good repair will rise.

2018 State of Good Repair Project Highlights

- Accept delivery of 16 Sound Transit buses which will replace buses having reached the end of their useful life.
- Upgrade and replace the hardware and software backbone of Sound Transit's legacy information technology systems.
- Procure seven link maintenance vehicles to provide specialized service repairs to the link alignment. Additionally, procure an Under Bridge Inspection Truck (UBIT) to enable maintenance staff and engineers to perform recurring onsite inspections of ST owned bridges.
- Establish a Link Light Rail (LRV) vehicle overhaul program to address the mid-life rehabilitation and repair requirements.
- Continue the process of refurbishing 58 passenger doors on Sounder passenger cars which have begun to fail due to repeated use.
- Replace glass on three Sounder entrances at King Street Station platforms with acrylic windows to lower the risk of damage from vandalism.
- Perform bridge repairs to two bridge segments supporting the Link system.
- Establish a Safety Oversight Approval Program (SOAP) to provide funding for emergency safety repairs.
- Partner with Pierce Transit to complete necessary improvements and repairs to the parking facility at the Tacoma Dome.

2018 Cashflow by Budget Approval

(in thousands)

State of Good Repair
ALL MODES

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Operating									
400046 Convention Place Development Systems Retrofit	\$1,002	\$1,547	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549
600033 Link CCTV System Upgrade	626	2,468	0	0	0	0	0	0	3,094
700681 Link SCADA System Support	0	250	0	0	0	0	0	0	250
700682 Tacoma Link HVAC and Building Systems Upgrade	0	400	0	0	0	0	0	0	400
700683 King Street Station Vertical Window Glazing	0	767	0	0	0	0	0	0	767
700695 Access Control Card Upgrade	0	520	1,744	0	0	0	0	0	2,264
700704 Link Radio Upgrade	0	1,000	0	0	0	0	0	0	1,000
700705 Link Bridge Repairs	0	165	385	0	0	0	0	0	550
700716 Othello Traction Power Sub-station Parking Lot	130	249	0	0	0	0	0	0	379
700718 Tacoma Link Light Rail Vehicle Overhaul	54	580	97	0	0	0	0	0	731
700728 Link Station Braided Tile Replacement	0	435	0	0	0	0	0	0	435
700769 Light Rail Vehicle Overhaul	1,919	3,081	0	0	0	0	0	0	5,000
7X356 Tacoma Dome Station	0	3,553	0	0	0	0	0	0	3,553
Subtotal	3,731	15,015	2,226	0	0	0	0	0	20,971
Program									
600077 Safety Oversight Approval Program	0	200	0	0	0	0	0	0	200
700677 Link Light Rail Vehicle Overhaul	0	5,100	3,570	1,445	0	0	0	0	10,115
700680 Link Operating Technology Upgrades	0	500	0	0	0	0	0	0	500
700770 Sounder Vehicle Overhaul Program	21,682	2,137	321	321	321	321	0	0	25,101
700771 Station Midlife Refurbishment Program	1,112	583	0	0	0	0	0	0	1,695
7X701 ST Express Fleet Replacement	128,348	26,195	15,535	0	19,191	0	0	0	189,269
7X740 Small Works Program	3,766	3,581	1,991	662	680	742	642	0	12,064
870100 Information Technology (IT) Infrastructure	1,543	1,162	771	585	410	471	737	64	5,743
870101 IT Transit Systems	444	143	470	638	840	486	391	2,494	5,905
Subtotal	156,894	39,600	22,658	3,651	21,442	2,020	1,770	2,557	250,593
Total	\$160,625	\$54,615	\$24,884	\$3,651	\$21,442	\$2,020	\$1,770	\$2,557	\$271,564

2018 Cashflow by Subarea
(in thousands)

State of Good Repair
ALL MODES

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$26,049	\$5,368	\$3,037	\$130	\$3,510	\$140	\$83	\$0	\$38,319
2 - North King	4,500	8,992	2,596	533	406	461	642	47	18,176
3 - South King	26,916	8,380	2,638	419	2,315	401	287	16	41,374
4 - East King	59,755	12,730	7,525	126	8,957	141	122	0	89,356
5 - Pierce	42,961	13,701	5,048	360	5,415	391	244	0	68,120
6 - Systemwide	444	343	470	638	840	486	391	2,494	6,105
Total	\$160,625	\$49,515	\$21,314	\$2,206	\$21,442	\$2,020	\$1,770	\$2,557	\$261,449

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$1,543	\$1,162	\$771	\$585	\$410	\$471	\$737	\$64	\$5,743
10-Agency Administration	606	253	35	0	0	0	0	0	895
20-Prelim Engineering/Env Review	64	133	0	0	0	0	0	0	197
30-Final Design+Specifications	127	397	0	0	0	0	0	0	525
35-Third Party	0	156	0	0	0	0	0	0	156
50-Construction	18,269	15,093	4,556	1,300	1,520	1,227	1,033	2,494	45,491
55-Construction Services	0	328	0	0	0	0	0	0	328
70-Vehicles	140,016	37,093	19,523	1,766	19,512	321	0	0	218,230
Total	\$160,625	\$54,615	\$24,884	\$3,651	\$21,442	\$2,020	\$1,770	\$2,557	\$271,564

400046 **Convention Place Development Systems Retrofit** **Managed by: DECM**

Scope: Install electrical distribution equipment that is necessary for the operation and integration of the Pine Street facility with the University Link and the Downtown Seattle Transit Tunnel (DSTT). This effort is in support of the deletion of the emergency generator necessary for the Convention Center project.

Changes to authorized project allocation since 2017: None.

Budget year activities: Install electrical distribution equipment in the Convention Place/Pine Street area.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
Baseline:		2017 :	2017	2017 Cost Estimate:	N/A
2017 TIP:	\$2,549	2018 :	2018	2018 Cost Estimate:	N/A
2018 TIP:	\$2,549				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,002	\$1,547	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549
Total	\$1,002	\$1,547	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$67	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$150
30-Final Design+Specifications	35	11	0	0	0	0	0	0	46
50-Construction	900	1,125	0	0	0	0	0	0	2,025
55-Construction Services	0	328	0	0	0	0	0	0	328
Total	\$1,002	\$1,547	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549

Project Risk Assessment

Coordination with Link Operations and King County Metro (KCM) to avoid impacts to existing Downtown Seattle Transit Tunnel (DSTT) operations will be challenging and may have schedule and cost impacts.

600033	Link CCTV System Upgrade	Managed by: Operations
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Scope: Upgrade existing Link light rail Closed-Circuit Television (CCTV) NiceVision system at 16 stations and Link Operations and Maintenance Facility with digital cameras to be compatible with the new equipment installed for University Link and South 200th Link extensions.

Changes to authorized project allocation since 2017: None.

Budget year activities: Upgrade cameras in all Link stations and the Operations and Maintenance Facility.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$3,094	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$3,094	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$418	\$1,651	\$0	\$0	\$0	\$0	\$0	\$0	\$2,070
South King	207	817	0	0	0	0	0	0	1,024
Total	\$626	\$2,468	\$0	\$0	\$0	\$0	\$0	\$0	\$3,094

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$20
30-Final Design+Specifications	0	50	0	0	0	0	0	0	50
50-Construction	626	2,398	0	0	0	0	0	0	3,024
Total	\$626	\$2,468	\$0	\$0	\$0	\$0	\$0	\$0	\$3,094

Project Risk Assessment
Completion of the project in 2018 requires all stations can be scheduled for installation of a large volume of cameras and integration into the agency CCTV system.

700677	Link Light Rail Vehicle Overhaul	Managed by: Operations
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Scope:- Plan and implement a light rail vehicle overhaul program to perform required mid-life maintenance and component overhauls required to keep vehicles in a state of good repair and achieve full life expectancy.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Begin formulating schedule for light rail vehicle (LRV) component part overhaul and performance of overhauls as required.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$10,115	2018 : 2020	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$0	\$5,100	\$3,570	\$1,445	\$0	\$0	\$0	\$0	\$10,115
Total	\$0	\$5,100	\$3,570	\$1,445	\$0	\$0	\$0	\$0	\$10,115

Project Risk Assessment
There are both schedule and budget risks: project delays could compromise light rail vehicles state of good repair and availability for use and have an affect on the budget requirements to fund the program.

700680	Link Operating Technology Upgrades	Managed by: Operations
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Scope: Perform lifecycle related updates to operations technology system at or near the end of life for current hardware, software and firmware.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Install upgrades.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$500	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$334	\$0	\$0	\$0	\$0	\$0	\$0	\$334
South King	0	166	0	0	0	0	0	0	166
Total	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500

Project Risk Assessment
Risk of discovering operation limitations or incompatibility of updated version of hardware, software and firmware.

700681	Link SCADA System Support	Managed by: Operations
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Scope: Enhance and improve the LINK SCADA systems for ease of operation to link control center staff, facilities and other departments needing SCADA presented information. The current LINK SCADA systems need alarm cleanup and management, new graphical screens and key system training to allow future delivery in-house.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Update the SCADA system.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$250	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$167
South King	0	83	0	0	0	0	0	0	83
Total	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$250

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Total	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$250

Project Risk Assessment

Proper coordination of change control process will have to be followed to maintain software configuration and keep both ST and vendor current.

700682	Tacoma Link HVAC and Building Systems Upgrade	Managed by: Operations
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Scope: The Tacoma Operations and Maintenance Facility (OMF) was constructed approximately 15 years ago, and the HVAC and Building Controls in the building are obsolete and nearing the end of their useful life. This project funds Operations (Facilities) coordination, replacement and upgrade of the original systems during the construction of the Tacoma Link Expansion project.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Upgrade the HVAC system.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$400	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400
Total	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
30-Final Design+Specifications	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$30
50-Construction	0	370	0	0	0	0	0	0	370
Total	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$400

Project Risk Assessment
Coordination with the Tacoma Link Expansion project is critical to obtaining an integrated, fully functional building control and HVAC system for the new combined facility.

700695	Access Control Card Upgrade	Managed by: Operations
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Scope: Upgrade the existing access control system that manages the secure access to Sound Transit Link facilities. The existing General Electric (GE) Secure Perfect system was installed in 2008 and is no longer supported by GE. A new system will allow for a single access control platform for all of the agency's Link facilities.

Changes to authorized project allocation since 2017: Increased by \$1.15 million as a result of higher than anticipated contract bids for the new system.

Budget year activities: Upgrade the existing access control card system for Link facilities.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,114	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$2,264	2018 : 2019	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$400	\$1,341	\$0	\$0	\$0	\$0	\$0	\$1,741
South King	0	120	403	0	0	0	0	0	523
Total	\$0	\$520	\$1,744	\$0	\$0	\$0	\$0	\$0	\$2,264

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$520	\$1,744	\$0	\$0	\$0	\$0	\$0	\$2,264
Total	\$0	\$520	\$1,744	\$0	\$0	\$0	\$0	\$0	\$2,264

Project Risk Assessment

The risk of budget or schedule changes is minimal given the scope of the project.

700704	Link Radio Upgrade	Managed by: Operations
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Scope: Install upgraded Distributed Antenna System (DAS) in two Link tunnel systems: Downtown Seattle Transit Tunnel and Beacon Hill Tunnel.

