SOUNDTRANSIT

RESOLUTION NO. R2016-16

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority adopting the Sound Transit 3 Regional Transit System Plan.

WHEREAS, the Central Puget Sound Regional Transit Authority (Sound Transit) is the duly-organized regional transit authority for Pierce, King, and Snohomish counties pursuant to Chapters 81.104 and 81.112 RCW, and is authorized to plan, construct, and permanently operate a regional high-capacity system of transportation infrastructure and services; and

WHEREAS, in general elections held on November 5, 1996 and November 4, 2008, voters approved local funding to implement plans for a regional high-capacity transportation (HCT) system serving the Central Puget Sound region. The 1996 system plan is commonly known as Sound Move, and the 2008 system plan is commonly known as Sound Transit 2 (or ST2); and

WHEREAS, the transit projects and services in the Sound Move and ST2 plans, including Link light rail, Sounder commuter rail, ST Express bus, and HOV access ramps, are either complete, under construction, or on schedule to be completed by 2023; and

WHEREAS, pursuant to Motion No. M2013-11 (February 28, 2013), Sound Transit initiated an HCT planning process, which included conducting a series of HCT corridor studies and evaluating a range of HCT system infrastructure investment alternatives. Sound Transit also completed the environmental review required to update Sound Transit's Regional Transit Long-Range Plan, which was informed by an extensive public involvement process that generated more than 5,000 comments on the planning and environmental documents; and

WHEREAS, by Resolution No. R2014-31 (December 18, 2014), the Sound Transit Board updated the Regional Transit Long-Range Plan to guide the long-term development of the regional HCT system to address the significant population and employment growth predicted for the region in the next several decades; and

WHEREAS, by Motion No. M2015-80 (August 27, 2015), consistent with the updated Regional Transit Long-Range Plan, and after extensive public outreach generating considerable input and project proposals from citizens, stakeholders and jurisdictions, the Sound Transit Board identified a substantial number of transportation projects and services to be considered for inclusion in the next system plan, and directed Sound Transit staff to complete further study of these projects and services; and

WHEREAS, in the process of developing the Sound Transit 3 Regional Transit System Plan (Sound Transit 3 Plan or Plan), Sound Transit conducted dozens of public meetings, discussed these candidate projects and services at multiple board and committee meetings, and received thousands of comments in response to its public outreach efforts, which included mailings, open houses, and web-based communications and surveys; and

WHEREAS, based on the system planning process, including the required independent Expert Review Panel review of financial, ridership, cost, and other technical studies and reports, and after extensive public input, the Sound Transit 3 Plan, together with required plan information and documents, project lists, financial information, and maps and appendices, is ready for Board consideration; and

WHEREAS, the development of the Sound Transit 3 Plan has been informed by the 2014 and 2005 supplemental environmental impact statements (EISs), which evaluated the impacts of the Regional Transit Long-Range Plan; Sound Transit's 1993 EIS, which evaluated the impacts of the Regional Transit System Plan; other relevant environmental documents; and other planning and technical analyses provided to the Sound Transit Board, including detailed templates for each project in the Plan; and

WHEREAS, the Sound Transit 3 Plan is based on, and is consistent with, the adopted Regional Transit Long-Range Plan, and the Plan elements and projects fall within the range of alternatives and impacts reviewed in the 2014 supplemental EIS and other relevant environmental documents and briefings to the Board; and

WHEREAS, individual projects identified in the Sound Transit 3 Plan will receive appropriate project-level environmental review following voter approval of financing for the Plan, but before the Board approves implementation of each project; and

WHEREAS, after considering the environmental information described herein, and after considering input from the public, the Expert Review Panel, the Citizen Oversight Panel, local jurisdictions, and other governmental agencies, the Sound Transit Board has determined that it is in the best interests of the region's citizens to adopt the Sound Transit 3 Plan as substantially contained in Exhibit A attached hereto, including Appendices A – D; and

WHEREAS, the Puget Sound Regional Council will review the Sound Transit 3 Plan for conformity with regional transportation and development plans, including Vision 2040 and Transportation 2040, and the Expert Review Panel has provided, and will continue to provide, comments on the plan consistent with RCW 81.104.110.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority as follows:

Section 1. The Board identifies and hereby adopts the Sound Transit 3 Plan (including Appendices A – D), as substantially contained in Exhibit A attached hereto, as Sound Transit's HCT system plan to be submitted to voters, pursuant to the requirements of the state HCT systems act, Chapter 81.104 RCW, and Sound Transit's enabling legislation, Chapter 81.112 RCW.

Section 2. The Financial Policies contained in Appendix B of the Sound Transit 3 Plan will take effect upon the earlier of either the approval of local funding by the voters at an election, currently scheduled for November 8, 2016, or upon Board adoption of these amended Financial Policies by separate resolution.

Section 3. The Board directs staff to make any final technical refinements to the Sound Transit 3 Plan deemed necessary by the chief executive officer to conform the plan to the Board's decision herein, including updating financial information and technical data, and adding photos, charts, and graphics to improve readability.

Section 4. The Sound Transit 3 Plan adopted herein constitutes Sound Transit's HCT plan and its preferences for purposes of future state and federal environmental review. Such review may adopt or incorporate by reference the results of the Sound Transit 3 Plan process in order to better integrate local planning with environmental decision-making.

Section 5. The Board directs the chief executive officer to take such additional actions as may be necessary to implement the intent, policies, and determinations of the Board reflected in this Resolution.

ADOPTED by not less than a two-thirds affirmative vote of the Board of the Central Puget Sound Regional Transit Authority as a major decision of the Board at a regular meeting thereof held on June 23, 2016.

Dow Constantine
Board Chair

ATTEST:

Kathryn Flores
Board Administrator

Sound Transit 3:

The Regional Transit System Plan for Central Puget Sound

Adopted June 23, 2016

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SOUND TRANSIT 3: INTRODUCTION

The Sound Transit 3 System Plan will improve and expand the regional mass transit system by connecting the major cities in King, Pierce and Snohomish counties with light rail, Bus Rapid Transit (BRT), express bus, and commuter rail.

Sound Transit's mission is to plan, build and operate mass transit service throughout central Puget Sound. The initial phase of the regional mass transit system, called Sound Move, was approved by voters in 1996. The second phase, Sound Transit 2, was approved in 2008. Under these plans, the regional light rail system will more than double in length from just over 20 miles today to over 50 miles by 2023. Service is also increasing on the 83-mile Sounder commuter-rail line from Everett to Lakewood, and ST Express buses continue to serve major highways in the region.

Even with these improvements, transportation continues to be one of the area's biggest challenges with approximately 800,000 more people expected to call this region home in the next 25 years. By 2040 the region will also support 800,000 new jobs. In the past year alone, the region's population grew by 52,000 people - making daily commutes longer and more congested.

In response, Sound Transit 3 provides the next phase of high-capacity transit improvements for central Puget Sound. With this plan, the light rail system will more than double again to 116 miles with over 70 stations. Light rail will expand north to Everett, south to Federal Way and Tacoma, east to downtown Redmond, south Kirkland, and Issaquah, and west to Ballard and West Seattle. Sound Transit 3 will also invest in Bus Rapid Transit (BRT) in two corridors: connecting Lynnwood to Burien via I-405 and SR 518 to serve Eastside cities as well as Tukwila and Burien; and on SR 522 between Bothell and Shoreline with service extending to Woodinville, and connecting to Link light rail via Northeast 145th Street. The plan also includes a program to improve bus speed and reliability in specific corridors. Finally, the plan will expand Sounder commuter rail, including an extension to serve Joint Base Lewis-McChord and DuPont.

The Sound Transit 3 plan was developed through an open public process over a three-year period. During that time, Sound Transit coordinated closely with cities and counties, the state of Washington, the Puget Sound Regional Council (PSRC), and local transit agencies. In addition, Sound Transit received tens of thousands of public comments that helped shape the plan.

SOUND TRANSIT 3: BUILDING ON SUCCESS

The new investments proposed in the Sound Transit 3 plan will build on Sound Move and Sound Transit 2, creating more connections to more places for more people. When complete, the system will connect 16 cities with light rail, 30 cities with Bus Rapid Transit/ST Express bus and 12 cities with commuter rail across Pierce, King and Snohomish counties.

The Sound Transit 3 plan is consistent with established regional land use and transportation plans. The PSRC developed and adopted VISION 2040 as the region's strategy for directing growth in an environmentally responsible way, while fostering economic development and providing efficient transportation. The PSRC also adopted Transportation 2040 as the region's comprehensive long-range regional transportation plan. Grounded in VISION 2040's growth management and transportation policies, Transportation 2040 provides a multimodal plan for investing in roads, ferries, transit and freight mobility through the year 2040. The Sound Transit 3 Plan builds on and is consistent with these regional plans.

As the Regional Transit Authority, Sound Transit is responsible for regional high-capacity transit system planning in the context of Transportation 2040. Sound Transit updated its Regional Transit Long-Range Plan in 2014. Sound Transit 3 is the next phase of high-capacity transit improvements for central Puget Sound.

THE SOUND TRANSIT 3 PLAN

Link Light Rail

Sound Transit launched Link light rail as part of Sound Move and is expanding Link under the voter-approved Sound Transit 2 plan. New light rail service opened to Capitol Hill and the University of Washington in March 2016, increasing ridership on the existing system. Also in 2016 Sound Transit will begin service to Angle Lake, 1.6 miles south of Sea-Tac Airport, adding a major new transit hub in South King County.

By 2021, Link will open new service to the University District, Roosevelt and Northgate. Two years later in 2023, Link will reach Shoreline, Mountlake Terrace, Lynnwood, Mercer Island, Bellevue, and Overlake — nearly doubling the light rail system to over 50 miles.

Sound Transit 3 will deliver major projects in steady succession, adding over 60 miles of new light rail serving 37 new stations, four expanded stations and two provisional stations. The provisional stations will be built if additional funding becomes available from grants, cost savings, additional subarea tax revenue or financial capacity, or contributions from other parties not currently assumed in the financial plan.

North Corridor

Sound Transit 3 extends light rail north from the Lynnwood Transit Center to downtown Everett via the Southwest Everett Industrial Center. The line is scheduled to open in 2036 and includes six stations serving the areas of West Alderwood Mall, Ash Way, Mariner, Southwest Everett Industrial Center, SR 526 near Evergreen Way and the area at the existing Everett Station. Additional parking will be provided at Mariner and Everett stations. A light rail operations and maintenance facility will be located in the north corridor. A seventh station, Airport Rd/SR 99 is a provisional station that will be built if funding becomes available from grants, cost savings, additional subarea tax revenue or financial capacity, or contributions from other parties not currently assumed in the financial plan. Sound Transit may cost share with Snohomish County, cities, transit and state agencies to provide access improvements to station areas for BRT planned by ST's partners such as signal improvements, bus access/egress, and bus/rail integration facilities, and nonmotorized access.

Central Corridor

Sound Transit 3 adds two light-rail extensions in Seattle. The first extends light rail from downtown Seattle to West Seattle with stations serving the sports stadiums, SODO, Delridge, Avalon and Alaska Junction. In addition, light rail extends to Ballard with a new subway through downtown Seattle and South Lake Union with stations serving the International District/Chinatown, Midtown, Westlake, Denny, South Lake Union, Seattle Center, Smith Cove, Interbay and Ballard.

Connections to the existing Forest Street operations and maintenance facility will be built to service vehicles operating in this corridor. Three infill stations will be added serving Northeast 130th Street, South Graham Street and South Boeing Access Road near I-5, with parking provided at the South Boeing Access Road station.

East Corridor

Sound Transit 3 extends light rail throughout the Eastside, connecting Redmond, Bellevue, south Kirkland and Issaquah to each other and to the rest of the regional system. Eastside investments include two stations serving southeast Redmond and downtown Redmond along with a new light rail line from south Kirkland to Issaquah via Bellevue. Four stations are included on the latter light rail extension serving south Kirkland, the Richards Road area, Eastgate near Bellevue College, and central Issaquah. A fifth station, the Lakemont provisional station, will be built if additional funding becomes available from grants, cost savings, additional subarea tax revenue or financial capacity, or contributions from other parties not current assumed in the financial plan. Additional parking will be provided at the southeast Redmond, south Kirkland, and central Issaquah stations.

South Corridor

Sound Transit 3 extends light rail south from Kent/Des Moines to Federal Way, with stations serving South 272nd and the Federal Way Transit Center. From there, light rail will continue south to Pierce County, with stations in south Federal Way, Fife, east Tacoma and at the Tacoma Dome. Parking will be added at the South 272nd, Federal Way Transit Center, South Federal Way, and Fife stations. A light-rail operations and maintenance will be built in the south corridor. Sound Transit 3 also includes an expansion of Tacoma Link to Tacoma Community College, with six stations.

Bus Rapid Transit (BRT)

Sound Transit 3 adds Bus Rapid Transit (BRT) in two corridors either in principally exclusive right-of-way or in managed toll lanes that provide substantially equivalent speed and reliability at speeds equal to or better than uncongested highway speeds. In addition to higher speeds, Bus Rapid Transit riders gain the advantage of reliability and frequent service: every 10 minutes in the peak periods and every 15 minutes during off-peak hours of operation.

Sound Transit 3 will establish BRT service on the I-405 corridor from the Lynnwood Transit Center to the Tukwila International Boulevard light rail station, and from there via SR 518 to the Burien Transit Center. Bus Rapid Transit will operate in the Express Toll lanes between Totem Lake and Bellevue Transit Center and from the Bellevue Transit Center to south Renton. Vehicle access to the express toll lanes is limited and managed by Washington State Department Of Transportation (WSDOT) to ensure that BRT service can operate at 45 miles

per hour or greater at least 90 percent of the time during the peak hour commute. On SR 518, BRT will operate on principally exclusive right-of-way between Tukwila International Boulevard Station and the Burien Transit Center.

New inline freeway stations which allow buses to stop within the freeway right-of-way to pick up/unload riders will be built at Northeast 85th Street and Northeast NE 44th Street Renton. Additionally, a new transit center and parking garage will be built in south Renton. Bus Rapid Transit service will also connect with existing freeway stops and transit centers in Lynnwood, Canyon Park, in the vicinity of UW Bothell, Brickyard Park-and-Ride, Totem Lake, downtown Bellevue, Tukwila International Boulevard Station and Burien Transit Center. Parking will be added at Totem Lake, Northeast 44th Street north Renton and south Renton, and Sound Transit will coordinate with third parties regarding potential transit-oriented development opportunities at these locations. New bus-only lanes will be added on Northeast 85th Street between Northeast 6th Street and I-405 in Kirkland. Sound Transit will coordinate with WSDOT regarding implementation of the I-405 Master Plan, including additional capital projects to improve bus speed and reliability for high-capacity transit service, should funding become available.

Bus Rapid Transit service that uses Business Access Transit (BAT) lanes on SR 522 will connect riders with the Link light rail station in Shoreline at I-5 and Northeast 145th Street, as well as I-405 BRT service near University of Washington Bothell and with service connections to Shoreline. This project will also include capital improvements on Northeast 145th Street at intersections. Additional parking will be provided in Lake Forest Park, Kenmore, and Bothell. This will improve transit options for residents of Shoreline, Lake Forest Park, Kenmore, Bothell and Woodinville areas.

ST Express Bus Service

Sound Transit's regional express bus system, which led the nation in number of commuter bus boardings for 2015, will continue building ridership in heavily-travelled corridors not served by rail and Bus Rapid Transit. Sound Transit 3 maintains interim express bus service in future High Capacity Transit (HCT) corridors, with an emphasis on long-haul connections between population and employment centers and providing riders with access to rail hubs.

Sound Transit 3 includes funding for capital improvements for interim express bus service to improve bus speed and reliability. This includes funding for capital investments for traffic signal and bus priority improvements on Madison Street BRT and facilities used by Metro's RapidRide C and D lines to move more people more efficiently through the heavily congested Ballard and West Seattle corridors while light rail is under design and construction. Sound Transit 3 provides investments for capital improvements for bus connections from east Pierce County to the Sumner Sounder station and along Pacific Avenue/SR 7 in Pierce County. Sound

Transit 3 also includes frequent ST Express bus service between Lakewood and the Tacoma Dome. Also, a park and ride facility will be built in north Sammamish.

The Bus-on-Shoulder program provides opportunities for buses to use shoulders on freeway and state highways during periods of congestion in general traffic and/or HOV lanes. This program requires coordination and further study with transit partners, WSDOT and the Federal Highway Administration to determine specific potential locations. Freeways that could be included in the program are I-5, I-405, SR 167, I-90 and SR 518. Improvements include capital infrastructure to enable the overall Bus-on-Shoulder program to operate efficiently.

Sound Transit works closely with transit and transportation partners, including Community Transit**,** Pierce Transit, Everett Transit, City of Seattle, King County Metro and WSDOT to extend the benefits of rail and Bus Rapid Transit services to more communities throughout the region by enabling our transit partners to redeploy bus hours in corridors as they become part of the regional high-capacity transit network through light rail transit and BRT projects. As rail corridors are built and extended, Sound Transit bus service funding for those corridors will be reallocated to operating costs for light rail services.

Sounder Commuter Rail

Sound Transit 3 includes funding to extend Sounder commuter rail service during peak hours from Lakewood to new stations at Tillicum and DuPont, increasing access near Joint Base Lewis-McChord. Parking is provided at both of these stations.

The Sounder south line capital improvement program helps meet growing demand for service by increasing system capacity and enhancing service. This program includes expanding platforms to accommodate up to 10-car trains, allowing Sound Transit to run longer trains and carry more riders. Access elements include improvements for pedestrians, bicyclists, buses and private vehicles, prioritized under Sound Transit's System Access Policy. In addition, depending on affordability and cost-effectiveness, track and signal upgrades and other related infrastructure will provide capacity for additional trips. Sound Transit will negotiate with Burlington Northern Santa Fe and affected organizations for additional trips to serve growing ridership along the Sounder south line, within available financial resources. Consistent with the financial policies, available financial resources remaining after funding cost-effective additional train trips will be reallocated to pay for other capital and/or service improvements that are deemed to best provide additional frequent and reliable high-capacity transit service in the same corridor or subareas.

New parking and other access improvements are included at the Sounder north line's Edmonds and Mukilteo stations.

Planning for the Future

The plan includes studies to continue planning beyond Sound Transit 3 to expand the regional high-capacity transit system even farther, consistent with the regional transit system envisioned in Sound Transit's Long-Range Plan. Additional investments must be approved by voters. Sound Transit 3 includes a series of high-capacity transit planning studies that will help

narrow the range of alternatives, evaluate potential routes and station locations, inform local comprehensive planning, prepare for environmental review and engineering, and position the Sound Transit Board to evaluate options to inform future updates to the Long-Range Plan.

High-capacity transit (HCT) studies in the Sound Transit 3 plan include connecting West Seattle to Burien and onto Renton via Tukwila; light rail connections across northern Lake Washington between SR 522 and SR 520, including connections between Ballard to the University of Washington and to the Eastside; commuter rail to Orting; HCT extension from Tacoma Dome to Tacoma Mall, and connections from Everett to North Everett. The Sound Transit 3 Plan also includes an environmental study examining multiple options to determine the mode and alignment for a HCT route from Bothell to Bellevue, including along the Eastside Rail Corridor and/or I-405, and planning for a future system expansion to continue implementing Sound Transit's Long-Range Plan.

PROGRAMS AND POLICIES

In addition to the projects described above, Sound Transit 3 also includes a series of programs and policies that will work together to provide a high-capacity transit system that:

- is accessible by walking, biking, transferring from other transit services, vehicle drop-off and pick-up, and parking;
- supports transit-oriented development;
- improves the system through innovation and technology;
- is sustainable.

These elements are provided at the individual project level and system-wide. For more details on these policies, consult Appendix D.

System Access

To serve the region's 3.7 million future residents, the Sound Transit Board of Directors has made multimodal access as a priority for Sound Transit 3. People will access the 116 miles of light rail, Sounder commuter rail stations north and south, and hundreds of thousands of annual ST Express Bus service hours, by walking, biking, parking, transferring from partner transit services, or using pick-up and drop-off areas.

With this plan, Sound Transit will combine robust, dedicated funding for access to the regional system, with ongoing planning that responds to evolving needs. The access investments included in the Sound Transit 3 plan conform to surrounding land uses, and the investments levels are based on the station type and location. Some stations are located in urban areas where pedestrian and bicycle access is emphasized. Other stations are located in suburban areas where travel by car is more common. Likewise, some stations are system hubs, where improvements to bus and rail transfers are needed. The Sound Transit 3 plan dedicates

funding to improve safe and convenient access to existing and future Sound Transit bus and rail stations including resources to facilitate integration with partner services:

Project-level

- Bus-rail integration allowances: Integration with other transit services is a priority for the region. Sound Transit will work closely with local transit agencies to clarify roles and responsibilities for funding future transit integration improvements. Sound Transit will also work closely early in the planning process with local transit agencies and jurisdictions to integrate station plans with transit service and related land use plans. To facilitate convenient passenger transfers between modes, the cost estimates for the light rail projects described in the Sound Transit 3 plan include approximately $100 million ($2014) in integration allowances to build off-street facilities at key stations for buses to lay over and maintain consistent schedules. As Sound Transit expands commuter rail, light rail, Bus Rapid Transit, and express bus corridors, there will be more opportunities to create convenient transfers for bus riders.

