

2018

Proposed Transit Improvement Plan



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Contents

- Transit Improvement Plan Overview** 1
 - Financial Plan 1
 - Project Budgeting 1
- Transit Modes** 3
- Projects¹** 4
 - Changes to Authorized Project Allocations from Adopted 2017 TIP to Proposed 2018 TIP 5
 - Project Summaries and Detail Pages 9
 - System Expansion 11
 - System Expansion – Link Light Rail 12
 - System Expansion – Sounder Commuter Rail 29
 - System Expansion – Regional Express 46
 - System Expansion – Other 55
 - Enhancement Projects 69
 - State of Good Repair Projects 116
 - Administrative Projects 141
- Reserves** 149
- Appendices** 150
 - Appendix A** – Sound Transit 2 and Sound Transit 3 Cost Estimates 150
 - Appendix B** – Sound Move Project Budgets 152
 - Appendix C** – State of Good Repair Forecast 153
 - Appendix D** – Subarea Allocations 154

¹ Index of Project Details follows on next page

Alphabetical Index of Project Details by Mode

LINK LIGHT RAIL

Access Control Card Upgrade 125

Central Link Card Readers 87

Central Link HVAC – Instrument House and UPS Room 86

Central Link Overhead Catenary System Tie Switch 88

Convention Place Development Systems Retrofit 119

Downtown Redmond Link Extension 28

East Link Extension 27

Enhancements to Tacoma Link Extension 18

Federal Way Link Extension 26

First Hill Streetcar 14

Link Bridge Repairs 127

Link CCTV System Upgrade 120

Link Operating Segment Systems Enhancements and Upgrades 73

Link Operating Technology Upgrades 122

Link Operations & Maintenance Facility – East 16

Link LRV Overhaul 121

Link Radio Upgrade 126

Link SCADA System Support 123

Link Station Braided Tile Replacement 129

LRV Between Car Barriers 81

LRV Fleet Expansion 17

LRV Overhaul 130

LRV Wheel Flat Software 83

LRV Wireless Communication Upgrade 77

LRV Wash Bay Modifications 84

Lynnwood Link Extension 22

Noise Abatement 74

Non-revenue Support Vehicles 89

Northgate Link Extension 21

Northgate Link Extension Project Reserve 23

OMF Energy Efficiency 82

Operations Maintenance Facility (OMF) – Expanded Parking 79

Operations Maintenance Facility (OMF) – Link Control Center (LCC) Upgrades 78

Operations & Maintenance Facility LRV Lift 85

Operations Maintenance Facility (OMF) – Renovations 80

South 200th Link Extension 25

Signage Improvements 90

Tacoma Dome Link Extension	19
Tacoma Link HVAC and Building Systems Upgrade	124
Tacoma Link Light Rail Vehicle Overhaul	128
Tacoma Link Extension	15
Tacoma Link Fare Collection	75
Tacoma Link Radio Upgrade	76
University Link Extension	24
West Seattle & Ballard Link Extensions	20

SOUNDER COMMUTER RAIL

Auburn Station Access Improvement	39
Customer Emergency Stations	93
D St – M St Track & Signal	41
Kent Station Access Improvements	38
Kent Station Parking Lot Paving	99
Kent Station Platform Lighting	98
King Street Station Platform Improvements	92
King Street Station Vertical Window Glazing	131
Lakewood Station Improvements	34
Locomotive Inboard Cameras	94
Mukilteo Station, S Platform	42
Point Defiance Bypass	37
Positive Train Control	91
Puyallup Station Improvements	32
Puyallup Station LED Lighting	96
Sounder Maintenance Base	31
Sounder Passenger Emergency Intercom	95
Sounder South Expanded Service	44
Sounder Fleet Expansion	45
Sounder North Parking/Access	40
Sounder Vehicle Overhaul Program	132
Sounder Yard Expansion	36
Station Midlife Refurbishment Program	133
Sumner Station Improvements	33
Sumner Station LED Lighting	97
Tacoma Trestle Track & Signal	35
Tukwila Station	43

REGIONAL EXPRESS

Bellevue TC Security System 104

Bothell Transit Related Improvements 49

Bus Maintenance Facility 100

Bus on Shoulder Project 52

Community Transit – On-Board Communication Upgrade 103

I-405 Bus Rapid Transit 50

I-90 Two-Way Transit & HOV Operations, Stage 3 53

Opensidewalks Data Development 101

Pierce Transit – Global Positioning System Repeater 102

SR 522 Bus Rapid Transit 51

ST Express Bus Base 48

ST Express Fleet Expansion 54

ST Express Fleet Replacement 134

OTHER

Administrative Capital 146

Agency Administration Operating 144

Bike Locker Program 114

Bike Parking Program 105

Digital Passenger Information System 106

Downtown Seattle Transit Tunnel Mitigation 112

Efficiency & Sustainability Program 65

Environmental Mitigation, Monitoring & Maintenance 145

Everett Station Security Improvements 108

Fare Administration 59

Fare Collection 57

Information Technology (IT) Infrastructure 139

Information Technology Program 147

Innovation and Technology Program 63

IT Transit Systems 140

LED Lighting Program 111

ORCA Next Generation 60

Othello Traction Power Substation Parking Lot 136

Research and Business Development Program 61

Research & Technology 58

Safety Oversight Approval Program 135

Security Operations Center – Video Monitoring Improvements 110

Security Radio System 109

Small Works Program..... 138
SODO/MLK Hazard Mitigation 107
ST3 Planning 68
STart 66
STart Operations & Maintenance 64
Surplus Property Disposition 148
Tacoma Dome Station 137
Transit Oriented Development Planning Program 67
Transit Oriented Development Property Disposition 115
Transit System Access Program 62
Union Station Garden Level Remodel 113

Transit Improvement Plan Overview

The Proposed 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 Draft 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.

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.

TRANSIT IMPROVEMENT PLAN SUMMARY
(in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Transit Modes	\$0	\$318	\$322	\$335	\$360	\$379	\$433	\$0	\$2,148
Projects	6,254	1,731	1,764	1,363	1,089	538	462	535	13,735
Reserves	340	93	11	11	12	7	7	35	515
Total	\$6,594	\$2,141	\$2,097	\$1,709	\$1,461	\$924	\$902	\$570	\$16,397

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.

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.

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 (Sound Move, ST2, ST3) adopted plans. 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.

Transit Modes

The Proposed 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.

TRANSIT MODES SUMMARY (in millions)

	2018	2019	2020	2021	2022	2023	Total
Link Light Rail	\$117	\$117	\$118	\$142	\$150	\$198	\$842
Souder Commuter Rail	54	59	63	58	60	63	358
ST Express Bus	141	141	146	151	157	157	892
Tacoma Link Light Rail	5	6	8	9	12	15	55
Total	\$318	\$322	\$335	\$360	\$379	\$433	\$2,148

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 Proposed 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 www.soundtransit.org.

Service levels provided by two of Sound Transit’s four modes will be increasing:

- In the fourth quarter of 2017, two additional round trips, one peak and one reverse commute, for Souder commuter rail service are planned. These two trips will operate for the full year in 2018.
- ST Express service levels will be increased by 17,332 service hours – 8,760 hours are forecasted overrun in 2017 that 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 the next few years, 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.

Souder costs will increase in 2018 due to the full year of the two roundtrips added in 2017. In 2021 the new Souder 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.

Projects

The Proposed 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	\$4,652	\$1,423	\$1,474	\$1,194	\$948	\$454	\$376	\$257	\$10,780
Sounder	681	35	88	3	2	0	0	0	809
Regional Express	203	64	52	39	5	3	3	18	387
Other	64	21	29	38	31	24	21	256	484
Subtotal	5,600	1,543	1,643	1,274	986	481	400	532	12,459
Enhancement	76	58	19	3	1	0	0	0	158
State of Good	166	51	23	4	21	2	2	2	272
Administrative	412	78	80	82	80	54	60	1	847
Total	\$6,254	\$1,731	\$1,764	\$1,363	\$1,089	\$538	\$462	\$535	\$13,735

PROJECT DELIVERY SUMMARY BY MODE (in millions)

	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total TIP
Link	\$4,673	\$1,456	\$1,484	\$1,197	\$948	\$454	\$377	\$257	\$10,846
Sounder	746	44	98	3	2	0	0	0	894
Regional	345	102	68	39	25	3	3	18	602
Other	490	129	113	123	114	81	83	259	1,393
Total	\$6,254	\$1,731	\$1,764	\$1,363	\$1,089	\$538	\$462	\$535	\$13,735

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 Adopted 2017 TIP to Proposed 2018 TIP

The table below is a reconciliation of changes in authorized project allocations to date between the Adopted 2017 TIP and the Proposed 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	Proposed 2018 TIP
System Expansion						
Link Light Rail	\$9,684	\$0	\$126	\$130	\$840	\$10,780
Sounder Commuter Rail	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	171	903	12,459
Enhancement	129	(3)	18	13	0	\$157
State of Good Repair	252	0	12	8	0	\$272
Administrative	844	0	0	3	0	\$846
Total	\$12,219	(\$100)	\$517	\$195	\$903	\$13,735

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

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

1. Regional Parking Pilot Project
2. Kirkland Transit Center/3rd
3. ST Express Mid-Day Bus Storage
4. M ST-Lakewood Track & Signal
5. Central & East HCT Study
6. LRV On-Board Energy Storage
7. OMF LRV Wash Heater System
8. 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 information technology hardware and software supporting Link operations.

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 \$63.4 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 \$67.1 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.

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. Exceptions are programs and reserves that 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 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 completion of the project at the time the baseline was adopted.

2017

The year anticipated for completion of the budgeted phases of the project at the time the 2017 TIP is published.

2018

The year anticipated for completion of the budgeted phases of the project 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 funded 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 2008 (the year ST2 was adopted by voters), 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 the life to date, six years of annual cashflow 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 budgeted phases of 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.

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	\$316	\$1,684	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
400053 Tacoma Dome Link Extension	0	10,250	15,225	19,400	39,500	21,950	19,348	0	125,673
400066 West Seattle & Ballard Link Extensions	4,150	25,500	32,515	45,500	58,995	78,000	41,236	0	285,896
4X630 Downtown Redmond Link Extension	8,311	68,808	14,887	0	0	0	0	0	92,006
Subtotal	12,777	106,242	62,627	64,900	98,495	99,950	60,584	0	505,575
Final Design & ROW									
4X115 Lynnwood Link Extension	214,545	148,026	85,920	37,560	28,465	22,342	15,151	3,447	555,456
4X445 Federal Way Link Extension	76,092	122,533	140,736	65,883	3,160	2,083	1,265	874	412,625
Subtotal	290,637	270,559	226,656	103,443	31,625	24,425	16,416	4,321	968,081
Baseline									
400008 Tacoma Link Extension	21,914	20,302	66,590	55,406	33,164	19,971	0	0	217,346
400009 Link Operations & Maintenance Facility - East	136,713	97,156	116,185	52,741	39,972	6,453	0	0	449,220
400032 Light Rail Vehicle Fleet Expansion	81,982	37,572	85,965	126,706	128,050	92,590	89,833	98,020	740,718
4X100 Northgate Link Extension	1,047,971	311,397	239,027	145,298	39,802	19,376	96,885	0	1,899,756
4X200 University Link Extension	1,509,359	5,454	5,623	65,432	170,139	0	0	0	1,756,007
4X420 South 200th Link Extension	329,425	120	7,440	46,256	0	0	0	0	383,241
4X600 East Link Extension	1,088,698	574,491	663,865	534,155	407,041	191,293	112,594	105,013	3,677,150
Subtotal	4,216,061	1,046,491	1,184,696	1,025,995	818,167	329,682	299,313	203,033	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	132,730	8	8	8	8	8	8	5	132,780
Subtotal	132,730	8	8	8	8	8	8	5	132,780
Total	\$4,652,204	\$1,423,300	\$1,473,986	\$1,194,345	\$948,294	\$454,065	\$376,321	\$257,359	\$10,779,874

2018 Cashflow by Subarea
(in thousands)

System Expansion
LINK

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$155,853	\$105,809	\$81,799	\$47,041	\$39,558	\$24,850	\$19,232	\$13,840	\$487,983
2 - North King	2,845,407	440,430	365,184	323,061	329,142	137,344	172,453	81,410	4,694,432
3 - South King	442,587	150,336	187,875	146,693	43,418	24,258	20,804	13,813	1,029,783
4 - East King	1,183,258	697,244	760,348	606,011	474,711	231,166	149,020	144,865	4,246,623
5 - Pierce	25,099	29,482	78,779	71,539	61,464	36,447	14,811	3,431	321,052
Total	\$4,652,204	\$1,423,300	\$1,473,986	\$1,194,345	\$948,294	\$454,065	\$376,321	\$257,359	\$10,779,874

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$261,612	\$64,339	\$64,311	\$76,085	\$73,714	\$66,746	\$80,893	\$13,706	\$701,406
20-Prelim Engineering/Env Review	201,688	33,741	40,698	48,495	78,845	74,950	30,906	3,050	512,374
30-Final Design+Specifications	469,980	49,963	30,018	28,432	16,191	11,552	14,864	19,043	640,042
35-Third Party	178,663	24,539	19,049	20,945	19,270	12,320	7,246	2,409	284,441
40-Row Acquisition+Permits	741,339	217,046	139,937	55,380	29,621	3,633	8,217	11,212	1,206,385
50-Construction	2,380,892	903,876	962,450	721,915	534,892	146,530	86,898	47,839	5,785,292
55-Construction Services	229,315	88,271	115,205	97,810	63,466	39,080	38,994	15,268	687,409
70-Vehicles	178,810	41,524	101,101	139,217	124,873	89,139	86,102	94,831	855,597
80-System Testing+Startup	9,907	0	1,216	6,067	7,424	3,549	0	0	28,163
90-Contingency	0	0	0	0	0	6,565	22,200	50,000	78,765
Total	\$4,652,204	\$1,423,300	\$1,473,986	\$1,194,345	\$948,294	\$454,065	\$376,321	\$257,359	\$10,779,874

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	2008 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	\$132,730	\$8	\$8	\$8	\$8	\$8	\$8	\$5	\$132,780
Total	\$132,730	\$8	\$8	\$8	\$8	\$8	\$8	\$5	\$132,780

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$239	\$8	\$8	\$8	\$8	\$8	\$8	\$5	\$289
35-Third Party	132,491	0	0	0	0	0	0	0	132,491
Total	\$132,730	\$8	\$8	\$8	\$8	\$8	\$8	\$5	\$132,780

Project Risk Assessment
The project is complete and in operation.