Changes to authorized project allocation since 2017: None.

Budget year activities: Procure and install a distributed antenna system.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,000	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$1,000	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$668	\$0	\$0	\$0	\$0	\$0	\$0	\$668
South King	0	332	0	0	0	0	0	0	332
Total	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$0	\$80
20-Prelim Engineering/Env Review	0	100	0	0	0	0	0	0	100
30-Final Design+Specifications	0	120	0	0	0	0	0	0	120
50-Construction	0	700	0	0	0	0	0	0	700
Total	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000

Project Risk Assessment
There is a low potential for a radio system failure during the installation of the upgraded system, which would prevent Link operations in the tunnels until fixed.

700705	Link Bridge Repairs	Managed by: Operations
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Scope: Repair bridge structures within the Tukwila Freeway Route and E-3 Busway segments of the Link light rail alignment to correct areas of deterioration that have developed over time as a result of weather, change of seasons and vibration caused by the operating trains.

Changes to authorized project allocation since 2017: None.

Budget year activities: Select and award contract; contractor to perform necessary repairs of the Link bridge structures.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$550	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$550	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$550	2018 : 2019	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$165	\$385	\$0	\$0	\$0	\$0	\$0	\$550
Total	\$0	\$165	\$385	\$0	\$0	\$0	\$0	\$0	\$550

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$15	\$35	\$0	\$0	\$0	\$0	\$0	\$50
30-Final Design+Specifications	0	150	0	0	0	0	0	0	150
50-Construction	0	0	350	0	0	0	0	0	350
Total	\$0	\$165	\$385	\$0	\$0	\$0	\$0	\$0	\$550

Project Risk Assessment

There is a limited repair window to perform repairs without impacting light rail operations. Effective schedule and efficient execution of repairs is required.

700718	Tacoma Link Light Rail Vehicle Overhaul	Managed by: Operations
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Scope: Maintain, preserve, and extend the life of the Tacoma Link fleet of three light rail vehicles. Repair, replace and overhaul traction motors and trucks, including wheel assemblies and gear boxes for the light rail vehicles per the manufacturer’s 375,000 mile overhaul guidelines.

Changes to authorized project allocation since 2017: None.

Budget year activities: Overhaul Tacoma Link light rail vehicle traction motors and trucks.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$731	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$731	2018 : 2019	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$54	\$580	\$97	\$0	\$0	\$0	\$0	\$0	\$731
Total	\$54	\$580	\$97	\$0	\$0	\$0	\$0	\$0	\$731

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$54	\$580	\$97	\$0	\$0	\$0	\$0	\$0	\$731
Total	\$54	\$580	\$97	\$0	\$0	\$0	\$0	\$0	\$731

Project Risk Assessment
There is a small risk the length of time to perform the overhaul activities could have schedule impacts.

700728	Link Station Braided Tile Replacement	Managed by: Operations
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Scope: Demolition and reinstallation of braided wayfinding tile at five Link light rail stations: Stadium, Sodo, Columbia City, Othello, and Rainier Beach.

Changes to authorized project allocation since 2017: None.

Budget year activities: Replace existing tiles as needed to complete project.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$435	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$435	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$435	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$0	\$435	\$0	\$0	\$0	\$0	\$0	\$0	\$435
Total	\$0	\$435	\$0	\$0	\$0	\$0	\$0	\$0	\$435

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$22	\$0	\$0	\$0	\$0	\$0	\$0	\$22
50-Construction	0	413	0	0	0	0	0	0	413
Total	\$0	\$435	\$0	\$0	\$0	\$0	\$0	\$0	\$435

Project Risk Assessment
N/A

700769	Light Rail Vehicle Overhaul	Managed by: DECM
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Scope: Complete repairs of the gear units and traction motors on light rail vehicles (LRVs), and purchase materials, equipment, services, and labor necessary to complete repairs.

Repairs to the LRV fleet were completed in 2016; work to repair spare equipment completed in 2017. Funds cash flowed in 2018 may be surplus budget depending on acceptance after testing.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete testing of spare traction power motors and gear boxes.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$5,000	2017 : 2016	2017 Cost Estimate: N/A
2018 TIP: \$5,000	2018 : 2017	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,284	\$2,061	\$0	\$0	\$0	\$0	\$0	\$0	\$3,345
South King	635	1,020	0	0	0	0	0	0	1,655
Total	\$1,919	\$3,081	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$1,919	\$3,081	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
Total	\$1,919	\$3,081	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000

Project Risk Assessment
Budget risk remains high given that no agreement regarding the warranty coverage on repairs has been reached between manufacturer, supplier and Sound Transit.

700683	King Street Station Vertical Window Glazing	Managed by: Operations
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Scope: Remove and replace all vertical tempered glass wall panels at the three King Street Station stair towers. The existing glass panels will be replaced with transparent acrylic panels that are significantly stronger than glass and will not shatter in the event of vandalism or other failure.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Remove and replace all vertical tempered glass wall panels at the three King Street Station stair towers.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$767	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$0	\$767	\$0	\$0	\$0	\$0	\$0	\$0	\$767
Total	\$0	\$767	\$0	\$0	\$0	\$0	\$0	\$0	\$767

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$767	\$0	\$0	\$0	\$0	\$0	\$0	\$767
Total	\$0	\$767	\$0	\$0	\$0	\$0	\$0	\$0	\$767

Project Risk Assessment

The risk is low. This project is not dependent on any other work. It creates a safer passenger environment and maintains passenger station access by eliminating a source of stairwell closures.

700770	Sounder Vehicle Overhaul Program	Managed by: Operations
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Scope: Maintain, preserve, and extend the life of Sounder locomotives and cab car fleet. This program overhauls 11 locomotives of the Sounder fleet while upgrading technologies and emisison efficiencies, truck overhauls of cab cars and HVAC upgrades to the same.

Changes to authorized project allocation since 2017: None.

Budget year activities: To rebuild 120 heating, ventilating and air conditioning units.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$25,101	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$25,101	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$2,970	\$293	\$44	\$44	\$44	\$44	\$0	\$0	\$3,439
South King	11,361	1,120	168	168	168	168	0	0	13,153
Pierce	7,350	724	109	109	109	109	0	0	8,509
Total	\$21,682	\$2,137	\$321	\$321	\$321	\$321	\$0	\$0	\$25,101

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$12,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,175
70-Vehicles	9,507	2,137	321	321	321	321	0	0	12,926
Total	\$21,682	\$2,137	\$321	\$321	\$321	\$321	\$0	\$0	\$25,101

Project Risk Assessment
Multiple Sounder vehicles being overhauled or under going major repairs continue to run the risk of cost overruns or schedule delays.

700771	Station Midlife Refurbishment Program	Managed by: Operations
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Scope: Provide rehabilitation and mid-life maintenance for Sound Transit facilities that have been in service for fifteen years or longer.

Changes to authorized project allocation since 2017: None.

Budget year activities: Rehabilitate Tukwila International Blvd Station bus loop.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$1,695	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$1,695	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$742	\$389	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131
Pierce	370	194	0	0	0	0	0	0	565
Total	\$1,112	\$583	\$0	\$0	\$0	\$0	\$0	\$0	\$1,695

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8
50-Construction	1,105	583	0	0	0	0	0	0	1,688
Total	\$1,112	\$583	\$0	\$0	\$0	\$0	\$0	\$0	\$1,695

Project Risk Assessment

Undefined scope of work at the various station locations could affect both the budget and schedule.

7X701	ST Express Fleet Replacement	Managed by: Operations
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Scope: Funds the bus fleet replacement program for ST Express.

Current Assumptions: FTA guidelines indicate that buses are to be replaced no earlier than either 12 years of service or 500,000 miles. Due to the unique service characteristics of the ST Express fleet, Sound Transit buses typically reach 500,000 miles after only 10 years of operations yet Sound Transit often keeps buses for several years past the minimal deadline. Replacement decisions are informed by specific fleet performance in consultation with our operating partner agencies. During the period from 2017-2022 150 buses will be replaced. The fleet size as of 2017 is 318.

Changes to authorized project allocation since 2017: None.

Budget year activities: Accept delivery of 18 replacement buses.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$189,269	2017 : 2021	2017 Cost Estimate: N/A
2018 TIP: \$189,269	2018 : 2021	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$22,589	\$4,610	\$2,734	\$0	\$3,378	\$0	\$0	\$0	\$33,311
South King	12,963	2,646	1,569	0	1,938	0	0	0	19,116
East King	59,040	12,050	7,146	0	8,828	0	0	0	87,064
Pierce	33,755	6,889	4,086	0	5,047	0	0	0	49,778
Total	\$128,348	\$26,195	\$15,535	\$0	\$19,191	\$0	\$0	\$0	\$189,269

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$47	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47
70-Vehicles	128,301	26,195	15,535	0	19,191	0	0	0	189,222
Total	\$128,348	\$26,195	\$15,535	\$0	\$19,191	\$0	\$0	\$0	\$189,269

Project Risk Assessment
Budget risk is a concern as the cost estimates and vehicle types are annually reviewed as replacements are identified and the agency adopts on-board technologies to be included in future replacements.

600077	Safety Oversight Approval Program	Managed by: EXE
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Scope: This program covers remedial actions approved by the Safety Oversight Approval Panel (SOAP). The responsibility of the panel includes; evaluation of risk & exposures that propose liability to the agency, make decisions/recommendations regarding budget, coordinate closely with Capital Plan Change Board (CCB) and ensure decisions are consistent across Sound Transit.

Changes to authorized project allocation since 2017: New project.

Budget year activities: Remedial actions are dependent on issues flagged during the year.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$200	2018 : N/A	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$200

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Total	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$200

Project Risk Assessment

This is a program new for 2018. The initial budget is designed to fund immediate need safety mitigation requirements. As the funds are used it is expected they would be replenished. As the program matures some certainty in budget requirements should result.

700716	Othello Traction Power Sub-station Parking Lot	Managed by: Operations
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Scope: Install concrete parking lot, concrete curb on the north property line, fencing and gating surrounding the lot, demolish part of the CMU wall surrounding the TPSS, and add lighting for the parking area.

Changes to authorized project allocation since 2017: Increased by \$182 thousand due to costs increase.

Budget year activities: Installation of the concrete parking lot, concrete curb, fencing and lighting.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$379	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$379	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$87	\$166	\$0	\$0	\$0	\$0	\$0	\$0	\$253
South King	43	83	0	0	0	0	0	0	126
Total	\$130	\$249	\$0	\$0	\$0	\$0	\$0	\$0	\$379

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$60	\$11	\$0	\$0	\$0	\$0	\$0	\$0	\$71
30-Final Design+Specifications	0	20	0	0	0	0	0	0	20
35-Third Party	0	6	0	0	0	0	0	0	6
50-Construction	70	212	0	0	0	0	0	0	283
Total	\$130	\$249	\$0	\$0	\$0	\$0	\$0	\$0	\$379

Project Risk Assessment
Low project risk.

7X356	Tacoma Dome Station	Managed by: Operations
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Scope: Provide financial support to address major maintenance requirement at Tacoma Dome Station per agreement with Pierce Transit.

Changes to authorized project allocation since 2017: Increased by \$3.14 million due to rehabilitation work cost increase.

