

2024 ANNUAL PROGRAM REVIEW REPORT

OCTOBER 2024



Dear Boardmembers:

The 2024 Annual Program Review is the agency's third edition of this report, as directed by R2021-05, detailing Sound Transit's financial health and project performance for active ST2 and ST3 projects.

The first two editions shared key themes focused on large increases in inflation and operating costs; project costs trending higher and schedules trending longer due to a variety of issues (including scope changes, extensive permitting, significant work with local jurisdictions, and construction quality challenges); and higher materials and labor costs than predicted.

As in previous editions, the 2024 report highlights continuing cost increases nationwide along with recent macroeconomic factors affecting projected revenues. The main challenges we continue to see include:

- The construction market continues to experience cost increases nationwide, particularly for megaproject delivery. Sound Transit must apply a range of new tactics to counteract market forces affecting program affordability from better estimating and controlling material costs to evaluating delivery methods and contracting structures. This includes strategically breaking projects into type of work and contract value to attract more bidders and gain competition.
- The compounding effects of scope changes and unforeseen field conditions are increasing long-term costs, extending schedules, and affecting service delivery. Agency staff are enhancing our ability to forecast, manage, and mitigate risks with a focus on recurring issues.
- Operating costs are trending higher than predicted in the ST2 and ST3 long-range Financial Plans due to both inflation and a tight local labor market. As these costs increase, we must ensure the system is well-maintained and funded appropriately for long-term viability.
- Macroeconomic factors have slowed economic growth, affecting future revenue forecasts.
 We continue to explore creative financial solutions to address the slowing growth rate.

In response, Sound Transit staff have developed more robust strategies to manage costs and change management. We are aligning this work with recommendations made by the Board's Technical Advisory Group and its independent consultant, as appropriate. For example, we are:

- Recruiting and hiring executives with megaproject expertise to ensure enhanced project delivery accountability and oversight.
- Implementing private-sector feedback into the agency's procedures to reduce the time to complete change order and closeout processes.
- Clarifying, unifying, and strengthening Sound Transit's betterments and scope control policies.
- Developing and analyzing methodologies for project delivery that support new financing strategies.

The <u>At-a-Glance Summary</u> in the following section includes information on additional initiatives, and you'll find more detailed discussions of these strategies in "What we're doing about it" sections throughout the report. Please refer to the following for more information:

- Page 5 <u>Financial capacity</u>
- Page 12 <u>Current and anticipated cost drivers</u>

Gran Grown

- Page 19 <u>Program performance (for all active ST2 and ST3 projects)</u>
- Page 35 Project information sheets (for all active ST2 and ST3 projects)
- Page 92 <u>Methodologies and supporting information</u>

Sound Transit's complex capital program is making our region a better place to live for generations to come. As such, this report also includes information on the agency's transformational contributions to the region, through workforce development, business inclusion, youth engagement, affordable housing development, sustainability, and more.

Sound Transit's program faces challenges to long-term affordability, and we will continue advancing strategies to improve the affordability of the long-range Financial Plan while delivering high-quality projects and services that create the best possible experience for our passengers.

Respectfully,

Goran Sparrman

Sound Transit CEO

Sound Transit

One report aligning finances, performance, and operations.

2024 Annual Program Review

Affordability snapshot

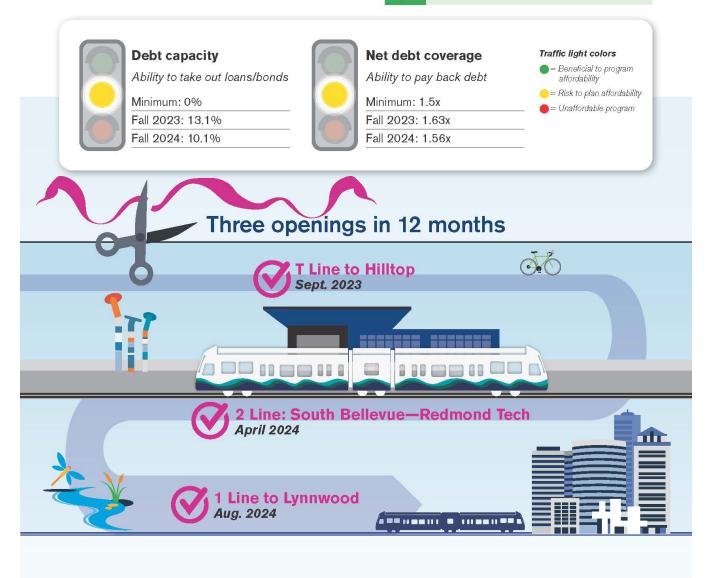
Sound Transit faces challenges with long-term affordability of the ST2/ST3 program as shown by the decrease in available debt capacity and net debt coverage ratio projections. The decline is due to decreased sales tax revenue projections and increased operating cost projections. As a result, costs to provide ST3 service levels and cost estimates for expansion projects in planning are at risk. Actions are underway to address constrained financing.

Agency faces affordability challenges.

Debt capacity and coverage projections have decreased.

Lower projected sales tax revenue, higher projected operating costs.

Actions are underway to address constrained financing.



Key takeaways

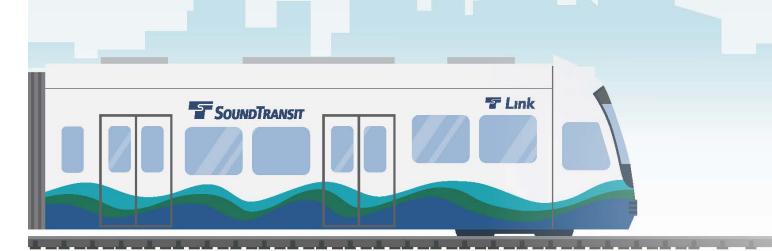
Current conditions influencing Sound Transit's capital program delivery.

- The construction market continues to experience cost increases nationwide, particularly for megaproject delivery.
- The compounding effects of scope changes and unforeseen field conditions are increasing long-term costs, extending schedules, and affecting service delivery.
- Operating costs are trending higher than predicted in the ST2 and ST3 long-range financial plans due to both inflation and a tight local labor market.
- Macroeconomic factors have slowed economic growth, affecting future revenue forecasts.

