



# Transit Improvement Plan 2014

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## Agency Overview

### Our Story

The Central Puget Sound Regional Transit Authority – better known as Sound Transit – was created by the Washington State legislature in 1993. Sound Transit plans, builds, and operates a regional mass transit system that connects people to their communities and jobs throughout urban areas of King, Pierce, and Snohomish counties. We have grown from a planning agency to one that carried 28.0 million passengers in 2012; 30.3 million passengers in 2013; and is expected to carry 31 million passengers in 2014 on our trains and buses. We continue building extensions to light rail, transit centers, stations, and other transportation infrastructure.

In 1996 voters in the region approved implementation of the Sound Move plan. The plan includes a mix of transportation improvements: Sounder commuter rail, Link light rail, ST Express bus, new transit centers, park and ride lots, and high occupancy vehicle (HOV) access projects. As a result of Sound Move, ST Express bus service began in 1999; joined by Sounder commuter rail in 2000. Light rail started with Tacoma Link in 2003 and Central Link light rail began



Tacoma Link Light Rail

service in 2009. The vast majority of Sound Move projects have been completed and closed or are pending close out. Active Sound Move projects include the University Link Extension from downtown Seattle to the University of Washington, scheduled for opening in 2016; completion of HOV lane work on I-90 to accommodate light rail across Lake Washington to Bellevue and Overlake; and Mukilteo Station South Platform.

In 2008 voters of the Central Puget Sound region approved the Sound Transit 2 (ST2) ballot measure. This new program includes the addition of 36 miles of track with 18 new stations to create a 50-mile regional light rail system. Due to the recession and resulting large reduction in tax revenues, the ST2 program was realigned to maintain affordability. Current ST2 light rail projects include extensions east to Bellevue and the Overlake area of Redmond, north to Northgate and Lynnwood, south to Kent/Des Moines in the area of Highline Community College as well as planning for future extensions south to Federal Way, and expansion of Tacoma Link. Regional Express bus projects include fleet expansion, a bus base, bus storage, and parking facilities. Sounder commuter rail projects include easements for four additional round trips in the south corridor, station access improvements, permanent stations for Edmonds and Tukwila, track and signal improvements, fleet expansion, and a Sounder yard and shops facility. ST2 also provided for the addition of ST Express bus and commuter rail service.

ST2 included funding to identify and evaluate additional regional high capacity transit (HCT) alternatives – referred to as ST3. Sound Transit is initiating alternative studies in eight transportation corridors that run north to Everett, south to Tacoma, east to downtown Redmond and Issaquah, and

west to Ballard, West Seattle, and Burien. Completion of these planning efforts is scheduled for June 2014.

In association with the HCT studies, the Board has authorized an update to the Sound Transit Long Range Plan and a programmatic Environmental Impact Statement (EIS) on plan elements. December 2014 is the anticipated completion date for this effort.

## Safeguarding Tax Dollars

Sound Transit takes its stewardship responsibilities very seriously and is committed to protecting taxpayers' money. Our oversight and structure help us meet that commitment.

Sound Transit is governed by an 18-member Board made up of local elected officials and the Secretary of the Washington State Department of Transportation. The Board establishes policies and gives direction and oversight.

The Board's four committees dig into the details and provide strategic direction for capital projects, the operation of our trains and buses, and our annual financial reports and external and internal audits.

In addition, an independent Citizen Oversight Panel (COP), made up of volunteers appointed by the Board, monitors and reports on agency performance, including capital and operating budgets and financial plans.

Both the Board and the COP receive regular briefings from Sound Transit staff.

For more information, please visit [www.soundtransit.org](http://www.soundtransit.org) then click on "About Sound Transit."



Dow Constantine, Chair  
Sound Transit Board of Directors

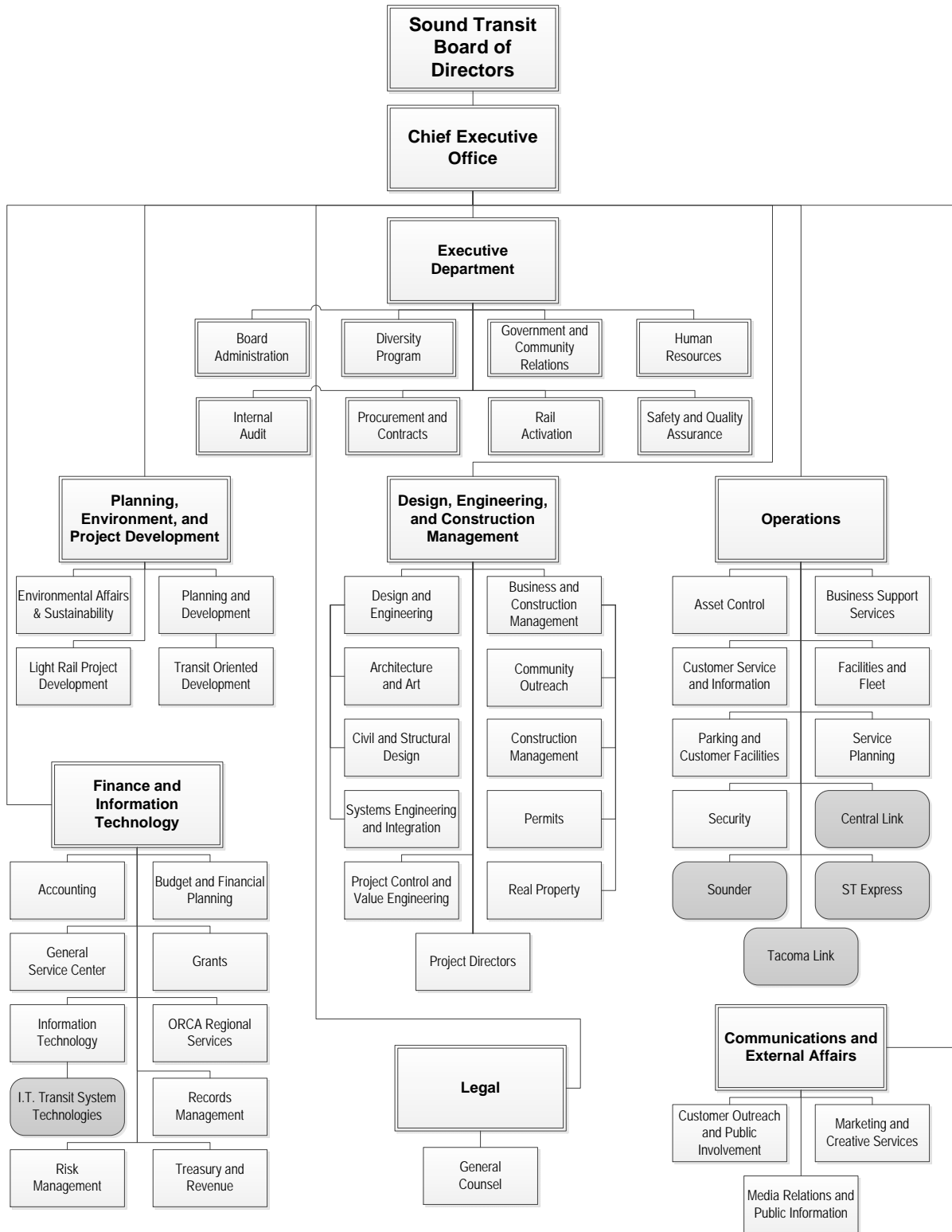
## Our People

Sound Transit's departments are organized in a way that ensures taxpayer dollars are aligned with our mission of planning, building, and operating the regional transit system. (An organization chart follows the department descriptions.)

- Executive Department includes the Chief Executive Office as well as Board Administration, Diversity, Government & Community Relations, Human Resources, Internal Audit, Procurement & Contracts, Rail Activation, and Safety & Quality Assurance.
- Planning, Environment, and Project Development (PEPD) leads the initial project activities that engage the public and inform Board decisions on projects' scope, schedule, and budget. Our ST3 planning effort, sustainability, and transit-oriented development programs are led by PEPD.
- Design, Engineering, and Construction Management (DECM) is principally responsible for final design and construction of all major capital projects. DECM supplies professional and technical resources throughout the design and construction phases of each project and also supports the Operations Department in design and delivery of small capital projects for our facilities. The department provides project control and real estate services for the entire agency.
- Operations oversees transit service, maintenance, and security for Central Link light rail, Sounder commuter rail, ST Express bus, and all Sound Transit facilities. The department also directly operates and maintains Tacoma Link light rail.

- Finance and Information Technology (FIT) is responsible for all financial activities including financial planning, budgeting, accounting, treasury, revenue collection, grants, records management, and risk management, as well as managing information technology. The Information Technology division manages the implementation of new technology and maintains our network and software for both transit operations and administrative systems.
- Communications and External Affairs (CEA) focuses on marketing and creative services, media relations and public information, and customer outreach and public involvement.
- Legal provides analysis and advice on a variety of legal subjects including real estate, labor, environmental, construction, land use, permitting, litigation, contracts and interagency issues. The Legal department is actively involved in claims defense and property acquisitions including condemnations.

SOUND TRANSIT ORGANIZATION CHART



□ = Division costs included in Agency Administration section of Budget  
 ○ = Division costs included in Service Delivery section of Budget

## Our Key Financial Policies

Sound Transit's financial policies provide the framework for planning, building, and operating the regional transit system. Our key policies are outlined below.

### **Financial Policies**

Sound Transit's Financial Policies were amended July 24, 2008. The "Financial Policies reflect Sound Transit's commitment to subarea equity while maintaining the flexibility necessary to manage the financing of the System Plan on a consolidated basis and within legal constraints."

The Sound Transit District is divided into five geographic subareas: Snohomish County, Pierce County, and three subareas within King County – North King County, East King County, and South King County. The regional transit system plan addresses unique needs in each of these subareas. Tax revenues raised in each subarea are used for projects and services benefiting that subarea.

The policies cover implementation of subarea equity and debt management for current and future phases. The full document can be found in Appendix F of the Adopted 2014 Budget.

### **Budgeting Policies**

The budget policies, amended July 25, 2002 (Resolution No. R2002-08), outline the contents of the agency's annual budget and the processes for its submittal, adoption, and modification.

### **Phase Gate**

Phase Gate is a project management process designed around a series of eight defined gates. Gates represent key transition and/or decision points in a project's progression through planning and environmental review, design, construction, and transition to operations. Management and staff representatives throughout the agency review all aspects of a project including budget, schedule, risk mitigation, design, and operational startup plans to determine if the project is ready to advance. The process ensures that the Board and public have visibility into project scope, schedule, and budget through routine staff reporting. And, the process gives the Board control over key project decisions – specifically, approval of budget and project scope and schedule. After the first gate, a request to complete initial planning and conceptual engineering is presented to the Board for approval. When the project is ready to move forward to final design, a second request for budget is made to cover design and right-of way acquisition, if applicable. Then, once final design is underway and value engineering and constructability analysis is complete, the total project budget is presented to the Board for approval – this is referred to as the baseline budget.

### **Basis of Budgeting and Accounting**

Sound Transit maintains a financial reporting system that records expenditures on an accrual basis. Budgets are prepared on the same basis with a few exceptions. Tax revenues are recorded on a modified accrual basis. Principal payments on long-term debt are applied to the outstanding liability. Assets that are transferred to another governmental entity are expensed as a donation upon completion.

### **Balanced Budget**

In a situation where Sound Transit's annual revenues are less than annual expenditures, the budget is balanced with a contribution from unrestricted cash balance. Because of Sound Transit's ability to borrow to build capital projects, revenues do not need to equal expenditures.

### **Enterprise Fund**

Sound Transit uses a single or general fund to account and budget for operating and capital transactions. Funds are not segregated for specific purposes.

### **Financial Plan**

Sound Transit maintains a financial plan that projects the total revenues and costs of Sound Move and ST2 plans through 2040. The plan is used to verify long-term viability of the programs and confirm the maintenance of subarea equity.

### **Procurement**

Resolution No. 78-2 grants the CEO or his/her delegate authority to approve transactions of \$200,000 or less within current budget authorization and \$50,000 or less outside of budget authorization. Sound Transit's Capital Committee and the Operations and Administration Committee are authorized to approve the award of contracts when the contract value does not exceed \$5,000,000. The full Sound Transit Board must approve contracts above \$5,000,000.

## **Our Business Planning and Reporting**

With guidance from the Board, Sound Transit's executive management establishes the agency's objectives and priorities each year. Departments use these to create their annual scorecard – establishing their strategies and performance measures. Departments also update their three-year business plans which enable us to align resource use with strategic priorities and strengthen collaboration within and across departments. The plans identify issues and opportunities, and specify the resources and inter-departmental support necessary to execute the initiatives and achieve the goals. Business planning is a critical step to building a more strategic and efficient budget.

Each year we set agency milestones to establish accountability in the areas of customer service, planning and building major infrastructure projects, and maintaining our commitment to sustainability. Performance relative to these milestones is reported to the Board.

In close coordination with the agency's adopted budget and long-range financial plan, Sound Transit's service planning division prepares a Service Implementation Plan (SIP). The SIP describes service and revisions for the upcoming year and cost estimates for the subsequent five-year period.

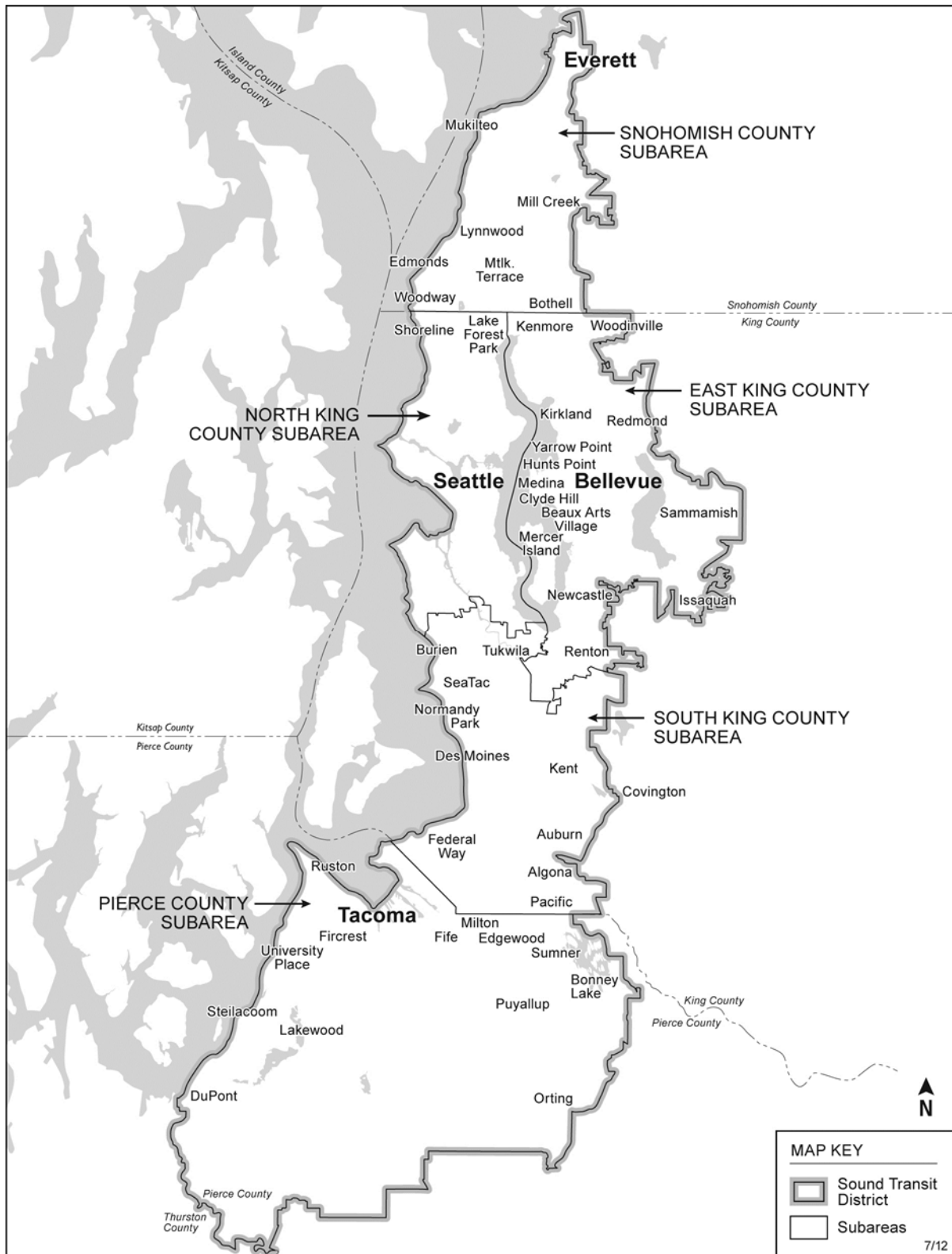
Performance relative to the adopted budget is presented to the Audit and Reporting Committee and is published in the agency's Quarterly Report. Capital program performance is detailed in the Agency Progress Report. Quarterly Reports, Agency Progress Reports, Service Implementation Plan, and the agency's milestones are available at [www.soundtransit.org](http://www.soundtransit.org).

## **Sound Transit District**

Sound Transit's boundaries, shown on the accompanying map, generally follow the urban-growth boundaries created by each county in accordance with Washington State's Growth Management Act. The Sound Transit District is divided into five subareas: Snohomish County, Pierce County, and three subareas within King County – North King County, East King County, and South King County. Revenues and expenses are allocated to the subareas. More detail on subarea allocations can be found in the Appendices. To learn more about Sound Transit, our district, and how we're organized, please visit [www.soundtransit.org](http://www.soundtransit.org).



SOUND TRANSIT DISTRICT





## Transit Improvement Plan Overview

The 2014 Transit Improvement Plan (TIP) provides projected capital and operating expenditures for the construction and operation of the Sound Transit regional transit system in the central Puget Sound. The agency's Board endorses the TIP and adopts the annual budget to authorize spending for 2014. This document contains information on scope and budget as well as changes in budget and schedule for all active phases of both capital and operating programs.

### Service Delivery

The TIP includes summary-level, six-year annual forecasts of operating expenses for each of the agency's transit modes. The expense forecasts reflect detailed service plans contained in the 2014 Service Implementation Plan (SIP).

### Project Delivery

The TIP includes phase-level budget information for projects displayed as 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 lifetime budget. Only Board-approved budget amounts are included. Where a baseline budget has not been approved, the total budget only includes the authorized phase(s). Baseline budget reflects the estimated costs for the entire project and is used to measure actual project budget performance. For most projects, information on risk and phase gate status is also provided. For ST2 projects only, cost estimate information is shown in the project delivery section and in Appendix A. Lifetime budgets for active Sound Move projects are shown in Appendix B.

### Agency Administration

The TIP includes administrative costs that support the agency's project and service delivery programs as well as agency reserves.

#### TRANSIT IMPROVEMENT PLAN SUMMARY

(in thousands)

Program	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total TIP
Service Delivery	-	\$220,959	\$229,821	\$252,926	\$262,110	\$269,655	\$277,187	-	\$1,512,659
Project Delivery	\$5,171,141	741,642	816,802	527,106	646,192	409,136	336,811	\$659,788	9,308,618
Agency Administration	396,561	105,081	116,443	146,944	142,129	154,761	152,070	597,544	1,811,532
<b>Total</b>	<b>\$5,567,702</b>	<b>\$1,067,682</b>	<b>\$1,163,066</b>	<b>\$926,976</b>	<b>\$1,050,431</b>	<b>\$833,552</b>	<b>\$766,068</b>	<b>\$1,257,332</b>	<b>\$12,632,809</b>

## Responding to the Recession

Because of the recession which started in 2008, Sound Transit expects to receive significantly less revenue to implement the ST2 program through 2023 than was anticipated at the time voters in the region approved the program. In response to the severe reduction in projected revenues, the Sound Transit CEO directed staff in FY 2010 to undertake a comprehensive review of the agency's capital and operating plans to realign them with projected revenues. The results of this review were presented to the Board through the fall of 2010 and were formalized in the Board's adoption of the 2011 budget and endorsement of the 2011 TIP. As a result, the agency announced at that time that it would no longer be able to complete the entire ST2 program within the original 15-year time

period. The 2010 program realignment suspended or delayed some elements of the ST2 plan, reduced administrative costs and found efficiencies in transit operational expenditures. With the 2010 realignment, the agency anticipates completing the vast majority of the ST2 plan.

Since 2010 the agency has continued to implement the build-out of the regional system, advancing design and environmental processes on key corridors. Under the agency's phase gate process, projects only receive construction authorization when the agency is confident in the final cost estimates and availability of resources to fully fund the project. This approach recognizes that project management through the 2008 recession was not a one-year effort, but requires ongoing monitoring of costs and revenues through the full ST2 program period.

The adopted 2013 budget and TIP included moving ahead with the substantial majority of Sound Move and ST2 projects, adding back the initial design funding for construction of light rail from So. 200<sup>th</sup> to Kent/DesMoines Road, and completion of preliminary engineering for a potential extension to Federal Way Transit Center and accelerating the So. 200<sup>th</sup> Extension with a station at Angle Lake.

The national and regional economies continue to recover slowly. This year the agency's updated revenue forecast predicts a decline in tax revenues for the period 2009 – 2023 of \$4.6 billion (29 percent) compared to the agency's July 2008 forecast on which the ST2 plan was based. This represents a modest increase of \$112 million in tax revenues over that period from the revenues forecasted in 2012. The agency will continue to monitor costs and revenues closely through the design phase for the capital program in order to determine final implementation schedules for the major programs. Staff will work with the Board to assess the impacts of the slow recovery on the agency, consistent with the agency's financial policies.

## Financial Plan

Sound Transit maintains a long-term agency financial plan – a model of forecasted cash flows through 2040. 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.

The TIP presents the projects and programs funded in the agency's financial plan. The financial plan includes funding for projects and programs equal to the baseline budget. For projects that do not yet have a baseline, the current cost estimate is used.

The six-year spending plan for service delivery expenses represents the funding level for that period. Corresponding service levels are in the 2014 Service Implementation Plan.

In addition, the financial plan includes funding for future operational expenses through 2040 that includes current service and expected future projects and service.

## Capital Budgeting

### **Budget Approval and Phase Gate Process**

Prior to 2010, the Sound Transit Board approved project lifetime 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 capital 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.

Typical budget requests include funding for:

- Project development including preliminary engineering and environmental investigation.
- Final design and right-of-way acquisition.
- Baseline or total project budget.

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

Each year, with the adoption of the annual budget, the Board approves annual capital spending by program for the coming fiscal year.

### **Cost Estimates**

Each ST2 capital project has a cost estimate that originated from the 2008 voter-approved plan. Original ST2 cost estimates, 2013 cost estimates, and 2014 cost estimates for ST2 projects appear in Appendix A.

Our cost estimates are maintained on a current year, constant dollar basis. For instance, in the 2014 TIP, full project cost estimates are presented in constant 2013 dollars. 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.

## Project Summary and Detail Pages

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

### **Summary Tables**

Summary tables for all budgets approved by the Board include three views:

- Projects by budget approval phase. A few exceptions are programs that are comprised of a number of projects and reserves.
- Subarea, by allocation to Sound Transit's five geographic subareas.
- Project phase, by the agency's work breakdown structure phases that group costs relative to activities and deliverables such as final design, construction, and startup and testing (see Appendix C for a list of project phases).

### **Project Detail**

Each active project has a full page that covers scope, lifetime budget and cashflow detail, phase gate status, and schedule and budget risk information. For ST2 projects, cost estimate updates are included. The following is an explanation of terms used in the project pages.

#### **Capital Budget (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 they would have, had the process been in place.

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, e.g., procurements, installation of equipment, etc.

#### *Baseline*

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

#### *2013 TIP*

Board-authorized project budget as of the 2013 TIP.

#### *2014 TIP*

Board-authorized project budget as of the 2014 TIP.

### **ST2 Project Cost Estimate (in 2013 dollars)**

This section of the project page is for ST2 projects only and provides a history of funded cost estimate updates in constant dollars. Cost estimates provided include the original 2008 estimate, prior to budget year estimate, and budget year estimate.

### **Budget Risk Assessment**

#### *Estimate Type*

Basis of current budget estimate used for a project:

- Initial Estimate – Sound Move or ST2 program plans.
- Planning – preliminary conceptual estimate developed for specific sites based on limited project information.
- Conceptual Engineering.
- Scoping – itemized right-of-way and construction costs on an estimated unit price basis.
- PE/ED – preliminary engineering/environmental design.
- Final Design.
- Construction – full design drawings, specifications, and known unit prices.

- Fixed Contribution – contractual amount of funds Sound Transit is to contribute to a project performed by another transit agency or governmental entity. This may not reflect a project's total cost estimate.

#### *Budget Risk Level*

Overall risk level for each project is classified as low, medium, or high, depending on the presence of uncertainties that could impact the scope or budget.

#### **Schedule Risk Assessment**

##### *Schedule Risk Level*

Overall risk level for each project is classified as low, medium, or high depending on the presence of risk factors that could impact the completion schedule for budgeted phases. If the project has a baseline budget, then risk is assessed at the level of the entire project through to putting the asset into service.

##### *2013 Budget Schedule*

The year anticipated for completion of the budgeted phases of the project as of the 2013 budget.

##### *2014 Budget Schedule*

The year anticipated for completion of the budgeted phases of the project as of the 2014 budget.

#### **Project Risk Assessment**

Explanation of the budget or schedule risk for the budgeted phases of the project.





## Service Delivery

The 2014 Transit Improvement Plan (TIP) contains forecasted expenses to operate and maintain the regional transit system from 2014 – 2019. 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 for providing those services.

### SERVICE DELIVERY SUMMARY

(in thousands)

Mode	2014	2015	2016	2017	2018	2019	Total TIP
Central Link Light Rail	\$60,385	\$63,997	\$79,335	\$82,088	\$83,452	\$85,721	<b>\$454,977</b>
Tacoma Link Light Rail	4,425	4,759	4,878	5,009	5,071	5,210	<b>29,351</b>
Sounder Commuter Rail	41,950	43,429	47,566	51,638	54,091	55,441	<b>294,115</b>
ST Express Bus	114,200	117,636	121,147	123,375	127,041	130,816	<b>734,216</b>
<b>Total</b>	<b>\$220,959</b>	<b>\$229,822</b>	<b>\$252,926</b>	<b>\$262,110</b>	<b>\$269,655</b>	<b>\$277,187</b>	<b>\$1,512,659</b>

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 forecasts service expenditures for a six-year period. The adopted 2014 SIP provides the service plan on which the adopted 2014 budget is based. Approved by the Operations and Administration Committee, the Board adopted the 2014 SIP at the same time as adopting the 2014 budget. The TIP only includes summary spending information for the six-year period described in the SIP. The SIP can be read at [www.soundtransit.org](http://www.soundtransit.org).



Kent Station

In 2014 ST Express bus added 2,000 hours of service to address overcrowded routes in the system. In the fourth quarter of 2013, Sounder commuter rail expanded service with a sixth round trip from Tacoma south to Lakewood. Additional round trips for Sounder commuter rail service will be added in 2016. There are no changes planned for Tacoma Link light rail service through 2019. However, the extension of Tacoma Link service approved by voters in ST2 is moving through the planning process.

Included in the ST2 program are extensions of Central Link light rail service south of the Airport to Angle Lake Station at South 200<sup>th</sup> Street and north to the University of Washington in 2016. In 2021 light rail service north to Northgate will begin. Additional extensions of light rail service are planned for 2023 north to Lynnwood, south to Kent/Des Moines in the vicinity of Highline Community College, and east to Overlake.



## Project Delivery

The 2014 Transit Improvement Plan (TIP) contains all Board-authorized active project budgets for expanding and improving the regional transit system. 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 Sound Move and ST2 plans.

The 2014 TIP reports projects by categories which align with common industry practice and provide transparency into the agency's investment in expanding service versus investment in existing assets. Within each of the following categories, projects are also identified by mode.

- System Expansion – Projects that expand the regional mass transit system and include the voter-approved ST2 and Sound Move programs.
- Enhancement – Projects that improve rider experience, increase the existing system's functionality, or reduce operating costs.
- Rehabilitation & Replacement – Projects that extend the life of the existing transit system or replace system assets at the end of their useful life.
- Administrative Projects – Projects that indirectly support the agency's mission.

As the system expands and its years in service lengthen, investment in maintaining our assets in a state of good repair and improving existing facilities will increase. The first table below clearly delineates spending on system expansion from spending required to maintain existing assets. The second table is broken out by project mode.

### PROJECT DELIVERY SUMMARY BY PROJECT TYPE

(in thousands)

	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total TIP
<b>System Expansion</b>									
Link	\$4,168,310	\$572,656	\$631,503	\$461,873	\$621,357	\$341,719	\$323,979	\$621,993	\$7,743,390
Sounder	532,243	46,887	48,039	2,461	-	-	-	-	629,630
Regional Express	299,296	16,530	45,092	27,778	622	503	-	-	389,822
Other	37,299	31,191	23,846	16,007	11,798	16,340	5,691	25,912	168,086
<b>Subtotal</b>	<b>\$5,037,147</b>	<b>\$667,265</b>	<b>\$748,481</b>	<b>\$508,119</b>	<b>\$633,777</b>	<b>\$358,563</b>	<b>\$329,670</b>	<b>\$647,906</b>	<b>\$8,930,927</b>
<b>Enhancement</b>	41,834	33,201	40,486	8,958	299	565	725	221	126,288
<b>Rehabilitation &amp; Replacement</b>	80,070	36,589	23,142	5,882	8,364	46,609	3,049	-	203,703
<b>Administrative</b>	12,091	4,587	4,693	4,148	3,752	3,400	3,368	11,661	47,700
<b>Total</b>	<b>\$5,171,141</b>	<b>\$741,642</b>	<b>\$816,802</b>	<b>\$527,106</b>	<b>\$646,192</b>	<b>\$409,136</b>	<b>\$336,811</b>	<b>\$659,788</b>	<b>\$9,308,618</b>

### PROJECT DELIVERY SUMMARY BY MODE

(in thousands)

	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total TIP
<b>Link</b>	\$4,178,665	\$583,812	\$635,500	\$461,919	\$621,405	\$341,768	\$324,030	\$621,993	\$7,769,092
<b>Sounder</b>	544,790	67,659	75,626	15,795	6,837	-	-	-	710,706
<b>Regional Express</b>	391,333	50,572	74,428	27,778	1,493	46,456	2,069	-	594,128
<b>Other</b>	56,354	39,599	31,249	21,614	16,457	20,911	10,712	37,794	234,691
<b>Total</b>	<b>\$5,171,141</b>	<b>\$741,642</b>	<b>\$816,802</b>	<b>\$527,106</b>	<b>\$646,192</b>	<b>\$409,136</b>	<b>\$336,811</b>	<b>\$659,788</b>	<b>\$9,308,618</b>

The Project Delivery section of the TIP document displays project budgets primarily in terms of cash flow – what year dollars will be spent. Total project budget 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 tables in this section.

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

**Annual Cash Flow** – Annual expected expenditures are shown for six years beginning with the budget year.

**Future** – Refers to the sum of approved budgets that is expected to be used in years seven and beyond.

**Total TIP** – Equivalent of the total Board-approved budget for a project. It may be just preliminary engineering, final design, and right-of way, or it could be baseline of the entire project budget.

