



Resolution No. R2021-05

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority establishing a flexible and accountable framework to implement ST2 and ST3 projects not yet in construction as close as possible to the dates promised to the voters that (1) allows project work to proceed right away within the confines of an affordable financial plan; (2) prioritizes maintaining project schedules through an accountable and transparent process to update the agency's revenue assumptions and financing approach and address cost increases at the project and program level; and (3) positions the agency to react quickly as new information becomes available, particularly on the revenue side, and provides greater oversight for the Board and transparency to the public through oversight mechanisms, including an annual Board program review of updated revenue and cost projections to allow the Board to revisit the realigned capital plan assumptions based on shifts in projected financial capacity and opportunities to expedite projects.

WHEREAS, the Central Puget Sound Regional Transit Authority, commonly known as Sound Transit, was formed under chapters 81.104 and 81.112 of the Revised Code of Washington (RCW) for the Pierce, King, and Snohomish Counties region by action of their respective county councils pursuant to RCW 81.112.030; and

WHEREAS, Sound Transit is authorized to plan, construct, and permanently operate a high-capacity system of transportation infrastructure and services to meet regional public transportation needs in the Central Puget Sound region; and

WHEREAS, in general elections held within the Sound Transit district on November 5, 1996, November 4, 2008, and November 8, 2016, voters approved local funding to implement a regional high-capacity transportation system for the Central Puget Sound region; and

WHEREAS, the Board finds that the rationale and purpose of the voter-approved plans of 1996, 2008 (ST2) and 2016 (ST3) for mobility, sustainability, equity, and community development have only grown in importance since the voters adopted them; and

WHEREAS, in 2016 voters of the Sound Transit service area in King, Pierce and Snohomish counties approved a \$53.8 billion system expansion, including 62 new miles of light rail with stations serving 37 additional areas for a regional system of 116 miles, creation of a bus rapid transit system on I-405/SR518 and SR522/NE145th, expanded capacity and service of the Sounder south rail line, improved access to stations for bicyclists, pedestrians, drivers, and pick-up and drop-off services, and expanded parking at some stations; and

WHEREAS, the need to decarbonize our transportation system in order to address climate change has only accelerated since the adoption of the voter-approved plans and Sound Transit's voter-approved projects continue to be the most climate-friendly transportation investments in the state; and

WHEREAS, mobility is a key to the continued economic growth of the region; and

WHEREAS, the pandemic has underscored that public transit is an absolute necessity for essential workers, who keep our economy and essential services operational; and

WHEREAS, the ST2 and ST3 Plan improvements are unaffordable due to growth in early cost estimate increases totaling \$12.9 billion that have resulted in an estimated net shortfall of \$6.5 billion, as of July 2021; and

WHEREAS, the ballot measure requires the Board to use legally available funds to implement projects, or portions thereof, that best achieve the plan objectives after consideration of the ST2 and ST3 Plans and financial policies when the Plan improvements, or some portion thereof are unaffordable; and

WHEREAS, the Board adopted Motion No. M2020-36 and Motion No. M2020-37 in June 2020 to establish criteria and pursue new revenue options; and

WHEREAS, the Board adopted in December 2020 a five-year delay to every project not under construction to fulfill the statutory responsibility for a financially constrained Transit Improvement Plan (TIP) to act as a placeholder until the realignment could be studied, reviewed, and completed; and

WHEREAS, ongoing monitoring and reporting on project costs and agency revenues is an essential element of delivering a successful program to the public; and

WHEREAS, since the first projections of revenue reductions due to the coronavirus pandemic, the Board has engaged in over a year of Committee and Board briefings and two realignment workshops; and

WHEREAS, the Board engaged in public and stakeholder engagement and received public input through a variety of means, including from organizations representing communities most affected by institutional and systemic racism; and

WHEREAS, the Board is committed to delivering all of the ST2 and ST3 mobility projects contained as close as possible to the schedule promised in the full voter-approved program in order to best achieve the Plan objectives, including ridership and passenger experience, as quickly as possible in a manner that fulfills the intent of the voter-approved measures; and

WHEREAS, the Board is undertaking program realignment to ensure the continued affordability of the program and provide direction on how to minimize the affordability gap to maintain the Board's commitment to the schedule promised in the ST3 ballot measure and how and when to implement realignment.

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

Section 1: The Board prioritizes delivering ST3 projects on the estimated timelines in the voter-approved plan, and will work to create the financial capacity to do so by pursuing expanded revenues, financial capacity and cost savings options. The schedule goals for each project are based upon timely delivery, without any delay due to funding.

Section 2: To ensure that funding remains available to complete all voter-approved projects, the Board also establishes a program schedule that is affordable utilizing current financial projections and cost estimates to serve as the general order in which projects will advance. The affordable schedule establishes tiers of projects to prioritize, fund and manage program work overtime based upon the Board's review of project evaluations using the criteria established in the Ballot Measure (Resolution No. R2016-17), Motion No. M2020-36, and the five core principles identified in both Motion No. M2020-36 and Motion No. M2020-37. The tiers and currently estimated completion date for each project are depicted in Exhibit A (Affordable Schedule).

Section 3: The criteria set forth in Motion No. M2020-36 and Motion No. M2020-37 expanding regional transit to the Central Puget Sound region are essential to address climate change, reduce greenhouse gas emissions, and build a sustainable future for the Puget Sound region.

Section 4: A new annual program review is hereby established for the Board to review shifts in projected financial capacity resulting from updated cost, revenue, and debt capacity projections and the readiness of projects to benefit from such shifts. An Initial Target Schedule for each project is established with Tier 1 and 2 projects programmed without funding delay and Tier 3 and 4 projects programmed per the delayed Affordable Schedule. At the annual program review, staff will present affordable budget estimates for each project in Tier 1 and Tier 2 if they are delivered on the Initial Target Schedule and the Affordable Schedule. The budget estimates will be the same for any projects where the Initial Target and Affordable Schedules are the same. The budget estimates will account for agency financial capacity, subarea affordability, and required system facilities. The difference between these budget estimates will be identified as each project's affordability gap. The Initial Target project schedules and funding gaps are presented in Exhibit B (Initial Target Schedule.) As the affordability gaps are eliminated for Tier 1 and Tier 2 projects, the gaps on Tier 3 projects will be assessed, and then the gaps on Tier 4 projects while ensuring adequate agency financial capacity and subarea affordability.

Section 5. In order to improve projected financial capacity, reduce project affordability gaps and deliver projects in a timely manner, the chief executive officer is directed to:

- Pursue expanded financial capacity per Motion No. M2020-37 to enable timely delivery of voter-approved plans including, but not limited to, state funds, additional federal funds, reduced borrowing costs through federal and other sources, increased debt capacity, and other new sources such as tax increment financing partnerships; and
- Develop and implement a cost savings work plan, to be overseen by the System Expansion Committee with regular quarterly reports, for projects and programs currently in development which will identify a menu of options to address project level affordability gaps; and
- Identify opportunities to reduce cost and planning delays, including creating an ad-hoc technical advisory group of several outside experts to meet for several months with the mission of looking for all possible ways to accelerate system expansion, highlight schedule risk including current project delivery timelines, and identify opportunities to mitigate risk, streamline third party negotiations, reduce permitting delays and expedite the delivery of said projects; and
- Engage project stakeholders in intensive discussions to address the trade-offs between project scope, schedule, and new financial resources to inform Board decision-making on project schedules; and
- Solicit the engagement of all Board members, as appropriate, to advance the processes cited in this section.
- As part of the annual program review, identify opportunities and make recommendations to deliver flexible, innovative and affordable methods to get people to transit stations, if structured parking facilities have to be delayed.

Section 6: Schedule assessments based on available agency projected financial capacity and subarea affordability as well as project readiness will occur during project development to determine if projects can continue to progress on the Initial Target Schedule or if the Affordable Schedule is needed. If the affordability gap is partially reduced, staff will assess whether a completion date between the Initial Target and Affordable Schedules is affordable and achievable.

These schedule assessments will occur before the following milestones:

- the start of preliminary engineering (which for large projects occurs after the Draft Environmental Impact Statement and preferred alternative update); and
- the project to be built decision (which occurs after environmental review is complete); and
- project baselining (which occurs before construction)

The funding likely to be available will inform preliminary engineering design, including contract packaging and phasing options. At the project to be built milestone, a full funding plan must be in place to determine a timeline for final design, rights-of-way (ROW) acquisition, and planned construction that will not impact the ability to deliver other system expansion projects on the Affordable Schedule. At project baselining, all funding must be secured before a project enters full construction. The Board will not authorize final design, ROW, or construction expenditures on any individual project which would cause delay to the Affordable Schedule for other projects unless the project's funding gap has been offset.

Section 7: The chief executive officer is further directed to prepare a 2021 TIP and financial plan. The new TIP will replace the five-year delay assumed in the 2020 TIP. Project development and environmental reviews will be adequately funded so as to ensure the opportunity to deliver projects based on the Initial Target Schedule without impacting the Affordable Schedule. The Schedule assessments described in Section 6 will determine the schedules for final design, ROW acquisition, and construction.

Section 8: To support continued Board oversight and accountability, the CEO is directed to:

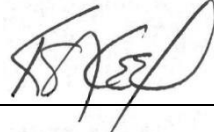
- Report biannually to the System Expansion Committee the status of current and anticipated cost drivers; and
- Expand the scope of the independent cost consultant contract to include development of recommended project management practices to enhance scope, change, and cost control and to review the potential cost saving options; and
- Hire an independent consultant to report directly to and assist the Board in reviewing the cost savings work plan and the structure of the new annual program review; and
- Separate from the regular reporting cycle, notify the Board in a timely manner of any information that may materially impact the cost or schedule of projects so that the System Expansion Committee can review that information as part of the committee's ongoing oversight of projects; and
- In concert with the chief financial officer, report to the Board before each baselining action on the affordability of the project to be baselined and whether such baselining action influences the affordability and delivery timeline for all other projects in the capital program; and
- Routinely inform the Board of Directors on the agency's adherence to schedule milestones during the planning and design process for all projects, and identify where any delays in pre-construction activities are likely to trigger a delay in the final delivery date of any project and establish new milestones to monitor during the construction and testing phases for the same monitoring and report any construction and testing delays that will trigger a delay in final project delivery.