Some of the ways we're addressing these challenges:

- Improving internal structure for more efficient decision-making, based on consistent standards.
- Adding experienced leaders with capital megaproject expertise to the ST team.
- Evaluating a range of options to tailor the most cost-effective approach for every ST project, from early planning through construction and delivery, including strategies like:
 - Strengthening policies that prevent scope creep.
 - Exploring different delivery methods and contracting structures.
 - Better estimating and controlling materials costs.
 - Leveraging market risk allocation for construction contracts.

- Increasing construction oversight.
- Implementing construction-industry feedback to make contract changes and close-outs more efficient.
- Exploring creative financing strategies, like different federal grant types and loan options, public-private partnerships, and creative publicpublic opportunities.
- Deploying a "zero-based budgeting" model for FY 2025 to align limited resources with key priorities.
- Developing a 5-10 year "state of good repair" roadmap to balance preventative maintenance and construction projects.



Regional contributions and benefits

Sound Transit's transformative capital program is making the Central Puget Sound a better place to live for generations to come.

DEVELOPING THE REGION'S WORKFORCE

Between July 2023 and June 2024, **ST's capital projects employed 7,000+ construction workers.** During

this timeframe, these workers earned more than \$182 million in wages and more than \$70 million in fringe benefits.

Out of 3.1M total labor hours during this period:

Workers of color performed

Women performed

Apprentices performed

42%

7.2%

15.4%



SUPPORTING SMALL & MINORITY-OWNED BUSINESSES

In 2023, **ST awarded \$50M+ to small firms** who qualify as
Disadvantaged Business Enterprises,
exceeding our annual DBE
contracting goal.



EQUITY IN INFRASTRUCTURE

On Aug. 29, **Sound Transit signed the Equity in Infrastructure Pledge**,

joining a national coalition dedicated to building generational wealth and reducing the racial wealth gap.

PRIORITIZING TRANSIT-ORIENTED DEVELOPMENT

3,471

total homes built or in process

2,671

affordable units built or in process

\$2.1B

total public and private investment in projects

14

stations and counting with completed or planned TOD



BUILDING TRANSIT SUSTAINABLY

ST is the only agency in the nation with **two Envision Platinum-certified transit projects**.

LEED: 4 facilities certified

In progress: 30+



Envision™: 2 extension projects certified

In progress: 3



Envision sustainability certification covers entire infrastructure projects and is compatible with building-specific LEED certification.

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ACRONYMS

ACRONYMS

Acronym	Terminology
BRT	Bus rapid transit
CCI	Consumer Cost Index (see Glossary for additional information)
CPI	Consumer Price Index (see Glossary for additional information)
DSCR	Debt Service Coverage Ratio
DSRF	Debt Service Reserve Fund
EIS	Environmental Impact Statement
LRV	Light rail vehicle
FTA	Federal Transit Administration
LRFP	Long-range Financial Plan
MVET	Motor Vehicle Excise Tax
NEPA	National Environmental Policy Act
O&M	Operations and maintenance
OMF	Operations and Maintenance Facility
ROW	Right of way
ROWI	Right-of-way index
SEPA	State Environmental Policy Act
SOGR	State of good repair
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transit Improvement Plan
WSDOT	Washington State Department of Transportation
YOE	Year of expenditure

SYSTEM EXPANSION SERVICE MAP



INTRODUCTION

Overview of the Annual Program Review

Consistent with the requirements of Board Resolution R2021-05, Section 4, the Annual Program Review evaluates "shifts in projected financial capacity resulting from updated cost, revenue, and debt capacity projections and the readiness of projects to benefit from such shifts," and provides that information to the Board for review and consideration. Additionally, this information informs the Board's decision-making on the annual Transportation Improvement Plan and budget, as well as the agency's long-range Financial Plan. Section 8 of R2021-05 requires current and anticipated cost drivers to be reported biannually, and this report, along with the Annual Proposed Budget and Financial Plan, will be put forward to meet this requirement.

Annual Program Review development is a collaborative effort across the agency involving the Agency Oversight; Finance & Business Administration; Capital Delivery; Service Delivery; Strategy; and Legal.

This approach provides a comprehensive look into the agency's financial health and program performance for all active capital projects — both those in planning (which are voter-approved to advance preliminary design work, including environmental investigations, but have not yet received Board approval on their fully built-out costs and schedules) and those in construction (which have Board-approved baseline budgets and schedules). We also provide information on non-capital work (or service delivery projects), and operations, maintenance, and infrastructure renewal drivers, as these efforts also inform the agency's overall affordability.

To determine shifts in the program's financial health and the performance of projects in the capital program, staff assess changes in three main categories: financial capacity, cost drivers, and program performance.



Financial capacity: Evaluates shifts in the projected financial capacity resulting from updated cost, revenue, and debt projections, which affects our debt capacity and debt coverage projections.



Cost drivers: Evaluates changes in project costs and schedules from cost estimates and predicts possible future shifts stemming from anticipated external pressures. Operations and maintenance expenditures and major infrastructure development and renewal needs from these pressures are also described.



Program performance: Tracks performance on community and economic impacts, environmental processes, third-party agreements, permits, and right-of-way acquisitions, schedule, risks, and mitigations.

FINANCIAL CAPACITY

The fall 2024 long-range Financial Plan (hereafter referred to as "the Financial Plan") projections indicate that although the Financial Plan currently adheres to our ST3 and statutory policies for debt compliance, Sound Transit faces challenges with the long-term affordability of the ST2/ST3 program. This is shown by the Financial Plan's projected decrease in available debt capacity and net debt coverage ratio, as well as cost uncertainties and risks which are detailed in the Cost Drivers section.

Projected minimum remaining available debt capacity (the agency's remaining ability to issue debt) has decreased from 13.1% in fall 2023 to 10.1% today. This is due to higher projected debt issuance resulting from lower revenue projections.

The projected minimum net debt service coverage ratio (the agency's ability to repay debt) also decreased from 1.63x in fall 2023 to 1.56x today.

The decreases indicate a need to proactively manage major project decisions, optimize resources for both projects and operating services, and explore additional funding and financing opportunities.