- Access Allowance: Also included in the cost estimates for the light rail and bus rapid transit projects, each new Sound Transit 3 station has an Access Allowance based on the type of station (i.e., suburban, urban) of up to $4.5 million ($2014). In total, the cost estimates include approximately $270 million ($2014) in new Access Allowances for station areas that create safe, direct walking and bicycling routes to surrounding neighborhoods, businesses, and community gathering places. Sound Transit will, where possible and appropriate, improve pedestrian and bicycle access to new and existing Sound Transit facilities by designing facilities that meet adopted wayfinding, lighting, safety design and disability access standards, consistent with FTA guidance.

- Parking access: Where identified in the project descriptions, funds are included for additional parking for transit riders. Sound Transit will evaluate potential locations for parking before implementing projects, including an analysis of access demand and how the investment will conform to surrounding land uses; opportunities for leased or shared parking; and/or parking built in conjunction with new TOD projects. Sound Transit has conducted pilot programs to provide permitted parking spaces for a small fee and real-time information about the availability of open parking spaces at some lots and is planning to launch a more widespread permit parking program when the facility at Angle Lake opens in 2016. In Sound Transit 3, the agency will manage parking to increase the availability and reliability of access for riders. This is consistent with Board-adopted policy that anticipates charging reasonable fees for parking, which may vary by location, facility, size and/or occupancy in order to manage demand. Discounted rates may be determined for low-income permits, in coordination with policies within regional reduced fare transit programs. Revenue

derived from parking fees over and above the amounts assumed in the ST3 financial plan will be directed to the ST3 System Access Fund to further improve station access and safety, including bicycle and pedestrian access improvements.

System-wide

- Sound Transit 3 System Access Fund: The System Access Fund provides an additional $100 million ($2014) allocated equally among Sound Transit's five sub-areas to fund projects such as safe sidewalks and protected bike lanes, shared use paths, improved bus-rail integration, and new pick-up and drop-off areas that provide convenient access so that more people can use Sound Transit services. Funds will be allocated based on an evaluation of the needs of customers using Sound Transit existing and planned bus and rail stations and connectivity with other modes. Sound Transit will partner with cities, counties, transit and state agencies and other Sound Transit stakeholders to leverage grants and matching funds and create the best access solutions for each station. Projects that leverage funds through funding partnerships will receive strong consideration. The System Access Fund includes funding to survey riders and conduct studies to help prioritize the most beneficial projects, whether retrofitting stations to accommodate growth or enhancing connections to neighborhoods.

Transit-Oriented Development (TOD)

Development around transit investments represents a significant opportunity both to shape communities that attract jobs and housing opportunities affordable at a range of incomes, increase transit ridership, and to improve equitable access to opportunities for current and future residents. Construction for ST3 will take place during a period of dramatic regional growth, especially among transit-dependent communities. Under this plan, Sound Transit will implement a regional equitable TOD strategy for diverse, vibrant, mixed-use and mixed-income communities adjacent to Sound Transit stations that are consistent with transit-oriented development plans developed with the community by the regional transportation planning organization within Sound Transit's boundaries. The necessary board policy changes for implementation must be completed within 18 months of voter approval of this system plan. Sound Transit will use, such plans as the 2013 *Growing Transit Communities Strategy*, to inform the content and implementation of its TOD strategy. The plan allocates funds to support collaborative planning for TOD at the transit capital project development stage, as well as for planning and pre-development activities on agency-owned properties that may be developed as TOD. Sound Transit will pursue and implement land disposition and development strategies that reduce the cost of affordable housing development, increase transit ridership, and otherwise work to leverage and increase the impact of other state, federal, and local affordable housing funders, and are consistent with retention of federal

grant funds where appropriate. Sound Transit's policies will specifically promote equitable TOD by:

Project-level

- TOD allowance: The cost estimates for the projects described in the Sound Transit 3 plan Section estimates include project allowances to fund appropriate TOD planning activities for each location expected to have surplus property.

System-wide

- TOD Fund: The Sound Transit 3 plan includes a TOD fund of $20 million ($2014) to incorporate TOD considerations during land acquisition to ensure that, where possible, property that may later become surplus is supportive of its reuse for TOD;
- Coordinating with the local land use authority so that TOD activity on Sound Transit property considers and is consistent with local land use plans, policies and goals and the local community's established vision for growth.
- Working with local governments, housing authorities, non-profit developers, community organizations and others to implement a regional equitable transit-oriented development strategy for diverse, mixed-use, mixed-income communities, , as required under RCW 81.112.350, consistent with adopted applicable regional and local plans and policies and the *Growing Transit Communities Strategy*;
- Incorporating TOD objectives adopted by the Sound Transit Board as part of the selection criteria during land acquisition to ensure that, where possible, property that is necessary to construct or operate the transit facility, but that may later become surplus is supportive of its reuse for TOD;
- Using TOD objectives adopted by the Sound Transit Board, including consideration of local government TOD supportive land use policy and regulation, to analyze and inform alignment and station location decision in order to support development of mixed-income, mixed-use communities around transit stations;
- Offering surplus properties that it deems suitable for housing for either transfer at no cost, sale, or long-term lease first to local governments, housing authorities, and non-profit developers to develop affordable housing regardless of acquisition date, in accordance with RCW 81.112.350; and
- Seeking input through public engagement that informs, involves, and empowers people, and communities. Inviting people to play an active role in shaping the development process of surplus property in the community;

- Developing policies that evaluate proposals to develop surplus property. The evaluation criteria may consider whether the development plan includes space for small businesses or other uses that comprise a diverse, vibrant, mixed use, mixed-income TOD. The developer selection criteria may also consider the types of business and whether jobs proposed for the development to pay prevailing wages to the extent consistent with law and the retention of federal grant funds, where appropriate;
- Contributing $20 million (dollars in year of expenditure) to a regional revolving loan fund to support affordable housing creation.
- Funding TOD activities in capital projects to ensure adequate consideration and planning for development have occurred as a part of capital projects;
- Updating policies to require TOD potential and opportunities to be analyzed and incorporated consistent with law and grant requirements, throughout the planning and design process; and
- Developing station design policies that appropriately facilitate and accommodate TOD on and adjacent to agency-owned properties. This includes planning for station areas designed to evolve over time as the communities we serve mature and transition from auto-dependent to multimodal station access.

Innovation

Transit, like all other industries, is in a constant state of development and change. While light rail, commuter rail and BRT are efficient ways to move large numbers of people around our region, the region needs to continue investing in technologies and innovations to make transit even more effective, efficient and convenient for more people. As new transportation technologies and approaches develop, Sound Transit will work to integrate them with its high-capacity transit services and facilities to create a robust and reliable, yet adaptable, network of regional mobility options.

<u>System-wide</u>

Sound Transit 3's Innovation and Technology Fund invests $75 million ($2014) in research and development of programs and technologies to:

- Deliver real-time service availability and travel option information to customers where and when they need it;
- Ensure transit accessibility and ease of use for riders of all ages, abilities and income levels;
- Make fare payment fast and convenient;

- Understand and meet the needs of employers and bulk-purchasers of transportation services;
- Better manage vehicle and bicycle parking for transit customers;
- Identify ways of improving the connectivity between transit facilities and the communities they serve;
- Partner with other public and private mobility providers including ferry, local transit, bikeshare, carshare, rideshare, shuttle and mobility-on-demand services;
- Identify and adopt best and emerging practices to better serve customers and enhance the environmental, social equity and economic benefits of high capacity transit;
- Maximize the ability of future transportation technologies such as driverless cars to complement and expand the reach of high-capacity transit; and
- Evaluate and implement other technologies to improve rider experience and/or save operating costs.

Sustainability

Sound Transit's mission to build, operate and expand regional transit is essential to central Puget Sound's sustainable future. Sound Transit is committed to making long-term investments that improve the region's economy, communities, and environment.

For Sound Transit, sustainability is both about fulfilling the agency's mission as a transit provider, as well as how that mission is accomplished. The proposed Sound Transit 3 expansion projects promote a sustainable central Puget Sound region by enabling more people to travel affordably and reliably throughout the area's growing communities on environmentally-friendly buses and trains.

Under this plan, Sound Transit will implement the goals articulated in its sustainability plans. Sustainability approaches will be integrated into all aspects of agency activities consistent with Board-adopted policy—from planning and design to construction and operations. Sound Transit's ongoing sustainability efforts include its commitment to environmental stewardship. Sound Transit Sustainability policies and plans contemplate that the agency will:

<u>Project-level</u>

- Sustainability Allowance: The project cost estimates include allowances to implement green building and infrastructure designs and meet third-party green building and infrastructure standards, where applicable.

<u>System-wide</u>

- Reduce the greenhouse gas emissions and air pollution generated during construction and operation of the Sound Transit 3 System Plan;
- Procure and manage fleets that demonstrate increasing fuel efficiency and reduced air pollution emissions, including alternative fuels and low- and no-emission vehicles;
- Work to maximize energy efficiency and make the agency's electricity use carbon-neutral via onsite renewable energy projects and other strategies;
- Procure and utilize environmentally preferable products and services, where practical;
- Pursue innovative sustainability features and approaches over the duration of the Sound Transit 3 plan as industry best practices and national standards continue to evolve;
- Plan, design and construct a transit system that is resilient to the long-term impacts of climate change and other natural hazards; and
- Invest in technologies or services that can meet the agency's sustainability goals and/or reduce long-term operating costs.

Sales and Use Tax Offset Fee *to Support Educational Outcomes in the Sound Transit District*

As required by RCW 81.112.360, new ST3 projects are subject to a sales and use tax offset fee equal to 3.25% of the total payments made by Sound Transit to its contractors on construction contracts on which no other sales or use tax is paid by Sound Transit. This fee is equivalent to the sales tax that Sound Transit would have remitted to the state if ST 3 projects were not eligible for a statutory sales tax exemption applicable to the construction of public road and transit facilities. The offset fee will be deposited into a Puget Sound Taxpayer Accountability Account until Sound Transit has paid $518 million. Pursuant RCW 43.79.520, the Legislature can appropriate funds from the account for distribution to King, Pierce, and Snohomish Counties. The counties must use the appropriated funds to support services to improve educational outcomes in early learning, K-12, and higher education within the Sound Transit District. The educational services include, without limitation, services for youths that are low-income, homeless, or in foster care, or other vulnerable populations. Counties receiving distributions under this section must track all expenditures and uses of the funds. The law requires that to the greatest extent practicable, a county's expenditures must follow Sound Transit's subarea equity policy.

PUTTING THE SYSTEM IN PLACE

Project Delivery – Implementing the Plan

Based on public feedback throughout the development of the Sound Transit 3 plan, Sound Transit has been asked to identify ways to deliver projects faster. Major capital projects must go through multiple phases before transit services can start, including planning, environmental review, preliminary engineering and final design, property acquisition, permitting, third-party agreements, construction and start-up/testing programs. In addition, to ensure accountability and transparency about project development and delivery, engaging the public and stakeholders throughout these phases is critical. Working closely with project delivery partners who have land use, permitting, oversight or regulatory authority is central to maintaining project schedules.

Early Deliverables

The schedule for the plan includes multiple projects that will be delivered early in Sound Transit 3. These early deliverable projects are anticipated to be completed by 2019 to 2025. These projects include bus-on-shoulder opportunities, contributions to bus speed and reliability improvements for RapidRide C and D and Madison Street Bus Rapid Transit in Seattle, Pacific Avenue/SR 7 in Pierce County, in east Pierce County, Lakewood to Tacoma Dome service, parking for north line Sounder at Edmonds and Mukilteo, and a park-and-ride facility in north Sammamish. Bus Rapid Transit on I-405 and SR 518, and on SR 522 and Northeast 145th Street are also included.

Delivering Light Rail, Sounder, and ST Express Bus

Link light rail from Kent/Des Moines to Federal Way is scheduled to open in 2024, and the scheduled opening from Angle Lake to Kent/Des Moines has been adjusted to open at the same time. Link light rail from Redmond Technology Center to downtown Redmond is scheduled to open in 2024. Further extension south from Federal Way to Tacoma and an extension between downtown Seattle to West Seattle are scheduled to open in 2030. Link Light rail north from Lynnwood to Everett via the Southwest Everett Industrial Center is scheduled to open in 2036. The plan anticipates a new extension between downtown Seattle and Ballard to open in 2035. Infill stations are slated to open in 2031 at South Boeing Access Road, South Graham Street, and Northeast 130th Street. An extension of Tacoma Link to Tacoma Community College is scheduled for 2039, and a Link light rail line from south Kirkland to Issaquah is scheduled for 2041.

The extension of Sounder from Lakewood to DuPont is scheduled for 2036. The South Sounder Capital Improvements Program will provide funding for a series of improvements from 2024 to 2036.

ST Express Bus service will continue throughout the plan to provide interim service in future high-capacity transit corridors. Sound Transit will work closely with its transit partners to coordinate, integrate, and maximize bus service and restructure those services in response to new rail service.

ST3 Construction Workforce

Implementing ST3 will require the support of tens of thousands of skilled construction workers each and every year of the 25 years. Sound Transit intends to include the delivery of major ST3 construction projects using the existing project labor agreement which may be amended from time to time. The agreement has provided both the building trades and the agency with the certainty of available highly skilled workers as well as apprenticeship opportunities. It has promoted fairness in employment and enhanced diversity in employment opportunities for disadvantaged workers while preventing strikes, lockouts, pickets and other job delays.

Sound Transit Leased Property

It is the policy of the Sound Transit Board that development of property leased by the agency will occur consistent with agency labor standards for ST construction projects.

When Sound Transit leases property around stations for transit-oriented development, it will, consistent with law, include in its evaluation criteria whether a proposer demonstrates:

- Inclusion of all members of the workforce, including underrepresented groups, and workforce utilization goals
- Apprenticeship and work-training opportunities
- Plans to keep workers safe at job sites
- Area standards for wages and benefits
- Equivalent pay for equivalent work for all workers

American Manufacturing

Sound Transit will, wherever possible and consistent with law, seek to increase the domestic content of agency procured products to generate American manufacturing jobs.

Schedule Accountability Tools

To help maintain project delivery schedules, Sound Transit will work with project delivery partners to develop tools to provide clarity about project phasing requirements and schedules. Examples of these tools could include early agreements on permits needed for projects; establishment of project teams to obtain agreement on project scopes and

schedules; or model term sheets to outline decisions related to the identification of preferred routing and profile choices.

Sound Transit will also seek to have third parties assign a single point of accountability for projects to ensure a streamlined and accountable process. Sound Transit will work with individual project partners to establish a common set of project goals based on the plan scope, schedule, and budget, and to identify the preferred project as early as possible in the environmental review process.

Sound Transit will ask local agencies to coordinate permit actions with federal, state and other agencies, including using the mitigation commitments described in the environmental documents and/or Record of Decision during permitting for mitigating potential environmental impacts of a project rather than using a city or county's authority to impose additional mitigation measures. Sound Transit will also seek code amendments and other agreements to facilitate the preparation, filing and diligent processing of any required permits, modifications, or renewals of permits, as soon as practicable, with the goal of receiving land use permit decisions within 120 days of submittal and other technical permit decisions sooner.

To further assist the region in meeting Sound Transit 3 delivery schedules, Sound Transit will work with project partners to develop and publish a master implementation schedule – a Schedule Dashboard – for all projects. This schedule will be reviewed and updated at regular intervals by the Board. Sound Transit staff will report schedule performance to the Sound Transit Board of Directors and the public, including factors contributing to schedule improvements or degradation.

THE SOUND TRANSIT DISTRICT

After the formation the Sound Transit District, state legislation in 2010 provided that when territory is annexed to a city located within the boundaries of the District, that new city territory is simultaneously included within the boundaries of the Sound Transit District. Such newly annexed territory is subject to all applicable Sound Transit taxes and other liabilities and obligations, notwithstanding any other provision of law.

The Sound Transit District is more than 1,000 square miles with a population of over 2.8 million people. There are more than 50 cities in the District, which includes most of the urban areas of King, Pierce and Snohomish counties.

Sound Transit is governed by an 18-member Board of Directors made up of local elected officials including mayors, city council members, county executives and county council members from within the Sound Transit District, and the Secretary of the Washington State Department of Transportation.

Annexations

After voters within the District have approved a ballot proposition authorizing local taxes to support implementation of the Sound Transit 3 plan, the Sound Transit Board may approve resolutions calling for elections to annex areas outside, but adjacent to, the Sound Transit District.

The legal requirements to annex areas into the Sound Transit District include the following:

> *The Sound Transit Board may call for annexation elections after consulting with any affected transit agencies and with the approval of the legislative authority of the city or town (if the area is incorporated) or with the approval of the area's county council (if it is unincorporated).*
>
> *Citizens in areas to be annexed are provided an opportunity to vote on proposed annexation and imposition of taxes at rates already imposed within the Sound Transit District boundaries.*
>
> *If approved by the voters, changes to the Sound Transit District boundaries may require changes in the make-up of the Sound Transit Board membership. Board membership must be "representative" of the proportion of the population from each county that falls within the Sound Transit District.*

Extending service outside the Sound Transit boundaries

Sound Transit may extend new services beyond its boundaries to make connections to significant regional destinations and allow areas outside of the District to function as part of the regional system. Such service extension would require agreements with the affected local transit agency and/or other appropriate government agencies.

Sound Transit will enter into agreements with agencies beyond the District boundary to integrate fares. This will allow flexible transfers among various operators and prevent people who live outside the District from being penalized financially for making regional trips by transit instead of by automobile.

BENEFITS OF THE PLAN

Transportation Benefits (Please see Appendix A for more information.)

Transportation improvements are clearly linked to the growth, development, quality of life and economic vitality of our region. Sound Transit 3 proposes a range of transit improvements building on the investments Sound Transit has already made that serve increasing numbers of riders every year.

Transit investments create value within a community that goes beyond where or how many projects are built. Personal mobility, regional connections, the availability of transportation alternatives and impacts on growth patterns, quality of life and the economic well-being of the region are all measurable outcomes. The regional transit improvements included in Sound Transit 3 have many benefits for people throughout the Puget Sound region and will further the realization of the long-term growth management and quality of life goals embodied in the PSRC's Vision 2040 and Transportation 2040 plans, Sound Transit's Regional Transit Long-Range Plan and local land use plans and policies.

System Reliability

Reliability means arriving at the same time every time, regardless of gridlock on the roads or snow on the ground. Reliability is a critical factor in how people plan their travel and budget their time. Transportation system reliability has continued to decline in the Puget Sound region for several decades, both for car drivers and for transit riders whose travel times also suffer from worsening congestion in HOV lanes. This is primarily related to increases in the severity of traffic congestion and the greater likelihood of congestion occurring at any time of day or on any day of the week.

When people need to arrive somewhere by a specific time, whether to be on time for work, to catch a plane or to make a child's day care pick-up, they know that if the trip involves one of the region's most congested corridors at peak hours they should allow a great deal of extra time to get there.

The road network is reaching saturation, where even small increases in traffic result in large degradation in travel time.

Highway reliability

Reliability on streets and highways is affected by many factors including collisions, stalled vehicles and weather conditions, but the most important factor in the Central Puget Sound region is the volume of traffic and delays caused by congestion.

Hours of delay on the central Puget Sound region's freeways nearly doubled between 2010 and 2015, increasing by 95 percent. Delay increased by 18 percent between 2014 and 2015 alone.

As detailed in Table 1, WSDOT tracks reliability on the freeways for major commutes between pairs of cities, and calculates "95 percent reliable travel times" -- that is, the amount of time a driver needs to plan for to be sure of arriving on time 19 times out of 20. WSDOT data, compiled annually in major corridors, shows reliability on the region's highways to be steadily declining.

Table 1: Existing regional highway travel time reliability

Route Description	Existing Time at Posted Speeds	Average (Median) Peak Travel Time	Time to Ensure 95% On-Time Arrival	Additional Time for On-Time Arrival	% Additional Time for On-Time Arrival
Everett to Seattle	24 min	52 min	76 min	24 min	46%
Seattle to Everett	23 min	44 min	63 min	19 min	43%
Bellevue to Everett	23 min	47 min	62 min	15 min	32%
Overlake to Seattle	13 min	30 min	60 min	30 min	100%
South Lake Union to Ballard	10 min	19 min	27 min	8 min	42%
Bellevue to Overlake	5 min	7 min	12 min	5 min	71%
Bellevue to Issaquah	9 min	18 min	22 min	4 min	22%
Seattle to Federal Way	22 min	33 min	52 min	19 min	58%
Tacoma to Federal Way	12 min	14 min	16 min	2 min	14%
Tacoma to Lakewood	5 min	6 min	16 min	10 min	167%

Notes:
Highway times shown are from WSDOT 2015 Corridor Capacity Report, except for Ballard, which is from City of Seattle data.

Transit reliability

Sound Transit's Link light rail operates almost entirely on exclusive right of way. Most right of way is grade separated, with no interference from traffic. Even where there is no grade separation, Link light rail operates in its own right of way with specially programmed traffic signals that very seldom require trains to stop at intersections. This allows the service to

maintain a very high level of reliability at all times of day. By contrast, Sound Transit's express buses rely heavily on regional HOV lanes that are performing worse each year. Between 2012 and 2014 alone, the Washington State Department of Transportation reported major deterioration of HOV lane travel times, as shown in Appendix C.