Each of the project detail pages state the type and amount of the Board-approved lifetime budget. Lifetime budget is stated in year-of-expenditure dollars (YOE\$). Appendix B contains a summary of lifetime budgets for active Sound Move projects.

**Cost Estimates** – Most comparable to a baseline budget, cost estimates are for completion of an entire project. Costs estimates are periodically updated as new information becomes available. Estimates are also adjusted each year for inflation and stated in constant-year dollars.

For ST2 projects only, project detail pages in the following subsections show project cost estimates. Cost estimates for 2008 (the year ST2 was adopted by voters), 2013, and 2014 are stated in constant-2013 dollars. A summary of ST2 cost estimates is provided in Appendix A.

## Summary of Changes from 2013 to 2014

The 2014 TIP contains the expenditures for active phases of capital and operating projects as authorized by the Board through the agency’s Phase Gate process. The table below reconciles the changes in project lifetime budgets for each project category from 2013 to 2014.

### PROJECT DELIVERY SUMMARY OF CHANGES FROM 2013 TO 2014

(in thousands)

Project Type	2013 Lifetime Total	2013 Board Actions	2014 New Projects	Lifetime Budget Transfers	Lifetime Budget Inc/(Dec)	Transfer from Cost Estimates	2013 Closed Projects	2014 Lifetime Budget
<b>System Expansion</b>								
Link Light Rail	7,782,864	5,926	-	-	(5,474)	60,891	(100,816)	7,743,390
Souder Commuter Rail	626,732	38,260	-	(209)	3,055	2,608	(40,815)	629,630
Regional Express	491,202	-	-	(0)	(3,229)	46	(98,197)	389,822
Other	202,017	-	-	(200)	5,473	-	(39,205)	168,086
<b>System Expansion Subtotal</b>	<b>9,102,815</b>	<b>44,186</b>	<b>-</b>	<b>(409)</b>	<b>(174)</b>	<b>63,544</b>	<b>(279,033)</b>	<b>8,930,928</b>
<b>Enhancement</b>	<b>112,655</b>	<b>14,459</b>	<b>2,280</b>	<b>200</b>	<b>(271)</b>	<b>-</b>	<b>(3,034)</b>	<b>126,288</b>
<b>Rehabilitation &amp; Replacement</b>	<b>179,682</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24,445</b>	<b>-</b>	<b>(424)</b>	<b>203,703</b>
<b>Administrative</b>	<b>47,491</b>	<b>-</b>	<b>-</b>	<b>209</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47,700</b>
<b>Total</b>	<b>\$9,442,643</b>	<b>\$58,645</b>	<b>\$2,280</b>	<b>\$0</b>	<b>\$23,999</b>	<b>\$63,544</b>	<b>(\$282,492)</b>	<b>\$9,308,618</b>

**2013 Board Actions** – An action to change a project's lifetime budget taken by the Board after adoption of the 2013 TIP.

- Amendment creating a new project.
  - \$1.9 million was authorized to create the Overlake Village Bridge project to design and construct a pedestrian bridge in partnership with the city of Redmond and in conjunction with the East Link project.
  - Sounder Yard and Shops Facility project was reduced \$835 thousand to create and fund the Sounder Yard Expansion project.
- Amendments changing existing capital projects.
  - East Link project was increased by \$4.0 million for Overlake Transit Center improvements.
  - Positive Train Control project was increased by \$13.8 million to design and construct a federally mandated integrated command and control systems for monitoring and controlling train movements.
  - Tacoma Trestle Track and Signal (formerly Reservation Junction Track and Signal) project was increased by \$5.0 million to purchase right of way.
  - Security Enhancements was increased by \$711 thousand to complete the original scope of work.
  - ST2 Sounder Fleet Expansion was increased by \$33.2 million to purchase an additional nine coach/cab cars to support additional trips scheduled for 2016.

**2014 New Projects** – Newly created project for the 2014 budget year.

- Four new projects are in the 2014 TIP.
  - Regional Parking Pilot Project to study parking demand, options, and solutions.
  - Pierce Transit Radio System Upgrade will provide radio systems in 118 ST Express buses in order to meet new Federal Communications Commission (FCC) regulations.
  - Signage Improvements for riders at Sea-Tac International Airport, Link Airport Station, and Westlake Station.
  - Tacoma Link Fare Collection Implementation project to install ticket vending machines at Tacoma Link to begin collecting fares in October 2014.

**Budget Transfers** – 2014 change in a project's lifetime budget including budget transfers between projects, and moving lifetime budget to new projects or subarea reserves.

- Regional Express East King County Program Reserve was increased by \$1.4 million from project savings.
- Research & Technology was reduced to fund a portion of the Regional Parking Pilot Project.
- HCT Corridor Planning Studies was reduced to create individual corridor projects and to transfer funds to the ST3 Planning project (Long-Range Plan update).
- D St. - M St. Track and Signal project budget was transferred to the Environmental Mitigation Maintenance and Monitoring to fund the project's long-term mitigation requirements.

- HCT Corridor Planning Studies budget in the amount of \$19.4 million was transferred to ST3 Planning project and three new individual corridor planning studies.

**Budget Increases/(Decreases)** – 2014 changes in a project's lifetime budget that are an increase or decrease as opposed to a transfer.

- Sixteen projects recognized project savings in anticipation of closing in 2014.
- Fare Administration budget was increased by a transfer of surplus from Fare Integration.
- Ticket Vending Machines and Passenger information Systems/CCTV were increased to include new technologies and replacement of existing equipment in project scope.
- ST Express Fleet Replacement was increased for another year of fleet replacements consistent with the Service Implementation Plan (SIP).
- Tacoma Dome Station was increased because of a one-year schedule delay.
- Sounder South Expanded Service budget was increased to undertake wetland mitigation requirements related to the third and fourth BNSF easements.
- Small Works Program was increased to include another year of the program. The Bike Locker Program is increased to fund the community outreach goals of the program.
- Non-Revenue Support Vehicles is increased to recognize future replacement of maintenance vehicles.
- Central Link HVAC for Traction Power was increased to meet the revised costs of the scope of work.
- East Link was increased to accommodate design requirements to integrate negotiated improvements into the design of the Overlake Transit Center.
- Central Link Card Reader and Security Enhancements was increased to cover cost increases.
- Sounder Vehicle Overhaul Program was increased to upgrade 11 locomotives to Tier 0+ emissions standard.

**Transfer from Cost Estimate** – Reflects an increase in lifetime budget that is within the ST2 cost estimate.

- Link Operations and Maintenance Satellite Facility project was increased to accommodate a purchase of property.
- East Link was increased to allow for pre-construction activities to include utility relocations.
- Three projects were increased to allow for the completion of right-of-way property appraisal activities.
- Tacoma Trestle Track and Signal (formerly Reservation Junction Track and Signal) was increased to allow for the completion of preliminary engineering of the project.

**Closed Projects** – Completed and closed projects excluded from the 2014 TIP.

- Nineteen projects were closed in June 2013 after completing Phase Gate 8.

## System Expansion – Link Light Rail

Sound Transit's regional light rail service began in 2003 with the completion of Tacoma Link, a 1.6-mile light rail line between Tacoma Dome Station and downtown Tacoma. In July 2009, the initial segment, consisting of a 13.9-mile light rail line between downtown Seattle and the city of Tukwila opened for service. In December 2009, a 1.7-mile extension known as Airport Link from Tukwila to Sea-Tac International Airport was also completed. Today, Link trains carry an increasing number of passengers each year with over 10.7 million expected in 2014.

Within the Link light rail program, the TIP identifies budgets to continue construction of University Link, extending light rail from downtown Seattle to the University of Washington, initiate construction of extensions to South 200<sup>th</sup> in SeaTac and north to Northgate, and advance planning and design efforts for future extensions south to Federal Way, east to Bellevue and the Overlake area of Redmond and north to Lynnwood. Costs to build the University Link segment make up the majority of our capital spending through 2016.

### TIP Highlights

Major Link light rail elements of the 2014 TIP include:

- Continue University Link construction through 2015 with service scheduled to begin in 2016.
- Continue planning, design, and construction efforts for light rail extensions to the north, south, and east.
- Funding for the city of Seattle's construction of the First Hill Streetcar connecting the Seattle's Capitol Hill, First Hill, and International District area neighborhoods.
- Review expansion options for Tacoma Link.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
Airport Link	Savings	Baseline	Budget adjusted to equal estimated costs and recognize savings at project closeout.	(\$374)
East Link Extension	Cost Increase	Final Design & ROW	Increased construction and pre-construction services including pre-construction management services, advanced utility relocation, potential demolition and remediation of early property acquisition, early mitigation activity and permitting.	\$37,500
Federal Way Transit Extension	Cost Increase	Preliminary Engineering	Budget increased for right-of-way acquisition activities.	\$200
Initial Segment	Savings	Baseline	Budget adjusted to equal estimated costs and recognize savings at project closeout.	(\$5,100)
Tacoma Link Expansion	Cost Increase	Preliminary Engineering	Budget increased for right-of-way activities including cost estimating and title research.	(\$1,197)

Project	Reason	Budget Type	Explanation	Change
Link Operations & Maintenance Satellite Facility	Cost Increase	Final Design & ROW	Reconcile the Proposed 2014 TIP with the 2012 Board action approving the protective acquisition of property.	\$44

**SCHEDULE CHANGES**

Project	Schedule Type	Explanation	Old Date	New Date
Link Operations & Maintenance Satellite Facility	Preliminary Engineering	Schedule is affected by the strategic property acquisition in 2013.	2014	2015
Tacoma Link Expansion	Preliminary Engineering	Preliminary engineering phase starts in 2014 and will be completed in 2015. Schedule is adjusted to reflect realistic time frames for environmental and other approvals.	2014	2015

**Project Closures**

The following projects are scheduled to be closed in 2014.

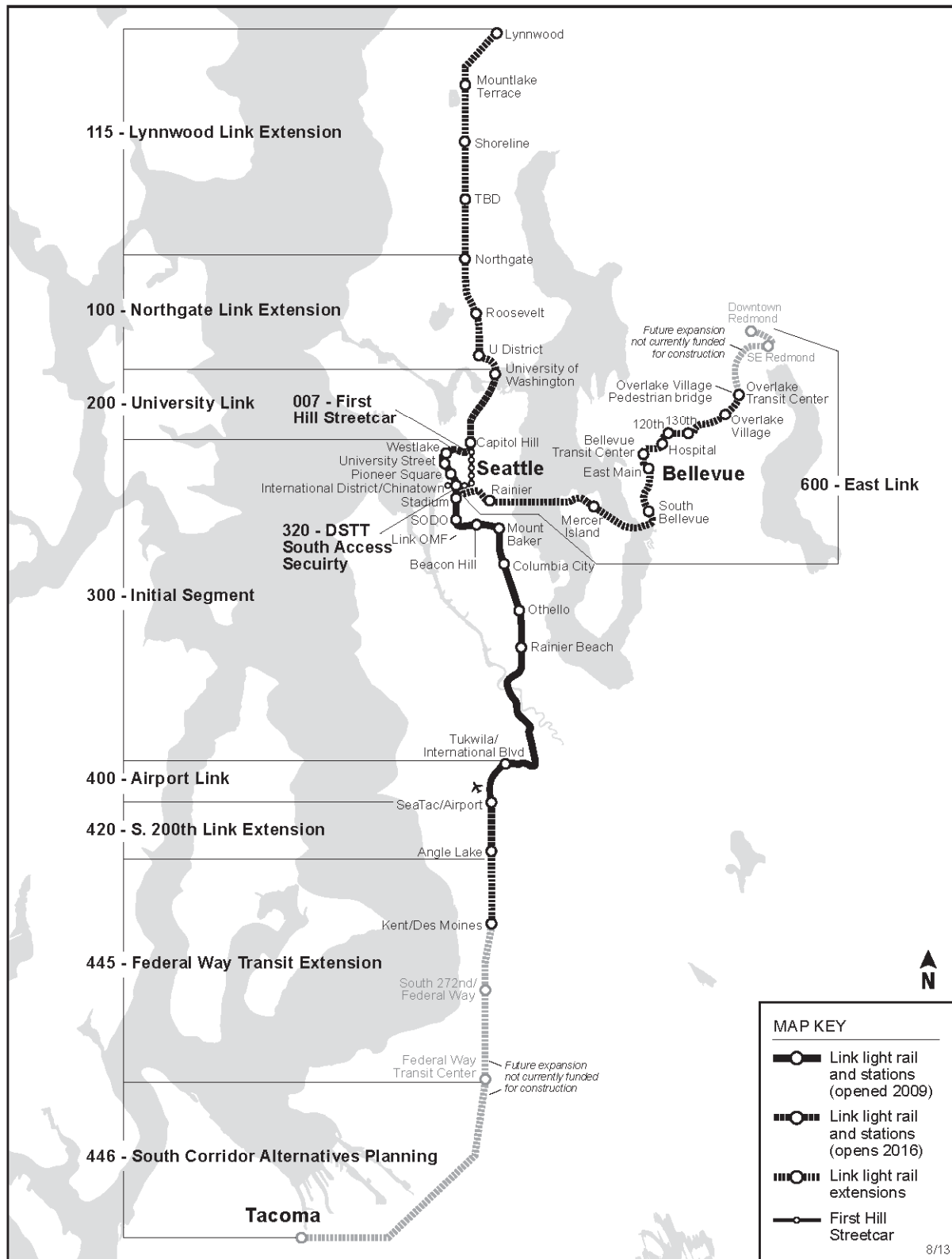
- Initial Segment
- Airport Link



S. 200<sup>th</sup> Link Extension Groundbreaking Ceremony



LIGHT RAIL CAPITAL PROJECTS



## 2014 TIP Cashflow by Budget Approval

(in thousands)

### System Expansion LINK

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Preliminary Engineering</b>									
400008 Tacoma Link Expansion	1,567	2,726	1,538	0	0	0	0	0	5,831
400009 Link Operations & Maintenance Satellite Facility	26,280	2,928	3,349	0	0	0	0	0	32,557
4X115 Lynnwood Link Extension	20,696	16,994	10,682	8,747	0	0	0	0	57,119
4X445 Federal Way Transit Extension	5,866	14,253	12,553	9,371	0	0	0	0	42,043
4X620 Overlake Village Bridge	113	782	1,003	0	0	0	0	0	1,898
<b>Subtotal</b>	<b>54,521</b>	<b>37,683</b>	<b>29,124</b>	<b>18,118</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>139,447</b>
<b>Final Design &amp; ROW</b>									
4X600 East Link Extension	168,784	148,303	134,260	98,469	94,853	53,869	57,770	42,040	798,347
<b>Subtotal</b>	<b>168,784</b>	<b>148,303</b>	<b>134,260</b>	<b>98,469</b>	<b>94,853</b>	<b>53,869</b>	<b>57,770</b>	<b>42,040</b>	<b>798,347</b>
<b>Baseline</b>									
400007 First Hill Streetcar	111,423	21,357	0	0	0	0	0	0	132,780
4X100 Northgate Link Extension	192,745	138,639	218,942	241,860	257,761	285,291	266,209	529,953	2,131,400
4X200 University Link Extension	1,171,227	146,866	136,530	66,301	232,525	2,558	0	0	1,756,007
4X300 Initial Segment	2,090,231	287	0	0	0	0	0	0	2,090,518
4X400 Airport Link	261,232	418	0	0	0	0	0	0	261,650
4X420 S 200th Link Extension	118,148	79,102	112,647	37,125	36,218	0	0	0	383,241
<b>Subtotal</b>	<b>3,945,005</b>	<b>386,669</b>	<b>468,120</b>	<b>345,286</b>	<b>526,504</b>	<b>287,850</b>	<b>266,209</b>	<b>529,953</b>	<b>6,755,596</b>
<b>Reserve</b>									
4X199 Northgate Link Extension Project Reserve	0	0	0	0	0	0	0	50,000	50,000
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>50,000</b>
<b>Total</b>	<b>\$4,168,310</b>	<b>\$572,656</b>	<b>\$631,503</b>	<b>\$461,873</b>	<b>\$621,357</b>	<b>\$341,719</b>	<b>\$323,979</b>	<b>\$621,993</b>	<b>\$7,743,390</b>

**2014 TIP Cashflow by Subarea**  
(in thousands)

System Expansion  
LINK

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	16,819	9,894	6,536	4,776	0	0	0	0	38,024
2 - North King	3,038,844	316,168	361,687	312,722	490,856	288,173	266,556	580,206	5,655,211
3 - South King	931,870	94,411	125,843	46,497	36,218	0	0	0	1,234,838
4 - East King	179,210	149,457	135,901	97,878	94,284	53,546	57,423	41,788	809,486
5 - Pierce	1,567	2,726	1,538	0	0	0	0	0	5,831
<b>Total</b>	<b>\$4,168,310</b>	<b>\$572,656</b>	<b>\$631,503</b>	<b>\$461,873</b>	<b>\$621,357</b>	<b>\$341,719</b>	<b>\$323,979</b>	<b>\$621,993</b>	<b>\$7,743,390</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	302,112	39,192	44,717	42,537	48,981	18,804	13,878	58,268	568,489
20 - Prelim Engineering/Env Review	160,954	29,133	19,664	12,509	300	403	300	950	224,213
30 - Final Design+Specifications	379,597	86,802	42,747	21,978	19,318	14,814	13,836	32,881	611,974
35 - Third Party	190,792	25,848	8,923	8,727	12,483	5,995	5,210	17,610	275,590
40 - Row Acquisition+Permits	475,799	84,815	109,030	69,117	101,360	38,657	43,364	12,586	934,728
50 - Construction	2,209,785	273,321	361,172	274,195	405,743	239,896	179,840	229,669	4,173,621
55 - Construction Services	186,130	33,144	38,051	25,185	22,999	13,424	11,004	23,828	353,766
70 - Vehicles	245,513	250	410	3,460	10,171	9,725	55,331	184,487	509,348
80 - System Testing+Startup	17,626	150	6,789	4,165	0	0	1,216	11,714	41,660
90 - Contingency	0	0	0	0	0	0	0	50,000	50,000
<b>Total</b>	<b>\$4,168,310</b>	<b>\$572,656</b>	<b>\$631,503</b>	<b>\$461,873</b>	<b>\$621,357</b>	<b>\$341,719</b>	<b>\$323,979</b>	<b>\$621,993</b>	<b>\$7,743,390</b>

<b>400008</b>	<b>Tacoma Link Expansion</b>	<b>Managed by: PEPD</b>
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Scope: Sound Transit, in cooperation with the City of Tacoma and Pierce Transit, is conducting conceptual and preliminary engineering and environmental review to expand Tacoma Link in the selected corridor. Federal Transit Administration guidance is being followed so that the project is eligible for future Small Starts grant funding consideration. Expansion is expected to require additional funding from other entities.

The estimated total project cost of \$150 million YOE is expected to be funded by \$50 million YOE of local Sound Transit revenues, \$50 million YOE of Small Starts funding, and \$50 million YOE of a local partnership.

Changes in lifetime budget since 2013: Project budget is increased by \$66 thousand to cover ROW activities including ROW cost estimating and any needed title research. Preliminary engineering is projected to be completed in the third quarter of 2015.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	2-Identify Alternatives		
Baseline:	\$0	2008 Cost Estimate:	\$95,011
2013 TIP:	\$5,765	2013 Cost Estimate:	\$129,486
2014 TIP:	\$5,831	2014 Cost Estimate:	\$129,486

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	1,567	2,726	1,538	0	0	0	0	0	5,831
Total	1,567	2,726	1,538	0	0	0	0	0	5,831

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	611	435	0	0	0	0	0	0	1,047
20 - Prelim Engineering/Env Review	944	2,250	1,524	0	0	0	0	0	4,718
40 - Row Acquisition+Permits	11	41	14	0	0	0	0	0	66
Total	1,567	2,726	1,538	0	0	0	0	0	5,831

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: Planning	Schedule Risk Level: High
Budget Risk Level: High	2013 Budget Schedule: 2014
	2014 Budget Schedule: 2015

Project Risk Assessment
Budget and Schedule Risk: Route alternatives may exceed budget. Project requires continued coordination with community stakeholders and potential

<b>400009</b>	<b>Link Operations &amp; Maintenance Satellite Facility</b>	<b>Managed by: PEPD</b>
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Scope: Review and evaluate current and future light rail storage and maintenance requirements to support the development, design, and construction of a future light rail operations and maintenance facility for ST2 system expansion.

Changes in lifetime budget since 2013: An increase of \$44 thousand for right-of-way was added to reflect a 2012 Board action approving a protective acquisition of property. Also, since the 2013 budget was adopted the project lifetime budget was increased by \$23.1 million for a protective acquisition (Board Resolution R2013-23).

Board Approved Capital Budget (in thousands of YOE dollars)	ST2 Total Project Cost Estimate (in thousands of 2013 dollars)
Phase Gate Passed: <span style="float: right;">2-Identify Alternatives</span>	
Baseline: <span style="float: right;">\$0</span>	2008 Cost Estimate: <span style="float: right;">\$281,063</span>
2013 TIP: <span style="float: right;">\$32,513</span>	2013 Cost Estimate: <span style="float: right;">\$236,889</span>
2014 TIP: <span style="float: right;">\$32,557</span>	2014 Cost Estimate: <span style="float: right;">\$236,889</span>

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	5,519	615	703	0	0	0	0	0	6,837
North King	4,389	489	559	0	0	0	0	0	5,437
South King	5,046	562	643	0	0	0	0	0	6,251
East King	11,327	1,262	1,443	0	0	0	0	0	14,032
Total	26,280	2,928	3,349	0	0	0	0	0	32,557

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	485	1,166	1,585	0	0	0	0	0	3,237
20 - Prelim Engineering/Env Review	2,662	1,519	1,529	0	0	0	0	0	5,710
35 - Third Party	0	220	165	0	0	0	0	0	385
40 - Row Acquisition+Permits	23,133	23	69	0	0	0	0	0	23,225
Total	26,280	2,928	3,349	0	0	0	0	0	32,557

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: <span style="float: right;">Planning</span>	Schedule Risk Level: <span style="float: right;">High</span>
Budget Risk Level: <span style="float: right;">High</span>	2013 Budget Schedule: <span style="float: right;">2014</span>
	2014 Budget Schedule: <span style="float: right;">2015</span>

Project Risk Assessment
All the sites under environmental review have design challenges and third party and jurisdictional opposition, which have led to increased costs and schedule

4X115

**Lynnwood Link Extension**

**Managed by: PEPD**

Scope: The Lynnwood Link Extension project entails planning, permitting, design and construction of an extension of light rail from Northgate to Lynnwood with additional service in the cities of Shoreline, Mountlake Terrace and Lynnwood. Consistent with the FTA New Starts requirements, the project has undergone an alternatives analysis and environmental scoping. The draft environmental impact statement (DEIS) was completed in summer 2013, and preliminary engineering of the preferred alternative and the final environmental impact statement are scheduled for completion in 2015.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	2-Identify Alternatives	2008 Cost Estimate:	\$1,593,735
Baseline:	\$0	2013 Cost Estimate:	\$1,357,661
2013 TIP:	\$57,119	2014 Cost Estimate:	\$1,357,661
2014 TIP:	\$57,119		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	11,300	9,279	5,832	4,776	0	0	0	0	31,187
North King	9,396	7,715	4,850	3,971	0	0	0	0	25,932
Total	20,696	16,994	10,682	8,747	0	0	0	0	57,119

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	3,245	3,137	3,089	1,267	0	0	0	0	10,738
20 - Prelim Engineering/Env Review	17,296	13,294	6,891	6,853	0	0	0	0	44,334
35 - Third Party	118	351	336	191	0	0	0	0	996
40 - Row Acquisition+Permits	37	213	366	435	0	0	0	0	1,050
Total	20,696	16,994	10,682	8,747	0	0	0	0	57,119

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

Project Risk Assessment
Budget Risk: Exists until Record of Decision received.
Schedule Risk: Coordination efforts with multiple third parties, stakeholders, and jurisdictions, and complying with the requirements of the Federal Transit Administration's New Starts process have the potential to impact the schedule for preliminary engineering.

<b>4X445</b>	<b>Federal Way Transit Extension</b>	<b>Managed by: PEPD</b>
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Scope: The Federal Way Transit Extension extends 7.6 miles from S. 200th Street in the City of SeaTac to the Federal Way Transit Center. Project scope elements include Alternatives Analysis, draft and final environmental impact statements and conceptual engineering to support the environmental analysis. Design of the preferred alternative will be advanced through preliminary engineering for the 2.3-mile segment from S. 200th Street to Kent/Des Moines.

Changes in lifetime budget since 2013: Project budget increased \$200 thousand for ROW activities.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	2-Identify Alternatives	2008 Cost Estimate:	\$466,347
Baseline:	\$0	2013 Cost Estimate:	\$415,483
2013 TIP:	\$41,843	2014 Cost Estimate:	\$415,483
2014 TIP:	\$42,043		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	5,866	14,253	12,553	9,371	0	0	0	0	42,043
Total	5,866	14,253	12,553	9,371	0	0	0	0	42,043

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,167	2,179	2,682	3,357	0	0	0	0	9,385
20 - Prelim Engineering/Env Review	4,588	11,700	9,240	5,355	0	0	0	0	30,883
35 - Third Party	8	304	604	659	0	0	0	0	1,575
40 - Row Acquisition+Permits	103	70	27	0	0	0	0	0	200
Total	5,866	14,253	12,553	9,371	0	0	0	0	42,043

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2016
		2014 Budget Schedule:	2016

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

<b>4X620</b>	<b>Overlake Village Bridge</b>	<b>Managed by: DECM</b>
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Scope: Overlake Village Bridge is a joint project with the City of Redmond to design a pedestrian bridge over SR-520 at the Overlake Village Station. Work started in August 2013.

Changes in lifetime budget since 2013: New project approved by the Board in July 2013. By agreement with the city of Redmond, the city is funding the \$1.9 million project with a Congestion Mitigation and Air Quality (CMAQ) grant and local matching funds. Sound Transit is funding project administration.

Board Approved Capital Budget (in thousands of YOE dollars)	ST2 Total Project Cost Estimate (in thousands of 2013 dollars)
Phase Gate Passed: 4-Enter Final Design	
Baseline: \$0	2008 Cost Estimate: N/A
2013 TIP: \$1,898	2013 Cost Estimate: N/A
2014 TIP: \$1,898	2014 Cost Estimate: N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	113	782	1,003	0	0	0	0	0	1,898
Total	113	782	1,003	0	0	0	0	0	1,898

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	3	32	40	0	0	0	0	0	75
30 - Final Design+Specifications	110	750	963	0	0	0	0	0	1,823
Total	113	782	1,003	0	0	0	0	0	1,898

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: Final Design	Schedule Risk Level: Low
Budget Risk Level: Low	2013 Budget Schedule: 2015
	2014 Budget Schedule: 2015

Project Risk Assessment
Although the risk is low, there is always some risk in coordinating with other jurisdictions to complete the scope of work.



## System Expansion

LINK

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

Scope: East Link extends light rail to East King County via I-90 from Downtown Seattle to Downtown Bellevue and the Overlake area of Redmond, with stations serving Rainier Avenue/I-90, Mercer Island, South Bellevue, Downtown Bellevue, Overlake Hospital, the Bel-Red corridor, Overlake Village and the Overlake Transit Center. Environmental review for a future expansion between the Overlake Transit Center and Downtown Redmond and preliminary engineering has been completed; the project is in Final Design. Revenue Service to the Overlake Transit Center is forecast for early 2023.

Changes in lifetime budget since 2013: Project budget increased by \$37.5 million for limited construction and pre-construction services. Work includes pre-construction management services, advanced utility relocation, potential demolition and remediation of early property acquisition, early mitigation activity and permitting. Also included is an amendment to the project lifetime budget in December 2013 (Board Resolution R2013-31) to add \$4.0 million for Overlake Transit Center improvements being funded by an agreement with the Microsoft Corporation.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	4-Enter Final	2008 Cost Estimate:	\$3,124,478
Baseline:	\$0	2013 Cost Estimate:	\$2,968,882
2013 TIP:	\$760,847	2014 Cost Estimate:	\$2,968,882
2014 TIP:	\$798,347		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	1,013	890	806	591	569	323	347	252	4,790
East King	167,771	147,413	133,454	97,878	94,284	53,546	57,423	41,788	793,557
Total	168,784	148,303	134,260	98,469	94,853	53,869	57,770	42,040	798,347

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	22,030	10,353	12,606	13,417	9,030	493	141	50	68,119
20 - Prelim Engineering/Env Review	53,494	371	476	300	300	403	300	950	56,594
30 - Final Design+Specifications	72,351	61,562	29,288	16,770	11,659	9,116	9,315	22,559	232,621
35 - Third Party	2,006	1,337	3,316	4,275	4,012	4,600	4,650	16,409	40,605
40 - Row Acquisition+Permits	18,903	63,130	73,174	57,357	68,752	38,657	43,364	2,072	365,408
50 - Construction	0	8,700	10,400	3,200	1,100	600	0	0	24,000
55 - Construction Services	0	2,850	5,000	3,150	0	0	0	0	11,000
Total	168,784	148,303	134,260	98,469	94,853	53,869	57,770	42,040	798,347

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	PE/E	Schedule Risk Level:	High
Budget Risk Level:	Hig	2013 Budget Schedule:	2023
		2014 Budget Schedule:	2023

**Project Risk Assessment**

The project presents technical and third party approval challenges and requires close coordination with stakeholders and other governmental jurisdictions. Timely decision making will be necessary in 2014 to maintain the schedule for project baselining and construction. Competiveness in the construction market will influence project costs. Maintaining project affordability in the face of reduced ST2 revenues remains a challenge.

400007

First Hill Streetcar

Managed by: PEPD

Scope: Sound Transit is financially supporting construction of the City of Seattle's First Hill Streetcar that will connect the Link Capitol Hill Station with First Hill neighborhood and the International District /Chinatown Station. Construction is expected to be completed in 2014.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	5-Establish Baseline	2008 Cost Estimate:	\$134,351
Baseline:	\$132,780	2013 Cost Estimate:	\$132,841
2013 TIP:	\$132,780	2014 Cost Estimate:	\$132,841
2014 TIP:	\$132,780		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	111,423	21,357	0	0	0	0	0	0	132,780
Total	111,423	21,357	0	0	0	0	0	0	132,780

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	165	554	0	0	0	0	0	0	719
35 - Third Party	111,258	20,803	0	0	0	0	0	0	132,061
Total	111,423	21,357	0	0	0	0	0	0	132,780

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment

The project schedule and budget risks remain low as the Agency is providing a fixed contribution based on completed progress of the project. The construction schedule of the project has changed and may affect the start of revenue service.

