



Central Puget Sound Regional Transit Authority

October 2017 Financial Plan

TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	Description of Sound Transit	1
1.1.1	Existing Sound Transit Service	1
1.1.2	Sound Transit District.....	1
1.1.3	Governance	2
1.1.4	Relationship to Local Transit Systems	3
1.1.5	Financial Structure	3
1.1.6	Financial Policies and Controls	3
1.1.7	Financial Oversight	4
1.1.8	Recent Major Agency Financial Updates	5
1.2	Summary of Financial Plan.....	5
3	REVENUE SOURCES	7
3.1.1	Approved Local Taxes.....	7
3.1.2	Grants.....	8
3.2	Borrowing, Debt Levels and Ratings	9
3.2.1	Debt Financing.....	9
3.2.2	Debt Financing Capacity	9
3.2.3	Bonding Assumptions	9
3.2.4	Debt-to-Equity Ratio	10
4	AGENCY-WIDE CAPITAL PLAN	10
4.1.1	ST Express Bus.....	10
4.1.2	Sounder Commuter Rail.....	11
4.1.3	Tacoma Link.....	11
4.1.4	Link Light Rail.....	11
4.1.5	Bus Rapid Transit.....	12
4.1.6	System-Wide Activities	12
4.1.7	Debt Service	12
4.1.8	Asset Management	12
5	SERVICE AND OPERATING PLAN	13
5.1	Operating Revenues.....	13
5.1.1	Ridership and Fare Revenue	13
5.1.2	Interest Earnings.....	14
5.1.3	Other Operating Revenues.....	14
5.2	Operating and Maintenance Costs	14
5.2.1	Agency O&M Costs.....	14
5.3	Service Implementation Plan	15
5.3.1	ST Express Bus.....	15
5.3.2	Sounder Commuter Rail.....	15
5.3.3	Tacoma Link Light Rail.....	16
5.3.4	Link Light Rail.....	16
5.3.5	Bus Rapid Transit (BRT).....	17
6	OTHER KEY PLANNING ASSUMPTIONS.....	17
6.1	Inflation Forecasting	17
6.2	Summary of Financial Assumptions	17
7	CASH FLOW ANALYSIS.....	18
7.1	Financial Risks.....	18
7.2	Key Risk Areas	18

7.3	Contingencies	19
7.4	Federal Funding Shortfalls.....	19
8	SUMMARY OF SOURCES AND USES OF FUNDS (2017 – 2041)	20
8.1	Sources of Funds.....	20
8.2	Uses of Funds.....	20
9	APPENDICES.....	21
A.	Sound Transit Sources and Uses Summary (2017 through 2041)	21
B.	Sound Transit Operating Statement	21
C.	Sound Transit Sources and Uses Statement.....	21
D.	Sound Transit Cost Indices	21
E.	Sound Transit Supporting Graphs	21

1 INTRODUCTION

This report reviews the financial plan for the Central Puget Sound Regional Transit Authority (herein, “Sound Transit”) and reflects the agency’s plan to fulfill its mission to implement affordable high-capacity transit programs approved by voters in 1996 (Sound Move), 2008 (ST2) and 2016 (ST3). The plan assumes completion of all affordable capital projects by year end 2041 and provides sufficient funding to ensure continued operation and maintenance of the transit system thereafter. This report provides information on costs, schedule, and funding sources for Sound Transit’s total capital and operating plan.

1.1 Description of Sound Transit

Sound Transit was created in 1993 pursuant to State enabling legislation (RCW 81.112). It is a special-purpose metropolitan municipal corporation, responsible for the construction and operation of high-capacity public transportation systems within its district. The Sound Transit district comprises five subareas within the contiguous urbanized areas of Snohomish, King, and Pierce counties (see Figure 1). The district is home to approximately 2.9 million people or 80% of the three-county population.

1.1.1 Existing Sound Transit Service

In November 1996 voters approved a Regional Transit System Plan – Sound Move – which incorporates elements of commuter rail, light rail, and express bus service into a comprehensive high-capacity regional transit system. Additional funding for new services were approved in 2008 (ST2) and 2016 (ST3). To date, the Transit Authority has implemented the following services:

- **ST Express Bus:** 28 express bus routes with a fleet of 307 buses operating approximately 783,000 platform hours. ST Express bus had approximately 18.5 million boardings in 2016.
- **Sounder Commuter Rail:** 82.5 miles of commuter rail service providing thirteen daily round-trips to the south between downtown Seattle and Tacoma. Eight of these round trips extend service to Lakewood. To the north, there are four daily round-trips between Seattle and Everett. Sounder commuter rail had approximately 4.3 million boardings in 2016.
- **Link Light Rail:** The Link Corridor has a total alignment of 20 miles with 16 stations, operating from the University of Washington to Angle Lake. Link light rail had 19.1 million boardings in 2016.
- **Tacoma Link:** A 1.8-mile light rail line in Tacoma serving approximately 940,000 annual passenger boardings.
- **Station/ Transit Access:** Associated stations, transit centers, park-and-ride lots and transit access ramps.

1.1.2 Sound Transit District

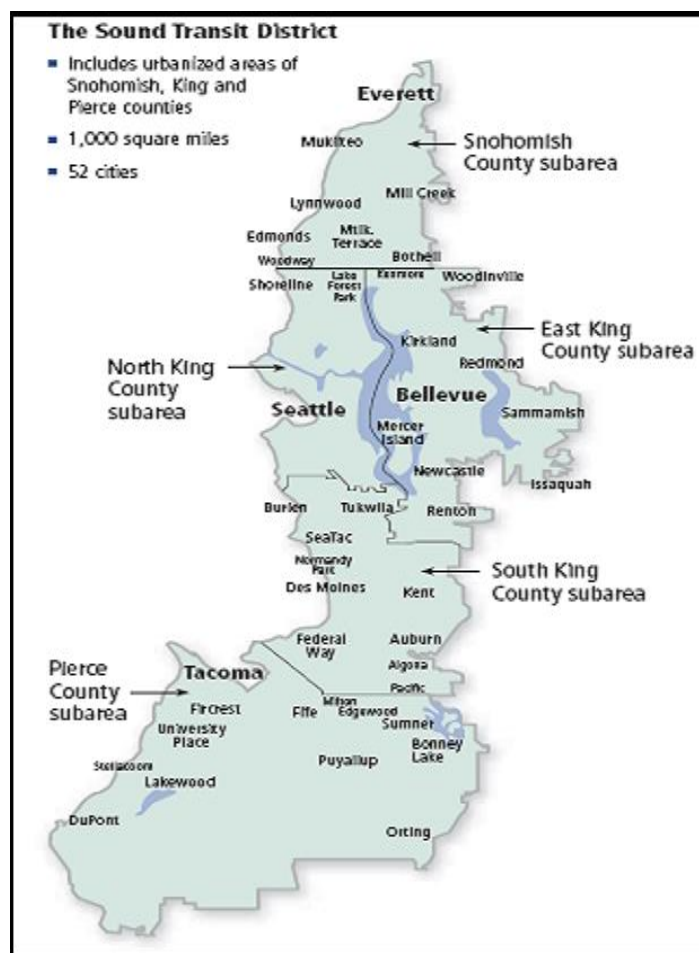
The Sound Transit District includes the most congested urban areas of King, Pierce, and Snohomish counties. The Sound Transit District boundary lines generally follow the urban growth boundaries created by each county in accordance with the state Growth Management Act. The Sound Transit District:

- Shows the area where high-capacity transit services will be added to the transportation system;
- Establishes representation on the Sound Transit Board as prescribed by state law;
- Shows the area in which local taxes authorized by voters to help finance Sound Move, ST2 and ST3 are collected; and
- Demonstrates how regional services and facilities can support growth management goals and adopted land use plans.

The Sound Transit District is divided into five geographic subareas for planning and budgeting purposes.

The system components in Sound Move, ST2, and ST3 address unique needs in each of these subareas. Local tax revenues and related debt for projects and services are utilized to benefit the subareas generally in proportion to the level of revenues each subarea generates.

Figure 1: Sound Transit District



1.1.3 Governance

Sound Transit is governed by an eighteen-member Board consisting of the Secretary of Transportation for the State of Washington and seventeen locally elected city and county officials who are appointed by the legislative authority of each of the member counties, based on nominations from the respective county executives. Each county has one representative per 164,000 residents within the Sound Transit district. Currently, there are ten representatives from King County, four from Pierce County, and three from Snohomish County.

The Board structure defined in RCW 81.112 was designed to establish linkages between Sound Transit and other governmental entities that will foster efficient coordination and delivery of transportation services. As noted above, the WSDOT Secretary automatically serves on the Sound Transit Board and of the county appointees, one must be an elected official from the county's largest city, and at least half the appointees shall also be members of the legislative authority of a local transit system.

Major actions of the Board require a two-thirds majority. These actions are defined by State law to include at least the following: System plan adoption and amendment, system phasing decisions, authorization of annexations, modification of Board composition, and employment of the Chief Executive Officer.

1.1.4 Relationship to Local Transit Systems

Sound Transit is an independent regional transit authority. Four other transit agencies operate public transit services within the Sound Transit district: King County Metro, Pierce Transit, Community Transit, and Everett Transit. Sound Transit's Regional Express Bus services are operated by King County Metro, Pierce Transit and Community Transit under joint operating agreements. In addition, Sound Transit has contracted with King County Metro to operate the current Link light rail system. The Sounder commuter rail service is operated through a contract with Burlington Northern Santa Fe (BNSF). Sounder commuter rail cars and locomotives are maintained under a contract with Amtrak.

1.1.5 Financial Structure

Sound Transit financial statements are maintained in accordance with methods prescribed by the Washington State Auditor under authority of RCW Chapter 43.90. Sound Transit uses Budgeting, Accounting, and Reporting Systems for proprietary-type districts in the State of Washington as well as Generally Accepted Accounting Principles established by the Government Accounting Standards Board. Propriety funds are accounted for using the accrual basis of accounting. Therefore, revenues are recognized when earned, and expenses are recognized when incurred. Fixed assets are capitalized when purchased, and long-term liabilities are accounted for as incurred. Funds are accounted for on a cost of service or capital gains measurement focus. This means all assets and all liabilities (whether current or non-current) associated with Sound Transit's activities are included on its balance sheets. Note, however, that the Financial Plan is maintained on a cash basis in accordance with federal guidelines.

1.1.6 Financial Policies and Controls

Sound Transit's Financial Plan is based on several underlying policies adopted initially as part of Sound Move and subsequently amended by the Board of Directors in 2008 and 2016. These policies preserve the principle of subarea equity, whereby expenditures benefiting a given subarea are commensurate with tax revenues contributed by that subarea.

Distributing Revenues Equitably: Chief among Sound Transit financial policies and controls is a commitment to Subarea equity. Subarea equity is defined as utilizing local tax revenues for transportation programs and services that benefit the residents and businesses of a subarea generally in proportion to the level of revenues contributed by that subarea. State law requires high-capacity transit system plans to include an equity element that identifies: (i) revenues anticipated to be generated by corridor and by county; (ii) the phasing of construction and operation of facilities and services in each corridor; and (iii) the degree to which the revenues generated within each county will benefit the residents of that county.

Subareas may fund projects outside their geographic boundary only when the project benefits the residents and businesses of the funding subarea. For more detailed revenue and expenditure information by subarea, see Appendix A: Sound Transit Sources and Uses Summary (2017 through 2041).

Financial Management: Sound Transit maintains policies governing debt, investment management, risk management, state-of-good repair/replacement, fares, and operating expenses to ensure effective utilization and deployment of voter-approved tax revenues.

Key financial policies are as follows:

- Minimum agency-wide net debt service coverage ratio of 1.5 or greater in any year;
- Maintain a two month operating and maintenance cost reserve for each subarea;
- Manage the agency's debt capacity on a consolidated basis. Allow the use of short-term debt to bridge the gap between the timing of expenditures and the receipt of revenues; and
- Target fare box recovery rates as follows: Light Rail – 40.0%; Commuter Rail – 23.0%, and Regional Express Bus – 20.0%.

Public Accountability: Sound Transit has engaged independent auditors and appointed a citizen oversight committee to monitor performance in carrying out its public commitments. In addition, Federal Transit Administration agents are assigned to oversee financial and project management functions and conduct process reviews of planning, design, and implementation of major capital projects to ensure compliance with all federal guidelines.

Voter Approval Requirement: The Sound Transit Board recognizes that the taxes approved by voters are intended to implement a regional transit system and to provide permanent funding for its future operations, maintenance, capital replacement, and debt service. Although the Board has the authority to fund ongoing costs through a continuation of the local taxes authorized by the voters, the Board pledges that, after the voter-approved plan is completed, subsequent capital expansion programs requiring continued local taxes at rates above those necessary to operate, and maintain the system and retire related debt will require approval by a vote of the citizens within the Sound Transit District.

Sales Tax Rollback: Upon completion of all voter approved transit projects, the Sound Transit Board will initiate steps to roll back the rate of sales and use tax collected. First, an accelerated payoff schedule will be established for any outstanding bonds whose retirement will not otherwise impair or affect the ability to collect tax revenue. Once all debt is retired, Sound Transit will implement a tax rollback to a level necessary to pay for system operations and maintenance, fare integration, capital replacement and ongoing system-wide costs and reserves.

Risk Analysis. The Financial Plan is based on a number of assumptions and projections of key variables such as cost inflation, revenue growth, interest rates and availability of federal funds. Although adequate contingency factors have been included in all these key variables, the financial forecasts are still vulnerable to periods of economic recession, and/or “spikes” in the cost of labor or construction materials. Although the Financial Plan reflects adequate cash flow, cash reserves and debt coverage to meet all financial obligations, a severe or near term recession is not currently reflected in the Financial Plan would most likely require further downsizing of or delay in the roll out of the ST2 and ST3 programs.