Link Light Rail Capacity

The capacity of rail transit is determined by a combination of the size of the vehicles, the number of vehicles on each train and how frequently the trains run. As with highway capacity, when speaking of rail capacity the important measure is the number of passengers that can be carried during the peak period, when the service is most in demand. This is usually referred to as "peak passengers per hour in the peak direction." The passenger moving capacity of the ST3 light rail system is quite large, especially in comparison to a roadway of similar width with mixed traffic. Table 2 shows the capacity of the light rail system.

Table 2: Link light rail system capacity (passengers per hour)

Peak frequency (minutes)	4-car trains per hour (1 direction)	Seated capacity: 74 per car (1 direction)	Comfortable capacity: 150 per car (1 direction)	Standard peak capacity: 200 per car (1 direction)	Standard peak capacity (2 directions)	Standard peak capacity (2 directions, 2 tunnels)*
3	20	6,000	12,000	16,000	32,000	64,000
4	15	4,440	9,000	12,000	24,000	48,000
6	10	2,960	6,000	8,000	16,000	32,000

*Assumes construction and operation of new downtown tunnel

With Sound Transit 3, between 657,000 and 797,000 trips will be taken daily in the region, approximately twice the number of trips taken today.

The following table summarizes the annual boardings and passenger miles projected for Link light rail, Sounder commuter rail, Bus Rapid Transit, and ST Express bus in 2040 with the ST3 Plan.

Table 3: Summary of Sound Transit ridership by mode (boardings)

	2014 Annual Riders	2040 Annual Riders with ST3	2040 Annual Passenger Miles with ST3
Link light rail	11.9 million	152 - 188 million	1,380 - 1,735 million
Sounder commuter rail	3.4 million	8 - 11 million	190 - 255 million
ST Bus Rapid Transit	n/a	7 - 9 million	51 - 58 million
ST Express Bus	17.7 million	9 - 10 million	79 - 91 million
Total	**33.0** million	**176 - 218** million	**1,700 - 2,139** million

Travel time savings

Looking ahead to 2040, after ST3 investments are completed, the region's transit riders are projected to save 16 to 22 million hours a year.

The following tables illustrate the reduction in vehicle miles traveled (VMT) and the expected travel time savings for the region's drivers and transit riders, achieved by the investments included in the ST3 plan.

This analysis is based on two scenarios for traffic in 2040: one with ST3 projects and one without ST3 projects. Accordingly, the numbers are estimates based on best practices. In the simplest terms, every car not driven because the driver chooses to travel by transit either reduces congestion or leaves space for another vehicle.

Table 4: Projected regional vehicle miles traveled reduction due to ST3

	Auto Vehicle Miles Traveled Reduction in 2040 with ST3
Reduction in annual vehicle miles traveled (switched to transit)	314 - 411 million
Reduction in annual trips in auto (switched to transit)	19 - 24 million

These two measures use the methods required by the Federal Transit Administration (FTA) for estimating environmental and congestion relief benefits for FTA New Starts funding applications. They are described in detail in the most recent edition of the *Final Interim Policy Guidance - FTA Capital Investment Program* (August 2015).

Table 5: Projected travel time savings for transit riders

	Transit Riders Time Savings in 2040 with ST3
Daily Hours Saved	51,000 - 67,000
Total Annual Hours Saved	16 - 22 million

Notes: These annual time savings include savings for both existing transit riders and new transit riders.

Combined Regional Rail Access

The reach of the regional transit investments made in Sound Transit 3 will be much greater than just the immediate vicinity of rail stations and transit centers.

Map 2 in Appendix C shows the access to the regional light rail and commuter rail systems when all ST3 improvements are in service. It depicts the geographic coverage of ¾-mile walk access and 2½-mile park-and-ride access to the rail stations, and the reach of existing local bus services (including average ¼ mile walk distance to the bus) that would allow access to the rail system with one transfer.

Approximately 84 percent of Sound Transit District residents and 93 percent of district employees would have convenient access to the region's high-reliability rail system in 2040.

Social, Mobility, Environmental and Economic Benefits

(See Appendix D for more information)

ST3 improvements can provide substantial benefits to all within the region, including minority, low-income, disabled, elderly, transit- dependent residents, and for those who are unable to or who prefer not to drive access to a variety of destinations throughout the region. Especially important for low-income households, Sound Transit 3 investments may make it possible to reduce the number of cars per household, and/or to reduce the annual number of miles driven and costs of vehicle operations and maintenance. For those who cannot drive or afford an automobile, Sound Transit 3 investments will greatly expand their ability to travel quickly and reliability throughout the region, whether they can walk or cycle to a Sound Transit station or stop, or connect via local transit or demand-responsive services.

When residents can access transit and other services without using their cars, they spend less money on transportation and consume less gasoline, which can help reduce air pollution and greenhouse gas emissions. Sound Transit 3 projects are projected to reduce the number of private vehicle miles traveled (VMT) by 362.2 million miles annually by 2040 (midpoint of range of 314-411 million miles annually). This would further reduce transportation-related greenhouse gas emissions by more than 130,000 metric tons annually in 2040.

Expanding transit can help reduce transportation-related air pollution and the diseases associated with them. The ST3 Plan represents an important step towards addressing the challenges of climate change by offering a reliable, low carbon transportation choice.

The ST3 Plan will provide all-day, reliable connections for travelers in the region's most congested corridors, which will cut travel time and costs, support jobs and the regional economy, and support job creation, as detailed in Appendix D. According to models developed by the Washington State Office of Financial Management, ST3 would support over 78,000 direct jobs and more than 144,000 indirect jobs over the 25-year period of construction, for a total of over 223,000 jobs. (A job is defined as full-time employment of one person for one year.)

PAYING FOR THE SYSTEM

Financial Plan framework

State law authorizes funding for regional transit investments through authorization of voter-approved taxes, a rental car tax, and other financing. The Sound Transit 3 plan will be funded by a combination of existing local taxes (nine-tenths of one percent sales and use tax, eight-tenths of one percent car rental tax, three-tenths of one percent of motor vehicle excise tax [end in 2028), along with new voter-approved local taxes (an additional five-tenths of one percent sales and use tax, eight-tenths of one percent of motor vehicle excise tax, and property tax of twenty-five cents per $1,000 of assessed valuation), an additional rental car tax of up to 1.372 percent if authorized by the Board; federal grants, and fares. Sound Transit will issue bonds backed by local tax collections within the Sound Transit District to help implement the Sound Transit 3 Plan.

Funding

The Sound Transit 3 plan is built on the following funding elements (all dollar values include inflation and represent year of expenditure dollars.) See Appendix A for more information.):

- *Sound Move* and Sound Transit 2 Surplus: Revenue generated from Sound Transit's existing taxes (nine-tenths of one percent sales and use tax, eight-tenths of one percent car rental tax, and three-tenths of one percent of motor vehicle excise tax [end 2028]), will continue to be used in addition to grants, fares and other miscellaneous sources. The revenue generated from this surplus that is available to be applied to the Sound Transit 3 program is estimated to be $8.6 billion.
- Sound Transit 3 tax revenues: The plan will seek voter approval to raise an additional five-tenths of one percent sales and use tax, a motor vehicle excise tax eight-tenths of one percent, and property tax of twenty-five cents per $1,000 of assessed valuation. Revenue from these taxes is estimated to generate $27.7 billion.
- Federal support: The Sound Transit 3 plan assumes an additional $4.7 billion in federal grants, supplementing local resources. These federal grants for capital programs include Federal Transit Administration formula grants and full funding grant agreements. No state or other federal grants are assumed for implementing the Sound Transit 3 plan.
- Bonding: Because transit facilities provide benefits over a long span of time, it is reasonable to finance a portion of their construction over a period of time that extends well beyond the construction timeframe. Sound Transit's debt financing capacity will be calculated by evaluating all revenues and deducting total operating expenses for net revenues available for debt service. The Sound Transit Board recognizes that its future bondholders will hold first claim against taxes pledged as repayment for outstanding bonds. The Sound Transit 3 plan includes an estimated $11.0 billion in bond financing.

- Fares: Sound Transit currently collects fare revenues from passengers using the system. As the Sound Transit 3 system is built out, the agency will continue to collect fares and other operating revenue. The Sound Transit 3 related fares and operating revenues are estimated to be $1.5 billion.
- Interest earnings: The Sound Transit 3 related interest earnings on net cash balances are estimated to be $333 million. Financial policies allocate these revenues to fund system-wide costs.

Estimated Costs

The Sound Transit 3 plan will cost an estimated $53.85 billion in capital and operating investments to expand the regional high-capacity transportation system. The capital and other associated costs that will be incurred from 2017 to 2041 are as follows (See Appendix A for more information):

- Sounder Commuter Rail capital: $2.23 billion
- Link light rail capital: $31.68 billion
- ST Express bus capital: $586 million
- Bus Rapid Transit capital: $1.81 billion
- System-wide activities: $2.62 billion
- Transit operations and maintenance: $5.21 billion
- Debt service: $6.99 billion
- State of Good Repair: $781 million
- Contribution to reserves: $908 million
- Contribution to system-wide: $1.03 billion

The capital cost estimates for the Sound Transit 3 plan were developed using standard cost-estimating techniques common in the transit industry and recommended by the Federal Transit Administration. They also reflect Sound Transit's experience in designing and building comparable facilities in the Central Puget Sound region. Sound Transit's cost estimating methods were reviewed by an independent Expert Review Panel that was appointed by the State of Washington.

Risk Assessment

Building a complex regional transit system over an extended period of time involves risk. Those risks and Sound Transit's approach to addressing them are summarized below.

- Tax base growth risks: The plan requires projections of revenue collections over an extended period of time. The agency relies on an independent revenue forecast that has been reviewed by the State's Expert Review Panel. The forecast projects sales tax revenue to grow at a compounded annual growth rate of 3.8 percent over the Sound Transit 3 plan.
- Federal funds risk: Sound Transit assumes the use of federal funds. These funds are contingent upon future Congressional authorization and may vary from initial Sound Transit 3 projects due to federal fiscal conditions, timing of Sound Transit 3 projects, and competition from other projects nationwide.
- Cost risk: The projects in Sound Transit 3 are based on conceptual engineering estimates. The risks for costs to grow beyond initial estimates include: faster than anticipated growth in construction costs; faster than anticipated growth in real estate values; the addition of new required elements or projects not currently included in the plan; and more expensive project elements. The Sound Transit Board will closely monitor and manage project scope and cost risks to minimize cost increases. In addition, the Sound Transit 3 plan includes contingencies within the project budgets that allow for uncertainties and unforeseen conditions that arise during the design and construction of the projects.

  The Sound Transit 3 plan also contains additional contingency to deal with revenue shortfalls or cost increases. The agency plans to maintain a 50 percent annual contingency (after payment of operating expense) above the amount necessary to pay debt service (1.5x net coverage policy). In the event that a sub-area's revenues are insufficient to cover its costs, the agency's currently approved policies provide the Sound Transit Board with these options:

  - Modify the scope of the projects;
  - Use excess subarea financial capacity and/or inter-subarea loans;
  - Extend the time to complete the system; or
  - Seek legislative authorization and voter approval for additional resources

Financial Policies

The Sound Transit 3 financial plan is based on the following principles, which are documented in the agency's financial policies and included in Appendix B. The financial policies also reflect the framework for completing Sound Transit 3 and provide tools for the Sound Transit Board to respond to future conditions. For more detailed information on revenues and expenditures, see Appendix A.

- Distributing revenues equitably: Local tax revenue generated in each of Sound Transit's five sub-areas generally will be used on Sound Transit projects and operations that

benefit that sub-area. Sub-areas may fund projects or services outside of the geographic boundary of the sub-area when the project benefits the residents and business of the funding sub-area.

- Financial management: To effectively manage voter-approved revenues and to efficiently manage the transit system, Sound Transit will maintain polices for debt and investment management, asset management, fares and operating expenses and grant management.
- Public accountability: Sound Transit will hire independent auditors and continue to appoint a citizen oversight panel to monitor Sound Transit performance in carrying out its public commitments.
- Voter approval requirement: The Sound Transit Board recognizes that the taxes approved by voters are intended to implement the system and to provide permanent funding for future operations, maintenance, capital replacement, and debt service for voter approved projects, programs, and services. The Board has the authority to fund those future costs through a continuation of the local taxes authorized by the voters. However, the Board pledges that after the voter-approved plan is completed, subsequent phase capital programs that continue local taxes at rates above those necessary to build, operate, and maintain the system and retire outstanding debt, will require approval by a vote of the citizens within the Sound Transit District.
- Sales Tax rollback: Upon completion of the capital projects in Sound Move, Sound Transit 2 and Sound Transit 3, the Board will initiate steps to roll back the rate of taxes collected by Sound Transit. Sound Transit will initiate an accelerated pay off schedule for any outstanding bonds whose retirement will not otherwise impair the ability to collect tax revenue and complete Sound Move, Sound Transit 2, or Sound Transit 3, or impair contractual obligations and bond covenants. Sound Transit will implement a sales tax rollback to a level necessary to pay the accelerated schedule for debt service on outstanding bonds, system operations and maintenance, fare integration, capital replacement and ongoing system-wide costs and reserves.

Sound Transit 3

Appendix A:

Detailed Description of Facilities and Estimated Costs

Adopted June 23, 2016

Table of Contents

Sound Transit 3 Plan Map

Total agency: Projects

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

<table>
<tr>
<td>SOUNDER COMMUTER RAIL
Sounder North Parking
Sounder South Capital Improvements Program
Sounder Expansion to DuPont</td>
<td rowspan="2">LINK LIGHT RAIL AND OTHER
Lynnwood to Everett via SW Everett Industrial Center
Ballard to Downtown Seattle
West Seattle to Downtown Seattle
Kent/Des Moines to Federal Way Transit Center
Federal Way Transit Center to Tacoma Dome
Redmond Technology Center to Downtown Redmond
South Kirkland to Issaquah
Infill light rail station: Boeing Access Road
Infill light rail station: South Graham Street
Infill light rail station: Northeast 130th Street
Tacoma Link extension to Tacoma Community College
Downtown Seattle Light Rail Tunnel
System Access Program</td>
</tr>
<tr>
<td>BUS RAPID TRANSIT PROJECTS
I-405/SR 518 Bus Rapid Transit
SR 522 and NE 145th Street Bus Rapid Transit (BRT)</td>
</tr>
<tr>
<td>ST EXPRESS BUS
A capped contribution for King County Metro RapidRide C and D and Madison Street BRT Capital Improvements
Capital enhancements to improve bus speed and reliability between east Pierce County cities and Sumner Sounder station
A capped contribution for capital enhancements for speed, reliability and convenience along Pacific Avenue/SR 7
Bus on Shoulder program
North Sammamish Park and Ride
Interim ST Express service, including bus service improvements from Lakewood to Tacoma Dome
Bus operations and maintenance facility</td>
<td>SYSTEM-WIDE ACTIVITIES
Agency administration and insurance
Fare integration
Future system planning
High-capacity transit (HCT) planning studies
Innovation Program
Transit-Oriented Development Planning Program
Light rail vehicles, light rail operations and maintenance facilities
Puget Sound Taxpayer Accountability Fund
Contribution to Regional Affordable Housing Revolving Loan Fund
Efficiency/Sustainability Fund</td>
</tr>
</table>

Total agency: Sources and uses of funds

(Millions of year-of-expenditure dollars)*

SOURCES		USES	
ST3 Tax Revenues	27,710	**Capital Expenditures**	
ST3 Grants - Federal	4,669	Sounder Commuter Rail	2,230
Sound Move + ST2 Surplus	8,621	Link Light Rail	31,683
Bond Proceeds	10,999	Sound Transit Express Bus	586
Fares & Other Revenues	1,514	Bus Rapid Transit	1,812
Interest Earnings	333	System-wide Activities	374
		O & M Expenditures	
		Sounder Commuter Rail	306
		Link Light Rail	2,993
		Sound Transit Express Bus	708
		Bus Rapid Transit	1,203
		System-wide Activities	2,246
		Debt Service	6,986
		State of Good Repair	781
		Contribution to Reserves	908
		Contribution to System-wide	1,031
Total sources	53,845	Total uses	53,845

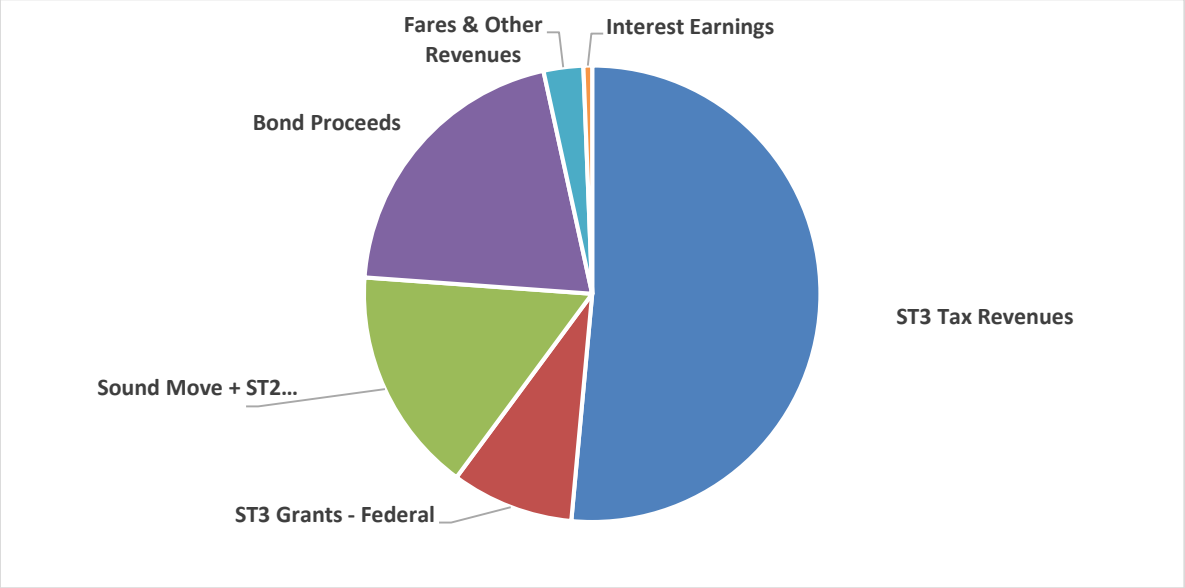
*2017 – 2041 includes inflation.

Note: Columns/rows may not add exactly due to rounding.

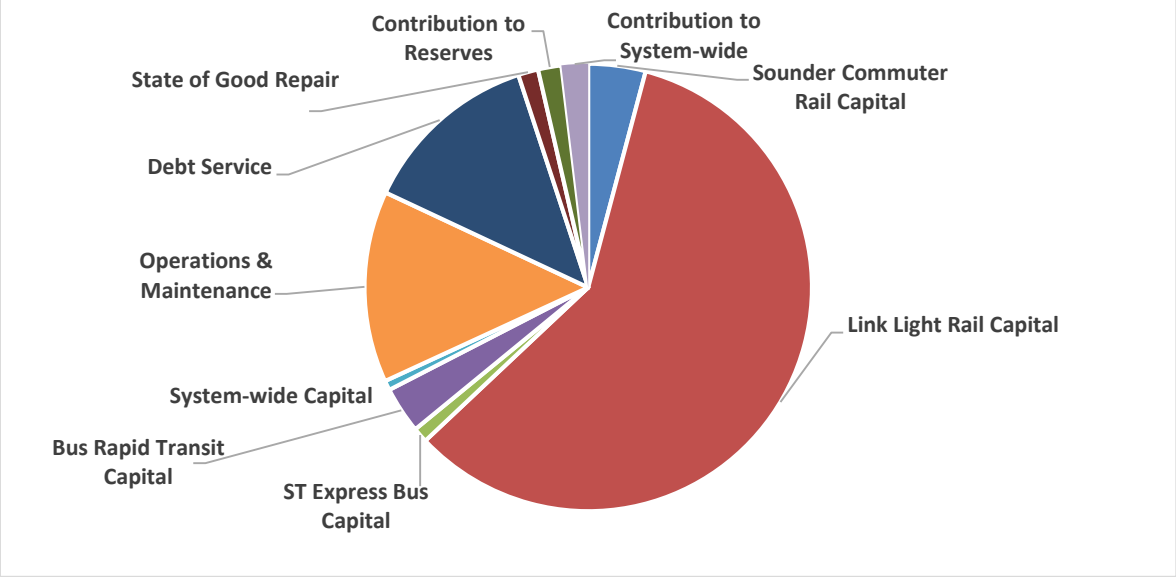
TOTAL SOURCES/USES OF FUNDS - $53.8 billion

(Millions of year-of-expenditure dollars)*

SOURCES OF FUNDS: 2017 – 2041

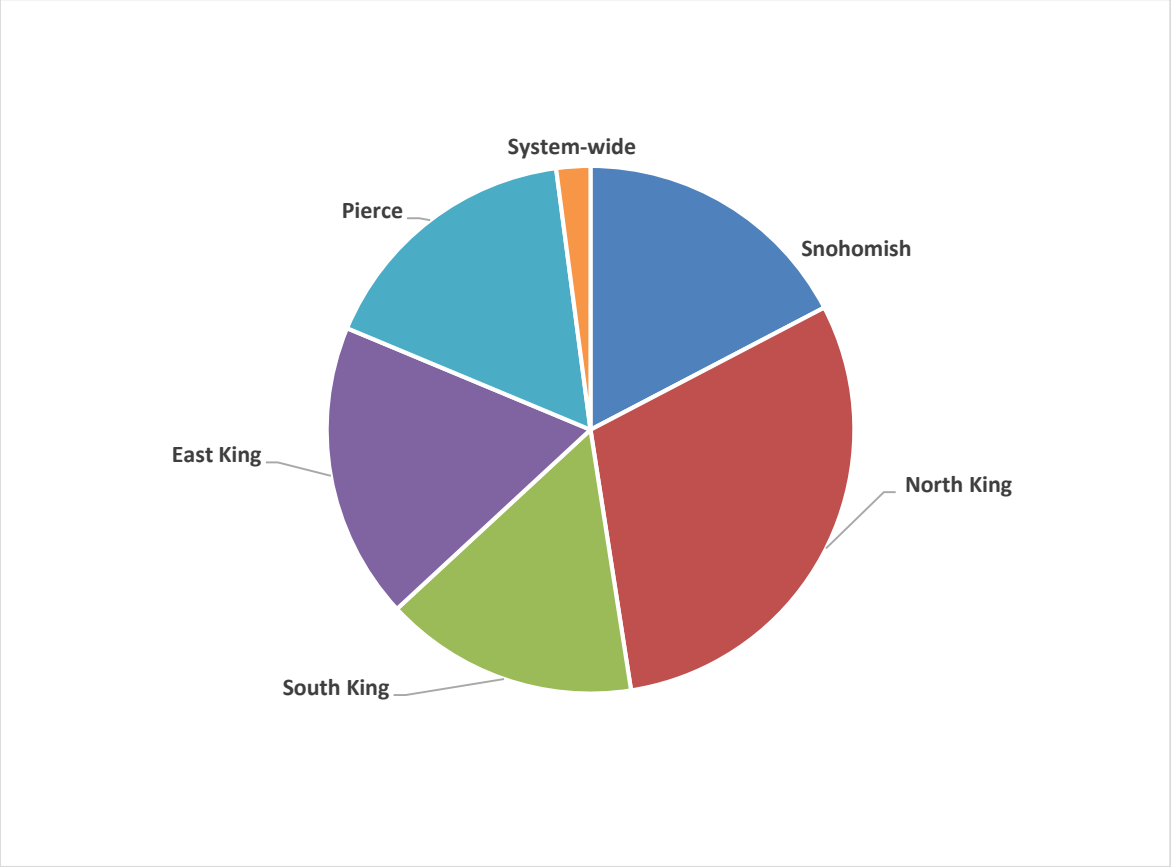


USES OF FUNDS: 2017- 2041



*2017-2041, includes inflation.