**4X100****Northgate Link Extension****Managed by: DECM**

Scope: The Northgate Link Extension extends light rail 4.3-miles from the UW 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 in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	\$1,643,079
Baseline:	\$2,131,400	2013 Cost Estimate:	\$1,815,319
2013 TIP:	\$2,131,400	2014 Cost Estimate:	\$1,815,319
2014 TIP:	\$2,131,400		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	192,745	138,639	218,942	241,860	257,761	285,291	266,209	529,953	2,131,400
Total	192,745	138,639	218,942	241,860	257,761	285,291	266,209	529,953	2,131,400

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	17,383	9,449	10,873	9,634	14,454	15,753	13,737	58,218	149,500
20 - Prelim Engineering/Env Review	15,077	0	0	0	0	0	0	0	15,077
30 - Final Design+Specifications	62,907	19,161	8,510	2,779	4,625	5,698	4,521	10,322	118,523
35 - Third Party	2,557	952	1,935	1,600	1,600	1,395	560	1,201	11,800
40 - Row Acquisition+Permits	52,058	20,127	31,202	7,866	5,532	0	0	10,515	127,300
50 - Construction	38,596	77,525	149,703	200,836	209,654	239,296	179,840	229,669	1,325,120
55 - Construction Services	4,167	11,175	16,318	15,685	16,449	13,424	11,004	23,828	112,050
70 - Vehicles	0	250	400	3,460	5,447	9,725	55,331	184,487	259,100
80 - System Testing+Startup	0	0	0	0	0	0	1,216	11,714	12,930
Total	192,745	138,639	218,942	241,860	257,761	285,291	266,209	529,953	2,131,400

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2021
		2014 Budget Schedule:	2021

**Project Risk Assessment**

Risks associated with underground conditions, limited site access, deep stations and groundborne noise and vibration and electromagnetic interference on University of Washington laboratory facilities have the potential to impact costs and schedule.

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

Scope: University Link is a 3.15-mile light rail extension located entirely underground extending east from the Downtown Seattle Transit Tunnel (DSTT), under I-5 to an underground Capitol Hill Station which 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 (UW) Station near Husky Stadium. University Link is expected to generate high ridership by connecting the three major population and employment centers of Downtown Seattle, Capitol Hill, and the University District when it opens in 2016.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$1,756,007	2013 Cost Estimate:	N/A
2013 TIP:	\$1,756,007	2014 Cost Estimate:	N/A
2014 TIP:	\$1,756,007		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	1,171,227	146,866	136,530	66,301	232,525	2,558	0	0	1,756,007
Total	1,171,227	146,866	136,530	66,301	232,525	2,558	0	0	1,756,007

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	54,151	8,983	10,453	13,257	24,152	2,558	0	0	113,554
20 - Prelim Engineering/Env Review	24,261	0	0	0	0	0	0	0	24,261
30 - Final Design+Specifications	78,521	3,715	2,185	1,853	3,034	0	0	0	89,308
35 - Third Party	10,589	626	592	1,004	5,835	0	0	0	18,646
40 - Row Acquisition+Permits	125,565	60	60	53	26,594	0	0	0	152,332
50 - Construction	717,253	118,050	106,569	41,682	165,229	0	0	0	1,148,783
55 - Construction Services	61,627	15,282	11,661	4,286	2,957	0	0	0	95,814
70 - Vehicles	99,175	0	10	0	4,724	0	0	0	103,909
80 - System Testing+Startup	85	150	5,000	4,165	0	0	0	0	9,400
Total	1,171,227	146,866	136,530	66,301	232,525	2,558	0	0	1,756,007

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2016
		2014 Budget Schedule:	2016

**Project Risk Assessment**

Budget and schedule risks significantly decreased after the completion of tunneling work in 2013. Some low-level risk associated with tighter constraints and coordination between Civil station contractors and Systems contractor.

**4X300****Initial Segment****Managed by: DECM**

Scope: The Initial Segment of the light rail system connecting Tukwila with downtown Seattle opened for service in July 2009. Project budget reflects the estimate to complete follow-on work in 2014 and close out the project.

Changes in lifetime budget since 2013: Project budget reduced by \$5.1 million to reflect savings anticipated at the time the 2014 Budget was adopted in December 2013. The project budget will be amended in 2014 for additional construction costs that will reduce the estimated savings at project close out. The project is expected to close in 2014.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$2,070,000	2013 Cost Estimate:	N/A
2013 TIP:	\$2,095,618	2014 Cost Estimate:	N/A
2014 TIP:	\$2,090,518		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	1,548,652	213	0	0	0	0	0	0	1,548,865
South King	541,579	74	0	0	0	0	0	0	541,653
Total	2,090,231	287	0	0	0	0	0	0	2,090,518

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	185,977	353	0	0	0	0	0	0	186,330
20 - Prelim Engineering/Env Review	33,268	0	0	0	0	0	0	0	33,268
30 - Final Design+Specifications	143,979	82	0	0	0	0	0	0	144,061
35 - Third Party	61,101	0	0	0	0	0	0	0	61,101
40 - Row Acquisition+Permits	205,038	51	0	0	0	0	0	0	205,089
50 - Construction	1,209,909	(318)	0	0	0	0	0	0	1,209,591
55 - Construction Services	102,536	118	0	0	0	0	0	0	102,654
70 - Vehicles	131,799	0	0	0	0	0	0	0	131,799
80 - System Testing+Startup	16,625	0	0	0	0	0	0	0	16,625
Total	2,090,231	287	0	0	0	0	0	0	2,090,518

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2009
		2014 Budget Schedule:	2009

**Project Risk Assessment**

**4X400**

**Airport Link**

**Managed by: DECM**

Scope: Airport Link, the light rail system connecting Tukwila with Sea-Tac Airport, opened for service in December 2009. Project budget reflects the estimate to complete follow-on work in 2014 and close out the project.

Changes in lifetime budget since 2013: Project budget reduced by \$374 thousand to reflect estimated savings at close out. The project is expected to close in 2014.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$269,100	2013 Cost Estimate:	N/A
2013 TIP:	\$262,024	2014 Cost Estimate:	N/A
2014 TIP:	\$261,650		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	261,232	418	0	0	0	0	0	0	261,650
Total	261,232	418	0	0	0	0	0	0	261,650

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	9,852	70	0	0	0	0	0	0	9,922
20 - Prelim Engineering/Env Review	3,666	0	0	0	0	0	0	0	3,666
30 - Final Design+Specifications	15,705	32	0	0	0	0	0	0	15,737
35 - Third Party	1,336	0	0	0	0	0	0	0	1,336
40 - Row Acquisition+Permits	16,509	0	0	0	0	0	0	0	16,509
50 - Construction	183,834	264	0	0	0	0	0	0	184,098
55 - Construction Services	14,874	53	0	0	0	0	0	0	14,926
70 - Vehicles	14,540	0	0	0	0	0	0	0	14,540
80 - System Testing+Startup	917	0	0	0	0	0	0	0	917
Total	261,232	418	0	0	0	0	0	0	261,650

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2009
		2014 Budget Schedule:	2009

Project Risk Assessment

**4X420**

**S 200th Link Extension**

**Managed by: DECM**

Scope: The S 200th Link Extension will extend light rail approximately 1.6 miles south from SeaTac/Airport Station to South 200th Street. The design features an elevated light rail guide way, and elevated station and detached park-and-ride facility at South 200th. The project is being delivered through design-build alternative contracting strategy and is expected to begin revenue service operation in 2016.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	\$384,524
Baseline:	\$383,241	2013 Cost Estimate:	\$364,816
2013 TIP:	\$383,241	2014 Cost Estimate:	\$364,816
2014 TIP:	\$383,241		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	118,148	79,102	112,647	37,125	36,218	0	0	0	383,241
Total	118,148	79,102	112,647	37,125	36,218	0	0	0	383,241

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	7,043	2,481	3,389	1,606	1,345	0	0	0	15,864
20 - Prelim Engineering/Env Review	5,698	0	4	0	0	0	0	0	5,702
30 - Final Design+Specifications	6,025	1,500	1,800	576	0	0	0	0	9,902
35 - Third Party	1,821	1,255	1,975	997	1,037	0	0	0	7,085
40 - Row Acquisition+Permits	34,442	1,100	4,119	3,406	482	0	0	0	43,549
50 - Construction	60,193	69,100	94,499	28,477	29,760	0	0	0	282,029
55 - Construction Services	2,926	3,666	5,072	2,064	3,593	0	0	0	17,322
80 - System Testing+Startup	0	0	1,789	0	0	0	0	0	1,789
Total	118,148	79,102	112,647	37,125	36,218	0	0	0	383,241

Budget Risk Assessment	
Estimate Type:	Construction
Budget Risk Level:	Medium

Schedule Risk Assessment	
Schedule Risk Level:	Low
2013 Budget Schedule:	2016
2014 Budget Schedule:	2016

Project Risk Assessment
Project being delivered through alternative design-build delivery strategy with which the Agency has limited experience, presents schedule and budget risks. Significant real property acquisition issues have been encountered; however, construction work has so far proceeded without delays.

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 approval for its use requires supermajority approval by the Sound Transit Board.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$50,000	2013 Cost Estimate:	N/A
2013 TIP:	\$50,000	2014 Cost Estimate:	N/A
2014 TIP:	\$50,000		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	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	2014	2015	2016	2017	2018	2019	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

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2021
		2014 Budget Schedule:	2021

Project Risk Assessment
Budget risk is medium to match the project risk. The use of Project Reserve funds are not expected to be required.



## System Expansion – Sounder Commuter Rail

Sounder commuter rail service between Seattle and Tacoma began in 2000. Service between Everett and Seattle began three years later in 2003. Presently, Sounder carries around 3 million passengers annually on four daily round trips between Everett and Seattle with service at stations in Everett, Mukilteo, Edmonds, and Seattle and nine daily round trips between Seattle and Lakewood with service at stations in Lakewood, South Tacoma, Tacoma, Puyallup, Sumner, Auburn, Kent, Tukwila, and Seattle. Four additional round trips were approved with the passage of ST2 for the Sounder south line; the schedule for implementing these trips is being developed.

Sound Transit has designed and built 12 commuter-rail stations. Sound Transit compensated Burlington Northern Santa Fe Railway (BNSF) to upgrade track and signal systems along the 75-mile BNSF corridor between Everett and Tacoma to provide for weekday commuter rail service to the north and south Sound communities.

In addition, Sound Transit designed and built three train layover facilities and a fourth is being added in Lakewood. Construction is completed on an 8.4-mile rail corridor between Tacoma and Lakewood. Service to South Tacoma and Lakewood commenced in October 2012.

### TIP Highlights

The 2014 TIP includes budgets to complete major elements of the Sounder commuter rail system, including:

- Closeout four completed Sounder projects.
- Build the south platform at Mukilteo Station.
- Continue environmental analysis and preliminary engineering for a Sounder Yard and Shop Facility for train maintenance and storage and a replacement for the Tacoma Trestle at Reservation Junction.
- Initiate preliminary engineering and environmental review for access improvements at the Puyallup and Sumner commuter rail stations.
- Build Tukwila Station.
- Provide for wetland mitigation requirements for recently purchased BNSF easements.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
D St-M St Track & Signal	Transfer	Baseline	Budget is transferred to Environmental Mitigation, Monitoring and Maintenance project to fund long-term mitigation requirements and allow this project to close out in a timely manner.	(\$209)
Edmonds Station	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$86)

Project	Reason	Budget Type	Explanation	Change
Lakewood Station	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$8)
Lakewood Station Improvements	Savings	Preliminary Engineering	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$751)
Layover	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$3,685)
M St-Lakewood Track & Signal	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$888)
Souder South Expanded Service	Cost Increase	Final Design & ROW	Additional funding needed for wetland mitigation requirement.	\$8,000
Station Access & Demand Study	Savings	Preliminary Engineering	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$277)
Tacoma Trestle Track & Signal	Cost Increase	Preliminary Engineering	Additional budget for Preliminary Engineering phase.	\$3,360

#### SCHEDULE CHANGES

Project	Schedule Type	Explanation	Old Date	New Date
D St-M St Track & Signal	Completion & Closeout	Project begins close-out activities in 2014.	2012	2014
Permitting/Environmental Mitigation	Final Completion	Final close-out activities scheduled for 2014	2013	2014
Souder South Expanded Service	Completion	An increase in the time to review wetland mitigation strategies has extended the project schedule.	2013	2014
Souder ST2 Fleet Expansion	Preliminary Engineering	The addition of 9 coaches/cabs is a new procurement extending the completion of the project into 2016.	2013	2016
Tacoma Trestle Track & Signal	Preliminary Engineering	Conceptual engineering began in August 2013 and will enter preliminary engineering in March 2014.	2013	2014
Tukwila Station	Revenue Service	Revised baseline is scheduled for Q1 2015 to include float and project close out activities.	2014	2015

## Project Closures

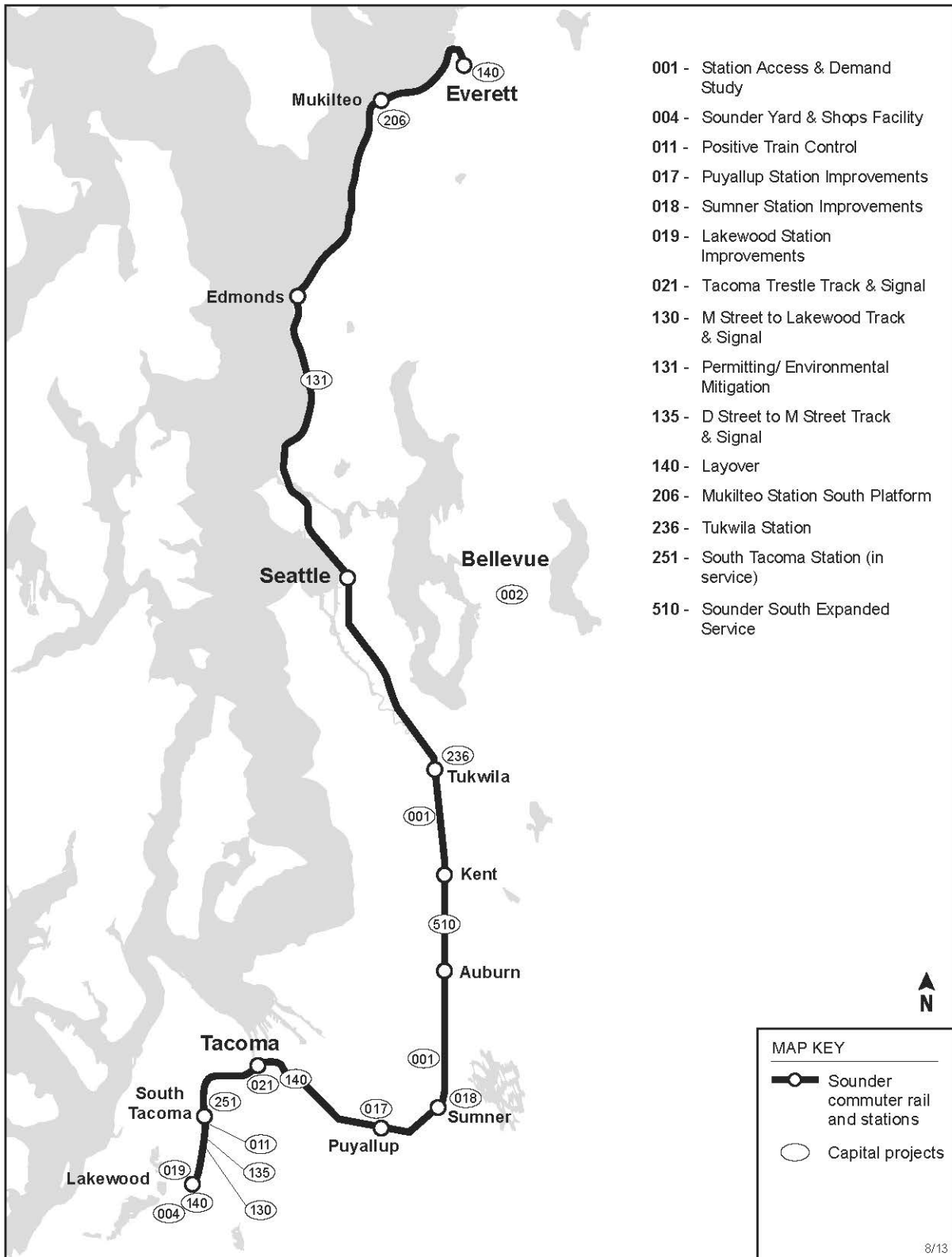
The following projects are complete and scheduled to be closed in 2014:

- Layover
- M Street to Lakewood Track & Signal
- South Tacoma Station
- Station Access and Demand Study



Sounder Commuter Rail

SOUNDER COMMUTER RAIL CAPITAL PROJECTS



## 2014 TIP Cashflow by Budget Approval

(in thousands)

### System Expansion SOUNDER

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Preliminary Engineering</b>									
300001	Station Access & Demand Study	888	5	0	0	0	0	0	893
300002	Eastside Rail Partnership	1	0	0	0	0	0	0	1
300004	Souder Yard & Shops Facility	1,090	2,032	0	0	0	0	0	6,077
300017	Puyallup Station Improvements	234	165	0	0	0	0	0	578
300018	Sumner Station Improvements	233	165	0	0	0	0	0	578
300019	Lakewood Station Improvements	256	0	0	0	0	0	0	404
300021	Tacoma Trestle Track & Signal	945	3,836	0	0	0	0	0	10,255
300026	Souder Yard Expansion	307	528	0	0	0	0	0	835
	<b>Subtotal</b>	3,954	6,732	0	0	0	0	0	19,620
<b>Final Design &amp; ROW</b>									
3X131	Permitting/Environmental Mitigation	4,709	1,694	0	0	0	0	0	6,516
3X510	Souder South Expanded Service	186,522	4,439	0	0	0	0	0	201,968
	<b>Subtotal</b>	191,231	6,132	0	0	0	0	0	208,484
<b>Baseline</b>									
3X130	M St-Lakewood Track & Signal	80,415	0	0	0	0	0	0	80,654
3X135	D St-M St Track & Signal	151,764	8,263	0	0	0	0	0	161,072
3X140	Layover	29,727	0	0	0	0	0	0	30,262
3X206	Mukilteo Station, S Platform	4,318	7,270	0	0	0	0	0	18,313
3X236	Tukwila Station	24,941	10,890	372	0	0	0	0	45,969
3X251	South Tacoma Station	15,604	0	0	0	0	0	0	15,728
7X755	Souder ST2 Fleet Expansion	30,290	8,751	2,089	0	0	0	0	49,530
	<b>Subtotal</b>	337,059	35,175	2,461	0	0	0	0	401,527
	<b>Total</b>	\$532,243	\$48,039	\$2,461	\$0	\$0	\$0	\$0	\$629,630

**2014 TIP Cashflow by Subarea**  
(in thousands)

System Expansion  
**SOUNDER**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	14,460	7,375	9,269	0	0	0	0	0	31,104
3 - South King	36,467	9,966	11,169	372	0	0	0	0	57,975
4 - East King	1	0	0	0	0	0	0	0	1
5 - Pierce	481,314	29,547	27,601	2,089	0	0	0	0	540,550
<b>Total</b>	<b>\$532,243</b>	<b>\$46,887</b>	<b>\$48,039</b>	<b>\$2,461</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$629,630</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	18,785	3,004	6,021	372	0	0	0	0	28,182
20 - Prelim Engineering/Env Review	9,173	6,578	3,196	0	0	0	0	0	18,946
30 - Final Design+Specifications	29,470	818	2,078	0	0	0	0	0	32,365
35 - Third Party	826	8,406	229	0	0	0	0	0	9,461
40 - Row Acquisition+Permits	257,421	5,922	7,006	0	0	0	0	0	270,349
50 - Construction	160,931	20,369	26,936	2,089	0	0	0	0	210,325
55 - Construction Services	6,412	1,790	2,403	0	0	0	0	0	10,606
70 - Vehicles	48,197	0	0	0	0	0	0	0	48,197
80 - System Testing+Startup	1,030	0	170	0	0	0	0	0	1,200
<b>Total</b>	<b>\$532,243</b>	<b>\$46,887</b>	<b>\$48,039</b>	<b>\$2,461</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$629,630</b>

**300001**

**Station Access & Demand Study**

**Managed by: PEPD**

Scope: Sound Transit is developing a comprehensive program of Sounder station access improvements that places priority on accommodating alternative station access improvements at the following Sounder commuter rail stations: Mukilteo, Kent, Auburn, Sumner, Puyallup, Tacoma Dome, South Tacoma, and Lakewood. Funding has been approved for ridership and traffic analysis environmental scan, transit oriented and joint development studies, conceptual engineering, and community outreach. The final product of the program will be proposed access investments for each station. The Initial Study was completed in 2013.

Changes in lifetime budget since 2013: Project budget is reduced by \$277.3 thousand to reflect savings at completion of the Initial Study.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	2-Identify Alternatives	2008 Cost Estimate:	\$141,929
Baseline:	\$0	2013 Cost Estimate:	\$58,030
2013 TIP:	\$1,170	2014 Cost Estimate:	\$58,030
2014 TIP:	\$893		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	37	0	0	0	0	0	0	0	38
South King	218	0	1	0	0	0	0	0	219
Pierce	633	0	4	0	0	0	0	0	637
Total	888	0	5	0	0	0	0	0	893

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	190	0	5	0	0	0	0	0	195
20 - Prelim Engineering/Env Review	699	0	0	0	0	0	0	0	699
Total	888	0	5	0	0	0	0	0	893

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

**300002**

**Eastside Rail Partnership**

**Managed by: PEPD**

Scope: This project was planned to include a potential financial contribution by Sound Transit to a partnership that would operate passenger rail on the Eastside BNSF rail corridor, subject to completion of due diligence and Board review and approval. This project was suspended in the 2011 realignment.

Changes in lifetime budget since 2013: None. Project is suspended.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$56,004
Baseline:	\$0	2013 Cost Estimate:	\$1
2013 TIP:	\$1	2014 Cost Estimate:	\$1
2014 TIP:	\$1		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	1	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	0	0	1

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	0	0	1

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2011
		2014 Budget Schedule:	2011

Project Risk Assessment



**300004**

**Sounder Yard & Shops Facility**

**Managed by: PEPD**

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. In 2013, the project lifetime budget was reduced by \$835 thousand to create the Sounder Yard Expansion project (Board Resolution R2013-13).

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	2-Identify Alternatives	2008 Cost Estimate:	\$159,878
Baseline:	\$0	2013 Cost Estimate:	\$159,087
2013 TIP:	\$6,077	2014 Cost Estimate:	\$158,252
2014 TIP:	\$6,077		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	163	443	305	0	0	0	0	0	912
Pierce	926	2,512	1,727	0	0	0	0	0	5,165
Total	1,090	2,955	2,032	0	0	0	0	0	6,077

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	199	334	128	0	0	0	0	0	661
20 - Prelim Engineering/Env Review	864	2,443	1,809	0	0	0	0	0	5,116
40 - Row Acquisition+Permits	27	179	94	0	0	0	0	0	300
Total	1,090	2,955	2,032	0	0	0	0	0	6,077

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	PE/ED	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

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

**300017**

**Puyallup Station Improvements**

**Managed by: PEPD**

Scope: Results from the Sounder Station Access & Demand Study (Project 300001) will be used to identify station access improvement alternatives. Improvements may include additional parking facilities, pedestrian access improvements, bicycle facilities including bicycle lane or path improvements within one half mile of the station, secure bicycle storage, additional bus/transfer facilities within the station, transit speed and reliability improvements on routes connecting to the station, expanded or new kiss-and-ride facilities at the station, and off-site parking along an existing bus route that connects frequently (20-minute or less headway) to the station at peak periods.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$64,350
Baseline:	\$0	2013 Cost Estimate:	\$54,462
2013 TIP:	\$578	2014 Cost Estimate:	\$54,462
2014 TIP:	\$578		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	234	178	165	0	0	0	0	0	578
Total	234	178	165	0	0	0	0	0	578

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	78	32	13	0	0	0	0	0	124
20 - Prelim Engineering/Env Review	156	146	152	0	0	0	0	0	454
Total	234	178	165	0	0	0	0	0	578

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

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

**300018**

**Sumner Station Improvements**

**Managed by: PEPD**

Scope: Results from the Sounder Station Access & Demand Study (Project 300001) will be used to identify station access improvement alternatives. Improvements may include additional parking facilities, pedestrian access improvements, bicycle facilities including bicycle lane or path improvements within one half mile of the station, secure bicycle storage, additional bus/transfer facilities within the station, transit speed and reliability improvements on routes connecting to the station, expanded or new kiss-and-ride facilities at the station, and off-site parking along an existing bus route that connects frequently (20-minute or less headway) to the station at peak periods.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$45,874
Baseline:	\$0	2013 Cost Estimate:	\$38,739
2013 TIP:	\$578	2014 Cost Estimate:	\$38,739
2014 TIP:	\$578		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	233	180	165	0	0	0	0	0	578
Total	233	180	165	0	0	0	0	0	578

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	76	34	13	0	0	0	0	0	124
20 - Prelim Engineering/Env Review	156	146	152	0	0	0	0	0	454
Total	233	180	165	0	0	0	0	0	578

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

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

**300019**

**Lakewood Station Improvements**

**Managed by: PEPD**

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 in lifetime budget since 2013: Project budget is reduced by \$751 thousand to reflect estimated savings for the pedestrian bridge.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	Pending	2008 Cost Estimate:	\$42,630
Baseline:	\$0	2013 Cost Estimate:	\$36,204
2013 TIP:	\$1,155	2014 Cost Estimate:	\$36,204
2014 TIP:	\$404		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	256	148	0	0	0	0	0	0	404
Total	256	148	0	0	0	0	0	0	404

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	22	18	0	0	0	0	0	0	40
35 - Third Party	233	130	0	0	0	0	0	0	363
Total	256	148	0	0	0	0	0	0	404

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

**300021**

**Tacoma Trestle Track & Signal**

**Managed by: DECM**

Scope: Design and construction of additional track and new structures along an approximately 0.65 mile section of track between the existing Tacoma Dome Station and the vicinity of M Street in Tacoma. Scope elements proposed at this time include limited site investigations to gather site-specific information (e.g., geotechnical data) and completion of conceptual engineering. The results of this effort will be used to inform preliminary engineering, validate ST2 cost estimate assumptions, and explore constructability issues such as construction sequencing to minimize the potential for the project to disrupt Sounder service.

This project was previously named Reservation Junction Track and Signal, and was renamed in July 2013.

Changes in lifetime budget since 2013: Project budget increased by \$3.4 million, including \$1.7 million for Preliminary Engineering and \$1.7 million to accelerate right-of-way property acquisition to meet compliance requirement of awarded TIGER V grant.

In 2013, the lifetime budget for this project was increased by \$5 million to \$6.9 million for Tacoma Rail acquisition (Board Resolution: R2013-07). The project budget was additionally increased by \$3.4 million during the 2014 budget cycle to \$10.3 million (Board Resolution: R2013-33).

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$70,791
Baseline:	\$0	2013 Cost Estimate:	\$59,898
2013 TIP:	\$6,896	2014 Cost Estimate:	\$59,898
2014 TIP:	\$10,255		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	945	5,474	3,836	0	0	0	0	0	10,255
Total	945	5,474	3,836	0	0	0	0	0	10,255

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	211	454	0	0	0	0	0	0	665
20 - Prelim Engineering/Env Review	582	3,020	203	0	0	0	0	0	3,805
40 - Row Acquisition+Permits	151	2,000	3,634	0	0	0	0	0	5,785
Total	945	5,474	3,836	0	0	0	0	0	10,255

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

Project Risk Assessment

**300026**

**Sounder Yard Expansion**

**Managed by: PEPD**

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 begins in 2016 before the Sounder Yard & Shops Facility project is complete. This project was created in 2013 with a budget transfer of \$835 thousand from Sounder Yard & Shops Facility project.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	3-Identify Preferred Alternative	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$835	2014 Cost Estimate:	\$835
2014 TIP:	\$835		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	161	0	278	0	0	0	0	0	439
Pierce	145	0	250	0	0	0	0	0	396
Total	307	0	528	0	0	0	0	0	835

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	63	0	72	0	0	0	0	0	135
20 - Prelim Engineering/Env Review	244	0	456	0	0	0	0	0	700
Total	307	0	528	0	0	0	0	0	835

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

Project Risk Assessment
The Sounder Yard Expansion project is anticipated to be completed by fall of 2016. The track and ancillary civil improvements will increase track capacity to provide needed storage capacity for the additional Sounder roundtrip that ST will be operating. The project currently is in the preliminary engineering design phase and updated cost estimates will be available for ST's review later in Fall of 2013.

**3X131** **Permitting/Environmental Mitigation** **Managed by: DECM**

Scope: Track and Signal improvements to accommodate Sounder commuter rail service between Seattle and Everett were completed by BNSF. Sound Transit assumed responsibility for all environmental permitting and mitigation required for these improvements. Required mitigation included the purchase of three properties in the Snohomish River Estuary, assistance with the Christofferson property purchase, Deer Creek Stream restoration, Kiwanis Ravine enhancement, a freshwater wetland enhancement in Woodway, and a bridge over Willow Creek to support a future day-lighting project. Track and Signal improvements were completed in 2008; remaining mitigation efforts include the on-going construction of the Christofferson fill pad.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$6,516	2013 Cost Estimate:	N/A
2013 TIP:	\$6,516	2014 Cost Estimate:	N/A
2014 TIP:	\$6,516		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	4,709	113	1,694	0	0	0	0	0	6,516
Total	4,709	113	1,694	0	0	0	0	0	6,516

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	519	13	31	0	0	0	0	0	563
20 - Prelim Engineering/Env Review	1,007	0	64	0	0	0	0	0	1,071
30 - Final Design+Specifications	193	20	206	0	0	0	0	0	419
40 - Row Acquisition+Permits	1,358	10	94	0	0	0	0	0	1,461
50 - Construction	1,632	70	1,298	0	0	0	0	0	3,001
Total	4,709	113	1,694	0	0	0	0	0	6,516

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Final Design	Schedule Risk Level:	Medium
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

Project Risk Assessment

**3X510**

**Souder South Expanded Service**

**Managed by: DECM**

Scope: Purchase of four additional commuter rail easements between Seattle and Lakewood from BNSF. BNSF is responsible for track and signal improvements; Sound Transit maintains responsibility for environmental permitting and mitigation. The fourth easement payment occurred in 2013.

Changes in lifetime budget since 2013: Project budget increased by \$8 million for King County permit fee in lieu of ST performing wetland mitigation. Project delayed to 2014 as the wetland mitigation strategies continue to be reviewed.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	4-Enter Final Design	2008 Cost Estimate:	\$169,356
Baseline:	\$0	2013 Cost Estimate:	\$200,989
2013 TIP:	\$193,968	2014 Cost Estimate:	\$208,818
2014 TIP:	\$201,968		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	186,522	11,008	4,439	0	0	0	0	0	201,968
Total	186,522	11,008	4,439	0	0	0	0	0	201,968

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,015	1,000	3,635	0	0	0	0	0	5,650
20 - Prelim Engineering/Env Review	325	423	259	0	0	0	0	0	1,007
30 - Final Design+Specifications	0	300	100	0	0	0	0	0	400
35 - Third Party	0	8,005	0	0	0	0	0	0	8,005
40 - Row Acquisition+Permits	185,182	1,229	74	0	0	0	0	0	186,485
50 - Construction	0	50	371	0	0	0	0	0	421
Total	186,522	11,008	4,439	0	0	0	0	0	201,968

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Final Design	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

**Project Risk Assessment**

Budget risks may be presented by environmental mitigation requirements. Additional environmental studies are being performed to verify mitigation requirements and establish appropriate mitigation budget/schedule.



**3X130**

**M St-Lakewood Track & Signal**

**Managed by: DECM**

Scope: Reconstruction of approximately seven miles of rail track between M Street in Tacoma and Lakewood was completed in 2010. Remaining project elements include restoration of the S. 66th St Bridge and installation of the Centralized Train Control system. Commuter rail service began in 2012 following the completion of the D Street to M Street Track and Signal project (Project 3x135).