Section 9. The Board determines that the projects and priorities identified in Exhibit A and B best achieve the ST2 and ST3 Plan objectives after consideration of the ST2 and ST3 Plan benefits included in Exhibit D, schedule, and subarea resources, and after consideration of financial policies included in Exhibit E.

Section 10. Subarea equity sources and uses of funds included in Exhibit C are hereby updated and available funds are hereby allocated to build those projects identified in Exhibit A and B.

Section 11. The restrictions on project advancement and agreements outlined in a presentation to the Board at the August 27, 2020 meeting and the staff document "The Path Forward", and implemented by Motion No. M2020-55 and Motion No. M2021-20 are hereby revoked and superseded by this action. The CEO is directed to advance all projects in accordance with the schedule and conditions established by this resolution.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a special meeting thereof held on August 5, 2021.



Kent Keel
Board Chair

Attest:



Kathryn Flores
Board Administrator



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Exhibit A

Affordable Schedule

To ensure that funding remains available to complete all voter approved projects, the Board also establishes a program schedule that is affordable utilizing current financial projections and cost estimates. The project tiers and currently estimated affordable completion date for each project are depicted in Table 1.

Table 1: Currently estimated completion dates for projects by tier

	Tier 1 ≤ 2 years delay	Tier 2 ≤ 6 years delay	Tier 3 ≤ 9 years delay	Tier 4 10+ years delay
System	Bus Base North (2025) OMF South (2029) OMF North (2034)	2 nd Downtown Seattle Transit Tunnel (2037)	Souder Maintenance Base (2034)	ST2 Bus Base (2045) Bus-on-Shoulder (with South King portion eliminated) (2045)
North	Lynnwood – Southwest Everett Link NP (2037)	Southwest Everett - Everett NP (2041)		Edmonds & Mukilteo (2034) Everett Link Parking (2046)
East	I-405 Stride South NP (2026) SR-522/145 th Stride NP (2026) NE 85th Street Interchange and Inline BRT Station portion of I-405 Stride North (2026)	I-405 Stride North NP (2027) S Kirkland-Issaquah (2044)		I-405 Stride Parking (2034) Kingsgate Parking (2035) SR-522/145 th Stride Parking (2034) Lake Forest Park Parking (2044) N Sammamish P&R (2045)
Central	Alaska Jct-SODO Link (2032) NE 130 th Infill (2025) Graham St. Infill (2031)	SODO-Smith Cove (2037) Smith Cove-Ballard (2039)		RapidRide C/D (2045)
South	Kent, Auburn & Sumner (2025) Tacoma Dome Link NP* (2032) Lakewood, S Tacoma (2032)		Souder platforms & access (2036) South King access improvements (2041) Souder added trips (2046)	SR-162 Bus Investments (2045)

	TCC Tacoma Link (2041) Boeing Access Rd. Infill (2031)		DuPont Sounder (2045) Tacoma Dome Link Parking (2038)	
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*NP = no parking *includes Tacoma Dome Parking & Access project*



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Exhibit B

Initial Target Schedule

The Initial Target Schedule programs Tier 1 and Tier 2 projects without funding delay and Tier 3 and 4 Projects per the delayed Affordable Schedule in Exhibit A. The project level funding gaps are the currently estimated offsets in cost savings and/or new financial resources needed to achieve these schedules. Project level funding gap amounts are rounded.

Table 1: Tier 1 & 2 Projects without funding delay and Tier 3 & 4 Projects with funding delay per the Affordable Schedule from Exhibit A.

	Projects in Tier 1 without funding delay <i>(current funding gap to achieve delivery year, \$2019M)</i>	Projects in Tier 2 without funding delay <i>(current funding gap to achieve delivery year, \$2019M)</i>	Project in Tier 3 with funding delay <i>(Delayed delivery year with no funding gap)</i>	Project in Tier 4 with funding delay <i>(Delayed delivery year with no funding gap)</i>
System	Bus Base North (2025) / (\$0) OMF South (2029) / (\$0) OMF North (2034) / (\$0)	2 nd Downtown Seattle Transit Tunnel (2037) (\$0)	Souder Maintenance Base (2034)	ST2 Bus Base (2045) Bus-on-Shoulder (with South King portion eliminated) (2045)
North	Lynnwood – SW Everett Link NP (2037) / (\$0)	SW Everett - Everett NP (2037) / (\$600)		Edmonds & Mukilteo (2034) Everett Link Parking (2046)
East	I-405 Stride South NP (2026) / (\$0) SR-522/145 th Stride NP (2026) / (\$0) NE 85th Street Interchange and Inline BRT Station portion of I-405 Stride North (2026) / (\$0)	I-405 Stride North NP (2027) / (\$0) S Kirkland-Issaquah (2041) / (\$90)		I-405 Stride N Parking (2034) Kingsgate Parking (2035) I-405 Stride S Parking (2034) SR-522/145 th Stride Parking (2034) Lake Forest Park Parking (2044) N Sammamish P&R (2045)

	Projects in Tier 1 without funding delay <i>(current funding gap to achieve delivery year, \$2019M)</i>	Projects in Tier 2 without funding delay <i>(current funding gap to achieve delivery year, \$2019M)</i>	Project in Tier 3 with funding delay <i>(Delayed delivery year with no funding gap)</i>	Project in Tier 4 with funding delay <i>(Delayed delivery year with no funding gap)</i>
Central	Alaska Jct-SODO Link (2032) / (\$0) NE 130 th Infill (2025) / (\$0) Graham St. Infill (2031) / (\$0)	SODO-Smith Cove (2037) / (\$0) Smith Cove-Ballard (2037) / (\$1,800)		RapidRide C/D (2045)
South	Kent, Auburn & Sumner (2025) / (\$0) Tacoma Dome Link NP* (2032) / (\$0) Lakewood, S Tacoma (2030) / (\$0) TCC Tacoma Link (2039) / (\$20) Boeing Access Rd. Infill (2031) / (\$0)		Sounder platforms & access (2036) South King access improvements (2041) Sounder added trips (2046) DuPont Sounder (2045) Tacoma Dome Link Parking (2038)	SR-162 Bus Investments (2045)

NP = no parking *includes Tacoma Dome Parking & Access project

Notes: All projects will be reviewed for cost savings, regardless of funding gap. Agency capacity, subarea affordability, and system requirements need to be assessed in conjunction with the offsets for individual projects. This scenario assumes all projects are simultaneously offset.



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Exhibit C

Sources and Uses



Financial Plan - Sources & Uses Summary
 2021 Final Realigned Plan, August 2021
 2017 through 2046; YOY Dollars in Millions

	Snohomish	North King	South King	East King	Pierce	System-wide	Total
Sources of Funds							
Tax Revenues							
Sales and Use	8,870	21,282	9,731	17,033	12,344	-	69,261
MVET	1,668	2,240	1,458	2,871	2,491	-	10,728
Property Tax	658	2,191	670	1,835	811	-	6,165
Rental Car Tax	3	7	50	5	4	-	69
Total Tax Revenues	11,199	25,721	11,909	21,744	15,650	-	86,223
Other Revenue							
Grant Revenue	2,190	3,194	2,323	2,030	1,555	980	12,273
Fare Revenue	619	5,066	1,149	1,351	788	-	8,973
Other Revenue	17	134	40	101	28	67	387
Interest Earnings	-	-	-	-	-	836	836
Total Other Revenue	2,826	8,395	3,512	3,482	2,372	1,883	22,469
Bond Proceeds (with DSRF)	5,714	11,227	2,275	181	-	-	19,397
TIFIA Proceeds	471	1,088	926	836	-	-	3,320
Changes in Cash (addtl funding to offset deficits)	1,272	284	248	(120)	(1,597)	0	87
Total Sources	21,481	46,715	18,870	26,123	16,424	1,883	131,496
Uses of Funds							
Capital Expenditures (Including Service Delivery)							
Light Rail Transit	11,307	18,655	5,698	12,340	3,323	6,278	57,601
Tacoma Link	-	-	-	-	1,689	-	1,689
Commuter Rail	155	-	1,460	-	2,873	-	4,488
Regional Express Bus	187	66	54	336	361	-	1,004
Bus Rapid Transit	87	404	330	1,450	131	-	2,402
System-wide	38	142	40	43	32	1,165	1,461
Service Delivery	20	17	33	38	37	1	146
Total Capital Expenditures	11,794	19,284	7,616	14,207	8,445	7,445	68,791
O&M Expenditures							
Light Rail Transit	1,682	9,656	3,003	2,610	606	-	17,557
Tacoma Link	-	-	-	-	925	-	925
Commuter Rail	438	-	1,332	-	1,548	-	3,318
Regional Express Bus	729	-	513	2,262	1,488	-	4,993
Bus Rapid Transit	196	363	257	1,018	-	-	1,833
System-wide*	340	506	221	414	244	2,234	3,959
Total O&M Expenditures	3,386	10,526	5,327	6,304	4,811	2,234	32,587
SOGR	514	2,599	1,579	1,767	1,201	1,289	8,950
System-Wide Activities	1,174	2,722	1,262	2,293	1,634	(9,085)	-
Reserve Contributions (O&M, R&R, DSRF)	447	905	216	75	50	0	1,694
Debt Service (Excludes TIFIA)	3,702	9,521.61	2,064	729	283	-	16,299
TIFIA Debt Service	466	1,157	806	747	-	-	3,176
Total Uses	21,481	46,715	18,870	26,123	16,424	1,883	131,496