The financial projections discussed in this section are for completing the agency's expansion projects, as well as operating and maintaining the system from 2017 through 2046, which is the length of the Financial Plan. The Financial Plan includes the latest macroeconomic updates, including tax revenues and inflation, as well as updates to other revenues (such as fares) and expenditures based on Board and agency decisions.

However, the Financial Plan does not include all identified cost drivers and effects of upcoming/future decisions, which would, if not mitigated, potentially result in increased expenditures for projects as well as operations and maintenance. These risks, detailed in the cost drivers section, may have large implications for overall program affordability with currently projected constraints in future financing.

Actions are underway to address constrained financing and are described in more detail in subsequent sections.

Shifts in revenues

- Macroeconomic factors have slowed economic growth, affecting future revenue forecasts. Compared to the fall 2023 plan, the fall 2024 update shows a tax revenue projection decrease of \$3.1 billion, or 3.3%. The main drivers of the lower total tax revenue projection include:
- A \$3.5 billion decrease to the sales tax revenue forecast, compared to the fall 2023 plan. This decrease is due to a reduction in our current tax base, depressing the entire forecast. The tax-base reduction is being driven by a slowdown in the regional economy, as reflected by a decline in employment (anticipated to decline 0.9% this year) and little to no growth in household income (anticipated to be less than 0.1% growth by year's end).
 - The sales tax revenue forecast decrease is partially offset by a \$451 million increase in MVET projections (due to an improved vehicle sales forecast, mostly attributed to easing supply chain constraints).

- Fare revenue projections remain relatively unchanged, with a \$26 million, or 0.5%, increase, through 2046 reflecting slightly higher average fares per boarding, due to a higher percentage of passengers paying full fares.
- The grants team increased grant assumptions to align with national transit funding trends, resulting in a \$3.7 billion, or 24%, increase in projected grants and other revenues, including:
 - \$2.6 billion increase to our full funding grant agreement assumptions to align our projects' grant share and size with recent national trends.
 - Adding a \$600 million Federal Railroad Administration grant for the Sounder South Capacity Expansion project's track and signal improvements.
 - \$434 million increase in FTA formula funding due to updates in Puget Sound Regional Council's earned-share methodology and the agency operating statistics.
 - \$52 million increase across all other grant types.
- A \$227 million increase in other revenues, mostly due to higher-than-expected interest earnings from high cash balances and interest rates.

Shifts in expenditures

- Compared to the fall 2023 Financial Plan, projected operating expenditures increased \$555 million, or 1.5%, due to updated purchased transportation labor rates from a new labor contract (\$527 million) and increased insurance costs from higher property insurance and Sounder premiums (\$221 million). These increases were offset by a \$193 million decrease from identified budget savings as part of the 2025 "zero-based budgeting" process.
- Project expenditure projections, including both system expansion and service delivery projects, have increased by \$426 million, or 0.5%, through 2046. \$394 million of the increase is attributed to inflation, mostly due to incorporating a new vehicle index to inflate bus and light rail vehicle costs. \$32 million is due to updating planning assumptions for service delivery projects. The agency is receiving new opinions of probable cost that are not yet incorporated into the Financial Plan, including for the OMF South project and West Seattle, Ballard, Tacoma Dome, and Everett Link extensions.
- Sound Transit uses inflation indices to escalate projected costs over time. For the fall 2024
 Financial Plan, inflation indices were updated to incorporate inflation seen in 2023, and future forecasts were adjusted based on economic outlooks and input from industry experts.
 - Compared to the fall 2023 Financial Plan, CPI was adjusted slightly upward mostly due to short-term growth rates (2024 to 2026), which are anticipated to be higher than previously projected in the fall 2023 Financial Plan.
 - Compared to the fall 2023 Financial Plan, the construction cost index was adjusted upward. The growth is attributed to continued near-term inflation growth, near-term public construction spending due to federal legislation providing infrastructure funding, and recent labor wage increases resulting from contract renegotiations between local unions and the Associated General Contractors in Washington.

- Compared to the fall 2023 Financial Plan, the right-of-way index was adjusted upward. Despite negative growth in 2023 (-9.5%), which was not forecasted in the fall 2023 Financial Plan, the right-of-way index is expected to see growth in the near-term due to indications by the Federal Reserve that interest rates will continue to decrease modestly through the end of 2024 and a higher anticipated recovery of commercial parcel prices.
- Inflation on new buses and light rail vehicles, which prior to the pandemic grew at a similar rate to CPI, has now (since 2021) been growing much quicker than CPI due to material components. As a result, staff procured a vehicle inflation index for the first time that more closely tracks the industry and components used in vehicle manufacturing. Compared to the CPI in the fall 2023 Financial Plan update, the new vehicle index has higher growth rates due to high increases seen in the fabricated metal products producer price index and energy costs.

Table 1: Inflation changes fall 2023 to fall 2024

Inflation Compound Annual Growth Rate, 2017-2046						
	Index	Fall 2023 Update	Fall 2024 Update			
CPI		2.81%	2.86%			
CCI		3.93%	3.95%			
ROWI		4.77%	4.93%			
VEHI		n/a	3.31%			

Projected shifts in revenues, expenditures, and debt issuance with this update can be seen in the following chart.

\$2,000 \$1,468 \$1,000 \$3.686 \$26 \$(1,000) \$(2,000) \$(3,000) \$(3,080) \$(4,000) 5. Increased 3. Increased 1. Decreased 2. Increased 4. Increased 6. Increased 7. Increased

Other

Revenues

OpEx

Project

Expenditures

Debt Proceeds

Figure 1: Major changes and impacts in this Financial Plan update, 2017-2046 (millions in YOE\$)

Debt and affordability constraints

Grant

Revenues

Fares

Tax Revenue

The agency uses debt, such as loans and bonds, to bridge the gap between the timing of expenditures and the receipt of revenues. The fall 2024 Financial Plan forecasts an increase of \$1.5 billion, or 4.6%, in bonds and cash to be issued through 2046, compared to the fall 2023 Financial Plan. Projected debt service and contributions to reserves through 2046 increased by \$1.4 billion, or 6.6%. Some principal and interest payback has been pushed beyond 2046, which is why there is a lower debt service increase as compared to the debt proceeds increase. (Bond issuance to fund the capital program is projected to end in 2046. The Financial Plan assumes 30-year bonds, so payback will be completed in 2075, which is outside of the Financial Plan reporting period.)