Budget year activities: Provide cost share if Pierce Transit completes rehabilitation work.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$414	2017 : 2018	2017 Cost Estimate: N/A
2018 TIP: \$3,553	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$0	\$3,553	\$0	\$0	\$0	\$0	\$0	\$0	\$3,553
Total	\$0	\$3,553	\$0	\$0	\$0	\$0	\$0	\$0	\$3,553

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$3,553	\$0	\$0	\$0	\$0	\$0	\$0	\$3,553
Total	\$0	\$3,553	\$0	\$0	\$0	\$0	\$0	\$0	\$3,553

Project Risk Assessment

The agency has agreed to fund a proportional share at completion. The budget represents the share of the cost estimate. It is possible that the agency would be responsible for the same share of cost overruns.

7X740	Small Works Program	Managed by: Operations
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Scope: Projects completed under the small works program include modification/repairs of operating facilities and systems with an estimated total cost of less than \$200,000 per project. The budget for this program is based on number of sites maintained, age of facilities, and amount of use.

Changes to authorized project allocation since 2017: Increased by \$1.5 million which includes extending the program another year. Additionally project was decreased by \$379 thousand as two projects were converted to stand-alone projects as a result of exceeding project funding limits.

Budget year activities: Continue work in progress from 2017, establish 2018 project list and deliver projects using traditional procurement methods, Job Order Contracting (JOC) or through internal resources.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$10,911	2017 : 2020	2017 Cost Estimate: N/A
2018 TIP: \$12,411	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$490	\$466	\$259	\$86	\$88	\$96	\$83	\$0	\$1,568
North King	565	537	299	99	102	111	96	0	1,810
South King	565	537	299	99	102	111	96	0	1,810
East King	716	680	378	126	129	141	122	0	2,292
Pierce	1,431	1,361	757	252	259	282	244	0	4,585
Total	\$3,766	\$3,581	\$1,991	\$662	\$680	\$742	\$642	\$0	\$12,064

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$471	\$23	\$0	\$0	\$0	\$0	\$0	\$0	\$494
20-Prelim Engineering/Env Review	64	33	0	0	0	0	0	0	97
30-Final Design+Specifications	92	16	0	0	0	0	0	0	108
35-Third Party	0	150	0	0	0	0	0	0	150
50-Construction	2,903	3,359	1,991	662	680	742	642	0	10,979
70-Vehicles	236	0	0	0	0	0	0	0	236
Total	\$3,766	\$3,581	\$1,991	\$662	\$680	\$742	\$642	\$0	\$12,064

Project Risk Assessment
Project risks are minimal, however, the volume of small works eligible projects and the limits of internal resources could impact the delivery of project requests. Given recent spending, age and growth of the Agency asset base the out years (2019-2023) will require additional financial resources to meet the demand of small works qualified projects.

870100	Information Technology (IT) Infrastructure	Managed by: FIT
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Scope: Provide lifecycle maintenance of the IT infrastructure across all Agency and Revenue systems including but not limited to: servers, storage area networks, networking equipment, backend for customer-facing systems (i.e. Video Messaging System) and other computer-based infrastructure, plus enhancements and maintenance for IT network and data security, including firewalls and other related technology systems.

This project encompasses the infrastructure systems for the entirety of the Agency datacenters and network and the backend infrastructure systems for the Link light rail systems, including the SCADA backend systems. The project also includes integration and upgrades of legacy hardware/software at Link light rail stations and control centers with upcoming future light rail expansion.

Changes to authorized project allocation since 2017: increased by \$1.8 million.

Budget year activities: Perform lifecycle maintenance of agency and operational systems' backend technology infrastructure which includes servers, storage area networks, networking equipment, and other computer-based infrastructure; IT SCADA backend security, and LRV wireless network.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: None		
Baseline: \$0	Baseline: N/A	Voter-Approved Cost Estimate: N/A
2017 TIP: \$3,935	2017 : 2023	2017 Cost Estimate: N/A
2018 TIP: \$5,743	2018 : 2023	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,143	\$861	\$571	\$433	\$304	\$349	\$546	\$47	\$4,254
South King	400	301	200	152	106	122	191	16	1,489
Total	\$1,543	\$1,162	\$771	\$585	\$410	\$471	\$737	\$64	\$5,743

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$1,543	\$1,162	\$771	\$585	\$410	\$471	\$737	\$64	\$5,743
Total	\$1,543	\$1,162	\$771	\$585	\$410	\$471	\$737	\$64	\$5,743

Project Risk Assessment

Potential for risk of increased cost as system expands and integration and support require more resources to meet system compliance standards.

870101 **IT Transit Systems** **Managed by: FIT**

Scope: Maintain, upgrade and replace multiple computer and technology-based systems at Sounder stations and ST Express transit centers to keep them safe, secure, and functional for our customers.

Systems maintained include: Sounder Stations & Transit Centers - closed circuit television access control and customer emergency stations; Sounder - passenger information systems, automated passenger counters and variable message signage.

Changes to authorized project allocation since 2017: None.

Budget year activities: Upgrade CCTV system along the initial light rail alignment, upgrade CCTV system at parking garages, install security systems and customer emergency stations at transit centers and parking garages.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$5,905	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$5,905	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$444	\$143	\$470	\$638	\$840	\$486	\$391	\$2,494	\$5,905
Total	\$444	\$143	\$470	\$638	\$840	\$486	\$391	\$2,494	\$5,905

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$444	\$143	\$470	\$638	\$840	\$486	\$391	\$2,494	\$5,905
Total	\$444	\$143	\$470	\$638	\$840	\$486	\$391	\$2,494	\$5,905

Project Risk Assessment

Information technology is ever changing and could adversely affect both the cost of the equipment and the availability of the equipment and technology.

Administrative

Administrative projects are not specific to any transit mode or capital program. Projects fund disposition of surplus real estate, procurement of administrative equipment, facilities, and technology, as well as administrative support critical to the successful operation of the agency. Administrative costs that support projects are charged to construction in progress and capitalized with the resulting assets.

2018 Administrative Project Highlights

- Replace seven non-revenue vehicles used by administrative staff and add eleven vehicles to the fleet in support of increased pool usage and direct need due to increased program activity.
- Continue the second year of a three-year program to replace the roof top cooling towers and 98 variable air volume exchangers at Union Station.
- Continue landscape and wetland hydrology mitigation and maintenance activities at selected Sound Transit properties.
- Implementation of Contract Manager replacement.
- Implementation of IT Service Delivery and Management platform.
- Implementation of Real Property/ROW Management software platform.

2018 Cashflow by Budget Approval

(in thousands)

Administrative

ALL MODES

Project Number and Name	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Program									
0X002 Agency Administration Operating	\$365,660	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$76,046	\$0	\$791,918
600025 Environmental Mitigation, Monitoring & Maintenance	538	121	105	18	13	13	0	664	1,471
802000 Administrative Capital	9,470	6,249	1,483	82	0	0	0	0	17,284
803800 Information Technology Program	18,122	3,265	2,564	3,293	2,399	2,226	1,894	1,372	35,136
804500 Surplus Property Disposition	305	100	303	0	0	0	0	0	708
Subtotal	394,094	78,143	79,021	80,989	80,087	54,206	77,940	2,036	846,516
Total	\$394,094	\$78,143	\$79,021	\$80,989	\$80,087	\$54,206	\$77,940	\$2,036	\$846,516

2018 Cashflow by Subarea
(in thousands)

Administrative
ALL MODES

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$94	\$21	\$18	\$3	\$2	\$2	\$0	\$116	\$257
2 - North King	305	100	303	0	0	0	0	0	708
3 - South King	333	75	65	11	8	8	0	412	912
4 - East King	31	7	6	1	1	1	0	39	86
5 - Pierce	79	18	15	3	2	2	0	98	216
6 - Systemwide	393,251	77,922	78,613	80,971	80,075	54,193	77,940	1,372	844,337
Total	\$394,094	\$78,143	\$79,021	\$80,989	\$80,087	\$54,206	\$77,940	\$2,036	\$846,516

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
02-Operation+Maintenance-Agency	\$0	\$315	\$0	\$0	\$0	\$0	\$0	\$0	\$315
09-Admin Capital	25,392	8,025	2,509	1,218	927	983	970	447	40,471
10-Agency Administration	366,798	68,716	74,761	77,658	78,244	52,435	76,970	924	796,507
20-Prelim Engineering/Env Review	1,608	986	1,455	2,112	916	788	0	664	8,530
40-Row Acquisition+Permits	296	100	297	0	0	0	0	0	693
Total	\$394,094	\$78,143	\$79,021	\$80,989	\$80,087	\$54,206	\$77,940	\$2,036	\$846,516

0X002 Agency Administration Operating Managed by: FIT

Scope: Funds administrative overhead expenses that are charged to capital projects and overhead expenses that are not allocated to either projects or transit operations. Overhead expenses allocated to projects are included in the capitalized cost of the resulting assets. Unallocated overhead expenses are included in general and administrative expenses for the agency.

The agency uses a cost allocation plan approved by the Federal Transit Administration. Use of this approved model makes the majority of indirect project expenses eligible for federal grant funding.

Changes to authorized project allocation since 2017: None.

Budget year activities: Fund department costs allocated to projects as administrative overhead that may be eligible for partial reimbursement from federal grants. Also, fund department costs that are unallocated.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$3,185,840	Baseline:	2023	Voter-Approved Cost Estimate:	\$791,918
2017 TIP:	\$0	2017 :	2023	2017 Cost Estimate:	\$791,918
2018 TIP:	\$791,918	2018 :	2023	2018 Cost Estimate:	\$791,918

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$365,660	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$76,046	\$0	\$791,918
Total	\$365,660	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$76,046	\$0	\$791,918

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$365,660	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$76,046	\$0	\$791,918
Total	\$365,660	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$76,046	\$0	\$791,918

Project Risk Assessment	
N/A	

600025 Environmental Mitigation, Monitoring & Maintenance Managed by: PEPD

Scope: Monitor and maintain post-construction environmental mitigation including wetland hydrology, plant establishment, and other site features. Duration depends upon permit conditions and may be 10 years or may last for the life of the property.

Changes to authorized project allocation since 2017: Increased by \$48 thousand by moving funds from Tacoma Trestle Project to the Environmental Monitoring and Maintenance project.

Budget year activities: Monitor and maintain mitigation maintenance activities at Tacoma Trestle, Tukwila and McKinley Park transit centers.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$1,423	2017 :	2030	2017 Cost Estimate:	N/A
2018 TIP:	\$1,471	2018 :	2030	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$94	\$21	\$18	\$3	\$2	\$2	\$0	\$116	\$257
South King	333	75	65	11	8	8	0	412	912
East King	31	7	6	1	1	1	0	39	86
Pierce	79	18	15	3	2	2	0	98	216
Total	\$538	\$121	\$105	\$18	\$13	\$13	\$0	\$664	\$1,471

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
20-Prelim Engineering/Env Review	\$538	\$121	\$105	\$18	\$13	\$13	\$0	\$664	\$1,471
Total	\$538	\$121	\$105	\$18	\$13	\$13	\$0	\$664	\$1,471

Project Risk Assessment
N/A

802000 Administrative Capital Managed by: FIT

Scope: Funds capital expenditures for administrative assets that support agency staff, including administrative facilities, non-revenue administrative fleet, office equipment, space planning, and furnishings.