*Includes Other O&M and Emergency Reserve



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Exhibit D

ST2 & ST3 Project Benefits

Exhibit D1:	ST3 Plan Appendix C: Benefits, Costs, Revenues, Capacity, Reliability and Performance Characteristics
Exhibit D2:	2021 Project Evaluation using Board-adopted criteria

SOUND TRANSIT 3

June 2016

APPENDIX C

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

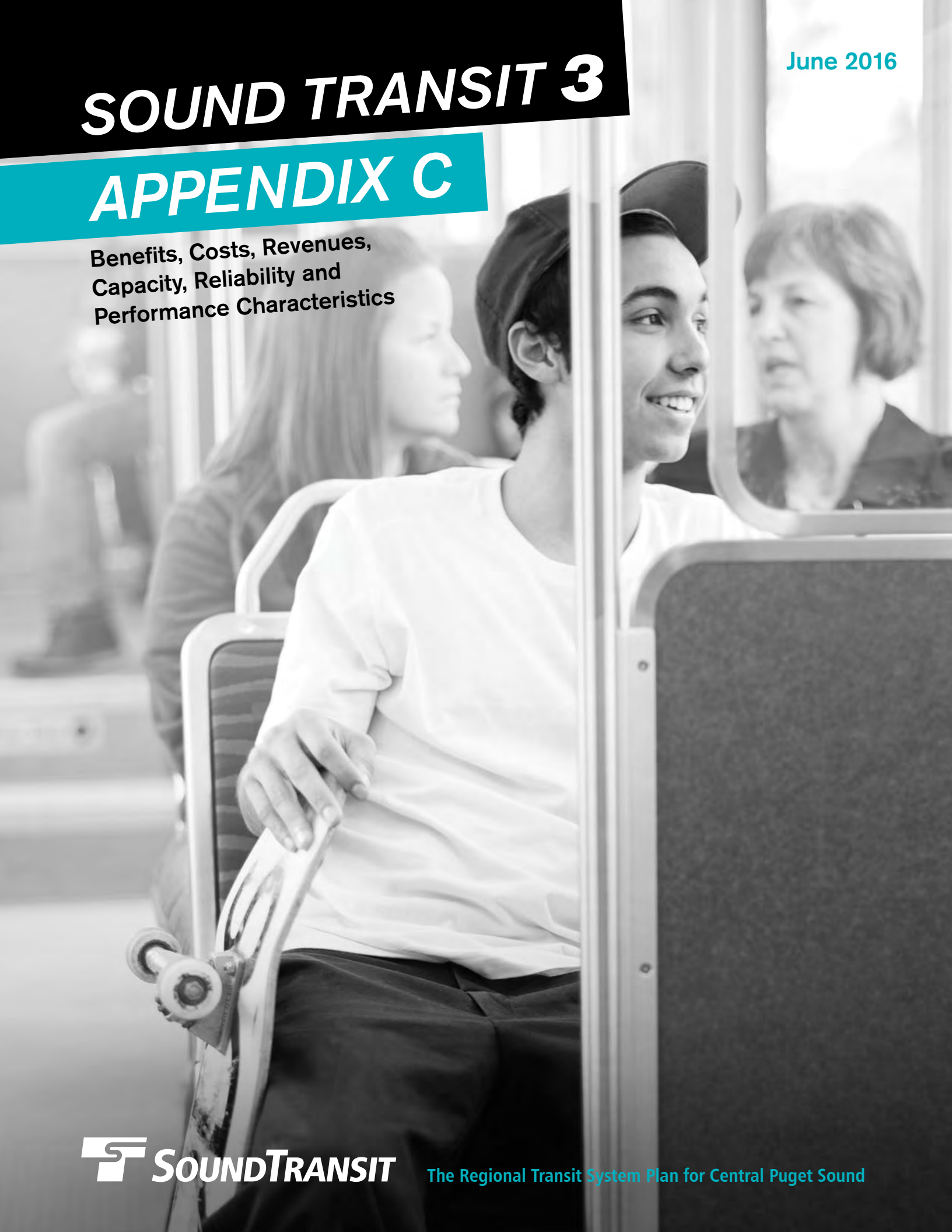


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More information at:



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





INTRODUCTION

This report details the benefits the central Puget Sound region can expect from the fully implemented Sound Transit 3 (ST3) 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 the 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. With the ST3 Plan, Sound Transit weekday ridership will roughly quadruple from what it is today, increasing from approximately 145,000 boardings each weekday to between 561,000 and 695,000 daily boardings. With ST3, weekday boardings will nearly double from the 350,000 weekday boardings that are forecasted to follow the completion of the Sound Transit 2 (ST2) 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 2041. 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.

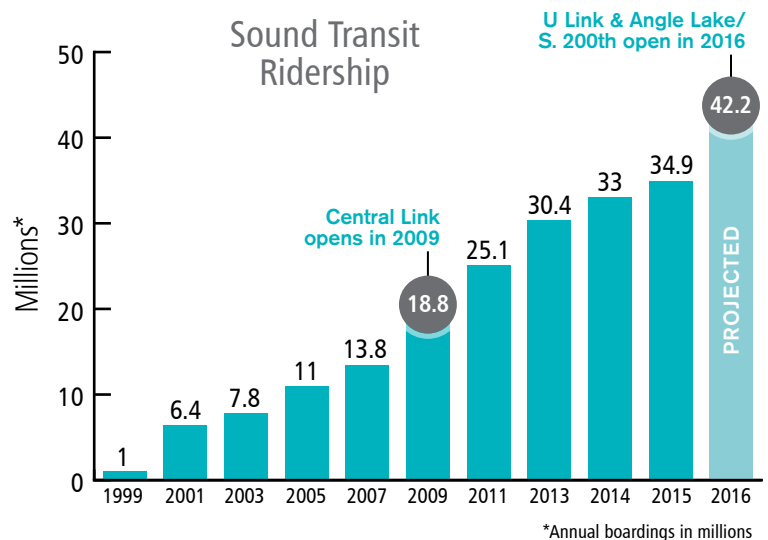
Both direct and quantifiable benefits, such as those from increasing the numbers of riders taking transit and reductions to travel times and costs, and broader qualitative benefits such as quality of life, are important to understanding the impact of ST3. All benefits will continue to grow over time, 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. When the region’s voters approved ST2 in 2008, that number had already grown to 98 million annual trips by 2006 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 existing daily transit trips were all made by single-occupancy cars, the line of cars would extend about 1,100 miles. With ST3 the 2040 daily ridership would be the equivalent of a line of single-occupancy cars over 2,000 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 High Occupancy Vehicle (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 central Puget Sound’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 Washington State Department of Transportation’s (WSDOT) 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 times in the region during the afternoon commute.

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	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%

NOTE: 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, WSDOT reported major deterioration of HOV lane travel times:

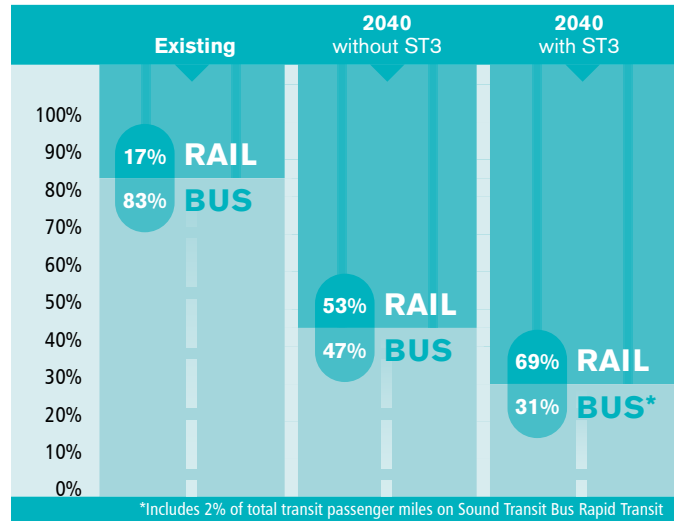
- I-5 Everett to Seattle: weekday morning average HOV travel time increased 22 percent to 45 minutes. Reliable* HOV travel time increased 17 percent to 74 minutes.
- I-5 Federal Way to Seattle: weekday morning average HOV lane travel time increased 18 percent to 39 minutes. Reliable* HOV travel time 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 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 bus priority and managed 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 percent 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 rail transit.

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

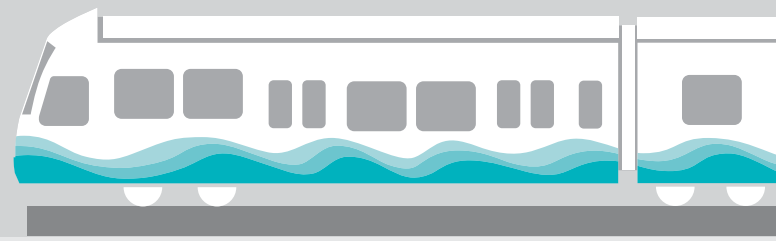


COMPARING THE CAPACITY OF RAIL SYSTEMS AND HIGHWAYS

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 rely extensively on rail transit. A two-direction light rail system occupies roughly the same amount of space as two highway lanes.



or



HIGHLIGHT: According to WSDOT, 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-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;

- On I-405 at SR 169 in Renton, congestion reduces northbound capacity by 20 to 60 percent for about six 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	5,920	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 shifting 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 farther 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 transit trips will be taken daily in the region, approximately twice the number of transit trips taken today. **Table 4** compares regional transit ridership today with ridership projections for 2040, with and without ST3 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.