Changes in lifetime budget since 2013: Project budget reduced by \$888 thousand to reflect estimated savings at close out. The project is expected to close in 2014.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$78,630	2013 Cost Estimate:	N/A
2013 TIP:	\$81,542	2014 Cost Estimate:	N/A
2014 TIP:	\$80,654		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	80,415	238	0	0	0	0	0	0	80,654
Total	80,415	238	0	0	0	0	0	0	80,654

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	3,642	123	0	0	0	0	0	0	3,765
20 - Prelim Engineering/Env Review	1,496	0	0	0	0	0	0	0	1,496
30 - Final Design+Specifications	2,982	3	0	0	0	0	0	0	2,985
40 - Row Acquisition+Permits	12,763	52	0	0	0	0	0	0	12,815
50 - Construction	50,579	60	0	0	0	0	0	0	50,639
70 - Vehicles	8,953	0	0	0	0	0	0	0	8,953
Total	80,415	238	0	0	0	0	0	0	80,654

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2010
		2014 Budget Schedule:	2010

Project Risk Assessment

**3X135**

**D St-M St Track & Signal**

**Managed by: DECM**

Scope: The project completed construction and began Sounder service between Lakewood and Tacoma in October 2012. Follow on work has been identified and will soon be underway. Anticipated completion no later than end 2014.

Changes in lifetime budget since 2013: Wetland monitoring budget of \$209 thousand transferred to project 600025 Wetland/Environmental Permitting.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$161,581	2013 Cost Estimate:	N/A
2013 TIP:	\$161,281	2014 Cost Estimate:	N/A
2014 TIP:	\$161,072		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	151,764	1,045	8,263	0	0	0	0	0	161,072
Total	151,764	1,045	8,263	0	0	0	0	0	161,072

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	8,556	140	911	0	0	0	0	0	9,606
20 - Prelim Engineering/Env Review	1,733	0	1	0	0	0	0	0	1,734
30 - Final Design+Specifications	17,304	60	1,248	0	0	0	0	0	18,612
35 - Third Party	593	24	229	0	0	0	0	0	846
40 - Row Acquisition+Permits	41,953	142	1,534	0	0	0	0	0	43,629
50 - Construction	66,469	669	3,136	0	0	0	0	0	70,273
55 - Construction Services	5,175	10	1,034	0	0	0	0	0	6,218
70 - Vehicles	8,953	0	0	0	0	0	0	0	8,953
80 - System Testing+Startup	1,030	0	170	0	0	0	0	0	1,200
Total	151,764	1,045	8,263	0	0	0	0	0	161,072

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2012
		2014 Budget Schedule:	2014

Project Risk Assessment

**3X140**

**Layover**

**Managed by: DECM**

Scope: Layover is a system wide component of the Sounder commuter rail program. It includes storage tracks and facilities for layover of trains at Seattle, Everett, Tacoma, and Lakewood. The costs and budget are allocated to three subareas based on track miles. Storage track and light maintenance facilities have been constructed in Seattle and Everett; storage tracks have been installed in Lakewood; construction of light maintenance facilities in Lakewood is scheduled to complete in 2013.

Changes in lifetime budget since 2013: Project budget reduced by \$3.7 million to reflect estimated savings at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$33,947	2013 Cost Estimate:	N/A
2013 TIP:	\$33,947	2014 Cost Estimate:	N/A
2014 TIP:	\$30,262		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	5,232	94	0	0	0	0	0	0	5,326
South King	11,148	201	0	0	0	0	0	0	11,348
Pierce	13,348	240	0	0	0	0	0	0	13,588
Total	29,727	535	0	0	0	0	0	0	30,262

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,033	116	0	0	0	0	0	0	1,149
20 - Prelim Engineering/Env Review	268	0	0	0	0	0	0	0	268
30 - Final Design+Specifications	1,475	64	0	0	0	0	0	0	1,540
40 - Row Acquisition+Permits	2,900	10	0	0	0	0	0	0	2,910
50 - Construction	23,738	214	0	0	0	0	0	0	23,952
55 - Construction Services	313	130	0	0	0	0	0	0	444
Total	29,727	535	0	0	0	0	0	0	30,262

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

**3X206**

**Mukilteo Station, S Platform**

**Managed by: DECM**

Scope: The Mukilteo Station South Platform project includes the 2nd platform, stair, and elevator towers for both platforms and the pedestrian bridge connecting them. Construction is scheduled to begin in the first quarter of 2014.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$18,313	2013 Cost Estimate:	N/A
2013 TIP:	\$18,313	2014 Cost Estimate:	N/A
2014 TIP:	\$18,313		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	4,318	6,724	7,270	0	0	0	0	0	18,313
Total	4,318	6,724	7,270	0	0	0	0	0	18,313

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	500	333	295	0	0	0	0	0	1,128
30 - Final Design+Specifications	2,001	120	326	0	0	0	0	0	2,447
35 - Third Party	0	247	0	0	0	0	0	0	247
40 - Row Acquisition+Permits	378	2,240	970	0	0	0	0	0	3,588
50 - Construction	1,132	2,964	4,944	0	0	0	0	0	9,040
55 - Construction Services	308	820	735	0	0	0	0	0	1,863
Total	4,318	6,724	7,270	0	0	0	0	0	18,313

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Final Design	Schedule Risk Level:	High
Budget Risk Level:	Medium	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment
Coordination with BNSF to permit work in active right of way caused some delays in allowing the contractor to begin work.

**3X236**

**Tukwila Station**

**Managed by: DECM**

Scope: Sounder service to Tukwila is currently supported by a temporary station boarding area. Construction of a permanent station began in 2013.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	\$39,346
Baseline:	\$45,969	2013 Cost Estimate:	\$45,162
2013 TIP:	\$45,969	2014 Cost Estimate:	\$45,162
2014 TIP:	\$45,969		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	24,941	9,766	10,890	372	0	0	0	0	45,969
Total	24,941	9,766	10,890	372	0	0	0	0	45,969

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,076	407	917	372	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	4,277	250	197	0	0	0	0	0	4,724
40 - Row Acquisition+Permits	10,342	60	607	0	0	0	0	0	11,009
50 - Construction	7,527	8,219	8,535	0	0	0	0	0	24,281
55 - Construction Services	617	830	634	0	0	0	0	0	2,081
Total	24,941	9,766	10,890	372	0	0	0	0	45,969

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Final Design	Schedule Risk Level:	High
Budget Risk Level:	Low	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2015

**Project Risk Assessment**

Delays in completing design and the procurement of the contractor used up all the available project float. Project re-baselined for schedule. Challenges with BNSF coordination on active tracks will be primary risk.

**3X251**

**South Tacoma Station**

**Managed by: DECM**

Scope: The South Tacoma Station project is in service, and is expected to close out in 2014.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$17,115	2013 Cost Estimate:	N/A
2013 TIP:	\$15,728	2014 Cost Estimate:	N/A
2014 TIP:	\$15,728		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	15,604	124	0	0	0	0	0	0	15,728
Total	15,604	124	0	0	0	0	0	0	15,728

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,603	0	0	0	0	0	0	0	1,603
20 - Prelim Engineering/Env Review	542	0	0	0	0	0	0	0	542
30 - Final Design+Specifications	1,238	0	0	0	0	0	0	0	1,238
40 - Row Acquisition+Permits	2,367	0	0	0	0	0	0	0	2,367
50 - Construction	9,854	124	0	0	0	0	0	0	9,978
Total	15,604	124	0	0	0	0	0	0	15,728

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2009
		2014 Budget Schedule:	2009

Project Risk Assessment

**7X755**

**Sounder ST2 Fleet Expansion**

**Managed by: Operations**

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. Three locomotives were ordered from Motive Power, Inc. and were delivered late in 2012. Nine cabs were ordered in 2013 from Bombardier and will be delivered through 2015.

Changes in lifetime budget since 2013: None

In 2013, the lifetime budget for this project was increased from \$33.2 million to \$49.5 million, and the 2013 cashflow increased by \$11 million to \$15.2 million, to fund the purchase of nine Sounder passenger vehicles (Board Resolution R2013-12).

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	\$35,842
Baseline:	\$0	2013 Cost Estimate:	\$29,602
2013 TIP:	\$49,530	2014 Cost Estimate:	\$45,979
2014 TIP:	\$49,530		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	30,290	8,400	8,751	2,089	0	0	0	0	49,530
Total	30,290	8,400	8,751	2,089	0	0	0	0	49,530

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
20 - Prelim Engineering/Env Review	0	400	100	0	0	0	0	0	500
50 - Construction	0	8,000	8,651	2,089	0	0	0	0	18,740
70 - Vehicles	30,290	0	0	0	0	0	0	0	30,290
Total	30,290	8,400	8,751	2,089	0	0	0	0	49,530

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Scoping	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2016

Project Risk Assessment
With such a large lead-time from purchase to delivery, there are risks of a time delays or unforeseen challenges.

## System Expansion – Regional Express

The Regional Express program consists of 23 capital projects including design and construction of direct-access freeway ramps to existing High Occupancy Vehicle (HOV) lanes, park-and-ride lots, HOV improvements to arterials, transit centers, and freeway in-line transit stations to support Sound Transit's ST Express regional bus system.

The 2014 TIP includes funds to continue infrastructure development to support ST Express bus services, which began service in 1999 and now carries around 16.2 million passengers a year.

### TIP Highlights

The 2014 TIP includes budgets for the following elements of the Regional Express program including:

- Complete design for I-90 Two-Way Transit and HOV Operations Stage 3, which will complete outer roadway HOV lanes eastbound and westbound from Mercer Island to Seattle. Develop the project baseline—scope, schedule, and budget.
- Conduct environmental analysis and preliminary engineering for the ST Express Bus Base.
- Continue to contribute to transit improvement projects led by third parties in Kirkland and Renton.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
85th Corridor, Kirkland	Savings Transfer	Baseline	Budget adjusted to equal estimated costs and recognize savings to be transferred to the East King County Program Reserve at project closeout.	(\$425)
Ash Way Transit Access	Savings Transfer	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$4)
Federal Way HOV Access/S 317th	Savings	Baseline	Project closed.	(\$26)
Mountlake Terrace Freeway Station	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$3,158)
Rainier Avenue Arterial Improvements	Savings Transfer	Baseline	Budget adjusted to recognize estimated savings to be transferred to the East King County Program Reserve at closeout	(\$370)
Regional Express Bus Program Reserve	Transfer	Program	Surplus budget from East King County projects was defunded and transferred to this program reserve.	\$1,365



Project	Reason	Budget Type	Explanation	Change
SR-522 HOV Enhancements/Bothell	Savings Transfer	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout. Savings are transferred to East King County Program Reserve.	(\$4)
ST Express Bus Base	Cost Increase	Preliminary Engineering	Higher level of effort than anticipated.	\$45
Strander Boulevard Extension	Savings	Baseline	Budget is adjusted to equal estimated costs and recognize savings at project closeout.	(\$147)
Totem Lake Freeway Station	Savings Transfer	Baseline	Budget is adjusted to equal estimated costs and recognize savings to be transferred to East King County Program Reserve at project closeout.	(\$423)

### SCHEDULE CHANGES

Project	Schedule Type	Explanation	Old Date	New Date
I-90 Two-Way Transit & HOV Operations, Stage 3	Completion	Coordination with the start of East Link project construction and fire, life and safety design refinements has delayed construction completion to Q3 2016.	2014	2016

### Project Closures

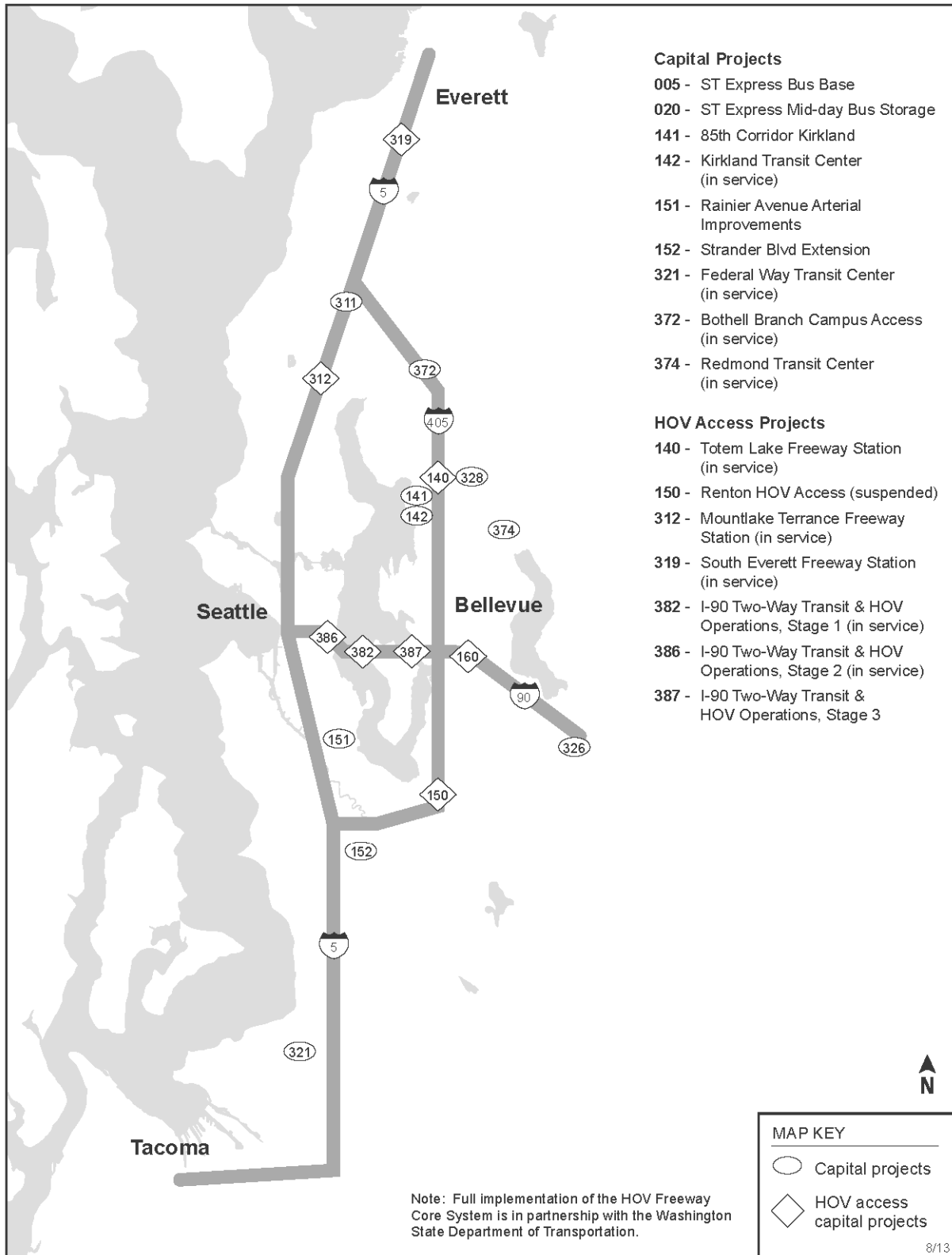
The following projects are complete and scheduled to be closed in 2014:

- 85<sup>th</sup> Corridor, Kirkland
- I-90 2-Way Transit and HOV Operations Stages 1 & 2
- Issaquah Transit Center/SR900
- Kirkland Transit Center/3<sup>rd</sup>
- Mountlake Terrace Freeway Station
- S. Everett Freeway Station
- Strander Boulevard Extension
- Totem Lake Freeway Station
- Totem Lake Transit Center



Regional Express Bellevue HOV Ramp

REGIONAL EXPRESS CAPITAL PROJECTS



## 2014 TIP Cashflow by Budget Approval

(in thousands)

### System Expansion

#### REGIONAL EXPRESS

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Preliminary Engineering</b>									
500005 ST Express Bus Base	1,070	2,056	2,389	0	0	0	0	0	5,515
<b>Subtotal</b>	<b>1,070</b>	<b>2,056</b>	<b>2,389</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,515</b>
<b>Final Design &amp; ROW</b>									
500020 ST Express Mid-Day Bus Storage	577	121	79	0	0	0	0	0	777
5X387 I-90 Two-Way Transit & HOV Operations, Stage 3	10,609	9,210	42,625	652	622	503	0	0	64,222
<b>Subtotal</b>	<b>11,187</b>	<b>9,331</b>	<b>42,704</b>	<b>652</b>	<b>622</b>	<b>503</b>	<b>0</b>	<b>0</b>	<b>64,999</b>
<b>Baseline</b>									
5X140 Totem Lake Freeway Station	73,104	34	0	0	0	0	0	0	73,138
5X141 85th Corridor, Kirkland	4,020	1,570	0	0	0	0	0	0	5,590
5X142 Kirkland Transit Center/3rd	10,557	402	0	0	0	0	0	0	10,959
5X150 Renton HOV Access/N 8th	4,505	0	0	0	0	0	0	0	4,505
5X151 Rainier Avenue Arterial Improvements	15,348	0	0	0	0	0	0	0	15,348
5X152 Strander Boulevard Extension	3,805	268	0	0	0	0	0	0	4,073
5X312 Mountlake Terrace Freeway Station	28,666	594	0	0	0	0	0	0	29,260
5X319 S. Everett Freeway Station	28,215	143	0	0	0	0	0	0	28,358
5X321 Federal Way Transit Center	37,973	1,481	0	0	0	0	0	0	39,455
5X326 Issaquah Transit Center/SR900	28,940	22	0	0	0	0	0	0	28,962
5X328 Totem Lake Transit Center	6,259	0	0	0	0	0	0	0	6,259
5X382 I-90 Two-Way Transit & HOV Operations, Stage 1	23,359	88	0	0	0	0	0	0	23,448
5X386 I-90 Two-Way Transit & HOV Operations, Stage 2	22,288	541	0	0	0	0	0	0	22,828
<b>Subtotal</b>	<b>287,039</b>	<b>5,143</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>292,182</b>
<b>Program</b>									
5X000 Regional Express Bus Program Reserve	0	0	0	27,126	0	0	0	0	27,126
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27,126</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27,126</b>
<b>Total</b>	<b>\$299,296</b>	<b>\$16,530</b>	<b>\$45,092</b>	<b>\$27,778</b>	<b>\$622</b>	<b>\$503</b>	<b>\$0</b>	<b>\$0</b>	<b>\$389,822</b>

**2014 TIP Cashflow by Subarea**  
(in thousands)

System Expansion  
REGIONAL EXPRESS

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	57,073	1,105	428	0	0	0	0	0	58,605
3 - South King	38,097	1,720	277	0	0	0	0	0	40,094
4 - East King	203,292	13,091	43,736	27,778	622	503	0	0	289,021
5 - Pierce	834	614	652	0	0	0	0	0	2,101
<b>Total</b>	<b>\$299,296</b>	<b>\$16,530</b>	<b>\$45,092</b>	<b>\$27,778</b>	<b>\$622</b>	<b>\$503</b>	<b>\$0</b>	<b>\$0</b>	<b>\$389,822</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	19,451	1,172	807	652	622	503	0	0	23,207
20 - Prelim Engineering/Env Review	28,075	1,724	2,270	0	0	0	0	0	32,068
30 - Final Design+Specifications	33,496	8,601	5,925	0	0	0	0	0	48,022
35 - Third Party	0	0	0	0	0	0	0	0	0
40 - Row Acquisition+Permits	13,934	140	85	0	0	0	0	0	14,160
50 - Construction	204,339	4,794	0	0	0	0	0	0	209,132
90 - Contingency	0	100	36,006	27,126	0	0	0	0	63,232
<b>Total</b>	<b>\$299,296</b>	<b>\$16,530</b>	<b>\$45,092</b>	<b>\$27,778</b>	<b>\$622</b>	<b>\$503</b>	<b>\$0</b>	<b>\$0</b>	<b>\$389,822</b>

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 in lifetime budget since 2013: Project budget increased by \$45 thousand in Agency Admin phase to reflect a higher level of effort than originally projected.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$183,985
Baseline:	\$0	2013 Cost Estimate:	\$178,015
2013 TIP:	\$5,469	2014 Cost Estimate:	\$178,015
2014 TIP:	\$5,515		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	192	368	428	0	0	0	0	0	987
South King	124	239	277	0	0	0	0	0	640
East King	498	956	1,111	0	0	0	0	0	2,564
Pierce	257	493	573	0	0	0	0	0	1,324
Total	1,070	2,056	2,389	0	0	0	0	0	5,515

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	300	207	58	0	0	0	0	0	566
20 - Prelim Engineering/Env Review	766	1,724	2,259	0	0	0	0	0	4,748
40 - Row Acquisition+Permits	4	125	72	0	0	0	0	0	201
Total	1,070	2,056	2,389	0	0	0	0	0	5,515

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment

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

**500020**

**ST Express Mid-Day Bus Storage**

**Managed by: DECM**

Scope: The ST Express Midday Bus Storage Project will replace temporary bus storage at the Link Operations Maintenance Facility (OMF) employee parking area with a more permanent facility. Currently 30, forty-five foot buses are stored in the mid-day lot at the Link OMF during periods of non use. The buses need to be relocated from the employee parking area in 2014 prior to implementing testing on the U-Link light rail extension. Project is on target to be completed when bus storage is required in late 2014.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)	
Phase Gate Passed:	4-Enter Final Design
Baseline:	\$0
2013 TIP:	\$777
2014 TIP:	\$777

ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
2008 Cost Estimate:	N/A
2013 Cost Estimate:	\$814
2014 Cost Estimate:	\$814

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	577	121	79	0	0	0	0	0	777
Total	577	121	79	0	0	0	0	0	777

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	94	0	3	0	0	0	0	0	97
20 - Prelim Engineering/Env Review	229	0	11	0	0	0	0	0	240
30 - Final Design+Specifications	253	106	51	0	0	0	0	0	410
40 - Row Acquisition+Permits	1	15	14	0	0	0	0	0	30
Total	577	121	79	0	0	0	0	0	777

Budget Risk Assessment	
Estimate Type:	PE/ED
Budget Risk Level:	Low

Schedule Risk Assessment	
Schedule Risk Level:	Low
2013 Budget Schedule:	2014
2014 Budget Schedule:	2014

Project Risk Assessment

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-use 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 to proceed. Lifetime budget does not include ST2 funding for construction; construction budget to be reviewed upon completion of further scoping and design.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	4-Enter Final Design	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$64,222	2014 Cost Estimate:	N/A
2014 TIP:	\$64,222		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	10,609	9,210	42,625	652	622	503	0	0	64,222
Total	10,609	9,210	42,625	652	622	503	0	0	64,222

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	430	715	745	652	622	503	0	0	3,667
20 - Prelim Engineering/Env Review	1,549	0	0	0	0	0	0	0	1,549
30 - Final Design+Specifications	8,631	8,495	5,874	0	0	0	0	0	23,000
35 - Third Party	0	0	0	0	0	0	0	0	0
90 - Contingency	0	0	36,006	0	0	0	0	0	36,006
Total	10,609	9,210	42,625	652	622	503	0	0	64,222

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	PE/ED	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2016

Project Risk Assessment

At the 60% stage plan completion, the Fire and Life Safety design is the key cost factor for I-90 Two-Way Transit and HOV Operations - Stage 3. Based upon the assessment of an Independent Expert Review Team, and concurrence from the FHWA and the Seattle and Mercer Island Fire Departments, this design is a comprehensive and thorough design. The cost estimate and schedule were also reviewed; it was determined that during this next phase of design (60% - 90%), additional emphasis must be placed to closely coordinate and align the cost estimate to the schedule. This is necessary to ensure complexities of the schedule, SCADA integration, construction staging, procurement, and traffic control are properly calculated in the estimate. Additionally, the FLS System Testing and Commissioning plan needs expansion and full incorporation into the 90% submittal.

**5X140**

**Totem Lake Freeway Station**

**Managed by: DECM**

Scope: Project is being closed out.

Changes in lifetime budget since 2013: Project budget reduced by \$423 thousand to reflect estimated savings to be transferred to the East King County Program Reserve at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$85,875	2013 Cost Estimate:	N/A
2013 TIP:	\$73,561	2014 Cost Estimate:	N/A
2014 TIP:	\$73,138		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	73,104	34	0	0	0	0	0	0	73,138
Total	73,104	34	0	0	0	0	0	0	73,138

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	4,352	32	0	0	0	0	0	0	4,384
20 - Prelim Engineering/Env Review	6,283	0	0	0	0	0	0	0	6,283
30 - Final Design+Specifications	4,565	0	0	0	0	0	0	0	4,565
40 - Row Acquisition+Permits	1,849	0	0	0	0	0	0	0	1,849
50 - Construction	56,055	1	0	0	0	0	0	0	56,056
Total	73,104	34	0	0	0	0	0	0	73,138

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2007
		2014 Budget Schedule:	2007

Project Risk Assessment



**5X141**

**85th Corridor, Kirkland**

**Managed by: DECM**

Scope: Street widening, traffic signal and bus shelter installations, and sidewalk improvements at various intersections in the City of Kirkland to enhance reliability and connections to transit. This project is being led by the city of Kirkland; transit elements are funded by capped contribution from Sound Transit. Project is being closed out.

Changes in lifetime budget since 2013: Project budget is reduced by \$425 thousand to reflect estimated savings to be transferred to the East King Country Program Reserve at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	5-Establish Baseline	2008 Cost Estimate:	N/A
Baseline:	\$6,015	2013 Cost Estimate:	N/A
2013 TIP:	\$6,015	2014 Cost Estimate:	N/A
2014 TIP:	\$5,590		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	4,020	1,570	0	0	0	0	0	0	5,590
Total	4,020	1,570	0	0	0	0	0	0	5,590

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	440	21	0	0	0	0	0	0	460
20 - Prelim Engineering/Env Review	1,124	0	0	0	0	0	0	0	1,124
30 - Final Design+Specifications	554	0	0	0	0	0	0	0	554
40 - Row Acquisition+Permits	876	0	0	0	0	0	0	0	876
50 - Construction	1,026	1,549	0	0	0	0	0	0	2,575
Total	4,020	1,570	0	0	0	0	0	0	5,590

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

**5X142**

**Kirkland Transit Center/3rd**

**Managed by: DECM**

Scope: Design and construct, and place into service, a new regional transit center in Kirkland on Third Street, south of Central Way to accommodate existing and anticipated bus service by King County Metro and ST Express routes. The project also includes a capped contribution for intersection improvements in the vicinity of the transit center to enhance bus service speed and reliability. These improvements were to be completed in 2013.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$13,300	2013 Cost Estimate:	N/A
2013 TIP:	\$10,959	2014 Cost Estimate:	N/A
2014 TIP:	\$10,959		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	10,557	402	0	0	0	0	0	0	10,959
Total	10,557	402	0	0	0	0	0	0	10,959

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	903	20	0	0	0	0	0	0	923
20 - Prelim Engineering/Env Review	1,154	0	0	0	0	0	0	0	1,154
30 - Final Design+Specifications	1,574	0	0	0	0	0	0	0	1,574
40 - Row Acquisition+Permits	187	0	0	0	0	0	0	0	187
50 - Construction	6,739	282	0	0	0	0	0	0	7,021
90 - Contingency	0	100	0	0	0	0	0	0	100
Total	10,557	402	0	0	0	0	0	0	10,959

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

**5X150**

**Renton HOV Access/N 8th**

**Managed by: DECM**

Scope: An HOV interchange on I-405 at North 8th Street was planned in partnership with WSDOT to include HOV direct access to and from North 8th Street at I-405, and a "T" interchange to the center lanes of North 8th Street. This project was to be designed and constructed as part of the WSDOT I-405 widening construction project that has a significant funding shortfall. The project has been deferred until partner funding becomes available.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$4,505	2014 Cost Estimate:	N/A
2014 TIP:	\$4,505		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	4,505	0	0	0	0	0	0	0	4,505
Total	4,505	0	0	0	0	0	0	0	4,505

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,596	0	0	0	0	0	0	0	1,596
20 - Prelim Engineering/Env Review	2,870	0	0	0	0	0	0	0	2,870
30 - Final Design+Specifications	35	0	0	0	0	0	0	0	35
40 - Row Acquisition+Permits	4	0	0	0	0	0	0	0	4
Total	4,505	0	0	0	0	0	0	0	4,505

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	PE/ED	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	
		2014 Budget Schedule:	

Project Risk Assessment

**5X151**

**Rainier Avenue Arterial Improvements**

**Managed by: DECM**

Scope: Addition of Business and Transit Access (BAT) Lanes, sidewalks, and medians on Hardie Avenue in the City of Renton between Rainier Avenue and Sunset Boulevard. The project is being led by the City of Renton; preliminary engineering, final design, right of way/permits and construction is funded by a capped contribution from Sound Transit. The project is being closed out.

Changes in lifetime budget since 2013: Project budget is reduced by \$370 thousand to reflect estimated savings to be transferred to the East King County Program Reserve at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	5-Establish Baseline	2008 Cost Estimate:	N/A
Baseline:	\$15,675	2013 Cost Estimate:	N/A
2013 TIP:	\$15,717	2014 Cost Estimate:	N/A
2014 TIP:	\$15,348		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	15,348	0	0	0	0	0	0	0	15,348
Total	15,348	0	0	0	0	0	0	0	15,348

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	448	0	0	0	0	0	0	0	448
20 - Prelim Engineering/Env Review	2,499	0	0	0	0	0	0	0	2,499
30 - Final Design+Specifications	1,700	0	0	0	0	0	0	0	1,700
40 - Row Acquisition+Permits	2,800	0	0	0	0	0	0	0	2,800
50 - Construction	7,900	0	0	0	0	0	0	0	7,900
Total	15,348	0	0	0	0	0	0	0	15,348

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment

**5X152**

**Strander Boulevard Extension**

**Managed by: DECM**

Scope: Extend Strander Boulevard in the City of Renton to a five-lane arterial between the East Valley Highway and the West Valley Highway. The project is being led by the City of Renton; Sound Transit is contributing to the first phase of this project which is construction of an underpass (bridge) at the BNSF tracks & Strander Blvd. Upon completion of future phases of the project, including a crossing at the Union Pacific Railroad (UPRR), the underpass will enhance commuter access to the Tukwila Sounder Station. The project is being closed out.

Changes in lifetime budget since 2013: Project budget is reduced by \$147 thousand to reflect estimated savings to be transferred to the East King County Program Reserve at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	5-Establish Baseline	2008 Cost Estimate:	N/A
Baseline:	\$4,208	2013 Cost Estimate:	N/A
2013 TIP:	\$4,219	2014 Cost Estimate:	N/A
2014 TIP:	\$4,073		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	3,805	268	0	0	0	0	0	0	4,073
Total	3,805	268	0	0	0	0	0	0	4,073

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	31	42	0	0	0	0	0	0	73
30 - Final Design+Specifications	1,000	0	0	0	0	0	0	0	1,000
50 - Construction	2,773	227	0	0	0	0	0	0	3,000
Total	3,805	268	0	0	0	0	0	0	4,073

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

5X312

Mountlake Terrace Freeway Station

Managed by: DECM

Scope: This project is being closed out.