Changes to authorized project allocation since 2017: None.

Budget year activities: Procure and replace eight non-revenue administrative vehicles, replace variable air exchangers and HVAC compressor at Union Station, and procure furnishings for additional leased space to accommodate growth.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$17,284	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$17,284	2018 :	2020	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$9,470	\$6,249	\$1,483	\$82	\$0	\$0	\$0	\$0	\$17,284
Total	\$9,470	\$6,249	\$1,483	\$82	\$0	\$0	\$0	\$0	\$17,284

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$9,467	\$6,249	\$1,483	\$82	\$0	\$0	\$0	\$0	\$17,282
10-Agency Administration	2	0	0	0	0	0	0	0	2
Total	\$9,470	\$6,249	\$1,483	\$82	\$0	\$0	\$0	\$0	\$17,284

Project Risk Assessment
N/A

803800 Information Technology Program Managed by: FIT

Scope: Support agencywide hardware and software infrastructure, develop and implement technology solutions to improve administrative efficiency through 2023.

Changes to authorized project allocation since 2017: Increased by \$2.9 million.

Budget year activities: Implement the agency's enterprise asset management system, maintain agency IT infrastructure, implement information security controls, replace eBid (vendor solicitation) system, and develop a business intelligence program.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$32,235	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$35,136	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$18,122	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$1,894	\$1,372	\$35,136
Total	\$18,122	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$1,894	\$1,372	\$35,136

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
02-Operation+Maintenance-Agency	\$0	\$315	\$0	\$0	\$0	\$0	\$0	\$0	\$315
09-Admin Capital	15,924	1,777	1,025	1,136	927	983	970	447	23,189
10-Agency Administration	1,128	308	189	63	568	468	924	924	4,572
20-Prelim Engineering/Env Review	1,070	865	1,350	2,094	904	775	0	0	7,059
Total	\$18,122	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$1,894	\$1,372	\$35,136

Project Risk Assessment

Future year forecasts reflect initial planning estimates so costs are subject to change. Schedules are dependent on staff capacity and the specific application or approach selected.

804500 **Surplus Property Disposition** **Managed by: DECM**

Scope: Prepare surplus properties for sale that due to their size or location do not lend themselves to Transit-Oriented Development (TOD) opportunities. Surplus properties represent remnant properties that may have been used during construction or were acquired and no longer needed for transit use.

Changes to authorized project allocation since 2017: None.

Budget year activities: Prepare surplus properties for sale.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:	\$0	Baseline:	N/A	Voter-Approved Cost Estimate:	N/A
2017 TIP:	\$708	2017 :	2017	2017 Cost Estimate:	N/A
2018 TIP:	\$708	2018 :	2019	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$305	\$100	\$303	\$0	\$0	\$0	\$0	\$0	\$708
Total	\$305	\$100	\$303	\$0	\$0	\$0	\$0	\$0	\$708

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$9	\$0	\$6	\$0	\$0	\$0	\$0	\$0	\$14
40-Row Acquisition+Permits	296	100	297	0	0	0	0	0	693
Total	\$305	\$100	\$303	\$0	\$0	\$0	\$0	\$0	\$708

Project Risk Assessment
N/A

Reserves

The 2018 TIP includes history and forecasts for reserve fund contributions through 2041 to support emergencies as well as unplanned expenditures. Additional reserves included in the ST3 plan approved by voters in November 2016 are included in the table below.

Emergency/Loss

While the agency maintains a comprehensive insurance program, the policies do contain retentions (deductibles), which the agency would have to cover in the event of an insurable loss. In such instances, the Board could authorize the use of the emergency/loss fund on a case-by-case basis. The approval of the ST3 plan increased the reserve by \$50 million.

Insurance Systemwide

The insurance systemwide reserve is forecasted to be made available to partially pay for builders' risk insurance in conjunction with funds provided by building contractors.

Operations & Maintenance

Sound Transit's financial policies require the agency to maintain an operation and maintenance reserve equal to two months of department operating expenses, including costs allocated to transit modes and projects.

Systemwide Contingency

The systemwide contingency is forecasted as part of the Sound Move program and supplemented in the ST2 plan. This fund is for use by the Board to deal with any unforeseen events.

Capital Replacement

The agency maintains a minimum \$300 million reserve for unanticipated expenditures necessary to keep the system in good working condition.

Asset Management Policy guidelines for forecasting and budgeting capital replacement and lifecycle maintenance to ensure the regional system is maintained in a state of good repair. The following are financial elements of the policy:

- \$300 million minimum Capital Replacement Reserve to be maintained by the agency for unanticipated or emergency capital replacements. The reserve balance is currently \$323.3 million.
- A rolling 40-year State of Good Repair Forecast (SGRF) will inform the inclusion of a six year funding of the replacement of agency assets and major mid-life maintenance, which will be included annually in the TIP. Independent assessments of the plan will be conducted every five years. The six year finding forecast is provided in the Reserve table.
- Appendix C provides a more detailed explanation of the policy and the categories of assets accounting for the financial set asides.

AGENCY RESERVE SUMMARY (in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Emergency Loss	\$18	\$6	\$6	\$6	\$6	\$7	\$7	\$35	\$88
Insurance Systemwide	0	0	6	6	6	6	0	0	23
Operations and Maintenance	0	77	0	0	0	0	0	0	77
Systemwide Contingency	0	0	5	0	0	0	0	0	5
Capital Replacement	323	0	0	0	0	0	0	0	323
Total	\$342	\$82	\$16	\$11	\$11	\$13	\$7	\$35	\$517

Appendix A – Sound Transit 2 and Sound Transit 3 Cost Estimates

The agency maintains cost estimates for all of its capital projects that are funded in the agency's financial plan. These estimates are updated as new engineering, right-of-way, public outreach, and other project information are developed. Project cost estimates are updated prior to seeking Board authorization of budgets for preliminary engineering, final design and right-of-way acquisition, and baseline budget, which includes total project costs and construction.

ST2 cost estimates were initially developed and reported in 2007 constant-year dollars. ST3 cost estimates were initially developed and reported in 2015 constant-year dollars. To enable comparisons between cost estimates, the figures in this appendix have been updated to 2017 constant-year dollars based on the agency's August 2017 inflation forecasts.

The table on the next page includes the following information:

- Original cost estimates are from the initial ST2 and ST3 plans approved by voters in November 2008 (ST2) and November 2016 (ST3).
- 2017 cost estimates match the adopted 2017 TIP.
- 2018 cost estimates include all ST2 and ST3 projects currently funded in the agency's financial plan.
- All voter-approved ST3 projects were added to Appendix A.
- The Federal Way Link Extension project is increased to reflect the addition of scope to extend the project to Federal Way Transit Center.

Link Light Rail



CAPITAL COST ESTIMATES (in thousands/constant 2017 dollars)

	Voter Approved	Inc / (Dec)	2017 Estimate	Inc / (Dec)	2018 Estimate
Link Light Rail					
East Link	\$3,620,104	(\$246,735)	\$3,373,370	\$0	\$3,373,370
Northgate Link Extension	1,894,174	167,496	2,061,670	-	2,061,670
Lynnwood Link Extension	1,797,752	(265,872)	1,531,880	-	1,531,880
First Hill Link Connector	145,548	(1,295)	144,254	-	144,254
South 200th Street Link Extension	440,208	7,308	447,516	-	447,516
South Corridor HCT - S200th to KDM Rd	537,731	(61,345)	476,386	(476,386)	-
South Corridor HCT - KDM Rd to S 272nd St	584,086	(584,086)	-	-	-
Federal Way Link Extension	1,140,867	-	1,140,867	476,386	1,617,253
HCC to Tacoma Dome - P/E & ROW	60,258	(60,258)	-	-	-
South Corridor Alternatives Analysis	87,367	(84,124)	3,242	-	3,242
Tacoma Link Extension	109,255	35,993	145,248	-	145,248
Link Maintenance & Storage (OMF-East)	329,862	89,793	419,655	-	419,655
Link Fleet Expansion	614,869	70,120	684,989	215,930	900,919
Downtown Seattle Light Rail Tunnel	1,925,943	-	1,925,943	-	1,925,943
West Seattle to Downtown	1,705,934	-	1,705,934	-	1,705,934
Ballard to Downtown	2,842,720	-	2,842,720	-	2,842,720
Graham St Station	79,540	-	79,540	-	79,540
Boeing Access Road Station	145,090	-	145,090	-	145,090
*Downtown Redmond Link Extension	1,128,425	-	1,128,425	28,714	1,157,139
130th Street Station	73,199	-	73,199	-	73,199
Everett Link Extension	3,365,380	-	3,365,380	-	3,365,380
Kirkland to Issaquah Link Extension	2,105,787	-	2,105,787	-	2,105,787
Operations and Maintenance Facility - North	814,555	-	814,555	-	814,555
Operations and Maintenance Facility - South	594,046	-	594,046	-	594,046
Tacoma Dome Link Extension	2,233,056	-	2,233,056	-	2,233,056
Tacoma Community College Extension	529,322	-	529,322	-	529,322
ST3 Light Rail Vehicle Fleet Expansion	1,445,484	-	1,445,484	(215,930)	1,229,554
Total Link Light Rail	\$30,350,562	(\$933,006)	\$29,417,556	\$28,714	\$29,446,270
Sounder Commuter Rail					
Station Access & Demand Study	\$80,328	(\$13,987)	\$66,341	\$0	\$66,341
Kent Station Improvements	39,462	(5,789)	33,673	-	33,673
Auburn Station Improvements	41,287	(5,968)	35,319	-	35,319
Sumner Station Improvements	53,542	(4,474)	49,068	-	49,068
Puyallup Station Improvements	76,012	(11,738)	64,274	-	64,274
Lakewood Station Improvements	47,625	(7,113)	40,512	-	40,512
South Sounder Capital Improvements	1,038,258	-	1,038,258	-	1,038,258
**Sounder North Parking/Access	44,030	-	44,030	-	44,030
Lakewood to Dupont Track and Signal	357,291	-	357,291	-	357,291
Sounder Yard & Shop Facility (Sounder Maintenance Base)	193,014	(24,196)	168,818	-	168,818
Sounder Yard Expansion	-	22,563	22,563	-	22,563
Tukwila Permanent Station	43,631	10,517	54,148	-	54,148
Edmonds Permanent Station	29,948	(29,948)	-	-	-
Seattle to Lakewood - Expanded Service	248,230	66,474	314,704	-	314,704
Sounder Fleet Expansion	38,830	9,765	48,595	-	48,595
Tacoma Trestle Track & Signal	82,826	77,419	160,246	-	160,246
Tacoma Track & Signal	32,642	(326)	32,315	-	32,315
Platform Extensions - South King / Pierce	65,517	(65,517)	-	-	-
Eastside Rail Partnership	60,671	(60,670)	2	-	2
Total Sounder Commuter Rail	\$2,573,145	(\$42,987)	\$2,530,157	\$0	\$2,530,157
Bus Rapid Transit					
I-405 Bus Rapid Transit	\$950,093	\$0	\$950,093	\$0	\$950,093
Bus Rapid Transit Maintenance Base	171,914	-	171,914	-	171,914
SR 522 & 145th Bus Rapid Transit	436,004	-	436,004	-	436,004
**Rapid Ride C&D and Madison Ave BRT	71,549	-	71,549	-	71,549
Total Bus Rapid Transit	\$1,629,559	\$0	\$1,629,559	\$0	\$1,629,559