TABLE 4: Regional Transit Ridership and Transfer Rate (Sound Transit and 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	1,100,00–1,332,000
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

Transit Ridership on Sound Transit by Service Type

Table 5 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)

MODE	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

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 an additional 16 to 22 million hours a year beyond travel time savings already achieved by Sound Move and ST2.

The following tables illustrate reductions in Vehicle Miles Traveled (VMT) as well as the travel time savings for the region’s transit riders, achieved by the investments included in the ST3 plan.

TABLE 6: Projected regional VMT reduction due to ST3

	Auto Vehicle Miles Traveled Reduction in 2040 due to 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

NOTE: 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 Final Interim Policy Guidance - FTA Capital Investment Program (August 2015).

This analysis is based on two scenarios 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 7: Projected travel time savings for transit riders

	Transit Riders Time Savings in 2040 due to ST3
Daily Hours Saved	51,000 – 67,000
Total Annual Hours Saved	16 – 22 million

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



HIGHLIGHT: By 2040, the annual travel time savings provided by ST3 for all transit riders will be between approximately 16 and 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 70 minutes. The future transit travel time would be expected to be 58 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 22 minutes (40 percent) over the same trip in 2040 without ST3.

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/ SR 518 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 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 from these improvements are not reflected in Sound Transit’s modeling assumptions, so any increased ridership resulting from the improvements has not been incorporated in the estimates.

The following table 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 due to ST3 ¹	Time Savings due to 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 Sea-Tac Airport	44 min	50 min	33 min	17 min

¹ Includes ST2 investments

*Requires 1 bus-to-bus, rail-to-bus or bus-to-rail transfer (transfer times not included, assume about 5 additional minutes)

NOTE: 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. 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.

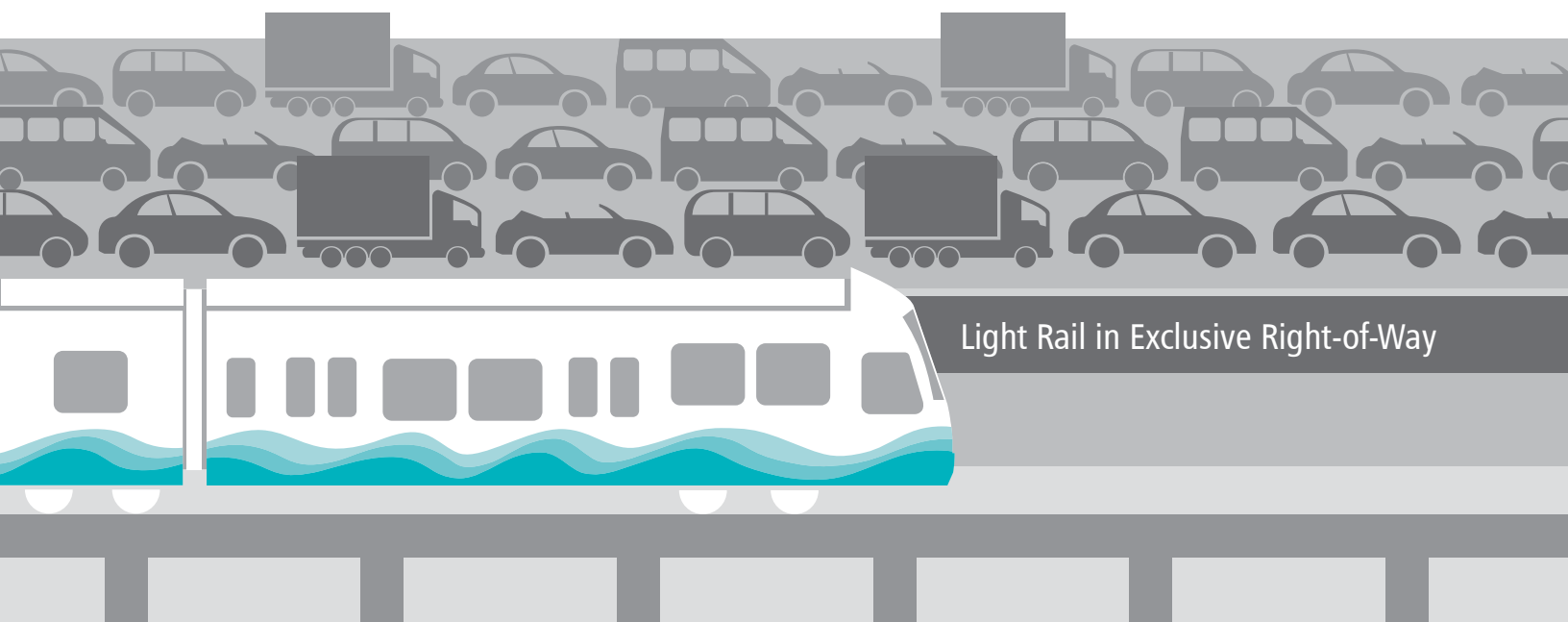
The existing transit share data is from 2007-2014 Puget Sound Commute Trip Reduction surveys and the 2006-2010 American Community Surveys. Percentages include ridership on fixed-route, fixed-schedule transit service. Excluded are paratransit, dial-a-ride, carpools and vanpools. The largest transit shares 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%

NOTE: 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).

ST3 makes improvements to provide separation from general traffic where possible.





Forecast Methods

The ST3 Plan 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 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 its 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 its corporate headquarters to the Spring District in Bellevue is based in large measure on East Link service coming to that area.

Sound Transit’s planning assumptions align closely with Puget Sound Regional Council (PSRC) plans. It is important to mention that the following 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. To assure no future reduction in bus travel times, future policymakers would need to impose steps, including 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 ST3) includes the effects of population and employment growth, and the transportation and transit projects included in the PSRC’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 \$9,073 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 PSRC, 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

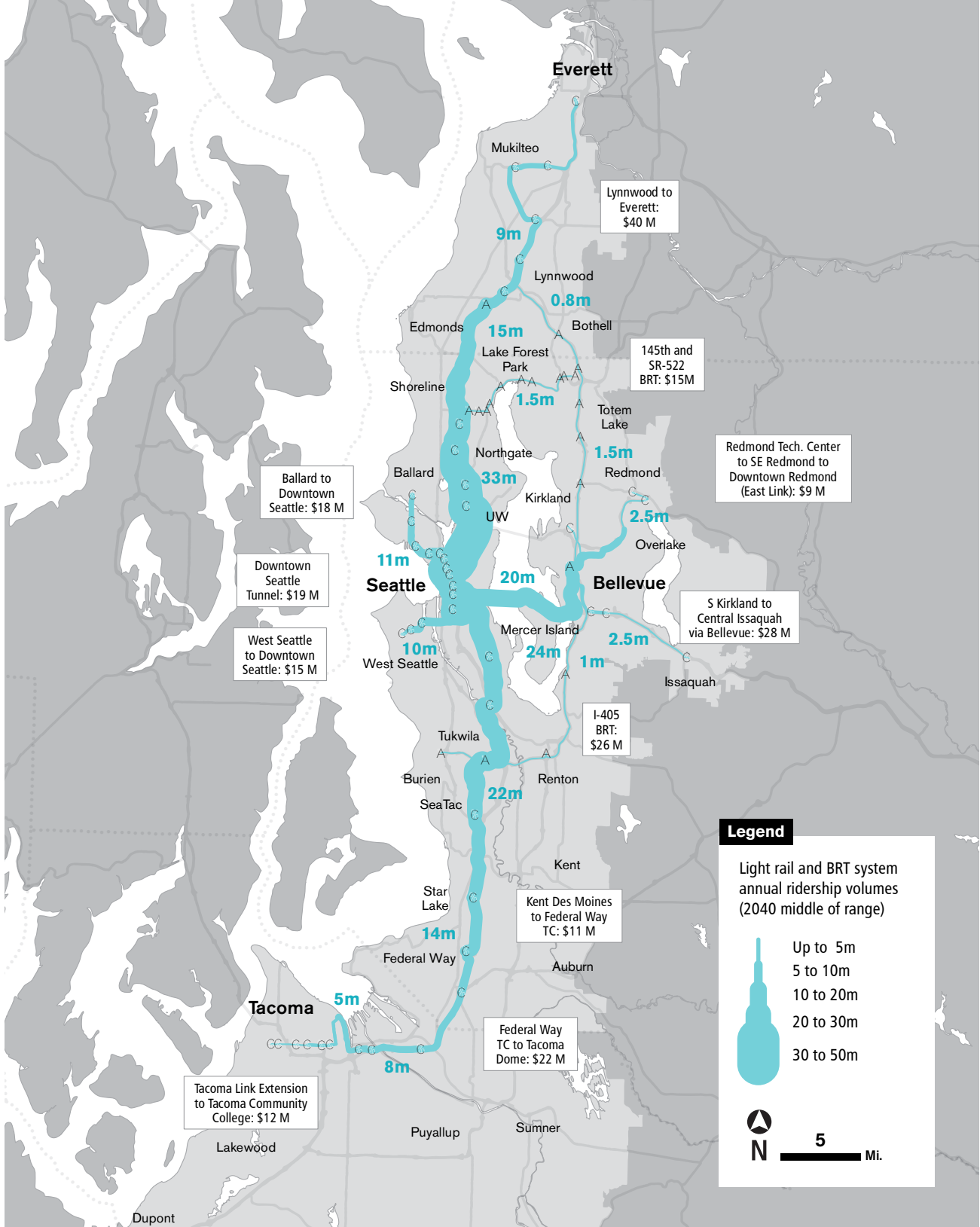
Table 10 shows the forecast ratio of operating revenue to operating expense by service in 2041. This ratio is the operating revenue (primarily fares) divided by the costs of operating Sound Transit’s services.