Changes in lifetime budget since 2013: There is \$3.2 million in savings from the project.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$40,869	2013 Cost Estimate:	N/A
2013 TIP:	\$32,417	2014 Cost Estimate:	N/A
2014 TIP:	\$29,260		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	28,666	594	0	0	0	0	0	0	29,260
Total	28,666	594	0	0	0	0	0	0	29,260

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,543	65	0	0	0	0	0	0	1,608
20 - Prelim Engineering/Env Review	2,402	0	0	0	0	0	0	0	2,402
30 - Final Design+Specifications	3,275	0	0	0	0	0	0	0	3,275
40 - Row Acquisition+Permits	39	0	0	0	0	0	0	0	39
50 - Construction	21,406	529	0	0	0	0	0	0	21,936
Total	28,666	594	0	0	0	0	0	0	29,260

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

Project Risk Assessment

5X319

S. Everett Freeway Station

Managed by: DECM

Scope: Project is being closed out.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$31,209	2013 Cost Estimate:	N/A
2013 TIP:	\$28,358	2014 Cost Estimate:	N/A
2014 TIP:	\$28,358		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	28,215	143	0	0	0	0	0	0	28,358
Total	28,215	143	0	0	0	0	0	0	28,358

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,879	15	0	0	0	0	0	0	1,894
20 - Prelim Engineering/Env Review	2,863	0	0	0	0	0	0	0	2,863
30 - Final Design+Specifications	2,328	0	0	0	0	0	0	0	2,328
40 - Row Acquisition+Permits	28	0	0	0	0	0	0	0	28
50 - Construction	21,117	129	0	0	0	0	0	0	21,246
Total	28,215	143	0	0	0	0	0	0	28,358

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2008
		2014 Budget Schedule:	2008

Project Risk Assessment

5X321

Federal Way Transit Center

Managed by: DECM

Scope: Project is pending litigation; trial is scheduled for Spring 2014.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$39,455	2013 Cost Estimate:	N/A
2013 TIP:	\$39,455	2014 Cost Estimate:	N/A
2014 TIP:	\$39,455		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	37,973	1,481	0	0	0	0	0	0	39,455
Total	37,973	1,481	0	0	0	0	0	0	39,455

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	2,374	52	0	0	0	0	0	0	2,426
20 - Prelim Engineering/Env Review	1,553	0	0	0	0	0	0	0	1,553
30 - Final Design+Specifications	1,701	0	0	0	0	0	0	0	1,701
40 - Row Acquisition+Permits	6,541	0	0	0	0	0	0	0	6,541
50 - Construction	25,804	1,430	0	0	0	0	0	0	27,234
Total	37,973	1,481	0	0	0	0	0	0	39,455

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2006
		2014 Budget Schedule:	2006

Project Risk Assessment



<b>5X326</b>	<b>Issaquah Transit Center/SR900</b>	<b>Managed by: DECM</b>
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Scope: Project is in service and is being closed out.

Changes in lifetime since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$29,482	2013 Cost Estimate:	N/A
2013 TIP:	\$28,962	2014 Cost Estimate:	N/A
2014 TIP:	\$28,962		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	28,940	22	0	0	0	0	0	0	28,962
Total	28,940	22	0	0	0	0	0	0	28,962

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,798	0	0	0	0	0	0	0	1,798
20 - Prelim Engineering/Env Review	848	0	0	0	0	0	0	0	848
30 - Final Design+Specifications	2,000	0	0	0	0	0	0	0	2,000
40 - Row Acquisition+Permits	1,045	0	0	0	0	0	0	0	1,045
50 - Construction	23,249	22	0	0	0	0	0	0	23,271
Total	28,940	22	0	0	0	0	0	0	28,962

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule: <span style="float: right;">2008</span>
	2014 Budget Schedule: <span style="float: right;">2008</span>

Project Risk Assessment

**5X328**

**Totem Lake Transit Center**

**Managed by: DECM**

Scope: Project is in service and is being closed out.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$13,243	2013 Cost Estimate:	N/A
2013 TIP:	\$6,259	2014 Cost Estimate:	N/A
2014 TIP:	\$6,259		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	6,259	0	0	0	0	0	0	0	6,259
Total	6,259	0	0	0	0	0	0	0	6,259

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	589	0	0	0	0	0	0	0	589
20 - Prelim Engineering/Env Review	495	0	0	0	0	0	0	0	495
30 - Final Design+Specifications	133	0	0	0	0	0	0	0	133
40 - Row Acquisition+Permits	502	0	0	0	0	0	0	0	502
50 - Construction	4,540	0	0	0	0	0	0	0	4,540
Total	6,259	0	0	0	0	0	0	0	6,259

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2008
		2014 Budget Schedule:	2008

Project Risk Assessment

**5X382** **I-90 Two-Way Transit & HOV Operations, Stage 1** **Managed by: DECM**

Scope: Project is being closed out.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	7-Transition to Operations	2008 Cost Estimate:	N/A
Baseline:	\$25,782	2013 Cost Estimate:	N/A
2013 TIP:	\$23,448	2014 Cost Estimate:	N/A
2014 TIP:	\$23,448		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	23,359	88	0	0	0	0	0	0	23,448
Total	23,359	88	0	0	0	0	0	0	23,448

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,348	0	0	0	0	0	0	0	1,348
20 - Prelim Engineering/Env Review	1,592	0	0	0	0	0	0	0	1,592
30 - Final Design+Specifications	3,720	0	0	0	0	0	0	0	3,720
40 - Row Acquisition+Permits	57	0	0	0	0	0	0	0	57
50 - Construction	16,641	88	0	0	0	0	0	0	16,730
Total	23,359	88	0	0	0	0	0	0	23,448

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2008
		2014 Budget Schedule:	2008

Project Risk Assessment

5X386

I-90 Two-Way Transit & HOV Operations, Stage 2

Managed by: DECM

Scope: During Stage 2 of the I-90 Two-way Transit and HOV Operations project, a new eastbound HOV lane was constructed on the eastbound I-90 outer roadway between 80th Avenue SE on Mercer Island and Bellevue Way. The ramps at 80th Avenue SE on Mercer Island and Bellevue Way and I-405 were also modified to improve traffic flow efficiencies and the eastbound I-90 to I-405 auxiliary lane was extended west to East Mercer Way. The current reversible lanes operate in the center roadway, with both lanes operating in the same direction. Sound Transit and the Washington Department of Transportation provided funding for Stage 2. Project is being closed out pending resolution of Plant Establishment with WSDOT.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$31,683	2013 Cost Estimate:	N/A
2013 TIP:	\$22,828	2014 Cost Estimate:	N/A
2014 TIP:	\$22,828		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	22,288	541	0	0	0	0	0	0	22,828
Total	22,288	541	0	0	0	0	0	0	22,828

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,326	4	0	0	0	0	0	0	1,330
20 - Prelim Engineering/Env Review	1,847	0	0	0	0	0	0	0	1,847
30 - Final Design+Specifications	2,026	0	0	0	0	0	0	0	2,026
50 - Construction	17,088	536	0	0	0	0	0	0	17,625
Total	22,288	541	0	0	0	0	0	0	22,828

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2012
		2014 Budget Schedule:	2012

Project Risk Assessment

5X000

**Regional Express Bus Program Reserve**

**Managed by: DECM**

Scope: Project reserve created to fund the Regional Express Bus Program in East King County. Approval for use of reserve funds requires supermajority approval by the Sound Transit Board.

Changes in lifetime budget since 2013: Savings from other East King County projects in the amount of \$1,365 thousand were transferred to the program reserve.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	\$27,391
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$25,761	2014 Cost Estimate:	N/A
2014 TIP:	\$27,126		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
East King	0	0	0	27,126	0	0	0	0	27,126
Total	0	0	0	27,126	0	0	0	0	27,126

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
90 - Contingency	0	0	0	27,126	0	0	0	0	27,126
Total	0	0	0	27,126	0	0	0	0	27,126

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

## System Expansion – Other

Projects that are part of the Sound Move and ST2 programs to expand the regional transit system but are not mode-specific are grouped as “other”. These include planning studies and infrastructure projects that cut across modes.

### TIP Highlights

The 2014 TIP includes budgets for the following planning studies along with continuation of the agency’s public art program.

- Ballard-to-Downtown Seattle HCT Planning Study is a collaboration with the city of Seattle and will focus on potential transit routes between downtown and the community of Ballard.
- HCT Corridor Planning Studies will look at different corridors to explore options to expand the regional transit system beyond the ST2 plan. These corridors studies include; Central and East HCT Study, Lynnwood to Everett Corridor Study and the South King County HCT Study, which includes Federal Way to Tacoma corridor.
- Long-Range Planning Study (part of the ST3 Planning project) in conjunction with the corridor studies will study the future expansion of the regional transit system beyond the voter approved Sound Move and ST2 programs.
- Research and Technology is moving forward with a four-year, \$9 million plan focused on developing and deploying transit rider technologies to improve the customer experience.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
Central & East HCT Study	New Project	Preliminary Engineering	This is a new project. \$4.7 million is transferred from HCT Corridor Planning Studies project.	\$4,725
Fare Administration	Savings Transfer	Baseline	The Fare Integration project was closed and a small balance transferred to Fare Administration.	\$23
HCT Corridor Planning Studies	Transfer	Preliminary Engineering	\$9.0 million of lifetime budget is transferred back to ST3 Planning. \$10.4 million is transferred to three new planning study projects: Central & East HCT Study, Lynnwood to Everett HCT Study, and South King County HCT Study.	(\$19,421)
Lynnwood to Everett HCT Study	New Project	Preliminary Engineering	This is a new project. \$2.9 million is transferred from HCT Corridor Planning Studies project.	\$2,856
Passenger Information System	Cost Increase	Baseline	Upgrades and enhancement costs.	\$3,911

Project	Reason	Budget Type	Explanation	Change
Research & Technology	Transfer	Baseline	\$200K is transferred to Parking Pilot Project in 2014.	(\$200)
South King County HCT Study	New Project	Preliminary Engineering	This is new project. \$2.8 million is transferred from HCT Corridor Planning Studies project.	\$2,840
ST3 Planning	Transfer	Preliminary Engineering	\$9.0 million is being returned from the HCT Corridor Planning Studies.	\$9,000
Ticket Vending Machines	Cost Increase	Baseline	Major upgrades and enhancements.	\$1,540

#### SCHEDULE CHANGES

Project	Schedule Type	Explanation	Old Date	New Date
South Corridor Alternatives Planning	Preliminary Engineering	Coordination efforts with multiple third parties, stakeholders, and jurisdictions have adversely impacted the project schedule.	2013	2014

**2014 TIP Cashflow by Budget Approval**  
(in thousands)

System Expansion		Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>OTHER</b>										
<b>Project Number and Name</b>										
<b>Preliminary Engineering</b>										
4X446	South Corridor Alternatives Planning	1,330	2,733	0	0	0	0	0	0	4,064
809100	ST3 Planning	804	6,681	11,447	7,989	6,139	6,139	0	0	39,200
809101	Ballard-to-Downtown Seattle HCT Planning Study	1,043	1,757	0	0	0	0	0	0	2,800
809102	HCT Corridor Planning Studies	49	2,590	3,087	54	0	0	0	0	5,779
809103	Central & East HCT Study	698	4,027	0	0	0	0	0	0	4,725
809104	Lynnwood to Everett HCT Study	592	2,264	0	0	0	0	0	0	2,856
809105	South King County HCT Study	688	2,153	0	0	0	0	0	0	2,840
	<b>Subtotal</b>	5,204	22,205	14,534	8,043	6,139	6,139	0	0	62,264
<b>Baseline</b>										
3X212	Ticket Vending Machines	7,625	545	200	0	50	150	345	303	9,218
3X216	Passenger Information System	6,013	1,060	599	100	100	100	300	1,870	10,142
5X410	Research & Technology	3,689	3,970	2,041	825	663	166	670	2,632	14,656
600016	Fare Administration	625	636	623	2,353	600	5,673	498	6,604	17,611
6X668	Start	14,143	2,775	5,849	4,687	4,247	4,112	3,878	14,503	54,194
	<b>Subtotal</b>	32,096	8,986	9,312	7,964	5,660	10,201	5,691	25,912	105,822
	<b>Total</b>	\$37,299	\$31,191	\$23,846	\$16,007	\$11,798	\$16,340	\$5,691	\$25,912	\$168,086



**2014 TIP Cashflow by Subarea**  
(in thousands)

System Expansion  
OTHER

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	4,433	2,738	508	349	362	550	641	2,986	12,567
2 - North King	6,850	2,436	1,663	714	856	857	591	1,078	15,046
3 - South King	8,393	3,347	1,603	1,155	229	266	468	3,944	19,404
4 - East King	2,825	3,157	1,973	1,979	2,369	2,377	2,390	7,609	24,681
5 - Pierce	8,596	3,880	901	590	581	312	433	1,058	16,349
6 - Systemwide	6,202	15,634	17,198	11,220	7,402	11,978	1,168	9,236	80,040
<b>Total</b>	<b>\$37,299</b>	<b>\$31,191</b>	<b>\$23,846</b>	<b>\$16,007</b>	<b>\$11,798</b>	<b>\$16,340</b>	<b>\$5,691</b>	<b>\$25,912</b>	<b>\$168,086</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
01 - Operation+Maintenance	504	296	280	279	250	250	250	2,826	4,935
02 - Operation+Maintenance-Agency	276	0	0	0	0	0	0	0	276
10 - Agency Administration	1,297	3,803	1,411	790	728	881	170	738	9,817
20 - Prelim Engineering/Env Review	6,289	19,354	14,209	7,831	5,974	6,057	298	1,067	61,079
26 - Research+Technology	2,441	3,714	1,728	2,600	700	5,190	700	7,635	24,708
50 - Construction	12,854	1,545	649	100	150	100	645	1,970	18,012
61 - Art	13,640	2,480	5,569	4,408	3,997	3,862	3,628	11,677	49,260
<b>Total</b>	<b>\$37,299</b>	<b>\$31,191</b>	<b>\$23,846</b>	<b>\$16,007</b>	<b>\$11,798</b>	<b>\$16,340</b>	<b>\$5,691</b>	<b>\$25,912</b>	<b>\$168,086</b>

4X446

South Corridor Alternatives Planning

Managed by: PEPD

Scope: The South Corridor Alternatives Planning (SCAP) project includes identification and evaluation of HCT transit alternatives for the corridor between Federal Way and Tacoma, and an examination of potential projects for the Pierce and South King subareas that may enhance transit use and operational efficiencies. SCAP is one of the HCT Corridor Planning studies that will serve as a resource for the Board and public during the update of the Long-Range Plan.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$80,645
Baseline:	\$0	2013 Cost Estimate:	\$4,019
2013 TIP:	\$4,064	2014 Cost Estimate:	\$4,019
2014 TIP:	\$4,064		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	1,330	2,733	0	0	0	0	0	0	4,064
Total	1,330	2,733	0	0	0	0	0	0	4,064

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	127	1,018	0	0	0	0	0	0	1,146
20 - Prelim Engineering/Env Review	1,203	1,715	0	0	0	0	0	0	2,918
Total	1,330	2,733	0	0	0	0	0	0	4,064

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

Project Risk Assessment

Schedule Risk due to the need to coordinate with multiple third parties, stakeholders, and jurisdictions and ongoing, related to Sound Transit projects.

**809100**

**ST3 Planning**

**Managed by: PEPD**

Scope: ST3 Planning project provides funding for studying future expansion of the regional transit system beyond the voter approved Sound Move and ST2 capital programs. The ST2 plan and the subsequently adopted budgets included funding for studying transit expansion options in nine corridors. The transit studies have now been split into their own projects reducing the scope to long-range transit planning beyond the Sound Move and ST2 Programs.

Changes in lifetime budget since 2013: Project budget increased by \$9.0 million to reflect transfer from the HCT Corridor Planning Studies project.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	\$67,204
Baseline:	\$0	2013 Cost Estimate:	\$27,954
2013 TIP:	\$30,200	2014 Cost Estimate:	\$36,762
2014 TIP:	\$39,200		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	804	6,681	11,447	7,989	6,139	6,139	0	0	39,200
Total	804	6,681	11,447	7,989	6,139	6,139	0	0	39,200

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	58	620	627	565	565	565	0	0	3,000
20 - Prelim Engineering/Env Review	746	6,061	10,821	7,424	5,574	5,574	0	0	36,200
Total	804	6,681	11,447	7,989	6,139	6,139	0	0	39,200

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2018
		2014 Budget Schedule:	2018

Project Risk Assessment

**809101**

**Ballard-to-Downtown Seattle HCT Planning Study**

**Managed by: PEPD**

Scope: In partnership with the City of Seattle, this project will focus on identifying and evaluating high capacity transit improvements between downtown Seattle and Ballard.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	\$2,787
2013 TIP:	\$2,800	2014 Cost Estimate:	\$2,787
2014 TIP:	\$2,800		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	1,043	1,757	0	0	0	0	0	0	2,800
Total	1,043	1,757	0	0	0	0	0	0	2,800

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	44	121	0	0	0	0	0	0	165
20 - Prelim Engineering/Env Review	999	1,636	0	0	0	0	0	0	2,635
Total	1,043	1,757	0	0	0	0	0	0	2,800

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment

809102

HCT Corridor Planning Studies

Managed by: PEPD

Scope: ST2 included funding for identifying and evaluating high capacity transit improvements along transit corridors as listed below for possible improvements to the regional transit system beyond those identified in ST2. These studies have been budgeted separately under other projects. The funds in this account will be available for additional work tasks that may be requested by the Sound Transit Board of Directors during the ST3 planning process as related to the High-Capacity Transit corridor studies.

- Lynnwood – SW Everett Industrial Center
- Overlake Transit Center – Downtown Redmond
- South Bellevue – Issaquah
- Redondo/Star Lake – Tacoma
- Redmond – Kirkland – U-District
- U-District – Ballard – Downtown Seattle (Ballard – Downtown Segment budgeted separately Project 809101)
- Renton – Tukwila/SeaTac – Burien

Changes in lifetime budget since 2013: Project budget reduced by \$19.4 million to reflect transfers from the HCT Corridor Planning Studies project to other projects, including \$9.0 million to the ST3 Planning project and \$10.4 million to create three new HCT Study projects - Lynnwood to Everett, Central & East HTC S, and South King County.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	\$24,718
2013 TIP:	\$25,200	2014 Cost Estimate:	\$5,600
2014 TIP:	\$5,779		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	49	2,590	3,087	54	0	0	0	0	5,779
Total	49	2,590	3,087	54	0	0	0	0	5,779

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	49	250	349	52	0	0	0	0	700
20 - Prelim Engineering/Env Review	0	2,340	2,738	2	0	0	0	0	5,079
Total	49	2,590	3,087	54	0	0	0	0	5,779

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

Project Risk Assessment

**809103**

**Central & East HCT Study**

**Managed by: PEPD**

Scope: Identify and evaluate alternative high capacity transit modes, routes and potential station areas along high capacity transit corridors.

Changes in lifetime budget since 2013: New project created by transfer of \$4.7 million from the HCT Corridor Planning Studies project.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	\$4,674
2014 TIP:	\$4,725		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	349	2,013	0	0	0	0	0	0	2,362
East King	349	2,013	0	0	0	0	0	0	2,362
Total	698	4,027	0	0	0	0	0	0	4,725

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	46	669	0	0	0	0	0	0	715
20 - Prelim Engineering/Env Review	652	3,358	0	0	0	0	0	0	4,010
Total	698	4,027	0	0	0	0	0	0	4,725

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	
		2014 Budget Schedule:	

Project Risk Assessment

**809104**

**Lynnwood to Everett HCT Study**

**Managed by: PEPD**

Scope: Identify and evaluate alternative high capacity transit modes, routes and potential station areas along high capacity transit corridors

Changes in lifetime budget since 2013: New project created by transfer of \$2.9 million from the HCT Corridor Planning Studies project.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	\$2,825
2014 TIP:	\$2,856		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	592	2,264	0	0	0	0	0	0	2,856
Total	592	2,264	0	0	0	0	0	0	2,856

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	16	413	0	0	0	0	0	0	429
20 - Prelim Engineering/Env Review	576	1,851	0	0	0	0	0	0	2,427
Total	592	2,264	0	0	0	0	0	0	2,856

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	
		2014 Budget Schedule:	

Project Risk Assessment

809105

South King County HCT Study

Managed by: PEPD

Scope: Identify and evaluate alternative high capacity transit modes, routes and potential station areas along high capacity transit corridors.

Changes in lifetime budget since 2013: New project created by transfer of \$2.8 million from the HCT Corridor Planning Studies project.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	\$2,810
2014 TIP:	\$2,840		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	688	2,153	0	0	0	0	0	0	2,840
Total	688	2,153	0	0	0	0	0	0	2,840

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	37	337	0	0	0	0	0	0	374
20 - Prelim Engineering/Env Review	651	1,815	0	0	0	0	0	0	2,466
Total	688	2,153	0	0	0	0	0	0	2,840

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	
		2014 Budget Schedule:	

Project Risk Assessment



**3X212****Ticket Vending Machines****Managed by: FIT**

Scope: Ticket Vending Machines (TVMs) are used at Agency's facilities to enable the purchase of fare media by riders to access the transportation system. This project facilitates capital maintenance, support, and software and hardware upgrades and enhancements that ensure reliable and cost effective TVMs' performance.

The lifetime budget increase is requested to allocate funds to maintain TVMs already placed in service by installing system-wide upgrades and software enhancement that prolong the useful life of the TVM systems and bring machines' performance on par with new models and installations.

Changes in lifetime budget since 2013: Project budget is increased by 1.55 million to include major upgrades and enhancements. Funds will be allocated to maintain TVMs already placed in service by installing system-wide upgrades and software enhancement that prolong the useful life of the TVM systems and bring machines' performance on par with new models and installations.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$7,678	2014 Cost Estimate:	N/A
2014 TIP:	\$9,218		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	1,693	121	44	0	11	33	77	67	2,046
South King	2,753	197	72	0	18	54	125	109	3,328
East King	214	15	6	0	1	4	10	8	258
Pierce	2,966	212	78	0	19	58	134	118	3,586
Total	7,625	545	200	0	50	150	345	303	9,218

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	221	60	150	0	0	150	0	203	784
20 - Prelim Engineering/Env Review	150	0	0	0	0	0	0	0	150
50 - Construction	7,254	485	50	0	50	0	345	100	8,284
Total	7,625	545	200	0	50	150	345	303	9,218

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Conceptual Engineering	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2023
		2014 Budget Schedule:	2023

**Project Risk Assessment**

The current budget is based on early planning estimates for rehabilitation and replacement costs 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.

**3X216****Passenger Information System****Managed by: FIT**

Scope: Sounder is expanding its station communications and all CCTV and Passenger Information Systems to future stations. The system includes communications between stations and Union Station for a number of CCTV cameras; audible rail announcements capabilities; variable message signs; customer emergency stations; and onboard, automated vehicle location. There is an existing security operations central control and monitoring system for all devices. Completion of the project is dependent on completion of all Sounder stations.

In 2013, work will continue to focus on the Lakewood Corridor track and signal improvements and Tukwila station.

Changes in lifetime budget since 2013: Project budget is increased by \$3.9 million for upgrades and enhancements.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$6,231	2014 Cost Estimate:	N/A
2014 TIP:	\$10,142		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	1,395	246	139	23	23	23	70	434	2,353
South King	1,774	313	177	30	30	30	89	552	2,992
Pierce	2,844	501	283	47	47	47	142	885	4,797
Total	6,013	1,060	599	100	100	100	300	1,870	10,142

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	210	0	0	0	0	0	0	0	210
20 - Prelim Engineering/Env Review	204	0	0	0	0	0	0	0	204
50 - Construction	5,599	1,060	599	100	100	100	300	1,870	9,728
Total	6,013	1,060	599	100	100	100	300	1,870	10,142

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2023
		2014 Budget Schedule:	2023

**Project Risk Assessment**

The current budget is based on early planning estimates for rehab and replacement costs for these assets. The costs are at 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: The Research and Technology Program was created to assess and implement new transit technologies to improve the Agency's operational effectiveness and efficiency. This program focuses on system wide security and safety technology, real-time service information and passenger communications, and deploying applications to better manage operations. The ST2 Research and Technology Program Phase 1 (2012-2015) focuses on developing and deploying Transit Rider Technologies to improve the customer experience. In 2012, the board approved a \$9 million Phase 1 of the program, focusing on deployment of improved information systems for transit riders.

Changes in lifetime budget since 2013: Project budget reduced by \$200 thousand being transferred to the Parking Pilot project in 2014.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$14,856	2014 Cost Estimate:	N/A
2014 TIP:	\$14,656		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	3,689	3,970	2,041	825	663	166	670	2,632	14,656
Total	3,689	3,970	2,041	825	663	166	670	2,632	14,656

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
02 - Operation+Maintenance-Agency	276	0	0	0	0	0	0	0	276
10 - Agency Administration	489	315	285	173	163	166	170	535	2,295
20 - Prelim Engineering/Env Review	482	172	228	0	0	0	0	0	882
26 - Research+Technology	2,441	3,484	1,528	652	500	0	500	2,098	11,203
Total	3,689	3,970	2,041	825	663	166	670	2,632	14,656

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Conceptual Engineering	Schedule Risk Level:	High
Budget Risk Level:	Medium	2013 Budget Schedule:	2023
		2014 Budget Schedule:	2023

**Project Risk Assessment**

Key projects are in various stages of design and involve new technologies and software development. Extensive coordination with external agencies also increase costs and schedule risk.

<b>600016</b>	<b>Fare Administration</b>	<b>Managed by: FIT</b>
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Scope: The Fare Administration program manages fares and pricing for Sound Transit. Elements of the program include: monitoring fare revenue and tracking performance; establishing pricing for cash fares, retail passes, and business accounts; managing fare change processes; Title VI analysis and mitigation; production, distribution, and tracking of all discounted and free fare media; administering Sound Transit fare policy; coordinating pricing and fare policy with partner agencies; and maintaining fare elasticity and revenue projection models. The program also supports initiatives for earned revenue generation from other potentially priced services such as parking and concessions. Initiated in 2010, this program relies on use of and builds upon the systems developed under the Fare Integration program and includes funds for upgrades to the ORCA system.

Changes in lifetime budget since 2013: Project budget increased by \$23 thousand to reflect transfer to Fare Administration of savings from the Fare Integration project when it closed out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$17,589	2014 Cost Estimate:	N/A
2014 TIP:	\$17,611		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	625	636	623	2,353	600	5,673	498	6,604	17,611
Total	625	636	623	2,353	600	5,673	498	6,604	17,611

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	0	0	0	0	0	0	0	0	0
20 - Prelim Engineering/Env Review	625	406	423	405	400	483	298	1,067	4,107
26 - Research+Technology	0	230	200	1,948	200	5,190	200	5,537	13,505
Total	625	636	623	2,353	600	5,673	498	6,604	17,611

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: Initial Estimate	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

System Expansion

OTHER

<b>6X668</b>	<b>STart</b>	<b>Managed by: DECM</b>
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Scope: The Sound Transit Art Program - STart- is responsible for incorporating public art into Sound Transit systems and 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 1% 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. Additionally, 10% of the total funding of the project is earmarked for the maintenance of the art collection.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/	2008 Cost Estimate:	N/
Baseline:	#	2013 Cost Estimate:	#
2013 TIP:	#	2014 Cost Estimate:	#
2014 TIP:	#		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	753	107	324	326	327	494	495	2,485	5,311
North King	6,500	422	1,663	714	856	857	591	1,078	12,681
South King	3,177	685	1,354	1,125	182	182	255	3,283	10,243
East King	2,260	1,128	1,968	1,979	2,368	2,373	2,380	7,601	22,057
Pierce	1,454	433	540	542	514	206	156	56	3,902
<b>Total</b>	<b>14,143</b>	<b>2,775</b>	<b>5,849</b>	<b>4,687</b>	<b>4,247</b>	<b>4,112</b>	<b>3,878</b>	<b>14,503</b>	<b>54,194</b>

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
01 - Operation+Maintenance	496	296	280	279	250	250	250	2,826	4,927
61 - Art	13,647	2,480	5,569	4,408	3,997	3,862	3,628	11,677	49,267
<b>Total</b>	<b>14,143</b>	<b>2,775</b>	<b>5,849</b>	<b>4,687</b>	<b>4,247</b>	<b>4,112</b>	<b>3,878</b>	<b>14,503</b>	<b>54,194</b>

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Fixed Contribution	Schedule Risk Level:	Lo
Budget Risk Level:	Lo	2013 Budget Schedule:	20
		2014 Budget Schedule:	20

Project Risk Assessment



## Enhancement Projects

Although the majority of Sound Transit's projects are related to expanding the regional transit system, work is planned and ongoing to service expansion efficiency and effectiveness.