1.1.7 Financial Oversight

Annual Financial Statement and Independent Auditor’s Report: At the close of the fiscal year on December 31, an independent auditor’s report is prepared including balance sheet, statements of revenues and expenses, findings (notes to the financial statements) and formal opinion. This report is presented to the Board of Directors.

Annual Single Audit Report As a recipient of federal funding, Sound Transit is required to engage an independent auditor to review compliance with U.S. Office of Management and Budget Circular 2 CFR Part 200. This directive specifies accounting procedures and internal controls to insure that federal funds are managed in compliance with federal laws and regulations. This report is presented to the Board of Directors.

FTA Triennial Review: At a minimum of three-year intervals, the Federal Transit Administration (FTA) conducts a review to ascertain Sound Transit compliance with 17 functional requirements of agencies receiving federal funds. These include activities such as procurement, fare policy, drug free workplace, financial control and disadvantaged business enterprise.

Project Management Oversight Consultant: For major construction projects under a Full Funding Grant Agreement (FFGA) and/or TIFIA loan, FTA contracts with an independent firm to monitor engineering design, cost estimates and construction/procurement practices. Sound Transit has currently executed the University Link FFGA and three TIFIA loans (East Link, Northgate, and Operations and Maintenance Facility East). Lynnwood Link and Federal Way Link are assumed to have both TIFIA and FFGA funding and have a PMO consultant.

Financial Management Oversight (FMO): Is provided by a financial expert under contract to FTA. This specialist reviews financial plans to verify that all assumptions and calculations are reasonable and in accordance with FTA Guidance for Transit Financial Plans. The FMO consultant also requires that Sound

Transit conduct “stress tests” to validate that the agency has sufficient capacity to meet all financial obligations even in the event that costs are higher or revenues lower than assumed in the Financial Plan.

Citizen Oversight Panel: This is a volunteer body appointed by the Sound Transit Board to oversee and monitor implementation of Sound Move, ST2, and ST3. The panel monitors performance of Sound Transit and reports to the Board two or more times per year on findings and recommendations for improvements to ensure the success of agency plans and investments.

Annual Report on Subarea Equity: One of the key commitments of Sound Move, ST2, and ST3 is to assure that Sound Transit delivers a fair share of investments to each of the five geographic subareas commensurate with their contributions of tax-based revenues to the Authority. To insure that this concept is maintained, Sound Transit engages an independent auditor to review the subarea reports for compliance with agreed-upon procedures for allocation of resources among the subareas. The findings of this report are presented to the Citizen Oversight Panel and the Sound Transit Board of Directors.

1.1.8 Recent Major Agency Financial Updates

In November 2016, the voters of Sound Transit’s district adopted Sound Transit 3 (ST3), a \$53.8 billion 25-year plan that will be complete in 2041. The Sound Transit 3 Plan adds 62 new miles of light rail with stations serving 37 additional areas for a regional system reaching 116 miles. The plan also establishes Bus Rapid Transit (“BRT”) on I-405/SR 518 and SR 522/NE 145th; expands capacity and service of the Sounder south rail line; includes ST Express bus service; improves access to stations for bicyclists, pedestrians, drivers, and pick-up and drop-off services, and expands parking at stations.

In December 2016, Sound Transit executed a master credit agreement (MCA) under the Transportation Infrastructure Finance and Innovation Act (TIFIA) covering a program of four loans for the following projects: the Northgate Link Extension, the Operations and Maintenance Facility East, the Lynnwood Link Extension Project and the Federal Way Link Extension. The four loans under the MCA represent a contingent commitment of \$1.99 billion. This is the first TIFIA master credit agreement in the history of the TIFIA program. The Northgate Link Extension Project was executed in December 2016 for \$615.3 million at a rate of 3.13%, and the Operations and Maintenance Facility East loan was executed in June 2017 for \$87.7 million at a rate of 2.73%. With the execution of the MCA and the Northgate TIFIA loan, S&P upgraded Sound Transit’s TIFIA loans to A+ from A- and Fitch upgraded the TIFIA loans to AA+ from A+.

Additionally in December 2016, Sound Transit executed the sale of \$400 million of green bonds that will help fund voter-approved regional transit projects, including construction of more than 30 miles of light rail extensions. The sale represents the agency’s second municipal sale of green bonds. This rising trend in the financial industry offers the ability to invest in bonds that advance environmental sustainability. The bond sale included fixed-rate bonds at a total interest cost of 3.60% and generated approximately \$477 million in proceeds to fund voter approved expansion. In issuing the new bonds, S&P affirmed the Senior Bonds’ AAA rating and removed the negative outlook from the Parity Bonds’ AAA rating and Moody’s upgraded Sound Transit’s Senior Bonds to Aaa from Aa1 and the Parity Bonds to Aa1 from Aa2.

1.2 Summary of Financial Plan

The long-term Financial Plan is produced in accordance with the Federal Transit Administration’s (FTA) “Guidance for Transit Financial Plans.” The plan is maintained on a cash basis. It states and projects all agency sources and uses of funds for the period 1997-2060 with special focus on 2017-2041 which is the ST3 start to completion time period. The Financial Plan presents the agency’s operating statements, sources and uses statements, debt amortization and capital replacement funding schedules for the period 1997-2060. The Financial Plan incorporates the agency’s most current proposed or Board-adopted operating budget and long-term capital and operating plans for ST Express bus, Sounder commuter rail, Link light rail, and BRT as included in the Sound Move, ST2, and ST3 voter-approved programs.

At the heart of the Financial Plan is the Financial Planning Model. This model incorporates all financial policies, assumptions, revenue forecasts and program cost estimates needed to calculate cash flow, debt

financing and key performance indicators (e.g., cash balances and debt service coverage ratios) over the long-range planning horizon. The diagram below illustrates the concept of the model.

Figure 2: Key Elements of Financial Plan



3 Revenue Sources

See Appendix B for historical and annual data for all funding sources.

3.1.1 Approved Local Taxes

Authority to Levy Taxes

The original Washington State enabling legislation for Sound Transit defines the taxes that may be levied by a regional transit authority. These include:

- Retail sales and use tax of up to 0.9%;
- Motor vehicle excise tax (MVET) of up to 0.8%;
- Employer tax of up to \$2.00 per employee per month; and
- Sales and use tax of up to 2.172% on taxable retail car rentals.

In 2015 the State granted Sound Transit with additional revenue raising authority, which includes:

- Sales tax of up to an additional 0.5%;
- Motor vehicle excise tax (MVET) of up to 0.8% (not including the 1996 MVET rate of .3%, expiring at the end of 2028, discussed below); and
- Property tax of up to 25 cents for each \$1,000 of assessed valuation.

All taxes, with the exception of the car rental tax, may be levied based on a simple majority vote within the regional transit district. The car rental tax may be implemented by Board action only if voters have approved the levy of a motor vehicle excise tax. The regional transit authority can pledge the revenues from any of these taxes to the repayment of bonds issued for high-capacity transit purposes. Once approved by voters, the taxes may be implemented by a vote of the Board and may continue in perpetuity at the Board's discretion.

Voter-Approved Taxes

A sales and use tax of 0.4% and an MVET of 0.3% were approved for Sound Transit's use in a November 1996 referendum. Subsequent to this referendum, the Board also authorized a rental car tax of 0.8%. Approval of these taxes was in connection with the Sound Move Ten-Year Regional Transit Plan, adopted by the Sound Transit Board in May 1996. In November 2008, voters approved increasing the sales tax rate to 0.9% to provide funding for the Phase 2 (ST2) plan.

Voters approved new taxes to fund the Sound Transit 3 (ST3) Plan in November 2016, including an additional 0.5% sales and use tax (bringing the total from 0.9% to 1.4%), 0.8% motor vehicle excise tax (bringing the total to 1.1%), and property tax of twenty-five cents per \$1,000 of assessed valuation. An additional rental car tax of up to 1.372% could be authorized by the Board to provide additional revenue but is not included in the Financial Plan.

Neither the sales and use tax nor the rental car tax has a sunset provision; however, the 1996 MVET collections (0.3%, as detailed above) will expire at the end of 2028. Once the capital portion of all voter approved programs is complete, and all related outstanding bonds have been retired, the Board may roll back tax rates to a level of not less than 1.3% so long as the resulting revenue is sufficient to meet all ongoing financial requirements and to perpetually operate and maintain the facilities and services implemented as part of the current system plan approved by voters.

Tax Revenue Forecast

Forecasting tax revenues for the Sound Transit district presents unique challenges, as the Agency's jurisdictional boundary does not correspond to any other economic reporting entity. The district includes incorporated and unincorporated areas in three counties – King, Pierce and Snohomish.

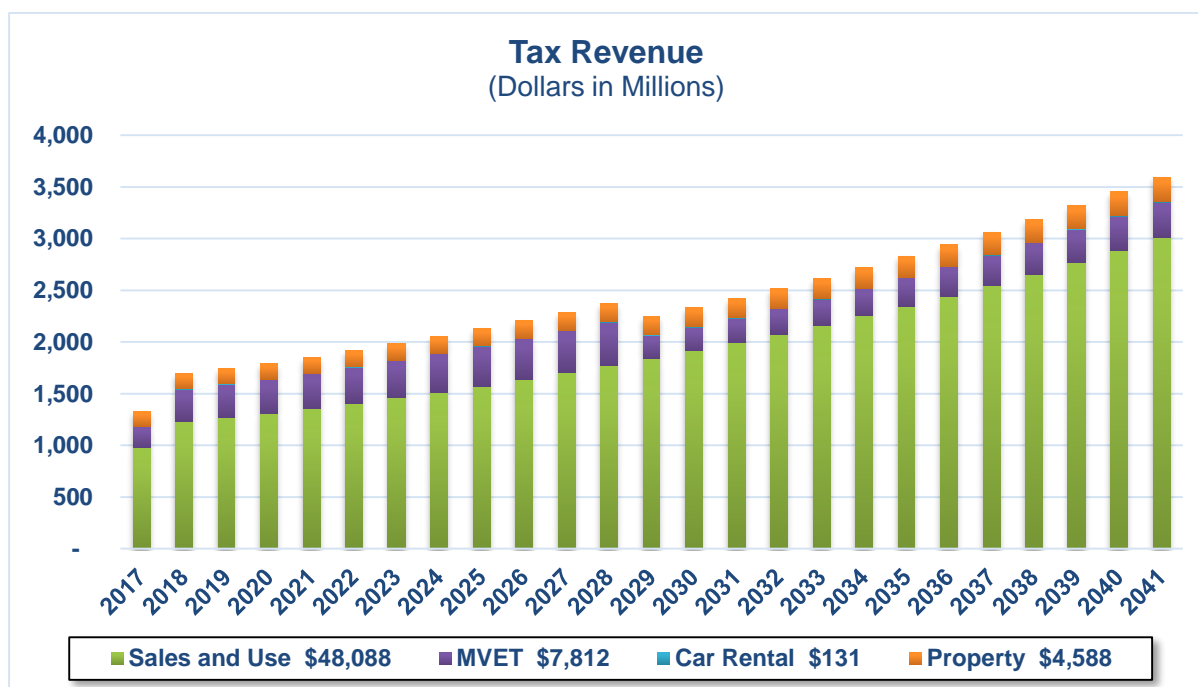
Sound Transit receives forecasts of sales and motor vehicle excise tax revenue bases at the county level from a local consulting economist. The Sales & Use and MVET tax base forecasts are grounded on economic and population projections from the Puget Sound Economic Forecasting Model, a regional econometric model of King, Pierce, Snohomish and Kitsap counties. The variables used to predict taxable retail sales include Puget Sound personal income, housing permits and the unemployment rate, among other variables. The motor vehicle excise tax base is forecast based on predictions of motor vehicles by type, driving-age population and the unemployment rate, as well as the expected average value of motor vehicles.

The property tax revenue base forecast, provided by a regional consulting firm, projects the growth of assessed value for both existing property and new construction within the Sound Transit service area. The forecast relies upon a statistical forecasting model, based upon a regression analysis, which includes inputs of historical assessed value, regional and US employment, GDP, and inflation.

Countywide tax base forecasts provided by a consulting economist are then allocated to each of the five Sound Transit subareas based on actual historical data from the State Department of Revenue and the State Department of Licensing.

Figure 3 below and Appendix B present annual tax revenue forecasts.

Figure 3: Sound Transit Tax Revenue (2017-2041)



3.1.2 Grants

Federal funding is generally secured through conventional Federal Transit Administration (FTA), Federal Highway Administration (FHWA) and Federal Railroad Administration programs currently authorized under the Fixing America's Surface Transportation (FAST) Act and future authorizations. Funding will be secured through both congressional appropriations and regional/national grant competitions. Funding awards are still provisional, subject to annual Congressional budget appropriations.

Table 1: Sound Transit Grant Funding Assumptions 2017-2041

Grant Type	Total 2017-2041 YOE\$ in 000s
FTA Section 5309 New Start - Lynnwood Link	\$ 1,172,730
FTA Section 5309 New Start - Federal Way	500,000
FTA Section 5309 New Start - ST3	3,700,000
FTA Section 5309 New Start - University Link	14,781
FTA Section 5309 Small Start - Tacoma Link	75,000
FTA Formula Grants (5307,5309,5337, 5339)	2,019,954
CMAQ	119,827
WSDOT Regional Mobility	8,286
Federal Railroad Administration	70,355
USDOT TIGER	15,000
FTA Section 5309 Bus	173
STP	1,963
State	840
Other	276
Total	\$ 7,699,184

To prepare for anticipated Full Funding Grant Agreements (Section 5309 New Starts funds) for Lynnwood Link and Federal Way Link, Sound Transit has reserved 100 percent of the non-Section 5309 New Starts capital funds in the Financial Plan, specifically for those projects.