TABLE 10: Sound Transit’s total forecasted operating revenue / operating expense ratio in 2041

MODE	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%

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

Light Rail and BRT Annual Ridership and Operations Costs (2014\$)



Cost Effectiveness

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: Projected cost per ST3 system rider and new rider (2014\$)

	2040 (high ridership)	2040 (low ridership)
Cost per ST3 System Rider		
ST3 transit operations	\$3.50	\$4.34
ST3 capital	\$10.02	\$12.42
Cost per New Transit Rider		
ST3 transit operations	\$13.56	\$17.13
ST3 capital	\$38.83	\$49.05
Total Annual Cost and Ridership		
ST3 transit operations cost (millions)	\$326	\$326
ST3 capital cost (millions)*	\$932	\$932
ST3 riders (millions)	93	75
New transit riders (millions)	24	19

*Annualized ST3 capital cost is the total capital cost, \$21.5 billion (2014\$), discounted at 3 percent over 40 years.

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.

The combined regional rail and BRT access map on the following page (C-13) 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 3/4-mile walk access and 2 1/2-mile park-and-

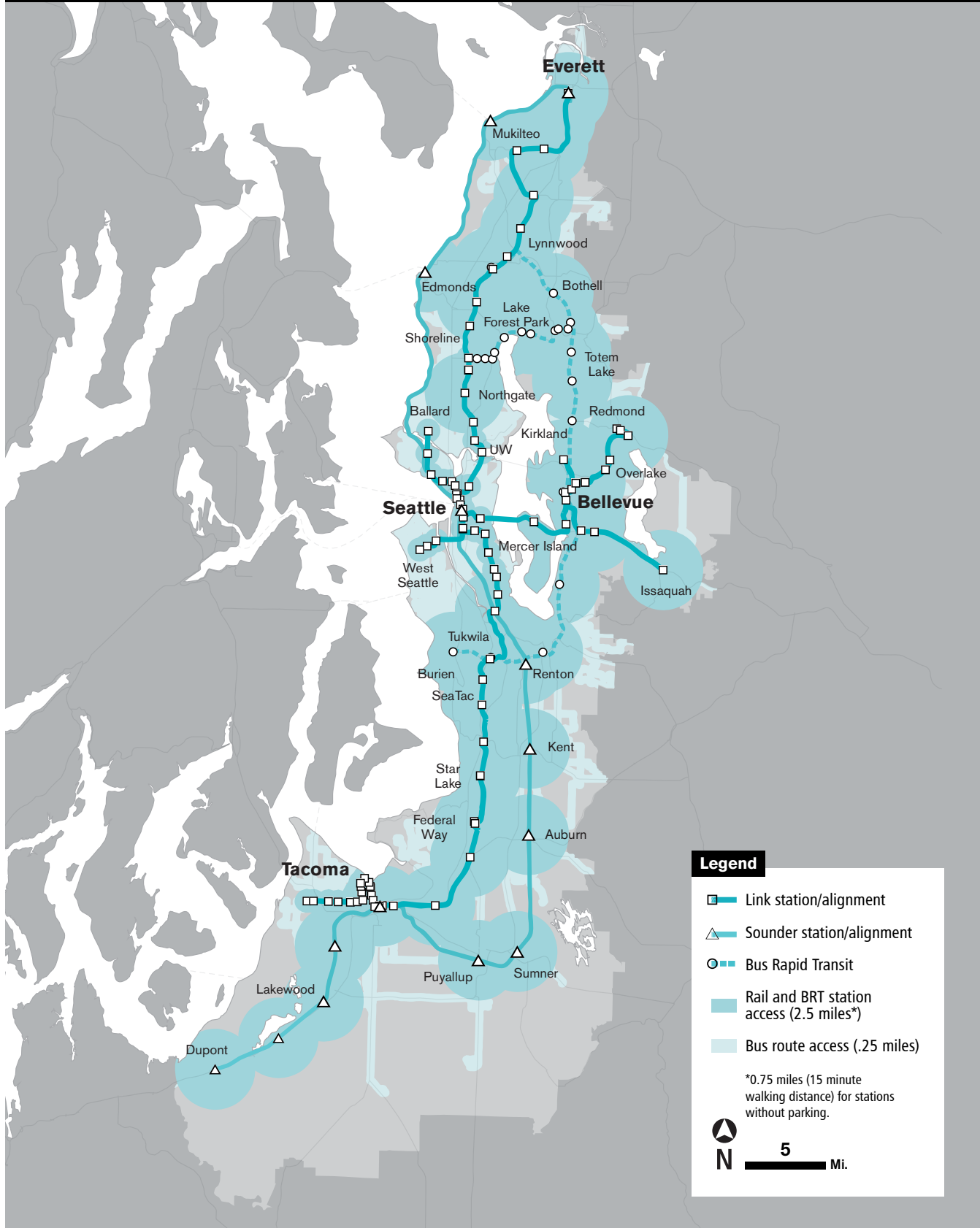
ride access to the rail stations, and the reach of existing local bus services (including average 1/4-mile walk distance to the bus) that would allow access to the rail system with one transfer.

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

With ST3 in 2040, approximately 84 percent of district residents and 93 percent of district employees would have convenient access to high-reliability transit.



Combined Regional Rail and BRT Access



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, the 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 expanded 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. Sound Transit 3 also includes funding for additional parking and accessibility elements for the Sounder north line.

Link Light Rail

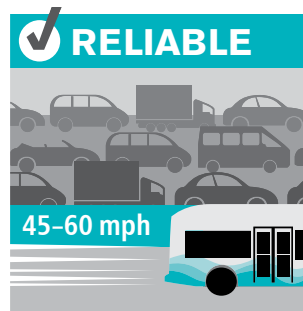
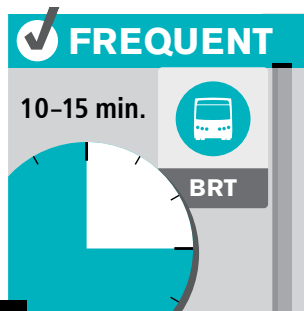
Tacoma Link currently operates electrically-powered single-car trains between the Tacoma Dome Station and downtown Tacoma, and a funded expansion will extend service along Martin Luther King, Jr. Boulevard.

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 farther south in SeaTac later in 2016, and ST2 investments will build about 33 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 80 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.

Link Light Rail (cont'd)

As part of ST3, Link will extend north to Everett via the Southwest Everett Industrial Center, south to Tacoma, and east to downtown Redmond. Additional extensions will serve Ballard and West Seattle, connecting 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 vehicle doors that combine to provide higher speeds, reliability and capacity than traditional bus service. Sound Transit 3 will invest in BRT in two corridors: on I-405 and SR 518, 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.

Sound Transit 3 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, business access and 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.

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Sound Transit

Peter Rogoff
Chief Executive Officer

SOUNDTRANSIT3.ORG



Resolution No. R2021-05

Exhibit D2

2021 Project Evaluation using Board-adopted criteria

1 PROJECT EVALUATION

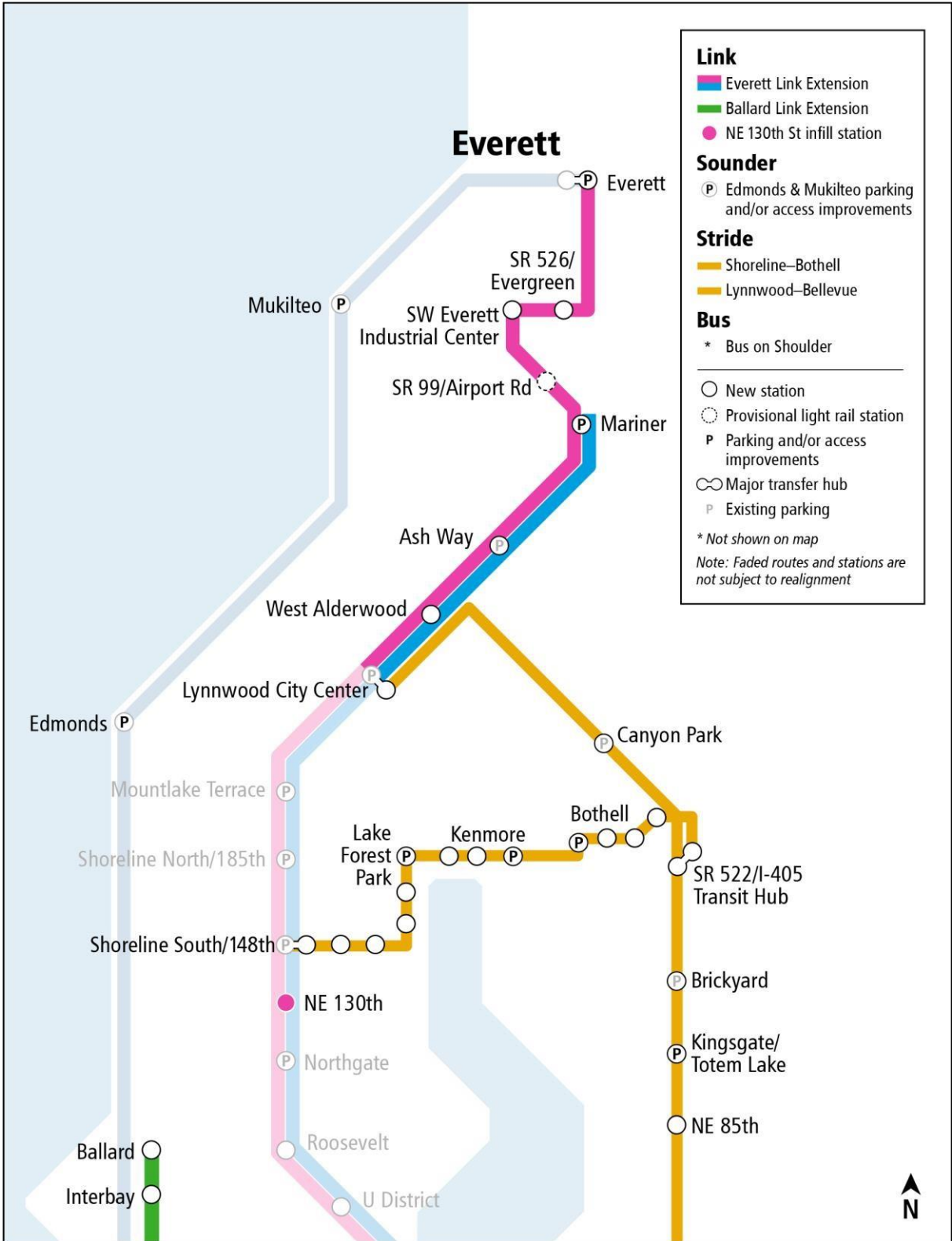
1.1 Adopted criteria

This section describes the performance of each system expansion project subject to realignment against the evaluation criteria adopted by the Board in Motion M2020-36. The table below defines the methods and indicators for each criterion, and the tables that follow present measures for each project. An appendix provides supplemental information for a subset of the criteria.