### TIP Highlights

- Continue to fund new bike storage and bike access improvement facilities at Sounder, Link, and Regional Express facilities.
- Design and build systemwide positive train control system to improve operational safety.
- Deliver noise abatement program near light rail facilities in Tukwila and the Rainier Valley including construction of a noise wall along the elevated guideway in Tukwila.
- Upgrade radios to meet Federal Communications Commission (FCC) compliance standards in Sound Transit buses operated by Pierce Transit.
- Evaluate TOD opportunities for Sound Transit surplus properties.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
<b>LINK</b>				
Central Link Card Readers	Cost Increase	Baseline	Additional administrative costs, inspection costs and to provide a contingency for the project.	\$50
Central Link HVAC for Traction Power	Cost Increase	Baseline	Upgrade to the existing transformers from 25 kilovolt-ampere (kVA) to 37.5 kVA.	\$200
Central Link OMF Laydown Area Improvement	Cost Decrease	Baseline	Project was completed in 2013.	(\$24)
Central Link OMF UPS Room Improvement	Savings	Baseline	Project to close. \$106K will be recognized as savings in 2014.	(\$106)
DSTT South Access Security	Savings	Baseline	Lifetime budget is adjusted to estimated costs and recognize savings at project closeout.	(\$74)
Non-revenue Support Vehicles	Cost Increase	Program	Additional funding for replacement of three maintenance vehicles.	\$285
Signage Improvements	New Project	Preliminary Engineering	New project in 2014.	\$491
Tacoma Link Fare Collection	New Project	Preliminary Engineering	New project in 2014.	\$514

Project	Reason	Budget Type	Explanation	Change
<b>SOUNDER</b>				
Parking Enhancements	Savings	Baseline	Project budget reduced by \$839 thousand to be defunded at close out.	(\$839)
<b>REGIONAL EXPRESS</b>				
Pierce Transit Radio System Upgrade	New Project	Preliminary Engineering	Mobile Radio Upgrades for buses operated by Pierce Transit.	\$1,000
<b>OTHER</b>				
Bike Locker Program	Cost Increase	Baseline	Additional staff and outreach costs.	\$156
Regional Parking Pilot Project	New Project	Preliminary Engineering	New project in 2014.	\$475
Security Enhancements	Cost Increase	Baseline	Increased for 15% contingency costs or/and consultancy services to ensure a smooth integration of the unique systems.	\$81

#### SCHEDULE CHANGES

Project	Schedule Type	Explanation	Old Date	New Date
<b>LINK</b>				
LRV On Board Energy Storage	Preliminary Engineering	Post-award procurement contract schedule.	2013	2014

#### Project Closures

The following projects are complete and scheduled to be closed in 2014:

- Auburn Garage Lighting Retrofit
- Central Link Benchtest Equipment
- Central Link OMF UPS Room Improvement
- Central Link Radio Upgrade
- DSTT South Access Security
- Federal Way Transit Center Light Retrofit
- Parking Enhancements
- Security Radios
- ST Express Camera Retrofit
- ST Express Mobile Communications



## 2014 TIP Cashflow by Budget Approval

(in thousands)

### Enhancement

#### ALL MODES

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Preliminary Engineering</b>									
4X210 LRV On Board Energy Storage	560	675	408	0	0	0	0	0	1,643
5X261 Bus Maintenance Facility	7,424	1,273	13,336	0	0	0	0	0	22,033
600029 Tacoma Link Fare Collection	0	514	0	0	0	0	0	0	514
700784 Regional Parking Pilot Project	0	475	0	0	0	0	0	0	475
700790 Pierce Transit Radio System Upgrade	0	1,000	0	0	0	0	0	0	1,000
700793 Signage Improvements	0	491	0	0	0	0	0	0	491
<b>Subtotal</b>	<b>7,984</b>	<b>4,428</b>	<b>13,743</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,156</b>
<b>Final Design &amp; ROW</b>									
300011 Positive Train Control	7,636	14,970	22,340	8,108	0	0	0	0	53,054
<b>Subtotal</b>	<b>7,636</b>	<b>14,970</b>	<b>22,340</b>	<b>8,108</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,054</b>
<b>Baseline</b>									
4X320 DSTT South Access Security	726	0	0	0	0	0	0	0	726
4X340 Noise Abatement	7,438	4,540	1,022	0	0	0	0	0	13,000
700772 ST Express Security Camera Retrofit	187	22	0	0	0	0	0	0	209
700773 Central Link HVAC for Traction Power	110	690	0	0	0	0	0	0	800
700774 Central Link HVAC - Instrument House and UPS Room	70	350	0	0	0	0	0	0	420
700775 Central Link Card Readers	11	412	0	0	0	0	0	0	423
700776 Central Link OMF UPS Room Improvement	1	1	0	0	0	0	0	0	2
700777 Central Link Overhead Catenary System Tie Switch	5	1,300	1,695	0	0	0	0	0	3,000
700778 Central Link Benchtest Equipment	700	0	0	0	0	0	0	0	700
700779 Security Radios	297	43	0	0	0	0	0	0	340
700780 Federal Way Transit Center Light Retrofit	575	4	0	0	0	0	0	0	579
700782 Auburn Garage Lighting Retrofit	208	12	0	0	0	0	0	0	220
7X743 Security Enhancements	2,015	483	0	0	0	0	0	0	2,498
7X745 ST Express Mobile Communications	7,397	3,134	0	0	0	0	0	0	10,531
7X746 Parking Enhancements	4,121	0	0	0	0	0	0	0	4,121
7X753 Bike Locker Program	624	371	360	0	0	0	0	0	1,355
7X763 Central Link Radio Upgrade	9	0	0	0	0	0	0	0	9

## 2014 TIP Cashflow by Budget Approval

(in thousands)

Enhancement

ALL MODES

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Subtotal</b>	24,493	11,362	3,077	0	0	0	0	0	38,932
<b>Program</b>									
700781 Non-revenue Support Vehicles	0	664	45	47	48	50	51	0	905
804100 Transit Oriented Development Property Disposition	574	1,677	936	753	251	515	674	221	5,601
8X100 Transit Oriented Development Planning	1,146	100	344	50	0	0	0	0	1,640
<b>Subtotal</b>	1,720	2,441	1,326	850	299	565	725	221	8,146
<b>Total</b>	\$41,834	\$33,201	\$40,486	\$8,958	\$299	\$565	\$725	\$221	\$126,288

**2014 TIP Cashflow by Subarea**  
(in thousands)

Enhancement  
ALL MODES

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	3,097	1,835	3,704	576	0	0	0	0	9,211
2 - North King	11,129	8,550	3,727	834	283	548	708	221	26,000
3 - South King	6,995	4,288	3,463	372	16	17	17	0	15,169
4 - East King	7,018	2,061	6,327	0	0	0	0	0	15,405
5 - Pierce	13,596	15,992	23,265	7,176	0	0	0	0	60,028
6 - Systemwide	0	475	0	0	0	0	0	0	475
<b>Total</b>	<b>\$41,834</b>	<b>\$33,201</b>	<b>\$40,486</b>	<b>\$8,958</b>	<b>\$299</b>	<b>\$565</b>	<b>\$725</b>	<b>\$221</b>	<b>\$126,288</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1,959	1,089	1,323	274	0	0	0	0	4,645
20 - Prelim Engineering/Env Review	1,611	302	344	50	0	0	0	0	2,308
30 - Final Design+Specifications	693	222	40	24	0	0	0	0	979
35 - Third Party	3,839	1,740	1,550	548	0	0	0	0	7,677
40 - Row Acquisition+Permits	777	1,444	991	753	251	515	674	221	5,626
50 - Construction	30,198	24,826	33,935	6,901	0	0	0	0	95,860
55 - Construction Services	1,796	2,008	1,899	362	0	0	0	0	6,064
70 - Vehicles	961	1,346	405	47	48	50	51	0	2,907
90 - Contingency	0	223	0	0	0	0	0	0	223
<b>Total</b>	<b>\$41,834</b>	<b>\$33,201</b>	<b>\$40,486</b>	<b>\$8,958</b>	<b>\$299</b>	<b>\$565</b>	<b>\$725</b>	<b>\$221</b>	<b>\$126,288</b>

**4X210**

**LRV On Board Energy Storage**

**Managed by: DECM**

Scope: This pilot project entails the design, procurement, and installation of energy storage units on up to five light rail vehicles to capture and store energy generated by vehicle braking for reuse to improve vehicle operational efficiencies and leading to lower energy consumption and reduced operating costs. The project is partially funded by a Transportation Investment Generating Economic Recovery (TIGER) grant awarded to Sound Transit in 2011. Work is expected to complete in late 2014. Cash flow in 2015 reflects project close-out activities.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$1,643	2013 Cost Estimate:	N/A
2013 TIP:	\$1,643	2014 Cost Estimate:	N/A
2014 TIP:	\$1,643		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	560	675	408	0	0	0	0	0	1,643
Total	560	675	408	0	0	0	0	0	1,643

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	7	15	38	0	0	0	0	0	60
30 - Final Design+Specifications	0	0	10	0	0	0	0	0	10
70 - Vehicles	553	660	360	0	0	0	0	0	1,573
Total	560	675	408	0	0	0	0	0	1,643

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

Project Risk Assessment
Low-level budget risk to complete work within grant funding limitations.

**5X261**

**Bus Maintenance Facility**

**Managed by: Operations**

Scope: The bus maintenance facility budget was established to fund expansion of Sound Transit's fleet maintenance capacity through addition of maintenance capacity or contributions to maintenance capacity expansions at facilities managed by third party service providers. This program does not include ST2 ST Express Bus Base scope or budget to build one or more bus maintenance facilities (Project 500005).

Sound Transit partnered with Community Transit to expand the Kasch Park Maintenance Base. This work was completed in 2011.

In 2013, Community Transit requested for Sound Transit participation in a concrete rehabilitation project that CT plans to undertake at KPMB in 2014. The 2014 budget cashflow is to reflect a potential project agreement with CT.

Work for KCM and PT bases is currently on hold and no project scope is currently in discussion.

Changes in lifetime since 2013: None.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$22,033	2014 Cost Estimate:	N/A
2014 TIP:	\$22,033		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	1,173	201	2,107	0	0	0	0	0	3,481
South King	824	141	1,480	0	0	0	0	0	2,446
East King	3,519	603	6,321	0	0	0	0	0	10,444
Pierce	1,908	327	3,427	0	0	0	0	0	5,662
Total	7,424	1,273	13,336	0	0	0	0	0	22,033

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	22	0	505	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	7,335	1,273	12,831	0	0	0	0	0	21,439
Total	7,424	1,273	13,336	0	0	0	0	0	22,033

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**600029**

**Tacoma Link Fare Collection**

**Managed by: FIT**

Scope: Sound Transit will begin collecting fares on the Tacoma Link light rail service beginning in the fourth quarter of 2014. The project includes installation and commissioning of eight ticket vending machines at Tacoma Link stations. Additionally the project will establish a spare parts inventory, setup fare enforcement support, and conduct public outreach.

Changes in lifetime budget since 2013: Addition of a new project with a lifetime budget of \$514 thousand.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	Pending	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	N/A
2014 TIP:	\$514		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	0	514	0	0	0	0	0	0	514
Total	0	514	0	0	0	0	0	0	514

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	0	447	0	0	0	0	0	0	447
90 - Contingency	0	67	0	0	0	0	0	0	67
Total	0	514	0	0	0	0	0	0	514

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	
		2014 Budget Schedule:	2014

Project Risk Assessment
Key project risks include: Fare system contractor timelines for software development and ability to reach inter-governmental agreements for fare enforcement.

<b>700784</b>	<b>Regional Parking Pilot Project</b>	<b>Managed by: Operations</b>
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Scope: This project is created to allow Sound Transit staff to conduct 2014 testing and evaluation of parking management strategies under the system implementation of customer parking permits including:

- Relocation of vanpool customer parking
- Promotion of vanshare and carpool to ST-operated parking facilities
- Implementation of real-time parking availability monitoring

Changes in lifetime budget since 2013: Addition of a new project with a lifetime budget of \$475,000.

Board Approved Capital Budget (in thousands of YOE dollars)	ST2 Total Project Cost Estimate (in thousands of 2013 dollars)
Phase Gate Passed: <span style="float: right;">N/A</span>	
Baseline: <span style="float: right;">\$0</span>	2008 Cost Estimate: <span style="float: right;">N/A</span>
2013 TIP: <span style="float: right;">\$0</span>	2013 Cost Estimate: <span style="float: right;">N/A</span>
2014 TIP: <span style="float: right;">\$475</span>	2014 Cost Estimate: <span style="float: right;">N/A</span>

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	0	475	0	0	0	0	0	0	475
Total	0	475	0	0	0	0	0	0	475

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
20 - Prelim Engineering/Env Review	0	202	0	0	0	0	0	0	202
50 - Construction	0	273	0	0	0	0	0	0	273
Total	0	475	0	0	0	0	0	0	475

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: <span style="float: right;">Initial Estimate</span>	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700790** **Pierce Transit Radio System Upgrade** **Managed by: Operations**

Scope: Replace all ST owned mobile radios currently installed in Pierce Transit-operated buses and necessary radio infrastructure components to be compliant with F.C.C. 6.25 MHZ narrow band, digital technology effective December 31, 2016. The project will cover a total of 118 radios for installation on ST Express buses, plus 13 mobile/portable radios assigned to supervisors/mechanics.

Change since 2013: Addition of a new project with a lifetime budget of \$1.0 million.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$0	2013 Cost Estimate:	N/A
2014 TIP:	\$1,000	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	0	1,000	0	0	0	0	0	0	1,000
Total	0	1,000	0	0	0	0	0	0	1,000

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	0	1,000	0	0	0	0	0	0	1,000
Total	0	1,000	0	0	0	0	0	0	1,000

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment



<b>700793</b>	<b>Signage Improvements</b>	<b>Managed by: Operations</b>
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Scope: Sound Transit is providing signage improvements at Airport Station, the connection between the station and the airport, and at Westlake Station entrances and mezzanine, including design, fabrication and installation.

Changes in lifetime budget since 2013: Addition of a new project with a lifetime budget of \$491 thousand.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	1-Enter Project Development	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	N/A
2014 TIP:	\$491		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	0	31	0	0	0	0	0	0	31
South King	0	460	0	0	0	0	0	0	460
Total	0	491	0	0	0	0	0	0	491

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	0	26	0	0	0	0	0	0	26
30 - Final Design+Specifications	0	105	0	0	0	0	0	0	105
50 - Construction	0	285	0	0	0	0	0	0	285
55 - Construction Services	0	30	0	0	0	0	0	0	30
90 - Contingency	0	45	0	0	0	0	0	0	45
Total	0	491	0	0	0	0	0	0	491

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type: Initial Estimate	Schedule Risk Level: Low
Budget Risk Level: Low	2013 Budget Schedule:
	2014 Budget Schedule: 2014

Project Risk Assessment

**300011**

**Positive Train Control**

**Managed by: DECM**

Scope: Positive Train Control (PTC) systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency. Federal regulations mandate that PTC be operational on passenger rail systems by December 2015. These systems will improve railroad safety by significantly reducing the probability of collisions between trains, casualties to roadway workers and damage to their equipment, and over speed accidents.

Changes in lifetime budget since 2013: None

In March 2013, the project lifetime budget was increased by \$13.8 million to a total of \$53 million (Board Resolution R2013-06) to allow the project's design and construction to proceed. Budget elements included costs associated with wayside upgrades to the signal systems owned by Sound Transit along the Tacoma to Lakewood corridor and those owned by BNSF in the Seattle to Tacoma and Seattle to Everett corridors, as well as upgrades to the systemwide rolling stock.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	4-Enter Final Design	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$53,054	2014 Cost Estimate:	N/A
2014 TIP:	\$53,054		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	542	1,063	1,586	576	0	0	0	0	3,767
South King	336	659	983	357	0	0	0	0	2,334
Pierce	6,758	13,248	19,771	7,176	0	0	0	0	46,953
Total	7,636	14,970	22,340	8,108	0	0	0	0	53,054

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	476	745	744	274	0	0	0	0	2,238
30 - Final Design+Specifications	226	0	28	24	0	0	0	0	279
35 - Third Party	2,510	1,740	1,550	548	0	0	0	0	6,348
50 - Construction	4,388	11,285	18,822	6,901	0	0	0	0	41,396
55 - Construction Services	36	1,200	1,196	362	0	0	0	0	2,794
Total	7,636	14,970	22,340	8,108	0	0	0	0	53,054

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Final Design	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

**Project Risk Assessment**

Technology implementation uncertainties and demand on a limited number of contractors to design and install PTC on active rail systems in accordance with federal mandates and schedule requirements.

**4X320**

**DSTT South Access Security**

**Managed by: DECM**

Scope: The DSTT South Access Security project included the design and construction of barriers and other deterrents, modification of train detection circuits, and channelization of traffic to prevent unauthorized vehicles from gaining access to the south entrance of the Downtown Seattle Transit Tunnel (DSTT), and has been in service since 2012. The project completed and all contracts were closed in 2013; project close-out is expected in 2014.

Changes in lifetime budget since 2013: Project budget reduced by \$74.4 thousand to reflect savings at closeout.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$1,000	2013 Cost Estimate:	N/A
2013 TIP:	\$800	2014 Cost Estimate:	N/A
2014 TIP:	\$726		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	726	0	0	0	0	0	0	0	726
Total	726	0	0	0	0	0	0	0	726

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	164	0	0	0	0	0	0	0	164
50 - Construction	561	0	0	0	0	0	0	0	561
Total	726	0	0	0	0	0	0	0	726

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	2012
		2014 Budget Schedule:	2012

Project Risk Assessment

**4X340** **Noise Abatement** **Managed by: DECM**

Scope: Sound Transit has designed and is constructing a noise wall along the elevated guideway in Tukwila. In addition, 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.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$13,000	2013 Cost Estimate:	N/A
2013 TIP:	\$13,000	2014 Cost Estimate:	N/A
2014 TIP:	\$13,000		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	5,079	3,100	698	0	0	0	0	0	8,876
South King	2,359	1,440	324	0	0	0	0	0	4,124
Total	7,438	4,540	1,022	0	0	0	0	0	13,000

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	889	111	0	0	0	0	0	0	1,000
30 - Final Design+Specifications	5	55	0	0	0	0	0	0	60
40 - Row Acquisition+Permits	15	40	45	0	0	0	0	0	100
50 - Construction	4,770	3,606	274	0	0	0	0	0	8,650
55 - Construction Services	1,759	728	703	0	0	0	0	0	3,190
Total	7,438	4,540	1,022	0	0	0	0	0	13,000

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Medium
Budget Risk Level:	Medium	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment
Budget and schedule risks decreased with the completion of noise wall construction in 2013. Work in 2014 is for Residential Soundwall Improvements Program (RSIP) construction.

**700772**

**ST Express Security Camera Retrofit**

**Managed by: Operations**

Scope: Onboard video surveillance systems have proven to improve safety, security, and incident/accident investigations. This project is to retrofit 17 ST Express coaches with video cameras. This project was completed in 2013.

Changes since 2013 budget: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$209	2014 Cost Estimate:	N/A
2014 TIP:	\$209		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	31	4	0	0	0	0	0	0	35
South King	20	2	0	0	0	0	0	0	22
East King	87	10	0	0	0	0	0	0	97
Pierce	49	6	0	0	0	0	0	0	55
Total	187	22	0	0	0	0	0	0	209

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
70 - Vehicles	187	22	0	0	0	0	0	0	209
Total	187	22	0	0	0	0	0	0	209

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700773** **Central Link HVAC for Traction Power** **Managed by: DECM**

Scope: Air conditioning is required in the Traction Power Sub Station (TPSS) buildings to protect and enhance the life of temperature sensitive electronic equipment.

Changes in lifetime budget since 2013: Project budget increased by \$200 thousand to upgrade to the existing transformers from 25 kilovolt-ampere (kVA) to 37.5 kVA.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$600	2014 Cost Estimate:	N/A
2014 TIP:	\$800		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	73	462	0	0	0	0	0	0	535
South King	36	228	0	0	0	0	0	0	265
Total	110	690	0	0	0	0	0	0	800

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	27	53	0	0	0	0	0	0	80
30 - Final Design+Specifications	80	0	0	0	0	0	0	0	80
50 - Construction	3	578	0	0	0	0	0	0	582
90 - Contingency	0	58	0	0	0	0	0	0	58
Total	110	690	0	0	0	0	0	0	800

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700774** **Central Link HVAC - Instrument House and UPS Room** **Managed by: DECM**

Scope: Air conditioning is required in the uninterruptible power supply (UPS) rooms and signal houses to protect and enhance the life of temperature sensitive electronic equipment.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$420	2014 Cost Estimate:	N/A
2014 TIP:	\$420		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	47	234	0	0	0	0	0	0	281
South King	23	116	0	0	0	0	0	0	139
Total	70	350	0	0	0	0	0	0	420

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	17	39	0	0	0	0	0	0	56
30 - Final Design+Specifications	52	4	0	0	0	0	0	0	56
50 - Construction	0	280	0	0	0	0	0	0	280
90 - Contingency	0	28	0	0	0	0	0	0	28
Total	70	350	0	0	0	0	0	0	420

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700775**

**Central Link Card Readers**

**Managed by: DECM**

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 in lifetime budget since 2013: Project budget increased by \$50 thousand to cover additional administrative costs, inspection costs and provide a contingency for the project.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$373	2014 Cost Estimate:	N/A
2014 TIP:	\$423		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	7	276	0	0	0	0	0	0	283
South King	4	136	0	0	0	0	0	0	140
Total	11	412	0	0	0	0	0	0	423

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	11	39	0	0	0	0	0	0	50
30 - Final Design+Specifications	0	50	0	0	0	0	0	0	50
50 - Construction	0	249	0	0	0	0	0	0	249
55 - Construction Services	0	50	0	0	0	0	0	0	50
90 - Contingency	0	25	0	0	0	0	0	0	25
Total	11	412	0	0	0	0	0	0	423

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment



700776

Central Link OMF UPS Room Improvement

Managed by: DECM

Scope: During Operations & Maintenance Facility construction, it was determined that flooring in the area planned for the UPS would not adequately support the weight of the battery modules and improvements were required. After further review, it was decided that the project scope is no longer required and therefore the project will be closed.

Changes in lifetime budget since 2013: Project budget reduced by \$106 thousand to be defunded at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$108	2014 Cost Estimate:	N/A
2014 TIP:	\$2		

TIP Cashflow (in thousands)

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	0	1	0	0	0	0	0	0	1
South King	0	0	0	0	0	0	0	0	1
Total	1	1	0	0	0	0	0	0	2

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1	1	0	0	0	0	0	0	2
Total	1	1	0	0	0	0	0	0	2

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700777** **Central Link Overhead Catenary System Tie Switch** **Managed by: Operations**

Scope: This project is created to install a mechanical means to electrically bridge the OCS section insulators at approximately 34 various locations throughout the Central Link Alignment.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$3,000	2013 Cost Estimate:	N/A
2014 TIP:	\$3,000	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	3	870	1,134	0	0	0	0	0	2,007
South King	2	430	561	0	0	0	0	0	993
Total	5	1,300	1,695	0	0	0	0	0	3,000

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	5	1,300	1,695	0	0	0	0	0	3,000
Total	5	1,300	1,695	0	0	0	0	0	3,000

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700778** **Central Link Benchtest Equipment** **Managed by: Operations**

Scope: Follow on equipment purchases in support of LRV maintenance originally included in the Initial Segment but deferred during initial construction. The purchase of the propulsion system equipment tester will be used to test circuit boards and other electrical components within the LRV propulsion systems. This equipment will provide more effective and timely diagnostics of problems within the LRV propulsion system, thereby reducing down time and service fees. This equipment was received in 2013.

Changes in lifetime since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$700	2014 Cost Estimate:	N/A
2014 TIP:	\$700		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	465	0	0	0	0	0	0	0	466
South King	234	0	0	0	0	0	0	0	235
Total	700	0	0	0	0	0	0	0	700

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	700	0	0	0	0	0	0	0	700
Total	700	0	0	0	0	0	0	0	700

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700779**

**Security Radios**

**Managed by: Operations**

Scope: Procure radios for security and fare enforcement personnel. The 800-megahertz radio project modernizes Sound Transit's communications capabilities, by migrating to a system where Sound Transit can communicate internally and with outside agencies in the event of an emergency or disaster. Beginning with Security and Station Agents, the 800 MHz radio system is scalable to all departments and divisions within Sound Transit and is interoperable with the Central Link radio system. The project will provide Sound Transit with a response and situational awareness not achievable with the current cell phone push to talk systems. These radios were installed in 2013.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$340	2014 Cost Estimate:	N/A
2014 TIP:	\$340		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	29	4	0	0	0	0	0	0	34
North King	119	17	0	0	0	0	0	0	136
South King	119	17	0	0	0	0	0	0	136
Pierce	29	4	0	0	0	0	0	0	34
Total	297	43	0	0	0	0	0	0	340

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	297	43	0	0	0	0	0	0	340
Total	297	43	0	0	0	0	0	0	340

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700780** **Federal Way Transit Center Light Retrofit** **Managed by: Operations**

Scope: Upgrade lighting at the Transit Center in Federal Way. This project was completed in 2013.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$579	2014 Cost Estimate:	N/A
2014 TIP:	\$579		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	575	4	0	0	0	0	0	0	579
Total	575	4	0	0	0	0	0	0	579

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	575	4	0	0	0	0	0	0	579
Total	575	4	0	0	0	0	0	0	579

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700782**

**Auburn Garage Lighting Retrofit**

**Managed by: Operations**

Scope: This project funds the replacement of existing T-8 and metal halide fixtures with LED fixtures at the Auburn Station garage. This project is completed.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$220	2014 Cost Estimate:	N/A
2014 TIP:	\$220		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	208	12	0	0	0	0	0	0	220
Total	208	12	0	0	0	0	0	0	220

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	208	12	0	0	0	0	0	0	220
Total	208	12	0	0	0	0	0	0	220

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X743**

**Security Enhancements**

**Managed by: FIT**

Scope: Sounder commuter rail has an extensive legacy CCTV system for monitoring commuter rail platforms, assets, and facilities. This system was installed in 2005 and includes 95 analog cameras and 8 digital video recorders with a central monitoring application. With a Homeland Security grant, Sound Transit upgraded to its current standard of networked video recorders with six times the amount of video storage with high quality digital video capabilities. In addition, the 62 cameras were upgraded to either a megapixel IP camera or a higher quality encoded video camera which allows such features as video analytics, high definition viewing, and a streamlined video administration and video sharing capability. These upgrades have been almost completed, pending final upgrades in Union Station in 2014.

Changes in lifetime budget since 2013: In 2013, the Board approved R2013-08 to increase the lifetime budget from \$1,787,286 to \$2,416,566 based on a grant received from Department of Homeland Security. 2014 project budget was increased by \$81,000 to account for 15% contingency costs or/and consultancy services to ensure a smooth integration of the unique systems.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$2,417	2014 Cost Estimate:	N/A
2014 TIP:	\$2,498		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	2,015	483	0	0	0	0	0	0	2,498
Total	2,015	483	0	0	0	0	0	0	2,498

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
20 - Prelim Engineering/Env Review	162	0	0	0	0	0	0	0	162
50 - Construction	1,853	483	0	0	0	0	0	0	2,336
Total	2,015	483	0	0	0	0	0	0	2,498

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X745**

**ST Express Mobile Communications**

**Managed by: Operations**

Scope: As part of the operation of the Sound Move ST Express bus fleet, mobile communications are necessary to ensure driver and passenger safety, to enhance the customer service information, and to improve the information available to the service planning function. The existing mobile communications systems are aging and in need of upgrades. In addition, this investment allows the ST Express bus fleet to be compatible with partner communication systems. A signed project participation agreement with Pierce Transit was executed in 2007. This project is in service. It was tested and accepted in 2010. Agreements for ST project participation with King County Metro and Community Transit projects were approved by the Board in 2008. These projects are expected to be completed in 2014.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$10,531	2014 Cost Estimate:	N/A
2014 TIP:	\$10,531		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	1,302	552	0	0	0	0	0	0	1,853
South King	747	317	0	0	0	0	0	0	1,064
East King	3,403	1,442	0	0	0	0	0	0	4,844
Pierce	1,945	824	0	0	0	0	0	0	2,770
Total	7,397	3,134	0	0	0	0	0	0	10,531

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	7,177	3,134	0	0	0	0	0	0	10,311
70 - Vehicles	220	0	0	0	0	0	0	0	220
Total	7,397	3,134	0	0	0	0	0	0	10,531

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

**Project Risk Assessment**

The project intends to complete its scope of work in 2013. There is a risk that coordination with our transit partners on this work could delay the completion of the project into 2014.



**7X746**

**Parking Enhancements**

**Managed by: DECM**

Scope: In 2007, Sound Transit received a Regional Mobility grant in the amount of \$3.7M to expand commuter rail parking in the Tacoma – Seattle Corridor. The local match for this grant is \$500K. In the 2009 budget, a grant for the city of Puyallup was added to the project budget and was used to expand capacity at Puyallup Station. In exchange for capital improvements at the Puyallup Fairgrounds, Sound Transit entered into an agreement to significantly expand the parking available for Sounder customers during commute periods.

As approved by WSDOT, the Regional Mobility Grant funds targeted for Sumner were used to purchase additional parking in the Auburn Station garage.

This project is being closed.

Changes in lifetime budget since 2013 budget: Project budget reduced by \$839 thousand to be defunded at close out.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$4,960	2014 Cost Estimate:	N/A
2014 TIP:	\$4,121		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	1,331	0	0	0	0	0	0	0	1,331
Pierce	2,790	0	0	0	0	0	0	0	2,790
Total	4,121	0	0	0	0	0	0	0	4,121

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	81	0	0	0	0	0	0	0	81
20 - Prelim Engineering/Env Review	339	0	0	0	0	0	0	0	339
30 - Final Design+Specifications	231	0	0	0	0	0	0	0	231
35 - Third Party	1,330	0	0	0	0	0	0	0	1,330
40 - Row Acquisition+Permits	139	0	0	0	0	0	0	0	139
50 - Construction	2,001	0	0	0	0	0	0	0	2,001
Total	4,121	0	0	0	0	0	0	0	4,121

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X753**

**Bike Locker Program**

**Managed by: DECM**

Scope: Install new bicycle parking at various Sounder commuter rail, ST Express bus, and Link light rail stations. In addition, project funded the design and construction of a bicycle plaza adjacent to the Columbia City Link light rail 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 in lifetime budget since 2013: Project budget increased by \$156 thousand for additional staff and outreach costs.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$1,199	2014 Cost Estimate:	N/A
2014 TIP:	\$1,355		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	19	11	11	0	0	0	0	0	41
North King	307	183	177	0	0	0	0	0	668
South King	173	103	100	0	0	0	0	0	375
East King	9	6	5	0	0	0	0	0	20
Pierce	115	69	67	0	0	0	0	0	251
Total	624	371	360	0	0	0	0	0	1,355

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	191	61	37	0	0	0	0	0	289
30 - Final Design+Specifications	98	8	1	0	0	0	0	0	108
40 - Row Acquisition+Permits	10	3	10	0	0	0	0	0	23
50 - Construction	324	299	312	0	0	0	0	0	935
Total	624	371	360	0	0	0	0	0	1,355

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X763**

**Central Link Radio Upgrade**

**Managed by: Operations**

Scope: The existing radio technology used on Link does not allow for seamless communications between the Link Control Center and non-Link staff who support the Downtown Seattle Transit Tunnel and joint bus/rail operations. The existing emVista program will not be able to adapt to new technologies being implemented by King County during 2010 and 2011. This project is being closed out.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$9	2014 Cost Estimate:	N/A
2014 TIP:	\$9		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	6	0	0	0	0	0	0	0	6
South King	3	0	0	0	0	0	0	0	3
Total	9	0	0	0	0	0	0	0	9

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	9	0	0	0	0	0	0	0	9
Total	9	0	0	0	0	0	0	0	9

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

<b>700781</b>	<b>Non-revenue Support Vehicles</b>	<b>Managed by: Operations</b>
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Scope: Purchase non-revenue support vehicles to improve maintenance efficiencies for the Link light rail system, including a tandem-axle, flatbed truck equipped with an insulated boom and bucket apparatus capable of picking up copper reels and poles is necessary for maintaining Link OCS equipment and power poles and the traction power grid. Lifetime expectancy of these trucks is 15 to 20 years. This equipment is expected to be delivered in 2014.

The scope of the project has been expanded in 2014 to include purchase/replace 3 maintenance vehicles.

Changes in lifetime budget since 2013: Project budget is increased by \$285 thousand to include replacement of three maintenance vehicles in 2014.

Board Approved Capital Budget (in thousands of YOE dollars)	ST2 Total Project Cost Estimate (in thousands of 2013 dollars)
Phase Gate Passed: <span style="float: right;">N/A</span>	2008 Cost Estimate: <span style="float: right;">N/A</span>
Baseline: <span style="float: right;">\$0</span>	2013 Cost Estimate: <span style="float: right;">N/A</span>
2013 TIP: <span style="float: right;">\$620</span>	2014 Cost Estimate: <span style="float: right;">N/A</span>
2014 TIP: <span style="float: right;">\$905</span>	

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	0	442	30	31	32	33	34	0	602
South King	0	222	15	16	16	17	17	0	303
Total	0	664	45	47	48	50	51	0	905

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
70 - Vehicles	0	664	45	47	48	50	51	0	905
Total	0	664	45	47	48	50	51	0	905

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment
This project is developing an assessment of maintenance vehicles needed in the support of the Agency mission. These vehicles are outside the role of administrative vehicles, rather they are used to support the maintenance of infrastructure necessary to provide service.