In terms of affordability and financing metrics, remaining available debt capacity and the ability to repay debt remains a challenge, as described in the section below.

Coverage

According to voter-approved financial policies, Sound Transit's net revenues (after deducting operating expenses) may not fall below 1.5 times our total debt service in any given year. This key affordability metric is referred to as the agency's net debt service coverage ratio, or DSCR, and is an important measure of the agency's financial health, conveying our ability to pay back debt.

As shown in Figure 2, a projected minimum net DSCR approaching the policy minimum of 1.5x conveys an increased financial risk to completing the plan according to the Board-approved scope and schedule.

To read this figure: The X-axis is each Financial Plan update, beginning with Sound Transit's 2021 program realignment until the current fall 2024 plan. The points show the minimum net DSCR in each

of those plans. The numbers in parentheses represent the year that net DSCR is the lowest (or most constrained).

Current projections show that Sound Transit would come closest to reaching its policy minimum net DSCR of 1.50x in 2049. Specifically, we project to have net revenues (meaning revenues minus operating costs) only 1.56 times the amount of debt service we need to pay in the year 2049.

2.5 2.25 2.17x (2044)1.99x 1.93x 2 (2044)(2045)1.75 1.67x 1.67x 1.63x 1.56x 1.53x (2046)(2046)**ST3 Policy Minimum** (2046)1.5 (2049)(2045)1.25 August Fall Fall Fall Fall Spring Spring Spring 2021 2022 2024 2021 2022 2023 2023 2024 Net Debt Service Coverage Ratio (DSCR) (Minimum Year)

Figure 2: Net debt service coverage ratio in year of maximum constraint

Capacity

According to Washington state law, the amount of debt issued by Sound Transit cannot exceed 1.5% of the assessed valuation of real property located within the regional transit authority district. An important metric of the agency's financial health is the remaining amount of debt that can be issued, also known as **remaining available debt capacity**.

As shown in Figure 3, the agency's projected remaining available debt capacity in the minimum (or most constrained) year has continued to decrease, from 13.1% last fall to 10.1% with this update. More information about the agency's debt and affordability constraints can be found in Appendix A: Financial capacity analysis.

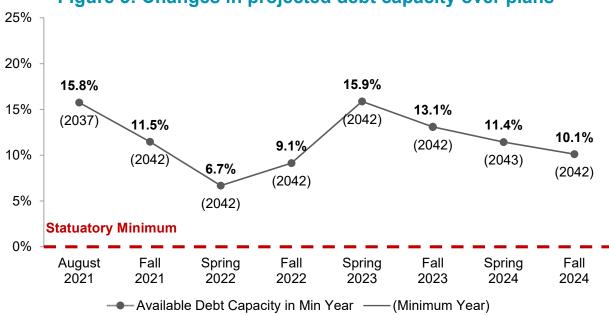


Figure 3: Changes in projected debt capacity over plans

Financial capacity: What we're doing about it

Staff are pursuing several potential solutions within the agency's control to contain costs and increase available funding. These are detailed below. Many of the strategies detailed throughout this report will ultimately benefit financial capacity.

- Staff are seeking federal funds for projects in planning. We are pursuing Capital Investment Grant funding (including exploring the FTA's Expedited Project Delivery funding source) for the West Seattle Link Extension, OMF South, and light rail vehicles for West Seattle Link.
 - Expedited Project Delivery is a pilot program Sound Transit has not pursued before. This funding source shortens the FTA's review to 120 days once grant requirements are met, which is a much shorter review period than a regular CIG grant. An EDP grant could fund up to 25% of eligible project costs. To date, only one other transit agency in the country, Los Angeles County Metropolitan Transportation Authority, has been granted funds by the FTA through this program. We anticipate submitting an EPD application, along with other requirements for CIG grant funding, in early 2025. (An EPD grant is already assumed in the Financial Plan for West Seattle Link.)
- In October of 2022, the U.S. Department of Transportation's Build America Bureau launched a new federal loan opportunity allowing projects to seek loans covering up to 49% of eligible project costs, raising the cap from 33%. Staff are working with outside counsel to understand the feasibility within our current bond structure, as additional tax pledges may be necessary. The OMF South project would likely be the first project to pursue this new loan type if the agency chooses to move forward with this approach. We anticipate submitting a Letter of Interest to the Build America Bureau in early 2025, with a loan closing in mid-2026.
- In addition to federal loans, staff are continuing to monitor the public debt market and are prepared to take advantage of future interest rate reductions initiated by the Federal Reserve in order to lower our actual borrowing costs.

- Staff are finalizing a contract for a financial advisory services consultant to assess potential financing and alternative strategies like public-private partnerships and/or creative third-party (public-public) financing partnerships and opportunities. We anticipate work to start by year-end or early Q1 2025.
- We assessed the Service Delivery program to align staff resources and funding for highest-priority projects as part of the FY 2025 budget process. This resulted in re-prioritizing existing Transportation Improvement Plan funding by approximately \$100 million.
- Staff implemented "zero-based budgeting" and only prioritized critical resourcing needs to further control costs for the proposed 2025 budget. Additionally, a number of lower-priority vacant full-time equivalent positions were removed from the budget and reduced the long-range Financial Plan by approximately \$100 million.
- In addition to interventions listed here, this document includes other solutions that will improve financial capacity and coverage, like strengthening policies to prevent scope creep.

COST DRIVERS

Between the August 2021 Realignment Plan and the first Annual Program Review in spring 2022, significant and numerous cost drivers made it challenging to maintain cost and schedule performance consistent with the prior Financial Plan. As required by the Board, staff provided current and anticipated cost driver updates in Q2 and Q4 of 2022 and 2023, noting similar pressures during these periods.

Cost drivers are economic factors that the Pacific Northwest and Sound Transit are experiencing. We evaluate these trends and those that are monitored and reported in the industry, which are not yet included in the current cost estimates supporting the Financial Plan. If necessary, they may become cost drivers reflected in project estimates.