Criterion	Methodology	Performance Indicator
<p>Ridership Potential <i>How many daily riders is the project projected to serve?</i></p>	<p>The measure uses outputs from ridership forecasts based on the Sound Transit ridership model to assess the number of projected daily riders.</p>	More than 45,000 daily riders
		Between 5,000 and 45,000 daily riders
		Less than 5,000 daily riders
<p>Socio-Economic Equity <i>How well does the project expand mobility for transitdependent, low-income, and/or diverse populations?</i></p>	<p>The measure identifies how well each project serves key populations based on a demographic analysis within a one-mile radius of station areas. Key populations include: 1) Black and Indigenous populations; 2) non-Black, non-Indigenous populations of color; 3) limited English proficiency populations; 4) low income populations; 5) very low income seniors; 6) populations with a disability.</p>	High
		Medium-high
		Medium-low
		Low

Criterion	Methodology	Performance Indicator
Connecting Centers <i>Does the project connect designated regional centers?</i>	The measure identifies the number of Puget Sound Regional Council designated regional growth and manufacturing/industrial centers served by the project.	More than One
		One
		None
Project Tenure <i>How long have voters been waiting for the project?</i>	The measure identifies which voter-approved capital program the project was originally a part of.	Sound Move
		ST2
		ST3
Outside Funding <i>Are other funding sources available or secured?</i>	The measure identifies if Sound Transit plans to pursue outside funding for the project and if the project is expected to be competitive for a significant portion of outside funding.	Yes, and competitive for >25% of project cost
		Yes, and competitive for <25% of project cost
		No, and not planned to pursue
Completing the HCT Spine <i>Does the project advance development of the regional HCT spine?</i>	The measure identifies whether the project contributes to the completion of the regional HCT spine.	Yes
		No
Advancing Logically Beyond the Spine <i>Is the project a "logical next step" beyond the spine and within financial capacity?</i>	The measure identifies whether the project advances logically beyond the spine. Because all projects were included in a voter-approved system plan, all projects that don't complete the spine are assumed to advance logically beyond the spine.	Yes
		N/A
Phasing Compatibility <i>Can the project be constructed and opened for service in increments?</i>	The measure identifies whether a project can be constructed and opened for service in increments.	Yes
		No

1.2 North Corridor Projects subject to realignment



Evaluation Criteria	Everett Link Extension	NE 145th Street and SR 522 BRT	Edmonds & Mukilteo Sounder Stations Parking & Access Improvements	NE 130th Street Infill Station
Ridership Potential	37,000-45,000 daily riders	8,300-9,900 daily riders	<500 daily riders	3,300-3,700 daily riders
Socio-Economic Equity	Medium-high	Medium-low	Low	Medium-low
Connecting Centers	3	0	0	0
Project Tenure	ST3	ST3	ST3	ST3
Outside Funding	Yes, competitive for >25% of project cost	Yes, competitive for <25% of project cost	No, not planning to pursue	Yes, competitive for <25% of project cost
Completing the HCT Spine	Yes	No	No	No
Advancing Logically Beyond the Spine	N/A	Yes	Yes	Yes
Phasing Compatibility	Yes	Yes	No	Yes

1.3 Central Corridor Projects subject to realignment



Evaluation Criteria	West Seattle Link Extension	Downtown Seattle Light Rail Tunnel	Ballard Link Extension
Ridership Potential	25,000-27,000 daily riders	113,000-150,000 daily riders	65,000-81,000 daily riders
Socio-Economic Equity	Medium-low	Medium-low	Low
Connecting Centers	1	2	3
Project Tenure	ST3	ST3	ST3
Outside Funding	Yes, competitive for >25% of project cost	Yes, competitive for >25% of project cost	Yes, competitive for >25% of project cost
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	Yes	Yes	Yes
Phasing Compatibility	Yes	No	Yes

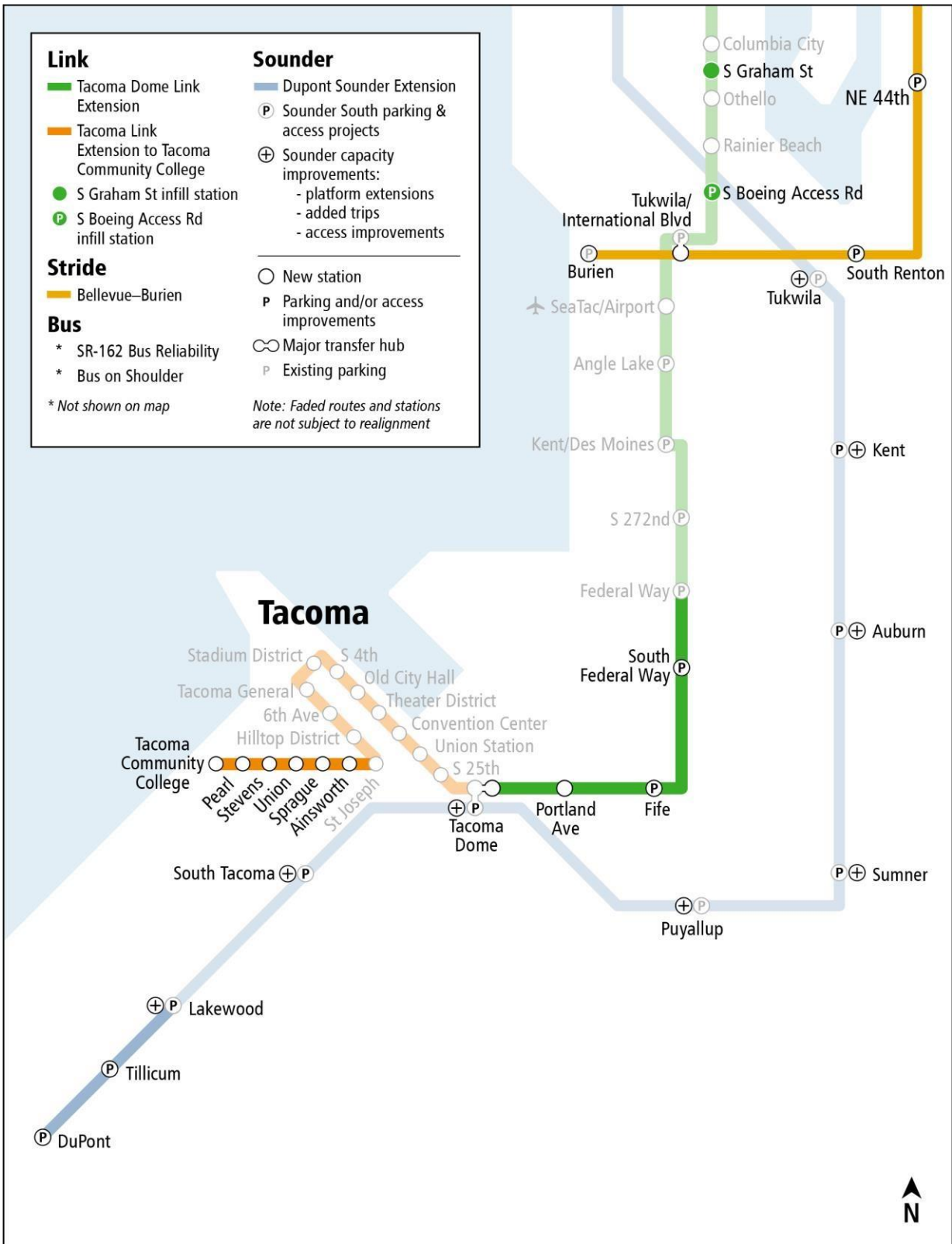
Evaluation Criteria	RapidRide C&D Capital Improvements	Graham Street Infill Station	Boeing Access Road Infill Station
Ridership Potential	N/A	1,500-2,500 daily riders	1,500-2,000 daily riders
Socio-Economic Equity	Medium-low	High	High
Connecting Centers	4	0	1
Project Tenure	ST3	ST3	Sound Move
Outside Funding	No, not planning to pursue	Yes, competitive for <25% of project cost	Yes, competitive for <25% of project cost
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	Yes	Yes	Yes
Phasing Compatibility	Yes	No	No