	Voter Approved	Inc / (Dec)	2017 Estimate	Inc / (Dec)	2018 Estimate
Regional Express					
ST Express Bus Base	\$217,582	(\$7,283)	\$210,299	\$0	\$210,299
Mid-Day Bus Storage	0	3,199	3,199	-	3,199
ST Express Fleet Expansion	43,242	17,824	61,066	-	61,066
**North Sammamish Park & Ride	22,096	-	22,096	-	22,096
Tacoma Pacific Avenue Contribution	65,987	-	65,987	-	65,987
**Bus On Shoulder Program	112,277	-	112,277	-	112,277
SR 162 Improvements	36,880	-	36,880	-	36,880
STEX Fleet to support Interim STEX Service	20,445	-	20,445	-	20,445
I-90 Contribution	45,000	-	45,000	-	45,000
Burien - Parking Garage / Transit Center	17,463	(909)	16,554	-	16,554
Bothell - Parking Garage / Transit Center	6,539	(1,499)	5,040	-	5,040
Total Regional Express	\$587,509	\$11,332	\$0	\$0	\$598,841
Other					
ST3 Planning	\$64,009	(\$26,897)	\$37,112	\$0	\$37,112
Innovation and Technology Fund	79,763	-	79,763	-	79,763
TOD Planning Program	22,203	-	22,203	-	22,203
Transit System Access Program	106,350	-	106,350	-	106,350
Sumner to Orting Study	5,318	-	5,318	-	5,318
ST4 Planning	69,395	-	69,395	-	69,395
HCT Planning Studies	47,993	-	47,993	-	47,993
ST Art Program	-	36,094	36,094	-	36,094
Total Other	395,030	9,197	404,227	0	404,227
TOTAL Capital Plan Estimate	\$35,535,805	(\$955,464)	\$33,981,500	\$28,714	\$34,609,055

Note:

The cost estimates included in the table above reflect the amount funded in the Agency's long-term Financial Plan. Projects proposed to proceed with only limited engineering activity are funded only to the extent that activity requires. Projects proposed to be suspended or deleted have no funding in the current Long-term Financial Plan.

*Downtown Redmond Link Extension is combined project. This cost estimate includes the ST2 project Downtown Redmond Link Ext and the ST3 project Redmond Technology Center to Downtown Redmond.

**These four projects comprise what is described in the ST3 package as Early Deliverables.

Appendix B – Sound Move Project Budgets

The agency has three voter-approved system expansion programs: Sound Move approved in 1996; Sound Transit 2 (ST2) approved in 2008; and Sound Transit 3 (ST3) approved in 2016. Appendix A reflects the cost estimates in constant-year dollars for all capital projects. This appendix displays adopted project budgets in year-of-expenditure dollars for active Sound Move system expansion projects.

Project budgets for Sound Move projects were adopted as total project budgets/baseline budgets, since these projects pre-date the agency's Phase Gate process. As with the ST2 and ST3 projects in Appendix A, Sound Move project budgets are shown for 2008, 2017, and 2018.

The changes between 2017 and 2018 include:

Sounder

- M Street to Lakewood Track and Signal was closed in 2017.

Regional Express

- Kirkland Transit Center was closed in 2017.

Note: The I-90 Two-Way Transit and HOV Operations, Stage 3 project was baselined in 2014. This project is funded by Sound Move & ST2, Regional Express Reserve, and agency financial capacity.

I-90 TWO-WAY AND HOV OPERATIONS, STAGE 3 TOTAL FUNDING (in thousands)

Sound Move	\$64,222
I-90 Contribution (ST2)	45,000
REX Program Reserve	27,126
Agency Financial Capacity	89,300
Total Project Cost	\$225,648

ADOPTED ALLOCATIONS TO DATE FOR ACTIVE SOUND MOVE PROJECTS

Year of Expenditure (YOE) Dollars (in thousands)

	2008	Inc/(Dec)	2017	Inc/(Dec)	2018
<u>Link Light Rail</u>					
University Link	\$ 1,614,007	\$ 142,000	\$ 1,756,007	\$ -	\$ 1,756,007
Total Link Light Rail	1,614,007	142,000	1,756,007	-	1,756,007
<u>Sounder Commuter Rail</u>					
D Street to M Street Track and Signal	76,025	82,237	158,262	-	158,262
Mukilteo Station, South Platform	9,371	8,942	18,313	-	18,313
Tukwila Station (see Notes)	-	-	-	-	-
Total Sounder Commuter Rail	85,396	91,179	176,575	-	176,575
<u>Regional Express</u>					
I-90 2-Way Transit & HOV Op, Stage 3 (see note)	1,722	223,926	225,648	-	225,648
Total Regional Express	1,722	223,926	225,648	-	225,648
S <i>T</i> art Program	18,100	16,100	34,200	-	34,200
Total Active Sound Move Projects	\$ 1,719,225	\$ 473,205	\$ 2,192,430	\$ -	\$ 2,192,430

Notes: Numbers may not add due to rounding.

Tukwila Station is a project recognized in ST2, but Sound Move did fund the project through Final Design.

I-90 2-Way Transit and HOV Op, Stage 3 is recognized in Sound Move, but ST2 contributed \$45 million of planned funding.

The agency used \$89.3 million of financial capacity to fully fund the project and the balance of the REX program reserve of \$27.2 million.

Appendix C – Compliance with Asset Management Policy

Resolution No. R2015-32 establishes Sound Transit’s Asset Management Policy. This appendix details the status of the agency’s compliance with the elements of that policy.

Section 3.1.1: The agency operates and maintains its assets in a state of good repair that meets or exceeds the FTA’s state of good repair and other regulatory requirements.

Compliance: Met. The agency currently meets or exceeds all FTA requirements as of December 31, 2017. However, the FTA compliance framework is fairly limited at this time and compliance does not constitute assurance that agency’s asset management practices are mature. Ninety-nine percent of assets are at a condition assessment of three or better under FTA guidelines.

Section 3.1.2: The agency maintains a comprehensive asset management program and plan to ensure that these goals are achieved.

Compliance: Met. The agency has a comprehensive asset management program that is inclusive of all business units – light rail, commuter rail, and express bus – throughout the entire asset lifecycle. The agency maintains a strategic Asset Management Plan that was most recently updated in 1Q 2018. While the asset management program and plan are in place, many agency practices are not yet mature and several years of additional work are required before the agency will achieve a mature asset management program.

Section 3.2: The CEO will include in the annual Transit Improvement Plan a State of Good Repair Forecast (SGRF) of the total amount, by year for a rolling 40-year period, required for lifecycle maintenance and capital replacement to maintain all agency replaceable assets in a state of good repair.

Compliance: Met

	May 2017 SOGR Forecast (YOES in 000s)	Oct 2017 SOGR Forecast (YOES in 000s)	Difference
2018	\$ 67,056	\$ 50,631	\$ (16,425)
2019	\$ 21,468	\$ 61,372	\$ 39,904
2020	\$ 36,447	\$ 96,419	\$ 59,972
2021	\$ 76,531	\$ 121,864	\$ 45,333
2022	\$ 101,286	\$ 121,125	\$ 19,839
2023-2058	\$ 26,455,661	\$ 27,854,858	\$ 1,399,197
Total	\$ 26,758,450	\$ 28,306,269	\$ 1,547,819

Years	SOGR Forecast	Set Aside In Agency Long-term Financial Plan	% of SOGR Forecast That is Funded
2018-2058	\$28 billion	\$28 billion	100.0%

The May 2017 40-year forecast was for \$26.8 billion. The updated 2017 forecast was \$28.1 billion, a difference of \$1.5 billion. The major variance was due to an annual update in inflation indices (which recognized a higher near time increase in construction costs) and inclusion of Downtown Seattle Transit Tunnel (DSTT) assets. Lastly, the forecast methodology was changed to include our current list of fixed assets as opposed to a project list (where many assets were combined into one project.)

Section 3.2.1: The agency’s Board-adopted Transit Improvement Plan will include the first six years of funding for the SGRF within the capital replacement and maintenance program.

Compliance: Under Evaluation. The agency’s current SGRF exceeds the amount included within the budget. The SOGR forecast for 2018-2023 is \$570 million, while the current TIP is \$88 million, a difference of \$482 million. This gap is either due to (1) over-forecasting of requirements, or (2) an insufficient number of projects being identified as needing SOGR funding. Additionally, some future state of good repair projects are either shown in a different category of the TIP, or they are not capitalized and are considered an operating cost; the TIP only includes capital costs. This gap should close as the agency refines its processes for capital budgeting SOGR requirements.

Year	SOGGR Forecast (YOE\$ in 000s)	TIP SOGR Funding (YOE\$ in 000s)	Difference
2018	\$ 50,631	\$ 35,386	\$ 15,245
2019	\$ 61,372	\$ 22,658	\$ 38,714
2020	\$ 96,419	\$ 3,651	\$ 92,768
2021	\$ 121,864	\$ 21,442	\$ 100,422
2022	\$ 121,125	\$ 2,020	\$ 119,105
2023	\$ 118,508	\$ 2,369	\$ 116,139
Total	\$ 569,919	\$ 87,526	\$ 482,393

Section 3.2.2: Beginning in 2023, the forecasted and funded amounts in the Transit Improvement Plan (TIP) will not on average fall below the greater of \$50 million annually or two percent of the agency's estimated replaceable asset value for that year.

Compliance: N/A. This requirement will not begin until 2023. The following table indicates that the SOGR forecast within the financial plan does not meet this requirement.

However, the two percent goal was established based on high level planning estimates from a wide range of industries and may not be entirely accurate for transit. Agency staff believe the current SOGR estimate will be adequate to meet requirements and will further monitor and study the validity of the two percent benchmark.

Year	SOGGR (YOE\$ in 000s)	Greater than \$50M?	ST Replaceable Asset Value (YOE\$ in 000s)	2% Of Amount	Variance btwn Forecast and 2%
2023	\$ 118,508	Yes	\$ 7,309,317	\$ 146,186	\$ (27,678)
2024	\$ 165,067	Yes	\$ 10,609,702	\$ 212,194	\$ (47,127)
2025	\$ 173,988	Yes	\$ 10,828,139	\$ 216,563	\$ (42,574)
2026	\$ 150,821	Yes	\$ 10,828,139	\$ 216,563	\$ (65,742)
2027	\$ 165,241	Yes	\$ 11,122,951	\$ 222,459	\$ (57,218)
2028	\$ 138,803	Yes	\$ 11,122,951	\$ 222,459	\$ (83,656)
2029	\$ 214,758	Yes	\$ 11,122,951	\$ 222,459	\$ (7,701)
2030	\$ 200,913	Yes	\$ 15,198,054	\$ 303,961	\$ (103,048)
2031	\$ 204,663	Yes	\$ 15,452,716	\$ 309,054	\$ (104,391)
2032	\$ 180,696	Yes	\$ 15,903,663	\$ 318,073	\$ (137,377)
2033	\$ 266,981	Yes	\$ 15,903,663	\$ 318,073	\$ (51,093)

Section 3.2.3: The agency's long-term financial plan will include the full 40-year SGRF.