3.2 Borrowing, Debt Levels and Ratings

3.2.1 Debt Financing

The Financial Plan assumes Sound Transit's long-term debt will primarily be in the form of 30-year bonds. The agency's current bond ratings are as follows: Moody's – Aaa and Aa1 for Senior and Parity bonds, respectively, and Standard & Poor's – AAA, all bonds. The current Financial Plan forecasts \$13.8 billion in bonds will be issued from 2017-2041. Additionally, the plan assumes \$3.3 billion in federal loans under the Transportation Infrastructure Finance and Innovation Act (TIFIA), \$2.0 billion for loans that have been executed and the remaining \$1.3 for loans expected to be executed under the MCA. The executed TIFIA loans and the MCA have been rated AA+ by Fitch and A+ by Standard & Poor's.

3.2.2 Debt Financing Capacity

Sound Transit's debt limit is pursuant to State law, like that for all municipalities in the State of Washington, based on the assessed valuation of real property located within the regional transit authority district. There are two types of bond limits — one for non-voted debt, and the other for voted debt. Sound Transit may issue total outstanding debt in an amount up to 1.5% of assessed valuation within its district without special voter authorization. Upon the approval of 60% of the electorate, Sound Transit could issue bonds in amounts up to 5.0% of assessed valuation.

3.2.3 Bonding Assumptions

The financial policies adopted by the Sound Transit Board encourage a conservative use of debt:

For long-term planning purposes, the Sound Transit agency debt service coverage ratio policy is set at an average coverage ratio for net revenue over annual debt services costs, not to fall below 1.5 in any single year. However, as voter-approved plans are implemented, prudent changes to coverage ratios may be

made by the Board as appropriate. Prior to bond issuance, the agency will establish the appropriate debt service coverage ratio to incorporate into its bond covenants.

Debt service coverage ratio is the amount of revenues available after funding operating expenses divided by debt service costs.

The agency net coverage ratio reaches a minimum of 2.22 in 2036, and rises thereafter.

The Financial Plan assumes 1.25% issuance costs and 7.15% of outstanding principal set-aside for bond reserves. The plan further assumes that future bonds will be issued at an average interest rate of 4% from 2017-2021 and 5.3% from 2021 to 2060 and that most bonds will be structured with a 30-year term, with principal payments deferred for five years. Bonds may have a non-level principal amortization structure.

3.2.4 Debt-to-Equity Ratio

Title 81.104.130 of the Revised Code of Washington states that agencies providing high capacity transportation service shall determine optimal *debt-to-equity* ratios. The term “debt-to-equity ratio” is most commonly applied to publicly traded companies whereby “equity” is determined to mean *stockholders equity*. For Sound Transit, the ratio can be interpreted as follows:

- *Debt* refers to total debt issued (bonds); and
- *Equity* refers to the amount of capital expenditures made (“taxpayer’s equity”).

Under these definitions, the debt-to-equity ratio would be the cumulative amount of debt incurred (dollar amount of bonds issued) divided by the amount of capital investments (dollar amount expended on capital programs). In effect, it is the proportion of capital assets funded from bond issues.

The agency debt-to-equity ratio reaches a maximum of 35.1% in 2035, and then declines thereafter.

4 Agency-Wide Capital Plan

Sound Transit’s capital program includes projects for system expansion, system enhancement, rehabilitation & replacement and administration. Sound Transit updates the capital program annually as part of its comprehensive budget process. Larger improvements and expansions of each mode that were approved by voters in Sound Move, ST2, and ST3 are detailed below.

4.1.1 ST Express Bus

Major ST Express capital costs include fleet expansion and fleet replacement. ST Express fleet expansion includes 11 buses in support of an additional 15,000 bus service hours to support increased ridership demands and driving congestion during peak service hours.

Additionally, the ST Express capital program is focused on providing two types of transportation improvements: community connection facilities and HOV improvements. Community connection facilities include transit centers, park-and-ride lots and transit access improvements. The HOV improvements are designed to allow quick and reliable express bus service throughout Sound Transit’s service area. The HOV access projects were implemented through a partnership between Sound Transit and WSDOT. Sound Transit has constructed special access ramps to make it easier for transit and vanpools to use HOV lanes at some of the region’s most congested freeway intersections. These improvements are intended to expand and improve the existing HOV network within the District. Sound Transit will continue to participate with Washington State Department of Transportation (WSDOT) in developing High Occupancy Vehicle (HOV) projects as part of the I-90 corridor across Lake Washington. In addition, Sound Transit will continue to improve passenger amenities such as providing more accessible low-floor buses and developing real-time next bus arrival information at stations.

The ST Express capital program includes:

- A bus operations maintenance facility;
- Capital enhancements to improve speed and reliability;
- North Sammamish Park and Ride;
- Fleet expansion to support interim ST Express service;
- Capped contribution for King County Metro RapidRide C and D and Madison St BRT Capital Improvements; and
- Bus-on-Shoulder Program. This program provides opportunities for buses to use shoulders on freeway and state route facilities during periods of congestion in general traffic and/or HOV lanes.

4.1.2 Sounder Commuter Rail

The Sound Move capital program for Sounder was completed in 2012 when revenue service from Tacoma to Lakewood began. The Sounder Commuter Rail capital program has delivered 82.5 miles of peak-period train service primarily using existing BNSF railroad tracks between Everett, Seattle, Tacoma and Lakewood.

The ST2 plan approved by voters in November 2008 includes programs that will increase the capacity of the highly utilized Tacoma-Lakewood service by adding four round-trip trains daily and potentially extending train lengths up to eight cars. Additional locomotives and passenger cars will be acquired to support this capacity and service expansion. Station access will be improved at Mukilteo, Auburn, Sumner, Puyallup, Tacoma, South Tacoma and Lakewood. There will be track and structure upgrades from Tacoma Dome to Reservation Junction. Funds are also included to construct and operate a commuter rail operations and maintenance facility. Sound Transit also expects to construct an expanded Sounder station in Tukwila and access improvements for Sounder Commuter Rail and bus riders at seven stations.

The ST3 plan approved by voters in November 2016 responds to the fast-growing south line ridership by increasing capacity with extended platforms to serve trains up to 10 cars in length and approximately 40% more passengers at Lakewood, Tacoma, Puyallup, Sumner, Auburn, Kent, and Tukwila. In addition to expanding train capacity, ST3 provides the potential to run more trains during the day. The ST3 plan will also add two stations to the south line with new parking built at two north line stations, with access improvements to both the north and south lines.

4.1.3 Tacoma Link

The 2.4-mile expansion will extend Tacoma Link service to the Hilltop neighborhood via the Stadium District and Martin Luther King, Jr. Way. The extension will add six additional stations and relocate the current Theater District station one block north. The project is currently in final design, with construction expected to be begin in 2018, and scheduled to open in 2022. The ST3 plan extends Tacoma Link west to Tacoma Community College with six stations.

4.1.4 Link Light Rail

The following light rail alignments were funded by voters in 1996 in the Sound Move System Plan: the Initial Segment of Central Link (13.9 miles), Airport Link (1.7 miles), South 200th (1.6 miles), and University Link (3.1 miles). In addition, preliminary engineering and initial planning for extending the alignment to Northgate were funded at that time. The Initial Segment began revenue service in July 2009. The Airport Link extension connecting the Tukwila station to SeaTac Airport opened in December 2009. The University Link segment opened for revenue service on March 19, 2016, six months early and approximately \$200 million below budget. This three-mile light rail extension includes a tunnel that extends east from the Downtown Seattle Transit Tunnel, crossing under Interstate 5 and then proceeds north to the Capitol Hill Station serving the First Hill/Capitol Hill urban center. The tunnel route then crosses under the ship canal to an interim terminus at the University of Washington station at Husky Stadium, serving the University of Washington campus and the surrounding neighborhoods.

The ST2 plan approved by voters in November 2008 will add approximately 36 miles of light rail alignment to the system by extending north from the University of Washington through Northgate on to Lynnwood,

south from Sea-Tac Airport to the vicinity of Highline Community College and 272nd Street, and east from Seattle through Bellevue to the Overlake Transit Center area of Redmond. Service to Northgate is expected to open by 2021, with service to Lynnwood by 2024. Service to downtown Bellevue and the Overlake Transit Center is scheduled to begin in 2023.

In the south, service reached the Angle Lake area in September 2016. Funding for planning, environmental documentation, preliminary engineering and right-of-way preservation of future light rail extensions to Tacoma in the south corridor, and Redmond in the east corridor, was provided in the ST2 program approved in November 2008.

The ST3 Plan will add 62 new miles of light rail, completing a 116-mile regional system. The plan includes extensions reaching Everett by the end of 2036, Tacoma Link to Tacoma Community College (2040), Seattle neighborhoods of Ballard (2035) and West Seattle (2030), and new Eastside destinations of Redmond (2024), south Kirkland, Bellevue, and central Issaquah (2041).

4.1.5 Bus Rapid Transit

The ST3 Plan funds a new mode for Sound Transit, Bus Rapid Transit. The I-405 BRT project (which will operate primarily in the I-405 express toll system between Lynnwood and Renton and in I-405 high-occupancy vehicle (HOV) lanes between Renton and Tukwila from Tukwila to Burien) is scheduled to open in 2024. The capital plan consists of a bus maintenance facility, 12 BRT stops, two parking garages, one surface lot, 34 vehicles (3-door articulated coaches with ST BRT livery), and roadway improvements to facilitate the movement of buses. The NE 145th St and SR 522 BRT project (which will run on NE 145th Street/SR 523 from the Link station at I-5 to SR 522, with BRT treatments continuing on SR 522 to UW Bothell, and with connecting service at lower frequencies to Woodinville) will also be completed in 2024. The Financial Plan funds 14 stations, an expanded transit center at UW Bothell, three 300-space parking garages, 14 vehicles, and roadway improvements.

4.1.6 System-Wide Activities

Sound Transit's capital and operating programs include funding for projects that are regional in scope, including but not limited to: high-capacity transit studies, innovation and technology fund, Phase 4 planning, transit-oriented development studies, efficiency and sustainability fund, emergency loss fund, research and technology fund, fare integration, and agency administration capital and operating projects.

The Financial Plan also includes provisions for third party and board approved contingencies and reserves. Sound Transit maintains O&M reserves equal to two months of operating costs. Cash is managed so that a minimum \$5 million operating balance is maintained in the General Fund at all times.

4.1.7 Debt Service

The Financial Plan assumes that in the years following completion of all voter-approved projects Sound Transit may reduce the sales tax rate to a level of not less than 1.3% so long as the resulting revenue is sufficient to meet all ongoing financial requirements. In order to further roll back this tax, the RTA district can begin a program of accelerating debt service payments in compliance with the sales tax rollback policy. Accelerated debt service payments will substantially reduce total long-term interest payments.

4.1.8 Asset Management

The Sound Transit Financial Plan provides for the repair and replacement of key operating assets through budgeting for the cost of replacing and refurbishing these assets in long range financial models and maintaining a \$300 million fund that can only be used for asset management. Annual costs of future asset replacement, or mid-life maintenance, activity is calculated for each class of asset based on; original cost, in-service date, estimated asset life, in addition to other financial factors.

The annual payment calculation assumes that 100% of replacement costs will be funded by Sound Transit revenues. The interest earnings rate on the \$300 million capital reserve fund is currently assumed at 2.5%

annually.

The replacement date for assets follows generally-accepted principles for the useful life of transit facilities and equipment. For buses the industry standard is a 12-year replacement cycle, for Sounder and Light Rail vehicles, the cycles are from “Methodology for Projecting Rail Transit Rehabilitation and Replacement Capital Financing Needs,” by Robert L. Peskin, published in the Transportation Research Record 1165.

5 SERVICE AND OPERATING PLAN

5.1 Operating Revenues

Sound Transit operating revenues include fare revenue, interest earnings, and other types of revenue. Tax revenues (discussed in the Capital Plan section) compose the remaining funding needed to fund operations. See Appendix B for the long-term operating statement.

5.1.1 Ridership and Fare Revenue

Fare revenues are a product of transit ridership and fare prices. Ridership, in turn, is a result of transit service provided, as well as a number of other factors. In the near term, ridership can be estimated based on past trends and the amount of transit service to be provided (e.g., routes, service frequency, parking capacity at park-and-ride facilities, etc.).

Ridership

For long-range ridership forecasts, including light rail, the Sound Transit travel demand forecasting model (ST Model) is used. In the ST Model, transit ridership forecasts are based on observed origins and destinations of transit riders, observed transit line volumes, and a realistic simulation of observed transit service characteristics. The ST Model is executed in three stages. In Stage 1, regional changes in demographics (households and employment) are taken into account. In Stage 2, changes in transit and highway travel times, which reflect congestion levels, and cost factors such as parking costs, transit fares, and household income are taken into consideration. In Stage 3, incremental changes to the transit network, such as addition of light rail services offered are incorporated and a forecast of zone to zone transit trips, is prepared for the region. Each light rail alternative ridership forecast is paired with a comparable baseline ridership forecast so the effects of incremental changes in the transit network can be clearly measured.

Table 2: Sound Transit Ridership (millions of boardings)

Mode	2016	2017	2020	2030	2040
Sounder Commuter Rail	4.3	4.5	5.0	6.2	7.1
Link Light Rail	19.1	23.4	27.3	106.2	156.9
Regional Express Bus	18.5	18.8	19.1	9.6	9.0
Tacoma Link	0.9	0.9	1.0	2.5	7.0
Bus Rapid Transit	-	-	-	6.6	7.7
Total	42.8	47.6	52.4	131.1	187.7

Fare Revenue

The Financial Plan assumes the Agency continues to collect fare revenues from Sound Transit operations — ST Express bus, Link light rail and Sounder commuter rail. Fare collection for Tacoma Link is assumed to begin when the Tacoma Link Expansion opens in 2022, and BRT will collect fares when the two BRT projects open in 2024. Fare revenue forecasts are based on ridership forecasts and assumptions regarding fare levels and price elasticity. The future fare structure assumes the following characteristics:

- Fares will be structured with a base fare plus an increment based on the distance (zone) traveled,

similar to the fare structure approved by the Board of directors for Sounder and Link light rail.