400008	Tacoma Link Extension	Managed by: DECM
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Scope: In cooperation with the city of Tacoma and Pierce Transit, design and construction of the preferred alternative to expand Tacoma Link from north downtown Tacoma to the Stadium District and Hilltop.

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	2008 Cost Estimate: \$109,255
2017 TIP: \$217,346	2017 : 2018	2017 Cost Estimate: \$145,248
2018 TIP: \$217,346	2018 : 2022	2018 Cost Estimate: \$145,248

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$21,914	\$20,302	\$66,590	\$55,406	\$33,164	\$19,971	\$0	\$0	\$217,346
Total	\$21,914	\$20,302	\$66,590	\$55,406	\$33,164	\$19,971	\$0	\$0	\$217,346

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4,616	\$2,465	\$2,342	\$2,342	\$2,245	\$2,939	\$0	\$0	\$16,948
20-Prelim Engineering/Env Review	5,559	0	0	0	0	0	0	0	5,559
30-Final Design+Specifications	7,324	1,650	500	500	500	357	0	0	10,830
35-Third Party	700	766	0	0	0	0	0	0	1,466
40-Row Acquisition+Permits	2,111	871	573	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	600	1,500	2,000	2,000	2,000	1,791	0	0	9,891
70-Vehicles	1,005	6,000	15,000	13,372	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	\$21,914	\$20,302	\$66,590	\$55,406	\$33,164	\$19,971	\$0	\$0	\$217,346

Project Risk Assessment
Unidentified utility conflicts poses risk to project budget and schedule; Additional scope regarding roadway and street improvement may impact budget and schedule; Unprotected intersections along the alignment may require signals or other electronic devices impacting budget and schedule.

400009 Link Operations & Maintenance Facility - East Managed by: DECM

Scope: Development, design, and construction of a light rail operations and maintenance facility in support of link system expansion.

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:	2020	2008 Cost Estimate:	\$329,862
Baseline:	\$449,220	2017 :	2020	2017 Cost Estimate:	\$419,655
2017 TIP:	\$449,220	2018 :	2020	2018 Cost Estimate:	\$413,922
2018 TIP:	\$449,220				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$28,710	\$20,403	\$24,399	\$11,076	\$8,394	\$1,355	\$0	\$0	\$94,336
North King	22,831	16,225	19,403	8,808	6,675	1,078	0	0	75,020
South King	26,249	18,654	22,308	10,126	7,675	1,239	0	0	86,250
East King	58,923	41,874	50,076	22,731	17,228	2,781	0	0	193,614
Total	\$136,713	\$97,156	\$116,185	\$52,741	\$39,972	\$6,453	\$0	\$0	\$449,220

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3,720	\$1,756	\$1,820	\$2,511	\$1,313	\$6,453	\$0	\$0	\$17,573
20-Prelim Engineering/Env Review	8,677	100	759	0	0	0	0	0	9,536
30-Final Design+Specifications	0	135	140	54	57	0	0	0	386
35-Third Party	266	130	1,543	1,026	142	0	0	0	3,107
40-Row Acquisition+Permits	101,022	11,700	20,700	1,107	0	0	0	0	134,529
50-Construction	20,906	77,800	85,243	43,632	37,172	0	0	0	264,753
55-Construction Services	2,122	5,535	5,980	4,412	1,288	0	0	0	19,337
Total	\$136,713	\$97,156	\$116,185	\$52,741	\$39,972	\$6,453	\$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: To 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	2008 Cost Estimate:	\$614,869
2017 TIP:	\$740,718	2017 :	2024	2017 Cost Estimate:	\$684,989
2018 TIP:	\$740,718	2018 :	2024	2018 Cost Estimate:	\$684,989

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$10,002	\$4,584	\$10,488	\$15,458	\$15,622	\$11,296	\$10,960	\$11,958	\$90,368
North King	24,430	11,196	25,618	37,758	38,159	27,592	26,770	29,210	220,734
South King	10,822	4,960	11,347	16,725	16,903	12,222	11,858	12,939	97,775
East King	33,858	15,517	35,504	52,329	52,885	38,240	37,101	40,482	305,917
Pierce	2,869	1,315	3,009	4,435	4,482	3,241	3,144	3,431	25,925
Total	\$81,982	\$37,572	\$85,965	\$126,706	\$128,050	\$92,590	\$89,833	\$98,020	\$740,718

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$729	\$530	\$563	\$643	\$659	\$633	\$713	\$1,896	\$6,367
55-Construction Services	2,640	1,518	2,018	2,218	2,518	2,818	3,018	1,293	18,040
70-Vehicles	78,612	35,524	83,384	123,845	124,873	89,139	86,102	94,831	716,311
Total	\$81,982	\$37,572	\$85,965	\$126,706	\$128,050	\$92,590	\$89,833	\$98,020	\$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 leads 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.

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	2008 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	\$316	\$1,684	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$316	\$1,684	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
35-Third Party	\$316	\$1,684	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$316	\$1,684	\$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

Scope: Design and construction of a 9.7 mile light rail extension from Federal Way Transit Center to the Tacoma Dome with a mix of elevated and at-grade guideway to include a minimum of three stations and parking garages and a bridge over the Puyallup River. This project also includes the design and construction of the Operations and Maintenance Facility South.

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:	N/A	2008 Cost Estimate:	\$2,233,056
Baseline:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2017 TIP:	\$0	2018 :	2023	2018 Cost Estimate:	\$2,233,056
2018 TIP:	\$125,673				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$0	\$4,069	\$6,044	\$7,702	\$15,682	\$8,714	\$7,681	\$0	\$49,892
Pierce	0	6,181	9,181	11,698	23,819	13,236	11,667	0	75,781
Total	\$0	\$10,250	\$15,225	\$19,400	\$39,500	\$21,950	\$19,348	\$0	\$125,673

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$2,850	\$3,700	\$4,400	\$4,650	\$5,250	\$5,998	\$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	\$0	\$10,250	\$15,225	\$19,400	\$39,500	\$21,950	\$19,348	\$0	\$125,673

Project Risk Assessment

Project issues and risks identified at this stage 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 requiring the coordination and approval of multiple stakeholders.

400066 **West Seattle & Ballard Link Extensions** **Managed by: PEPD**

Scope: The West Seattle Link Extension builds light rail from West Seattle's Alaska Junction neighborhood to downtown Seattle.

The Ballard Link Extension and downtown Seattle Light Rail Tunnel build light rail from Ballard's Market Street area through downtown Seattle.

Changes to authorized project allocation since 2017: New program.

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	2008 Cost Estimate:	\$6,474,597
2017 TIP:	\$285,896	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$285,896	2018 :	2023	2018 Cost Estimate:	\$6,474,597

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$4,150	\$25,500	\$32,515	\$45,500	\$58,995	\$78,000	\$41,236	\$0	\$285,896
Total	\$4,150	\$25,500	\$32,515	\$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	\$1,150	\$5,500	\$7,000	\$9,000	\$10,000	\$12,000	\$18,430	\$0	\$63,080
20-Prelim Engineering/Env Review	3,000	18,500	23,115	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	0	500	1,000	1,000	1,000	1,500	1,000	0	6,000
Total	\$4,150	\$25,500	\$32,515	\$45,500	\$58,995	\$78,000	\$41,236	\$0	\$285,896

Project Risk Assessment

<p>Project's issues and risks identified at this stage includes:</p> <ul style="list-style-type: none"> • 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

Scope: The Northgate Link Extension extends light rail 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	2008 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	\$1,047,971	\$311,397	\$239,027	\$145,298	\$39,802	\$19,376	\$96,885	\$0	\$1,899,756
Total	\$1,047,971	\$311,397	\$239,027	\$145,298	\$39,802	\$19,376	\$96,885	\$0	\$1,899,756

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$56,162	\$14,655	\$13,587	\$11,903	\$10,020	\$9,363	\$29,189	\$0	\$144,879
20-Prelim Engineering/Env Review	15,077	0	0	0	0	0	0	0	15,077
30-Final Design+Specifications	107,072	5,492	5,852	5,819	500	100	7,331	0	132,167
35-Third Party	7,584	1,484	1,088	546	213	250	635	0	11,800
40-Row Acquisition+Permits	104,752	681	450	200	0	0	6,217	0	112,300
50-Construction	696,262	275,209	204,930	110,898	15,369	5,689	21,736	0	1,330,093
55-Construction Services	61,062	13,876	11,904	10,864	8,426	2,601	9,577	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	\$1,047,971	\$311,397	\$239,027	\$145,298	\$39,802	\$19,376	\$96,885	\$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
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Scope: Lynnwood Link Extension extends light rail 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, with stations at NE 145th Street, NE 185th Street, Mountlake Terrace Transit Center and Lynnwood Transit Center.

On August 24, 2017 The Board was presented with a \$2.9 billion trending cost estimate for this project, which was \$516 million higher than the ST2 high cost estimate. This increase was due to property acquisition and construction market conditions, design evolution and scope changes and the use of a General Contractor/Construction Manager contract method. Staff is engaged in a value engineering effort to reduce project costs.

Changes to authorized project allocation since 2017: Increased by \$67.1 million for pre-construction services.

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 \$1,531,881	2008 Cost Estimate: \$1,797,752
2017 TIP: \$488,361	2017 : 2023	YOE \$000s \$2,934,813	2017 Cost Estimate: \$1,531,881
2018 TIP: \$555,546	2018 : 2023		2018 Cost Estimate: \$1,531,881

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$117,142	\$80,822	\$46,912	\$20,508	\$15,542	\$12,199	\$8,272	\$1,882	\$303,279
North King	97,404	67,204	39,008	17,052	12,923	10,143	6,879	1,565	252,177
Total	\$214,545	\$148,026	\$85,920	\$37,560	\$28,465	\$22,342	\$15,151	\$3,447	\$555,546

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$19,179	\$10,960	\$12,110	\$12,030	\$11,910	\$12,591	\$9,526	\$0	\$88,305
20-Prelim Engineering/Env Review	39,053	0	0	0	0	0	0	2,947	42,000
30-Final Design+Specifications	56,077	29,906	8,970	5,000	5,000	4,000	2,500	0	111,453
35-Third Party	4,332	7,403	1,644	1,500	1,000	771	750	0	17,400
40-Row Acquisition+Permits	85,554	38,225	0	0	0	0	0	0	123,779
50-Construction	462	34,000	33,133	0	0	0	0	0	67,595
55-Construction Services	9,890	27,532	30,063	19,030	10,555	4,980	2,375	500	104,925
Total	\$214,545	\$148,026	\$85,920	\$37,560	\$28,465	\$22,342	\$15,151	\$3,447	\$555,546

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	2008 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: University Link Extension is a 3.15-mile light rail extension located entirely underground extending 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, and 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	2008 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	\$1,509,359	\$5,454	\$5,623	\$65,432	\$170,139	\$0	\$0	\$0	\$1,756,007
Total	\$1,509,359	\$5,454	\$5,623	\$65,432	\$170,139	\$0	\$0	\$0	\$1,756,007

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$81,929	\$3,249	\$1,658	\$12,433	\$14,286	\$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	86,598	380	1,037	2,292	0	0	0	0	90,308
35-Third Party	11,303	0	0	1,004	6,339	0	0	0	18,646
40-Row Acquisition+Permits	126,428	0	0	0	25,904	0	0	0	152,332
50-Construction	984,480	1,325	80	46,591	117,137	0	0	0	1,149,613
55-Construction Services	86,598	500	132	1,111	6,473	0	0	0	94,814
70-Vehicles	99,193	0	2,716	2,000	0	0	0	0	103,909
80-System Testing+Startup	8,570	0	0	0	0	0	0	0	8,570
Total	\$1,509,359	\$5,454	\$5,623	\$65,432	\$170,139	\$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: The South 200th Link Extension will extend 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. The project is being 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 surplus budget.

The funds in 2020 are considered 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	2008 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	\$329,425	\$120	\$7,440	\$46,256	\$0	\$0	\$0	\$0	\$383,241
Total	\$329,425	\$120	\$7,440	\$46,256	\$0	\$0	\$0	\$0	\$383,241

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$16,261	\$120	\$564	\$197	\$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	8,747	0	0	777	0	0	0	0	9,523
35-Third Party	3,820	0	0	3,265	0	0	0	0	7,085
40-Row Acquisition+Permits	37,992	0	0	5,557	0	0	0	0	43,549
50-Construction	238,471	0	6,876	36,239	0	0	0	0	281,585
55-Construction Services	17,099	0	0	222	0	0	0	0	17,322
80-System Testing+Startup	1,337	0	0	0	0	0	0	0	1,337
Total	\$329,425	\$120	\$7,440	\$46,256	\$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: Design and construct approximately 7.8 miles of light rail and three stations from S. 200th Street in the city of SeaTac to the Federal Way Transit Center. The passage of the ST3 voter-approved program included funds for the expansion of the project to Federal Way Transit Center. The 2018 cost estimate includes and increase of \$1.2 billion of additional funding from the ST3 program.

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:	N/A	2017 \$000s	\$1,617,253	2008 Cost Estimate:	\$1,121,817
Baseline:	\$0	2017 :	2018	YOE \$000s	\$2,056,218	2017 Cost Estimate:	\$476,386
2017 TIP:	\$412,625	2018 :	2018			2018 Cost Estimate:	\$1,617,253
2018 TIP:	\$412,625						

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$76,092	\$122,533	\$140,736	\$65,883	\$3,160	\$2,083	\$1,265	\$874	\$412,625
Total	\$76,092	\$122,533	\$140,736	\$65,883	\$3,160	\$2,083	\$1,265	\$874	\$412,625

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$8,540	\$3,804	\$1,531	\$1,041	\$0	\$0	\$0	\$0	\$14,915
20-Prelim Engineering/Env Review	39,108	0	0	1,245	0	0	0	0	40,353
30-Final Design+Specifications	621	700	418	635	0	0	0	0	2,374
35-Third Party	2,229	2,240	3,518	3,278	3,160	2,083	1,265	874	18,646
40-Row Acquisition+Permits	24,094	100,129	100,948	39,971	0	0	0	0	265,141
50-Construction	1,500	11,000	13,024	0	0	0	0	0	25,524
55-Construction Services	0	4,660	21,298	19,714	0	0	0	0	45,672
Total	\$76,092	\$122,533	\$140,736	\$65,883	\$3,160	\$2,083	\$1,265	\$874	\$412,625

Project Risk Assessment

Given the experience of projects that are slightly ahead in cost estimate development the agency has experienced increasing cost trends in the areas of real estate and right of way acquisitions and construction market trends. Further, uncertainties exist in design and third party coordination that could present cost and schedule risks; such as – price escalation, labor shortages and contract method selection. Using value engineering reviews can contribute to address the cost pressures on scope schedule and budget.