Compliance: Met. The October 2017 Financial Plan includes the full SGRF through 2060.

Section 3.3: The agency shall maintain a minimum of \$300 million capital replacement reserve (CRR) to fund unexpected capital replacement requirements.

Compliance: Met. The balance of the CRR as of December 31, 2017 was \$328 million.

Section 3.4: The CEO conducts an independent assessment of the adequacy of the SGRF at least once every five years.

Compliance: Met. The CEO has commissioned the first independent assessment as of Q1 2018 and results will be reported to the Audit & Reporting Committee. If the results are deemed satisfactory, then the next assessment must be completed no later than 2023.

Appendix D – Reconciliation of the Proposed 2018 TIP to Adopted 2018 TIP

The TIP contains Board-approved allocations for active projects by phase and year of expenditure forecast. The Proposed TIP, and any revisions to it before the Board adopts the Budget and TIP, is approved by the annual budget resolution. Additional changes to the Proposed TIP arise from budget amendments approved as separate Board actions, in the time between publication of the Proposed and Adopted TIP, or from non-material error corrections. The 2018 TIP was adopted by Resolution No. R2017-44 on December 21, 2017. The TIP also includes summary level six year forecasts for Transit Mode expenses contained in the 2018 Service Implementation Plan (SIP).

There are three circumstances when the project allocation to date would change from the Proposed TIP to the Adopted TIP:

1. Budget revisions adopted by the annual budget resolution.
2. Amendments adopted between publication of the proposed and adopted TIP.
3. Non-material error corrections.

1. Budget revisions adopted by the annual budget resolution

Board committees reviewed and recommended for approval to the Board, budget revisions to project allocations to date published in the proposed TIP. These revisions were adopted by the annual budget resolution (**Resolution No. R2017-44, Attachment C**) and are shown below.

Budget/Project Category	Project	Authorized Project Allocation as reported in Proposed TIP (\$000)	Revised Authorized Project Allocation (\$000)	Change to Allocation (\$000)	Comments
SYSTEM EXPANSION - LINK	4X115 - LYNNWOOD LINK EXTENSION	\$555,456	\$667,338	\$111,882	Right of way funding added for property acquisitions to meet critical project milestones.
SYSTEM EXPANSION - LINK	4X630 - DOWNTOWN REDMOND LINK EXT	92,006	178,026	86,020	Right of way funding added for property acquisitions to meet critical project milestones.
ENHANCEMENT	700686 - SECURITY RADIO SYSTEM	293	915	622	Revision to procure radio system, which is fully reimbursed via a grant.
	TOTAL	\$647,755	\$846,278	\$198,524	

2. Amendments adopted between the publication of the Proposed and Adopted TIP

Other budget amendments adopted by the Board subsequent to publication of the Proposed 2018 TIP and prior to publication of the Adopted 2018 TIP are shown below:

Budget/Project Category	Project	Authorized Project Allocation as reported in Proposed TIP (\$000)	Revised Authorized Project Allocation (\$000)	Change to Allocation (\$000)	Comments
STATE OF GOOD REPAIR	7X740 - SMALL WORKS PROGRAM	12,411	12,064	-347	Two subprojects were established as standalone projects originating from the Small Works project via Resolutions R2017-24 for Othello Traction Power Substation Parking Lot project at \$179.2K and R2017-44 for OMF Expanded Parking project at \$167.4K.
	TOTAL	\$12,411	\$12,064	-\$347	

3. Non-material error corrections.

Resolution No. R2017-44, Section 5g, authorizes the CEO to correct the budget for “non-material errors” to be consistent with Board actions.

There were no corrections for 2018.

Appendix E – Sound Transit Project Phases

Projects are typically planned and executed in phases. Project teams track and report on project costs relative to the activities and deliverables in each. Project phases include:

01 – Operations+Maintenance

Costs to operate and maintain capital assets where the budget to do so is part of an established lifetime budget. Currently used to maintain Sound Transit's public art assets.

02 – Operations+Maintenance-Agency

Costs that cannot be capitalized. Currently used for Research and Technology project costs incurred prior to the establishment of project scope.

09 – Administrative Capital

Design, development and implementation or procurement of Agency assets such as non-revenue vehicle fleet, IT systems, furniture, and equipment.

10 – Agency Administration

Administrative expenditures occur throughout the life of the project and include costs for direct labor by Sound Transit staff (staff dedicated to specific projects) and other direct charges to the project necessary for project execution.

20 – Preliminary Engineering & Environmental Review

Professional services to complete the preliminary engineering and environmental assessments and evaluations. Preliminary engineering identifies project requirements and defines the project work scope. This includes preliminary design studies, permitting requirements, data collection, public involvement, legal and technical documentation, cost estimates, and assessment of alternatives. The environmental review includes achievement of all necessary environmental permits.

26 – Research & Technology

Implementation of new transit technologies focused on systemwide safety, security and communications with passengers.

30 – Final Design & Specification

Final design includes professional consultant activities to complete design and full construction plans and specifications, legal and technical documentation, environmental clearance, constructability review, value engineering, data collection, advertising, assessment of alternatives related to project design, and bid reviews.

35 – Third Parties

Third party expenditures occur through the life of the project and include agreements with other governmental units to reimburse their costs for review of alternatives, design review, and construction monitoring and inspection.

In certain cases, when Sound Transit is a funding partner rather than the lead agency, it includes Sound Transit's funding obligation to the lead agency.

40 – Right-of-Way (ROW) Acquisition & Permits

ROW includes the cost to purchase or lease real property required for construction and construction staging, easements, rights-of-way, and any residential or commercial relocations. This phase includes budget for negotiating the purchase price, relocation costs, surveys, appraisals, environmental audits, permits, legal costs, maps, charts, and all permits not included under the general construction contracts.

50 – Construction

Construction covers project construction contracts, professional and technical assistance, advertising, legal and technical documentation, inspection, testing, and permitting. In addition, the construction budget includes service startup, commissioning of all systems, and training.

55 – Construction Services

Construction Services includes construction management and other professional services in support of the Agency's management of construction activities.

61 – Art

Procurement and installation of public art at stations and along guideways.

70 – Vehicles

Procurement, manufacture, delivery, testing, and commissioning of revenue vehicles, spare parts, and warranty support. Also includes procurement of non-revenue vehicles.

80 – Startup and Testing

Includes tests of new systems, new schedules, and various specific equipment. This phase includes the training of personnel before the completion of the project to identify issues and correct them to enable a smooth transition to operations and the close out of the project.

90 – Contingency

Contingency provides a funding source to address general project risks, such as market fluctuations and changes in regulatory requirements. It also covers unforeseen expenses and cost estimate variances.

Appendix F – Subarea Allocations

The Central Puget Sound Regional Transit Authority (Sound Transit) has implemented an accounting and reporting system consistent with the financial policies approved in the ST2 and ST3 voter-approved programs. Annually, Sound Transit (the agency) prepares a Schedule of Sources and Uses of Funds by Subarea (the schedule) that is based on the agency's audited financial statements and the agency's long-term Financial Plan. The schedule reports actual tax revenues received by subarea and an allocation to each subarea of other sources and uses earned.

This system is integrated into the agency's system of internal control over financial reporting, ensuring the integrity of the information reported and providing management, the Board, and the Citizen Oversight Panel required information to monitor progress against Sound Transit's subarea commitments to its voters.

Revenues and Financing Sources

SOURCES

Description	Driver
Bond Proceeds	Financial Plan
Capital Grants	Project Costs or Board Designation
Interest Earnings	Financial Plan
Property Tax	Zip Code Location
Motor Vehicle Excise Tax	Zip Code Location
Operating Grants	Operating Uses by Mode
Other Revenue	Location/Modal Operating Use Drivers (see Operating Uses section below)
Passenger Fares	(see next section)
Rental Car Tax	Department of Revenue Location Code/County Level
Sales & Use Tax	Department of Revenue Location Code

PASSENGER FARES

Description	Driver
Central Link Light Rail Fares	Station Boardings
Sounder Fares	Station Boardings
ST Express Fares	Route Boardings/Platform Hours
Tacoma Link Light Rail Fares	Station Boardings

Annually, the agency's financial statement auditors perform agreed upon procedures which look at the allocation of sources and uses of funds presented. These procedures were developed by management, reviewed by the Citizen Oversight Panel, and approved by the Audit and Reporting Committee of the Board. All results from independent examinations are presented to the Board.

This appendix provides the drivers that will be used to allocate sources and uses to subareas in 2016 as well as new projects for 2018. Any additional projects are added at the end of the year when subarea allocations are calculated.

Operating Uses

LINK LIGHT RAIL SERVICES OPERATING USES

Description	Driver
Central Link Operations	Track Miles/Boardings
Tacoma Link Operations	Location

SOUNDER COMMUTER RAIL SERVICES OPERATING USES

Description	Driver
BNSF North Line	Track Miles
BNSF South Line	Track Miles
All Other Sounder Operations	Vehicle Miles

ST EXPRESS SERVICES OPERATING USES

Description	Driver
Bus Operations	Platform Hours
DSTT Operations	Location

OTHER OPERATING USES

Description	Driver
Agency Administration Operating	Financial Policies
Efficiency and Sustainability Program	ST3 Adopted Financial Plan
Innovation and Technology Program	ST3 Adopted Financial Plan
STart Operations & Maintenance	Location
Transit Oriented Development Planning Program	ST3 Adopted Financial Plan
Transit System Access Program	ST3 Adopted Financial Plan
Other Expenses	Location or Board Designation

Capital Project Uses (Outlays)

System Expansion – Link Light Rail Projects	Driver
East Link Extension	ST2 Adopted Financial Plan
Enhancements to Tacoma Link Extension	Location
Downtown Redmond Link Extension	Location
Federal Way Link Extension	Location
First Hill Link Streetcar	Location
Link Operations & Maintenance Satellite Facility: East	ST2 Adopted Financial Plan
LRV Fleet Expansion	Financial Plan
Lynnwood Link Extension	ST2 Adopted Financial Plan

System Expansion – Link Light Rail Projects	Driver
Northgate Link Extension	Location
Northgate Link Extension Project Reserve	Location
S. 200 th Link Extension	Location
Tacoma Dome Link Extension	Track Miles
Tacoma Link Extension	Location
University Link Extension	Location
West Seattle & Ballard Link Extensions	Track Miles

System Expansion – Sounder Commuter Rail Projects	Driver
Auburn Station Access Improvements	Location
D St-M St Track & Signal	Location
Kent Station Access Improvements	Location
Lakewood Station Improvements	Location
Mukilteo Station, South Platform	Location
North Sounder Parking and Access Improvements	Location
Point Defiance Bypass	Location
Puyallup Station Improvements	Location
Sounder South Expanded Service	ST2 Adopted Financial Plan
Sounder Fleet Expansion	Financial Plan
Sounder Maintenance Base	ST2 Adopted Financial Plan
Sounder Yard Expansion	Track Miles
Sumner Station Improvements	Location
Tacoma Trestle Track & Signal	Location
Tukwila Station	Location