- Sound Transit regional express bus fares will compare to bus fares of other transit agencies serving the three counties, including zone fares;
- There will be no charge for bus-rail transfers;
- There will be discounts offered to seniors and youth; and
- Monthly passes and employer passes will be sold at a discount.

In addition, fares are assumed to generally increase with inflation over time, or are increased as needed to maintain Board-adopted fare recovery ratios.

Allocation of regional fare revenue to Sound Transit from collections through the ORCA card system are based on an inter-local agreement reached between Sound Transit, Community Transit, Everett Transit, King County Metro, Pierce Transit, Everett Transit, Kitsap Transit, and Washington State Ferries. Table 3 shows the fare revenue forecast for selected years. Appendix B shows the agency-wide fare revenue forecast from 2009 - 2060.

Table 3: Sound Transit Fare Revenue (\$ Millions)

Mode	2016	2017	2020	2030	2040
Sounder Commuter Rail	\$ 13.6	\$ 14.5	\$ 16.2	\$ 21.8	\$ 28.2
Link Light Rail	30.8	36.4	45.0	175.2	313.8
Regional Express Bus	36.2	37.2	38.1	24.0	26.9
Tacoma Link	-	-	-	3.8	10.6
Bus Rapid Transit	-	-	-	19.9	27.0
Total	\$ 80.6	\$ 88.1	\$ 99.3	\$244.7	\$406.4

5.1.2 Interest Earnings

The Financial Plan assumes that Sound Transit will earn a 2.0% rate of return on General Fund cash balances and 2.5% on reserve fund balances throughout the planning horizon (2041). In accordance with Sound Transit financial policies, all interest earnings are credited, at the Agency level, to offset expenditures for system-wide programs.

5.1.3 Other Operating Revenues

Other operating revenues include advertising, real estate, rental, and state and local contributions. State and local financial assistance includes funds that are either granted directly to Sound Transit or are provided as a credit against taxes or fees that would otherwise be levied on construction activities by other units of government. The agency has commitments from other jurisdictions for providing funds for ST Express, Light Rail, and Sounder projects. Such revenues are not included in the Financial Plan until agreements with other jurisdictions are signed.

5.2 Operating and Maintenance Costs

5.2.1 Agency O&M Costs

Operating and maintenance (O&M) costs are projected by transit mode (ST Express bus, Link light rail, Sounder commuter rail, Tacoma Link, and Bus Rapid Transit) as part of the annual budget process taking into account all scheduled service expansions. For ST Express, Bus Rapid Transit, and Sounder, O&M

costs forecasts are based on experience in contracting with the local service providers. For light rail and Tacoma Link, the O&M cost estimates are based on a cost build-up model for each function (e.g., vehicle operations, vehicle maintenance, and facilities maintenance) including the cost of administration and support services. The O&M costs for these modes of service are presented in Appendix B, and operating statistics are detailed in the Sound Transit Service Implementation Plan.

System-wide activities represent programs that are funded by interest earnings in the general fund and levies on subarea tax revenues, the latter is not to exceed 10 percent per year. These include administration costs that are not allocated to the lines of business (light rail, commuter rail and express bus), regional fare integration costs, phase 3 planning and research, and technology programs.

5.3 Service Implementation Plan

Sound Transit services currently consist of four modal elements: (1) ST Express Bus; (2) Sounder Commuter Rail; (3) Tacoma Link Light Rail; and (4) Central Link Light Rail. Under ST3, Sound Transit will also be adding a fifth mode: Bus Rapid Transit. These elements have been consolidated under the Operations Department. Each year, Sound Transit's Service Planning Department prepares a Service Implementation Plan (SIP) to guide the delivery of these modes. The summary below includes all services approved by voters under the Sound Move, ST2, and ST3 ballot propositions.

5.3.1 ST Express Bus

Through its partner agencies – King County Metro, Pierce Transit and Community Transit, Sound Transit currently operates 307 buses on 28 routes with a total of approximately 783,000 annual vehicle platform hours. ST Express regional bus service operates 20 hours every day. Service levels on ST Express routes range from peak-only to all-day, all-week service. ST Express bus ridership in 2016 was 18.5 million, compared to 18.3 million in 2015.

In response to sustained ridership growth and increasingly crowded conditions on ST Express service, 15,000 additional annual hours were added in 2017 to improve service frequency, expand hours of operation, and increase trips to relieve overloads. These new resources create new bus connections to U Link and planned new Sounder trains, mitigate impact from East Link construction, and provide schedule maintenance to bring running times up-to-date. Additionally, high occupancy vehicle (HOV) access projects have been implemented through a partnership between Sound Transit and WSDOT. These special access ramps make it easier for transit and carpools to use HOV lanes at some of the region's most congested freeway intersections.

The financial plan includes the operating cost for interim ST Express service, the North Sammamish Park and Ride, and a bus operations and maintenance facility.

5.3.2 Sounder Commuter Rail

The Sounder Commuter Rail system, which uses conventional railroad locomotives and passenger coaches, includes 12 stations on two lines that span three counties. The North Line runs from Seattle to Everett; the South Line runs from Seattle to Lakewood. Sounder Commuter Rail ridership in 2016 was 4.3 million, compared to 3.8 million in 2015. Sounder trains carried more than an average of 17,000 passengers each weekday. The goal of the Sounder Commuter Rail is to increase the passenger-moving capacity of the regional transportation system while not impeding the flow of freight.

Sounder Commuter Rail service between Tacoma and Seattle began in 2000 with two round trips on weekdays and weekend event service. Service has gradually been expanded to ten round trips between Tacoma and Seattle and four round trips (with two additional trips provided by Amtrak) between Everett and Seattle on weekdays, as well as event service on weekends. Sounder service between Tacoma and Lakewood began in October 2012.

The ST2 plan approved four additional Sounder south line round trips (eight one-way trips) between Seattle and Lakewood. Two new Sounder south line round trips were implemented in September 2017 as the final

part of the Sounder service expansion under ST2. These two new trips were strategically timed to increase the span of 20-minute peak service as well as provide relief on trips that currently have standees on the trains. Prior additional trips were added in September 2013 and September 2016. September 2017 also marked the introduction of additional cars to operate on the existing trains. The additional vehicles will relieve overcrowding on existing trains through longer consists.

The ST3 plan will fund platform extensions to accommodate 10-car train sets and acquisition of the required vehicles (at the moment trains on the south line can operate up to 7-car trains). Additionally, the plan includes funding to support potential expanded service levels, which would be determined by the ST Board in collaboration with partner agencies and organizations. Such funding may include, but is not be limited to, acquisition of operating rights and real property rights and up to 3 Sounder stations modified at platforms to accommodate additional train volumes. Lastly, ST3 funds an extension of Sounder commuter rail service from Lakewood to Tillicum and Dupont with two new stations, which will be served by 4 trains in the morning and afternoon peak periods.

5.3.3 Tacoma Link Light Rail

Tacoma Link is a 1.6-mile at-grade light rail line with five stations, including the Tacoma Dome multimodal station. Tacoma Link began service in August 2003 and connects downtown Tacoma with a regional transit center at the Tacoma Dome Station, where riders can transfer to Sounder Commuter Rail, ST Express regional buses, and local Pierce Transit buses. Ridership on Tacoma Link was approximately 940,000 in 2016. Tacoma Link Light Rail trains currently carry more than 3,200 passengers each weekday.

Tacoma Link Extension (scheduled to open in 2022) is a 2.4-mile expansion that will add six additional stations and relocate the current Theater District station one block north. The expansion will also increase frequencies from every 12 minutes to every 10 minutes.

The ST3 plan provides funding for an extension of Tacoma Link from Downtown Tacoma to Tacoma Community College. This will consist of 3.5 miles of mostly at-grade light rail with four center platform stations and two side platform stations. The project will operate principally in its own right-of-way and have peak headways of 6 minutes. It will require the purchase of 8 light rail vehicles.

5.3.4 Link Light Rail

Link Light Rail is currently a 20-mile light rail system with 16 stations that runs between Angle Lake and University of Washington. Ridership in 2016 was approximately 19.1 million, compared to 11.7 million in 2015. In 2015 (prior to the 2016 U-Link expansion discussed below), Link Light Rail carried approximately 35,500 passengers each weekday. Link trains run every 6, 10, or 15 minutes depending on the time of day. Service is available from 5 a.m. to 1 a.m. Monday through Saturday and from 6 a.m. to midnight on Sunday and holidays.

In March 2016, a 3.1-mile extension (known as “U-Link”) with new stations at Capitol Hill and University of Washington opened. Capitol Hill Station serves the state’s most densely-populated urban area, and the University of Washington Station serves the largest educational institution in the Northwest. Together, the two stations significantly increased ridership on Link. Additionally, service from SeaTac Airport to South 200th Street (“Angle Lake”) and its 1,000-stall park-and-ride opened in September 2016. This 2016 Link service expansion represents significant progress towards development of the Link system that is envisioned to connect all of the region’s major population and employment centers.

In 2017, additional 3-car trains were put into service during peak and off-peak periods.

Future ST2 expansion approved by voters includes 36 new miles of light rail service, including:

- Northgate Link (4.3 miles and three stations) in late 2021;
- East Link (14 miles and ten stations) in late 2023; and
- Lynnwood Link (8.5 miles and 4 stations) in 2024.

When all ST2 expansion programs are completed, light rail trains will service transit riders for up to 20 hours each day.

The ST3 expansion approved by voters in November 2016 adds 62 new miles of light rail with 34 stations. Light rail is projected to serve about 600,000 riders every day and will provide service 20 hours each day, every 6 minutes in peak and every 10 minutes in non-peak hours. Additionally, there will be approximately 470,000 annual service hours.

5.3.5 Bus Rapid Transit (BRT)

The ST3 Plan approved Bus Rapid Transit, providing fast, reliable bus service every 10 minutes in peak hours along 1-405, SR 518, SR 522, and NE 145th Street, connecting light rail service in Bellevue, Tukwila, Shoreline, and Lynnwood. By 2040, it is estimated annual ridership would range between 7 and 9 million passengers. Bus Rapid Transit service is anticipated to begin in 2024.

6 OTHER KEY PLANNING ASSUMPTIONS

6.1 Inflation Forecasting

Three inflation forecasts are used at Sound Transit to inflate costs over time in the long-range Financial Plan. The Consumer Price Index (CPI-U Seattle) is applied to Operating & Maintenance expenses, and “soft” capital costs, excluding construction & land acquisitions. The CPI forecast and tax revenue base forecasts are developed by a local consulting economist. The Construction Cost Index is applied to construction-related elements of the capital program. A Seattle-area forecast of the CCI index is prepared for Sound Transit by an outside consultant based on projected changes to the price of a “shopping cart” of goods related to construction. A right-of-way index (ROWI) forecast is applied to property acquisition costs.

6.2 Summary of Financial Assumptions

- Sales Tax Rate: 0.4% 1997 - 2009; 0.9% 2009 – 2017; 1.4% 2017 - 2041 (subject to potential sales tax rollback, after 2041)
- Sales Tax Base Average Annual Growth: 3.8% 2017 - 2041
- MVET Tax Rate: 0.3% 1997 – 2028 (tax ends in 2029)
- MVET Tax Rate 0.8% 2017 – 2041 (updated depreciation schedule in 2029)
- MVET Tax Base Average Annual Growth: 1.9% 2017 – 2041
- Rental Car Tax Rate: 0.8%
- Rental Car Tax Base Average Annual Growth Rate: 2.9% 2017-2041
- ST3 Property Tax Rate: \$0.25 per \$1,000 of assessed value
- Average fare prices increase at a rate generally in line with inflation
- Sound Transit to receive \$7.7 billion in grant revenues 2017 – 2041
- CPI Average Annual Cost Inflation: 2.3% 2017 – 2041
- CCI Average Annual Cost Inflation: 3.4% 2017 – 2041
- ROWI Average Annual Cost Inflation: 4.8% 2017 – 2041
- Interest Rate: 2% on General Fund; 2.5% on Reserve Fund Balances
- Bond Interest Rate: 4% 2017-2021; 5.3% 2022 – 2041
- Bond Term: 30 years

- Interest Only Payment Period on Bonds: First 5 years
- All-in Issuance Costs: 1.25% of Par Value
- Principal Set-Aside for Bond Reserves: 7.15%
- O&M Reserves equal to two months' O&M costs

7 CASH FLOW ANALYSIS

The summary results of the Sound Transit Financial Planning Model are found in Appendix "A" and represent the combined *Sound Move*, *ST2*, and *ST3* propositions approved by voters in 1996, 2008 and 2016, respectively.

The Financial Plan reflects all assumptions and contingencies as detailed throughout this presentation and at present meets all criteria stated in the Financial Policies and Controls section.

7.1 Financial Risks

Stress tests are regularly conducted on the Financial Plan in order to assess the extent to which the Agency's plans are susceptible to not being fully met due to external risk factors. Completion of a series of these tests has confirmed that, at the agency level, Sound Transit has sufficient financial flexibility to withstand significant adverse financial shocks. However, on a stand-alone basis, individual subareas are more susceptible to negative financial developments than the agency as a whole.