TOTAL SOURCES/USES BY SUBAREA: 2017 - 2041



*2017-2041, includes inflation.

Financial plan

Sources & Uses Summary for ST3

(Millions of year-of-expenditure dollars)*

Sources of funds

Notes**		Snohomish	North King	South King	East King	Pierce	System-wide	Total
1	ST3 Tax Revenues	3,689	7,912	3,933	6,973	5,203	-	27,710
2	ST3 Grants - Federal	800	1,151	601	861	661	595	4,669
3	Sound Move + ST2 Surplus	1,824	1,742	835	1,493	2,533	193	8,621
4	Bond Proceeds	2,894	4,965	2,657	174	308	-	10,999
5	Fares & Other Revenues	128	492	359	285	248	2	1,514
6	Interest Earnings	-	-	-	-	-	333	333
	TOTAL SOURCES	**9,334**	**16,264**	**8,385**	**9,786**	**8,953**	**1,122**	**53,845**

*2017 - 2041, includes inflation.

**See pages 18-20 for notes to line items.

Uses of funds

Notes**		Snohomish	N King	S King	E King	Pierce	System-wide	Total
	Capital Expenditures							
7	Sounder Commuter Rail	50	-	727	-	1,453	-	2,230
8	Link Light Rail	6,249	8,791	3,252	5,999	3,221	4,171	31,683
9	Regional Express Bus	74	85	78	96	252	-	586
10	Bus Rapid Transit	42	318	257	1,195	-	-	1,812
11	System-wide Activities	-	-	-	-	-	374	374
	Total Capital	6,414	9,194	4,315	7,290	4,926	4,545	36,683
	O & M Expenditures							
12	Sounder Commuter Rail	-	-	129	-	177	-	306
13	Link Light Rail	413	670	581	306	312	710	2,993
14	Regional Express Bus	73	-	65	177	393	-	708
15	Bus Rapid Transit	128	238	168	668	-	-	1,203
	System-wide Activities	-	-	-	-	-	2,246	2,246
	Total O&M	615	908	943	1,151	882	2,956	7,455
16	Debt Service	1,397	3,313	1,928	156	192	-	6,986
17	State of Good Repair	9	81	171	440	81	-	781
18	Contribution to Reserves	66	390	312	57	31	52	908
19	Contribution to System-wide	834	2,378	716	692	2,842	(6,431)	1,031
	Total Uses	**9,334**	**16,264**	**8,385**	**9,786**	**8,953**	**1,122**	**53,845**

*2017-2041, includes inflation.

**See pages 18-20 for notes to line items.

Note: Columns/rows may not add exactly due to rounding.

Snohomish County subarea

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

BUS RAPID TRANSIT

- I-405 BRT – Lynnwood Transit Center to Snohomish/King County Line

	Capital	O&M	TOTAL
Total Costs	42	128	170

ST EXPRESS BUS

- Bus on shoulder
- Interim express bus service: 12,804 hours
- Contribution towards bus maintenance facility

Total Costs	Capital	O&M	TOTAL
	74	73	147

SOUNDER COMMUTER RAIL

- Sounder north parking

Total Costs	Capital	O&M	TOTAL
	50		50

LINK LIGHT RAIL AND OTHER

- Lynnwood to Everett via SW Everett Industrial Center
- Contribution to Downtown Seattle Light Rail Tunnel
- System Access

	Capital	O&M	TOTAL
Total Costs	6,249	413	6,662

- Contribution to light rail vehicle fleet and Operations & Maintenance base
- Planning for the future
  - HCT Study: Connections from Everett to North Everett

Included in system-wide capital costs.

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	3,689	Sounder Commuter Rail Capital	50
ST3 Grants - Federal	800	Link Light Rail Capital	6,249
Sound Move + ST2 Surplus	1,824	ST Express Bus Capital	74
Bond Proceeds	2,894	Bus Rapid Transit Capital	42
Fares & Other Revenues	128	Sounder Commuter Rail O&M	-
		Link Light Rail O&M	413
		ST Express O&M	73
		Bus Rapid Transit O&M	128
		Debt Service	1,397
		State of Good Repair	9
		Contribution to Reserves	66
		Contribution to System-wide	834
Total sources	9,334	Total uses	9,334

*2017 – 2041 includes inflation. Note: Columns/rows may not add exactly due to rounding.

North King County subarea

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

BUS RAPID TRANSIT

- SR 522 and NE 145th Street BRT: 145th Street Link station (from Lake Forest Park)

	Capital	O&M	TOTAL
Total Costs	318	238	557

LINK LIGHT RAIL AND OTHER

- Ballard to Downtown Seattle
- Downtown Seattle to West Seattle
- Infill light rail station: South Graham Street
- Infill light rail station: Northeast 130th Street
- Contribution to Downtown Seattle Light Rail Tunnel
- System Access

	Capital	O&M	TOTAL
Total Costs	8,791	670	9,461

ST EXPRESS BUS

- Capped contribution for King County Metro RapidRide C and D and Madison Street BRT Capital Improvements

	Capital	O&M	TOTAL
Total Costs	85	-	85

- Contribution to light rail vehicle fleet and Operations & Maintenance base
- Planning for the future
  - HCT Study: Northern Lake Washington
  - HCT Study: West Seattle to Burien and Renton via Tukwila

Included in system-wide capital costs.

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	7,912	Sounder Commuter Rail Capital	-
ST3 Grants - Federal	1,151	Link Light Rail Capital	8,791
Sound Move + ST2 Surplus	1,742	ST Express Bus Capital	85
Bond Proceeds	4,965	Bus Rapid Transit Capital	318
Fares & Other Revenues	492	Sounder Commuter Rail O&M	-
		Link Light Rail O&M	670
		ST Express O&M	-
		Bus Rapid Transit O&M	238
		Debt Service	3,313
		State of Good Repair	81
		Contribution to Reserves	390
		Contribution to System-wide	2,378
Total sources	16,264	Total uses	16,264

*2017 – 2041 includes inflation. Note: Columns/rows may not add exactly due to rounding.

South King County subarea

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

SOUNDER COMMUTER RAIL

- Sounder South Capital Improvements Program

Total Costs	Capital	O&M	TOTAL
	727	129	856

ST EXPRESS BUS

- Interim express bus service: 10,700 hours
- Contribution towards bus maintenance facility
- Bus on Shoulder

Total Costs	Capital	O&M	TOTAL
	78	65	143

BUS RAPID TRANSIT

- I-405/SR 518 BRT: Renton to Burien Transit Center

Total costs	Capital	O&M	TOTAL
	257	168	426

LINK LIGHT RAIL AND OTHER

- Infill station at Boeing Access Road
- Link light rail from Kent/Des Moines to Federal Way Transit Center
- Link light rail from Federal Way to King County/Pierce County line
- Contribution to Downtown Seattle Light Rail Tunnel
- System Access

Total Costs	Capital	O&M	TOTAL
	3,252	581	3,833

- Contribution to light rail vehicle fleet and Operations & Maintenance base
- Planning for the future
  - HCT Study: West Seattle to Burien and Renton via Tukwila

Included in system-wide capital costs.

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	3,933	Sounder Commuter Rail Capital	727
ST3 Grants - Federal	601	Link Light Rail Capital	3,252
Sound Move + ST2 Surplus	835	ST Express Bus Capital	78
Bond Proceeds	2,657	Bus Rapid Transit Capital	257
Fares & Other Revenues	359	Sounder Commuter Rail O&M	129
		Link Light Rail O&M	581
		ST Express O&M	65
		Bus Rapid Transit O&M	168
		Debt Service	1,928
		State of Good Repair	171
		Contribution to Reserves	312
		Contribution to System-wide	716
Total sources	8,385	Total uses	8,385

*2017 – 2041 includes inflation. Note: Columns/rows may not add exactly due to rounding

East King County subarea

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

<table>
<tr><td colspan="4">BUS RAPID TRANSIT
I-405 BRT from Snohomish County/King County line to Renton
SR 522 and NE 145th Street BRT (through Kenmore)</td><td colspan="4">LINK LIGHT RAIL AND OTHER
Link light rail Redmond Technology Center to Downtown Redmond
Link light rail South Kirkland park and ride to Issaquah
Contribution to Downtown Seattle Light Rail Tunnel
System Access</td></tr>
<tr><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td></tr>
<tr><td></td><td>1,195</td><td>668</td><td>1,862</td><td></td><td>5,999</td><td>306</td><td>6,305</td></tr>
<tr><td colspan="4">ST EXPRESS BUS
North Sammamish park and ride
Interim express bus service: 27,820 hours
Contribution towards bus maintenance facility</td><td colspan="4">Contribution to light rail vehicle fleet and Operations & Maintenance base
Planning for the future
HCT/Environmental Study: Bothell to Bellevue
HCT Study: West Seattle to Burien and Renton via Tukwila
HCT Study: Northern Lake Washington</td></tr>
<tr><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td><td colspan="4" rowspan="2">Included in system-wide capital costs.</td></tr>
<tr><td></td><td>96</td><td>177</td><td>274</td></tr>
</table>

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	6,973	Sounder Commuter Rail Capital	-
ST3 Grants - Federal	861	Link Light Rail Capital	5,999
Sound Move + ST2 Surplus	1,493	ST Express Bus Capital	96
Bond Proceeds	174	Bus Rapid Transit Capital	1,195
Fares & Other Revenues	285	Sounder Commuter Rail O&M	-
		Link Light Rail O&M	306
		ST Express O&M	177
		Bus Rapid Transit O&M	668
		Debt Service	156
		State of Good Repair	440
		Contribution to Reserves	57
		Contribution to System-wide	692
Total sources	9,786	Total uses	9,786

*2017 – 2041 includes inflation. Note: Columns/rows may not add exactly due to rounding.

Pierce County subarea

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

<table>
<tr><td colspan="4">SOUNDER COMMUTER RAIL
Sounder extension to DuPont
Sounder South Capital Improvements Program</td><td colspan="4">LINK LIGHT RAIL AND OTHER
Link light rail from King County/Pierce County line to Tacoma Dome Station
Tacoma Link extension to Tacoma Community College
Contribution to Downtown Seattle Light Rail Tunnel
System Access</td></tr>
<tr><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td></tr>
<tr><td></td><td>1,453</td><td>177</td><td>1,630</td><td></td><td>3,221</td><td>312</td><td>3,533</td></tr>
<tr><td colspan="4">ST EXPRESS BUS
Interim express bus service: 55,640 hours
ST Express bus service improvements from Lakewood to Tacoma Dome
Capital enhancements to improve bus speed and reliability between east Pierce County cities and Sumner Sounder station
Bus capital enhancements for speed, reliability and convenience along Pacific Avenue/SR 7
Contribution towards bus maintenance facility
Bus on shoulder</td><td colspan="4">Contribution to light rail vehicle fleet and Operations & Maintenance base
Planning for the future
HCT Study: Sumner to Orting Commuter Rail
HCT Study: Tacoma Dome to Tacoma Mall</td></tr>
<tr><td>Total Costs</td><td>Capital</td><td>O&M</td><td>TOTAL</td><td colspan="4" rowspan="2">Included in system-wide capital costs.</td></tr>
<tr><td></td><td>252</td><td>393</td><td>645</td></tr>
</table>

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	5,203	Sounder Commuter Rail Capital	1,453
ST3 Grants - Federal	661	Link Light Rail Capital	3,221
Sound Move + ST2 Surplus	2,533	ST Express Bus Capital	252
Bond Proceeds	308	Bus Rapid Transit Capital	-
Fares & Other Revenues	248	Sounder Commuter Rail O&M	177
		Link Light Rail O&M	312
		ST Express O&M	393
		Bus Rapid Transit O&M	-
		Debt Service	192
		State of Good Repair	81
		Contribution to Reserves	31
		Contribution to System-wide	2,842
Total sources	8,953	Total uses	8,953

*2017 – 2041 includes inflation. Note: Columns/rows may not add exactly due to rounding.

System-wide activities

SUMMARY OF ESTIMATED ST3 PROGRAM COSTS AND REVENUES

(Millions of year-of-expenditure dollars)*

Projects

Notes		Capital	O&M	Total
20	LRT Vehicles	1,894	622	2,516
21	LRT Bases	2,247	86	2,333
22	Downtown Seattle Tunnel light rail tunnel	30	2	32
23	Innovation & Technology	107	-	107
24	ST4 Planning	96	-	96
25	High Capacity Transit Studies	91	-	91
26	Transit Oriented Development Planning Program	30	-	30
	Agency Administration			
27	ST3 Administration & Program Management	45	1,454	1,499
28	Efficiency / Sustainability Fund	-	25	25
29	Emergency Loss Fund	-	50	50
30	State Tax Collection Fees	-	172	172
31	Puget Sound Taxpayers Accountability Fund	-	518	518
32	Regional Affordable Housing Revolving Loan Fund	-	20	20
33	Fare Administration	5	8	13
	Total System-wide	4,545	2,956	7,501

*2017 – 2041 includes inflation.

Note: Columns/rows may not add exactly due to rounding.

Sources and uses of funds

SOURCES		USES	
ST3 Tax Revenues	-	Sounder Commuter Rail Capital	-
ST3 Grants - Federal	595	Link Light Rail Capital	4,171
Sound Move + ST2 Surplus	193	ST Express Bus Capital	-
Bond Proceeds	-	Bus Rapid Transit Capital	-
Fares & Other Revenues	2	System-wide Capital	374
Interest Earnings	333	Sounder Commuter Rail O&M	-
Total Sources	1,122	Link Light Rail O&M	710
		ST Express O&M	-
		Bus Rapid Transit O&M	-
		System-wide O&M	2,246
		Debt Service	-
		State of Good Repair	-
		Contribution to Reserves	52
		Contribution to System-wide	(6,431)
		Total Uses	1,122

*2017 – 2041 includes inflation.

Note: Columns/rows may not add exactly due to rounding.

About the Financial Plan

The summary of the Financial Plan is included in Appendix A as the Sources and Uses of Funds by Subarea table. Additional financial plan information is provided in the System Plan (phasing of projects) and Appendix C (cost effectiveness, ridership, and cost of service). *"Annual ST3 Projected Financial Cash Flows"* contains annual estimates for each of the components of the Sources and Uses Tables contained in Appendix A as well as additional financial forecasts and estimates for the period 2017-2060. A copy of "*Annual ST3 Projected Financial Cash Flows"* which is not statutorily required, can be obtained at the agency web site at www.soundtransit.org.xxxxx

Notes to Appendix A

1 Revenues from new ST3 tax increases: 0.5% Sales & Use Tax, 0.8% Motor Vehicle Excise Tax, and $0.25 / $1,000 Assessed Value Property Tax. Additional Rental Car Tax up to 1.372% can be authorized by the board but is not included in Appendix A.

2 Federal grants for ST3 capital program (FTA formula funding and full funding grant agreements).

3 Revenues from Sound Move & ST2 (taxes, grants and other miscellaneous revenues) in excess of what is necessary to support ongoing Sound Move and ST3 O&M and debt service.

4 Estimated net issuance of bonds for ST3 capital projects (par value less issuance costs).

5 Fares and other operating revenues from ST3 service.

6 Net interest earned on agency cash balances, attributed to fund system-wide costs per Sound Transit financial policies.

7 Capital expenditures for South Sounder Capital Improvements Program.

8 Capital expenditures for expansion of Link light rail system.

9 Capital expenditures for expansion of Sound Transit Express bus service.

10 Capital expenditures for implementation of Bus Rapid Transit service.

11 Capital expenditures for system-wide activities (Agency Administration, TOD Planning Program, Innovation Program, HCT Studies, Future System Planning, Fare Integration, Puget Sound Taxpayer Accountability Fund, Contribution to Regional Affordable Housing Revolving Loan Fund).

12 O&M expenses for new ST3 South Sounder Capital Improvements Program

13 O&M expenses for new ST3 Link light rail service.

14 O&M expenses for new Sound Transit Express bus service.

15 O&M expenses for new ST3 Bus Rapid Transit service.

16 Debt service (interest and principal) on bonds issued to fund ST3 capital projects.

17 State of Good Repair spending for mid-life refurbishment and end of life replacement of ST3 assets.

18 Contribution to reserves (O&M, bonds).

19 Contribution by subarea to system-wide activities, including General Fund change in cash.

20 Cost associated with the purchase and operation of ST3 light rail vehicles.

21 Cost for the construction and operation for ST3 light rail maintenance facilities

22 Downtown Seattle transit tunnel – represents 1.0% of project cost as determined by percent of ridership not allocated to subarea destinations.

23 This program would fund research, analysis, and implementation of innovative best practices, partnerships, and technologies to increase ridership, improve service, and enhance efficiency of regional mobility outside of new investments in large capital projects.

24 Costs of initial conceptual planning for ST4 program.

25 HCT studies including the following: Connections from Everett to North Everett; Northern Lake Washington; West Seattle to Burien and Renton via Tukwila; Bothell to Bellevue environmental study, Sumner to Orting commuter rail, Tacoma Dome to Tacoma Mall.

26 This program would fund TOD analysis and support beyond the planning phase of transit capital project development in anticipation of sale, lease, or transfer of surplus properties or air rights to third parties. All analysis and property disposition would be conducted in accordance with TOD Policy (Resolution No. R2012-4).

27 Costs of Sound Transit employees and related cost necessary to effectively manage ST3 capital and operating programs. Includes capital costs for office space and furnishings, non-revenue fleet vehicles and IT equipment and services.

28 Funding for cost efficiency programs at existing facilities (energy, water, and waste conservation), renewable energy installations, green infrastructure and building pilot projects, other resource conservation and pollution mitigation projects.

29 Reserves for uninsured capital and operating losses or emergency uses as authorized by the Board.

30 Costs paid to State of Washington for tax collection fees.

31 Senate Bill 5987 Sec. 422. A new section is added to chapter 81.112 RCW – "Beginning January 1, 2017, and until the requirements in subsection (4) of this section are met, a regional transit authority must pay to the department of revenue, for deposit into the Puget Sound taxpayer accountability account, a sales and use tax offset fee.
(2) A sales and use tax offset fee is three and twenty-five one-hundredths percent of the total payments made by the regional transit authority to construction contractors on construction contracts that are (a) for new projects identified in the system plan funded by any proposition approved by voters after January 1, 2015, and (b) excluded from the definition of retail sale under RCW 82.04.050(10).
(4) A sales and use tax offset fee is due until the regional transit authority has paid five hundred eighteen million dollars."

32 Senate Bill 5987 Sec. 329. A new section is added to chapter 81.104 RCW to read as follows: "The regional transit authority must contribute at least four million dollars each year for five consecutive years beginning within three years of voter approval of the system plan to a revolving loan fund to support the development of affordable housing opportunities related to equitable transit-oriented development within the boundaries of the regional transit authority"

33 Cost for Sound Transit's share of ST3 related regional fare collection system and related fare system management costs.