Cost drivers identified below include the effects of market pressures in the construction sector, project scope changes, operations and maintenance expenditures, and major infrastructure development and renewals. These forces affect the agency on many fronts, including capital and operating costs, property acquisition costs, project bid prices, and operating costs.

Overall, the construction market continues to experience cost increases nationwide, particularly for megaproject delivery. The compounding effects of scope changes and unforeseen field conditions are increasing long-term costs, extending schedules, and affecting service delivery. At the same time, operating costs are trending higher than predicted in the ST2 and ST3 long-range Financial Plans due to inflation and a tight local labor market. Details are included below.

Market pressures

While inflation indices have slowed as described above in "Shifts in expenditures" section within "Financial capacity," market pressures such as skilled labor shortages and lack of competitive bidders in the region are still driving costs for ST projects.

As referenced in the Mortensen's Cost Index report for Seattle Q1 2024, our region will have many public projects for at least the next few years. The Mortensen Q2 2024 report further indicated "overall spending on non-residential construction to remain steady as conditions [related to anticipation of interest rate cuts and material costs stabilizing] continue to improve..." This includes ST's work to nearly double the Link light rail system, from 35 miles to 62 miles by the end of 2026.

Though we are beginning to feel the effects of inflation easing compared to previous years, skilled labor availability (including specialty contractors and their skilled labor force) is decreasing, and the cost for all construction craft workers is increasing. These shortages increase project construction costs and are amplified further with the limited availability of bidders (contractors) for ST projects that require numerous skilled trades and a high number of workers, given the scope, scale, and complexity of our capital projects.

Specifically, this limited pool of megaproject-qualified firms results in less competition and higher prices. In addition, the lack of available resources (particularly subcontractors in systems and those who build infrastructure for our stations and OMFs) is resulting in lack of competition and upward pressure on pricing.

Within subcontractors, Disadvantaged Business Enterprise firms are often at construction capacity in the Central Puget Sound. While thriving local DBEs are a highlight for our regional economy, their limited availability to meet construction demand is being felt in bid prices, since prime contractors add cost to their bids to cover such market risks.

Within this environment, megaproject bidders can afford to be risk-averse, and to bid against their competition rather than bidding their costs plus reasonable markup. These market conditions are resulting in higher bids than we expect.

Market pressures: What we're doing about it

- We are evaluating delivery methods, contracting structures, and procurement strategies to ensure the most cost-effective strategy tailored to each project. The focus is to address current market conditions such as the effects of high inflation in recent years, labor shortages, and industry preferences.
- In cooperation with our labor partners over the past few years we have assisted in the establishment of two new construction pre-apprenticeship programs: one in Snohomish County (Edmonds Community College), and one in Pierce County (Palmer Pathways). We continue to support these programs to ensure that residents across the region have access to quality training and career pathways into the construction industry. These measures will help us mitigate future labor shortages.

Scope changes

As projects advance through the development phase, we explore multiple alternatives for alignments and stations, and the level of design is conceptual (~10%). We garner more information about utilities, geotechnical conditions, engineering constraints, and community priorities that may differ from the original project presumptions.

Specific examples of project scope changes that materialize during design development include:

- Identifying environmental impacts and negotiating required mitigation with Tribes, jurisdictions, and other regulatory authorities.
- Required upgrades to affected utilities or streets, instead of just replacement, as required by authorities having jurisdiction.
- Projects are sometimes asked to include elements to support the growing light rail system not anticipated in the initial project definition or considered in the Financial Plan. If these elements are identified as betterments, agreements must be developed committing the requesting party as responsible for the associated costs.
- Based on community or stakeholder feedback, new alternatives or options may be added to project environmental review. Depending on timing, changes may affect the project schedule.

Conceptual design is insufficient for accurate and durable budgeting. During the development phase we use cost estimation techniques which compare alternatives in terms of scale only. After project baselining, when the Board has selected the project to be built, we calculate more rigorous opinions of cost based on a more developed project scope and schedule.

Scope changes: What we're doing about it

- Staff have worked with the Board and Technical Advisory Group to update the agency's Project Scope and Betterments Policy, which guides scope development and provides direction to staff on the process for incorporating betterments into project scope.
- We're reinforcing clear internal design direction by refreshing Sound Transit design requirements and strengthening station design standards.
- We're also developing and refining standard language for third-party agreements that can affect scope like Letters of Concurrence, Administration, Partnering, and Development Agreements.

Operations and maintenance expenditures

The agency's operating expenses fund provides core service delivery as well as critical support functions, such as Sound Transit staffing, security service, insurance, utilities, and taxes.

Core service delivery, by far the largest portion of operating expenses, consists of operating and maintaining Sound Transit fleets, facilities, and infrastructure by our operating partners and contractors. Other critical support functions such as public safety also require significant investment.

Service delivery and public safety are primarily executed through Intergovernmental Agreements and contracts.

For more information on key operating cost trends, see <u>Figure 2 of Appendix C: Cost drivers supporting</u> information.

Delivering transit service to the public

- Link (partner) staffing levels: Details of operating and maintenance requirements evolve as more information on each light rail expansion project becomes available and as projects proceed into the activation period. Quite often, additional resources are required. ST staff and our Link operating partner King County Metro gain more hands-on knowledge during pre-revenue testing and revenue service, which helps determine the additional resources needed to meet run times, work through operational challenges, and maintain the assets on the new extension.
 - This trend has led to staffing increases with KCM that are higher than Sound Transit's original projections. At this time, we expect this trend to continue and therefore will need to be accommodated for in the Financial Plan.
- Partner staffing shortages and increased costs: The nationwide shortage of transit operators continues. Sound Transit's operating partners (including Community Transit, King County Metro, and Pierce Transit for ST Express; and King County Rail for Link) face significant staffing shortages in critical operational and technical positions include trainers, bus and light rail operators, light rail vehicle electro-mechanics, facility custodians and electricians, system/signal technicians, and others.
 - Our operating partners have increased labor rates and offer retention and hiring bonuses to attract and retain these key operational personnel. We expect a tight labor market to continue in the near future.