4X600 **East Link Extension** **Managed by: DECM**

Scope: East Link extends light rail 14 miles to East King County from downtown Seattle serving Mercer Island via I-90, Bellevue and the Overlake area of Redmond, with ten new light rail stations. 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) given to 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	2008 Cost Estimate:	\$3,643,314
2017 TIP:	\$3,677,150	2017 :	2023	2017 Cost Estimate:	\$3,402,084
2018 TIP:	\$3,677,150	2018 :	2023	2018 Cost Estimate:	\$3,402,084

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$6,532	\$3,447	\$3,983	\$3,205	\$2,442	\$1,148	\$676	\$630	\$22,063
East King	1,082,165	571,044	659,882	530,950	404,599	190,145	111,919	104,383	3,655,087
Total	\$1,088,698	\$574,491	\$663,865	\$534,155	\$407,041	\$191,293	\$112,594	\$105,013	\$3,677,150

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$67,988	\$15,326	\$18,342	\$19,577	\$18,623	\$17,510	\$17,029	\$11,805	\$186,200
20-Prelim Engineering/Env Review	54,756	41	250	250	250	250	0	103	55,900
30-Final Design+Specifications	203,541	11,700	13,100	13,354	10,134	7,095	5,033	19,043	283,000
35-Third Party	15,121	8,082	8,607	7,827	5,417	4,215	1,346	1,535	52,150
40-Row Acquisition+Permits	259,176	9,400	9,716	6,546	1,466	633	0	11,212	298,150
50-Construction	438,811	497,492	572,990	448,363	338,945	134,698	65,162	47,839	2,544,300
55-Construction Services	49,304	32,450	40,860	38,239	32,207	26,891	24,025	13,475	257,450
Total	\$1,088,698	\$574,491	\$663,865	\$534,155	\$407,041	\$191,293	\$112,594	\$105,013	\$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. In addition, risk of schedule delay is present due to limited availability of skilled labor in the competitive construction market, and due to inefficiency inherent in multi-level coordination with both public and private utilities and local jurisdictions.	

4X630 Downtown Redmond Link Extension Managed by: PEPD

Scope: The Downtown Redmond PE project performs preliminary engineering for a 3.7 mile extension of light rail from Overlake Transit Center to Redmond Terminal Station to establish route and station locations. In 2016 the Board has approved additional budget, Resolution No R2016-05 to complete preliminary engineering to Downtown Redmond for the future extension of East Link.

Changes to authorized project allocation since 2017: \$63.4 million primarily for property acquisitions.

Budget year activities: Continue preliminary engineering, 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	2008 Cost Estimate:	\$22,952
Baseline:	\$0	2017 :	2018	2017 Cost Estimate:	\$28,377
2017 TIP:	\$28,617	2018 :	2018	2018 Cost Estimate:	\$28,377
2018 TIP:	\$92,006				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$8,311	\$68,808	\$14,887	\$0	\$0	\$0	\$0	\$0	\$92,006
Total	\$8,311	\$68,808	\$14,887	\$0	\$0	\$0	\$0	\$0	\$92,006

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,100	\$3,118	\$1,088	\$0	\$0	\$0	\$0	\$0	\$5,306
20-Prelim Engineering/Env Review	6,501	8,700	6,299	0	0	0	0	0	21,500
35-Third Party	500	1,250	750	0	0	0	0	0	2,500
40-Row Acquisition+Permits	210	55,040	5,800	0	0	0	0	0	61,050
55-Construction Services	0	700	950	0	0	0	0	0	1,650
Total	\$8,311	\$68,808	\$14,887	\$0	\$0	\$0	\$0	\$0	\$92,006

Project Risk Assessment

Project is currently undergoing a refinement of the preferred alternative alignment and commencing preliminary engineering. Uncertainty persists in price escalation of right-of-way, and due to potential changes to the design, new environmental issues and an additional scope demand from third party that 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	\$4,438	\$3,933	\$597	\$0	\$0	\$0	\$0	\$0	\$8,968
300019 Lakewood Station Improvements	277	0	126	0	0	0	0	0	404
300035 Kent Station Access Improvements	662	2,651	845	0	0	0	0	0	4,158
300040 Auburn Station Access Improvement	660	2,652	846	0	0	0	0	0	4,158
300087 Sounder North Parking/Access	0	718	1,050	743	0	0	0	0	2,511
Subtotal	6,037	9,954	3,464	743	0	0	0	0	20,198
Final Design & ROW									
300017 Puyallup Station Improvements	5,840	3,586	1,584	0	0	0	0	0	11,009
300018 Sumner Station Improvements	7,530	2,568	3,601	1,679	1,664	0	0	0	17,042
3X510 Sounder South Expanded Service	194,986	7,800	2,602	180	0	0	0	0	205,568
Subtotal	208,355	13,954	7,787	1,859	1,664	0	0	0	233,619
Baseline									
300021 Tacoma Trestle Track & Signal	118,666	5,864	36,487	0	0	0	0	0	161,017
300026 Sounder Yard Expansion	17,077	100	3,373	0	0	0	0	0	20,550
300027 Point Defiance Bypass	75,639	100	7,931	0	0	0	0	0	83,670
3X135 D St-M St Track & Signal	152,879	50	5,332	0	0	0	0	0	158,262
3X206 Mukilteo Station, S Platform	16,656	440	1,216	0	0	0	0	0	18,313
3X236 Tukwila Station	37,311	1,305	7,353	0	0	0	0	0	45,969
Subtotal	418,229	7,859	61,693	0	0	0	0	0	487,781
Program									
7X755 Sounder Fleet Expansion	48,666	3,520	15,014	0	0	0	0	0	67,200
Subtotal	48,666	3,520	15,014	0	0	0	0	0	67,200
Total	\$681,286	\$35,287	\$87,958	\$2,602	\$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	\$17,322	\$1,748	\$2,356	\$743	\$0	\$0	\$0	\$0	\$22,169
3 - South King	47,615	6,661	10,819	0	0	0	0	0	65,094
5 - Pierce	616,349	26,879	74,784	1,859	1,664	0	0	0	721,535
Total	\$681,286	\$35,287	\$87,958	\$2,602	\$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	25,528	3,223	5,712	332	0	0	0	0	34,794
20-Prelim Engineering/Env Review	15,611	8,192	3,832	315	0	0	0	0	27,951
30-Final Design+Specifications	36,117	535	5,193	0	0	0	0	0	41,844
35-Third Party	1,659	4,993	4,732	1,727	1,664	0	0	0	14,774
40-Row Acquisition+Permits	258,382	4,272	5,318	33	0	0	0	0	268,005
50-Construction	263,613	9,300	41,448	196	0	0	0	0	314,558
55-Construction Services	21,678	1,253	6,709	0	0	0	0	0	29,640
70-Vehicles	57,611	3,520	15,014	0	0	0	0	0	76,146
80-System Testing+Startup	1,046	0	0	0	0	0	0	0	1,046
Total	\$681,286	\$35,287	\$87,958	\$2,602	\$1,664	\$0	\$0	\$0	\$808,798

300004	Sounder Maintenance Base	Managed by: PEPD
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Scope: Sound Transit is evaluating operations and maintenance cost efficiencies associated with the development of commuter rail operations and maintenance facilities to support existing and future service levels. Funding has been approved for completing site selection, preliminary engineering (30% design), and environmental determination. Detailed project oversight requires a step by step involvement of the Board before moving from one project phase to another.

Changes to authorized project allocation since 2017: None.

Budget year activities: Continue preliminary engineering 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	2008 Cost Estimate: \$193,014
2017 TIP: \$8,968	2017 : 2019	2017 Cost Estimate: \$168,818
2018 TIP: \$8,968	2018 : 2019	2018 Cost Estimate: \$168,818

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$666	\$590	\$89	\$0	\$0	\$0	\$0	\$0	\$1,345
Pierce	3,772	3,343	507	0	0	0	0	0	7,623
Total	\$4,438	\$3,933	\$597	\$0	\$0	\$0	\$0	\$0	\$8,968

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$634	\$137	\$169	\$0	\$0	\$0	\$0	\$0	\$940
20-Prelim Engineering/Env Review	2,155	2,603	278	0	0	0	0	0	5,036
40-Row Acquisition+Permits	1,649	1,193	150	0	0	0	0	0	2,992
Total	\$4,438	\$3,933	\$597	\$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: The Puyallup Station Access Improvement Project is evaluating potential capital improvements to facilitate access to Puyallup Station for pedestrians, bicyclists, and drivers. Improvements include additional parking facilities, pedestrian access improvements, bicycle route improvements, and secure bicycle storage.

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	Baseline:	N/A	2008 Cost Estimate:	\$76,012
Baseline:	\$0	2017 :	2018	2017 Cost Estimate:	\$64,274
2017 TIP:	\$11,009	2018 :	2018	2018 Cost Estimate:	\$64,274
2018 TIP:	\$11,009				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$5,840	\$3,586	\$1,584	\$0	\$0	\$0	\$0	\$0	\$11,009
Total	\$5,840	\$3,586	\$1,584	\$0	\$0	\$0	\$0	\$0	\$11,009

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$883	\$280	\$60	\$0	\$0	\$0	\$0	\$0	\$1,223
20-Prelim Engineering/Env Review	1,971	402	624	0	0	0	0	0	2,996
35-Third Party	0	100	5	0	0	0	0	0	105
40-Row Acquisition+Permits	2,986	2,679	890	0	0	0	0	0	6,555
55-Construction Services	0	125	5	0	0	0	0	0	130
Total	\$5,840	\$3,586	\$1,584	\$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: Evaluate, design and construct capital improvements to facilitate access to Sumner Station for pedestrians, bicyclists, and drivers. Improvements include additional parking facilities, pedestrian access improvements, bicycle route improvements, and secure bicycle storage.

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:	N/A	2008 Cost Estimate:	\$53,542
Baseline:	\$0	2017 :	2020	2017 Cost Estimate:	\$49,068
2017 TIP:	\$17,042	2018 :	2020	2018 Cost Estimate:	\$49,068
2018 TIP:	\$17,042				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$7,530	\$2,568	\$3,601	\$1,679	\$1,664	\$0	\$0	\$0	\$17,042
Total	\$7,530	\$2,568	\$3,601	\$1,679	\$1,664	\$0	\$0	\$0	\$17,042

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$922	\$456	\$55	\$0	\$0	\$0	\$0	\$0	\$1,433
20-Prelim Engineering/Env Review	1,976	402	619	0	0	0	0	0	2,996
35-Third Party	350	1,172	2,810	1,664	1,664	0	0	0	7,658
40-Row Acquisition+Permits	4,186	131	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	\$7,530	\$2,568	\$3,601	\$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
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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: \$0	Baseline: N/A	2008 Cost Estimate: \$47,625
2017 TIP: \$404	2017 : 2016	2017 Cost Estimate: \$40,512
2018 TIP: \$404	2018 : 2016	2018 Cost Estimate: \$40,512

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$277	\$0	\$126	\$0	\$0	\$0	\$0	\$0	\$404
Total	\$277	\$0	\$126	\$0	\$0	\$0	\$0	\$0	\$404

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$26	\$0	\$14	\$0	\$0	\$0	\$0	\$0	\$40
35-Third Party	252	0	112	0	0	0	0	0	363
Total	\$277	\$0	\$126	\$0	\$0	\$0	\$0	\$0	\$404

Project Risk Assessment
N/A

300021

Tacoma Trestle Track & Signal

Managed by: DECM

Scope: Design and construct additional track, bridge and platforms along an approximately 0.65 mile section of track between the existing Tacoma Dome Station and the vicinity of M Street in Tacoma.

Project baseline was established in 2015 per Resolution No. R2015-09. Project was re-baselined in 2016 per Resolution No. R2016-20 to add WSDOT funded scope and consequent budget. The added scope and complexity of construction support the variance between the baseline and the ST2 Cost Estimate.

Changes to authorized project allocation since 2017: \$48 thousand moved 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:	2018	2008 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	\$118,666	\$5,864	\$36,487	\$0	\$0	\$0	\$0	\$0	\$161,017
Total	\$118,666	\$5,864	\$36,487	\$0	\$0	\$0	\$0	\$0	\$161,017

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$4,698	\$814	\$2,582	\$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	11,211	200	3,788	0	0	0	0	0	15,198
35-Third Party	372	60	1,349	0	0	0	0	0	1,781
40-Row Acquisition+Permits	9,794	0	267	0	0	0	0	0	10,061
50-Construction	84,103	4,290	25,846	0	0	0	0	0	114,240
55-Construction Services	4,426	500	2,655	0	0	0	0	0	7,581
Total	\$118,666	\$5,864	\$36,487	\$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.

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:	2017	2008 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	\$8,982	\$53	\$1,774	\$0	\$0	\$0	\$0	\$0	\$10,809
Pierce	8,094	47	1,599	0	0	0	0	0	9,741
Total	\$17,077	\$100	\$3,373	\$0	\$0	\$0	\$0	\$0	\$20,550

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,325	\$100	\$0	\$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	12,958	0	2,562	0	0	0	0	0	15,521
55-Construction Services	1,400	0	0	0	0	0	0	0	1,400
Total	\$17,077	\$100	\$3,373	\$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:	2017	2008 Cost Estimate:	N/A
Baseline:	\$83,670	2017 :	2017	2017 Cost Estimate:	N/A
2017 TIP:	\$83,670	2018 :	2017	2018 Cost Estimate:	N/A
2018 TIP:	\$83,670				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$75,639	\$100	\$7,931	\$0	\$0	\$0	\$0	\$0	\$83,670
Total	\$75,639	\$100	\$7,931	\$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	3,059	100	0	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	65,063	0	4,560	0	0	0	0	0	69,623
55-Construction Services	7,321	0	2,925	0	0	0	0	0	10,246
Total	\$75,639	\$100	\$7,931	\$0	\$0	\$0	\$0	\$0	\$83,670

Project Risk Assessment
N/A

300035	Kent Station Access Improvements	Managed by: PEPD
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Scope: Evaluate, design and construct capital improvements to facilitate access to Kent Station for pedestrians, bicyclists, and drivers. Improvements include additional parking facilities, pedestrian access improvements, bicycle route improvements and bicycle storage.