Sound Transit 3

Appendix B:

Financial Policies

Adopted June 23, 2016

Sound Transit Financial Policies

The Sound Transit Board may amend these Financial Policies from time to time; the most current version of the Financial Policies is available at www.soundtransit.org

PURPOSE

The Sound Transit Board (the Board) adopted an initial framework for the financing of Sound Move and *ST2*, by setting local tax rates, focusing on minimizing the cost of capital, requiring conservative projections for federal and state funding, defining equity and adopting the subarea equity principle to guide how projects are funded in the five subareas. The Financial Policies reflect the Board's policy intent for implementing the financial framework for completing *Sound Move* and *ST2* and subsequent system plans and for providing the tools to the Board to appropriately manage toward and respond to future conditions.

LEGAL RESPONSIBILITIES

In adopting these Financial Policies, the Board recognizes certain legal responsibilities. Existing state law grants all legislative and policy authority to the Board and does not allow the Board to abrogate, transfer or delegate such authority to other agencies or to the five subareas within the Sound Transit District. Consequently, all funds collected by or provided to Sound Transit, including local tax revenues, federal and other government grants, bond and loan proceeds, fare box revenues, interest earnings, and private development revenues, may be disbursed only with approval of the Board. Priorities for disbursements will be determined within Sound Transit's annual budgetary process, which by law requires two-thirds affirmative vote of the Board.

Similarly, the Board recognizes that bonds issued and loans incurred by Sound Transit will be secured by a pledge of repayment through revenues including local taxes. When bonds are issued or loans secured, Sound Transit will enter a binding contract with its bondholders and lendors that requires first lien claim against pledged revenues for repayment and for maintenance and operation of the transit facilities and services funded by the bonds. Stated differently, bondholders and lendors will have a legal priority to Sound Transit's local tax revenues to repay the bonds and operate and maintain the transit system, notwithstanding any commitment or policy that no subarea will pay another subarea's debt. These Financial Policies reflect Sound Transit's commitment to subarea equity while maintaining the flexibility necessary to manage the financing of the System Plan on a consolidated basis and within legal constraints.

EQUITY

Definition of Equity

Equity will be defined as utilizing local tax revenues for projects and services that provide transportation benefits to the residents and businesses in each of the subareas generally in proportion to the level of revenues each subarea generates. Subareas may fund projects or services located outside of the geographic subarea when the project substantially benefits the residents and businesses of the funding subarea. The Financial Plan for Sound Transit activities addresses this equity principle by providing a financial plan for each of the five Sound Transit subareas, comprised of the subarea's share of local taxes, debt capacity, farebox proceeds and an assumption for federal funding. The five subareas are defined as Snohomish County, North King County/Seattle, East King County, South King County, and Pierce County. While the Financing Plan will be managed by the Board on a consolidated basis, the Board will report annually on individual subarea performance.

The Board agrees, therefore, that the facilities, projects and services identified in all voter-approved system plans represent a reasonable definition of equity.

IMPLEMENTATION POLICY

Subarea Reporting

1. The Financial Plan will provide projections for each of the five subareas, comprised of the subarea's projected share of local taxes, use of debt, farebox proceeds, other revenue, and an assumption for federal funding and related expenditures.

2. Local taxes will be allocated for subarea reporting based on actual tax receipts collected by subarea and within the Sound Transit District. The annual Financial Plan will incorporate updated forecasts based on these actual receipts. A portion of local taxes from each subarea will be allocated to fund system-wide costs as identified by the Board.

3. For subarea reporting purposes, government funding that is received for a specific project or service will be allocated to subarea(s) on a basis consistent with the allocation of costs for the project or service, unless the Board takes action to allocate the funds to other subareas as it deems in the best interest of Sound Transit after consideration of the funding needs to complete, enhance or extend the system plan.

   For subarea reporting purposes, government funding that is received that is agency-wide or general in scope will be allocated by the Board as it deems in the best interest of Sound Transit after consideration of the funding needs to complete, enhance or extend the system plan.

4. Miscellaneous revenues, such as those generated through private-public partnerships, advertising and terminal concessions will be allocated for subarea reporting based on subarea investment in the facility and/or service from which the revenue is generated.

5. Debt will be allocated for subarea reporting based on a subarea's share of total long-term bonding requirements or as otherwise directed by the Board as deemed in the best interest of Sound Transit.

6. Subarea expenditures will be allocated for subarea reporting based on facilities and services to be provided, their projected costs and project contingencies, associated operating costs, debt service, reserves for debt service, operations and maintenance and capital replacement. The allocation of expenditures for reporting purposes for facilities and services that cross subarea boundaries will be made by the Board to ensure safe and efficient maintenance and operation of the system-wide facilities and services after due consideration to subarea benefits and priorities.

Monitoring Function

1. Sound Transit will establish a system that on an annual basis reports subarea revenues and expenditures. This monitoring and reporting function will be incorporated into Sound Transit's financial cycle. The Board may at its discretion conduct an independent assessment of the consistency of subarea reporting with Board policy guidance.

2. Sound Transit will appoint an advisory citizen oversight panel to monitor Sound Transit performance under these policies (see Public Accountability below).

Adjustments to Subarea Projects and Services

1. Subarea capital projects and transit services will be evaluated and adjusted annually as a part of the Board's consideration and adoption of an annual budget, which requires a two-thirds affirmative vote of the Board. Adjustments to subarea capital projects and services can include additional priority projects and/or services within that subarea should funding be available. This adjustment process recognizes that some fluctuation in revenues and expenditures against forecasts will occur.

2. For those cases in which a subarea's actual and projected expenditures exceed its actual and projected revenues and funding sources by five percent or greater, and/or where unforeseen circumstances occur that would result in an inability to substantially complete projects within such subarea's plan, the Board must take one or more of the following actions:

    - Correct the shortfall through use of such subarea's uncommitted funds and/or bond capacity available to the subarea; and/or

- Scale back the subarea plan or projects within the plan to match a revised budget; and/or
- Extend the time period of completion of the subarea plan; and/or
- Seek legislative authorization and voter approval for additional resources.

3. For those cases in which a subarea's actual and projected revenue to be collected until the system plan is completed will exceed its actual and projected expenditures by five percent or greater, and/or where unforeseen circumstances occur that would result in the subarea's ability to fund additional projects and services not identified in the system plan, then Sound Transit may use such surplus funds to complete, extend or enhance the system plan to provide transportation benefits for the subarea's residents or businesses as determined by the Board. Contributions from other parties, including the State, local governments and private sector can be programmed by the Board to complete, extend or enhance the System Plan, consistent with agreements with the other party.

SYSTEM-WIDE EXPENDITURES

The Board will fund such system-wide expenditures as necessary to maintain and plan for an integrated regional transit system consistent with voter-approved system plans. Such system-wide expenditures will include fare administration, technology and innovation programs, system access, transit oriented development, future phase planning and agency administration, system-wide transit assets and other such expenditures as determined by the Board to be appropriate. Properties authorized for purchase by the Board to preserve required right-of-way will be funded as a system-wide cost until such time as the right-of-way is utilized by a subarea(s), at which time the cost will be allocated to the subarea(s) consistent with Board approved allocation. System-wide expenditures, not funded by dedicated system-wide agency interest earnings, revenues or other specific funding sources, will be funded by subareas proportional to the subarea's share of total local tax revenues, population, benefits received, or on another basis as deemed appropriate by the Board.

DEBT MANAGEMENT

Legal Definition of Sound Transit Debt Financing Capacity

Sound Transit's enabling legislation defines Sound Transit's capacity for issuing general obligation debt at one and one-half percent of the value of the taxable property within the boundaries of the Sound Transit District (and with approval of three-fifths of voters voting within the Sound Transit District, up to five percent of the value of the taxable property within the district's boundaries). There is no dollar limit for revenue indebtedness.

Debt Service Coverage Requirements

The Board recognizes that its bondholders and lenders will hold first claim against revenues pledged as repayment for outstanding bonds and loans based on the flow of funds. However, Sound Transit's debt financing capacity will be calculated on a more conservative basis, by evaluating all revenues and deducting total operating expenses for net revenues available for debt service.

For long-term planning purposes, Sound Transit agency debt service coverage ratio policy will be set at an average coverage ratio of 2.0x for net revenues over annual debt service costs, not to fall below 1.5x in any single year. However, as voter-approved plans are implemented, prudent changes to coverage ratios may be made by the Board as appropriate. Before issuing bonds, Sound Transit will establish the appropriate debt service coverage ratio to incorporate into the bond covenants for the specific bond issuance.

Uses of Debt Financing

1. The ST3 Plan will be financed through a variety of mechanisms, including without limitation: direct expenditure of tax revenues, operating revenues, and other receipts; state, federal and local government grants; private donations; tax backed and non-tax backed debt issuance by Sound Transit, associated or subsidiary entities, by cooperating public or private entities; leases; public private partnerships or other contractual arrangement.

2. Debt financing for capital projects covers two distinct types of borrowing, the first related to long-term debt financing, and the second related to short-term debt financing.

3. Short-term debt financing (with terms of ten years or less) is expected to be used primarily to bridge the gap between the necessary timing of expenditures and the anticipated receipt of revenues.

4. The use of long-term financing (with terms of more than ten years) is expected to be limited to capital and related costs for portions of the program that have a useful life in excess of the term of the debt. Long-term financing should be preserved for those aspects of the program for which other sources of funds are not likely to be available.

Allocation of Sound Transit Debt

1. For reporting purposes, the amount of long-term debt financing used to benefit each of the subareas will be based on each subarea's ability to repay debt after covering operating costs. For internal reporting purposes, the Board may determine appropriate internal debt service limits by subarea.

2. While the above policy prescribes the use of debt financing for subarea reporting, the Board will manage the agency's debt capacity on a consolidated basis to maximize resources between subareas.

PRIORITIES FOR EXPENDITURES

The Board will adopt expense budgets for transit operations and agency administration and maintain a multi-year capital improvement plan. A two-thirds affirmative vote of the Board is required for budget adoption. Sound Transit will establish guidelines for its budgeting process and criteria to establish priorities for expenditures.

FINANCIAL MANAGEMENT & PROCUREMENT

Sound Transit will maintain polices for debt and investment management, asset management, fares and operating expenses and grants management to effectively manage voter-approved revenues and efficiently operate the regional public transit system.

Sound Transit will evaluate alternative procurement methods for capital projects. Such methods will be implemented when they are calculated to result in schedule or cost savings, favorable risk transfer, or more effective project management, and are consistent with best practices in procurement and strong control systems.

ASSET MANAGEMENT

Sound Transit will invest in, maintain, and manage its physical assets and infrastructure to ensure safe, cost effective and sustainable ongoing provision of regional high capacity transit services to the citizens of the Puget Sound. The agency will operate and maintain its assets in a state of good repair that meets or exceeds all federal and other regulatory requirements. The Board will maintain capital replacement and maintenance reserves and annual budgetary amounts sufficient to fully fund the system in a state of good repair. Sufficient funds will be set aside funds with the agency's long-term financial plan to meet these obligations, and their funding will have precedence over other agency expenditures.

PUBLIC ACCOUNTABILITY

To ensure that the voter approved program development and implementation occurs within the framework and intent of these policies, Sound Transit will:

1. Conduct an annual independent audit of its financial statements in compliance with state and federal requirements;

2. Implement a performance audit program; and

3. Appoint and maintain an advisory citizen oversight panel to conduct annual reviews of Sound Transit's performance and financial plan, and submit a report and recommendations to the Board.

FUTURE PHASES

Voter Approval Requirement

The Board recognizes that the voter-approved taxes are intended to be used to implement the System Plan and to provide permanent funding for future operations, maintenance, capital replacement and debt service ("permanent operations") for voter-approved programs and services. The Board has the authority to fund these future costs through a continuation of the local taxes authorized by the voters. However, as a part of its commitment to public accountability, the Board pledges that the local taxes will be rolled back to the level required for permanent operations and debt service after the voter-approved ST3, Sound Transit 2 and Sound Move plans are completed and implemented. The rollback procedure is contained in the Tax Rate Rollback section. The Board further pledges that, after the voter-approved ST3, Sound Transit 2, and *Sound Move* plans are completed and implemented, any additional capital programs that would continue local taxes at tax rates higher than necessary for permanent operations will require approval by a vote of those citizens within the Sound Transit district.

Tax Rate Rollback

When the voter-approved capital projects in ST3, ST2 and *Sound Move* are completed and implemented, the Board will initiate two steps to roll back the rate of one or more of the taxes collected by Sound Transit.

1. First, Sound Transit will initiate an accelerated pay off schedule for any outstanding bonds whose retirement will not otherwise impair the ability to collect tax revenue and complete ST3, ST2 or Sound Move, or impair contractual obligations and bond covenants. Sound Transit will implement a sales tax rollback to a level necessary to pay the accelerated schedule for debt service on outstanding bonds, system operations and maintenance, fare administration, capital replacement and ongoing system-wide costs and reserves.

2. After all debt is retired, Sound Transit will implement a tax rollback to a level necessary to pay for permanent operations, including, system operations and maintenance, fare administration, capital replacement and ongoing system-wide costs and reserves.

Financial Policies Review

These Financial Policies may be amended from time to time as the Board deems necessary to implement and complete the System Plan. These policies, as they may be amended, will apply to future capital programs. The Financial Policies will be reviewed before submittal of a future capital program to the Sound Transit district voters.

Financial Policy Content

The policies in this document together with Appendix A (Sources and Uses of Funds) to the ST 3 Regional Transit System Plan constitute the financial plan for the ST 3 Regional Transit System Plan, Sound Move and ST 2. The documents are available online at _____(XXX)_ , at Sound Transit's offices at 401 S. Jackson St., Seattle, Washington 98104 or by mail on request.

Sound Transit 3

Appendix C:

Benefits, Costs, Revenues, Capacity, Reliability, and Performance Characteristics

Adopted June 23, 2016

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Tables

Introduction

This report details the benefits the Central Puget Sound region can expect from the fully implemented Sound Transit 3 Plan.

Transportation improvements strongly shape the growth, development, quality of life and economic vitality of a region. ST3 proposes improvements that add major new capacity in the region's most congested corridors to help serve the transportation demands of people and businesses here today as well as for more than 800,000 new residents anticipated in the next 25 years.

Replacing overcrowded and slowing bus routes with congestion-free light rail and significantly faster and more frequent bus rapid transit services will greatly improve travel for thousands of riders, particularly during peak hour commutes. The ST3 Plan will up to quintuple Sound Transit ridership from what it is today, increasing it from approximately 145,000 each weekday to between 561,000 and 695,000 daily riders. The plan will double the 350,000 boardings each weekday forecasted to follow the completion of the Sound Transit 2 plan.

With ST3, the share of all transit travel in the region on Sound Transit rail lines will grow from 17 percent today to 69 percent in 2040. This means more than four times as much transit travel will occur on vehicles that don't get stuck in traffic, regardless of time of day, day of the week, weather conditions or other factors.

Most importantly, these transit trips will be concentrated in the region's most congested corridors on bus routes and rail lines serving the region's densest downtowns and urban centers, adding critical capacity where it is most needed to support the region's economy and preserve its quality of life.

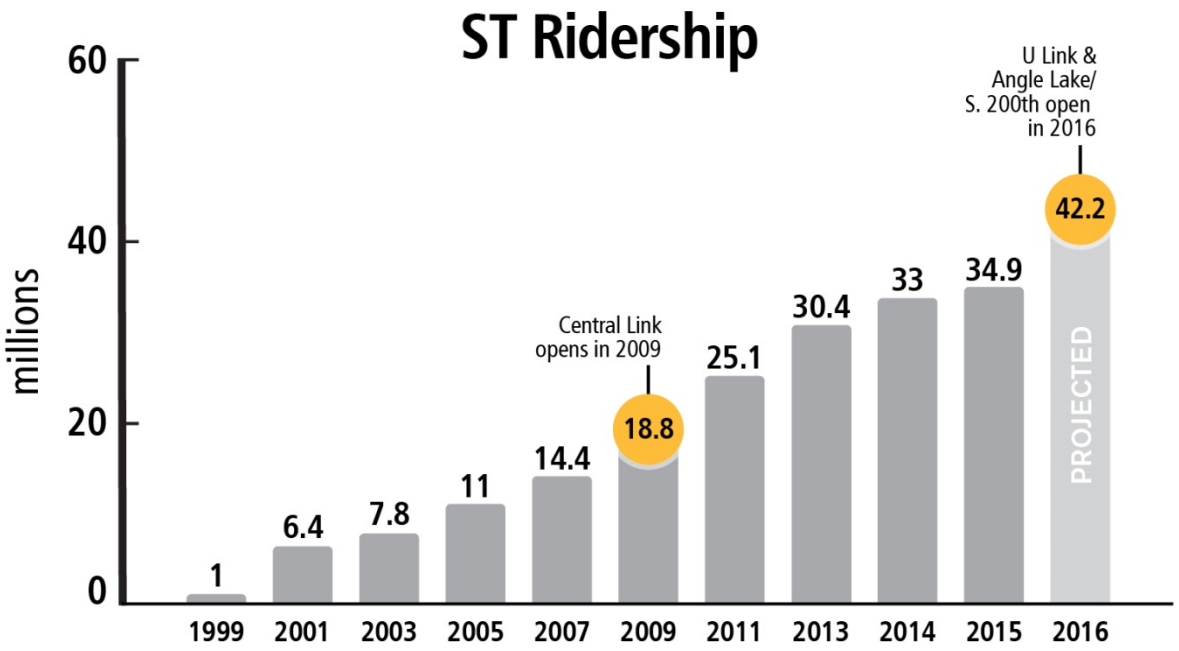
This report documents the conservatively projected travel benefits of ST3, while also discussing the plan's broader and far-reaching implications for the region's growth patterns, quality of life and economic well-being.

Both direct and quantifiable benefits, such as those from increasing the numbers of riders taking transit and reductions to travel times and costs, and broader qualitative benefits such as quality of life, are important to understanding the impact of ST3. All benefits will continue to grow over time, especially given transit's contributions in the coming decades to achieving the region's land use vision including dense, mixed-use development in walkable regional centers.

Data and methodologies used to analyze direct benefits of the transportation improvements in ST3 have been prepared in accordance with nationally accepted standards and procedures and have been subject to review by an independent Expert Review Panel appointed by, and accountable to, the state of Washington.

Background

In 1996, the year Sound Transit's Sound Move plan was approved by the voters, about 75 million individual trips were made on transit in the Sound Transit service area. By the time the region's voters had approved the Sound Transit 2 Plan (ST2) in 2008, that number had grown to 98 million trips, on Sound Transit services as well as those provided by partner transit organizations. By 2014, 117 million transit trips were being made annually. Since it was founded, Sound Transit has been increasing its market share of the region's transit system.



By 2040, as a result of completed projects in Sound Move and ST2, along with continued population growth, public transit in the Sound Transit District across all partner agencies will carry about 200 million trips a year, about 70 percent more than in 2014.

Benefits of ST3 investments in the regional transit system

Highlight: If the region's daily transit trips were all made by single-occupancy cars, the line of cars would extend about 1,100 miles. The 2040 daily ridership represents a line of cars nearly 1,800 miles long.

System reliability

Reliability means arriving at the same time every time, regardless of gridlock on the roads or snow on the ground. Reliability is a critical factor in how people plan their travel and budget their time.

Transportation system reliability has continued to decline in the Puget Sound region for several decades, both for car drivers and for transit riders whose travel times also suffer from worsening congestion in HOV lanes. This is primarily related to increases in the severity of traffic congestion and the greater likelihood of congestion occurring at any time of day or on any day of the week.

When people need to arrive somewhere by a specific time, whether to be on time for work, to catch a plane or to make a child's daycare pick-up, they know that if the trip involves one of the region's most congested corridors at peak hours they should allow a great deal of extra time to get there.

The road network is reaching saturation, where even small increases in traffic result in large degradation in travel time.

Highway reliability

Reliability on streets and highways is affected by many factors including collisions, stalled vehicles and weather conditions, but the most important factor in the Central Puget Sound region is the volume of traffic and delays caused by congestion.

Hours of delay on the central Puget Sound region's freeways nearly doubled between 2010 and 2015, increasing by 95 percent. Delay increased by 18 percent between 2014 and 2015 alone.

The following table shows WSDOT's estimates of how much time a driver needs to allow for travel between certain points in the regional system due to the unpredictability of highway travel in the region.

As detailed in Table 1, WSDOT tracks reliability on the freeways for major commutes between pairs of cities, and calculates "95 percent reliable travel times" -- that is, the amount of time a driver needs to plan for to be sure of arriving on time 19 times out of 20.

WSDOT data, compiled annually in major corridors, shows reliability on the region's highways to be steadily declining.