7.2 Key Risk Areas

Federal Funding: Sound Transit has received \$500 million under a Full Funding Grant Agreement (FFGA) with the Federal Transit Administration (FTA) for the Initial Segment project. In January 2009, FTA approved a FFGA for \$813 million for the University Link extension project of which \$681 million will be drawn down due to effective project cost management. The Financial Plan assumes \$1,173 million of FTA New Starts funding for Lynnwood Link Extension, \$500 million for Federal Way Link Extension, and \$3,700 million for future FFGA projects. There is currently substantial uncertainty surrounding the New Starts program, as the President's 2018 Budget indicated funding for new New Starts projects would no longer be available. However, certain New Starts programs have subsequently been funded by Congressional action.

Local Tax Revenue Growth: Sound Transit primarily relies on independent forecaster for its local tax bases. The tax revenue forecast projects continued improvement through 2018 then stabilizes thereafter. The forecast included in the Financial Plan does not predict economic cycles. However, long-term economic forecasts are inherently uncertain and actual economic growth in the region could be lower than the current forecast, especially if the region experiences a period of "stagflation" (high inflation with stagnant economic growth). If revenue growth were to fall below the current forecast, the agency's revenue collections as well as its long-term bonding capacity would be reduced. A significant reduction in local tax revenues would have a negative impact on the agency's financial condition. See Appendix D for forecasts of tax revenues.

Interest Rates: The financial model assumes that the agency can, on average, borrow at 5.3% interest on its long-term bonds. If interest rates were to rise above this level for a prolonged period of time, the cost to borrow and service debt could increase to the point that the agency's capacity to borrow additional funds would be negatively impacted. Although current interest rates are relatively low, various factors may cause interest rates to rise in the mid-to-long term.

Inflation: The Puget Sound region has experienced relatively mild price increases for general goods and services. The CPI-U is currently very low and is projected to remain in the 2.0% to 2.6% range through 2041. However, the region has experienced the highest property appreciation of any major U.S. city in 2017 and construction prices also appear to be higher than prior periods. The Financial Plan incorporates long-term consumer price, construction cost, and real estate cost inflation forecasts provided by independent consultants or developed internally using data from external sources. The current forecast projects long

term inflation will reflect historically moderate levels. If inflation were to rise significantly beyond this forecast, or if Sound Transit's construction schedules were to be delayed, the agency's capital and operating costs would also rise beyond the current forecast. Historically, retail sales and use tax, the agency's primary revenue source, has risen with general price levels partially mitigating this risk. See Appendix D for forecasts of cost inflation.

Operating and Maintenance Costs: The Financial Plan utilizes O&M cost build-up models to project costs for Sounder, Link Light Rail, Tacoma Link and ST Express bus services. These models calculate the annual cost associated with providing projected service levels based on the amount of inputs (e.g., staffing, equipment, and materials) needed to provide service at those projected levels. The parameters for these models are developed from experience of both Sound Transit and other transit agencies operating similar services. It is recognized that O&M costs are affected by many factors, including partnership operating agreements and changes in operating efficiency. The cost of fuel, utilities, spare parts and supplies are subject to change depending on regional and even international market conditions. Adverse changes in these consumables may lead to higher O&M costs than projected in the Financial Plan, reducing financial capacity and flexibility.

7.3 Contingencies

The Financial Plan contains a number of contingencies that could be applied to meet revenue shortfalls related to the project:

- The ST2 capital projects include \$446 million¹ in unallocated contingencies as of June 2017; and
- The ST3 capital projects include \$1.1 billion² in unallocated contingencies.

In addition, the Agency maintains reserves to meet agency-wide revenue shortfalls or cost increases, including a \$25 million ST3 efficiency fund, and a \$38 million Regional Express growth contingency.

7.4 Federal Funding Shortfalls

The Financial Plan assumes full funding of federal grants with recognition of the potential risk that certain grants may not be fully funded. In the event of cost increases or funding shortfalls, there are several mitigation strategies that could be implemented.

Apply savings from bonding: The Financial Plan uses conservative assumptions regarding bonding and debt coverage, which are appropriate for long-range planning. However, as the agency implements the capital program, it may be possible to apply savings from debt service costs as the projects begin their construction phases.

Changes to financial policies and financial planning assumptions: The agency's financial policies and financial planning assumptions, such as debt service coverage and capital replacement, could be altered, within prudent financial parameters, to make additional resources available.

Construction schedule extended: Delaying the schedule could generate additional resources. In most years, tax revenues increase faster than cost inflation. Another benefit in extending the construction schedule is the postponement of operating costs and debt service costs.

Control O&M costs: If growth of O&M costs increase significantly above inflation, Sound Transit could find alternate providers for services, or reduce the level of service on routes/runs that have high costs, and/or low ridership efficiencies.

¹ In Year-of-Expenditure Dollars.

² In 2014 Dollars.

8 Summary of Sources and Uses of Funds (2017 – 2041)

8.1 Sources of Funds

Sound Transit Tax Revenues: Sound Transit is primarily funded by four local taxes: (1) sales and use tax of 1.4%; (2) motor vehicle excise tax (MVET) of 1.1%, 0.3% of which is sun-setting at the end of 2028; (3) rental car tax of 0.8%; and (4) property tax of \$0.25 per \$1,000 assessed property valuation.

Sound Transit's combined tax revenues are projected to total \$60.62 billion during the period 2017-2041.

Federal Grant Support: In addition to local tax revenues, the agency expects to receive approximately \$7.7 billion in grant funding over the 2017 through 2041 time period. This amount includes a \$1,173 million Full Funding Grant Agreement (FFGA) for the Lynnwood Link Extension. The balance of grant revenues is expected to come primarily from future FFGAs for ST3 projects, from FTA formula funding grants and other competitive grant programs.

Operating Revenues: Fares and other operating revenues total \$6.5 billion in the 2017 Financial Plan (2017-2041). Approximately 9% of fare revenues are forecast to come from Sounder commuter rail, 19% from regional express bus and BRT, and 72% from Link light rail.

Bonding: Transit infrastructure is inherently long-lived; therefore, it is appropriate to finance some portion of their construction costs over a period consistent with a long useful life. The Financial Plan assumes Sound Transit will issue long-term debt in the form of 30-year bonds.

8.2 Uses of Funds

Capital Program:

- **Sounder Commuter Rail:** The Sounder capital program totals \$3.2 billion from 2017 to 2041. This includes ST2 projects such as additional track easements, locomotives and passenger cars, station access, and parking, as well as construction of a commuter rail operations and maintenance facility. The ST3 capital program includes platform extensions, increased service and access, as well as an extension from Lakewood to Dupont.
- **Express Bus:** ST Express Bus has \$0.9 billion in capital projects from 2017 to 2041, including park-and-ride lots, high occupancy vehicle (HOV) lanes/access, transit centers and vehicles. The plan also provides for additional bus routes and funding for the design of an operating and maintenance facility.
- **Tacoma Link:** The Tacoma Link system will expand 2.4 miles from the Theater District to the Stadium and Hilltop district in 2022 and to Tacoma Community College in 2039.
- **Link Light Rail:** The ST2 plan funds approximately 36 additional miles of light rail. The existing line will extend north from University of Washington through Northgate to Lynnwood, south from Sea-Tac International Airport to Kent Des Moines Road, and east from Seattle through Bellevue to the Overlake Transit Center area of Redmond. The ST3 program adds 62 miles of light rail, reaching north to Everett, south to Federal Way and Tacoma, and west to the Seattle neighborhoods of Ballard and West Seattle. New Eastside destinations will include Redmond, south Kirkland, Bellevue, and central Issaquah.

From 2017 to 2041, the Financial Plan includes \$41.2 billion in light rail capital, including Tacoma Link.

Transit Operations: Transit operations costs include service improvements under the Sound Move program (e.g., Sounder extension to Lakewood, Link light rail from UW to Sea-Tac) as well as expanding existing and additional new services approved by the voters in under ST2 and ST3. Note that Operating and Maintenance costs related to new service will not be incurred until the new service becomes

operational.

System-wide Activities: The Financial Plan includes funding to support projects that impact the system at large such as research and technology, fares administration, future phase planning, agency administration, and other expenditures that are essential to the planning and maintenance of a regional transit system, consistent with that approved by voters.

Debt Service: The Financial Plan anticipates future issuances of 30-year bonds to provide sufficient financial capacity needed to complete all voter-approved transit programs. Debt service reflects all costs associated with issuing and retiring debt for the 2017 through 2041 time period. Debt service will continue beyond 2041 until all debt is fully retired. Sound Transit financial policies include provision for accelerated retirement of bonds once system expansion capital program is completed.

State of Good Repair (SOGR): The Financial Plan provides for the cost of repair and replacement of key operating assets. Annual costs of future asset replacement, or mid-life maintenance activity, is calculated for each class of asset based on original cost, in-service date, and estimated asset life, in addition to other financial factors.

Contribution to Reserves: The Financial Plan provides funding for the following financial reserves: Bond reserves, operations & maintenance reserve, Capital replacement/mid-life maintenance reserve, Emergency/Loss reserve, and insurance reserves.

9 APPENDICES

A. Sound Transit Sources and Uses Summary (2017 through 2041)

B. Sound Transit Operating Statement

C. Sound Transit Sources and Uses Statement

D. Sound Transit Cost Indices

E. Sound Transit Supporting Graphs



Appendix A

Financial Plan - Sources & Uses Summary

2017 through 2041

(YOE Dollars in Millions)

	Snohomish	North King	South King	East King	Pierce	System Wide	Total
Sound Transit Tax Revenues	7,694	18,240	8,374	15,326	10,984	-	60,619
Grant Revenue - Federal / Local	1,479	2,200	1,346	1,265	940	469	7,699
Bond Proceeds ⁽¹⁾	2,702	5,708	3,660	1,371	380	-	13,822
TIFIA Proceeds	471	1,088	926	836	-	-	3,320
Fares & Other Revenues	510	3,416	697	1,085	794	-	6,501
Interest Earnings	-	-	-	-	-	494	494
Total Sources	12,856	30,652	15,003	19,883	13,098	963	92,455
	Snohomish	North King	South King	East King	Pierce	System Wide	Total
Capital Expenditures							
Sounder Commuter Rail	95	-	1,012	-	2,051	-	3,158
Link Light Rail	7,876	11,663	4,078	9,569	3,449	4,595	41,228
Regional Express Bus	118	85	112	307	321	-	943
Bus Rapid Transit	41	325	260	1,201	-	-	1,826
Service Delivery	17	22	23	40	30	1	133
System-wide Activities	8	27	21	23	3	966	1,048
Total Capital	8,155	12,122	5,505	11,140	5,853	5,562	48,337
O & M Expenditures							
Sounder Commuter Rail	400	-	966	-	1,042	-	2,408
Link Light Rail	874	5,808	1,678	1,479	833	-	10,671
Regional Express Bus	471	-	398	1,700	1,123	-	3,691
Bus Rapid Transit	131	244	173	684	-	-	1,232
System-wide Activities	93	120	55	298	77	3,294	3,936
Total O&M	1,969	6,172	3,269	4,160	3,074	3,294	21,939
SOGA Spending	499	1,703	1,127	1,362	811	798	6,300
Debt Service	1,866	5,489	3,566	818	380	-	12,118
TIFIA Debt Service	399	899	733	460	-	-	2,491
Bond Reserve Deposits	195	413	254	87	28	-	977
O&M Reserve Contributions	21	68	37	42	36	-	205
Capital Reserve Contributions	-	-	-	-	-	-	-
System-wide Activities	1,066	2,680	1,235	2,150	1,559	(8,690)	-
Change in Cash	(1,315)	1,107	(723)	(337)	1,357	-	89
Total Uses	12,856	30,652	15,003	19,883	13,098	963	92,455

Notes:

(1) This total includes surplus bond amounts issued in 2016, which were not allocated.



Operating Statement
2017 DRAFT Financial Plan
Appendix B
(YOE Dollars in Thousands)

	1997- 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
REVENUES															
ST District Taxes															
Sales & Use Tax	1,336,157	219,020	239,785	259,164	277,424	273,286	393,909	500,619	525,431	545,454	586,387	632,175	687,141	745,955	977,261
Motor Vehicle Excise Tax (MVET)	350,929	64,714	66,308	70,203	72,011	70,927	64,645	66,476	65,429	66,249	68,576	73,581	78,803	85,028	207,036
Rental Car Tax	15,200	2,166	2,245	2,427	2,527	2,554	2,784	2,469	2,490	1,979	2,759	3,050	3,250	3,501	3,593
Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141,376
TOTAL TAX REVENUES	1,702,286	285,900	308,338	331,794	351,962	346,767	461,338	569,564	593,350	613,681	657,721	708,806	769,194	834,485	1,329,266
Fares & Other Operating Revenue															
Commuter Rail	78,791	6,302	6,043	25,615	9,120	8,482	9,615	7,794	8,768	10,113	10,468	11,385	12,403	14,262	67,206
Link Light Rail	1,879	-	-	3,913	615	2,791	5,001	10,164	12,549	14,621	16,934	18,799	25,104	33,479	53,664
Regional Express Bus	38,952	11,566	15,757	15,219	16,617	18,240	19,662	21,862	27,381	32,075	34,546	35,473	37,888	38,074	37,662
Tacoma Link	-	1,000	6,200	3,000	-	-	-	-	-	-	-	-	-	-	-
Bus Rapid Transit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System-Wide	972	1,821	566	100	1,886	1,361	121	205	2,368	1,007	971	1,075	1,114	1,151	-
TOTAL FARES & OTHER OPERATING REVENUE	120,594	20,689	28,566	47,847	28,237	30,874	34,400	40,026	51,067	57,816	62,919	66,732	76,508	86,966	158,532
INTEREST EARNINGS	175,720	10,626	26,090	37,265	24,952	23,445	12,360	14,122	20,875	(3,054)	7,974	4,361	8,994	12,784	28,220
TOTAL OPERATING REVENUES	1,998,600	317,215	362,994	416,906	405,151	401,085	508,098	623,712	665,291	668,443	728,614	779,899	854,696	934,236	1,516,019
OPERATING EXPENSES															
Operating & Maintenance Costs															
Commuter Rail	39,696	16,782	22,377	24,125	25,849	32,792	37,787	33,285	32,566	33,571	37,013	38,899	40,626	44,843	55,729
Link Light Rail	2,757	7,235	6,539	7,031	16,421	9,374	30,684	68,596	60,098	56,415	55,132	60,465	64,051	88,095	112,704
Regional Express Bus	161,799	40,934	59,070	64,778	78,956	81,862	85,144	96,326	96,596	101,483	104,091	108,129	108,063	117,356	136,406
Bus Rapid Transit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System-wide	79,265	27,655	29,925	30,119	19,045	36,434	23,876	23,802	23,611	25,439	28,746	37,221	31,378	71,934	136,940
TOTAL OPERATING EXPENSES	283,518	92,607	117,911	126,054	140,272	160,463	177,492	222,009	212,871	216,908	224,982	244,714	244,118	322,228	441,779
NET OPERATING INCOME	1,715,082	224,609	245,083	290,852	264,880	240,623	330,606	401,703	452,420	451,535	503,632	535,185	610,578	612,007	1,074,240
DEBT SERVICE															
Principal & Interest	80,098	17,164	29,227	41,929	41,930	75,941	83,007	78,819	89,149	81,199	99,181	98,913	101,127	111,479	133,998
NET INCOME	1,634,984	207,445	215,857	248,923	222,950	164,682	247,599	322,884	363,271	370,336	404,451	436,272	509,451	500,528	940,242