**804100** **Transit Oriented Development Property Disposition** **Managed by: PEPD**

Scope: For properties acquired to build Central Link light rail that are no longer required, this project funds property due diligence, evaluation for potential real estate development opportunities and other activities associated with sales/transfer of surplus property to interested parties. The program only includes properties suitable for TOD based on size and proximity to transit stations.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$5,601	2013 Cost Estimate:	N/A
2014 TIP:	\$5,601	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	574	1,677	936	753	251	515	674	221	5,601
Total	574	1,677	936	753	251	515	674	221	5,601

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	20	0	0	0	0	0	0	0	20
40 - Row Acquisition+Permits	553	1,401	936	753	251	515	674	221	5,305
50 - Construction	0	276	0	0	0	0	0	0	276
Total	574	1,677	936	753	251	515	674	221	5,601

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2019
		2014 Budget Schedule:	2019

Project Risk Assessment

**8X100**

**Transit Oriented Development Planning**

**Managed by: PEPD**

Scope: The program budget funds Sound Move Transit Oriented Development planning within the Sound Transit District including external technical assistance to local jurisdictions and internal project support to help identify and shape TOD and joint development opportunities.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$1,640	2013 Cost Estimate:	N/A
2014 TIP:	\$1,640	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	1,146	100	344	50	0	0	0	0	1,640
Total	1,146	100	344	50	0	0	0	0	1,640

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	43	0	0	0	0	0	0	0	43
20 - Prelim Engineering/Env Review	1,103	100	344	50	0	0	0	0	1,597
Total	1,146	100	344	50	0	0	0	0	1,640

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2014
		2014 Budget Schedule:	2014

Project Risk Assessment

## Rehabilitation & Replacement Projects

Projects that replace existing bus and commuter rail fleet and major maintenance of stations and vehicles are the key to managing efficient and cost effective transit services.

The 2014 TIP includes projects to perform maintenance at facilities with more than ten years of service, overhaul Sounder vehicles, and replace retiring ST Express buses. In addition, the TIP includes a Small Works Program to fund small capital projects, each with lifetime budgets under \$200,000.

### TIP Highlights

- ST Express bus replacements are anticipated in 2014, 2015, 2017, and 2018.
- Sounder Vehicle Maintenance Program is funded through 2016.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
<b>REGIONAL EXPRESS</b>				
ST Express Fleet Replacement	Cost Increase	Baseline	Added one additional year to the bus replacement schedule.	\$18,696
<b>OTHER</b>				
Small Works Program	Cost Increase	Program	Extend the program another year.	\$687
Tacoma Dome Station	Cost Increase	Baseline	Inflation to 2015 year of expenditure	\$24

### SCHEDULE CHANGES

Project	Schedule Type	Explanation	Old Date	New Date
<b>LINK</b>				
Beacon Avenue Paving	Construction	Contract procurement delayed to negotiate betterments requested by the city of Seattle.	2013	2014

### Project Closures

The following projects are complete and scheduled to be closed in 2014.

- Link Station Paver Replacement Project
- Tacoma Link Announcement/Sign System



Sounder Auburn Station

**2014 TIP Cashflow by Budget Approval**  
(in thousands)

Rehabilitation & Replacement

ALL MODES

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Baseline</b>									
4X360 Beacon Avenue Paving	134	1,040	826	0	0	0	0	0	2,000
4X370 Link Station Paver Replacement	345	155	0	0	0	0	0	0	500
7X356 Tacoma Dome Station	0	0	414	0	0	0	0	0	414
7X701 ST Express Fleet Replacement	77,027	28,090	15,999	0	871	45,953	2,069	0	170,009
7X758 Tacoma Link Announcement/Sign System	247	124	0	0	0	0	0	0	371
7X761 Central Link Control Center Phone Network	1	199	0	0	0	0	0	0	200
7X768 Federal Way Post Tension Cable Repair	2	523	0	0	0	0	0	0	525
<b>Subtotal</b>	<b>77,755</b>	<b>30,132</b>	<b>17,239</b>	<b>0</b>	<b>871</b>	<b>45,953</b>	<b>2,069</b>	<b>0</b>	<b>174,019</b>
<b>Program</b>									
700770 Sounder Vehicle Overhaul Program	666	5,297	5,047	4,604	6,837	0	0	0	22,450
700771 Station Midlife Refurbishment Program	123	505	200	622	0	0	0	0	1,450
7X740 Small Works Program	1,525	656	656	656	656	656	979	0	5,784
<b>Subtotal</b>	<b>2,314</b>	<b>6,457</b>	<b>5,903</b>	<b>5,882</b>	<b>7,493</b>	<b>656</b>	<b>979</b>	<b>0</b>	<b>29,684</b>
<b>Total</b>	<b>\$80,070</b>	<b>\$36,589</b>	<b>\$23,142</b>	<b>\$5,882</b>	<b>\$8,364</b>	<b>\$46,609</b>	<b>\$3,049</b>	<b>\$0</b>	<b>\$203,703</b>



**2014 TIP Cashflow by Subarea**  
(in thousands)

Rehabilitation & Replacement  
ALL MODES

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	13,846	5,755	3,593	716	1,175	8,173	491	0	33,749
2 - North King	708	1,426	925	98	98	98	147	0	3,501
3 - South King	8,442	6,636	4,492	2,926	3,769	4,740	356	0	31,361
4 - East King	35,722	13,046	7,484	125	525	21,263	1,138	0	79,303
5 - Pierce	21,351	9,725	6,648	2,017	2,796	12,335	916	0	55,788
<b>Total</b>	<b>\$80,070</b>	<b>\$36,589</b>	<b>\$23,142</b>	<b>\$5,882</b>	<b>\$8,364</b>	<b>\$46,609</b>	<b>\$3,049</b>	<b>\$0</b>	<b>\$203,703</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	383	222	75	42	39	28	28	0	818
20 - Prelim Engineering/Env Review	24	51	36	23	41	13	13	0	200
30 - Final Design+Specifications	84	151	126	106	113	0	0	0	580
50 - Construction	1,956	2,693	1,959	1,149	2,360	615	938	0	11,669
55 - Construction Services	35	210	25	0	0	0	0	0	270
70 - Vehicles	77,587	33,262	20,921	4,502	5,812	45,953	2,069	0	190,107
90 - Contingency	0	0	0	60	0	0	0	0	60
<b>Total</b>	<b>\$80,070</b>	<b>\$36,589</b>	<b>\$23,142</b>	<b>\$5,882</b>	<b>\$8,364</b>	<b>\$46,609</b>	<b>\$3,049</b>	<b>\$0</b>	<b>\$203,703</b>

**4X360**

**Beacon Avenue Paving**

**Managed by: DECM**

Scope: As agreed with the City of Seattle, Sound Transit is performing roadway improvements on Beacon Avenue between South McClellan Street and South Landers Street. The roadway was impacted by construction of the Initial Segment: work includes full-depth replacement of pavement, drainage improvements, reconstruction of portions of sidewalks, sidewalk widening, addition of raised roadway median, and increased crosswalk widths. Work is expected to be completed in 2014. Cash flow in 2015 reflects projected surplus budget.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$2,000	2013 Cost Estimate:	N/A
2013 TIP:	\$2,000	2014 Cost Estimate:	N/A
2014 TIP:	\$2,000		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	134	1,040	826	0	0	0	0	0	2,000
Total	134	1,040	826	0	0	0	0	0	2,000

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	64	50	36	0	0	0	0	0	150
30 - Final Design+Specifications	65	25	35	0	0	0	0	0	125
50 - Construction	0	765	730	0	0	0	0	0	1,495
55 - Construction Services	4	201	25	0	0	0	0	0	230
Total	134	1,040	826	0	0	0	0	0	2,000

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Initial Estimate	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2014

**Project Risk Assessment**

Potential schedule risks associated with weather conditions exist since paving work is to be done during warmer months.

**4X370**

**Link Station Paver Replacement**

**Managed by: DECM**

Scope: Sound Transit is replacing tactile pavers at the Link SODO Station boarding platform that have not performed in accordance with design requirements. Work is expected to be completed in 2013. Cash flow in 2014 reflects construction unallocated contingency to fund follow-on work if required.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$500	2013 Cost Estimate:	N/A
2013 TIP:	\$500	2014 Cost Estimate:	N/A
2014 TIP:	\$500		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	345	155	0	0	0	0	0	0	500
Total	345	155	0	0	0	0	0	0	500

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	76	9	0	0	0	0	0	0	85
50 - Construction	238	137	0	0	0	0	0	0	375
55 - Construction Services	31	9	0	0	0	0	0	0	40
Total	345	155	0	0	0	0	0	0	500

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Medium
Budget Risk Level:	Low	2013 Budget Schedule:	2013
		2014 Budget Schedule:	2013

**Project Risk Assessment**

Schedule risks presented by need to coordinate paver replacement with Link Operations to ensure the project does not impact Link service. Budget risk associated with uncertainty whether similar condition may occur at other Link stations.

**7X356**

**Tacoma Dome Station**

**Managed by: Operations**

Scope: The Tacoma Dome Station project was completed in 2002. Per agreement with Pierce Transit, Sound Transit has maintained a capital budget for major maintenance which may be necessary during the useful life of the facility. Current projections are for spending to be programmed after 2014. Per the terms of the agreement with Pierce Transit, the Sound Transit contribution for major maintenance is \$275 thousand in 1998 dollars, inflated to the year of expenditure.

Changes in lifetime budget since 2013: Project budget increased \$24 thousand to reflect the inflation to 2015 year of expenditure.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	None	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$390	2014 Cost Estimate:	N/A
2014 TIP:	\$414		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	0	0	414	0	0	0	0	0	414
Total	0	0	414	0	0	0	0	0	414

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	0	0	414	0	0	0	0	0	414
Total	0	0	414	0	0	0	0	0	414

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X701**

**ST Express Fleet Replacement**

**Managed by: Operations**

Scope: The project funds the bus replacement program for the ST Express Fleet.

Current Assumptions: FTA guidelines indicate that buses are to be replaced no earlier than either 12 years of service or 500,000 miles. Due to the unique service characteristics of the ST Express fleet, Sound Transit buses typically reach 500,000 miles after only 10 years of operations. Replacement decisions are informed by specific fleet performance in consultation with our operating partner agencies. During the period from 2013-2019, more than 160 buses will be replaced.

Changes in lifetime since 2013: Project budget increased by \$18.7 million to extend for another year based on the replacement plan.

Board Approved Capital Budget (in thousands of YOY dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$151,313	2014 Cost Estimate:	N/A
2014 TIP:	\$170,009		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	13,557	4,944	2,816	0	153	8,088	364	0	29,922
South King	7,780	2,837	1,616	0	88	4,641	209	0	17,171
East King	35,432	12,921	7,360	0	400	21,138	952	0	78,204
Pierce	20,258	7,388	4,208	0	229	12,086	544	0	44,712
Total	77,027	28,090	15,999	0	871	45,953	2,069	0	170,009

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	6	0	0	0	0	0	0	0	6
70 - Vehicles	77,021	28,090	15,999	0	871	45,953	2,069	0	170,003
Total	77,027	28,090	15,999	0	871	45,953	2,069	0	170,009

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X758**

**Tacoma Link Announcement/Sign System**

**Managed by: Operations**

Scope: Procurement and installation of a new communications system for Tacoma Link. System replacement is necessary due to the limited availability of replacement parts and technical support for the existing technology. ST has contracted for a computerized system which will be delivered and installed by early 2014.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$371	2014 Cost Estimate:	N/A
2014 TIP:	\$371		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Pierce	247	124	0	0	0	0	0	0	371
Total	247	124	0	0	0	0	0	0	371

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
50 - Construction	247	124	0	0	0	0	0	0	371
Total	247	124	0	0	0	0	0	0	371

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X761**

**Central Link Control Center Phone Network**

**Managed by: Operations**

Scope: The current emVista system in the Link Control Center (LCC) is not compatible with the Agency Cisco phone system. The current system also provides interference on the King County radio communications, rendering EmVista inadequate. The replacement system will allow for communications between operators and the LCC without interference on other supporting systems.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$200	2014 Cost Estimate:	N/A
2014 TIP:	\$200		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	1	133	0	0	0	0	0	0	134
South King	0	66	0	0	0	0	0	0	66
Total	1	199	0	0	0	0	0	0	200

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	1	19	0	0	0	0	0	0	20
50 - Construction	0	180	0	0	0	0	0	0	180
Total	1	199	0	0	0	0	0	0	200

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**7X768 Federal Way Post Tension Cable Repair Managed by: DECM**

Scope: Repair post tension cables that provide structural reinforcement of the Federal Way parking garage. Grease has been leaking out of the post tension cable grout pockets indicating water penetration. The budget funds complete remediation. At a minimum, removal of failed grout pockets and replacement of the grease-filled caps is required; however, more extensive remediation may be needed. The project is expected to be completed in 2014.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$525	2014 Cost Estimate:	N/A
2014 TIP:	\$525		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	2	523	0	0	0	0	0	0	525
Total	2	523	0	0	0	0	0	0	525

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	2	98	0	0	0	0	0	0	100
50 - Construction	0	425	0	0	0	0	0	0	425
Total	2	523	0	0	0	0	0	0	525

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	
Budget Risk Level:		2013 Budget Schedule:	
		2014 Budget Schedule:	

Project Risk Assessment



700770

**Sounder Vehicle Overhaul Program**

**Managed by: Operations**

Scope: This project funds various components of overhaul projects to expand the useful life of the vehicles.

Major Locomotive Overhauls: This project is a preservation project to maintain, preserve, and extend the life of these existing assets (Locomotives). It will not significantly change the program use of the asset.

Engine Overhauls: Currently there are 11 locomotives operating for Sounder. Maintenance overhauls are required to ensure the continued performance of the asset - the locomotives were purchased in 2000 and 2001 and have continued to perform over the past 13 years without a major overhaul. Cost per locomotive is \$1.3M plus tax and contingency with a total of 11 locomotives. The completion of these projects will take 5 years which will allow the Sounder services to operate at current levels without service disruption. Two of these overhauls will be for a Tier 3 engine, funded from a Clean Air Agency grant.

Truck Overhauls: A 5-year project, for 58 cars with a cost of \$36K per car. Twelve cars are expected to be overhauled in 2013.

Door Motor Replacement: Passenger door motors with a cost of \$7.5K per car (two motors per car) and currently forecast to replace 12 car motors in 2013.

Change in lifetime budget since 2013: None

In September 2013, the project lifetime budget was increased by \$5.0 million to a total \$22.45 million (Board Resolution R2013-17) to cover the higher costs to upgrade 9 locomotives to the Tier 0+emissions standard and 2 locomotives to the Tier 3 emissions standard.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$22,450	2013 Cost Estimate:	N/A
2014 TIP:	\$22,450	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	91	726	691	631	937	0	0	0	3,076
South King	349	2,776	2,645	2,412	3,583	0	0	0	11,764
Pierce	226	1,796	1,711	1,561	2,318	0	0	0	7,611
Total	666	5,297	5,047	4,604	6,837	0	0	0	22,450

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	0	11	11	11	11	0	0	0	42
20 - Prelim Engineering/Env Review	0	23	23	0	28	0	0	0	74
30 - Final Design+Specifications	0	91	91	91	113	0	0	0	387
50 - Construction	335	0	0	0	1,745	0	0	0	2,080
70 - Vehicles	330	5,172	4,922	4,502	4,942	0	0	0	19,868
Total	666	5,297	5,047	4,604	6,837	0	0	0	22,450

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**700771 Station Midlife Refurbishment Program Managed by: Operations**

Scope: Sound Transit facilities have been in service for more than ten years, and are now reaching their midlife maintenance stage. This is a multi-location midlife program with projects as follows:

- Concrete patching; ADA hand rails; guard rails; caulking on roof; replacement of broken tile; painting of shelters; asphalt lot re-paving, re-sealing, and re-stripping at Auburn Station \$877,166, Kent Station \$191,486 Sumner Station \$258,761, and Puyallup Station \$154,430.

Others include:

- Kent Garage: \$33,000 for seal coat of the top level of the garage.
- Tukwila Station: \$14,250 for plywood platform rehab.
- King Street Station: \$69,574 for concrete patching, installation of guardrail, caulking and repainting.
- South Hill Park & Ride: \$178,000 for caulking/painting of shelters, railing and misc. fixtures, asphalt lot re-paving, re-sealing, and re-stripping.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:			
Baseline:	\$0	2008 Cost Estimate:	N/A
2013 TIP:	\$1,450	2013 Cost Estimate:	N/A
2014 TIP:	\$1,450	2014 Cost Estimate:	N/A

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
South King	82	337	133	415	0	0	0	0	967
Pierce	41	168	67	207	0	0	0	0	483
Total	123	505	200	622	0	0	0	0	1,450

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	7	8	0	3	0	0	0	0	19
20 - Prelim Engineering/Env Review	0	15	0	10	0	0	0	0	25
30 - Final Design+Specifications	0	35	0	15	0	0	0	0	50
50 - Construction	116	447	200	534	0	0	0	0	1,296
90 - Contingency	0	0	0	60	0	0	0	0	60
Total	123	505	200	622	0	0	0	0	1,450

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment
Continued changes and refinement of the scope of work to the various station locations throughout the Sound Transit service area could affect both the budget and scheduled as already evidenced in the delays of some of the work anticipated earlier in the project.

**7X740**

**Small Works Program**

**Managed by: Operations**

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. Facility repairs/modifications exceeding \$200,000 are identified as separate projects in the capital plan. The budget for this program is based on number of sites maintained, age of facilities, and amount of use.

Changes in lifetime budget since 2013: Project budget increased by \$687 thousand to extend the program another year.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$5,097	2014 Cost Estimate:	N/A
2014 TIP:	\$5,784		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	198	85	85	85	85	85	127	0	752
North King	229	98	98	98	98	98	147	0	868
South King	229	98	98	98	98	98	147	0	868
East King	290	125	125	125	125	125	186	0	1,099
Pierce	580	249	249	249	249	249	372	0	2,198
<b>Total</b>	<b>1,525</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>979</b>	<b>0</b>	<b>5,784</b>

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	232	28	28	28	28	28	28	0	402
20 - Prelim Engineering/Env Review	24	13	13	13	13	13	13	0	101
30 - Final Design+Specifications	19	0	0	0	0	0	0	0	19
50 - Construction	1,014	615	615	615	615	615	938	0	5,027
70 - Vehicles	236	0	0	0	0	0	0	0	236
<b>Total</b>	<b>1,525</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>656</b>	<b>979</b>	<b>0</b>	<b>5,784</b>

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment



## Administrative Projects

Administrative Projects are not specific to any transit mode or capital program but include agency assets such as real estate not required for construction and operations, administrative equipment and facilities, and technology critical to the successful operation of the agency.

### TIP Highlights

- Environmental Mitigation, Monitoring, and Maintenance project will fund follow on work to allow completed projects to be closed.
- Administrative vehicle replacement purchases.
- Continued development of the Agency information technology infrastructure in support of operational efficiencies and Agency growth.

### BUDGET CHANGES

(in thousands)

Project	Reason	Budget Type	Explanation	Change
<b>OTHER</b>				
Environmental Mitigation, Monitoring & Maintenance	Transfer	Program	Increased for transfer from the D-M Street project to cover additional monitoring scope.	\$209



McKinley Park Restoration

## 2014 TIP Cashflow by Budget Approval

(in thousands)

Administrative

ALL MODES

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Program</b>									
600025 Environmental Mitigation, Monitoring & Maintenance	115	303	210	192	126	115	363	0	1,423
802000 Administrative Capital	3,870	824	845	928	1,026	885	905	4,051	13,334
803800 Information Technology Program	7,965	3,160	3,500	2,900	2,600	2,400	2,100	7,610	32,235
804500 Surplus Property Disposition	140	300	139	129	0	0	0	0	708
<b>Subtotal</b>	12,091	4,587	4,693	4,148	3,752	3,400	3,368	11,661	47,700
<b>Total</b>	\$12,091	\$4,587	\$4,693	\$4,148	\$3,752	\$3,400	\$3,368	\$11,661	\$47,700

**2014 TIP Cashflow by Subarea**  
(in thousands)

Administrative  
ALL MODES

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
1 - Snohomish	20	53	37	34	22	20	63	0	249
2 - North King	140	300	139	129	0	0	0	0	708
3 - South King	71	188	130	119	78	71	225	0	882
4 - East King	7	18	12	11	7	7	21	0	83
5 - Pierce	17	44	31	28	18	17	53	0	209
6 - Systemwide	11,835	3,984	4,345	3,828	3,626	3,285	3,005	11,661	45,569
<b>Total</b>	<b>\$12,091</b>	<b>\$4,587</b>	<b>\$4,693</b>	<b>\$4,148</b>	<b>\$3,752</b>	<b>\$3,400</b>	<b>\$3,368</b>	<b>\$11,661</b>	<b>\$47,700</b>

**2014 TIP Cashflow by Phase**  
(in thousands)

Phase # and Description	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
09 - Admin Capital	11,594	3,720	4,045	3,678	3,376	3,035	2,755	10,753	42,956
10 - Agency Administration	238	150	150	0	0	0	0	0	538
20 - Prelim Engineering/Env Review	118	358	310	292	226	215	463	442	2,423
40 - Row Acquisition+Permits	140	300	139	129	0	0	0	0	708
90 - Contingency	0	59	50	50	150	150	150	466	1,075
<b>Total</b>	<b>\$12,091</b>	<b>\$4,587</b>	<b>\$4,693</b>	<b>\$4,148</b>	<b>\$3,752</b>	<b>\$3,400</b>	<b>\$3,368</b>	<b>\$11,661</b>	<b>\$47,700</b>

**600025 Environmental Mitigation, Monitoring & Maintenance Managed by: PEPD**

Scope: This project is for post construction monitoring of wetland areas at or adjacent to capital project construction sites. Permit obligations require wetland sites to be monitored for 5 to 10 years after the completion of construction.

Changes in lifetime budget since 2013: Additional \$209 thousand transferred from the D-M Street project to cover additional monitoring scope.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	6-Proceed to Construction	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$1,214	2014 Cost Estimate:	N/A
2014 TIP:	\$1,423		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Snohomish	20	53	37	34	22	20	63	0	249
South King	71	188	130	119	78	71	225	0	882
East King	7	18	12	11	7	7	21	0	83
Pierce	17	44	31	28	18	17	53	0	209
Total	115	303	210	192	126	115	363	0	1,423

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
20 - Prelim Engineering/Env Review	115	303	210	192	126	115	363	0	1,423
Total	115	303	210	192	126	115	363	0	1,423

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Construction	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2019
		2014 Budget Schedule:	2019

Project Risk Assessment



**802000**

**Administrative Capital**

**Managed by: FIT**

Scope: This program funds capital expenditures for assets that support Agency staff through 2023. Such items include administrative facilities, non-revenue administrative fleet, office equipment, space planning and furnishings that meet the accounting threshold for recognizing capital assets at \$5 thousand per item.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$13,334	2014 Cost Estimate:	N/A
2014 TIP:	\$13,334		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	3,870	824	845	928	1,026	885	905	4,051	13,334
Total	3,870	824	845	928	1,026	885	905	4,051	13,334

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
09 - Admin Capital	3,870	765	795	878	876	735	755	3,585	12,259
90 - Contingency	0	59	50	50	150	150	150	466	1,075
Total	3,870	824	845	928	1,026	885	905	4,051	13,334

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment

**803800**

**Information Technology Program**

**Managed by: FIT**

Scope: The Program supports agencywide hardware and software infrastructure and development and implementation of technology solutions to improve operational efficiencies resulting from the Agency's growth. Highlights of 2014 IT projects are: the Enterprise Asset Management System, Intranet Infrastructure Redesign, Safety and Quality Assurance Drug Test Management and Reporting and the implementation of a Records Management System.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$32,235	2014 Cost Estimate:	N/A
2014 TIP:	\$32,235		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	7,965	3,160	3,500	2,900	2,600	2,400	2,100	7,610	32,235
Total	7,965	3,160	3,500	2,900	2,600	2,400	2,100	7,610	32,235

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
09 - Admin Capital	7,723	2,955	3,250	2,800	2,500	2,300	2,000	7,169	30,697
10 - Agency Administration	238	150	150	0	0	0	0	0	538
20 - Prelim Engineering/Env Review	3	55	100	100	100	100	100	442	1,000
Total	7,965	3,160	3,500	2,900	2,600	2,400	2,100	7,610	32,235

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Conceptual Engineering	Schedule Risk Level:	High
Budget Risk Level:	High	2013 Budget Schedule:	2023
		2014 Budget Schedule:	2023

**Project Risk Assessment**

Future year cost estimates are highly conceptual and constitute initial planning estimates.

**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 opportunities. Surplus properties represent properties that may have been used during construction or that were acquired but are not necessary to support active transit service operations.

Changes in lifetime budget since 2013: None

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$708	2014 Cost Estimate:	N/A
2014 TIP:	\$708		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
North King	140	300	139	129	0	0	0	0	708
Total	140	300	139	129	0	0	0	0	708

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
40 - Row Acquisition+Permits	140	300	139	129	0	0	0	0	708
Total	140	300	139	129	0	0	0	0	708

Budget Risk Assessment		Schedule Risk Assessment	
Estimate Type:	Planning	Schedule Risk Level:	Low
Budget Risk Level:	Low	2013 Budget Schedule:	2015
		2014 Budget Schedule:	2015

Project Risk Assessment



## Agency Administration

The 2014 TIP includes history and forecasts for agency administrative operating expenses and reserve fund contributions through 2023, to support the agency's current system expansion programs – Sound Move and ST2.

### AGENCY ADMINISTRATION SUMMARY

(in thousands)

Program	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total TIP
Operating	\$158,479	\$53,409	\$64,627	\$66,618	\$68,984	\$71,435	\$74,030	\$289,311	\$846,892
Reserves	238,082	51,672	51,816	80,326	73,145	83,326	78,040	308,233	964,640
<b>Total</b>	<b>\$396,561</b>	<b>\$105,081</b>	<b>\$116,443</b>	<b>\$146,944</b>	<b>\$142,129</b>	<b>\$154,761</b>	<b>\$152,070</b>	<b>\$597,544</b>	<b>\$1,811,532</b>

### Agency Administrative Operating Expenses

This budget funds agency staff salaries and benefits and staff-related costs that are not directly charged to projects or allocated to service delivery. Costs for Sound Transit staff that work directly on capital projects or in service delivery are included in the budgets for those specific project or mode of operations, respectively. The remaining costs are charged to the agency administration operating program. The costs for agency staff that work indirectly on capital projects is capitalized and the remainder is expensed as a general and administrative expense for the agency.

### Agency Reserves

#### *Systemwide Contingency*

The systemwide contingency was established as part of the Sound Move program and was supplemented in the ST2 plan. This fund is set aside to be available for use by the Board to deal with any unforeseen events.

#### *Capital Replacement*

The capital replacement reserve is increased over time to replace agency capital assets. A replacement schedule, based on expected useful life and future cost of assets, is part of the agency's financial plan.

#### *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, on a case-by-case basis, could authorize use of the emergency/loss fund.

#### *Insurance Systemwide*

The insurance systemwide reserve is forecasted to be funded beginning in 2016, when major new construction gets underway. It will be available to partially pay for builders' risk insurance in conjunction with funds provided by building contractors.

**2014 TIP Cashflow by Budget Approval**  
(in thousands)

Agency Administration

Project Number and Name	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
<b>Operating</b>									
0X002 Agency Administration Operating	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892
<b>Subtotal</b>	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892
<b>Reserve</b>									
0X005 Systemwide Contingency	0	0	0	5,000	0	0	0	0	5,000
1X900 Emergency/Loss	7,928	2,000	2,000	3,000	3,000	3,000	3,000	14,000	37,928
1X901 Insurance Systemwide	0	0	0	5,625	5,625	5,625	6,425	0	23,300
8X500 Capital Replacement	230,154	49,672	49,816	66,701	64,520	74,701	68,615	294,233	898,412
<b>Subtotal</b>	238,082	51,672	51,816	80,326	73,145	83,326	78,040	308,233	964,640
<b>Total</b>	\$396,561	\$105,081	\$116,443	\$146,944	\$142,129	\$154,761	\$152,070	\$597,544	\$1,811,532

**0X002 Agency Administration Operating Managed by: FIT**

Scope: Agency Administration operating funds salary, benefits, and staff-related costs that support our capital program indirectly and the agency overall. This is for the period 2010 - 2023.

Changes in lifetime budget since 2013: None.

Board Approved Capital Budget (in thousands of YOE dollars)		ST2 Total Project Cost Estimate (in thousands of 2013 dollars)	
Phase Gate Passed:	N/A	2008 Cost Estimate:	N/A
Baseline:	\$0	2013 Cost Estimate:	N/A
2013 TIP:	\$0	2014 Cost Estimate:	N/A
2014 TIP:	\$846,892		

**TIP Cashflow (in thousands)**

Subarea	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
Systemwide	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892
Total	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892

Phase	Life to Date	2014	2015	2016	2017	2018	2019	Future	Total
10 - Agency Administration	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892
Total	158,479	53,409	64,627	66,618	68,984	71,435	74,030	289,311	846,892

Budget Risk Assessment	Schedule Risk Assessment
Estimate Type:	Schedule Risk Level:
Budget Risk Level:	2013 Budget Schedule:
	2014 Budget Schedule:

Project Risk Assessment





# APPENDIX A

## Sound Transit 2 Cost Estimates



## Sound Transit 2 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 (2007\$). To enable comparisons between cost estimates, the figures in this appendix have been updated to 2013 constant-year dollars (referred to as "2013\$") based on the agency's August 2013 inflation forecasts. The table on the following page includes information on:

- 2008 cost estimates are from the initial ST2 plan approved by voters in November 2008.
- 2013 cost estimates match the board-endorsed 2013 TIP.
- 2014 cost estimates include all ST2 projects currently funded in the agency's financial plan.

The changes to the cost estimates between 2013 and 2014 include:

- The Seattle to Lakewood Expanded Service increase reflects additional cost to provide wetland mitigation to recently acquired easements.
- The increase in the Sounder ST2 Fleet Expansion project reflects the purchase of nine additional coach/cab cars in support of the expansion of service to the south.
- The changes in the ST3 Planning and HCT Corridor Studies represent a shift in funds to allow for the creation of separate studies and the movement of funds to ST3 long range planning.
- The increase to the East Link project to reflect the additional costs for final design of the Overlake Transit Center to include the integration of changes requested and funded by Microsoft.