Table 1: Existing regional highway travel time reliability

Route Description	Existing Time at Posted Speeds	Average (Median) Peak Travel Time	Time to Ensure 95% On-Time Arrival	Additional Time for On-Time Arrival	% Additional Time for On-Time Arrival
Everett to Seattle	24 min	52 min	76 min	24 min	46%
Seattle to Everett	23 min	44 min	63 min	19 min	43%
Bellevue to Everett	23 min	47 min	62 min	15 min	32%
Overlake to Seattle	13 min	30 min	60 min	30 min	100%
South Lake Union to Ballard	10 min	19 min	27 min	8 min	42%
Bellevue to Overlake	5 min	7 min	12 min	5 min	71%
Bellevue to Issaquah	9 min	18 min	22 min	4 min	22%
Seattle to Federal Way	22 min	33 min	52 min	19 min	58%
Tacoma to Federal Way	12 min	14 min	16 min	2 min	14%
Tacoma to Lakewood	5 min	6 min	16 min	10 min	167%

Notes:

Highway times shown are from WSDOT 2015 Corridor Capacity Report, except for Ballard, which is from City of Seattle data.

Transit reliability

Sound Transit's Link light rail operates almost entirely on exclusive right of way. Most right of way is grade separated, with no interference from traffic. Even where there is no grade separation, Link light rail operates in its own right of way with specially programmed traffic signals that very seldom require trains to stop at intersections. This allows the service to maintain a very high level of reliability at all times of day.

By contrast, Sound Transit's express buses rely heavily on regional HOV lanes that are performing worse each year. Between 2012 and 2014 alone, the Washington State Department of Transportation reported major deterioration of HOV lane travel times:

- I-5 Everett to Seattle: weekday morning average HOV travel time increased 22 percent to 45 minutes. Reliable* HOV travel time increased 17 percent to 74 minutes.

- I-5 Federal Way to Seattle: weekday morning average HOV lane travel time increased 18 percent to 39 minutes. Reliable* HOV travel time increased 20 percent to 55 minutes.
- I-405 Lynnwood to Bellevue: weekday morning average HOV lane travel time increased 23 percent to 27 minutes. Reliable* HOV lane travel time increased 30 percent to 39 minutes.
- I-405 Tukwila to Bellevue: weekday morning average HOV lane travel time increased 38 percent to 22 minutes. Reliable* HOV lane travel time increased 65 percent to 33 minutes.

* Defined as the time allowance required to arrive on time 19 out of 20 times.

In 2014, about 83 percent of the region's transit travel occurred on buses operating in mixed traffic. With the completion of Sound Transit 2 (ST2) investments, 53 percent of the region's transit travel will occur on high-reliability rail lines. Shortly thereafter, the two Bus Rapid Transit lines included in ST3 will come into service, providing passengers with a higher level of reliability than existing buses due to separate lanes and other features. These investments will provide access to high-capacity transit in the near term as the region builds rail over the next 25 years.

With ST3 rail will carry 69% of the region's transit passenger miles, as shown in Table 2 below. Transit reliability is related to the portion of the trip that occurs in exclusive right-of-way. As the percentage of rail trips increases, transit reliability will also increase. This table illustrates the growing percentage of transit miles that will be traveled on reliable grade-separated rail transit.

Table 2: Percentage shares of passenger miles in mixed traffic vs. exclusive right-of-way

**Includes 2% of total transit passenger miles on Sound Transit Bus Rapid Transit*

Comparing the capacity of rail systems and highways

As the region's population continues to grow rapidly, high-capacity transit is the best and sometimes the only way to dramatically expand the region's transportation system to move significantly more people in highly congested corridors and to move those people more reliably. That is why so many regions of comparable size to that of Sound Transit rely extensively on rail transit. A two-direction light rail system occupies roughly the same amount of space as two highway lanes.

Highlight: Peak-period transit ridership on the I-5 corridor in Central Puget Sound was equal to nearly five extra lanes of capacity in 2014 (when compared to the peak efficiency of the roadway, a conservative approach to this measurement).

Highway capacity

The capacity of a single highway lane is defined as the highest number of vehicles that can pass a single point in an hour in a lane experiencing a stable flow of traffic.

Transportation planners calculate that maximum freeway capacity – up to 2,000 vehicles per hour per lane, with an average vehicle carrying 1.1 occupants during commute hours – is achieved at speeds of about 40-50 mph. When the speed falls to 30 mph, capacity can be reduced to as few as 700 vehicles per lane per hour.

Other factors affecting capacity include roadway design, collisions, disabled vehicles, spills, poor weather conditions and other events that impede normal traffic flow.

WSDOT tracks peak-period highway performance in Central Puget Sound for 40 different city-to-city commutes. Between 2012 and 2014 travel times worsened for 28 of these 40 commutes while only five improved.

Again, as travel speeds decrease due to congestion, the capacity of the freeway lanes decreases – even as demand increases. According to WSDOT annual system performance reports, particularly bad locations for congestion already affecting capacity today before the addition of 800,000 more people include:

- On I-405 at SR 169 in Renton, congestion reduces northbound capacity by 20 to 60 percent for about six hours a day;
- On I-5 at SR 18 in Federal Way, congestion reduces southbound capacity by 10 to 30 percent for about four hours a day;
- On I-5 at I-90, congestion reduces capacity in both directions by 10 to 20 percent for about 14 hours a day;
- On I-5 near Northgate, congestion reduces southbound capacity by 10 to 30 percent for about nine hours a day; and

- On I-5 at SR 18 in Federal Way, congestion reduces southbound capacity by 10 to 30 percent for about four hours a day.

Link Light Rail Capacity

The capacity of rail transit is determined by a combination of the size of the vehicles, the number of vehicles on each train and how frequently the trains run.

As with highway capacity, when speaking of rail capacity the important measure is the number of passengers that can be carried during the peak period, when the service is most in demand. This is usually referred to as "peak passengers per hour in the peak direction."

The passenger moving capacity of the ST3 light rail system is quite large, especially in comparison to a roadway of similar width with mixed traffic. Table 3 shows the capacity of the light rail system.

This table presents the hourly passenger capacity of the ST3 light rail system with varying frequencies of train service, at three different loading standards: Seated Capacity; Comfortable Capacity including some standing passengers; and a Standard Peak Capacity that might only occur during peak times for short segments. Planned peak-hour headways are between three and six minutes in each direction.

Table 3: Link light rail system capacity (passengers per hour)

Peak frequency (minutes)	4-car trains per hour (1 direction)	Seated capacity: 74 per car (1 direction)	Comfortable capacity: 150 per car (1 direction)	Standard peak capacity: 200 per car (1 direction)	Standard peak capacity (2 directions)	Standard peak capacity (2 directions, 2 tunnels)*
3	20	6,000	12,000	16,000	32,000	64,000
4	15	4,440	9,000	12,000	24,000	48,000
6	10	2,960	6,000	8,000	16,000	32,000

*Assumes construction and operation of new downtown tunnel

ST3 performance highlights

Transit passenger trips

With the ST3 Plan, transit ridership in the region including all agencies and transit services is projected to grow by 91 percent over 2014.

Transit agencies seek to develop high-capacity transit in corridors that already have high bus ridership because these areas are where population is most dense, congestion highest and transit alternatives most critical. That means that most new rail riders are people who are moving from buses. Riders graduate from crowded buses that are reaching their destinations more slowly as congestion worsens each year, even when operating in HOV lanes. Rail extensions provide the opportunity for vehicles and

operating expenses for bus services that previously ran in those corridors to serve more people in other corridors making the entire system more productive.

As the Sound Transit light rail system continues to grow, many riders are projected to shift from bus to rail, where they will benefit from the speed and reliability provided by grade separation. This continues the trend established through Sound Move and ST2, which were designed to serve the densest areas of the region. As the system expands regionally to serve urban centers further from the central core, the numbers of new riders does not grow at as steep a pace, though the distance traveled by the average rider increases.

With ST3, between 657,000 and 797,000 trips will be taken daily in the region, approximately twice the number of trips taken today. Table 4 compares regional transit ridership today with ridership projections for 2040, with and without ST3 investments.

Table 4: Regional transit ridership and transfer rate (Sound Transit & other regional transit partners)

	Existing in 2014	2040 without ST3*	2040 with ST3
Daily			
Transit Trips	390,600	601,000 - 725,000	657,000 - 797,000
Transit Boardings	563,000	975,000 - 1,169,000	1,100,000 - 1,332,000
Annual			
Transit Trips	117 million	183 - 221 million	202 - 245 million
Transit Boardings	169 million	297 - 356 million	338 - 409 million
Percent using Sound Transit (of passenger-miles)	39%	63%	75%
Percent of passenger miles by mode	Rail: 17% Bus: 83%	Rail: 53% Bus: 47%	Rail: 69% Bus: 31%
Transfer Rate	1.44	1.62	1.67

*Includes ST2 investments

Definitions

Transit passenger trips are counted with regard to boardings, trips, transfers and passenger miles. These terms are defined here.

Boardings – A transit boarding occurs any time a passenger steps into any transit vehicle.

Transit trips (or passenger trips) – A trip is a completed journey made by a person from an origin to a destination (such as home to work). Because people may transfer from one route to another to complete such a journey, a trip can consist of more than one transit boarding.

Transfer – A transfer is when a passenger changes from one transit vehicle to another (bus-to-bus, or bus-to-train for example) to complete a trip. Transfers explain why the average transit trip consists of more than one boarding, and they are a good measure of the effective integration of the individual routes that make up the overall transit system.

Transfer rate –Transfer rates are an indication of how the individual elements of a transit system complement each other, that is how complete the transit coverage is, and the range of trips that can be made on the transit network. Nationwide and worldwide, higher transfer rates are strongly and positively correlated with higher transit ridership.

Passenger miles – Passenger miles are a measure of service that a transit line, route or system is providing to its riders. For example, 100 passengers traveling ten miles each, results in 1,000 passenger miles of travel.

Transit ridership on Sound Transit by service type

The following summarizes the annual boardings and passenger miles projected for Link light rail, Sounder commuter rail, Bus Rapid Transit, and ST Express bus in 2040 with the ST3 Plan.

Table 5: Summary of Sound Transit ridership by mode (boardings)

	2014 Annual Riders	2040 Annual Riders with ST3	2040 Annual Passenger Miles with ST3
Link light rail	11.9 million	152 - 188 million	1,380 - 1,735 million
Sounder commuter rail	3.4 million	8 - 11 million	190 - 255 million
ST Bus Rapid Transit	n/a	7 - 9 million	51 - 58 million
ST Express Bus	17.7 million	9 - 10 million	79 - 91 million
Total	**33.0** million	**176 - 218** million	**1,700 - 2,139** million

Note: Annual ridership was calculated using average weekday ridership estimates multiplied by annualization factors of 320 for light rail (excluding Tacoma Link - 295), 265 for commuter rail, and 300 for all other transit services.

Highlight: In 2040, with the ST3 plan, the region's residents and visitors will travel between 1.7 and 2.1 billion miles a year on Link light rail, Sounder commuter rail, Bus Rapid Transit and ST Express buses.

Travel time savings

Looking ahead to 2040, after ST3 investments are completed, the region's transit riders are projected to save 16 to 22 million hours a year.

The following tables illustrate the expected travel time savings for the region's drivers and transit riders, achieved by the investments included in the ST3 plan.

This analysis is based on two scenarios for traffic in 2040: one with ST3 projects and one without ST3 projects. Accordingly, the numbers are estimates based on best practices. In the simplest terms, every car not driven because the driver chooses to travel by transit either reduces congestion or leaves space for another vehicle.

Table 6: Projected regional vehicle miles traveled reduction due to ST3

	Auto Vehicle Miles Traveled Reduction in 2040 with ST3
Reduction in annual vehicle miles traveled (switched to transit)	314 - 411 million
Reduction in annual trips in auto (switched to transit)	19 - 24 million

Notes:
These two measures use the methods required by the Federal Transit Administration (FTA) for estimating environmental and congestion relief benefits for FTA New Starts funding applications. They are described in detail in the most recent edition of the *Final Interim Policy Guidance - FTA Capital Investment Program* (August 2015).

Table 7: Projected travel time savings for transit riders

	Transit Riders Time Savings in 2040 with ST3
Daily Hours Saved	51,000 - 67,000
Total Annual Hours Saved	16 - 22 million

Notes: These annual time savings include savings for both existing transit riders and new transit riders.

Highlight: By 2040 the annual travel time savings for all transit riders combined is approximately 22 million hours.

Travel times and transfers between selected centers

Looking at specific trips between the region's centers is one way to understand how ST3 will benefit riders who are taking the bus today, as well as future riders who will be attracted to transit because of the improved speed and reliability they will experience on ST3 services.

Traffic congestion is slowing bus speeds. Within the Sound Transit District, bus travel times have gotten continuously slower every year due to more congestion on highways and urban roads that are serving more cars, pedestrians and bicyclists in constrained areas. Without improvements in transit, existing bus travel times would be expected to worsen in the future.

For example, the Bellevue-to-Ballard existing bus travel time is 66 minutes. The future transit travel time would be expected to be 60 minutes using the ST2 East Link investment for part of the trip, but without the ST3 light rail expansion to Ballard. With completion of the ST3 Link light rail extension the same trip is expected to take 36 minutes, with a rail-to-rail transfer in downtown Seattle -- a savings of 24 minutes (40%) over the same trip without ST3 in 2040. Rail investments also greatly reduce rider delays from factors such as traffic and weather that significantly reduce the reliability of bus services.

While most of our region's buses must travel in general purpose traffic, ST3 makes improvements to provide separation where possible. These include bus rapid transit (BRT) corridors on I-405 and SR 522 and NE 145th that will connect riders to the light rail system, as well as early deliverables that will improve bus travel times on existing bus routes as Sound Transit continues to extend the light rail system.

In certain locations, capital improvements made in the ST3 program will allow buses to bypass traffic in queue jump lanes or on highway shoulders. These improvements will be identified with further evaluation and input from WSDOT, transit partners and local jurisdictions. Travel time improvements that will result are not reflected in Sound Transit's modeling assumptions, so any increased ridership resulting from the improvements has not been incorporated in the estimates into this plan.

The following chart compares existing transit travel times to future transit travel times after implementation of ST3. Existing times represent the afternoon weekday commute. Scheduled times cannot be relied on from hour to hour and day to day because of traffic congestion on the roads.

Table 8: Projected transit travel times and transfers between selected centers

	Existing Transit Time	Expected 2040 Transit Time without ST3(1)	Expected 2040 Transit Time with ST3	Time Savings with ST3
University of Washington to Everett	73 min*	60 min*	53 min	7 min
Seattle to Mariner Park-and-Ride	55 min	52 min*	41 min	11 min
Bellevue to Ballard	70 min*	58 min*	36 min*	22 min
University of Washington to West Seattle	30 min*	37 min*	23 min	14 min
Bellevue to Issaquah	25 min	28 min	18 min	10 min
Federal Way to Stadium	61 min*	56 min*	44 min*	12 min
Tacoma to Airport	44 min	50 min	33 min	17 min

* Requires 1 bus-to-bus, rail-to-bus or bus-to-rail transfer (transfer times not included, assume about 5 additional minutes)
(1) Includes ST2 investments
Notes: Bus travel times can vary greatly. The times shown for 2040 are expected averages, after accounting for speed degradation from PSRC 2040 traffic model.

Changes in length of wait times are not reflected in travel time estimates. Typical light rail frequencies on all lines in 2040 will be at least every 10 minutes, with service more often during peak commute times. Shorter wait times and transfer times also reduce total trip times for riders.

Reliability problems that bus riders experience in traffic today may contribute to the preference for rail previously described. Since one poor experience on a bus commute may affect perceptions of that transportation service, a preference for rail and BRT may contribute positively to ridership in ways that are not reflected in forecasted estimates.

Transit trips to selected centers

Table 9 presents the percentage of commute trips made by transit riders to a selected set of regional centers. The existing transit share data is from 2007-2014 Puget Sound Commute Trip Reduction surveys and the 2006-2010 American Community Surveys. Percentages include ridership on fixed-route, fixed-schedule transit service. Excluded are paratransit, dial-a-ride, carpools and vanpools. The largest transit shares correspond to the places with highest travel volumes and employment density.

Table 9: Projected activity center mode splits

Activity Center (Destination)	Existing Transit Share of Commute Trips	2040 Transit Share of Commute Trips with ST3	Percent Change from Existing to ST3 in 2040
Everett CBD	8%	12%	50%
Lynnwood East	4%	7%	75%
Bellevue CBD	14%	20%	43%
Redmond CBD	3%	4%	33%
Seattle CBD	45%	52%	16%
University District	34%	51%	50%
Issaquah Area	4%	7%	75%
Des Moines area	2%	4%	100%
Downtown Tacoma	4%	8%	100%
Systemwide	**14%**	**20%**	**43%**

Notes: Transit shares of commute trips to these Activity Centers are estimated shares of all commute trips in vehicles (excluding bicycle-only and walk-only trips). The largest transit shares correspond to the places with highest travel volumes and employment density.

Forecast methods

The report relies on ridership forecasts prepared for the year 2040. The forecasts are based on the Puget Sound Regional Council's published population and employment forecasts; and a well-documented modeling/forecasting methodology reviewed by local and national experts and approved by the Federal Transit Administration specifically designed to avoid over-forecasts of transit ridership.

Sound Transit wants to ensure that its forecasts do not overstate system benefits. Accordingly, ridership has been presented in ranges to account for some uncertainty about how changes in the region over the next 25 years will affect travel patterns. Sound Transit's forecasts also do not consider other factors that have been shown to increase rail and overall transit ridership but which are not easily quantified. These include:

Rail bias – The demonstrated preference of people to make urban transit trips on trains they would not make on equally fast buses. Researchers have documented this preference, and link it to passengers' perceptions of rail's speed and reliability, as well as a confidence factor related to the ease of understanding inherent in routes. Passengers know trains can take them only where the tracks are laid and that if they make a mistake and go in the wrong direction backtracking is easy. Sound Transit's modeling does not take rail bias into account, assuming that buses and trains with the same service characteristics would have the same ridership.

Land use changes resulting from transit investments – Sound Transit's modeling also does not assume that land use will change because of improvements in high capacity transit. However, rail investments across the nation and world have catalyzed positive land use transformations. These result from their ability to bring large numbers of people into dense urban centers without taking up the space required for freeways, streets and parking lots, and because developers have confidence in rail's permanence and are willing to build projects around rail stations.

As two local examples, Weyerhaeuser stated their 2016 relocation to a new headquarters under construction in Seattle's Pioneer Square was based in significant part on access to light rail and other transit, and REI's anticipated move of their corporate headquarters to the Spring District in Bellevue is based in large measure on East Link service coming to that area.

While Sound Transit's projections align closely with PSRC regional plans, it is important to mention that the following PSRC assumptions require political consensus on difficult policy choices:

- Calculations assume transportation agencies will initiate a new per-mile driving fee on all miles driven across the region. Fees would apply to all trips. This assumption achieves policy consistency with PSRC as one of the funding alternatives being considered by the Transportation Futures Task Force in preparation for the update to the Transportation 2040 Plan.
- In the future bus travel times on HOV lanes are assumed not to deteriorate. In order to assume no future reduction in bus travel times, the model assumes future policymakers will obtain the political consensus to impose new, more stringent HOV limitations to three- or four-passenger vehicles or converting the HOV lanes to bus-only lanes.

The 2040 transit ridership forecast (which includes Sound Transit 3) includes the effects of population and employment growth, and the transportation and transit projects included in the Puget Sound Regional Council's Metropolitan Transportation Plan.

Other ST3 benefits

Cost savings for transit riders

According to the U.S. Census Bureau, in 2014 the average family spent more of its disposable income on transportation than any other expenditure except housing. The average household had 2.54 people, owned 1.8 cars, and spent $9073 a year on transportation.

The most expensive cost of driving is the cost of owning and insuring a vehicle. A family that can own one fewer car because of better transit service can save thousands of dollars each year on transportation. Even a family that owns the same number of cars but drives less saves on vehicle operating costs – gas, oil, parking, tires and maintenance.

For those commuting by transit to places with high parking costs, the savings in parking alone are substantial. For example, a monthly Puget Pass good for unlimited $3.25 rides (the two-zone peak hour fare on King County Metro) costs $117. According to the Puget Sound Regional Council, the average cost of parking in the region's downtowns in 2013 was $161 a month. For a transit commuter to downtown Seattle, where the average monthly parking cost is $215, savings in parking alone would be approximately $1,200 a year, on top of the savings on gas and other vehicle operating costs.