Operating Statement
2017 DRAFT Financial Plan
Appendix B
(YOE Dollars in Thousands)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUES															
ST District Taxes															
Sales & Use Tax	1,233,109	1,266,524	1,304,733	1,353,127	1,403,342	1,457,883	1,515,231	1,575,054	1,637,319	1,702,324	1,770,875	1,841,747	1,914,931	1,992,679	2,074,983
Motor Vehicle Excise Tax (MVET)	310,875	323,483	332,277	341,577	351,883	362,206	373,076	384,049	395,641	407,905	420,979	221,008	228,721	236,798	245,517
Rental Car Tax	3,702	3,813	3,927	4,045	4,166	4,291	4,420	4,553	4,689	4,830	4,975	5,124	5,278	5,436	5,599
Property Tax	145,558	149,092	151,971	154,773	157,660	160,636	163,705	166,871	170,136	173,506	176,984	180,576	184,285	188,117	192,076
TOTAL TAX REVENUES	1,693,243	1,742,912	1,792,908	1,853,521	1,917,051	1,985,016	2,056,433	2,130,526	2,207,785	2,288,565	2,373,813	2,248,455	2,333,215	2,423,029	2,518,174
Fares & Other Operating Revenue															
Commuter Rail	27,616	15,988	16,232	17,013	17,572	18,229	18,652	18,988	19,324	19,692	21,529	21,926	22,323	21,923	22,355
Link Light Rail	42,979	102,726	86,904	69,811	72,602	94,087	129,535	188,505	163,249	165,751	193,539	170,756	177,218	209,149	215,827
Regional Express Bus	37,853	38,456	38,679	39,103	39,323	39,602	26,353	26,745	27,137	27,555	27,973	28,391	25,009	26,871	27,261
Tacoma Link	-	11,925	11,925	11,925	13,797	2,597	3,005	3,202	3,308	3,429	3,550	3,686	3,807	3,943	4,093
Bus Rapid Transit	-	-	-	226	231	302	17,104	17,361	17,619	17,904	19,772	20,083	20,394	20,682	21,024
System-Wide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL FARES & OTHER OPERATING REVENUE	108,448	169,095	153,739	138,078	143,526	154,816	194,648	254,800	230,636	234,331	266,363	244,841	248,751	282,568	290,562
INTEREST EARNINGS	23,917	18,992	16,948	13,245	4,990	8,650	4,899	6,351	8,008	9,033	9,171	11,675	15,168	18,187	21,000
TOTAL OPERATING REVENUES	1,825,608	1,931,000	1,963,595	2,004,844	2,065,567	2,148,482	2,255,980	2,391,677	2,446,429	2,531,929	2,649,347	2,504,971	2,597,135	2,723,784	2,829,736
OPERATING EXPENSES															
Operating & Maintenance Costs															
Commuter Rail	60,900	66,484	70,320	65,450	67,459	69,615	73,595	76,035	78,176	85,748	88,225	90,935	93,739	98,412	101,271
Link Light Rail	129,309	129,398	132,912	158,049	169,291	220,402	305,819	323,877	334,874	346,114	357,445	369,280	456,268	478,903	495,606
Regional Express Bus	149,586	148,964	154,147	159,433	165,012	165,570	124,412	130,954	135,290	139,752	144,392	149,176	154,248	125,661	129,788
Bus Rapid Transit	-	-	-	-	-	-	25,839	53,437	55,261	57,154	59,110	61,134	63,228	65,386	67,618
System-wide	145,339	150,511	158,212	165,139	133,064	146,135	136,908	142,420	138,207	163,065	183,922	182,275	165,842	175,603	180,829
TOTAL OPERATING EXPENSES	485,134	495,358	515,591	548,072	534,826	601,721	666,574	726,722	741,808	791,832	833,095	852,800	933,325	943,965	975,113
NET OPERATING INCOME	1,340,473	1,435,642	1,448,004	1,456,772	1,530,740	1,546,761	1,589,406	1,664,954	1,704,621	1,740,096	1,816,253	1,652,171	1,663,810	1,779,819	1,854,622
DEBT SERVICE															
Principal & Interest	137,262	139,289	141,645	161,477	173,156	190,318	236,826	286,598	331,326	333,682	372,075	449,742	575,559	672,137	754,239
NET INCOME	1,203,212	1,296,353	1,306,359	1,295,295	1,357,584	1,356,443	1,352,580	1,378,356	1,373,295	1,406,414	1,444,177	1,202,429	1,088,251	1,107,682	1,100,383



Operating Statement
2017 DRAFT Financial Plan
Appendix B
(YOE Dollars in Thousands)

	2033	2034	2035	2036	2037	2038	2039	2040	2041
REVENUES									
ST District Taxes									
Sales & Use Tax	2,161,313	2,251,374	2,345,512	2,443,939	2,546,932	2,654,705	2,767,619	2,885,867	3,009,265
Motor Vehicle Excise Tax (MVET)	254,705	264,041	273,580	283,496	294,187	305,795	318,068	330,825	344,097
Rental Car Tax	5,767	5,940	6,118	6,302	6,491	6,686	6,886	7,093	7,306
Property Tax	196,168	200,398	204,773	209,297	213,978	218,822	223,836	229,027	234,402
TOTAL TAX REVENUES	2,617,954	2,721,754	2,829,984	2,943,034	3,061,588	3,186,008	3,316,409	3,452,811	3,595,070
Fares & Other Operating Revenue									
Commuter Rail	22,789	23,257	23,586	25,608	25,998	26,427	26,818	28,974	29,423
Link Light Rail	262,878	222,138	229,867	253,203	265,134	270,065	312,772	317,404	323,663
Regional Express Bus	27,678	28,095	28,513	23,555	23,921	24,261	27,715	28,158	28,633
Tacoma Link	4,229	4,396	4,547	4,607	4,683	4,759	6,224	10,545	10,715
Bus Rapid Transit	23,071	23,409	23,779	24,180	26,360	26,759	27,194	27,595	29,980
System-Wide	-	-	-	-	-	-	-	-	-
TOTAL FARES & OTHER OPERATING REVENUE	340,646	301,295	310,292	331,154	346,096	352,271	400,723	412,675	422,414
INTEREST EARNINGS	23,204	25,675	28,262	30,969	31,576	32,206	34,850	32,450	36,161
TOTAL OPERATING REVENUES	2,981,804	3,048,723	3,168,538	3,305,157	3,439,259	3,570,484	3,751,982	3,897,937	4,053,645
OPERATING EXPENSES									
Operating & Maintenance Costs									
Commuter Rail	104,559	107,908	111,462	129,612	133,742	137,786	142,400	146,705	151,626
Link Light Rail	512,167	529,196	618,491	646,543	670,241	693,161	781,478	809,596	890,260
Regional Express Bus	134,028	138,443	143,133	147,926	152,810	158,192	163,515	169,030	171,281
Bus Rapid Transit	69,934	72,335	74,827	77,411	80,085	82,860	85,730	88,709	91,791
System-wide	185,569	191,128	139,544	143,959	143,220	143,832	159,588	161,660	163,353
TOTAL OPERATING EXPENSES	1,006,257	1,039,011	1,087,457	1,145,452	1,180,099	1,215,831	1,332,711	1,375,700	1,468,311
NET OPERATING INCOME	1,975,547	2,009,713	2,081,082	2,159,705	2,259,160	2,354,653	2,419,271	2,522,236	2,585,334
DEBT SERVICE									
Principal & Interest	818,235	909,247	1,010,365	1,095,114	1,122,189	1,128,651	1,136,736	1,147,314	1,151,798
NET INCOME	1,157,312	1,100,465	1,070,717	1,064,591	1,136,971	1,226,002	1,282,535	1,374,923	1,433,536



SOURCES & USES
2017 DRAFT Financial Plan
Appendix C
(YOE Dollars in Thousands)

	2017 - 2041	1997 - 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOURCES													
Tax Revenue	60,618,524	1,702,286	285,900	308,338	331,794	351,962	346,767	461,338	569,564	593,350	613,681	657,721	708,806
Fare Revenue	6,025,813	37,945	13,206	16,036	18,145	22,029	25,657	29,048	37,589	46,117	54,145	56,944	60,180
Other Operating Revenue	475,682	82,649	7,484	12,530	29,702	6,209	5,217	5,352	2,437	4,950	3,671	5,975	6,553
Capital Grant Drawdowns	5,462,511	154,691	53,539	101,372	97,828	79,125	103,257	100,534	104,658	118,062	89,154	81,656	90,201
FTA Formula Fund Drawdowns	2,236,673	123,640	14,112	36,198	33,114	31,125	60,681	65,272	56,940	55,250	42,265	67,462	105,328
Bond Proceeds (less issuance cost)	13,493,738	347,693	-	399,968	-	463,908	-	399,283	-	-	-	-	-
TIFIA Proceeds	3,320,266	-	-	-	-	-	-	-	-	-	-	-	-
Interest Earned	493,807	175,720	10,626	26,090	37,265	24,952	23,445	12,360	14,122	20,875	(3,054)	7,974	4,361
TOTAL SOURCES	92,127,013	2,624,624	384,866	900,533	547,847	979,310	565,023	1,073,188	785,309	838,604	799,862	877,732	975,428
USES													
Commuter Rail Capital Costs	3,157,885	706,781	104,195	35,642	51,930	61,901	57,238	63,745	90,810	94,310	105,554	92,149	55,747
Light Rail Capital Costs	41,228,287	383,246	220,972	486,899	465,471	513,647	377,227	236,604	340,613	421,481	366,808	473,641	638,787
Regional Express Capital Costs	943,379	225,537	74,302	78,618	82,334	77,825	36,750	22,006	26,929	38,923	7,368	13,978	9,540
Bus Rapid Transit Capital Costs	1,826,372	-	-	-	-	-	-	-	-	-	-	-	-
Service Delivery Capital Costs	132,824	-	59	101,801	1,212	4,545	22,482	6,690	46,772	32,606	40,806	2,570	31,079
Agency Admin Capital Costs	88,698	-	-	-	-	-	-	-	-	-	3,877	3,031	2,425
Systemwide Capital Costs	959,218	25,912	14,010	9,039	(6,035)	2,076	3,538	10,386	4,530	8,977	299	958	2,364
TOTAL CAPITAL PROGRAM	48,336,663	1,341,476	413,538	711,999	594,911	659,995	497,235	339,431	509,653	596,298	524,711	586,326	739,942
Total O&M + NC Costs	21,938,544	283,518	92,607	117,911	126,054	140,272	160,463	177,492	222,009	212,871	216,908	224,982	244,714
State-of-Good Repair	6,300,118	-	-	-	-	-	-	-	-	-	-	-	-
Scheduled Debt Service	12,118,351	80,098	17,164	29,227	41,929	41,930	75,941	83,007	78,819	89,149	81,199	99,181	98,913
TIFIA Debt Service	2,490,629	-	-	-	-	-	-	-	-	-	-	-	-
Early Principal Redemption	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond Reserve Deposits	976,834	-	-	-	-	92,133	-	9,386	-	-	(26,355)	(972)	-
O&M Reserve Contributions	204,839	20,111	1,385	1,385	1,385	1,385	2,243	7,879	1,365	8,999	(2,180)	11,805	(4,664)
Capital Reserve Contributions	-	-	-	-	-	22,601	21,904	24,273	24,273	45,862	61,227	45,290	59,272
Increase (decrease) in cash	(238,963)	899,422	(139,827)	40,011	(216,431)	20,995	(192,763)	431,720	(50,809)	(114,575)	(55,648)	(88,880)	(162,749)
TOTAL USES	92,127,013	2,624,624	384,866	900,533	547,847	979,310	565,023	1,073,188	785,309	838,604	799,862	877,732	975,428
BALANCE END													
Bond Reserve Fund Balance END	74,192	-	-	-	-	92,133	92,133	101,519	101,519	101,519	75,164	74,192	74,192
O&M Reserve Fund Balance END	52,958	20,111	21,496	22,880	24,265	25,650	27,893	35,772	37,137	46,135	43,955	55,760	51,096
Capital Reserve Balance END	-	-	-	-	-	22,601	44,505	68,778	93,241	144,745	207,615	252,906	312,178
General Fund Balance END	819,267	899,422	759,595	799,606	583,175	604,170	393,304	825,024	774,215	659,640	603,992	485,693	322,944
Total Fund Balance END	946,417	919,533	781,091	822,486	607,440	744,553	557,836	1,031,094	1,006,112	952,040	930,727	868,551	760,410