1.4 East Corridor Projects subject to realignment



Evaluation Criteria	South Kirkland – Issaquah Extension	North Sammamish Park and Ride	I-405 BRT: North	I-405 BRT: South
Ridership Potential	12,000-15,000 daily riders	<500 daily riders	10,800-15,000 daily riders	8,600-11,400 daily riders
Socio-Economic Equity	Low	Low	Low	Medium-high
Connecting Centers	2	0	4	3
Project Tenure	ST3	ST3	ST3	ST3
Outside Funding	Yes, competitive for >25% of project cost	No, not planning to pursue	Yes, competitive for <25% of project cost	Yes, competitive for <25% of project cost
Completing the HCT Spine	No	No	No	No
Advancing Logically Beyond the Spine	Yes	Yes	Yes	Yes
Phasing Compatibility	Yes	No	Yes	Yes

1.5 South Corridor Projects subject to realignment



Evaluation Criteria	Kent Station Parking & Access Improvements	Auburn Station Parking & Access Improvements	Sumner Station Parking & Access Improvements
Ridership Potential	<1,000 daily riders	<1,000 daily riders	<1,000 daily riders
Socio-Economic Equity	High	Medium-high	Low
Connecting Centers	1	1	0
Project Tenure	ST2	ST2	ST2
Outside Funding	No, not planning to pursue	Yes, competitive for <25% of project cost	No, not planning to pursue
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	Yes	Yes	Yes
Phasing Compatibility	No	No	No

Evaluation Criteria	Tacoma Dome Station Parking & Access Improvements	South Tacoma Station Parking & Access Improvements	Lakewood Station Parking & Access Improvements
Ridership Potential	<1,000 daily riders	<1,000 daily riders	<1,000 daily riders
Socio-Economic Equity	High	Medium-high	High
Connecting Centers	1	0	1
Project Tenure	ST2	ST2	ST2
Outside Funding	No, not planning to pursue	Yes, competitive for <25% of project cost	Yes, competitive for <25% of project cost
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	Yes	Yes	Yes
Phasing Compatibility	Yes	Yes	Yes

Evaluation Criteria	Sounder South Platform Extensions	Sounder South Expanded Service	Sounder South Access Improvement Program	DuPont Sounder South Extension
Ridership Potential	22,900 - 31,100 daily riders			1,000-1,500 daily riders
Socio-Economic Equity	High	High	N/A	Medium-low
Connecting Centers	6	6	N/A	1
Project Tenure	ST3			ST3
Outside Funding	Yes, competitive for >25% of project cost	No, and not planned to pursue	Yes, competitive for <25% of project cost	Yes, competitive for >25% of project cost
Completing the HCT Spine	No			No
Advancing Logically Beyond the Spine	Yes			Yes
Phasing Compatibility	Yes			Yes

Evaluation Criteria	Tacoma Dome Link Extension	Tacoma Link Extension to Tacoma Community College	SR-162 Bus Speed & Reliability Capital Improvements
Ridership Potential	24,300-36,000 daily riders	13,000-18,000 daily riders	<1,000 daily riders
Socio-Economic Equity	Medium-high	Medium-high	Low
Connecting Centers	3	1	0
Project Tenure	ST3	ST3	ST3
Outside Funding	Yes, competitive for >25% of project cost	Yes, competitive for >25% of project cost	No, not planning to pursue

Completing the HCT Spine	Yes	No	No
Advancing Logically Beyond the Spine	N/A	Yes	Yes
Phasing Compatibility	Yes	Yes	No

1.6 System-wide projects subject to realignment

Evaluation Criteria	Bus on Shoulder Program	System Access Program	Innovation & Technology Program
Ridership Potential	N/A	N/A	N/A
Socio-Economic Equity	N/A	N/A	N/A
Connecting Centers	N/A	N/A	N/A
Project Tenure	ST3	ST2	ST3
Outside Funding	No, not planning to pursue	Yes, competitive for <25% of project cost	No, not planning to pursue
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	Yes	N/A	N/A
Phasing Compatibility	Yes	Yes	Yes

Evaluation Criteria	ST4 System Planning	High Capacity Transit Planning Studies	High Capacity Transit Environmental Study
Ridership Potential	N/A	N/A	N/A
Socio-Economic Equity	N/A	N/A	N/A
Connecting Centers	N/A	N/A	N/A

Project Tenure	ST3	ST3	ST3
Outside Funding	No, not planning to pursue	No, not planning to pursue	No, not planning to pursue
Completing the HCT Spine	No	No	No
Advancing Logically Beyond the Spine	N/A	N/A	N/A
Phasing Compatibility	No	No	No

Appendix A: Supplemental project evaluation

The following tables provide additional information regarding the evaluation of the following criteria: Ridership Potential, Connecting Centers, Outside Funding, and Phasing Compatibility.

Ridership Potential

Project or Program	Ridership Potential	Additional Information
Central Corridor		
West Seattle Link Extension	25,000-27,000 daily riders	Source: WSBLE Phase 2 Analysis
Downtown Seattle Transit Tunnel	113,000-150,000 daily riders	Source: WSBLE Phase 2 Analysis
Ballard Link Extension	65,000-81,000 daily riders	
RapidRide C&D Capital Improvements	N/A	Not modeled; daily ridership based on assumed improvements
Graham Street Infill Station	1,500-2,500 daily riders	Source: ST3 System Plan
Boeing Access Road Infill Station	1,500-2,000 daily riders	Source: ST3 System Plan

Project or Program	Ridership Potential	Additional Information
North Corridor		
NE 145th Street / SR 522 Bus Rapid Transit	8,300-9,900 daily riders	Source: NE 145th Street / SR 522 BRT Phase 1 analysis
Edmonds & Mukilteo Stations Parking & Access Improvements	<500 daily riders	Not modeled; daily ridership based on assumed improvements
NE 130th Street Infill Station	3,300-3,700 daily riders	Source: Project-specific analysis
Everett Link Extension	37,000-45,000 daily riders	Source: ST3 System Plan

Project or Program	Ridership Potential	Additional Information
East Corridor		
I-405 Bus Rapid Transit: North	10,800-15,000 daily riders	Source: I-405 BRT Phase 2 Analysis
I-405 Bus Rapid Transit: South	8,600-11,400 daily riders	
South Kirkland – Issaquah Extension	12,000-15,000 daily riders	Source: ST3 System Plan
North Sammamish Park & Ride	<500 daily riders	Not modeled; daily ridership based on assumed improvements

Project or Program	Ridership Potential	Additional Information
South Corridor		
Kent Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements
Auburn Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements
Sumner Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements

Tacoma Dome Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements
South Tacoma Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements
Lakewood Station Parking & Access Improvements	<1,000 daily riders	Not modeled; daily ridership based on assumed improvements
Sounder South Platform Extensions	22,900-31,100 daily riders	Source: Sounder South SDIP (number shown is new daily riders)
Sounder South Expanded Service		
Sounder South Access		

Project or Program	Ridership Potential	Additional Information
South Corridor		
Improvement Program		
DuPont Sounder South Extension	1,000-1,500 daily riders	Source: ST3 System Plan
Tacoma Dome Link Extension	24,300-36,000 daily riders	Source: TDLE Phase 2
Tacoma Link Extension to Tacoma Community College	13,000-18,000 daily riders	Source: ST3 System Plan
SR 162 Bus Speed & Reliability Capital Improvements	<1,000 daily riders	Source: ST3 System Plan

Project or Program	Ridership Potential	Additional Information
System-wide – Programs/Plans		
Bus on Shoulder Program	N/A	
System Access Program	N/A	
Innovation & Technology Program	N/A	
ST4 System Planning	N/A	
HCT – Planning Studies	N/A	
HCT – Environmental Study	N/A	

Connecting Centers

Project or Program	Connecting Centers	Additional Information
Central Corridor		
West Seattle Link Extension	1	Connects Duwamish MIC
Downtown Seattle Transit Tunnel	2	Connects Seattle Downtown RGC and Seattle South Lake Union RGC
Ballard Link Extension	3	Connects Seattle South Lake Union RGC, Seattle Uptown RGC, and Ballard-Interbay MIC
RapidRide C&D Capital Improvements	4	Connects Seattle Downtown RGC, Seattle South Lake Union RGC, Seattle Uptown RGC, and Ballard-Interbay MIC
Graham Street Infill Station	0	
Boeing Access Road Infill Station	1	Connects North Tukwila MIC

Project or Program	Connecting Centers	Additional Information
North Corridor		
NE 145th Street / SR 522 Bus Rapid Transit	0	
Edmonds & Mukilteo Stations Parking & Access Improvements	0	
NE 130th Street Infill Station	0	
Everett Link Extension	3	Connects Lynnwood RGC, Paine Field/Boeing Everett MIC, and Everett RGC

Project or Program	Connecting Centers	Additional Information
East Corridor		
I-405 Bus Rapid Transit: North	4	Connects Lynnwood RGC, Bothell Canyon Park RGC, Kirkland Totem Lake RGC, Bellevue Downtown RGC
I-405 Bus Rapid Transit: South	3	Bellevue Downtown RGC, Renton RGC, and Burien RGC
South Kirkland – Issaquah Extension	2	Connects Issaquah RGC and Bellevue Downtown RGC
North Sammamish Park & Ride	0	

Project or Program	Connecting Centers	Additional Information
South Corridor		
Kent Station Parking & Access Improvements	1	Connects Kent RGC
Auburn Station Parking & Access Improvements	1	Connects Auburn RGC
Sumner Station Parking & Access Improvements	0	
Tacoma Dome Station Parking & Access Improvements	1	Connects Tacoma Downtown RGC
South Tacoma Station Parking & Access Improvements	0	
Lakewood Station Parking & Access Improvements	1	Connects Lakewood RGC
Souder South Platform Extensions	6	Connects Lakewood RGC, Tacoma Downtown RGC, Puyallup Downtown RGC, Auburn RGC, Kent RGC, and Seattle Downtown RGC
Souder South Expanded Service		
Souder South Access Improvement Program		