Operating revenue /operating expense ratio

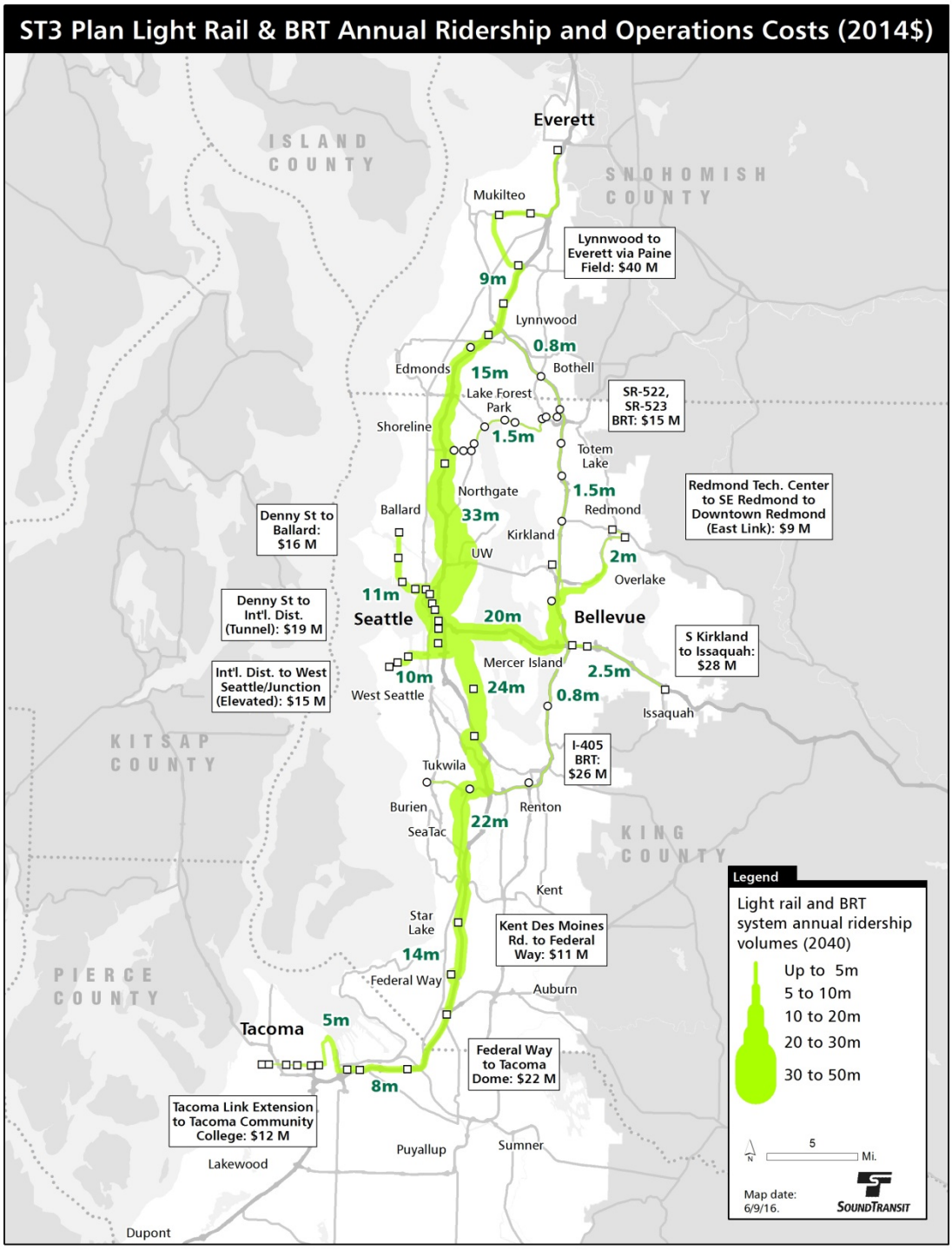
The following table shows the forecast ratio of operating revenue to operating expense by service in 2040. This ratio is the operating revenue (primarily fares) divided by the costs of operating Sound Transit's services.

Table 10: Sound Transit's total forecasted operating revenue / operating expense ratio in 2040

	2041 O&M Cost by Mode (millions of 2014$)	Total 2041 Fare Revenue by Mode (millions of 2014$)	Operating Revenue/Operating Expense Ratio
Commuter Rail	$ 77.03	$ 19.34	25%
Light Rail	$ 441.91	$ 170.04	38%
Regional Express	$ 101.42	$ 19.23	19%
Bus Rapid Transit	$ 48.99	$ 13.50	28%
Total	**$ 669.36**	**$ 222.12**	**33%**

Operating costs and ridership on each ST3 light rail extension

This map illustrates the annual transit ridership volumes in 2040 on each of the seven light rail extensions and the two BRT lines T line proposed in ST3. Annual system operating costs allocated to each of these ST3 extensions are also shown.



Cost effectiveness

Annual operations and maintenance cost of the ST3 plan per rider and per new transit rider over the cost of the ST2 plan are shown in this table.

Table 11: Annual projected cost per ST3 system rider and new rider (2014$)

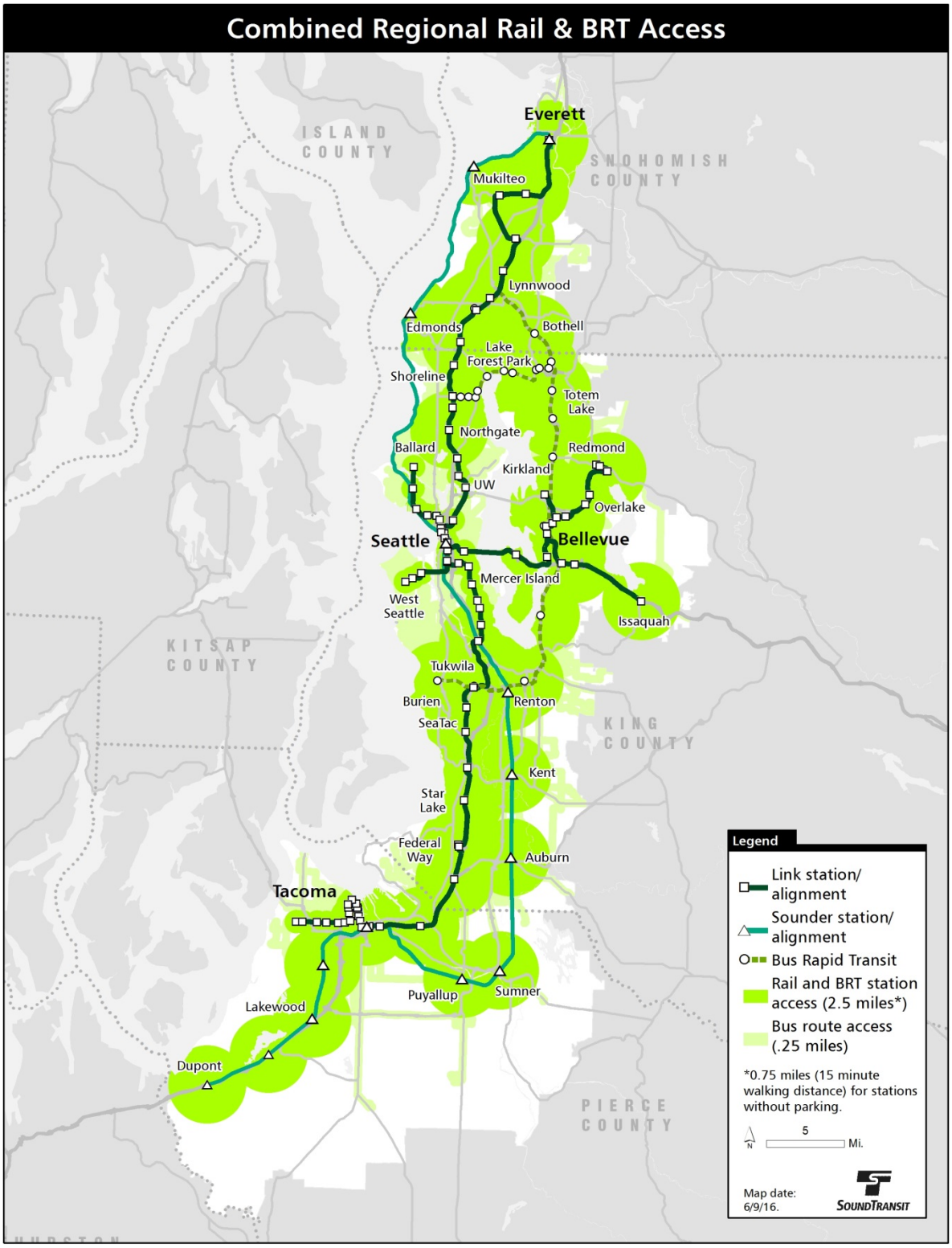
	With ST3 in 2040 (high ridership)	With ST3 in 2040 (low ridership)
Annual cost per ST3 system rider -		
ST3 transit operations	$3.98	$4.93
ST3 capital	$10.03	$12.44
Annual cost per new transit rider		
ST3 transit operations	$15.41	$19.47
ST3 capital	$38.88	$49.11
Total annual cost and ridership		
ST3 transit operations cost (millions)	$370	$370
ST3 capital cost (millions)	$933	$933
ST3 riders (millions)	93	75
New transit riders (millions)	24	19

Combined regional rail access

The reach of the regional transit investments made in Sound Transit 3 will be much greater than just the immediate vicinity of rail stations and transit centers.

Map 2 shows the access to the regional light rail and commuter rail systems when all ST3 improvements are in service. It depicts the geographic coverage of ¾-mile walk access and 2½-mile park-and-ride access to the rail stations, and the reach of existing local bus services (including average ¼ mile walk distance to the bus) that would allow access to the rail system with one transfer.

Approximately 84 percent of Sound Transit District residents and 93 percent of district employees would have convenient access to the region's high-reliability rail system in 2040.


Combined Regional Rail & BRT Access
ISLAND COUNTY
SNOHOMISH COUNTY
KITSAP COUNTY
KING COUNTY
PIERCE COUNTY
Everett
Mukilteo
Lynnwood
Edmonds
Bothell
Lake Forest Park
Shoreline
Totem Lake
Northgate
Ballard
Redmond
Kirkland
UW
Overlake
Seattle
Bellevue
Mercer Island
West Seattle
Issaquah
Tukwila
Burien
Renton
SeaTac
Kent
Star Lake
Federal Way
Auburn
Tacoma
Puyallup
Sumner
Lakewood
Dupont
Legend
Link station/ alignment
Sounder station/ alignment
Bus Rapid Transit
Rail and BRT station access (2.5 miles*)
Bus route access (.25 miles)
*0.75 miles (15 minute walking distance) for stations without parking.
N
5
Mi.
Map date: 6/9/16.
SOUNDTRANSIT

Performance Characteristics by Mode

System and service philosophy and impacts

Sound Transit's role is to provide the Central Puget Sound with a regional network of high-capacity transit services. As defined by Sound Transit's enabling legislation, high-capacity transit means service operating principally on exclusive rights-of-way and providing a substantially higher level of passenger capacity, speed and service frequency than public transit operating on highways and city streets in mixed traffic.

This role is further defined by the Puget Sound Regional Council's land use plans, Vision 2040, and Transportation 2040, which together define goals to establish a region-wide transit system that connects regional growth centers, provide seamless connections with local transit and ferries, and supports concentrated development at and around stations.

Within this framework, Sound Transit's ST3 plan will improve and expand the regional mass transit system by connecting nearly all the major cities in King, Pierce and Snohomish counties with light rail, Bus Rapid Transit (BRT), express bus, and commuter rail. Consistent with the major expansion in rail services, some existing express bus routes will be replaced with rail. Service characteristics for Sound Transit's modes are consistent with the mandate to operate high-capacity transit with frequent, fast service.

ST Express buses

ST Express operates frequent, all-day bus service on major corridors between centers, with half-hour headways or better, from about 6 a.m. or earlier until about 10 p.m. ST Express buses operate on freeway HOV facilities where they are available, including a series of freeway direct access ramps built as part of Sound Move, which improve speed and help ensure reliability.

ST Express buses serve major urban centers as well as outlying park-and-ride lots and transit centers, and they connect to Sounder and existing and future Link light rail stations. All buses carry bicycles; some serve mixed-use transit centers with commercial and residential development integrated into the center.

Sounder commuter rail

Sounder commuter rail currently operates between Everett and Lakewood. In the 2008 ST2 ballot measure, voters approved four additional Sounder round trips on the south line. The first of these began operating in 2013. A mid-day train will start in September 2016 and two peak-service trains will begin operating in 2017.

Sound Transit 3 includes funding to extend Sounder commuter rail service during peak hours from Lakewood to new stations at Tillicum and DuPont, increasing access near Joint Base Lewis-McChord. Parking will be provided at both of these stations.

The Sounder south line capital improvement program will help meet growing demand for service by increasing system capacity and enhancing service. This program will include additional parking and accessibility elements and expanding platforms to accommodate trains up to 10 cars in length, allowing

Sound Transit to run longer trains and carry more riders. In addition, track and signal upgrades and other related infrastructure will provide additional capacity. There is also funding for additional parking and accessibility elements for North Sounder.

Link light rail

Tacoma Link currently operates electrically-powered single-car trains between the Tacoma Dome Station and downtown Tacoma, and a funded expansion will extend service along Martin Luther King, Jr. Boulevard. Link light rail is a 19-mile electric light-rail line with 15 stations operating predominantly on exclusive right-of-way between Sea-Tac Airport and the University of Washington. Angle Lake Station will extend the line further south in SeaTac later in 2016, and ST2 investments will build more than 50 miles of light rail service in the region. Trains run about every six minutes during peak hours and every 10 to 15 minutes off-peak and at night.

With ST3, the light rail system will more than double again to 116 miles with over 70 stations. Currently two-car and three-car trains serve customers based on capacity needs, but station platforms will accommodate up to four-car trains for future service expansion as demand grows.

As part of ST3, Link will be extended north to Everett via the Southwest Everett Industrial Center, south to Tacoma, and east to Redmond Town Center. Additional extensions will serve Ballard and West Seattle to downtown Seattle, and south Kirkland to Issaquah via Bellevue. The technology used for these expansions will be the same as the light rail currently in operation from the University of Washington to SeaTac with exclusive and largely grade-separated rights of way.

Bus Rapid Transit (BRT)

Bus Rapid Transit (BRT) describes bus services that use features such as separated lanes, level boarding, off-board payment, higher frequency, and additional doors to provide, which combine to provide higher speed and capacity than traditional bus service. ST3 will invest in BRT in two corridors: on I-405 and SR 518 to serve the eastside, connecting from Lynnwood to Burien; and on SR 522 and Northeast 145th Street between Bothell and Shoreline (with service to Woodinville), connecting with Link light rail at Northeast 145th Street.

ST3 BRT investments will serve customers approximately every 10 minutes in the peak period and every 15 minutes off peak. On I-405 and SR 518, BRT will operate on limited-access highways primarily in lanes that are managed via tolls and/or limited to high occupancy vehicles. On SR 522 and NE 145th Street, bus access transit (BAT) lanes and features such as queue jumps will similarly allow buses to maintain a level of speed and reliability that represents a substantial improvement over buses in general purpose traffic.

Sound Transit 3

Appendix D:

Social, Economic and Environmental Impacts; Integration with Regional Land Use; Transit-Oriented Development

Adopted June 23, 2016

Table of Contents

Social, Economic and Environmental Impacts of Sound Transit 3 (ST3)

Sound Transit's mission to build, operate and expand regional transit is essential to central Puget Sound's sustainable future. The agency is committed to making long-term transit investments and choices that retain and improve the region's economy, communities and environment. The ST3 projects enable more people to travel more affordably and reliably throughout the area's growing communities on environmentally friendly buses and trains.

This appendix describes the benefits and impacts of ST3 on the region's communities, economy and its environment.

Social Benefits and Impacts

Increased accessibility and mobility options for all residents

Sound Transit 3 provides the next phase of high-capacity transit improvements for central Puget Sound, with the light rail system doubling to 116 miles with over 70 stations. When complete, the system will connect 16 cities with light rail, 30 cities with Bus Rapid Transit/ST Express bus and 12 cities with commuter rail across Pierce, King and Snohomish counties.

The proposed expansion will complete the regional light rail system to improve community connectivity, enhance multi-modal access, connect the region's designated growth centers and provide improved connections to the system by coordinating with local transit partners. Also included in Sound Transit 3 are high-capacity transit studies to examine options for future expansion of the regional system. The addition of Bus Rapid Transit in major corridors, expanded capacity and access improvements for Sounder commuter rail and continued ST Express services will expand opportunities for workers to commute to their jobs. Together, these improvements can provide substantial benefits to all within the region, including minority, low-income, disabled, elderly, transit dependent residents, and for those who are unable to or who prefer not to drive to access to a variety of destinations throughout the region.

Many populations will have greater access to transportation options and mobility with the ST3 plan. According to the American Community Survey, 12.4 percent of the region's population is classified as low-income, and about nine percent of all households in the region do not have access to a car. About 10.5 percent of the population has a disability, and by 2040 just over 20 percent of the population in each of the region's three counties will be seniors. Compared to others, all of these individuals tend to have lower incomes and are less likely to have a car available to them.

For low-income households, Sound Transit 3 investments may make it possible to reduce the number of cars per household, and/or to reduce the annual number of miles driven and costs of operating and maintaining a car. For those who cannot drive or afford an automobile, Sound Transit 3 investments will greatly expand their ability to travel quickly and *reliably* throughout the region, whether they live along a Sound Transit route, or connect via local transit or demand-responsive services.

Transportation is the second largest monthly expense after housing for working families. When residents can access transit and other services without using their cars, they spend less money on transportation and consume less gasoline, which can help reduce air pollution and greenhouse gas emissions.

Enhancing Mobility and Access

The following uses current demographic data (2014) from the American Community Survey conducted by the United States Census and recent studies from Pierce, Snohomish and King Counties to illustrate what populations could have improved mobility and access after completion of the Sound Transit 3 Plan.

1. **People of color -** Over 38 percent of the population within a mile of future Sound Transit service, including ST3 stations and stops, are people of color.
2. **Low-income residents -** The proportion of the low-income population within one mile of Sound Transit 3 proposed service is 14.3 percent. Within the Sound Transit District, a higher percentage of those at the poverty level use public transportation compared to commuters overall.
3. **Seniors -** People 60 years and older made up 17 percent of the population of King, Snohomish, and Pierce counties in 2014 and have been a growing portion of the population over time. This trend is expected to continue as the general population ages and life expectancy increases. By 2020, all three counties anticipate that over 20 percent of their total population will be 60 or older.
4. **Subsidized housing residents -** When the Sound Transit 3 system expansion is complete, Sound Transit will serve over 36,000 current units of subsidized housing.
5. **Renters -** Renters, who tend to use transit more frequently than homeowners, will have greater mobility options as a result of ST3. The percentage of renters within a half-mile of Sound Transit service would include nearly 35,000 renters when the Sound Transit 3 system is finished.
6. **Zero-vehicle households -** Today, nearly nine percent of households in the Sound Transit service area do not have access to a car.

Enhancing Access to Regional Services and Amenities

When completed, ST3 projects will enhance access to numerous regional amenities and services. Residents will be able to access services within ½ mile of transit to reach the following places:

- **Educational institutions -** Additional public transit options will improve access to educational facilities for students of all ages, especially those who might not have access to a vehicle. Analyzing the ST3 Plan in relation to current educational institutions shows that ST3 stations and stops will provide access to 14 more K-12 educational facilities, as well as several additional higher education institutions. When the ST3 Plan is fully built, students will be able to access 135 K-12 facilities and 31 higher education institutions.
- **Community facilities -** ST3 will also provide access to 51 more community facilities, which include hospitals and medical centers, public health clinics, libraries, museums, park and rides, parks and recreation facilities and shopping centers. Altogether, the full system will make 633 community facilities accessible by Sound Transit service.
- **Sports and event venues -** Several major sports and event venues like Husky Stadium, the Washington State Convention Center, Safeco Field and CenturyLink Field already enjoy accessibility by several modes of public transit. Sound Transit 3 would not only expand that access to reach a broader number of attendees, but would also replace some current ST Express bus service with more reliable service via Link light rail. Specifically, ST3 will provide access to 6 more venues via Link light rail. After ST3 is built, 16 major sports facilities and event venues in the region will be accessible via Sound Transit services, 12 of those by light rail, including the Tacoma Dome, ShoWare Center and Xfinity Arena.

Improving public health and reducing healthcare costs

Expanding transit can help reduce transportation-related air pollution and the diseases associated with them. This is especially critical for vulnerable populations like seniors, children and those with respiratory illnesses. A national study of pollution and health estimated that each ton of carbon reduced from transportation emissions would reduce the incidence of respiratory illnesses and result in $570,000 in health cost benefits in the Seattle area. National studies have also documented a link between particulate matter and ozone air pollution from road transportation and premature cardiovascular and pulmonary disease-related deaths.

Promoting physical activity through active travel

Regular physical activity can reduce risk factors for several chronic conditions, including heart disease, obesity, cancer, anxiety and depression. Public transit can increase physical activity, since it is usually paired with either walking or cycling to reach a final destination. National studies show that public transit users walk about three times as much as non-transit users and are more likely to meet guidelines for daily physical activity. One study found that nearly a third of transit riders get the recommended 30 minutes or more of daily physical activity from walking to transit.

System Safety

Sound Transit is in the process of establishing a Safety Management System. This system is developed on the framework established by the Federal Transit Administration to ensure that safety programs are cohesive and procedures are effective. Designed to be comprehensive, the program interfaces with every element of Sound Transit - from operations, to capital construction to human resources. It enables Sound Transit to be proactive rather than reactive to safety-related incidents. This system will continue and be updated as required during the Sound Transit 3 plan.

Reducing traffic injuries

Transportation improvements and compact, mixed-use development that often accompanies public transit may increase traffic safety by reducing vehicle miles travelled (VMT). National studies indicate that safety is increased by reducing overall miles driven, slowing traffic speeds and providing more travel options to avoid high risk driving.

Economic Benefits and Impacts of ST3

The ST3 Plan will provide all-day, reliable connections for travelers in the region's most congested corridors. The economic benefits of the ST3 Plan will be realized in many ways, some of which can be quantified and others that are more difficult to measure.

Cutting travel time and costs

Travel time savings are shown in Appendix C for both transit riders and non-transit users. Transit users save money by using transit instead of driving and the region as a whole realizes economic benefits. The region's residents also save substantial costs related to owning and operating a car.