SOURCES & USES
2017 DRAFT Financial Plan
Appendix C
(YOE Dollars in Thousands)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
SOURCES														
Tax Revenue	769,194	834,485	1,329,266	1,693,243	1,742,912	1,792,908	1,853,521	1,917,051	1,985,016	2,056,433	2,130,526	2,207,785	2,288,565	2,373,813
Fare Revenue	65,426	80,562	88,139	94,035	97,113	99,318	105,330	128,415	142,464	191,000	218,544	226,858	230,486	237,165
Other Operating Revenue	11,083	6,404	70,393	14,413	71,983	54,422	32,974	15,342	12,653	4,060	36,677	4,209	4,286	29,650
Capital Grant Drawdowns	61,943	40,238	14,781	200,000	225,000	225,000	215,000	210,000	200,000	100,000	100,000	300,000	300,000	272,730
FTA Formula Fund Drawdowns	90,907	129,971	93,191	95,543	107,368	61,220	60,330	61,303	63,978	65,119	68,752	76,910	77,277	78,312
Bond Proceeds (less issuance cost)	600,023	477,023	-	-	-	-	-	-	111,281	652,510	777,414	-	483,050	1,288,406
TIFIA Proceeds	-	-	266,270	188,026	574,285	874,101	728,023	446,924	190,585	52,052	-	-	-	-
Interest Earned	8,994	12,784	28,220	23,917	18,992	16,948	13,245	4,990	8,650	4,899	6,351	8,008	9,033	9,171
TOTAL SOURCES	1,607,569	1,581,468	1,890,260	2,309,177	2,837,653	3,123,916	3,008,423	2,784,025	2,714,628	3,126,073	3,338,263	2,823,771	3,392,698	4,289,247
USES														
Commuter Rail Capital Costs	61,617	114,596	138,251	80,986	183,435	113,483	102,250	113,172	174,606	144,991	151,451	95,890	84,280	96,888
Light Rail Capital Costs	609,154	500,420	1,165,698	1,639,091	1,805,048	2,104,100	2,198,154	1,416,676	1,569,363	1,181,793	1,225,469	1,270,472	1,988,167	2,712,014
Regional Express Capital Costs	78,404	88,645	95,036	75,184	161,755	243,615	151,119	51,197	81,058	61,928	22,487	-	-	-
Bus Rapid Transit Capital Costs	-	-	45,650	-	54,732	26,022	87,728	145,414	125,255	538,103	652,109	151,359	-	-
Service Delivery Capital Costs	6,483	2,090	34,920	50,266	19,165	3,056	21,822	1,749	243	1,603	-	-	-	-
Agency Admin Capital Costs	3,286	2,565	6,242	10,714	5,760	6,226	4,049	3,795	1,400	3,179	3,144	3,169	3,622	3,728
Systemwide Capital Costs	1,084	3,597	48,821	78,594	75,748	81,722	45,141	39,958	44,494	67,962	29,994	28,492	29,784	32,496
TOTAL CAPITAL PROGRAM	760,028	711,912	1,534,619	1,934,834	2,305,644	2,578,225	2,610,264	1,771,960	1,996,418	1,999,559	2,084,652	1,549,381	2,105,853	2,845,126
Total O&M + NC Costs	244,118	322,228	441,779	485,134	495,358	515,591	548,072	534,826	601,721	666,574	726,722	741,808	791,832	833,095
State-of-Good Repair	-	-	-	-	-	74,458	102,702	121,125	118,508	165,067	173,988	150,821	165,241	138,803
Scheduled Debt Service	101,127	111,479	133,998	137,262	139,289	140,654	149,899	151,328	152,805	171,539	206,584	248,312	248,314	265,977
TIFIA Debt Service	-	-	-	-	-	991	11,578	21,828	37,513	65,287	80,014	83,014	85,369	106,099
Early Principal Redemption	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond Reserve Deposits	-	-	-	-	-	-	-	-	8,056	47,236	56,278	-	34,969	93,270
O&M Reserve Contributions	1,862	7,785	19,925	7,226	1,704	3,372	5,414	193	11,149	10,809	10,025	3,218	8,337	6,877
Capital Reserve Contributions	4,112	4,989	-	-	-	-	-	-	-	-	-	-	-	-
Increase (decrease) in cash	496,322	423,074	(240,060)	(255,279)	(104,342)	(189,375)	(419,506)	182,765	(211,542)	2	(1)	47,217	(47,218)	1
TOTAL USES	1,607,569	1,581,468	1,890,260	2,309,177	2,837,653	3,123,916	3,008,423	2,784,025	2,714,628	3,126,073	3,338,263	2,823,771	3,392,698	4,289,247
BALANCE SHEET														
Bond Reserve Fund Balance END	74,192	74,192	74,192	74,192	74,192	74,192	74,192	74,192	82,248	129,484	185,763	185,763	220,731	314,001
O&M Reserve Fund Balance END	52,958	60,744	80,669	87,895	89,598	92,971	98,384	98,577	109,726	120,535	130,559	133,777	142,115	148,992
Capital Reserve Balance END	316,290	329,186	337,415	345,851	354,497	363,360	372,444	381,755	391,299	401,081	411,108	421,386	431,920	442,718
General Fund Balance END	819,267	1,242,340	1,002,280	747,002	642,660	453,284	33,779	216,544	5,001	5,003	5,002	52,219	5,001	5,002
Total Fund Balance END	1,262,707	1,706,462	1,494,557	1,254,939	1,160,947	983,807	578,799	771,067	588,274	656,103	732,432	793,144	799,767	910,713



SOURCES & USES
2017 DRAFT Financial Plan
Appendix C
(YOE Dollars in Thousands)

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
SOURCES													
Tax Revenue	2,248,455	2,333,215	2,423,029	2,518,174	2,617,954	2,721,754	2,829,984	2,943,034	3,061,588	3,186,008	3,316,409	3,452,811	3,595,070
Fare Revenue	240,861	244,702	276,919	284,840	290,979	295,648	304,569	325,231	340,091	346,182	394,549	406,415	415,961
Other Operating Revenue	4,443	4,524	6,141	6,225	50,183	6,176	6,265	6,508	6,604	6,703	6,803	6,905	7,140
Capital Grant Drawdowns	200,000	225,000	225,000	225,000	225,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
FTA Formula Fund Drawdowns	80,325	84,770	86,222	94,635	98,346	99,415	100,749	103,656	106,612	116,344	117,474	118,630	120,195
Bond Proceeds (less issuance cost)	1,883,251	1,447,478	1,529,697	1,146,374	1,293,314	1,354,504	1,272,423	201,855	-	-	52,180	-	-
TIFIA Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Earned	11,675	15,168	18,187	21,000	23,204	25,675	28,262	30,969	31,576	32,206	34,850	32,450	36,161
TOTAL SOURCES	4,669,010	4,354,856	4,565,195	4,296,249	4,598,980	4,753,171	4,792,252	3,861,253	3,796,471	3,937,442	4,172,264	4,267,211	4,424,526
USES													
Commuter Rail Capital Costs	167,565	217,105	204,896	181,559	250,169	291,173	225,913	87,467	52,355	-	-	-	-
Light Rail Capital Costs	2,786,277	2,250,510	2,374,126	2,086,413	2,130,143	2,169,082	2,066,204	1,140,476	975,274	988,555	1,033,166	729,557	222,457
Regional Express Capital Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Bus Rapid Transit Capital Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Service Delivery Capital Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Agency Admin Capital Costs	3,703	3,675	3,575	3,613	3,610	2,291	1,707	1,734	1,093	1,112	2,381	2,513	2,665
Systemwide Capital Costs	54,423	53,021	49,326	26,434	24,769	25,380	21,157	21,686	17,139	17,573	18,018	18,476	8,606
TOTAL CAPITAL PROGRAM	3,011,969	2,524,312	2,631,923	2,298,018	2,408,692	2,487,926	2,314,981	1,251,364	1,045,861	1,007,240	1,053,565	750,546	233,728
Total O&M + NC Costs	852,800	933,325	943,965	975,113	1,006,257	1,039,011	1,087,457	1,145,452	1,180,099	1,215,831	1,332,711	1,375,700	1,468,311
State-of-Good Repair	214,758	200,913	204,663	180,696	266,981	213,474	271,203	345,044	418,250	455,007	775,052	809,917	733,448
Scheduled Debt Service	320,737	434,605	531,960	614,840	679,613	771,403	873,297	958,824	986,677	993,916	1,002,778	899,628	904,113
TIFIA Debt Service	129,004	140,954	140,177	139,400	138,622	137,845	137,067	136,291	135,513	134,736	133,958	247,685	247,685
Early Principal Redemption	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond Reserve Deposits	136,332	104,785	110,737	82,988	93,625	98,055	92,113	14,613	-	-	3,777	-	-
O&M Reserve Contributions	3,408	15,961	1,773	5,191	5,191	5,459	16,132	9,666	5,774	5,955	19,480	7,165	15,435
Capital Reserve Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-
Increase (decrease) in cash	2	1	(4)	2	0	(1)	1	1	24,296	124,758	(149,057)	176,569	821,807
TOTAL USES	4,669,010	4,354,856	4,565,195	4,296,249	4,598,980	4,753,171	4,792,252	3,861,253	3,796,471	3,937,442	4,172,264	4,267,211	4,424,526
BALANCE SHEET													
Bond Reserve Fund Balance END	450,333	555,118	665,855	748,843	842,468	940,523	1,032,636	1,047,248	1,047,248	1,047,248	1,051,026	1,051,026	1,051,026
O&M Reserve Fund Balance END	152,399	168,360	170,133	175,325	180,515	185,974	202,107	217,773	217,547	223,502	242,982	250,147	265,582
Capital Reserve Balance END	453,786	465,131	476,759	488,678	500,895	513,418	526,253	539,409	552,895	566,717	580,885	595,407	610,292
General Fund Balance END	5,004	5,005	5,001	5,003	5,003	5,002	5,003	5,004	29,300	154,058	5,001	181,570	1,003,377
Total Fund Balance END	1,061,522	1,193,614	1,317,749	1,417,849	1,528,882	1,644,917	1,765,999	1,803,435	1,846,990	1,991,526	1,879,894	2,078,150	2,930,277



Cost Inflation Factors
2017 DRAFT Financial Plan
Appendix D

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
COST INDICES												
ST CPI-U												
<i>(used for O&M, Other Capital)</i>												
CPI-U Index - Conway August 2017	226.1	226.8	232.7	238.6	241.6	245.9	249.3	254.9	261.5	267.9	274.4	281.0
CPI-U Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
CPI-U Index w / contingency	226.1	226.8	232.7	238.6	241.6	245.9	249.3	254.9	261.5	267.9	274.4	281.0
CPI-U Annual Growth Factor	1.0056	1.0030	1.0262	1.0252	1.0126	1.0177	1.0140	1.0224	1.0258	1.0245	1.0241	1.0241
CPI-U Annual % Change	0.56%	0.30%	2.62%	2.52%	1.26%	1.77%	1.40%	2.24%	2.58%	2.45%	2.41%	2.41%
CPI-U Escalation Factor (from year 2007 dollars)	1.0492	1.0523	1.0799	1.1071	1.1211	1.1410	1.1570	1.1829	1.2134	1.2432	1.2731	1.3038
ST BCI/CCI												
<i>(used for Construction)</i>												
CCI Index - WSP August 2017	4,901.5	5,037.3	5,140.7	5,211.2	5,281.0	5,408.1	5,519.3	5,652.8	5,953.0	6,248.9	6,540.9	6,808.4
CCI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
CCI Index w / contingency	4,901.5	5,037.3	5,140.7	5,211.2	5,281.0	5,408.1	5,519.3	5,652.8	5,953.0	6,248.9	6,540.9	6,808.4
CCI Annual Growth Factor	1.0223	1.0277	1.0205	1.0137	1.0134	1.0241	1.0206	1.0242	1.0531	1.0497	1.0467	1.0409
CCI Annual % Change	2.23%	2.77%	2.05%	1.37%	1.34%	2.41%	2.06%	2.42%	5.31%	4.97%	4.67%	4.09%
CCI Escalation Factor (from year 2007 dollars)	1.0750	1.1048	1.1275	1.1430	1.1583	1.1862	1.2105	1.2398	1.3057	1.3706	1.4346	1.4933
ST ROWI												
<i>(used for ROW)</i>												
ROWI Index (Internal Estimate)	161.0	161.9	164.8	168.0	184.4	210.6	229.8	244.7	270.6	301.8	327.3	342.6
ROWI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
ROWI Index w / contingency	161.0	161.9	164.8	168.0	184.4	210.6	229.8	244.7	270.6	301.8	327.3	342.6
ROWI Annual Growth Factor	0.8636	1.0058	1.0178	1.0197	1.0975	1.1421	1.0909	1.0650	1.1058	1.1152	1.0845	1.0468
ROWI Annual % Change	-13.6%	0.58%	1.78%	1.97%	9.75%	14.21%	9.09%	6.50%	10.58%	11.52%	8.45%	4.68%
ROWI Escalation Factor (from year 2007 dollars)	0.8945	0.8997	0.9157	0.9338	1.0248	1.1705	1.2769	1.3599	1.5038	1.6771	1.8188	1.9039