System Expansion – ST Express Projects	Driver
Bothell Transit Related Improvements	Location
Bus On Shoulder	ST3 Adopted Financial Plan
I-90 Two-Way Transit & HOV Operations, Stage 3	Location
I-405 Bus Rapid Transit	Service Miles
ST Express Bus Base	ST2 Adopted Financial Plan
SR 522 Bus Rapid Transit	Service Miles
ST Express Fleet Expansion	Service Hours

System Expansion – Other	Driver
Fare Administration	Financial Policies
Fare Collection	Location
ORCA Next Generation	Financial Policies

System Expansion – Other	Driver
Research and Business Development Program	Financial policies
Research and Technology	Financial Policies
ST3 Planning	Financial Policies
<i>Start</i>	Location

Enhancement Projects	Driver
Bellevue TC Security System	Location
Bike Locker Program	Location
Bike Parking Program	Location
Bus Maintenance Facility	Platform Hours
Central Link Card Readers	Boardings/Track Miles
Central Link HVAC – Instrument House & UPS Room	Boardings/Track Miles
Central Link Overhead Catenary System Tie Switch	Boardings/Track Miles
Community Transit On-Board Communication Upgrade	Location
Customer Emergency Stations	Location
Digital Passenger information System	Financial Policies
Downtown Seattle Transit Tunnel Mitigation	Location
Everett Station Security Improvements	Location
Kent Station Parking Lot Paving	Location
Kent Station Platform Lighting	Location
King St Station Platform Improvements	Location
LED Lighting Program	Location
Link Operating Segment System Enhancements & Upgrades	Location
Locomotive Inboard Facing Cameras	Vehicle Miles
LRV Wireless Communication Upgrade	Boardings/Track Miles
LRV Between Car Barriers	Location
LRV Wash Bay Modifications	Boardings/Track Miles
LRV Wheel Flat Software	Boardings/Track Miles
Noise Abatement	Location
Non-Revenue Support Vehicles	Boardings/Track Miles
OMF Energy Efficiency	Boardings/Track Miles
Opensidewalks Data Development	Location
OMF– Link Control Center (LCC) Upgrades	Boardings/Track Miles
OMF Expanded Parking	Boardings/Track Miles
OMF - Renovations	Boardings/Track Miles
OMF LRV Vehicle Lift	Boardings/Track Miles
Pierce County – Global Positioning System Repeater	Location

Enhancement Projects	Driver
Positive Train Control	Location/Track Miles
Puyallup Station LED Lighting	Location
Security Operations Center – Video Monitoring Improvements	Financial Policies
Security Radio System	Financial Policies
Signage Improvements	Location
SODO/MLK Hazard Mitigation	Location
Sounder Passenger Emergency Intercom	Vehicle Miles
Sumner Station LED Lighting	Location
Tacoma Link Fare Collection	Location
Tacoma Link Radio Upgrade	Location
Transit Oriented Development Property Disposition	Location
Union Station Remodel Garden Level Remodel	Location

State of Good Repair	Driver
Access Control System Upgrade	Location
Convention Place Development Systems Retrofit	Location
IT Infrastructure	Financial Policies
IT Transit Systems	Financial Policies
King Street Station Vertical Window Glazing	Location
Link Bridge Repairs	Location
Link CCTV System Upgrade	Boardings/Track Miles
Link LRV Overhaul	Boardings/Track Miles
Link Operating Technology Upgrades	Boardings/Track Miles
Link Radio Upgrade	Boardings/Track Miles
Link SCADA System Support	Boardings/Track Miles
Link Station Braided Tile Replacement	Location
LRV Overhaul	Boardings/Track Miles
Othello TPSS Parking Lot	Location
Safety Oversight Approval Program	Location
Small Works Program	Location
Sounder Vehicle Overhaul Program	Vehicle Miles
ST Express Fleet Replacement	Platform Hours
Station Midlife Refurbishment Program	Location
Tacoma Dome Station	Location
Tacoma Link LRV Overhaul	Location
Tacoma Link HVAC and Building Systems Upgrade	Location

Administrative Projects	Driver
Administrative Capital	Financial Policies
Environmental Mitigation, Monitoring & Maintenance	Modal Operating Expense Rules
Information Technology Program	Financial Policies
Surplus Property Disposition	Location

Appendix G – Glossary

ADA (Americans with Disabilities Act) – Federal law passed in 1990 that prohibits discrimination in services, facilities, and employment against individuals with disabilities.

Adopted Annual Budget – The proposed annual budget and associated revisions adopted by the Board before the beginning of the fiscal year, plus any one-time actions that the agency’s Budget Policy authorizes the CEO to take after the Board adopts the budget and transit improvement plan (TIP) and before publication of the adopted annual budget document.

Adopted Transit Improvement Plan (TIP) – The TIP is the cumulative total of authorized project allocations to date for all active projects. The adopted TIP is the proposed TIP and associated revisions adopted by the Board, plus any one-time actions that the Budget Policy authorizes the CEO to take after the Board adopts the annual budget and TIP resolution.

Annual Budget and TIP Resolution – Board-adopted resolution that establishes annual spending authority and divides spending totals into categories such as operating including transit modes, projects by type, and debt service, plus an annual revenue forecast. It also establishes the authorized project allocation to date for projects included in the TIP and not approved by separate Board resolution.

Annual Operating Budget – Board-authorized agency operating expenditures. The agency maintains operating budgets at five levels:

Agency: Total agency operating expenditures.

Department: All operating expenditures managed by a department (e.g., DECM, Operations, Executive). Included in agency budget document.

Division: All operating expenditures managed by a division (e.g., Construction Management, Environmental & Sustainability, Human Resources, Service Planning,). Not included in agency budget document but maintained and monitored within agency financial systems.

Business Unit: All operating expenditures for smallest organization component. Not included in agency budget documents but maintained and monitored within agency financial systems.

Modal: All operating expenditures for a transit mode: Sounder commuter rail, ST Express bus, Tacoma Link, and Link light rail. Included in agency budget document.

Annual Project Budget – The amount of project costs expected to be incurred during the budget year.

Authorized Project Allocation to Date – The current Board-authorized spending ceiling for a project.

Average Weekday Boardings – Number of one-way passenger movements (trips) between two points on a single vehicle on all routes on an average weekday.

Baseline – A plan, design, specification, contract, or other approved document or configurations against which actual performance is measured. Baseline can also refer to a schedule or budget used for management control and reporting purposes.

BNSF – Burlington Northern Santa Fe Railway - The railroad company that contractually operates Sounder, Sound Transit’s commuter rail service.

Board – The Sound Transit Board of Directors, made up of 18 members: 17 elected officials from local jurisdictions within the Sound Transit district and the Secretary of the Washington State Department of Transportation.

Boarding – The number of one-way passenger trips between two points on a single vehicle. Also synonymous with unlinked passenger trip, rider, or passenger.

Capital Asset – Individual assets costing \$5,000 or more and having useful lives greater than one year. Also, significant alterations, renovations, or structural changes that increase the usefulness of a Sound Transit owned asset, enhance its efficiency, or prolong its useful life by more than one year.

Capital Outlay – An expense that results in the acquisition of or addition to fixed assets.

Capital Projects – Projects that purchase or construct capital assets.

Catenary – Suspended overhead wire that carries high voltage for electrically-powered transit vehicles (such as light rail) from a central power source.

CCTV (Closed Circuit Television) – Cameras installed aboard transit vehicles and at passenger stations for security purposes.

CEA – Communications & External Affairs department.

CEO – Chief Executive Officer of Sound Transit who reports directly to the Board of Directors.

COLA (Cost-of-Living Adjustment) – Refers to the annual percentage increase applied to an employee’s salary for inflationary factors.

Commuter Rail – Railway for urban passenger train service consisting of local short distance travel operating between a central city and adjacent suburbs.

Complaints per 100,000 Boardings – The performance metric (calculated for each mode) that measures the number of service complaints per 100,000 passenger boardings.

*Calculation = [(Service Complaints Received/ Modal Passenger Boardings) * 100,000]*

Contingency – A budgetary reserve put aside for emergencies or unforeseen expenses.

COP (Citizen Oversight Panel) – An independent panel of 15 volunteers appointed by the Board of Directors representing each of Sound Transit's five subareas. Its mission is to monitor the agency's commitment to the public, reviewing projects, budgets, and performance, and reporting its findings and recommendations for improvement to the Board.

Cost per Boarding – Calculated for each mode, this metric represents the fully allocated cost of providing service to a passenger.

Calculation = (Modal Operating Expenses/Modal Passenger Boardings)

Cost per Platform Hour – Calculated for each mode, this metric measures the fully allocated cost of providing one hour of service, inclusive of revenue and non-revenue time.

Calculation = (Modal Operating Expenses/Modal Platform Hours)

Cost per Revenue Vehicle Hour – Calculated for each mode, this metric represents the fully allocated cost of providing one revenue vehicle hour of service.

Calculation = (Modal Operating Expense/Modal Revenue Vehicle Hours)

CPI (Cost Performance Index) – A measure of the value of the work completed compared to the actual cost or progress made on the project.

Deadhead – The amount of non-revenue service time or miles when a bus or train is not carrying revenue passengers, usually a trip from, to, or between lines, yards, or garages.

Debt Service – The payment of interest and the repayment of principal on long-term borrowed funds according to a predetermined schedule.

DECM – Design, Engineering & Construction Management department.

DB (Design-build) – A procurement method used to minimize design and construction risks while reducing the project delivery schedule by overlapping the design phase and construction phase of a project. Using DB, the owner contracts with a single entity for all engineering, design, and construction services for a transit facility/system.

Department – Highest organizational unit of Sound Transit, consisting of: Communications & External Affairs; Design, Engineering & Construction Management; Executive; Finance & Information Technology; Legal; Operations; and Planning, Environment & Project Development.

Depreciation – A method by which the costs of property and equipment are systematically and rationally allocated over their useful life.

Division – Organizational sub-unit within departments.

DSTT – Downtown Seattle Transit Tunnel.

EIS (Environmental Impact Statement) – A study of the impacts of a major project on the environment and surrounding areas, required for any capital construction project for which federal funds are used.

Expense – A decrease in net current assets. Expenses include salaries and benefits, administrative expenses, debt service, and those current operating costs that require the use of current assets.

Farebox Recovery – Calculated for each mode collecting fares, this metric represents the percentage of operating cost of each mode that is paid by transit riders.

Calculation = (Modal Operating Expenses/Modal Passenger Fare Revenue)

FCC – Federal Communications Commission.

Financial Plan Project Estimate – The current estimated project cost from inception to completion, as maintained and updated annually in the agency's financial plan. Maintained in inflation adjusted year of expenditure dollars.

Fiscal Year – A 12-month period for calculating annual financial statements. Sound Transit's fiscal year is January 1 to December 31.

FIT – Finance & Information Technology department.

FTA (Federal Transit Administration) – The federal agency responsible for the administration of federal transit programs, including the allocation of grant funds. FTA is a part of the U.S. Department of Transportation.

FTE (Full Time Equivalent) – The fractional equivalent of one full-time employee working a 40-hour work week for one calendar year.