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	2008 Cost Estimate: \$39,462
2017 TIP: \$831	2017 : 2018	2017 Cost Estimate: \$33,673
2018 TIP: \$4,158	2018 : 2018	2018 Cost Estimate: \$60,000

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$662	\$2,651	\$845	\$0	\$0	\$0	\$0	\$0	\$4,158
Total	\$662	\$2,651	\$845	\$0	\$0	\$0	\$0	\$0	\$4,158

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$198	\$340	\$279	\$0	\$0	\$0	\$0	\$0	\$817
20-Prelim Engineering/Env Review	464	2,235	542	0	0	0	0	0	3,241
40-Row Acquisition+Permits	0	76	24	0	0	0	0	0	100
Total	\$662	\$2,651	\$845	\$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
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Scope: Evaluate, design and construct capital improvements to facilitate access to Auburn Station for pedestrians, bicyclists, and drivers. Improvements include additional parking facilities, pedestrian access improvements, bicycle route improvements and bicycle storage.

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	2008 Cost Estimate: \$41,287
2017 TIP: \$831	2017 : 2018	2017 Cost Estimate: \$35,319
2018 TIP: \$4,158	2018 : 2018	2018 Cost Estimate: \$65,000

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
South King	\$660	\$2,652	\$846	\$0	\$0	\$0	\$0	\$0	\$4,158
Total	\$660	\$2,652	\$846	\$0	\$0	\$0	\$0	\$0	\$4,158

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$196	\$341	\$280	\$0	\$0	\$0	\$0	\$0	\$817
20-Prelim Engineering/Env Review	464	2,235	542	0	0	0	0	0	3,241
40-Row Acquisition+Permits	0	76	24	0	0	0	0	0	100
Total	\$660	\$2,652	\$846	\$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	Sounder North Parking/Access	Managed by: PEPD
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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	2008 Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
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	\$0	\$718	\$1,050	\$743	\$0	\$0	\$0	\$0	\$2,511
Total	\$0	\$718	\$1,050	\$743	\$0	\$0	\$0	\$0	\$2,511

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$325	\$325	\$332	\$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	\$0	\$718	\$1,050	\$743	\$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	2008 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	\$152,879	\$50	\$5,332	\$0	\$0	\$0	\$0	\$0	\$158,262
Total	\$152,879	\$50	\$5,332	\$0	\$0	\$0	\$0	\$0	\$158,262

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$8,936	\$50	\$621	\$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	42,145	0	1,484	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	\$152,879	\$50	\$5,332	\$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 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:	\$18,313	Baseline:	2009	2008 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	\$16,656	\$440	\$1,216	\$0	\$0	\$0	\$0	\$0	\$18,313
Total	\$16,656	\$440	\$1,216	\$0	\$0	\$0	\$0	\$0	\$18,313

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,586	\$100	\$92	\$0	\$0	\$0	\$0	\$0	\$1,777
30-Final Design+Specifications	2,345	10	154	0	0	0	0	0	2,509
35-Third Party	34	0	1	0	0	0	0	0	35
40-Row Acquisition+Permits	1,778	0	0	0	0	0	0	0	1,778
50-Construction	9,170	310	884	0	0	0	0	0	10,363
55-Construction Services	1,744	20	86	0	0	0	0	0	1,850
Total	\$16,656	\$440	\$1,216	\$0	\$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	2008 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	\$37,311	\$1,305	\$7,353	\$0	\$0	\$0	\$0	\$0	\$45,969
Total	\$37,311	\$1,305	\$7,353	\$0	\$0	\$0	\$0	\$0	\$45,969

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,817	\$30	\$926	\$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	4,594	25	305	0	0	0	0	0	4,924
40-Row Acquisition+Permits	10,376	0	633	0	0	0	0	0	11,009
50-Construction	17,809	1,200	5,072	0	0	0	0	0	24,081
55-Construction Services	1,614	50	417	0	0	0	0	0	2,081
Total	\$37,311	\$1,305	\$7,353	\$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 begin construction of fish culvert.

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	2008 Cost Estimate:	\$248,230
2017 TIP:	\$201,968	2017 :	2018	2017 Cost Estimate:	\$314,704
2018 TIP:	\$205,568	2018 :	2019	2018 Cost Estimate:	\$314,704

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Pierce	\$194,986	\$7,800	\$2,602	\$180	\$0	\$0	\$0	\$0	\$205,568
Total	\$194,986	\$7,800	\$2,602	\$180	\$0	\$0	\$0	\$0	\$205,568

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,240	\$150	\$310	\$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	556	300	44	0	0	0	0	0	900
35-Third Party	46	3,600	154	0	0	0	0	0	3,800
40-Row Acquisition+Permits	185,232	100	1,153	0	0	0	0	0	186,485
50-Construction	7,433	3,500	941	180	0	0	0	0	12,054
55-Construction Services	0	150	0	0	0	0	0	0	150
Total	\$194,986	\$7,800	\$2,602	\$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	2008 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	\$48,666	\$3,520	\$15,014	\$0	\$0	\$0	\$0	\$0	\$67,200
Total	\$48,666	\$3,520	\$15,014	\$0	\$0	\$0	\$0	\$0	\$67,200

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8
70-Vehicles	48,658	3,520	15,014	0	0	0	0	0	67,192
Total	\$48,666	\$3,520	\$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	\$1,161	\$587	\$3,794	\$266	\$0	\$0	\$0	\$0	\$5,808
500050 I-405 Bus Rapid Transit	300	35,553	35,290	14,314	2,596	0	0	0	88,053
500051 SR 522 Bus Rapid Transit	0	5,781	5,781	5,807	1,187	0	0	0	18,556
500086 Bus on Shoulder Project	0	1,180	821	1,877	0	0	0	0	3,878
Subtotal	1,461	43,101	45,686	22,263	3,783	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	193,111	4,955	1,450	1,050	1,550	2,800	2,750	17,983	225,648
Subtotal	193,111	4,955	1,450	1,050	1,550	2,800	2,750	17,983	225,648
Program									
700720 ST Express Fleet Expansion	8,350	15,458	0	15,948	0	0	0	0	39,757
Subtotal	8,350	15,458	0	15,948	0	0	0	0	39,757
Total	\$202,928	\$63,515	\$52,170	\$39,262	\$5,333	\$2,800	\$2,750	\$17,983	\$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	\$1,252	\$2,442	\$961	\$2,685	\$0	\$0	\$0	\$0	\$7,339
3 - South King	1,045	2,158	722	2,413	0	0	0	0	6,337
4 - East King	200,002	51,973	43,538	27,034	4,146	2,800	2,750	17,983	350,226
5 - Pierce	629	1,161	1,168	1,323	0	0	0	0	4,281
Total	\$202,928	\$57,734	\$46,389	\$33,455	\$4,146	\$2,800	\$2,750	\$17,983	\$368,184

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
40-10-Agency Administration	\$2,366	\$6,236	\$6,455	\$6,281	\$2,776	\$50	\$50	\$1,483	\$25,698
50-20-Prelim Engineering/Env Review	2,347	15,746	16,244	13,417	0	0	0	0	47,754
50-30-Final Design+Specifications	18,038	40	0	0	0	0	0	4,043	22,121
35-Third Party	0	1,180	5,412	412	208	0	0	0	7,212
40-40-Row Acquisition+Permits	53	19,824	22,659	2,203	849	0	0	0	45,588
50-50-Construction	171,774	5,030	1,400	1,000	1,500	2,750	2,700	12,457	198,610
70-70-Vehicles	8,350	15,458	0	15,948	0	0	0	0	39,757
Total	\$202,928	\$63,515	\$52,170	\$39,262	\$5,333	\$2,800	\$2,750	\$17,983	\$386,740

500005

ST Express Bus Base

Managed by: PEPD

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	2008 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	\$208	\$105	\$679	\$48	\$0	\$0	\$0	\$0	\$1,040
South King	135	68	440	31	0	0	0	0	674
East King	540	273	1,764	124	0	0	0	0	2,701
Pierce	279	141	911	64	0	0	0	0	1,394
Total	\$1,161	\$587	\$3,794	\$266	\$0	\$0	\$0	\$0	\$5,808

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$360	\$72	\$372	\$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	\$1,161	\$587	\$3,794	\$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: Provide fixed contribution funding to City of Bothell to improve rider access to transit service.

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	2008 Cost Estimate:	\$6,495
2017 TIP:	\$5,040	2017 :	2018	2017 Cost Estimate:	\$6,195
2018 TIP:	\$5,040	2018 :	2019	2018 Cost Estimate:	\$6,195

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.

Changes to authorized project allocation since 2017: Increased by \$42.4 million.

The 2017 budget and authorized project allocation to date were established in 2017 per Resolutions No R2017-22 and No R2017-25 at \$45.7 million.

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:	N/A	2008 Cost Estimate:	\$610,910
Baseline:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2017 TIP:	\$45,650	2018 :	2024	2018 Cost Estimate:	\$610,910
2018 TIP:	\$88,053				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
East King	\$300	\$35,553	\$35,290	\$14,314	\$2,596	\$0	\$0	\$0	\$88,053
Total	\$300	\$35,553	\$35,290	\$14,314	\$2,596	\$0	\$0	\$0	\$88,053

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$250	\$3,785	\$3,785	\$4,068	\$1,784	\$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	50	19,714	22,517	1,957	812	0	0	0	45,050
Total	\$300	\$35,553	\$35,290	\$14,314	\$2,596	\$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

Scope: 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: This is a new project for 2018.

Budget year activities: continue procurement of 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	2008 Cost Estimate:	\$436,053
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$18,556	2018 :	N/A	2018 Cost Estimate:	\$436,053

Cashflow (YOE \$000s)

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$1,882	\$1,882	\$1,882	\$942	\$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	\$0	\$5,781	\$5,781	\$5,807	\$1,187	\$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: 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	2008 Cost Estimate:	N/A
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$3,878	2018 :	2020	2018 Cost Estimate:	\$112,277

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$0	\$405	\$282	\$644	\$0	\$0	\$0	\$0	\$1,330
South King	0	405	282	644	0	0	0	0	1,330
Pierce	0	371	258	589	0	0	0	0	1,218
Total	\$0	\$1,180	\$821	\$1,877	\$0	\$0	\$0	\$0	\$3,878

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$332	\$332	\$241	\$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	\$0	\$1,180	\$821	\$1,877	\$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	2008 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	\$193,111	\$4,955	\$1,450	\$1,050	\$1,550	\$2,800	\$2,750	\$17,983	\$225,648
Total	\$193,111	\$4,955	\$1,450	\$1,050	\$1,550	\$2,800	\$2,750	\$17,983	\$225,648

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,750	\$165	\$50	\$50	\$50	\$50	\$50	\$1,483	\$3,648
20-Prelim Engineering/Env Review	1,549	0	0	0	0	0	0	0	1,549
30-Final Design+Specifications	18,038	40	0	0	0	0	0	4,043	22,121
50-Construction	171,774	4,750	1,400	1,000	1,500	2,750	2,700	12,457	198,330
Total	\$193,111	\$4,955	\$1,450	\$1,050	\$1,550	\$2,800	\$2,750	\$17,983	\$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	2008 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	\$1,044	\$1,932	\$0	\$1,994	\$0	\$0	\$0	\$0	\$4,970
South King	910	1,685	0	1,738	0	0	0	0	4,333
East King	6,046	11,192	0	11,546	0	0	0	0	28,784
Pierce	351	649	0	670	0	0	0	0	1,670
Total	\$8,350	\$15,458	\$0	\$15,948	\$0	\$0	\$0	\$0	\$39,757

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$8,350	\$15,458	\$0	\$15,948	\$0	\$0	\$0	\$0	\$39,757
Total	\$8,350	\$15,458	\$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	\$592	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$1,696	\$0	\$31,523
809100 ST3 Planning	22,150	3,000	2,290	2,000	2,000	2,000	1,648	17,560	52,648
Subtotal	22,742	4,527	5,941	14,384	9,637	6,035	3,344	17,560	84,171
Baseline									
6X668 SStart	18,259	2,134	4,900	5,455	3,128	854	156	14,382	49,267
Subtotal	18,259	2,134	4,900	5,455	3,128	854	156	14,382	49,267
Operating									
600668 SStart Operations & Maintenance	1,125	231	187	189	214	212	218	2,552	4,927
Subtotal	1,125	231	187	189	214	212	218	2,552	4,927
Program									
55 3X212 Fare Collection	8,497	195	254	735	397	360	382	4,051	14,870
59 5X410 Research & Technology	11,303	613	464	0	0	0	0	7,620	20,000
600016 Fare Administration	1,841	1,630	500	500	500	300	170	0	5,441
600039 Research and Business Development Program	90	300	225	192	336	0	0	0	1,143
600073 Transit System Access Program	0	6,000	11,000	11,000	11,000	11,000	11,000	81,139	142,139
600076 Innovation and Technology Program	0	4,000	4,000	4,000	4,000	4,000	4,000	82,604	106,604
601000 Efficiency & Sustainability Program	0	1,000	750	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	21,732	14,138	17,593	18,076	17,882	17,310	16,952	221,685	345,369
Total	\$63,858	\$21,029	\$28,621	\$38,104	\$30,860	\$24,412	\$20,670	\$256,179	\$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	\$3,786	\$275	\$555	\$716	\$415	\$184	\$121	\$2,559	\$8,612
2 - North King	4,536	553	1,190	1,321	782	249	88	3,962	12,681
3 - South King	6,731	517	1,053	1,332	775	332	209	4,663	15,611
4 - East King	8,127	968	2,077	2,318	1,371	444	163	7,005	22,473
5 - Pierce	4,701	246	465	692	395	217	176	2,795	9,687
6 - Systemwide	35,977	18,470	23,280	31,725	27,123	22,985	19,914	235,194	414,669
Total	\$63,858	\$21,029	\$28,621	\$38,104	\$30,860	\$24,412	\$20,670	\$256,179	\$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	\$364	\$96	\$100	\$103	\$106	\$109	\$112	\$499	\$1,488
02-Operation+Maintenance-Agency	761	135	87	86	108	103	106	2,053	3,439
10-Agency Administration	7,254	3,837	3,503	4,051	4,687	3,639	2,564	30,687	60,222
20-Prelim Engineering/Env Review	21,445	5,375	4,600	4,667	4,536	4,200	3,748	95,231	143,802
26-Research+ Technology	9,130	3,203	3,888	11,763	6,384	3,586	1,866	6,074	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	79,385	134,385
40-Row Acquisition+Permits	10	0	290	200	300	350	250	8,189	9,589
50-Construction	7,925	1,650	1,629	2,160	1,997	1,960	1,858	17,231	36,411
61-Art	16,969	1,634	4,375	4,925	2,593	314	16	13,912	44,737
Total	\$63,858	\$21,029	\$28,621	\$38,104	\$30,860	\$24,412	\$20,670	\$256,179	\$483,733

3X212

Fare Collection

Managed by: FIT

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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2023	2017 Cost Estimate:	N/A
2017 TIP:	\$14,870	2018 :	2023	2018 Cost Estimate:	N/A
2018 TIP:	\$14,870				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,886	\$43	\$56	\$163	\$88	\$80	\$85	\$899	\$3,301
South King	3,067	70	92	265	143	130	138	1,462	5,368
East King	238	5	7	21	11	10	11	113	416
Pierce	3,305	76	99	286	154	140	149	1,576	5,785
Total	\$8,497	\$195	\$254	\$735	\$397	\$360	\$382	\$4,051	\$14,870

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$421	\$195	\$0	\$0	\$0	\$0	\$124	\$244	\$984
20-Prelim Engineering/Env Review	150	0	0	0	0	0	0	0	150
50-Construction	7,925	0	254	735	397	360	258	3,807	13,737
Total	\$8,497	\$195	\$254	\$735	\$397	\$360	\$382	\$4,051	\$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	2008 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	\$11,303	\$613	\$464	\$0	\$0	\$0	\$0	\$7,620	\$20,000
Total	\$11,303	\$613	\$464	\$0	\$0	\$0	\$0	\$7,620	\$20,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,552	\$150	\$0	\$0	\$0	\$0	\$0	\$1,398	\$3,100
20-Prelim Engineering/Env Review	1,952	0	0	0	0	0	0	148	2,100
26-Research+Technology	7,799	463	464	0	0	0	0	6,074	14,800
Total	\$11,303	\$613	\$464	\$0	\$0	\$0	\$0	\$7,620	\$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: Project allocation to date was decreased 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	2008 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	\$1,841	\$1,630	\$500	\$500	\$500	\$300	\$170	\$0	\$5,441
Total	\$1,841	\$1,630	\$500	\$500	\$500	\$300	\$170	\$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	1,103	200	50	0	0	0	0	0	1,353
26-Research+Technology	739	1,430	450	500	500	300	170	0	4,089
Total	\$1,841	\$1,630	\$500	\$500	\$500	\$300	\$170	\$0	\$5,441

Project Risk Assessment
ORCA is a regional universal fare payment system. The equipment and software technology that current 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 implied has not been identified, nor has the associated equipment to support the program.