Reliance on partner agencies and agreements means Sound Transit has limited control over escalating costs in these areas. Because union-represented transit operators and maintenance staff negotiate their contracts directly with their employers, Sound Transit is not party to those labor contract negotiations (with the exception of Tacoma Link, which Sound Transit operates directly). Sound Transit fully reimburses our operating partners for services rendered; the agency opts not to offer performance-based financial incentives or penalties to provide accountability for efficient operations.

Service standards

The ST2 and ST3 plans assumed certain levels of service. As we gain more information about the fleet, facilities, and partner staff resources needed to provide that service, we will need to update our service assumptions and operating costs accordingly. Service-level assessments for all modes occurred as part of the 2025 budget process, and we'll update longer-term service projections toward the end of 2024.

Parts and component cost increases

Many assets we maintain require specialty products and components only available through select suppliers. ST's unique and specialized design for each of its stations results in special or small-quantity procurements and suppliers leveraging their market position to pass on cost increases for these components.

Rising costs have also spread to revenue service vehicles and spare parts for track, signal, and other system components, onboard IT systems, and elevator and escalator maintenance. There are also significant cost increases on vehicle technology updates (such as upgrading analog radio to digital radio), which are required to provide proper customer service and passenger experience. We expect these challenges to continue in the near future.

Insurance cost increases

Historically, insurance costs have increased significantly and will continue to rise, especially as Link expands. The main drivers of insurance premiums are property and earthquake insurance, and heavy rail and light rail liability coverage.

Property and earthquake insurance and premiums rise as we expand and have more assets. For example, in 2021, our property total insured value was \$2.6 billion. At the time of the Lynnwood opening in August 2024, the expected property total insured value is \$9B.

For liability-related insurance and premiums on heavy rail and light rail, insurance premiums are the result of exposure, measured by ridership and the insurance carrier rate. As ridership increases for Sounder and especially for an expanded Link system, insurance liability costs will continue to go up.

In addition, Sound Transit procures its insurance coverage on the global market, and global losses, exposures, and world events significantly affect the availability of carrier capital and cost. Sound Transit has consistently received a lower-than-industry carrier rate, but our continued growth and expansion have led to increased exposure and higher insurance premiums.

Passenger service expectations

Like other transit agencies nationwide, Sound Transit's need for public safety personnel to maintain a safe experience for our riders, at our facilities, and onboard our transit network has increased. Public Safety has moved from a single security contract to multiple contracts, which have added costs. Vendors and contractors providing public safety and security personnel are also subject to staff cost increases to attract and retain personnel, further increasing cost to Sound Transit.

In addition to enhanced security, other key initiatives to improve the passenger experience have also increased costs, such as enhanced cleaning, the Fare Ambassador program, and significant investments in the vertical transportation program to improve escalator and elevator uptime.

Other initiatives to enhance passenger experience and support upcoming project openings will require more resources and increased operating and maintenance costs as well. Based on evolving passenger needs, we are exploring new and/or expanded facilities and programs, including adding bathrooms and attendants, assigning more Link station agents, implementing enhanced wayfinding, improving passenger technology, and prioritizing ADA enhancements. These expanded programs, if adopted under the Board's direction, will lead to increased costs in the long term and are not accounted for in the long-range Financial Plan.

Sound Transit staffing and resources

As the system expands with ST2 and ST3 project openings, staffing and resources to support operating service levels have increased over original ST3 projections. Staffing and resource needs will continue to be updated as new service opens, additional data is gathered, and service standards get established with our purchased transportation partners.

Link light rail vehicle storage

As we've shared in the past, our Operations and Maintenance Facility Central in SODO is now filled to capacity with the opening of Lynnwood Link, as trains will not have access to OMF East in Bellevue until the full 2 Line opens across Lake Washington. To provide enough vehicles to meet service demand, we are storing LRVs overnight at various locations along the 1 Line, where they undergo light cleaning.

This requires additional maintenance personnel and increased travel time to service and operate vehicles from a decentralized location and will continue until there is access for vehicles between the 1 Line and OMF East. Solving this challenge is dependent on the timing of the full 2 Line opening.

Operations and maintenance cost drivers: What we're doing about it

- Sound Transit staff have been working with our partner King County Metro to forecast appropriate staffing levels. We will continue to collaborate to address challenges.
 - ST and KCM leverage an interagency group and subject matter experts to update the Link Operations and Maintenance Intergovernmental Agreement to address challenges and improve communication, operational efficiency, and cost control, along with an increased partnership through focus on roles, responsibilities, and accountability.

KCM is addressing staffing shortages with increased compensation including signing bonuses, relocation, and retention bonuses. We are working to support these efforts while monitoring effects of cost on budgets and the long-range Financial Plan.

- Insurance carrier relationships are the best way to mitigate cost increases. We invite carriers to visit our sites and stay in constant communication with them to ensure they are familiar with agency risks. This open communication can, in turn, lead to lower insurance rates; in our experience, the more comfortable the carriers are with the risk, the better (lower) the rate.
- Sound Transit has augmented full-time staffing needs with consulting support and term-limited employees to contain long-term staffing costs and meet peak demands until ST2 expansion projects complete. As mentioned earlier, we are implementing zero-based budgeting with this year's FY 2025 budget to scrutinize all costs and ensure expenditures align with priorities.

Major infrastructure development and renewals

The agency's long-range Financial Plan forecasts funding needs for projects that expand, enhance, replace, or renew our existing operational assets. Our fall 2024 forecast and "state of good repair" funding model is based upon our current understanding of our asset conditions and needs.

Enhanced asset condition analysis and identification of additional operational needs and initiatives to support or improve passenger experience may require additional state of good repair program funding in the future, as our understanding of our needs evolves.