Cost Inflation Factors
2017 DRAFT Financial Plan
Appendix D

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
COST INDICES												
ST CPI-U												
<i>(used for O&M, Other Capital)</i>												
CPI-U Index - Conway August 2017	287.2	293.6	300.1	307.2	314.5	322.0	329.7	337.7	345.8	354.1	362.5	371.2
CPI-U Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
CPI-U Index w / contingency	287.2	293.6	300.1	307.2	314.5	322.0	329.7	337.7	345.8	354.1	362.5	371.2
CPI-U Annual Growth Factor	1.0223	1.0220	1.0223	1.0236	1.0238	1.0239	1.0240	1.0240	1.0240	1.0240	1.0239	1.0239
CPI-U Annual % Change	2.23%	2.20%	2.23%	2.36%	2.38%	2.39%	2.40%	2.40%	2.40%	2.40%	2.39%	2.39%
CPI-U Escalation Factor (from year 2007 dollars)	1.3329	1.3622	1.3926	1.4254	1.4594	1.4942	1.5301	1.5668	1.6044	1.6429	1.6822	1.7224
ST BCI/CCI												
<i>(used for Construction)</i>												
CCI Index - WSP August 2017	7,080.9	7,360.3	7,642.6	7,933.6	8,232.0	8,503.3	8,783.1	9,072.4	9,371.5	9,680.6	10,000.3	10,330.7
CCI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
CCI Index w / contingency	7,080.9	7,360.3	7,642.6	7,933.6	8,232.0	8,503.3	8,783.1	9,072.4	9,371.5	9,680.6	10,000.3	10,330.7
CCI Annual Growth Factor	1.0400	1.0395	1.0384	1.0381	1.0376	1.0330	1.0329	1.0329	1.0330	1.0330	1.0330	1.0330
CCI Annual % Change	4.00%	3.95%	3.84%	3.81%	3.76%	3.30%	3.29%	3.29%	3.30%	3.30%	3.30%	3.30%
CCI Escalation Factor (from year 2007 dollars)	1.5530	1.6143	1.6762	1.7401	1.8055	1.8650	1.9264	1.9898	2.0554	2.1232	2.1933	2.2658
ST ROWI												
<i>(used for ROW)</i>												
ROWI Index (Internal Estimate)	356.8	373.9	392.5	410.2	429.2	448.5	468.6	489.6	511.6	534.6	558.6	583.6
ROWI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-	-	-	-
ROWI Index w / contingency	356.8	373.9	392.5	410.2	429.2	448.5	468.6	489.6	511.6	534.6	558.6	583.6
ROWI Annual Growth Factor	1.0414	1.0480	1.0498	1.0451	1.0462	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449
ROWI Annual % Change	4.14%	4.80%	4.98%	4.51%	4.62%	4.49%	4.49%	4.49%	4.49%	3.74%	3.79%	3.76%
ROWI Escalation Factor (from year 2007 dollars)	1.9828	2.0780	2.1815	2.2797	2.3851	2.4922	2.6041	2.7210	2.8431	2.9708	3.1041	3.2435



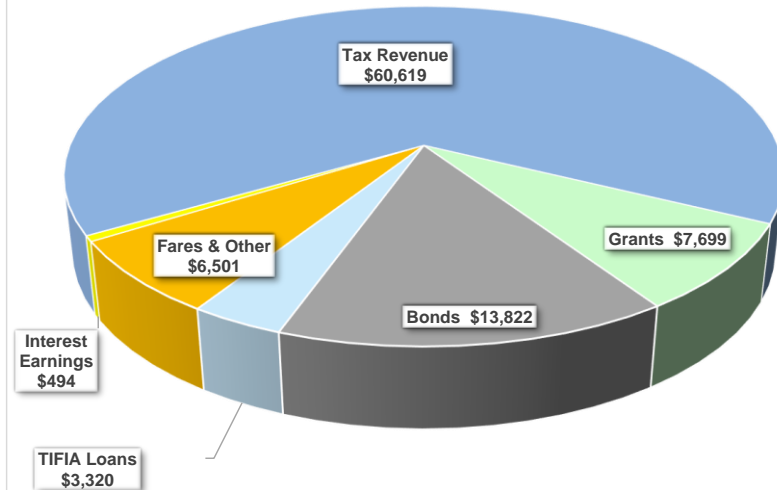
Cost Inflation Factors
2017 DRAFT Financial Plan
Appendix D

	2033	2034	2035	2036	2037	2038	2039	2040	2041
COST INDICES									
ST CPI-U									
<i>(used for O&M, Other Capital)</i>									
CPI-U Index - Conway August 2017	380.1	389.3	398.7	408.4	418.3	428.5	438.9	449.7	460.7
CPI-U Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-
CPI-U Index w / contingency	380.1	389.3	398.7	408.4	418.3	428.5	438.9	449.7	460.7
CPI-U Annual Growth Factor	1.0240	1.0241	1.0242	1.0243	1.0243	1.0244	1.0244	1.0245	1.0245
CPI-U Annual % Change	2.40%	2.41%	2.42%	2.43%	2.43%	2.44%	2.44%	2.45%	2.45%
CPI-U Escalation Factor (from year 2007 dollars)	1.7637	1.8063	1.8500	1.8949	1.9410	1.9883	2.0368	2.0867	2.1379
ST BCI/CCI									
<i>(used for Construction)</i>									
CCI Index - WSP August 2017	10,672.4	11,025.6	11,390.9	11,768.5	12,159.0	12,562.8	12,980.3	13,412.1	13,858.2
CCI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-
CCI Index w / contingency	10,672.4	11,025.6	11,390.9	11,768.5	12,159.0	12,562.8	12,980.3	13,412.1	13,858.2
CCI Annual Growth Factor	1.0331	1.0331	1.0331	1.0332	1.0332	1.0332	1.0332	1.0333	1.0333
CCI Annual % Change	3.31%	3.31%	3.31%	3.32%	3.32%	3.32%	3.32%	3.33%	3.33%
CCI Escalation Factor (from year 2007 dollars)	2.3408	2.4182	2.4983	2.5812	2.6668	2.7554	2.8470	2.9417	3.0395
ST ROWI									
<i>(used for ROW)</i>									
ROWI Index (Internal Estimate)	609.8	637.2	665.8	695.7	726.9	759.6	793.7	829.3	866.5
ROWI Annual Growth Factor Contingency	-	-	-	-	-	-	-	-	-
ROWI Index w / contingency	609.8	637.2	665.8	695.7	726.9	759.6	793.7	829.3	866.5
ROWI Annual Growth Factor	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449	1.0449
ROWI Annual % Change	3.58%	3.58%	3.56%	3.54%	3.54%	3.55%	3.55%	3.53%	3.53%
ROWI Escalation Factor (from year 2007 dollars)	3.3891	3.5412	3.7002	3.8663	4.0399	4.2212	4.4107	4.6087	4.8156

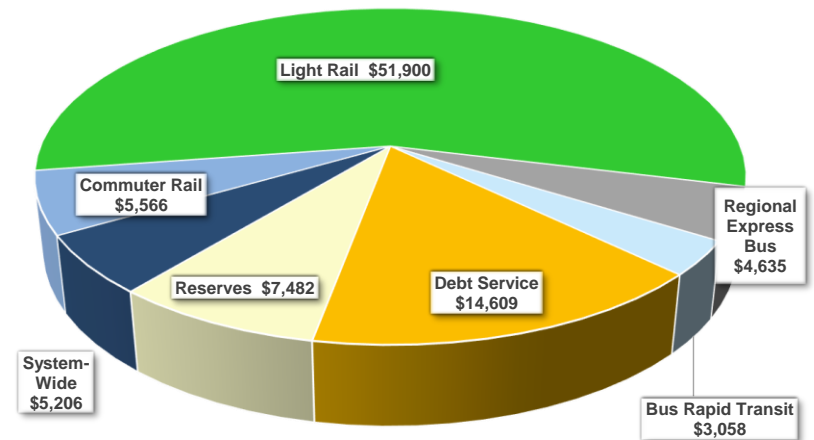
**Sound Transit
Sources and Uses
Appendix E
(Dollars in Millions)**

Total Sources & Uses \$92,455

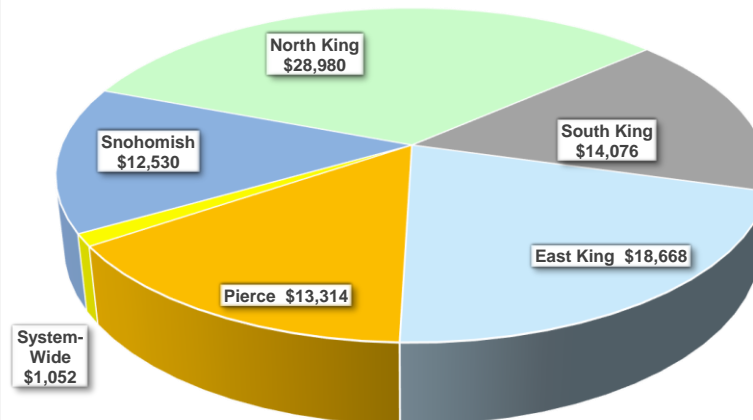
Sources of Funds



Uses of Funds

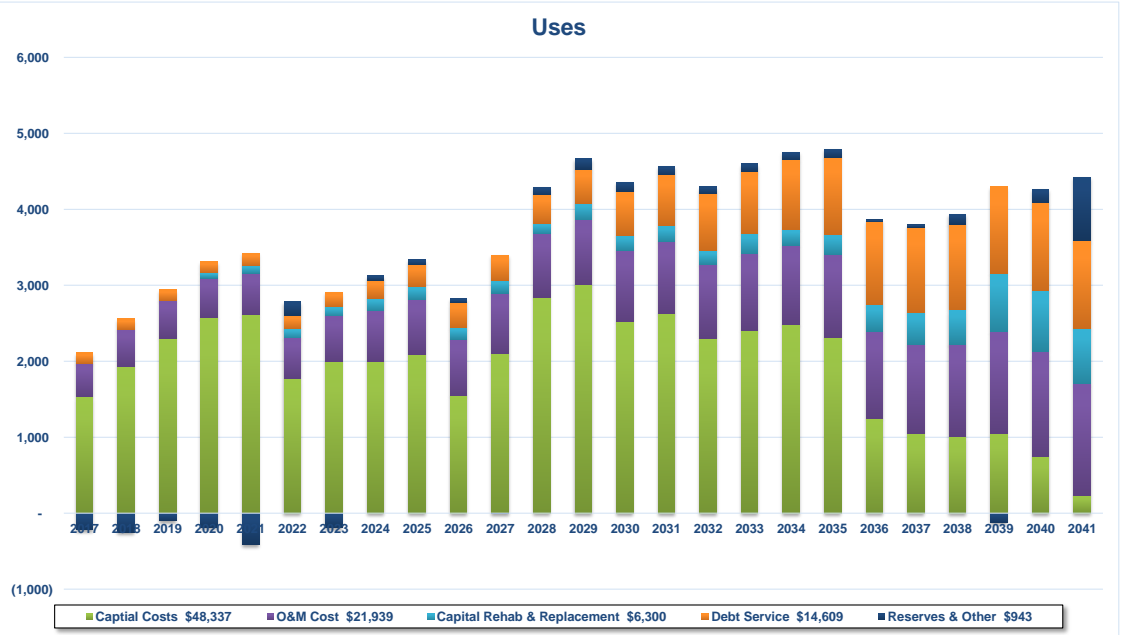
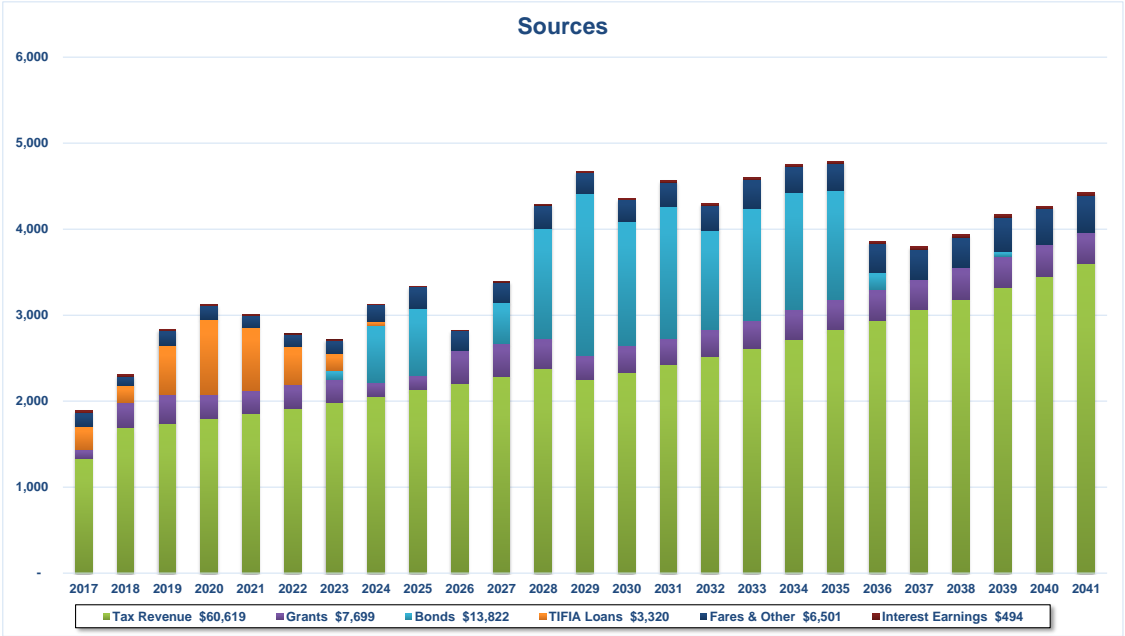


Sources by Subarea



Sound Transit
Sources and Uses by Year
Appendix E
(Dollars in Millions)

Total Sources & Uses \$92,455



Sound Transit
O&M and Boardings by Mode
Appendix E
(Dollars in Millions)

Total O&M \$21,939