600038	ORCA Next Generation	Managed by: FIT
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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 be replacement to 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 new vending machines, introduction of mobile applications, new websites and the flexibility to allow for additional integrations to improve customer experience and adapt as technology changes.

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

Budget year activities: Issue contracts to System Integrator and QA Consultant, which will start the design phase of this project.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: Pending		
Baseline: \$0	Baseline: N/A	2008 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	\$592	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$1,696	\$0	\$31,523
Total	\$592	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$1,696	\$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	592	1,310	2,974	11,263	5,884	3,286	1,696	0	27,005
Total	\$592	\$1,527	\$3,651	\$12,384	\$7,637	\$4,035	\$1,696	\$0	\$31,523

Project Risk Assessment
Project is in early design and costs will be known with greater certainty when system integration vendor has been finalize in the summer of 2018.

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: The project allocation to date is decreased 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	2008 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	\$90	\$300	\$225	\$192	\$336	\$0	\$0	\$0	\$1,143
Total	\$90	\$300	\$225	\$192	\$336	\$0	\$0	\$0	\$1,143

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
20-Prelim Engineering/Env Review	\$90	\$300	\$225	\$192	\$336	\$0	\$0	\$0	\$1,143
Total	\$90	\$300	\$225	\$192	\$336	\$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

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. This project was included in the voter-approved ST3 program.

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:	N/A	2008 Cost Estimate:	\$106,350
Baseline:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2017 TIP:	\$0	2018 :	2041	2018 Cost Estimate:	\$106,350
2018 TIP:	\$142,139				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$6,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$81,139	\$142,139
Total	\$0	\$6,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$81,139	\$142,139

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
35-Third Party	\$0	\$5,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$79,385	\$134,385
50-Construction	0	1,000	1,000	1,000	1,000	1,000	1,000	1,754	7,754
Total	\$0	\$6,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$81,139	\$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. The program was approved as part of the ST3 plan.

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	2008 Cost Estimate:	\$79,763
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
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	\$0	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$82,604	\$106,604
Total	\$0	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$82,604	\$106,604

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	\$20,650	\$26,650
20-Prelim Engineering/Env Review	0	3,000	3,000	3,000	3,000	3,000	3,000	61,954	79,954
Total	\$0	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$82,604	\$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	SStart 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 (SStart), the lifetime budget is set at ten percent of the total SStart 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	2008 Cost Estimate: N/A
2017 TIP: \$4,927	2017 : 2023	2017 Cost Estimate: \$4,927
2018 TIP: \$4,927	2018 : 2023	2018 Cost Estimate: \$4,927

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$110	\$23	\$18	\$18	\$21	\$21	\$21	\$250	\$483
North King	263	54	44	44	50	50	51	597	1,153
South King	213	44	35	36	40	40	41	482	931
East King	458	94	76	77	87	86	89	1,039	2,005
Pierce	81	17	13	14	15	15	16	184	355
Total	\$1,125	\$231	\$187	\$189	\$214	\$212	\$218	\$2,552	\$4,927

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
01-Operation+Maintenance	\$364	\$96	\$100	\$103	\$106	\$109	\$112	\$499	\$1,488
02-Operation+Maintenance-Agency	761	135	87	86	108	103	106	2,053	3,439
Total	\$1,125	\$231	\$187	\$189	\$214	\$212	\$218	\$2,552	\$4,927

Project Risk Assessment
N/A

601000 Efficiency & Sustainability Program Managed by: PEPD

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	2008 Cost Estimate:	\$25,000
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$25,000	2018 :	2041	2018 Cost Estimate:	\$25,000

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$0	\$1,000	\$750	\$800	\$1,000	\$1,000	\$1,000	\$19,450	\$25,000
Total	\$0	\$1,000	\$750	\$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	650	375	425	600	600	600	11,670	14,920
Total	\$0	\$1,000	\$750	\$800	\$1,000	\$1,000	\$1,000	\$19,450	\$25,000

Project Risk Assessment
N/A

6X668

STart

Managed by: DECM

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	Baseline:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2023	2017 Cost Estimate:	\$56,280
2017 TIP:	\$49,267	2018 :	2023	2018 Cost Estimate:	\$56,280
2018 TIP:	\$49,267				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$1,789	\$209	\$480	\$535	\$307	\$84	\$15	\$1,409	\$4,828
North King	4,273	499	1,146	1,277	732	200	37	3,365	11,529
South King	3,451	403	926	1,031	591	161	29	2,718	9,312
East King	7,432	868	1,994	2,220	1,273	348	63	5,853	20,052
Pierce	1,315	154	353	393	225	61	11	1,035	3,547
Total	\$18,259	\$2,134	\$4,900	\$5,455	\$3,128	\$854	\$156	\$14,382	\$49,267

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,290	\$500	\$525	\$530	\$535	\$540	\$140	\$470	\$4,530
61-Art	16,969	1,634	4,375	4,925	2,593	314	16	13,912	44,737
Total	\$18,259	\$2,134	\$4,900	\$5,455	\$3,128	\$854	\$156	\$14,382	\$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	2008 Cost Estimate:	\$21,427
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$30,171	2018 :	2041	2018 Cost Estimate:	\$21,427

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

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	2008 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	\$22,150	\$3,000	\$2,290	\$2,000	\$2,000	\$2,000	\$1,648	\$17,560	\$52,648
Total	\$22,150	\$3,000	\$2,290	\$2,000	\$2,000	\$2,000	\$1,648	\$17,560	\$52,648

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$3,990	\$1,500	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$0	\$10,490
20-Prelim Engineering/Env Review	18,150	1,500	1,000	1,000	1,000	1,000	648	17,560	41,858
40-Row Acquisition+Permits	10	0	290	0	0	0	0	0	300
Total	\$22,150	\$3,000	\$2,290	\$2,000	\$2,000	\$2,000	\$1,648	\$17,560	\$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	\$686	\$714	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
600045 Opensidewalks Data Development	60	0	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	3,136	0	0	0	0	0	0	3,136
700723 Downtown Seattle Transit Tunnel Mitigation	514	11,820	0	0	0	0	0	0	12,334
700730 Operations & Maintenance Facility Light Rail Vehicle Lift	694	4,205	0	0	0	0	0	0	4,898
700793 Signage Improvements	517	615	0	0	0	0	0	0	1,131
Subtotal	2,471	22,106	0	0	0	0	0	0	24,577
Baseline									
300011 Positive Train Control	39,850	3,055	10,149	0	0	0	0	0	53,054
4X340 Noise Abatement	9,025	610	3,365	0	0	0	0	0	13,000
600029 Tacoma Link Fare Collection	64	0	0	0	0	0	382	67	514
700774 Central Link HVAC - Instrument House and UPS Room	1,232	0	0	0	0	0	0	0	1,232
Subtotal	50,171	3,665	13,514	0	0	0	382	67	67,800
Operating									
5X261 Bus Maintenance Facility	11,153	10,880	0	0	0	0	0	0	22,033
700676 Tacoma Link Radio Upgrade	0	748	0	0	0	0	0	0	748
700685 Everett Station Security Improvements	0	289	0	0	0	0	0	0	289
700686 Security Radio System	0	293	0	0	0	0	0	0	293
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	165	456	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	1	299	0	0	0	0	0	0	300
700697 LRV Between Car Barriers	350	170	0	0	0	0	0	0	520
700706 OMF Energy Efficiency	1,098	0	0	0	0	0	0	0	1,098
700707 Bellevue TC Security System	125	25	0	0	0	0	0	0	150
700708 Customer Emergency Stations	280	520	0	0	0	0	0	0	800
700710 Locomotive Inboard Cameras	64	236	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	300	0	0	0	0	0	0	0	300
700724 Puyallup Station LED Lighting	178	0	0	0	0	0	0	0	178
700725 Sumner Station LED Lighting	134	0	0	0	0	0	0	0	134
700726 Kent Station Platform Lighting	236	0	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	1,854	0	0	0	0	0	0	0	1,854
700775 Central Link Card Readers	131	292	0	0	0	0	0	0	423
700777 Central Link Overhead Catenary System Tie Switch	16	2,984	0	0	0	0	0	0	3,000
Subtotal	16,159	28,623	2,100	0	0	0	0	0	46,882
Program									
600080 Bike Parking Program	0	640	0	0	0	0	0	0	640
700684 Light Rail Vehicle Wireless Communication Upgrade	0	156	0	0	0	0	0	0	156
700781 Non-revenue Support Vehicles	1,191	730	1,157	1,450	0	0	0	0	4,528
7X753 Bike Locker Program	1,265	90	0	0	0	0	0	0	1,355
804100 Transit Oriented Development Property Disposition	4,302	2,430	1,850	1,430	1,148	455	0	0	11,615
Subtotal	6,757	4,046	3,007	2,880	1,148	455	0	0	18,293
Total	\$75,558	\$58,440	\$18,621	\$2,880	\$1,148	\$455	\$382	\$67	\$157,552

2018 Cashflow by Subarea
(in thousands)

Enhancement
ALL MODES

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
1 - Snohomish	\$4,640	\$4,563	\$721	\$0	\$0	\$0	\$0	\$0	\$9,924
2 - North King	15,952	28,932	6,320	2,394	1,148	455	0	0	55,202
3 - South King	8,849	9,346	2,599	486	0	0	0	0	21,280
4 - East King	5,431	5,394	0	0	0	0	0	0	10,825
5 - Pierce	38,771	8,588	8,982	0	0	0	382	67	56,791
6 - Systemwide	1,914	1,617	0	0	0	0	0	0	3,531
Total	\$75,558	\$58,440	\$18,621	\$2,880	\$1,148	\$455	\$382	\$67	\$157,552

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$5,122	\$3,773	\$1,404	\$250	\$170	\$69	\$0	\$0	\$10,787
20-Prelim Engineering/Env Review	366	92	150	150	100	94	0	0	951
30-Final Design+Specifications	1,201	1,529	107	0	0	0	0	0	2,837
35-Third Party	3,024	13,210	367	0	0	0	0	0	16,601
40-Row Acquisition+Permits	3,167	1,755	1,184	800	800	293	0	0	7,999
50-Construction	58,251	36,616	7,400	230	78	0	382	0	102,957
55-Construction Services	3,040	638	3,911	0	0	0	0	0	7,589
70-Vehicles	1,191	730	1,157	1,450	0	0	0	0	4,528
80-System Testing+Startup	197	75	1,217	0	0	0	0	0	1,490
90-Contingency	0	22	1,725	0	0	0	0	67	1,814
Total	\$75,558	\$58,440	\$18,621	\$2,880	\$1,148	\$455	\$382	\$67	\$157,552

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:	N/A	2008 Cost Estimate:	N/A
Baseline:		2017 :	2017	2017 Cost Estimate:	N/A
2017 TIP:	\$1,400	2018 :	2018	2018 Cost Estimate:	N/A
2018 TIP:	\$1,400				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$459	\$477	\$0	\$0	\$0	\$0	\$0	\$0	\$935
South King	228	237	0	0	0	0	0	0	465
Total	\$686	\$714	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$133	\$52	\$0	\$0	\$0	\$0	\$0	\$0	\$185
30-Final Design+Specifications	79	107	0	0	0	0	0	0	185
50-Construction	475	475	0	0	0	0	0	0	950
55-Construction Services	0	80	0	0	0	0	0	0	80
Total	\$686	\$714	\$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**

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	2008 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	\$6,162	\$417	\$2,298	\$0	\$0	\$0	\$0	\$0	\$8,876
South King	2,863	193	1,067	0	0	0	0	0	4,124
Total	\$9,025	\$610	\$3,365	\$0	\$0	\$0	\$0	\$0	\$13,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,029	\$10	\$161	\$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	5,887	500	2,063	0	0	0	0	0	8,450
55-Construction Services	2,088	100	1,002	0	0	0	0	0	3,190
Total	\$9,025	\$610	\$3,365	\$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	2008 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 a further deferment of implementation. Additionally, next generation fare system changes across the region may affect contractor timelines for software and hardware development. Further 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 installed at each station, linking the repeaters via fiber optic with local managed Ethernet switches. Also, install a passive repeater at the existing TPSS. To install and commission a new low-power Simulcast DMR radio system installed at each Tacoma Link station, linking the repeaters via fiber optic with local managed Ethernet switches. Also, install a passive repeater at the existing TPSS.

Changes to authorized project allocation since 2017: \$748 thousand for new project.

Budget year activities: To 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	2008 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
Depending on the length of engineering work and the installation of new communication cabinets the schedule could extend beyond 2018.

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: \$156 thousand for 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	2008 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 devise 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: \$400 thousand for 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	2008 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.