## ST2 COST ESTIMATES

(constant 2013 dollars in thousands)

	2008		2013		2014
	Estimate	Inc/(Dec)	Estimate	Inc/(Dec)	Estimate
<b>Link Light Rail</b>					
East Link	\$ 3,124,478	\$ (155,596)	\$ 2,968,882	\$ 3,797	\$ 2,972,889
Northgate Link Extension	1,643,079	172,239	1,815,319	-	1,815,319
Lynnwood Link Extension	1,593,735	(236,075)	1,357,661	-	1,357,661
First Hill Street Car	134,351	(1,509)	132,841	-	132,841
S 200th Link Extension	384,524	(19,708)	364,816	-	364,816
South Corridor HCT - S 200th to KDM Rd	466,347	(50,864)	415,483	-	415,483
South Corridor HCT - KDM Rd to S 272nd St	507,636	(507,636)	-	-	-
HCC to Tacoma Dome - P/E & ROW	40,364	(40,364)	-	-	-
Tacoma Link Expansion	95,011	34,475	129,486	-	129,486
Link Operations & Maintenance Satellite Facility	281,063	(44,174)	236,889	-	236,889
Link Fleet Expansion	567,565	(248,319)	319,245	-	319,245
<b>Total Link Light Rail</b>	<b>8,838,152</b>	<b>(1,097,530)</b>	<b>7,740,622</b>	<b>3,797</b>	<b>7,744,629</b>
<b>Souder Commuter Rail</b>					
Station Access & Demand Study	141,929	(83,899)	58,030	-	58,030
Sumner Station Improvements	45,874	(7,135)	38,739	-	38,739
Puyallup Station Improvements	64,350	(9,888)	54,462	-	54,462
Lakewood Station Improvements	42,630	(6,426)	36,204	-	36,204
Souder Yard & Shops Facility	159,878	(791)	159,087	(835)	158,252
Souder Yard Expansion				835	835
Tukwila Station	39,346	5,816	45,162	-	45,162
Edmonds Station	25,626	(25,626)	-	-	-
Souder South - Expanded Service	169,356	31,633	200,989	7,829	208,818
Souder ST2 Fleet Expansion	35,842	(6,240)	29,602	16,377	45,979
Tacoma Trestle Track and Signal	70,791	(10,894)	59,898	-	59,898
Tacoma Track & Signal	29,324	(293)	29,030	-	29,030
Platform Extensions - South King/Pierce	58,982	(58,982)	-	-	-
Eastside Rail Partnership	56,004	(56,002)	1	-	1
<b>Total Souder Commuter Rail</b>	<b>939,933</b>	<b>(228,727)</b>	<b>711,206</b>	<b>24,206</b>	<b>735,412</b>
<b>Regional Express</b>					
ST Express Bus Base	183,985	(5,970)	178,015	-	178,015
ST Express Mid-Day Bus Storage	-	814	814	-	814
ST Express Fleet Expansion	39,915	4,064	43,979	-	43,979
ST Express Capital Reserve Program	27,391	(27,391)	-	-	-
I-90 Contribution	52,783	-	52,783	-	52,783
Burien - Parking Garage/Transit Center	15,688	(407)	15,281	-	15,281
Bothell - Parking Garage/Transit Center	5,884	(5,884)	-	-	-
<b>Total Regional Express</b>	<b>325,646</b>	<b>(34,775)</b>	<b>290,872</b>	<b>-</b>	<b>290,872</b>
<b>Other</b>					
ST3 Planning	67,204	(39,250)	27,954	8,808	36,762
Ballard to Downtown Seattle HCT Planning Study	-	2,787	2,787	-	2,787
HCT Corridor Planning Studies	-	24,718	24,718	(19,118)	5,600
Central & East HCT Study	-	-	-	4,674	4,674
Lynnwood to Everett HCT Study	-	-	-	2,825	2,825
South King County HCT Study	-	-	-	2,810	2,810
South Corridor Alternatives Planning	80,645	(76,626)	4,019	-	4,019
STart Program	-	26,189	26,189	-	26,189
<b>Total Other</b>	<b>147,849</b>	<b>(62,182)</b>	<b>85,667</b>	<b>-</b>	<b>85,666</b>
<b>Total ST2 Capital Estimate</b>	<b>\$ 10,251,580</b>	<b>\$ (1,423,214)</b>	<b>\$ 8,828,366</b>	<b>\$ 28,003</b>	<b>\$ 8,856,578</b>

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 Lifetime Budgets



## Sound Move Lifetime Budgets

The agency has two voter-approved system expansion programs, Sound Transit 2 (ST2) approved in 2008 and the earlier Sound Move program approved in 1996. Appendix A reflects the cost estimates in constant-year dollars for all projects funded under the ST2 program. This appendix displays adopted lifetime budgets in year-of-expenditure dollars for active Sound Move system expansion projects.

Lifetime 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 projects in Appendix A, Sound Move lifetime budgets are shown for 2008, 2012, and 2013.

The changes between 2013 and 2014 include:

### **Link Light Rail**

We expect to close both the Initial Segment and the Airport Link projects in 2014. Project savings has been recognized during the life of the project when practicable and in 2014 will reduce again by \$6.0M for the Initial Segment project and by \$0.4 million for the Airport Link project.

### **Souder Commuter Rail**

We expect to close three projects in 2014 and realize the following project savings:

- Layover – \$3.7 million
- M Street to Lakewood track and Signal – \$0.9 million
- South Tacoma Station – \$0.1 million

### **Regional Express**

We expect to close the following projects in 2014 with project savings:

- 85<sup>th</sup> Corridor, Kirkland – \$0.4 million
- Mountlake Terrace Freeway Station – \$3.2 million
- Strander Boulevard Improvements – \$0.1 million
- Totem Lake Freeway Station – \$0.4 million

## ADOPTED LIFETIME BUDGETS FOR ACTIVE SOUND MOVE PROJECTS

Year of Expenditure (YOE) Dollars (in thousands)

	2008	Inc/(Dec)	2013	Inc/(Dec)	2014
<i>Link Light Rail</i>					
University Link	\$ 1,614,007	\$ 142,000	\$ 1,756,007	\$ -	\$ 1,756,007
Initial Segment	2,070,000	25,618	2,095,618	(6,046)	2,089,572
Airport Link	243,600	18,424	262,024	(374)	261,650
DSTT Capital Costs	24,919	(1,200)	23,719	-	23,719
Tacoma Link	80,416	(3,319)	77,097	-	77,097
<b>Total Link Light Rail</b>	<b>4,032,942</b>	<b>181,523</b>	<b>4,214,465</b>	<b>(6,420)</b>	<b>4,208,045</b>
<i>Sounder Commuter Rail</i>					
Willow Creek Environmental Mitigation	1,001	(167)	834	-	834
M Street to Lakewood Track and Signal	73,601	7,941	81,542	(888)	80,654
D Street to M Street Track and Signal	76,025	85,256	161,281	(209)	161,072
Layover	24,424	9,523	33,947	(3,685)	30,262
Mukilteo Station, South Platform	9,371	8,942	18,313	-	18,313
South Tacoma Station	16,476	(748)	15,728	-	15,728
Edmonds Station	12,929	(2,050)	10,879	(86)	10,793
Lakewood Station	32,920	(3,723)	29,197	(8)	29,189
Tukwila Station (see Notes)	-	-	-	-	-
Permitting and Mitigation	10,288	(3,772)	6,516	-	6,516
<b>Total Sounder Commuter Rail</b>	<b>257,035</b>	<b>101,202</b>	<b>358,237</b>	<b>(4,876)</b>	<b>353,361</b>
<i>Regional Express</i>					
Regional Express Program Reserve	22,620	3,141	25,761	995	26,756
I-90 2-Way Transit & HOV Op, Stage 1	25,782	(2,334)	23,448	-	23,448
I-90 2-Way Transit & HOV Op, Stage 2	19,372	3,456	22,828	-	22,828
I-90 2-Way Transit & HOV Op, Stage 3	1,722	62,500	64,222	-	64,222
Ash Way Transit Access	18,993	(359)	18,634	(4)	18,630
Federal Way Hov Access, S317th	32,618	(3,844)	28,774	-	28,774
Totem Lake Freeway Station	80,339	(6,778)	73,561	(423)	73,138
85th Corridor, Kirkland	6,015	-	6,015	(425)	5,590
Kirkland Transit Center	13,300	(2,341)	10,959	-	10,959
Renton HOV Access/N8th	67,075	(62,570)	4,505	-	4,505
Rainier Avenue Arterial Improvements	15,717	-	15,717	-	15,717
Strander Boulevard Improvements	4,219	-	4,219	(146)	4,073
Mountlake Terrace Freeway Station	25,545	6,872	32,417	(3,157)	29,260
S Everett Freeway Station	31,209	(2,851)	28,358	-	28,358
Federal Way Transit Center	39,455	-	39,455	-	39,455
Canyon Park Freeway Station	10,728	(967)	9,761	-	9,761
Issaquah Transit Center/SR900	29,482	(520)	28,962	-	28,962
Totem Lake Transit Center	7,743	(1,484)	6,259	-	6,259
Newcastle Transit Improvements	7,223	(3,096)	4,127	-	4,127



	<b>2008</b>	<b>Inc/(Dec)</b>	<b>2013</b>	<b>Inc/(Dec)</b>	<b>2014</b>
Mercer Island Park and Ride	16,829	(2,834)	13,995	-	13,995
SR522 HOV Enhancements/Bothell	8,601	(355)	8,246	(4)	8,242
<b>Total Regional Express</b>	<b>484,587</b>	<b>(14,364)</b>	<b>470,223</b>	<b>(3,164)</b>	<b>467,059</b>
STart Program	18,100	16,100	34,200	-	34,200
<b>Total Active Sound Move Projects</b>	<b>\$ 4,792,664</b>	<b>\$ 284,461</b>	<b>\$ 5,077,125</b>	<b>\$ (14,460)</b>	<b>\$ 5,062,665</b>

Notes: Numbers may not add due to rounding.

Sound Move Project lifetime budgets are expressed in Year of Expenditure (YOE) dollars.

Table includes Sound Move projects only.

Tukwila Station is a project recognized in ST2, but Sound Move did fund the project through Final Design.



## APPENDIX C

### Sound Transit Project Phases



## Sound Transit Project Phases

Capital projects are typically planned and executed in phases. Project teams track and report on projects costs relative to the activities and deliverables in each. The phases of capital projects include:

### **01 – Operations+Maintenance**

Costs to operate and maintain capital assets where the budget to do so is part of an established lifetime budget. Currently used to maintain Sound Transit's public art assets.

### **02 – Operations+Maintenance-Agency**

Projects costs that cannot be capitalized. Currently used for Research and Technology project costs incurred prior to the establishment of project scope.

### **09 – Administrative Capital**

Design, development and implementation or procurement of agency assets such as non-revenue vehicle fleet, IT systems, furniture, and equipment.

### **10 – Agency Administration**

Administrative expenditures occur throughout the life of the project and include costs for direct labor by Sound Transit staff (staff dedicated to specific projects) and other direct charges to the project necessary for project execution.

### **20 – Preliminary Engineering & Environmental Review**

The budget for this phase also includes professional services to complete the preliminary engineering and environmental assessments and evaluations. Preliminary engineering identifies project requirements and defines the project work scope. This includes preliminary design studies, permitting requirements, data collection, public involvement, legal and technical documentation, cost estimates, and assessment of alternatives. The environmental review includes achievement of all necessary environmental permits.

### **26 – Research & Technology**

Implement new transit technologies focused on systemwide safety, security and communications with passengers.

### **30 – Final Design & Specification**

The final design phase includes professional consultant activities to complete design and full construction plans and specifications, legal and technical documentation, environmental clearance, constructability review, value engineering, data collection, advertising, assessment of alternatives related to project design, and bid reviews.

### **35 – Third Parties**

Third party expenditures occur through the life of the project and include agreements with other governmental units to reimburse their costs for review of alternatives, design review, and construction monitoring and inspection. In certain cases, when Sound Transit is a funding partner rather than the lead agency, it includes Sound Transit's funding obligation to the lead agency.

**40 – Right-of-Way (ROW) Acquisition & Permits**

ROW includes the cost to purchase real property required for construction and construction staging, easements, rights-of-way, and any residential or commercial relocations. This phase include budget for negotiating the purchase price, relocation costs, surveys, appraisals, environmental audits, permits, legal costs, maps, charts, and all permits not included under the general construction contracts.

**50 – Construction**

Construction covers project construction contracts, professional and technical assistance, advertising, legal and technical documentation, inspection, testing, and permitting. In addition, the construction budget includes service startup, commissioning of all systems, and training.

**55 – Construction Services**

Construction Services includes construction management and other professional services in support of the Agency's management of construction activities.

**61 – Art**

Procurement and installation of public art at stations and along guideways.

**70 – Vehicles**

Procurement, manufacture, delivery, testing, and commissioning of revenue vehicles, spare parts, and warranty support. Also includes procurement of non-revenue vehicles.

**80 – Startup and Testing**

This phase tests new systems, new schedules, and various specific equipment. This phase includes the training of personnel before the completion of the project to identify issues and correct them to enable a smooth transition to operations and the close out of the project.

**90 – Contingency**

Contingency provides a funding source to address general project risks, such as market fluctuations and changes in regulatory requirements. It also covers unforeseen expenses and cost estimate variances.

## APPENDIX D

### Subarea Allocations





## 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 voter-approved program. 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 Finance 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 2013 as well as new projects for 2014. Any additional projects are added at the end of the year when subarea allocations are calculated.

## Revenues and Financing Sources

### Sources

Description	Driver
Sales & Use Tax	Department of Revenue Location Code
Motor Vehicle Excise Tax	Zip Code Location
Rental Car Tax	Department of Revenue Location Code/County Level
Capital Grants	Project Costs or Board Designation
Operating Grants	Operating Uses by Mode
Passenger Fares	(see next section)
Interest Earnings	Financial Plan
Other Revenue	Location/Modal Operating Use Drivers (see Operating Uses section below)
Bond Proceeds	Financial Plan

### PASSENGER FARES

Description	Driver
Souder Fares	Station Boardings
ST Express Bus Fares	Route Boardings/Platform Hours
Central Link Light Rail Fares	Station Boardings
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 Souder Operations	Vehicle Miles

## ST EXPRESS BUS 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
First Hill Link Streetcar	Location
Tacoma Link Expansion	Location
Link Operations & Maintenance Satellite Facility	ST2 Adopted Financial Plan
Northgate Link Extension	Location
Lynnwood Link Extension	ST2 Adopted Financial Plan
University Link Extension	Location
Initial Segment	2009 Sound Move Reported Rules
Airport Link	Location
S. 200 <sup>th</sup> Link Extension	Location
Federal Way Transit Extension	Location
East Link Extension	ST2 Adopted Financial Plan Location
Overlake Village Bridge	Location

System Expansion – Sounder Commuter Rail Projects	Driver
Station Access & Demand Study	ST2 Adopted Financial Plan
Eastside Rail Partnership	Location
Sounder Yard & Shops Facility	ST2 Adopted Financial Plan
Puyallup Station Improvements	Location
Sumner Station Improvements	Location
Lakewood Station Improvements	Location
Tacoma Trestle Track & Signal	Location
Sounder Yard Expansion	Track Miles
Willow Creek Environmental Mitigation	Location

<b>System Expansion – Sounder Commuter Rail Projects</b>	<b>Driver</b>
M St.-Lakewood Track & Signal	Location
Permitting/Environmental Mitigation	Location
D St-M St Track & Signal	Location
Layover	Vehicle Miles
Mukilteo Station, South Platform	Location
Edmonds Station	Location
Tukwila Station	Location
South Tacoma Station	Location
Lakewood Station	Location
Sounder South Expanded Service	ST2 Adopted Financial Plan
Sounder ST2 Fleet Expansion	ST2 Adopted Financial Plan

<b>System Expansion – ST Express Bus Projects</b>	<b>Driver</b>
ST Express Bus Base	ST2 Adopted Financial Plan
ST Express Mid-Day Bus Storage	Location
Burien Transit Center Parking Expansion	Location
Ash Way Transit Access	Location
Federal Way HOV Access/S 317 <sup>th</sup>	Location
Totem Lake Freeway Station	Location
85 <sup>th</sup> Corridor, Kirkland	Location
Kirkland Transit Center/3 <sup>rd</sup>	Location
Renton HOV Access/N 8 <sup>th</sup>	Location
Rainier Avenue Arterial Improvements	Location
Strander Boulevard Extension	Location
Mountlake Terrace Freeway Station	Location
S. Everett Freeway Station	Location
Federal Way Transit Center	Location
Canyon Park Freeway Station	Location
Issaquah Transit Center/SR900	Location
Totem Lake Transit Center	Location
Newcastle Transit Improvements	Location
Mercer Island Park & Ride	Location
I-90 Two-Way Transit & HOV Operations, Stage 1	Location
SR 522 HOV Enhancements/Bothell	Location
I-90 Two-Way Transit & HOV Operations, Stage 2	Location
I-90 Two-Way Transit & HOV Operations, Stage 3	Location

<b>System Expansion – Other</b>	<b>Driver</b>
ST3 Planning	Financial Policies
South Corridor Alternatives Planning	Location
Ballard to Downtown Seattle HCT Planning Study	Financial Policies
HCT Corridor Planning Studies	Financial Policies
Central & East HCT Study	Financial Policies
Lynnwood to Everett HCT Study	Financial Policies
South King County HCT Study	Financial Policies
Fare Integration	Financial Policies
Fare Administration	Financial Policies
Research and Technology	Financial Policies
STart	Location
Passenger Information System/CCTV	Location
Ticket Vending Machines	Location

<b>Enhancement Projects</b>	<b>Driver</b>
Bus Maintenance Facility	Platform Hours
Federal Way Transit Center Lighting Retrofit	Location
Auburn Garage Lighting Retrofit	Location
TOD Property Disposition	Location
Positive Train Control	Location
LRV On Board Energy Storage	Location
Noise Abatement	Location
Security Enhancements	Location
ST Express Mobile Communications	Platform Hours
Parking Enhancements	Location
Bike Locker Program	Location
Link OMF Laydown Area Improvements	Boardings/Track Miles
Link LRV Wash Bay Doors	Boardings/Track Miles
Central Link Radio Upgrade	Boardings/Track Miles
ST Express Security Camera Retrofit	Platform Hours
HVAC for Traction Power Sub Station (TPSS)	Boardings/Track Miles
Central Link HVAC – Instrument House & UPS Room	Boardings/Track Miles
Central Link Card Readers	Boardings/Track Miles
Central Link OMF UPS Room Improvement	Boardings/Track Miles
Central Link Overhead Catenary System Tie Switch	Boardings/Track Miles

<b>Enhancement Projects</b>	<b>Driver</b>
Central Link Benchtest Equipment	Track Miles/Boardings
Security Radios	Securitas Service
Non Revenue Support Vehicles	Boarding/ Track Miles
Central Link Switch Heaters	2009 Sound Move Reported Rules; Vehicle Maintenance
DSTT South Access Security	Location
Regional Parking Pilot Project	Financial Policies
Pierce Transit Radio System Upgrade	Platform Hours
Tacoma Link Fare Collection	Location
Signage Improvements	Location

<b>Rehabilitation &amp; Replacement Projects</b>	<b>Driver</b>
Beacon Avenue Paving	Location
Link Station Paver Replacement	Location
Tacoma Dome Station	Location
ST Express Fleet Replacement	Platform Hours
Small Works Program	Location
Tacoma Link Auxiliary Power Supply Replacement	Location
Tacoma Link LRV Communications Upgrade	Location
Central Link Control Center Phone Network	Boardings/Track Miles
Federal Way: Post Tension Cable Repair	Location
Souder Vehicle Overhaul Program	Vehicle Miles
Station Midlife Refurbishment Program	Location

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

### Systemwide Uses

<b>Description</b>	<b>Driver</b>
Agency Administration	Financial Policies

### Debt Service

<b>Description</b>	<b>Driver</b>
Debt Service	Financial Plan





## APPENDIX E

### Reconciliation of the Proposed 2014 Transit Improvement Plan to the Endorsed 2014 Transit Improvement Plan



## Reconciliation of the Proposed 2014 Transit Improvement Plan to the Endorsed 2014 Transit Improvement

The Proposed 2014 Transit Improvement Plan (TIP) was submitted for Board review in September 2013. The TIP contains the projected expenditures for active phases of capital and operating projects and lifetime budgets for baselined capital project and operating projects with fixed lifetime budgets. The TIP also includes summary level six year forecasts for Service Delivery expenses by mode that reflect detailed service plans contained in the 2014 Service Implementation Plan (SIP). By Resolution No. R2013-33, the Board endorsed the 2014 TIP on December 19, 2013.

There are four circumstances when the lifetime project budget would change from the Proposed to the Endorsed TIP:

1. Changes to project budgets due to non-material errors.
2. Projects that are completed and in closeout, when updating project cashflows to reflect actual historic capital outlays results in a project surplus or deficit.
3. Projects for which budget amendments to the proposed budget were adopted by the Board.
4. Budget amendments adopted by the Board prior to or subsequent to budget adoption.

### 1. Changes to Project Budgets Due to Non-material Corrections

Resolution No. R2013-33, section 4, authorizes the CEO to correct the budget for “non-material errors” to be consistent with Board actions. The following projects had non-material corrections:

Project	Lifetime Budget as reported in Proposed TIP (\$000) *	Revised Lifetime Budget (\$000)	Change to Project Budget (\$000)	Notes
Lakewood Station Improvements (300019)	349	404	55	The final cost of work done to date on the project exceeded the estimate that was included in the proposed budget by \$55 thousand. The project budget is increased by \$55 thousand to provide local match funds for a potential grant, as directed by the Board.
East King County Project Reserve (5x000)	27,131	27,126	(5)	Lifetime budget reduction is a reflection of lower savings from the Rainier Avenue Arterial Improvements project where actual costs exceeded the estimated project costs.

\* Lifetime Budget shown in this table for these projects reflect the amendments approved by the board, the changes here therefore only reflect budget in addition to these approved amendments.

## 2. Updated Project Cashflows Based on Actual Expenditures in 2013

The following project had changes to the total lifetime budget as a result of incorporating actual 2013 capital outlays into the project.

Project	Lifetime Budget as reported in Proposed TIP (\$000)	Revised Lifetime Budget (\$000)	Change to Project Budget (\$000)	Notes
Rainier Ave Arterial Improvements (5X151)	15,342	15,348	5	Actual costs exceeded estimated project costs.

Note: There may be insignificant variances due to rounding.

As a result of incorporating actual 2013 capital outlays, the following projects contain changes to the project cashflow between individual phases, with no change to either the total project fiscal year 2014 budget or the total project lifetime budget.

### PROJECTS WITH CHANGES TO CASHFLOW BETWEEN PHASES BUT NO CHANGE TO EITHER FISCAL YEAR 2014 OR LIFETIME BUDGETS

<p><b>System Expansion:</b>            Airport Link (4X400)            Tacoma Link Expansion (400008)            Tacoma Trestle Track &amp; Signal (300021)            Sounder ST2 Fleet Expansion (7X755)            Research &amp; Technology (5X410)</p>	<p><b>Rehabilitation &amp; Replacement:</b>            Beacon Avenue Paving (4X360)            Link Station Paver Replacement (4X370)            Small Works Program (7X740)</p>
<p><b>Enhancement:</b>            Noise Abatement (4X340)            Central Link Card Readers (700775)            ST Express Mobile Communications (7X745)            Security Radios (70779)            TOD Property Disposition (804100)</p>	<p><b>Administrative:</b>            Information Technology Program (803800)</p>

### 3. Changes to Lifetime Project Budgets Reflected in Amendments (Attachment C, R2013-33)

As a part of the TIP review process, Board committees reviewed the Proposed 2014 TIP amendments, and cash flow change requests before the final approval of the TIP. These changes approved by the Board as part of the review process are included in the following reconciliation.

Project	Lifetime Budget as reported in Proposed TIP (\$000)	Revised Lifetime Budget (\$000)	Change to Project Budget (\$000)	Notes
<b>System Expansion - Link</b>				
Initial Segment (4X300)	2,089,572	2,090,518	946	Reduction to lifetime budget savings to fund remaining follow-on work to complete the project.
East Link (4X600)	779,619	794,319	14,700	Lifetime budget increase will fund completion of final design and construction of entrance ramp from I-90 to Bellevue Way.
Link Operations and Maintenance Satellite Facility (400009)	32,513	32,557	44	Lifetime budget adjustment due to protective property acquisition that took place in October 2013.
<b>System Expansion - Sounder</b>				
Lakewood Station Improvements (300019)	1,155	349	(806)	Uncommitted lifetime budget of \$806,399 defunded from the project.
Tacoma Trestle Track and Signal (300021)	8,567	10,255	1,688	Additional \$1.688M to accelerate property/ROW acquisitions.
<b>System Expansion - ST Express</b>				
East King County Project Reserve (5x000)	26,756	27,131	375	Defunded Lifetime Budgets from EKC projects are transferred to EKC Project Reserve.
Rainier Ave Arterial Improvements (5X151)	15,717	15,342	(375)	This project is being closed out, lifetime budget reduced by \$375,025.
<b>Enhancement</b>				
Central Link Card Readers (700775)	373	423	50	\$50K increase to cover additional administration, inspection costs and provide contingency for the project.
Security Enhancements (7X743)	2,417	2,498	81	Additional \$81K for final contract to complete project. Costs are higher than estimated (3 years ago).
Signage Improvements (700793)	0	491	491	New project for signage improvements recommended for Airport Station, connection between link station and Sea-Tac airport, and Westlake station entrances and mezzanine.
Tacoma Link Fare Collection Implementation (600029)	0	514	514	New project created for installation of TVMs at Tacoma Link station for fare collection.

Note: There may be insignificant variances due to rounding.

#### 4. Prior Budget Amendments Adopted by the Board

The following lifetime project budget amendments were adopted by the Board prior to budget adoption:

Project	Lifetime Budget as reported in Proposed TIP (\$000)	Revised Lifetime Budget (\$000)	Change to Project Budget (\$000)	Notes
East Link (4X600)	779,619	783,647	4,028	Resolution R2013-31 increased 2013 lifetime budget for Overlake Transit Center improvements funded by an agreement with the Microsoft Co.
Sounder Vehicle Overhaul Program - 700770	17,412	22,450	5,038	Resolution R2013-17 increased 2013 lifetime budget for Sounder Vehicle Overhaul Program funded by a federal grant and agency capital replacement reserves.

Note: There may be insignificant variances due to rounding.

## APPENDIX F

### List of Charts, Maps, and Tables





## List of Charts, Maps, and Tables

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# APPENDIX G

## Glossary



## Glossary of Terms

*The following definitions reflect how the terms are used at Sound Transit and in this document.*

**ADA** – Americans with Disabilities Act. Federal law passed in 1990 that prohibits discrimination in services, facilities and employment against individuals with disabilities.

**Adopted Budget** – The Board-approved budget and capital plan for Sound Transit for the current fiscal year

**Baseline** – A plan, design, specification, contract, or other approved document or configurations against which actual performance is measured. Baseline can also refer to a schedule or budget used for management control and reporting purposes.

**BAT** – Business and Transit Access

**BNSF** – Burlington Northern Santa Fe Railway

**Board** – The Sound Transit Board of Directors

**Boarding** – The number of one-way passenger trips between two points on a single vehicle. Synonymous with unlinked passenger trip, rider, or passenger.

**Capital Asset** – Individual assets costing \$5,000 or more and having useful lives greater than one year. Also, significant alterations, renovations, or structural changes that increase the usefulness of a Sound Transit owned asset, enhance its efficiency, or prolong its useful life by more than one year.

**Capital Outlay** – Expense which results in the acquisition of or addition to fixed assets

**Capital Projects** – Projects that purchase or construct capital assets

**CCTV** – Closed circuit television

**CEA** – Communication and External Affairs Department

**CEO** – Sound Transit Chief Executive Officer

**CFO** – Sound Transit Chief Financial Officer

**COLA** – Cost-of-Living Adjustment

**Contingency** – A budgetary reserve put aside for emergencies or unforeseen expenses

**COP** – Citizen Oversight Panel

**CPI** – Cost Performance Index

**DBE** – Disadvantaged Business Enterprise

**Debt Service** – Payment of interest and principal

**DECM** – Design, Engineering, and Construction Management Department

**Department** – Highest organizational unit of Sound Transit, consisting of Executive; Finance and Information Technology; Legal; Design, Engineering, and Construction Management; Planning, Environment, and Project Development; Operations; and Communications and External Affairs.

**Depreciation** – A method by which the costs of property and equipment are systematically and rationally allocated over their useful life.

**Division** – Organizational sub-unit within departments

**DPO** – Diversity Program Office

**DSTT** – Downtown Seattle Transit Tunnel

**EEO** – Equal Employment Opportunity

**EIS** – Environmental Impact Statement. A study of the impacts of a major project on the environment and surrounding areas, required for any capital construction project for which federal funds are used.

**Expense** – A decrease in net current assets. Expenses include salaries and benefits, administrative expenses, debt service, and those current operating costs that require the use of current assets.

**EXEC** – Executive Department

**FCC** – Federal Communications Commission

**FFGA** – Full Funding Grant Agreement

**Fiscal Year** – A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and results of its operations. Sound Transit's fiscal year is concurrent with the calendar year.

**FIT** – Finance and Information Technology Department

**FRA** – Federal Railroad Administration

**FTA** – Federal Transit Administration

**FTE** – Full Time Equivalent employee. The fractional equivalent of one full-time employee working a 40-hour work week for one calendar year.

**FY** – Fiscal Year

**GFOA** – Government Finance Officers Association

**GIS** – Geographic Information Services

**HCT** – High Capacity Transit

**HOV** – High-Occupancy Vehicle

**IT** – Information Technology

**KCM** – King County Metro

**kVA** – Kilovolt-ampere

**LRV** – Light Rail Vehicle

**MMIS** - Maintenance Management Information System

**MVET** – Motor Vehicle Excise Tax

**NTD** – National Transit Database

**O&M** – Operations and Maintenance

**OCS** - Overhead Contract System

**OEM** – Original Equipment Manufacturer

**OMF** – Operations Maintenance Facility

**OMSF** – Operations & Maintenance Satellite Facility

**OPS** – Operations Department

**ORCA** – One Regional Card for All. A stored-value smart card used for payment of public transit fares in the Central Puget Sound region.

**Paratransit** – The comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed-route (bus and rail) service.

**PE** – Preliminary Engineering

**PE/ED** – Preliminary Engineering and Environmental Documentation

**PEPD** – Planning, Environment, and Project Development Department

**PLA** – Project Labor Agreement

**Proposed Budget** – The recommended and unapproved Sound Transit budget submitted by the CEO to the Board.

**PTC** – Positive Train Control

**Revenues** – Increases in proprietary fund type net total assets from other than expense refunds and capital contributions.

**REX** – Regional Express

**RFP** – Request for Proposal

**ROD** – Record of Decision

**ROIP** – Rail Operations Insurance Program

**ROW** – Right-of-Way

**RSIP** – Residential Sound Insulation Program

**SIP** – Service Implementation Plan. This document is produced annually by the Service Planning division and approved by the Board. It documents the development of each mode of service, describes any service changes planned for the year, and contains preliminary service proposals and financial projections for the following five years.

**SODO** – South of downtown Seattle

**Sound Move** – Voter-approved plan to build a high-capacity public transit system

**Sound Transit** – The Central Puget Sound Regional Transit Authority

**SPI** – Schedule Performance Index

**SR** – State Route

**ST2** – Sound Transit 2 – the second phase of Sound Transit’s plan for mass transit expansion

**ST3** – Sound Transit 3 – the third phase of Sound Transit’s plan for mass transit expansion

**STart** – Sound Transit Art Program – Public Art

**STU** – Sound Transit University Program

**Subarea** – Five subareas of the Sound Transit District defined for planning and budgeting purposes consisting of Snohomish County, North King County, East King County, South King County, and Pierce County.

**TCO** – Total Cost of Ownership

**TGT** – Technology Governance Team

**TIFIA** – Transportation Infrastructure Financing and Innovation Act. A direct loan, loan guarantee, and standby line of credit program allowing the USDOT to provide credit assistance of up to 33 percent of the construction costs of a regionally or nationally significant surface transportation project. Loans are made at U.S. Treasury rates and may be repaid over as long as 35 years after substantial completion of the project.

**TIP** – Transit Improvement Plan. This document provides projected capital and operating expenditures for the construction and operation of the Sound Transit regional transit system in the central Puget Sound. The TIP contains information on scope and budget as well as changes in budget and schedule for all active phases of both capital and operating programs.

**TOD** – Transit Oriented Development

**TPSS** – Traction Power Sub Station

**TVM** – Ticket Vending Machine

**UPS** – Uninterrupted Power Supply

**UW** – University of Washington

**WSDOT** – Washington State Department of Transportation

**YOE** – Year of Expenditure