- National data indicate that a $10 million investment in public infrastructure saves local highway drivers and transit users $15 million through reduced fuel and lost productivity costs.
- In gasoline costs alone, it's estimated that regional residents riding the expanded ST3 system will save the equivalent of up to ~~44~~ 19 million gallons of gasoline annually.

Supporting jobs and the regional economy

Improving the reach and reliability of regional transit directly supports the region's economy. It gives employers access to a broader base of workers, and it gives individuals greater choice in where to live, work, shop and conduct personal business. It also gives businesses better access to goods and services and allows more people across the region, especially those without access to a car, to reach job opportunities.

Currently, the regional population within the Sound Transit service area is over 2.9 million people, with 1.8 million jobs. By 2040, that population is expected to grow by 27 percent reaching nearly 3.7 million people. According to the Puget Sound Regional Council:

- By 2040, the number of jobs within the Sound Transit service area is expected to grow by 45 percent, reaching nearly 2.6 million.
- As Map 2 in Appendix C depicts, approximately 84 percent of Sound Transit District residents and 93 percent of district employees would have convenient access to the region's high-reliability rail system in 2040. This includes residents and employees within 2½ miles of rail stations with park-and-ride access, ¾ mile of other rail stations, and ¼ mile of existing local bus services that would allow access to the rail system with one transfer.

Creating Jobs

Investment in public transit benefits the economy as a whole by supporting the businesses that provide the goods and services needed to build public transit infrastructure. According to the State of Washington Office of Financial Management, transit investment also flows through the construction workers and other personnel to local businesses where they spend their wages, creating indirect jobs.

- According to models developed by the Washington State Office of Financial Management, ST3 would support over 78,000 direct jobs and more than 144,000 indirect jobs over the 25-year period of construction, for a total of over 223,000 jobs. A job is defined as full-time employment of one person for one year.
- Additionally, national economic studies have found that every $1 of public transit investment generates $4 in economic returns when considering business sales, revenues and new private investment.

Increasing job access and productivity

National studies also indicate that businesses located near transit have lower employee absenteeism and turnover. These and other benefits may contribute to increased productivity; a national study found

that transit investments provide more than twice the increase in worker productivity as highway spending. Additionally, local businesses indicated to the Puget Sound Regional Council that a lack of transportation choices and congestion were among the top constraints to doing business in the region.

Environmental Benefits and Impacts of ST3

Environmental Review

Sound Transit conducted an environmental impact review that includes the impacts of the ST3 Plan. In November 2014, Sound Transit issued a plan-level Supplemental Environmental Impact Statement (SEIS) for updating the agency's Regional Transit Long-Range Plan in accordance with the State Environmental Policy Act. The SEIS describes existing conditions and evaluates the environmental impacts and benefits of adopting and implementing an updated Regional Transit Long-Range Plan, including potential ST3 Plan investments. Effects on the environment as well as possible mitigation measures are discussed in the 2014 SEIS at a level of detail appropriate for long-term planning. In addition, the 2014 SEIS broadly describes potential impacts in the areas of transportation, noise and vibration, water quality, ecosystems, visual quality, parks and recreation, historic and cultural resources and other areas. Sound Transit 3 Plan investments support Puget Sound Regional Council's *Vision 2040* directive to concentrate growth and denser development in urbanized areas rather than rural areas, thus helping to preserve high value habitat, wetlands and water quality.

In addition to this environmental review, a more detailed environmental review is required before constructing any ST3 projects. If financing for ST3 is approved by voters, Sound Transit will complete project-level environmental reviews and identify potential mitigation measures for significant adverse environmental impacts. To the extent that they apply, the 2014 SEIS and other planning documents developed in support of the ST3 Plan may be incorporated by reference during project-level environmental reviews in accordance with the provisions for integrating planning and environmental reviews as set forth in federal statutes and mandates that address linking planning and NEPA.

Quantifying Environmental Benefits and Impacts

The ST3 Plan investments are expected have a positive impact on the central Puget Sound's environment. Transit reduces individual vehicle miles travelled, which generally corresponds with reduced energy consumption, air pollution and greenhouse gas emissions. An overview of the impacts to air quality, greenhouse gas emissions and energy use are presented here and reflect updated modeling for ST3 investments only.

Reducing Regional Energy Consumption

The ST3 Plan will help reduce transportation-related energy consumption in the central Puget Sound. According to the Washington Department of Commerce, cars and trucks account for the majority of total daily energy consumption in the region and gasoline accounts for over half of transportation energy use in Washington. By shifting personal car trips to transit trips and reducing vehicle miles traveled, it is expected that less fuel will be consumed to move those same residents throughout the region.

Improving Regional Air Quality and Greenhouse Gas Emissions

Regional air quality is improved when people choose transit instead of driving alone. Burning fuel to operate motor vehicles results in air pollutant emissions that contribute to climate change and are harmful to human and environmental health. Overall, the ST3 Plan will help reduce vehicle miles traveled (VMT) on the region's roadways, which in turn reduces air pollution and greenhouse gas (GHG) emissions.

Traveling on transit produces less air pollution than driving. National studies show that riding on transit with others instead of driving alone reduces pollution per passenger mile traveled nearly in half, depending on the pollutant. Using methodologies approved by the Federal Transit Administration for analyzing air quality, overall air pollution from ground transportation is expected to be lower in the region with the ST3 Plan compared to not building the ST3 Plan. Traveling on Sound Transit's electric powered light rail trains and upgraded diesel commuter rail locomotives is also less polluting on a per passenger mile basis than standard rail vehicles.

Traveling on transit produces fewer greenhouse gas emissions than driving. In central Puget Sound, transportation-related emissions are the largest source of greenhouse gas emissions. The ST3 Plan represents an important step towards addressing the challenges of climate change by offering a reliable, low carbon transportation choice.

Greenhouse gas emissions savings: Sound Transit 3 Plan only

Sound Transit 3 projects alone are projected to annually reduce the number of private vehicle miles traveled (VMT) by 362.2 million miles starting in 2040 (midpoint of range of 314-411 million miles annually). This would further reduce transportation-related greenhouse gas emissions by more than 130,000 metric tons annually. These savings are based on the Federal Transit Administration's New Starts methodology. This approach calculates emissions and vehicular mile reductions due only to the Sound Transit 3 Plan. These greenhouse gas savings are equal to the annual greenhouse gas emissions from:

- Driving more than 312 million miles in an average passenger vehicle.
- Burning more than 14.6 million gallons of gasoline.
- Powering the electricity for more than 19,000 homes for a year.
- Burning over 690 railcars of coal.
- Sequestering the carbon equal to growing more than 3.3 million tree seedlings for a year

The annual value of reducing these emissions is over $5.3 million, based on a $38/ton estimate of the social cost of carbon, which is used by federal agencies for estimating the climate benefits of federal air quality regulations.

Greenhouse gas emission savings from the entire Sound Transit System including ST3 in 2040

With the completion Sound Transit 3, by 2040 the entire Sound Transit system will save an estimated 793,000 metric tons of greenhouse gas emissions annually. This average estimate follows guidance from

the American Public Transportation Association and is the approach used by Sound Transit and King County in annual reports to quantify the reduction in emissions for these respective transit systems[1].

These savings are equal to the annual greenhouse gas emissions from:

- Driving more than 1.9 billion miles in an average passenger vehicle
- Burning more than 89 million gallons of gasoline
- Powering the electricity for more than 117,000 homes for a year
- Burning more than 4224 railcars of coal
- Sequestering the carbon equal to growing 22.5 million tree seedlings for a year

Reducing Sound Transit Generated Air Pollution and Greenhouse Gas Emissions

In addition to enabling regional residents to improve air quality by taking transit rather than driving, Sound Transit is committed to reducing its own environmental impacts. The agency is working to integrate energy efficient operating practices at existing and new facilities. The agency will continue to procure and manage fleets that demonstrate increasing fuel efficiency, including alternative fuels and low-and no-emission vehicles. The agency will also work to make its electricity use carbon-neutral and maximize energy efficiency. Furthermore, the agency is committed to reducing the greenhouse gas emissions and air pollution generated during construction of the ST3 Plan.

Sound Transit's recent efficiency and pollution reduction efforts provide a strong foundation for reaching these goals under ST3. The agency has a strong track record of substantially reducing air pollution from its buses and trains. In 2015 alone, Sound Transit reduced the particulate emissions that cause respiratory disease by 21 percent for Sounder commuter rail engines.

Finally, Sound Transit's role in reducing greenhouse gas emissions and air pollution supports regional climate change goals. The City of Seattle, King County and the State of Washington maintain aggressive greenhouse gas emissions reduction goals that rely on substantial reductions in air pollution from the region's transportation sector. The Puget Sound Regional Council's (PSRC) *Transportation 2040*, the region's action plan for transportation, illustrates how ST3 services are a key component of these efforts. One strategy to reduce greenhouse gas emissions indicates that ST3's extension of light rail to Everett, Tacoma and Redmond as well as bicycle and pedestrian access investments, together could result in a 9 percent decrease in regional greenhouse gas (GHG) emissions.

Supporting Transit System Resiliency

To safeguard the long-term sustainability of agency infrastructure and operations, Sound Transit also strives to plan, design and deliver an ST3 System that demonstrates resilience in the face of projected changes in development patterns and demographics, climate change and extreme weather patterns and natural disasters.

[1] The American Public Transportation Association's methodology also considers secondary effects of transit, including reductions due to congestion relief and land use changes. These secondary environmental benefits of the transit system are not included in *New Starts*, and explain the difference between final outputs of both models.

Integration with Regional Land Use Planning

Puget Sound Regional Council's Regional Plan

ST3 investments are consistent with the vision and goals in the region's land use, growth management and transportation plans. Light rail, commuter rail, Bus Rapid Transit (BRT) and express bus services will carry hundreds of thousands of people daily in the region's most dense and highly congested corridors delivering people to regional downtowns, jobs and other activity centers.

Vision 2040, adopted by the Puget Sound Regional Council (PSRC) in 2009, is the integrated, long-range vision for how and where the region will accommodate a substantial growth in population and employment over the next 25 years. The concept of people, planet and prosperity is a central theme to *Vision 2040* as evidenced by the regional goals set forth in the plan.

- Environment—Protect and restore natural systems, conserve habitat, improve water quality, reduce greenhouse gas emissions and air pollutants and address potential climate change impacts.
- Development patterns—Focus growth within already urbanized areas to create walkable, compact and transit-oriented communities.
- Housing—Preserve, improve, and expand housing stock to provide a range of affordable, healthy, and safe housing choices.
- Economy—Promote a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people, sustaining environmental quality and creating great central places, diverse communities and high quality of life.
- Transportation—Provide a safe, cleaner, integrated, sustainable and highly efficient multimodal transportation system that supports the regional growth strategy, promotes economic and environmental vitality and contributes to better public health.
- Public Services—Support development with adequate public facilities and services.

Achieving *Vision 2040*

Sound Transit's system plans are incorporated into PSRC's regional plan. Sound Transit 3 contributes to the region's ability to achieve many of the above-mentioned goals established in *Vision 2040*.

Between now and 2040, population within the urbanized portions of Pierce, King and Snohomish counties is expected to grow approximately 25 percent, with a projected 45 percent growth in employment and a 30 percent increase in vehicle miles traveled. This means that this area will need to accommodate about 800,000 new residents. Successfully focusing growth within already urbanized areas will depend on the region's ability to develop adequate infrastructure to support more dense development.

Vision 2040's transportation goals are integral to the region's land use vision, which includes linking places of concentrated, transit-oriented development with an efficient multimodal transportation system. In particular, *Vision 2040* calls for high-capacity transit system (HCT) links between and within major urban centers.

Sound Transit 3 expands the region's HCT system, providing a key piece of the transportation

components necessary to implement the transportation element of *Vision 2040*. *Transportation 2040* calls for completing ST2 projects and additional light rail and other HCT projects, such as to Everett, Tacoma, Redmond, Ballard, West Seattle, Issaquah and along I-405 and SR522.

Through the implementation of HCT in key corridors, ST3 supports the *Vision 2040* strategy of concentrating growth within regional growth centers, and supporting that growth with robust mass transportation alternatives. The ultimate goal of this growth strategy is to promote the well-being of people and communities, economic vitality and a healthy environment. By 2040, the ST3 program of investments, when combined with the investments in Sound Move and ST2, will provide light rail, commuter rail or bus connections to 39 cities in the region. The expanded HCT system in the ST3 Plan will provide an effective and reliable alternative to driving and an efficient way for people to move throughout the region.

Transit-Oriented Development

Transit-oriented development focuses development growth within one-half mile of transit stations. Concentrating growth in station areas creates multiple regional benefits, including but not limited to:

- Increased tax base in communities served by transit
- Increased transit ridership
- Increased regional access to goods and services
- Opportunities for less automobile-dependent lifestyles
- Improved access to housing and jobs
- Emphasis on pedestrian infrastructure in station areas.

Background

Transit-oriented development is a programmatic component of the ST3 system plan that complements capital project development and guides the disposition of surplus property.

Sound Transit completed a *TOD Program Strategic Plan* in 2010, which introduced the policy framework for the TOD work program within the context of Sound Transit's mission to implement regional high capacity transit.

Sound Transit's Board adopted a *Transit-Oriented Development Policy* in December 2012 through Resolution No. R2012-24. This provides the policy foundation for how the agency approaches integrating transit infrastructure and local and regional land use development.

The TOD Policy guides the agency to work toward the following goals:

- Increase the value and effectiveness of transit by increasing transit ridership
- Support economic development efforts
- Further implementation of state, regional and local growth plans, policies and strategies
- Foster relationships with regional and local stakeholders
- Encourage creation of housing options including market-rate and affordable units
- Advance related Sound Transit plans and policies, with an emphasis on the agency's Sustainability Plan
- Protect and enhance Sound Transit's assets and investments

- Encourage convenient, safe multi-modal access to the transit system, with an emphasis on non-motorized access.

Sound Transit updated its TOD strategic plan in 2014 to reflect the 2012 TOD Policy.

Regional plans and policies, including those of the Puget Sound Regional Council (PSRC), encourage equitable transit communities. The PSRC's *Growing Transit Communities Strategy*, adopted in 2013 and to which Sound Transit is a signatory, defines "transit community" as the approximately one-half mile area around a high capacity transit station. Equitable transit communities are further described as:

> *"…mixed-use, transit-served neighborhoods that provide housing and transportation choices and greater social and economic opportunity for current and future residents. Although generally defined by a half-mile walking distance around high-capacity transit stations, they exist within the context of larger neighborhoods with existing residents and businesses. These communities promote local community and economic development by providing housing types at a range of densities and affordability levels, commercial and retail spaces, community services, and other amenities that are integrated into safe, walkable neighborhoods." (PSRC GTCS)*

The state legislature amended Sound Transit's enabling legislation in July 2015, directing the agency to advance transit-oriented development goals, setting forth specific financial and procedural requirements, and giving new tools to the Agency to advance equitable development through prioritizing affordable housing in surplus property disposition.

TOD Components within ST3

Transit planning and transit project development

Consistent with the 2015 amendments to the Sound Transit enabling legislation (RCW 81.112.350), Sound Transit will "implement a regional equitable TOD strategy for diverse, vibrant, mixed-use and mixed-income communities consistent with TOD plans developed with community input by any regional transportation planning organization within the regional transit authority boundaries." This strategy includes transit planning and project development.

Sound Transit 3 distributes $12 million ($2014) among identified capital projects to support inclusive and collaborative planning for TOD during the transit project planning and development stages. These funds will be available for:

- Considering TOD opportunities throughout the alternatives analysis, conceptual station design and preliminary engineering processes.
- Where appropriate during the property acquisition phase, considering TOD potential on property that is necessary to construct or operate the transit facility, but that may later become surplus to construction-related or ongoing transit operations to increase the likelihood that it is supportive of being used for TOD.
- Sound Transit may evaluate alternative land development strategies that meet its on-going and construction property needs and facilitates for the realization of equitable transit oriented development in station areas.

- Using TOD objectives adopted by the Sound Transit Board, including consideration of local government TOD supportive land use policy and regulation, to analyze and inform alignment and station location decision in order to support development of mixed-income, mixed-use communities around transit stations.
- Developing station design policies that appropriately facilitate and accommodate TOD on and adjacent to agency-owned properties in light of the space needs of transit-supportive facilities and services as well as local community development plans and priorities. This includes planning for station areas designed to evolve over time as the communities we serve mature and transition from auto-dependent to multimodal station access.
- Working with local jurisdictions on station area planning, zoning, and/or other opportunities to leverage the ST3 transit investment to support local and regional growth plans.
- Seeking input through public engagement that informs, involves, and empowers people, and communities. Invite people to play an active role in shaping Sound Transit alignment and station design plans. Sound Transit will make efforts to include organizations and affordable housing developers who represent communities most at risk for displacement, including low-income communities, communities of color, and immigrants and refugees.

Surplus property

During land acquisition to acquire sufficient property to construct and operate the transit facility, Sound Transit will consider how the surplus property remaining after construction may be used for TOD, including such factors as size, configuration and relationship to the future transit facility. Sound Transit 3 allocates $20 million ($2014) to support TOD program activities with respect to planning and pre-development activities on surplus property, air rights and joint development sites. Sound Transit 3 provides funding for TOD analysis and support beyond the early project development phase of transit capital development. The program will fund pre-development activities, community engagement and planning activities required to prepare TOD surplus properties or air rights for sale, lease or transfer.

As required in RCW 81.112.350(1)(b)(i), when Sound Transit disposes or transfers any surplus property, regardless of the date of acquisition, a minimum of 80 percent of the surplus property to be disposed or transferred, including air rights, that is suitable for development as housing, will be offered for either transfer at no cost, sale or long-term lease first to “qualified entities” that agree to develop affordable housing on the property, consistent with local land use and zoning laws. A “qualified entity” is a local government, housing authority or nonprofit developer. “Affordable housing” is long-term housing for persons, families or unrelated persons living together whose adjusted income is at or below 80 percent of the median income, adjusted for household size, for the county where the housing is located.

As required in RCW 81.112.350(1)(b)(ii), if a qualified entity receives surplus property after Sound Transit offers the property as provided in RCW 81.112.350(1)(b)(i):

- Sound Transit will require that a minimum of 80 percent of the housing units constructed on the property be dedicated to affordable housing
- If a qualified entity sells property or development rights obtained through RCW 81.112.350(1)(b) it must use the proceeds from the sale to construct affordable housing within one-half mile of a light rail station or transit station.

The surplus property disposition requirements described above will not apply to property to be transferred to governments or third parties in order to facilitate permitting, construction or mitigation of high capacity transportation facilities and services. Sound Transit will work in good faith to implement all the requirements of RCW 81.112.350, but is not required to comply with a requirement of RCW 81.112.350(1)(b)(i) or (ii) imposing surplus property disposition requirements if the requirement is in conflict, as determined by the relevant federal agency, with provisions of the applicable Federal Transit Administration master grant agreement, Federal Transit Administration Full Funding Grant Agreement with Sound Transit, or the equivalent Federal Railroad Administration agreement necessary to establish or maintain eligibility for a federal grant program.

Sound Transit will send a report to the appropriate legislative committee and post a report on its website at the end of each fiscal quarter detailing the following activities:

- Any transfers of property that have occurred in the previous fiscal quarter pursuant to RCW 81.112.350(1)(b)
- Any progress in implementing the agency's regional equitable transit-oriented development strategy for diverse, vibrant, mixed-use and mixed-income communities as set forth in this ST3 Plan.

Sound Transit will advance equitable TOD projects on surplus property, air rights and joint development sites by:

- Working with local governments, housing authorities, non-profit developers community organizations and others to implement a regional equitable transit-oriented development strategy for diverse, mixed-use, mixed-income communities as required under RCW 81.112.350, consistent with the Growing Transit Communities Strategy and other applicable regional and local plans and policies.
- Incorporating TOD objectives adopted by the Sound Transit Board as part of the selection criteria during land acquisition to ensure that, where possible, property that is necessary to construct or operate the transit facility, but that may later become surplus is supportive of its reuse for TOD.
- Offering surplus properties that it deems suitable for housing to be offered for either transfer at no cost, sale, or long-term lease first to local governments, housing authorities and non-profit developers to develop affordable housing, regardless of acquisition date, in accordance with RCW 81.112.350.
- Sound Transit will seek input through public engagement that informs, involves, and empowers people and communities. Invite people to play an active role in shaping criteria to govern the development of surplus property in the community. Sound Transit will make efforts to include organizations and affordable housing developers who represent communities most at risk for displacement, including low-income communities, communities of color, immigrants and refugees.
- Developing policies that evaluate proposals to develop surplus property. The evaluation criteria may consider whether the development plan includes space for small businesses or other uses that comprise a diverse, vibrant, mixed use, mixed-income TOD. The developer selection criteria may also consider the types of business and whether jobs proposed for the development to pay

prevailing wages to the extent consistent with law and the retention of federal grant funds, where appropriate.

- Funding TOD activities in capital projects to ensure appropriate consideration and planning for development have occurred.

Affordable housing funding

Sound Transit will contribute a total of $20 million ($4 million annually for 5 consecutive years beginning within three years of voter approval of the ST3 plan; year of expenditure dollars) to a revolving loan fund to support development of affordable housing in opportunities related to equitable transit-oriented development within the boundaries of the Sound Transit District.