Changes to authorized project allocation since 2017: \$621 thousand for new project. The project was previously in Small Work Program but has become a stand alone project. Costs from Small Work Program have been rolled into the 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	2008 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	\$110	\$305	\$0	\$0	\$0	\$0	\$0	\$0	\$415
South King	55	151	0	0	0	0	0	0	206
Total	\$165	\$456	\$0	\$0	\$0	\$0	\$0	\$0	\$621

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$26	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$61
20-Prelim Engineering/Env Review	25	0	0	0	0	0	0	0	25
30-Final Design+Specifications	114	0	0	0	0	0	0	0	114
50-Construction	0	421	0	0	0	0	0	0	421
Total	\$165	\$456	\$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: Reprogram the Link OMF in Seattle. Project includes efficiently sizing the enclosed offices, creating additional workstations, securing the area around the LCC (Link Control Center), and regrouping divisions to be co-located more efficiently.

Changes to authorized project allocation since 2017: \$5.3 million for 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	2008 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
50-Construction	0	3,000	2,000	0	0	0	0	0	5,000
Total	\$0	\$3,225	\$2,100	\$0	\$0	\$0	\$0	\$0	\$5,325

Project Risk Assessment
Minimal project risk. Estimated completion date is 1st Quarter 2019.

700697

LRV Between Car Barriers

**Managed by:
Operations**

Scope: Procure 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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2019	2017 Cost Estimate:	N/A
2017 TIP:	\$520	2018 :	2018	2018 Cost Estimate:	N/A
2018 TIP:	\$520				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$295	\$143	\$0	\$0	\$0	\$0	\$0	\$0	\$438
South King	55	27	0	0	0	0	0	0	82
Total	\$350	\$170	\$0	\$0	\$0	\$0	\$0	\$0	\$520

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1	\$151	\$0	\$0	\$0	\$0	\$0	\$0	\$152
50-Construction	350	18	0	0	0	0	0	0	368
Total	\$350	\$170	\$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 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.

Changes to authorized project allocation since 2017: None.

Budget year activities: Proceed to close the project.

Authorized Project Allocation To Date (YOE \$000s)	Completion Schedule	Financial Plan Project Estimate (2017 \$000s)
Phase Gate Passed: N/A		
Baseline:	Baseline: N/A	2008 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	\$733	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$733
South King	365	0	0	0	0	0	0	0	365
Total	\$1,098	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,098

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

Project Risk Assessment
Work will need to be coordinated with Link Operations to avoid impacts to light rail vehicle maintenance.

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	2008 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**

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: Proceed to close out the project.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A				
Baseline:		Baseline:	N/A	2008 Cost Estimate:	N/A
2017 TIP:	\$300	2017 :	2017	2017 Cost Estimate:	N/A
2018 TIP:	\$300	2018 :	2017	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

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

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25
30-Final Design+Specifications	75	0	0	0	0	0	0	0	75
50-Construction	200	0	0	0	0	0	0	0	200
Total	\$300	\$0	\$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	2008 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	\$592	\$3,587	\$0	\$0	\$0	\$0	\$0	\$0	\$4,179
South King	102	617	0	0	0	0	0	0	719
Total	\$694	\$4,205	\$0	\$0	\$0	\$0	\$0	\$0	\$4,898

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$283	\$264	\$0	\$0	\$0	\$0	\$0	\$0	\$547
20-Prelim Engineering/Env Review	260	0	0	0	0	0	0	0	260
30-Final Design+Specifications	150	100	0	0	0	0	0	0	250
50-Construction	1	3,636	0	0	0	0	0	0	3,636
55-Construction Services	0	205	0	0	0	0	0	0	205
Total	\$694	\$4,205	\$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. This project consists of installing AC units in ten instrument houses along the Central Link corridor. AC units are needed to keep equipment inside the bungalows from overheating during periods of hot weather. This project is necessary to ensure the continued integrity of the signal equipment throughout the system. This is the current design standard for Link light rail.

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	2008 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	\$824	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$824
South King	408	0	0	0	0	0	0	0	408
Total	\$1,232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,232

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$443	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$443
30-Final Design+Specifications	132	0	0	0	0	0	0	0	132
40-Row Acquisition+Permits	36	0	0	0	0	0	0	0	36
50-Construction	621	0	0	0	0	0	0	0	621
Total	\$1,232	\$0	\$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. Card readers are required 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	2008 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	2008 Cost Estimate: N/A
2017 TIP: \$3,000	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$3,000	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$10	\$1,997	\$0	\$0	\$0	\$0	\$0	\$0	\$2,007
South King	5	988	0	0	0	0	0	0	993
Total	\$16	\$2,984	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11
50-Construction	5	2,984	0	0	0	0	0	0	2,989
Total	\$16	\$2,984	\$0	\$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 when 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: Budget 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	2008 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	\$792	\$485	\$770	\$964	\$0	\$0	\$0	\$0	\$3,011
South King	399	245	388	486	0	0	0	0	1,517
Total	\$1,191	\$730	\$1,157	\$1,450	\$0	\$0	\$0	\$0	\$4,528

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$1,191	\$730	\$1,157	\$1,450	\$0	\$0	\$0	\$0	\$4,528
Total	\$1,191	\$730	\$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 always exists and 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	2008 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	\$2	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$3
North King	247	294	0	0	0	0	0	0	541
South King	265	315	0	0	0	0	0	0	580
East King	0	0	0	0	0	0	0	0	1
Pierce	3	3	0	0	0	0	0	0	6
Total	\$517	\$615	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$74	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$81
30-Final Design+Specifications	294	0	0	0	0	0	0	0	294
50-Construction	149	580	0	0	0	0	0	0	728
55-Construction Services	0	28	0	0	0	0	0	0	28
Total	\$517	\$615	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131

Project Risk Assessment
N/A

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:	2018	2008 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	\$2,829	\$217	\$721	\$0	\$0	\$0	\$0	\$0	\$3,767
South King	1,753	134	447	0	0	0	0	0	2,334
Pierce	35,267	2,704	8,982	0	0	0	0	0	46,953
Total	\$39,850	\$3,055	\$10,149	\$0	\$0	\$0	\$0	\$0	\$53,054

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,420	\$25	\$793	\$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	34,543	1,365	3,087	0	0	0	0	0	38,995
55-Construction Services	953	200	2,909	0	0	0	0	0	4,062
80-System Testing+Startup	197	75	1,217	0	0	0	0	0	1,490
90-Contingency	0	0	1,725	0	0	0	0	0	1,725
Total	\$39,850	\$3,055	\$10,149	\$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 construct passenger access improvements at King Street Station, improving access to Century Link Field. The partnership is between Sound Transit, Washington State Department of Transportation, and Amtrak. Improvements to track 9 will reduce platform crowding and improve overall passenger safety. 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	2008 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	\$1	\$299	\$0	\$0	\$0	\$0	\$0	\$0	\$300
Total	\$1	\$299	\$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
40-Row Acquisition+Permits	0	75	0	0	0	0	0	0	75
50-Construction	0	125	0	0	0	0	0	0	125
Total	\$1	\$299	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Project Risk Assessment
N/A

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	2008 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	\$280	\$520	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Total	\$280	\$520	\$0	\$0	\$0	\$0	\$0	\$0	\$800

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$280	\$520	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Total	\$280	\$520	\$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**

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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2018	2017 Cost Estimate:	N/A
2017 TIP:	\$300	2018 :	2018	2018 Cost Estimate:	N/A
2018 TIP:	\$300				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$9	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$44
South King	30	112	0	0	0	0	0	0	143
Pierce	24	89	0	0	0	0	0	0	114
Total	\$64	\$236	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$6	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$30
30-Final Design+Specifications	6	24	0	0	0	0	0	0	30
50-Construction	51	189	0	0	0	0	0	0	240
Total	\$64	\$236	\$0	\$0	\$0	\$0	\$0	\$0	\$300

Project Risk Assessment

N/A

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	2008 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
N/A

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: Proceed to close out 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	2008 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	\$178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$178
Total	\$178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$178

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$178
Total	\$178	\$0	\$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**

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: Proceed to close out the project.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A	Baseline:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2017	2017 Cost Estimate:	N/A
2017 TIP:	\$134	2018 :	2017	2018 Cost Estimate:	N/A
2018 TIP:	\$134				

Cashflow (YOE \$000s)

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

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$134	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$134
Total	\$134	\$0	\$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 close out 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	2008 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	\$236	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236
Total	\$236	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$236	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236
Total	\$236	\$0	\$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	2008 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**

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	2008 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	\$1,762	\$1,719	\$0	\$0	\$0	\$0	\$0	\$0	\$3,481
South King	1,238	1,208	0	0	0	0	0	0	2,446
East King	5,287	5,157	0	0	0	0	0	0	10,444
Pierce	2,866	2,796	0	0	0	0	0	0	5,662
Total	\$11,153	\$10,880	\$0	\$0	\$0	\$0	\$0	\$0	\$22,033

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$24	\$502	\$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	11,062	10,378	0	0	0	0	0	0	21,439
Total	\$11,153	\$10,880	\$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.

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	2008 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
Systemwide	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60
Total	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60

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

Project Risk Assessment	
N/A	

700689

Pierce Transit - Global Positioning System Repeater

**Managed by:
Operations**

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: \$1.7 million for 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	2008 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

The agency does not have control over the project as it is being managed by Pierce Transit.

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: \$2.1 million for 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	2008 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
N/A

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	2008 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	\$125	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$125	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$150

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$125	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$125	\$25	\$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	2008 Cost Estimate: \$640
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate: N/A
2018 TIP:	\$640	2018 :	2020	2018 Cost Estimate: \$640

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
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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	2008 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 at \$3.1 million.

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	2008 Cost Estimate:	N/A
2017 TIP:	\$0	2017 :	N/A	2017 Cost Estimate:	N/A
2018 TIP:	\$3,136	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	\$3,136	\$0	\$0	\$0	\$0	\$0	\$0	\$3,136
Total	\$0	\$3,136	\$0	\$0	\$0	\$0	\$0	\$0	\$3,136

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$0	\$819	\$0	\$0	\$0	\$0	\$0	\$0	\$819
50-Construction	0	2,317	0	0	0	0	0	0	2,317
Total	\$0	\$3,136	\$0	\$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: \$289 thousand for 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	2008 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
No risks. Systems are familiar and would be maintained by Sound Transit - Transit Systems staff.

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.

Changes to authorized project allocation since 2017: \$293 thousand for 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	2008 Cost Estimate: N/A
2017 TIP: \$0	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$293	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	\$293	\$0	\$0	\$0	\$0	\$0	\$0	\$293
Total	\$0	\$293	\$0	\$0	\$0	\$0	\$0	\$0	\$293

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$0	\$293	\$0	\$0	\$0	\$0	\$0	\$0	\$293
Total	\$0	\$293	\$0	\$0	\$0	\$0	\$0	\$0	\$293

Project Risk Assessment
N/A

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: \$188 thousand for 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	2008 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: \$1.5 million for new project.

Budget year activities: 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	2008 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
10-Agency Administration	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$50
50-Construction	0	1,450	0	0	0	0	0	0	1,450
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: Additional \$10 million 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	2008 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	\$514	\$11,820	\$0	\$0	\$0	\$0	\$0	\$0	\$12,334
Total	\$514	\$11,820	\$0	\$0	\$0	\$0	\$0	\$0	\$12,334

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
35-Third Party	\$514	\$11,820	\$0	\$0	\$0	\$0	\$0	\$0	\$12,334
Total	\$514	\$11,820	\$0	\$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: The 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	2008 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	\$1,854	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,854
Total	\$1,854	\$0	\$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	1,831	0	0	0	0	0	0	0	1,831
Total	\$1,854	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,854

Project Risk Assessment
N/A

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: 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	2008 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	\$38	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$41
North King	623	44	0	0	0	0	0	0	668
South King	350	25	0	0	0	0	0	0	375
East King	19	1	0	0	0	0	0	0	20
Pierce	234	17	0	0	0	0	0	0	251
Total	\$1,265	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$1,355

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$328	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$328
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	826	90	0	0	0	0	0	0	916
Total	\$1,265	\$90	\$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	2008 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	\$4,302	\$2,430	\$1,850	\$1,430	\$1,148	\$455	\$0	\$0	\$11,615
Total	\$4,302	\$2,430	\$1,850	\$1,430	\$1,148	\$455	\$0	\$0	\$11,615

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$1,257	\$450	\$350	\$250	\$170	\$69	\$0	\$0	\$2,546
20-Prelim Engineering/Env Review	0	0	150	150	100	94	0	0	494
40-Row Acquisition+Permits	3,042	1,680	1,100	800	800	293	0	0	7,715
50-Construction	2	300	250	230	78	0	0	0	860
Total	\$4,302	\$2,430	\$1,850	\$1,430	\$1,148	\$455	\$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 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 on-site inspections of ST owned bridges.
- Establish a Link Light Rail (LRV) vehicle overhaul program to address the mid-life rehabilitation and repair requirements of the LRV fleet.
- 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 or immediate need safety repairs as identified by the SOAP panel.
- 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
Preliminary Engineering									
700718 Tacoma Link Light Rail Vehicle Overhaul	\$247	\$387	\$97	\$0	\$0	\$0	\$0	\$0	\$731
Subtotal	247	387	97	0	0	0	0	0	731
Operating									
400046 Convention Place Development Systems Retrofit	1,449	1,100	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	75	2,189	0	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	65	485	0	0	0	0	0	0	550
700716 Othello Traction Power Sub-station Parking Lot	355	24	0	0	0	0	0	0	379
700728 Link Station Braided Tile Replacement	0	435	0	0	0	0	0	0	435
700769 Light Rail Vehicle Overhaul	2,409	2,591	0	0	0	0	0	0	5,000
7X356 Tacoma Dome Station	0	3,553	0	0	0	0	0	0	3,553
Subtotal	4,978	15,262	0	0	0	0	0	0	20,240
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	22,599	1,220	321	321	321	321	0	0	25,101
700771 Station Midlife Refurbishment Program	1,079	616	0	0	0	0	0	0	1,695
7X701 ST Express Fleet Replacement	131,066	23,477	15,535	0	19,191	0	0	0	189,269
7X740 Small Works Program	4,725	2,968	1,991	662	680	742	642	0	12,411
870100 Information Technology (IT) Infrastructure	1,007	1,162	771	585	410	471	1,336	0	5,743
870101 IT Transit Systems	631	143	470	638	840	486	391	2,306	5,905
Subtotal	161,107	35,386	22,658	3,651	21,442	2,020	2,369	2,306	250,939
Total	\$166,333	\$51,035	\$22,755	\$3,651	\$21,442	\$2,020	\$2,369	\$2,306	\$271,911