Project or Program	Connecting Centers	Additional Information
South Corridor		
DuPont Sounder South Extension	1	Connects Lakewood RGC
Tacoma Dome Link Extension	3	Connects Federal Way RGC, Port of Tacoma MIC, and Tacoma Downtown RGC
Tacoma Link Extension to Tacoma Community College	1	Connects University Place RGC
SR 162 Bus Speed & Reliability Capital Improvements	0	

Project or Program	Connecting Centers	Additional Information
System-wide – Programs/Plans		
Bus on Shoulder Program	N/A	
System Access Program	N/A	
Innovation & Technology Program	N/A	
ST4 System Planning	N/A	
HCT – Planning Studies	N/A	
HCT – Environmental Study	N/A	

Outside Funding

Project or Program	Outside Funding	Additional Information
Central Corridor		
West Seattle Link Extension	Yes, and competitive for >25% of project cost	FFGA and TIFIA planned
Downtown Seattle Transit Tunnel	Yes, and competitive for >25% of project cost	FFGA (Core Capacity) and TIFIA planned

Ballard Link Extension	Yes, and competitive for >25% of project cost	FFGA and TIFIA planned
RapidRide C&D Capital Improvements	No, and not planned to pursue	
Graham Street Infill Station	Yes, and competitive for <25% of project cost	Potential for local match
Boeing Access Road Infill Station	Yes, and competitive for <25% of project cost	Potential for infill stations to be combined into Core Capacity FFGA

Project or Program	Outside Funding	Additional Information
North Corridor		
NE 145th Street / SR 522 Bus Rapid Transit	Yes, and competitive for <25% of project cost	BRT buses funded with \$11.1M of FTA 5307 funding with additional on contingency list
Edmonds & Mukilteo Stations Parking & Access Improvements	No, and not planned to pursue	
NE 130th Street Infill Station	Yes, and competitive for <25% of project cost	On contingency list for \$7.3M in FTA 5307 funding
Everett Link Extension	Yes, and competitive for >25% of project cost	FFGA and TIFIA planned

Project or Program	Outside Funding	Additional Information
East Corridor		
I-405 Bus Rapid Transit: North	Yes, and competitive for <25% of project cost	\$26.7M secured of CMAQ and FTA 5307 funds for BRT buses and construction of S Renton Transit Center
I-405 Bus Rapid Transit: South		
South Kirkland – Issaquah Extension	Yes, and competitive for >25% of project cost	Potential FFGA and TIFIA
North Sammamish Park & Ride	No, and not planned to pursue	

Project or Program	Outside Funding	Additional Information
South Corridor		
Kent Station Parking & Access Improvements	No, and not planned to pursue	
Auburn Station Parking & Access Improvements	Yes, and competitive for <25% of project cost	\$3M in FHWA CMAQ funding
Sumner Station Parking & Access Improvements	No, and not planned to pursue	
Tacoma Dome Station Parking & Access Improvements	No, and not planned to pursue	
South Tacoma Station Parking & Access Improvements	Yes, and competitive for <25% of project cost	\$5M on contingency list in FTA 5307 funding
Lakewood Station Parking & Access Improvements	Yes, and competitive for <25% of project cost	
Souder South Platform Extensions	Yes, and competitive for >25% of project cost	\$14.5M secured of CMAQ and FTA 5307 for platforms and vehicles for longer trains; FFGA (Core Capacity) planned & RRIF loan
Souder South Expanded Service	No, and not planned to pursue	

Project or Program	Outside Funding	Additional Information
South Corridor		
Souder South Access Improvement Program	Yes, and competitive for <25% of project cost	
Souder South Extension to DuPont	Yes, and competitive for >25% of project cost	Potential for FFGA and RRIF loan
Tacoma Dome Link Extension	Yes, and competitive for >25% of project cost	FFGA and TIFIA planned
Tacoma Link Extension to Tacoma Community College	Yes, and competitive for >25% of project cost	Potential for FFGA and TIFIA
SR 162 Bus Speed & Reliability Capital Improvements	No, and not planned to pursue	

Project or Program	Outside Funding	Additional Information
System-wide – Programs/Plans		
Bus on Shoulder Program	No, and not planned to pursue	
System Access Program	Yes, and competitive for <25% of project cost	Anticipates leverage of local funding
Innovation & Technology Program	No, and not planned to pursue	
ST4 System Planning	No, and not planned to pursue	
HCT – Planning Studies	No, and not planned to pursue	
HCT – Environmental Study	No, and not planned to pursue	

Phasing Compatibility

Project or Program	Phasing Compatibility	Additional Information
Central Corridor		
West Seattle Link Extension	Yes	Potential to build in segments
Downtown Seattle Transit Tunnel	No	Project cannot be built in segments
Ballard Link Extension	Yes	Potential to build in segments
RapidRide C&D Capital Improvements	Yes	Can be scaled based on available funding
Graham Street Infill Station	No	Infill stations along active alignment cannot be phased
Boeing Access Road Infill Station	No	

Project or Program	Phasing Compatibility	Additional Information
North Corridor		
NE 145th Street / SR 522 Bus Rapid Transit	Yes	Service levels could begin before all capital components complete
Edmonds & Mukilteo Stations Parking & Access Improvements	No	Small overall project size does not allow for phasing
NE 130th Street Infill Station	Yes	Board currently in process of “advancing progressively”
Everett Link Extension	Yes	Potential to build in segments

Project or Program	Phasing Compatibility	Additional Information
East Corridor		
I-405 Bus Rapid Transit: North	Yes	Service levels could begin before all capital components complete
I-405 Bus Rapid Transit: South	Yes	Service levels could begin before all capital components complete
South Kirkland – Issaquah Extension	Yes	Potential to build in segments
North Sammamish Park & Ride	No	Small overall project size does not allow for phasing

Project or Program	Phasing Compatibility	Additional Information
South Corridor		
Kent Station Parking & Access Improvements	No	Size of investments could be scaled to budget but garage unlikely to be delivered in pieces
Auburn Station Parking & Access Improvements	No	
Sumner Station Parking & Access Improvements	No	
Tacoma Dome Station Parking & Access Improvements	Yes	

South Tacoma Station Parking & Access Improvements	Yes	Early enough in project development to allow for phased implementation
Lakewood Station Parking & Access Improvements	Yes	
Souder South Platform Extensions	Yes	Potential investments can be implemented over time
Souder South Expanded Service		
Souder South Access Improvement Program		

Project or Program	Phasing Compatibility	Additional Information
South Corridor		
DuPont Souder South Extension	Yes	Potential to build in segments
Tacoma Dome Link Extension	Yes	Potential to build in segments
Tacoma Link Extension to Tacoma Community College	Yes	Potential to build in segments
SR 162 Bus Speed & Reliability Capital Improvements	No	Small overall project size does not allow for phasing

Project or Program	Phasing Compatibility	Additional Information
System-wide – Programs/Plans		
Bus on Shoulder Program	Yes	Potential to implement over time
System Access Program	Yes	Potential to implement over time
Innovation & Technology Program	Yes	Potential to implement over time
ST4 System Planning	No	
HCT – Planning Studies	No	
HCT – Environmental Study	No	



Resolution No. R2021-05
Exhibit E

Financial Policies

Exhibit E1:	ST3 Plan Appendix B: Financial Policies
Exhibit E2:	Grant Benefit Allocation Policy

SOUND TRANSIT 3

APPENDIX B

Financial Policies





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



More information at:

SOUNDTRANSIT3.ORG 

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 soundtransit.org

Purpose

The Sound Transit Board (the Board) adopted an initial framework for the financing of Sound Move and Sound Transit 2 (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. These Financial Policies reflect the Board's policy intent for implementing the financial framework for completing Sound Move, ST2, Sound Transit 3 (ST3), 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 lenders 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 lenders 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 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 & 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 or 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 10 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 10 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 region. 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 within 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 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 ST3 Regional Transit System Plan constitute the financial plan for the ST3 Regional Transit System Plan, Sound Move and ST2.* The documents are available online at soundtransit.org, at Sound Transit's offices at 401 S. Jackson St., Seattle, Washington 98104 or by mail on request.

- * **As adopted May 31, 1996** (Resolution No. 72)
As amended April 13, 2006 (Resolution No. 72-1)
As amended May 24, 2007 (Resolution No. R2007-05)
As amended July 24, 2008 (Resolution No. R2008-10)
As amended June 23, 2016 (Resolution No. R2016-16)†

†Resolution No. R2016-16 provides that these amended Financial Policies take effect upon the earlier of either the approval of local funding by the voters at an election, or upon Board adoption of these amended Financial Policies by separate resolution.

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Sound Transit

Peter Rogoff
Chief Executive Officer

SOUNDTRANSIT3.ORG



Resolution No. R2021-05

Exhibit E2

Grant Benefit Allocation Policy

Section 1h of Resolution No. R2018-44, Adopted December 20, 2018

Section 1h—Grant Benefit Allocation. In the event both (1) the actual and projected funds legally available to a subarea are sufficient to complete all future voter-approved subarea projects, and (2) the voter-approved program remains affordable for the entire agency, reimbursements from FTA's Capital Investment Grant program and FTA Formula funding grants not necessary for recipient projects to remain affordable based on the baseline cost budget established by the Board, may, for subarea accounting purposes, be designated systemwide grant funds so long as the designation does not violate the grant requirements. The chief financial officer may then, if financially necessary to complete the ST2 or ST3 system plans, allocate designated systemwide grant funds to complete projects in another subarea. This Section 1h authorization continues in effect as adopted policy after December 31, 2019.