- Major systems/applications update: With the rapid expansion of the Link network, some essential systems, such as our asset management system and enterprise resource planning, fire and life safety, and Link core control and operational system, need significant updates for us to provide safe and reliable services on a bigger scale.
- Additional fleet and operations support facilities: Sound Transit may need additional fleet and storage capacity, beyond what is already planned, to support future light rail service levels envisioned in the ST2 and ST3 plans. However, the Sound Transit Board has directed staff to investigate and implement further operating and capital efficiencies before proposing modified future service levels. Several near, mid, and long-term efficiencies have been identified and will be evaluated by staff and considered by the Board over time. In addition, the existing Link control center cannot support full system expansion. A Unified Control Center was not included in ballot measures but has been proposed to enhance operational reliability and coordination across all modes. Light rail support facility funds in the Financial Plan may not be adequate to fund all identified needs.
- Bus decarbonization: Moving the region toward bus electrification will increase infrastructure and vehicle investments. Staff are writing a Zero-Emission Bus Implementation Plan so the agency can be poised to implement new technologies in concurrence with bus retirement dates. Staff are also in frequent conversation with our bus operating partners to understand their plans and implementation timelines for zero-emission buses.
- Major vehicle overhaul: Sounder and Link vehicles have significant overhaul needs to ensure Sound Transit can continue to deliver safe and reliable service. Both train types have ongoing vehicle overhaul programs, but costs are increasing for labor and parts. Link currently has two different fleets from different manufacturers, and in the near future may have a third fleet from yet

- another manufacturer. Each fleet has specific parts and components that aren't interchangeable, which will only increase the risk to overhaul costs not assumed in the long-range Financial Plan.
- Major maintenance and repair and replacement of assets: As we take ownership of assets like the downtown Seattle stations and tunnel, or bridges previously owned or maintained by WSDOT, and we take on new cost-sharing responsibilities such as the I-90 floating bridge and a myriad of agreements with many other public agencies and jurisdictions, the exact costs to maintain, repair, and replace these assets are unknown. They are subject to the same cost pressures facing other capital construction and maintenance contracts.

Major infrastructure development and renewals cost drivers: What we're doing about it

- To better plan and fund state of good repair projects, we are creating a program management framework for service delivery (non-system expansion) projects that allows for cost, schedule, and scope tracking and management. As part of this effort, in the FY 2025 budget, we are working to assess the service delivery program to align resources and funding for highest-priority projects.
- In late 2022, Service Delivery initiated a comprehensive SOGR roadmapping project to enhance the reliability and safety of our expanding transit services. Early this year, the project identified five key capabilities essential for maintaining and improving ST-owned assets: Comprehensive Asset Inventory, Asset Health Monitoring, Risk-Based Investment Prioritization, Enhanced SOGR Needs Analysis, and Asset-to-Project Mapping. Currently, the project is focused on improving asset inventory and health data for a set of asset types highlighted in the roadmap (e.g., track, LRVs, and facilities). By early 2025, the work will provide a high-level 5- to 10-year capital plan for those asset types. The plan will also summarize the expected timing and cost of rehab-replacement events for major asset components identified through analysis.
- Sound Transit staff are working with the Board to review options and evaluate service-level goals and effects on cost.

PROGRAM PERFORMANCE

Building and expanding the regional transit system through Sound Transit's large capital programs is a major focal point for the agency. This includes major Link light rail, Sounder train, and Stride bus rapid transit projects. At the same time, Sound Transit has also advanced projects to ensure our system operates and is maintained appropriately as the system grows. As noted in previous sections, we now refer to the non-system expansion body of work as "service delivery projects."

While this annual review focuses primarily on system expansion, we will continue to include more information in the future on both bodies of project work, as well as systemwide challenges we foresee.

In addition, we have included information on how Sound Transit contributes to the region's construction labor market and small and minority businesses; our efforts to build and sustain transit-oriented development and affordable housing; our community and youth engagement efforts; and our commitment to sustainability.

Equity and economic impacts

Construction labor market

Sound Transit's expansion program is a powerful driver of economic mobility across the Central Puget Sound region, providing thousands of high-paying jobs that support working families.

Between July 2023 and June 2024, expansion projects employed more than 7,000 construction workers, who worked more than 3.1 million labor hours. People of color performed more than 42% of those hours, apprentices 15.4%, and women 7.2%. In this timeframe, these workers earned more than \$182 million in wages and more than \$70 million in fringe benefits (such as pension contributions, full family medical, dental, vision insurance, and other critical worker benefits).

Sound Transit also supports pre-apprenticeship programs to develop our future workforce, including for incarcerated individuals (Washington is one of only a few states with registered construction craft pre-apprenticeship programs within its Department of Corrections system):

- The Construction Trades Apprenticeship Preparation (CTAP) program for men began in 2019. More than 750 men have graduated from CTAP, but many are still incarcerated.
- The Trades Related Apprenticeship Coaching (TRAC) program for women began in 2000. Around 280 women have graduated from the TRAC program since 2013, with 30% placed in craft construction careers.

Sound Transit and our labor partners support CTAP and TRAC through the Preferred Entry program in our Project Labor Agreement (PLA). Sound Transit's Office of Labor Relations also assigns PLA Specialists to visit TRAC and CTAP classes as industry experts, and staff attend participants' graduations to celebrate their success. Graduates of both programs then have Direct Entry to registered apprenticeship programs and immediate employment on Sound Transit PLA-covered construction projects as Preferred Entry candidates.

The Washington State Department of Corrections reports that 30% of all inmates released each year go on to re-offend and end up in prison again within three years. Among TRAC graduates, however, the recidivism rate is less than 5%.

The 28 TRAC and CTAP graduates who have worked on Sound Transit construction projects so far have contributed 34,000 labor hours and earned more than \$1.8 million in wages and benefits since 2013.

Small and minority-owned businesses

Sound Transit is committed to ensuring that all procurements and contracts are administered without discrimination on the basis of race, color, sex, or national origin, and that Disadvantaged Business Enterprises have equal opportunity to compete for and participate in all agreements, contracts, and subcontracts awarded by Sound Transit or its contractors. In federal fiscal year 2023, Sound Transit awarded \$50,364,075 to DBE firms, exceeding our agency's annual DBE goal of 18.17% with 18.25% DBE attainment. Sound Transit disaggregates DBE performance with each semiannual report to better understand DBE performance per gender/ethnicity group and equitably inform outreach and communication strategies.

In addition, Sound Transit has partnered with WSDOT to provide businesses technical assistance in the form of the Capacity Building Mentorship Program. The program is intended to enhance the capabilities and participation of small and minority-, veteran-, and women-owned business enterprises, and underserved businesses that can perform work on transportation-related projects. As of the end of 2023, the Capacity Building Mentorship Program had served a total of 74 participants: 45% Black, 18% Hispanic, 14% Asian, 11% white, 3% Native American, and 11% whose demographic data wasn't available.