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	\$26,778	\$4,685	\$3,037	\$130	\$3,510	\$140	\$83	\$0	\$38,364
2 - North King	5,294	9,580	870	533	406	461	1,086	0	18,228
3 - South King	27,909	7,703	2,236	419	2,315	401	443	0	41,426
4 - East King	61,188	11,363	7,525	126	8,957	141	122	0	89,422
5 - Pierce	44,534	12,261	5,048	360	5,415	391	244	0	68,252
6 - Systemwide	631	343	470	638	840	486	391	2,306	6,105
Total	\$166,333	\$45,935	\$19,185	\$2,206	\$21,442	\$2,020	\$2,369	\$2,306	\$261,796

2018 Cashflow by Phase
(in thousands)

Phase # and Description	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$1,007	\$250	\$0	\$0	\$190	\$0	\$0	\$0	\$1,447
10-Agency Administration	714	175	0	0	0	0	0	0	889
20-Prelim Engineering/Env Review	224	100	0	0	0	0	0	0	324
30-Final Design+Specifications	356	267	0	0	0	0	0	0	623
35-Third Party	150	0	0	0	0	0	0	0	150
50-Construction	17,356	22,527	6,802	3,330	1,740	1,699	2,369	2,306	58,130
55-Construction Services	80	40	0	0	0	0	0	0	120
70-Vehicles	146,446	27,675	15,953	321	19,512	321	0	0	210,227
Total	\$166,333	\$51,035	\$22,755	\$3,651	\$21,442	\$2,020	\$2,369	\$2,306	\$271,911

400046	Convention Place Development Systems Retrofit	Managed by: DECM
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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:	Baseline: N/A	2008 Cost Estimate: N/A
2017 TIP: \$2,549	2017 : 2017	2017 Cost Estimate: N/A
2018 TIP: \$2,549	2018 : 2018	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$1,449	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549
Total	\$1,449	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$2,549

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$79	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$133
30-Final Design+Specifications	98	22	0	0	0	0	0	0	120
50-Construction	1,192	985	0	0	0	0	0	0	2,177
55-Construction Services	80	40	0	0	0	0	0	0	120
Total	\$1,449	\$1,100	\$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	2008 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 2017 requires a Q1 2017 contract award to ensure 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: \$10.1 million for 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	2008 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
50-Construction	\$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 risk: 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: \$500 thousand for 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	2008 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: \$250 thousand for new project. The project will be evaluated after the first year. Additional funds may be allocated if it deems necessary.

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	2008 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 OMF was constructed approximately 15 years ago. The HVAC and Building Controls in the building are obsolete and nearing the end of their useful life. Facilities Division would like to coordinate with DECM to replace and upgrade the original systems during the construction of the new OMF Expansion Project.

Changes to authorized project allocation since 2017: \$400 thousand for 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	2008 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
The project coordination with the DECM Tacoma OMF 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: \$1.15 million added for expanded scope of work which resulted in an increase in the cost to complete the project.

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	2008 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	\$58	\$1,684	\$0	\$0	\$0	\$0	\$0	\$0	\$1,741
South King	17	505	0	0	0	0	0	0	523
Total	\$75	\$2,189	\$0	\$0	\$0	\$0	\$0	\$0	\$2,264

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$75	\$2,189	\$0	\$0	\$0	\$0	\$0	\$0	\$2,264
Total	\$75	\$2,189	\$0	\$0	\$0	\$0	\$0	\$0	\$2,264

Project Risk Assessment
The risk of budget or schedule changes are 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	2008 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:	Baseline: N/A	2008 Cost Estimate: N/A
2017 TIP: \$550	2017 : N/A	2017 Cost Estimate: N/A
2018 TIP: \$550	2018 : N/A	2018 Cost Estimate: N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$65	\$485	\$0	\$0	\$0	\$0	\$0	\$0	\$550
Total	\$65	\$485	\$0	\$0	\$0	\$0	\$0	\$0	\$550

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
30-Final Design+Specifications	5	45	0	0	0	0	0	0	50
50-Construction	10	440	0	0	0	0	0	0	450
Total	\$65	\$485	\$0	\$0	\$0	\$0	\$0	\$0	\$550

Project Risk Assessment
There is a limited repair window to affect repairs without impacting light rail operations requiring effective schedule and efficient execution of repairs.

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	2008 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	\$247	\$387	\$97	\$0	\$0	\$0	\$0	\$0	\$731
Total	\$247	\$387	\$97	\$0	\$0	\$0	\$0	\$0	\$731

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$247	\$387	\$97	\$0	\$0	\$0	\$0	\$0	\$731
Total	\$247	\$387	\$97	\$0	\$0	\$0	\$0	\$0	\$731

Project Risk Assessment
Although 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:		Baseline:	N/A	2008 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 is scheduled for completion in 2017. Funds cash flowed in 2018 are considered surplus.

Changes to authorized project allocation since 2017: None.

Budget year activities: Complete repairs to spare traction power motors and gear boxes, including testing.

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	2008 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	\$1,612	\$1,733	\$0	\$0	\$0	\$0	\$0	\$0	\$3,345
South King	797	858	0	0	0	0	0	0	1,655
Total	\$2,409	\$2,591	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
70-Vehicles	\$2,409	\$2,591	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
Total	\$2,409	\$2,591	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000

Project Risk Assessment

Budget risk remains high given 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: \$767 thousand for 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	2008 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
<p>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.</p>

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	2008 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	\$3,096	\$167	\$44	\$44	\$44	\$44	\$0	\$0	\$3,439
South King	11,842	639	168	168	168	168	0	0	13,153
Pierce	7,661	414	109	109	109	109	0	0	8,509
Total	\$22,599	\$1,220	\$321	\$321	\$321	\$321	\$0	\$0	\$25,101

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$10,064	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,064
70-Vehicles	12,535	1,220	321	321	321	321	0	0	15,038
Total	\$22,599	\$1,220	\$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	2008 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	\$720	\$411	\$0	\$0	\$0	\$0	\$0	\$0	\$1,131
Pierce	359	205	0	0	0	0	0	0	565
Total	\$1,079	\$616	\$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	1,072	616	0	0	0	0	0	0	1,688
Total	\$1,079	\$616	\$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**

Scope: Funds the bus fleet replacement program for ST Express.

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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2021	2017 Cost Estimate:	N/A
2017 TIP:	\$189,269	2018 :	2021	2018 Cost Estimate:	N/A
2018 TIP:	\$189,269				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$23,068	\$4,132	\$2,734	\$0	\$3,378	\$0	\$0	\$0	\$33,311
South King	13,238	2,371	1,569	0	1,938	0	0	0	19,116
East King	60,290	10,799	7,146	0	8,828	0	0	0	87,064
Pierce	34,470	6,174	4,086	0	5,047	0	0	0	49,778
Total	\$131,066	\$23,477	\$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	131,019	23,477	15,535	0	19,191	0	0	0	189,222
Total	\$131,066	\$23,477	\$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

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	2008 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 Substation 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 concrete masonry wall surrounding the traction power substation (TPSS), and add lighting for the parking area.

Changes to authorized project allocation since 2017: This project was under the Small Works Program but has been created as a stand alone project as the costs increased by \$182K, from \$197K to \$379K.

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

Authorized Project Allocation To Date	Completion Schedule	Financial Plan Project Estimate
Phase Gate Passed: N/A		
Baseline: \$0	Baseline: N/A	2008 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	\$237	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$253
South King	118	8	0	0	0	0	0	0	126
Total	\$355	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$379

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$71	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71
50-Construction	284	24	0	0	0	0	0	0	308
Total	\$380	\$24	\$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: Budget 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	2008 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: Project budget 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	2008 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	\$614	\$386	\$259	\$86	\$88	\$96	\$83	\$0	\$1,613
North King	709	445	299	99	102	111	96	0	1,862
South King	709	445	299	99	102	111	96	0	1,862
East King	898	564	378	126	129	141	122	0	2,358
Pierce	1,796	1,128	757	252	259	282	244	0	4,716
Total	\$4,725	\$2,968	\$1,991	\$662	\$680	\$742	\$642	\$0	\$12,411

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$505	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$505
20-Prelim Engineering/Env Review	224	0	0	0	0	0	0	0	224
30-Final Design+Specifications	273	0	0	0	0	0	0	0	273
35-Third Party	156	0	0	0	0	0	0	0	156
50-Construction	3,331	2,968	1,991	662	680	742	642	0	11,017
70-Vehicles	236	0	0	0	0	0	0	0	236
Total	\$4,725	\$2,968	\$1,991	\$662	\$680	\$742	\$642	\$0	\$12,411

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.

870100 Information Technology (IT) Infrastructure Managed by: FIT

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	2008 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	\$746	\$861	\$571	\$433	\$304	\$349	\$990	\$0	\$4,254
South King	261	301	200	152	106	122	346	0	1,489
Total	\$1,007	\$1,162	\$771	\$585	\$410	\$471	\$1,336	\$0	\$5,743

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$1,007	\$250	\$0	\$0	\$190	\$0	\$0	\$0	\$1,447
50-Construction	0	912	771	585	220	471	1,336	0	4,295
Total	\$1,007	\$1,162	\$771	\$585	\$410	\$471	\$1,336	\$0	\$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
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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	2008 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	\$631	\$143	\$470	\$638	\$840	\$486	\$391	\$2,306	\$5,905
Total	\$631	\$143	\$470	\$638	\$840	\$486	\$391	\$2,306	\$5,905

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
50-Construction	\$631	\$143	\$470	\$638	\$840	\$486	\$391	\$2,306	\$5,905
Total	\$631	\$143	\$470	\$638	\$840	\$486	\$391	\$2,306	\$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	\$384,519	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$57,186	\$0	\$791,918
600025 Environmental Mitigation, Monitoring & Maintenance	575	121	105	18	13	13	0	627	1,471
802000 Administrative Capital	7,907	6,299	1,996	1,082	0	0	0	0	17,284
803800 Information Technology Program	18,569	3,265	2,564	3,293	2,399	2,226	2,819	0	35,136
804500 Surplus Property Disposition	294	100	314	0	0	0	0	0	708
Subtotal	411,865	78,193	79,545	81,989	80,087	54,206	60,005	627	846,516
Total	\$411,865	\$78,193	\$79,545	\$81,989	\$80,087	\$54,206	\$60,005	\$627	\$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	\$101	\$21	\$18	\$3	\$2	\$2	\$0	\$110	\$257
2 - North King	294	100	314	0	0	0	0	0	708
3 - South King	357	75	65	11	8	8	0	388	912
4 - East King	34	7	6	1	1	1	0	37	86
5 - Pierce	85	18	15	3	2	2	0	92	216
6 - Systemwide	410,995	77,972	79,126	81,971	80,075	54,193	60,005	0	844,337
Total	\$411,865	\$78,193	\$79,545	\$81,989	\$80,087	\$54,206	\$60,005	\$627	\$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	\$75	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$315
09-Admin Capital	24,076	8,201	3,021	2,218	1,424	1,858	1,266	0	42,064
10-Agency Administration	385,626	68,657	74,761	77,658	77,747	52,335	58,739	0	795,522
20-Prelim Engineering/Env Review	1,800	996	1,455	2,112	916	13	0	627	7,918
40-Row Acquisition+Permits	288	100	308	0	0	0	0	0	696
Total	\$411,865	\$78,193	\$79,545	\$81,989	\$80,087	\$54,206	\$60,005	\$627	\$846,516

OX002 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.

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:	\$791,918	Baseline:	2023	2008 Cost Estimate:	N/A
2017 TIP:	\$791,918	2017 :	2023	2017 Cost Estimate:	N/A
2018 TIP:	\$791,918	2018 :	2023	2018 Cost Estimate:	N/A

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$384,519	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$57,186	\$0	\$791,918
Total	\$384,519	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$57,186	\$0	\$791,918

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$384,519	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$57,186	\$0	\$791,918
Total	\$384,519	\$68,409	\$74,566	\$77,595	\$77,676	\$51,967	\$57,186	\$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: increase by \$48,000 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, McKinley Park, and Ashway transit centers.

Authorized Project Allocation To Date (YOE \$000s)		Completion Schedule		Financial Plan Project Estimate (2017 \$000s)	
Phase Gate Passed:	N/A	Baseline:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2030	2017 Cost Estimate:	N/A
2017 TIP:	\$1,423	2018 :	2030	2018 Cost Estimate:	N/A
2018 TIP:	\$1,471				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Snohomish	\$101	\$21	\$18	\$3	\$2	\$2	\$0	\$110	\$257
South King	357	75	65	11	8	8	0	388	912
East King	34	7	6	1	1	1	0	37	86
Pierce	85	18	15	3	2	2	0	92	216
Total	\$575	\$121	\$105	\$18	\$13	\$13	\$0	\$627	\$1,471

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
20-Prelim Engineering/Env Review	\$575	\$121	\$105	\$18	\$13	\$13	\$0	\$627	\$1,471
Total	\$575	\$121	\$105	\$18	\$13	\$13	\$0	\$627	\$1,471

Project Risk Assessment
N/A

802000	Administrative Capital	Managed by: FIT
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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	2008 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	\$7,907	\$6,299	\$1,996	\$1,082	\$0	\$0	\$0	\$0	\$17,284
Total	\$7,907	\$6,299	\$1,996	\$1,082	\$0	\$0	\$0	\$0	\$17,284

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
09-Admin Capital	\$7,907	\$6,299	\$1,996	\$1,082	\$0	\$0	\$0	\$0	\$17,284
Total	\$7,907	\$6,299	\$1,996	\$1,082	\$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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2023	2017 Cost Estimate:	N/A
2017 TIP:	\$32,235	2018 :	2023	2018 Cost Estimate:	N/A
2018 TIP:	\$35,136				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
Systemwide	\$18,569	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$2,819	\$0	\$35,136
Total	\$18,569	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$2,819	\$0	\$35,136

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
02-Operation+Maintenance-Agency	\$75	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$315
09-Admin Capital	16,169	1,902	1,025	1,136	1,424	1,858	1,266	0	24,780
10-Agency Administration	1,101	248	189	63	71	368	1,553	0	3,593
20-Prelim Engineering/Env Review	1,224	875	1,350	2,094	904	0	0	0	6,447
Total	\$18,569	\$3,265	\$2,564	\$3,293	\$2,399	\$2,226	\$2,819	\$0	\$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:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2017 :	2017	2017 Cost Estimate:	N/A
2017 TIP:	\$708	2018 :	2019	2018 Cost Estimate:	N/A
2018 TIP:	\$708				

Cashflow (YOE \$000s)

Subarea	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
North King	\$294	\$100	\$314	\$0	\$0	\$0	\$0	\$0	\$708
Total	\$294	\$100	\$314	\$0	\$0	\$0	\$0	\$0	\$708

Phase	Life to Date	2018	2019	2020	2021	2022	2023	Future	Total
10-Agency Administration	\$6	\$0	\$6	\$0	\$0	\$0	\$0	\$0	\$12
40-Row Acquisition+Permits	288	100	308	0	0	0	0	0	696
Total	\$294	\$100	\$314	\$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.