FY – Fiscal Year.

GCCM (General Contractor/Construction Manager) – A procurement method used to reduce construction risk. Using GCCM, the owner has access to construction expertise and experience prior to completion of design. Services offered by a GCCM contractor include assistance with decision-making, constructability reviews, value engineering, budget control, cost estimating, and schedule control.

GFOA (Government Finance Officers Association) – An organization whose purpose is to enhance and promote the professional management of governments for the public's benefit by identifying and developing financial policies and practices and promoting them through education, training, and leadership.

GIS – Geographic Information Services

HCT (High Capacity Transit) – Public transportation within an urbanized region operating principally on exclusive rights of way, including interim express services and high occupancy vehicle lanes, which taken as a whole, provides a substantially higher level of passenger capacity, speed, and service frequency than traditional public transportation systems operating principally in general purpose roadways.

HOV (High-Occupancy Vehicle) – A vehicle containing two or more passengers. Occupancy designations are used on designated auto traffic lanes to encourage car-pooling, ride sharing, or the use of public transportation.

IT – Information Technology

KCM (King County Metro) – The public transit division of King County Department of Transportation, responsible for providing bus, trolley bus, light rail, water taxi, paratransit, and vanpool services in a service area of about 2,000 square miles. Sound Transit contracts a portion of its express bus service as well as all of its light rail service with KCM.

Light Rail – Service using trains powered with overhead catenary power, operating on tracks embedded in city streets or along a separate right-of-way. Passengers are picked up and discharged at fixed locations (stations) located along the tracks.

LRV (Light Rail Vehicle) – A vehicle with overhead catenary power operating on tracks. It may be connected to other vehicles and operated as a train.

MMIS (Maintenance Management Information System) – The Maintenance Management Information System is an online system that helps gather and analyze data about an organization's maintenance operations with the intention of helping management make informed decisions and staff do their jobs more effectively.

Mode – A system for carrying transit passengers described by specific right-of-way, technology, and operational features. Sound Transit modes are light rail, commuter rail, and regional express bus.

MVET (Motor Vehicle Excise Tax) – Also called the “car tab” tax; this is a tax on vehicles based on the depreciated value of the vehicle using the Manufacturer's Suggested Retail Price (MSRP) as the initial vehicle value. The tax on commercial trucks and trailers is based on the depreciated value using the latest purchase price and year as the initial vehicle value. Sound Transit currently assesses a 0.3 percent MVET within its taxing district.

NRV (Non-Revenue Vehicles) – Agency fleet consisting of cars, trucks, vans, SUVs, specialty vehicles, and equipment used for administrative purposes.

O&M – Operations and Maintenance

OMF – Operations Maintenance Facility

On-Time Performance – A performance ratio that measures how often a transit service is on time (i.e., at a designated pick-up spot within a predetermined timeframe). The timeframe differs based on mode and frequency of service.

Calculation = ((# Scheduled Trips – # Trips Early or Late)/Total # of Scheduled Trips)

ORCA (One Regional Card for All) – A stored-value smart card used for payment of public transit fares in the Central Puget Sound region.

Paratransit – The comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed-route (bus and rail) service. The vehicles used do not operate over a fixed route or on a fixed schedule.

PE/ED – Preliminary Engineering and Environmental Documentation

PEPD – Planning, Environment & Project Development department

Percentage of Scheduled Trips Operated – A performance ratio that measures the number of times a Sound Transit vehicle or mode of service completes its scheduled route/trip

Phase Gate Process – Project management oversight and project budget approval process to ensure projects are ready to advance to a subsequent phase. Intended to enhance Board visibility into projects and control over key project decisions. The Phase Gate process triggers requests to the Board for Phase Gate project budget and other actions.

PLA (Project Labor Agreement) – PLAs are collective bargaining agreements between building trade unions and contractors. They govern terms and conditions of employment for all craft workers – union and nonunion – on a construction project.

Platform Hours (also called Service Hours) – For any mode, the total time the operator operates the vehicle, including revenue service (scheduled route, special event, and layover time) and non-revenue service (pullout and pull-in times from first/last stop to garage).

Platform Miles (also called Service Miles) – For any mode, the total miles traveled by a vehicle from pullout of garage/yard to return to garage/yard at end of revenue service, including any layover time and time when not carrying passengers.

Preventable Accidents per 100,000 Revenue Miles – For any mode, the number of preventable accidents reported per 100,000 miles of actual revenue vehicle mileage. A preventable accident is one in which the driver failed to do everything that reasonably could have been done to avoid the crash.

*Calculation = (Preventable Accidents / Actual Revenue Mileage) * 100,000*

Project Amendment – A change to an authorized project allocation to date for a previously established phase budget or baseline. Generally triggered by a cost overrun or underrun.

Project Type – A category name used to identify projects of a similar nature. Sound Transit has four project types:

System Expansion: Projects that expand the current regional transit system including planning, design, and construction of light rail, commuter rail, and express bus transit infrastructure. Examples: East Link Extension, Tukwila Station, Fare Collection.

Enhancement: Projects that improve operating efficiency and effectiveness, improve rider experience, increase system functionality, or reduce operating costs. Examples: Noise Abatement, Signage Improvements, OMF Energy Efficiency

State of Good Repair: Projects that extend the life of existing system assets and replace those at the end of their useful life; investment in maintaining assets in a state of good repair. Examples: Small Works Program, Link CCTV System Upgrade, Sounder Vehicle Overhaul Program

Administrative: Projects that support administration of the agency. The majority of these costs are capitalized with the assets produced by projects or expensed as transit operating costs. Remaining costs are treated as general and administrative expenses. Examples: Information Technology Program, Environmental Mitigation Monitoring & Maintenance, Surplus Property Disposition.

Proposed Annual Budget – The initial annual operating and project budget as submitted by the CEO to the Board for its consideration and adoption.

Proposed Transit Improvement Plan (TIP) – The TIP is the cumulative total of authorized project allocations to date for all active projects. The proposed TIP is the initial submission to the Board for their review and adoption.

Purchased Transportation – Transportation service provided to a public transit agency from a public or private transportation provider, based on a written contract.

Rebaselined Budget – Board adopted change to a previously adopted baseline budget. Occurs when new scope elements have been included in a project that were not previously part of the project baseline. In order to maintain clear cost management accountability, projects are not rebaselined when project cost elements are higher than previously estimated.

Revenue Vehicle Hours – The number of hours that a vehicle is in revenue service and there is a reasonable expectation of carrying passengers (includes layover time, but not deadhead).

Revenue Vehicle Miles – The number of miles that a vehicle is in revenue service and there is a reasonable expectation of carrying passengers (includes layover time, but not deadhead).

Revenues – Increases in proprietary fund type net total assets from other than expense refunds and capital contributions.

ROW (Right-of-Way) – A right-of-way is a right to make a way over a piece of land, usually to and from another piece of land. A right of way is a type of easement granted or reserved over the land for transportation purposes. Also used to describe the land on which a railroad line, road, or utility is built.

Sales Tax – A 0.9 percent tax levied on sales of eligible items within the boundaries of the Sound Transit District and collected by the State for the benefit of Sound Transit.

SCADA (Supervisory Control and Data Acquisition) – A centralized system to control signals, systems, and substations on Sound Transit's light rail system. The system also provides real-time location data to a control center.

Service Hours (also called Platform Hours) – For any mode, the total time the operator operates the vehicle, including revenue service (scheduled route, special event, and layover time) and non-revenue service (pullout and pull-in times from first/last stop to garage).

Service Miles (also called Platform Miles) – For any mode, the total miles traveled by a vehicle from pullout of garage/yard to return to garage/yard at end of revenue service, including any layover time and time when not carrying passengers.

Service Implementation Plan (SIP) – Board-adopted document that details six-year transit mode service levels and operating expenses. SIP is a planning document and does not constitute authorization for expenditure of funds.

Smart Card – A small card, usually plastic, with an imbedded computer chip good for one or more trips that is usually altered by a fare collection machine removing some or all of the stored value as each trip is taken.

SODO – The general area south of downtown Seattle; also, the name of one of Sound Transit’s light rail stations located in that neighborhood.

Sound Move – Voter-approved plan (1996) to build a high-capacity public transit system.

Sound Transit – The Central Puget Sound Regional Transit Authority

SPI (Schedule Performance Index) – A measure of schedule efficiency on a project. It is the ratio of earned value (EV) to planned value (PV).

SR – State Route

ST2 (Sound Transit 2) – Voter-approved (2008) second phase of Sound Transit’s plan for mass transit expansion.

ST3 (Sound Transit 3) – The third phase of Sound Transit’s plan for mass transit expansion.

STart (Sound Transit Art Program) – Program whose purpose is to incorporate public art into Sound Transit systems and facilities that will reflect the communities served and enhance the customer experience.

STU (Sound Transit University Program) – Refers to a range of training courses, both on-site and off-site, offered for Sound Transit employees to improve professional and technical skills.

Subarea – Five subareas of the Sound Transit District defined for planning and budgeting purposes consisting of Snohomish County, North King County, East King County, South King County, and Pierce County.

System Plan – (see Sound Move).

TCO (Total Cost of Ownership) – A financial estimate intended to help buyers and owners determine the direct and indirect costs of a product or system.

TGT (Technology Governance Team) – Team of Sound Transit employees who provide leadership and direction for the Information Technology (IT) division to ensure reliable, consistent, cost-effective, and accountable services.

TIFIA (Transportation Infrastructure Financing and Innovation Act) – A direct loan, loan guarantee, and standby line of credit program allowing the USDOT to provide credit assistance of up to 33 percent of the construction costs of a regionally or nationally significant surface transportation project. Loans are made at U.S. Treasury rates and may be repaid over as long as 35 years after substantial completion of the project.

TIP (Transit Improvement Plan) – This document provides projected capital and operating expenditures for the construction and operation of the Sound Transit regional transit system in the central Puget Sound. The TIP contains information on scope and budget as well as changes in budget and schedule for all active phases of both capital and operating programs.

TOD (Transit-Oriented Development) – The development of residential, commercial, and retail uses within walking distance of a transit station or stop.

Total Baseline Budget – The total budget to complete all phases of a project approved by the Board as a benchmark for performance and reporting purposes in year of expenditure dollars. A project may set a new baseline if there is a change in the scope of the project. However, a project baseline is not adjusted to account for cost overruns or underruns.

Total Capital Project Cost Estimate – The current estimated project cost from inception to completion, as maintained and updated at engineering milestones by agency Project Controls. Maintained in constant dollars.

TPSS (Traction Power Sub Station) – A wayside unit that converts electric power from the form provided by the public utility to an appropriate voltage, current type, and frequency to supply traction power to the motor of the light rail vehicle through the overhead catenary.

TVM (Ticket Vending Machine) – Automated equipment located at customer facilities that enable the purchase of fare media for access to the Sound Transit transportation system.

UPS – Uninterrupted Power Supply

UW – University of Washington

Variance – The difference between planned costs and actual costs.

WSDOT – Washington State Department of Transportation

YOE (Year of Expenditure) – Refers to the representation of a project’s cost inclusive of an annual inflationary factor calculation.



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Sound Transit plans, builds and operates regional transit systems and services to improve mobility for Central Puget Sound.