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	6	6	6	6	0	0	0	23
Operations and Maintenance	0	77	0	0	0	0	0	0	77
Systemwide Contingency	0	5	0	0	0	0	0	0	5
Capital Replacement	322	0	0	0	0	0	0	0	322
Total	\$340	\$93	\$11	\$11	\$12	\$7	\$7	\$35	\$515

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 \$321.5 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.

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:

- Voter-Approved 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.

CAPITAL COST ESTIMATES (in thousands/constant 2017 dollars)

	Voter Approved Estimate	Inc / (Dec)	2017 Estimate	Inc / (Dec)	2018 Estimate
Link Light Rail					
East Link	\$ 3,643,314	\$ (241,230)	\$ 3,402,084	\$ -	\$ 3,402,084
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 Ext	\$ -	\$ -	\$ -	\$ 1,140,867	\$ 1,140,867
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 Expansion	\$ 109,255	\$ 35,993	\$ 145,248	\$ -	\$ 145,248
Link Maintenance & Storage	\$ 329,862	\$ 89,793	\$ 419,655	\$ (5,733)	\$ 413,922
Link Fleet Expansion	\$ 614,869	\$ 70,120	\$ 684,989	\$ -	\$ 684,989
Downtown Seattle Light Rail tunnel	\$ -	\$ -	\$ -	\$ 1,925,943	\$ 1,925,943
West Seattle to Downtown	\$ -	\$ -	\$ -	\$ 1,705,934	\$ 1,705,934
Ballard to Downtown	\$ -	\$ -	\$ -	\$ 2,842,720	\$ 2,842,720
Graham St Station	\$ -	\$ -	\$ -	\$ 79,540	\$ 79,540
Boeing Access Road Station	\$ -	\$ -	\$ -	\$ 145,090	\$ 145,090
Redmond Tech Center to Downtown Redmond	\$ -	\$ -	\$ -	\$ 1,128,425	\$ 1,128,425
130th Street Station	\$ -	\$ -	\$ -	\$ 73,199	\$ 73,199
Everett Link Extension	\$ -	\$ -	\$ -	\$ 3,365,380	\$ 3,365,380
Kirkland to Issaquah Link Extension	\$ -	\$ -	\$ -	\$ 2,105,787	\$ 2,105,787
Operations and Maintenance Facility - North	\$ -	\$ -	\$ -	\$ 814,555	\$ 814,555
Operations and Maintenance Facility - South	\$ -	\$ -	\$ -	\$ 594,046	\$ 594,046
Tacoma Dome Link Extension	\$ -	\$ -	\$ -	\$ 2,233,056	\$ 2,233,056
Tacoma Community College Extension	\$ -	\$ -	\$ -	\$ 529,322	\$ 529,322
ST3 LRVs (except FW/ Redmond)	\$ -	\$ -	\$ -	\$ 1,229,554	\$ 1,229,554
Total Link Light Rail	\$ 10,244,424	\$ (927,501)	\$ 9,316,923	\$ 19,907,685	\$ 29,224,608
Sounder Commuter Rail					
Station Access & Demand Study	\$ 161,077	\$ (25,744)	\$ 135,333	\$ -	\$ 135,333
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
Kent Station Improvements	\$ 39,462	\$ (5,789)	\$ 33,673	\$ -	\$ 33,673
Auburn Station Improvements	\$ 41,287	\$ (5,968)	\$ 35,319	\$ -	\$ 35,319
South Sounder Parking and Access Improvements	\$ -	\$ -	\$ -	\$ 761,342	\$ 761,342
Sounder Parking Edmonds & Mukilteo Stations	\$ -	\$ -	\$ -	\$ 44,030	\$ 44,030
SR 162 Improvements	\$ -	\$ -	\$ -	\$ 36,880	\$ 36,880
Lakewood to Dupont Track and Signal	\$ -	\$ -	\$ -	\$ 357,291	\$ 357,291
Sounder Yard & Shop Facility	\$ 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
Reservation Junction - 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)	\$ -	\$ 276,916	\$ 276,916
Eastside Rail Partnership	\$ 60,671	\$ (60,670)	\$ 2	\$ -	\$ 2
Total Sounder Commuter Rail	\$ 1,214,315	\$ (54,745)	\$ 1,159,570	\$ 1,476,459	\$ 2,636,029
Bus Rapid Transit					
I-405 Bus Rapid Transit	\$ -	\$ -	\$ -	\$ 610,910	\$ 610,910
Bus Rapid Transit Maintenance Base	\$ -	\$ -	\$ -	\$ 171,914	\$ 171,914
SR 522 & 145th Bus Rapid Transit	\$ -	\$ -	\$ -	\$ 436,053	\$ 436,053
Rapid Ride C&D and Madison Ave BRT Contribution	\$ -	\$ -	\$ -	\$ 71,549	\$ 71,549
Kirkland to NE 85th	\$ -	\$ -	\$ -	\$ 338,056	\$ 338,056
Total Bus Rapid Transit	\$ -	\$ -	\$ -	\$ 1,628,482	\$ 1,628,482
Regional Express					
ST Express Bus Base	\$ 217,582	\$ (7,283)	\$ 210,299	\$ -	\$ 210,299
Mid-Day Bus Storage	\$ -	\$ 3,199	\$ 3,199	\$ -	\$ 3,199
ST Express Fleet Expansion	\$ 43,242	\$ 17,824	\$ 61,066	\$ -	\$ 61,066
North Sanmamish Park & Ride	\$ -	\$ -	\$ -	\$ 22,096	\$ 22,096
Tacoma Pacific Avenue Contribution	\$ -	\$ -	\$ -	\$ 65,987	\$ 65,987
Bus On Shoulder - North	\$ -	\$ -	\$ -	\$ 38,526	\$ 38,526
Bus On Shoulder - South King	\$ -	\$ -	\$ -	\$ 38,526	\$ 38,526
Bus On Shoulder - Pierce	\$ -	\$ -	\$ -	\$ 35,224	\$ 35,224
Capital Enhancements btwn East Pierce and Sumner Sounder Station	\$ -	\$ -	\$ -	\$ 36,880	\$ 36,880
STEX Fleet to support Interim STEX Service	\$ -	\$ -	\$ -	\$ 20,445	\$ 20,445
I-90 Contribution	\$ 58,755	\$ -	\$ 58,755	\$ -	\$ 58,755
Burien - Parking Garage / Transit Center	\$ 17,463	\$ (909)	\$ 16,554	\$ -	\$ 16,554
Bothell - Parking Garage / Transit Center	\$ 6,539	\$ (6,539)	\$ -	\$ -	\$ -
Total Regional Express	\$ 343,581	\$ 6,292	\$ 349,873	\$ 257,683	\$ 607,556
Other					
ST3 Planning	\$ 64,099	\$ (26,987)	\$ 37,112	\$ -	\$ 37,112
Innovation and Technology Fund	\$ -	\$ -	\$ -	\$ 79,763	\$ 79,763
Transit Oriented Development	\$ -	\$ -	\$ -	\$ 21,427	\$ 21,427
System Access Program	\$ -	\$ -	\$ -	\$ 106,350	\$ 106,350
Sumner to Orting Study	\$ -	\$ -	\$ -	\$ 5,318	\$ 5,318
ST4 Planning	\$ -	\$ -	\$ -	\$ 69,395	\$ 69,395
HCT Planning Studies	\$ -	\$ -	\$ -	\$ 47,993	\$ 47,993
ST Art Program	\$ -	\$ 56,280	\$ 56,280	\$ -	\$ 56,280
Total Other	\$ 64,099	\$ 29,293	\$ 93,392	\$ 330,245	\$ 423,637
TOTAL Capital Plan Estimate	\$ 11,866,419	\$ (946,660)	\$ 10,919,758	\$ 23,600,554	\$ 34,520,312

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.

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
STart 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 – State of Good Repair Forecast

In accordance with the agency asset management policy, the agency will maintain a rolling 40-year state of good repair forecast (SOGRF) for the purpose of advance funding for replacement of assets and major midlife maintenance. The full 40-year rolling forecast is included in the agency's finance plan to account for the use of long term revenues for the replacement of assets which is intended to reduce net borrowing costs to the agency. Additionally, an annual SOGRF spending forecast for the period 2018 through 2023 is displayed below.

The Capital Replacement Reserve (CRR) will be maintained and serve as a funding source for emergency or unexpected capital replacements.

The CRR balance will be maintained at a minimum of \$300 million and if used, must be replenished to the minimum level within 5 years. The current CRR balance is \$321.5 million.

The following table represents the current year of the 40-year rolling forecast.

STATE OF GOOD REPAIR FORECAST
(in millions and in YOY)

40 Year Rolling Forecast	2016-2055
Administrative Facilities	\$100
Track and Power	588
Transit Centers/Parking Lots	810
Stations/Platforms/Ped Bridges/Garages	601
O&M Facilities	425
Infrastructure	1,537
Rolling Stock	1,739
Fare Collection	213
Non-Revenue Fleet	16
Other	42
Total	\$6,071

The following table represents the annual state of good repair forecast for the period 2018-2023.

STATE OF GOOD REPAIR
(in millions)

	2018	2019	2020	2021	2022	2023
State of Good Repair Forecast	60.56	26.94	8.34	24.49	4.36	6.37

An update of these forecasts will be performed in the fourth quarter of 2017 and included in the adopted budget.

Appendix D – 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.

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.

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
Souder Fares	Station Boardings
ST Express Fares	Route Boardings/Platform Hours
Tacoma Link Light Rail Fares	Station Boardings

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 USES

Description	Driver
Art Maintenance	Location
Other Expenses	Location or Board Designation

Capital Project Uses (Outlays)

System Expansion – Link Light Rail Projects	Driver
East Link Extension	ST2 Adopted Financial Plan Location
Downtown Redmond Link Extension	Location
Federal Way Link Extension	Location
First Hill Link Streetcar	Location
Link Operations & Maintenance Satellite Facility	ST2 Adopted Financial Plan
Lynnwood Link Extension	ST2 Adopted Financial Plan
Northgate Link Extension	Location
S. 200 th Link Extension	Location
Tacoma Link Expansion	Location
University Link Extension	Location
LRV Fleet Expansion	Financial Plan
Enhancements to Tacoma Link Expansion	Location

System Expansion – Link Light Rail Projects	Driver
Tacoma Dome Link Extension	Location
Operations & Maintenance Facility	ST3 Adopted Financial Plan
West Seattle Link Extension	ST3 Adopted Financial Plan
Ballard Link Extension	ST3 Adopted Financial Plan
Downtown Tunnel	ST3 Adopted Financial Plan

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
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
Sounder North Parking/Access	Location

System Expansion – ST Express Projects	Driver
Bothell Transit Related Improvements	Location
I-90 Two-Way Transit & HOV Operations, Stage 3	Location
I-405 Bus Rapid Transit	ST3 Adopted Financial Plan
ST Express Bus Base	ST2 Adopted Financial Plan
SR 522 Bus Rapid Transit	ST3 Adopted Financial Plan
Bus On Shoulder	ST3 Adopted Financial Plan

System Expansion – Other	Driver
Transit System Access Program	ST3 Adopted Financial Plan
Innovation and Technology Program	ST3 Adopted Financial Plan
Efficiency and Sustainability Program	ST3 Adopted Financial Plan
Transit Oriented Development Planning	ST3 Adopted Financial Plan
Fare Administration	Financial Policies

System Expansion – Other	Driver
Fare Collection	Location
ORCA Next Generation	Financial Policies
Research and Business Development Program	Financial policies
Research and Technology	Financial Policies
ST3 Planning	Financial Policies
<i>STart</i>	Location
Transit System Access Program	ST3 Adopted Financial Plan
Innovation and Technology Program	ST3 Adopted Financial Plan
Efficiency and Sustainability Program	ST3 Adopted Financial Plan
Transit Oriented Development (TOD) Planning Program	ST3 Adopted Financial Plan

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 Comm 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 Street Station Platform Improvements	Boardings/ Track Miles
LED Lighting Program	Location
Link CCTV System Upgrade	Boardings/Track Miles
Link OMF Energy Efficiency	Boardings/Track Miles
Link Operating Segment System Enhancements & Upgrades	Location
Locomotive Inboard Facing Cameras	Boardings/Track Miles
LRV Between Car Barriers	Location
LRV Wash Bay Modification	Boardings/Track Miles
LRV Wheel Flat Software	Boardings/Track Miles

Enhancement Projects	Driver
Noise Abatement	Location
Non-Revenue Support Vehicles	Boardings/ Track Miles
Opensidewalks Data Development	Location
Operations & Maintenance LRV Vehicle Lift	Boardings/Track Miles
Positive Train Control	Location
Puyallup Station LED Lighting	Location
Security Operations Center – Video Enhancements	Financial Policies
Security Radio Project	Financial Policies
Signage Improvements	Location
Sounder Passenger Emergency Intercom	Boardings/Track Miles
ST Express Mobile Communications	Platform Hours
Sumner Station LED Lighting	Location
Tacoma Link Fare Collection	Location
TOD Property Disposition	Location
Union Station Remodel – Renovation of 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
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	Location
Link SCADA System Support	Boardings/Track Miles
Link Station Braided Tile Replacement	Location
LRV Overhaul	Boardings/Track Miles
LRV Wireless Communication Upgrade	Boardings/Track Miles
King Street Station Vertical Window Glazing	Location
OMF Upgrades	Boardings/Track Miles
Othello TPSS Parking Lot	Location
Pierce Transit GPS Repeater	Location
Safety Oversight Approval Program	Location
Small Works Program	Location

State of Good Repair	Driver
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
Tacoma Link Radio Upgrade	Location

Administrative Projects	Driver
Administrative Capital	Financial Policies
Environmental Mitigation, Monitoring and Maintenance	Modal Operating Expense Rules
Information Technology Program	Financial Policies
Surplus Property Disposition	Location

Systemwide Uses

Description	Driver
Agency Administration	Financial Policies

Debt Service

Description	Driver
Debt Service	Financial Plan



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Sound Transit plans, builds and operates regional transit systems and services to improve mobility for Central Puget Sound.