Equity in Infrastructure Pledge

On Aug. 29, Sound Transit signed the Equity in Infrastructure Pledge, joining a national coalition of public agencies and private-sector partners dedicated to building generational wealth and reducing the racial wealth gap by maximizing opportunities for historically underutilized businesses, or HUBs. Other local EIP signatories included the City of Seattle, Community Transit, King County, Port of Seattle, and Hill International.

HUBs include firms formally designated as DBEs, Minority and Women-Owned Business Enterprises, and Small Business Enterprises, as well as any other business classification used locally in the United States intended to boost the participation of otherwise underutilized firms.

The EIP is funded in part by the Infrastructure Investment and Jobs Act. It advances President Biden's Justice40 Initiative and Executive Order 13985 on Advancing Racial Equity and Support for Underserved Communities.



Sound Transit, City of Seattle, Community Transit, King County, Port of Seattle, Hill International, and other regional partners sign the Equity in Infrastructure Pledge on Aug. 29, 2024 at Seattle's historic Union Station.

Sound Transit's pledge will bolster support for this vitally important work by:

- Creating more prime, joint venture, and equity contracting opportunities for HUBs.
- Increasing the number, size, and proportion of contracting opportunities going to HUBs overall, and more specifically as prime contractors.
- Streamlining contract administration with HUBs to centralize certification, improve payment time, and standardize transparent data collection.
- Increasing the amount and type of financing available to HUBs aiming to meet infrastructure contracts by working with private and public partners.
- Expanding the number of signatories to the pledge.

Transit-oriented development and affordable housing

As we strengthen regional connections and people rely less on cars, transit-oriented development around station areas helps neighborhoods thrive. TOD creates retail space, restaurants, offices, community spaces and, most importantly, thousands of urgently needed new affordable housing units across the region.

Sound Transit partners with private and nonprofit developers to build TOD projects on property we no longer need for transit construction. We work with communities as we develop these projects, from what type of housing people need to the kinds of businesses and services they want near transit.

Sound Transit's TOD program is empowered by the voter-approved ST3 plan to create diverse, vibrant, and mixed-income communities around transit. To achieve these outcomes, Sound Transit offers surplus property for the development of affordable housing in accordance with the 80/80/80 policy, a Washington statute that requires the agency to offer at least 80% of surplus property that is suitable for housing to qualified entities to develop housing, at least 80% of which is affordable to families at 80% of area median income or less.

Figure 4: Transit-oriented development projects across the ST District



To date, 3,471 housing units (2,671 of which are affordable units) either have been built, are under construction, have been awarded, or are in negotiation with development partners. In 2024, 134 affordable homes and 277,000 sq. ft. of commercial space are under construction, including:

- 130 affordable rental homes and 11,000 sq. ft. of office space located at Angle Lake Station in SeaTac.
- 4 affordable homes for purchase located near Columbia City Station in Seattle.
- 266,000 sq. ft. of office and retail space at the U District Station in Seattle.

Additionally, 234 affordable rental homes are expected to start construction in late 2024 near Spring District Station in Bellevue. Specific TOD projects are actively underway associated with other ST2 projects, and the agency is in early planning and evaluation of TOD opportunities on ST3 projects.

Potential joint development projects – TOD that is typically built above or integrated with transit facilities – have been identified at numerous stations on the West Seattle Link Extension and Ballard Link Extension, as well as deferred park-and-ride garages on other ST3 projects. In 2024, the agency is advancing design of potential joint development above underground Link stations and engaging the development industry for input on design and delivery of those projects.

Sustainability

As part of Sound Transit's commitment to sustainability and innovation, all major capital projects at the megaproject or corridor level require Envision certification. This internationally recognized rating system requires an integrated design process focused on environmental, social, and economic sustainability. As a result, Envision certification enables the planning, design, and delivery of sustainable, resilient, and equitable civil infrastructure projects.

Projects earn credits across a number of categories to earn Envision certification. While the Envision program does not specify prerequisites, Sound Transit's design requirements go above and beyond by specifying what credits a project needs to achieve and the performance level expected for achievement.

This approach has proven effective. In 2022, the Downtown Redmond Link Extension became the first transit project in the Pacific Northwest — and only the ninth transportation project in the nation — to earn Envision Platinum certification. In April 2024, the Federal Way Link Extension also achieved a Platinum rating.

Envision certification encompasses large infrastructure projects and is compatible with building-specific Leadership in Energy and Environmental Design (LEED) certification. Sound Transit has multiple LEED-certified facilities within each corridor/project that we are certifying to Envision standards. The most recent design standards require LEED for Transit at the Gold level for all stations within an Envision corridor.

Sound Transit's most recent LEED certification was in June 2024, when the Lynnwood Transit Center earned LEED Gold status. We expect the NE 130th Street Infill Station to achieve LEED Silver in 2026, with many more certifications in the works.

In addition to Envision and LEED certifications, Sound Transit is an industry leader in integrating climate resiliency into project design. Well before any federal regulation, Sound Transit required each

project to evaluate how climate change affects the resiliency of project infrastructure and operations. Additionally, the agency has instituted specific design criteria to ensure that infrastructure can withstand increasing heat events, localized flooding, and sea level rise into our transit projects.

And on the operations side, we are progressing toward the goal of fully carbon-free fleets by 2050; the Stride bus rapid transit program will launch with a fully zero-emissions service, and procurement for those vehicles is currently underway.

Community and youth engagement

Sound Transit's Capital Program Engagement and System Engagement teams build and cultivate relationships with communities across the region. In total, we communicate with more than 500,000 email and SMS subscribers, plus thousands more via social media, in-person and online open houses and meetings, and door-to-door direct engagement.

In 2023 and the first quarter of 2024, capital project engagement teams hosted more than 40 public meetings and info sessions and interacted with more than 21,000 district residents at 84 local fairs and festivals. More than 63,000 people have opted in to Sound Transit's contact list to follow and help plan system expansion projects across the region.

Public engagement also plays a critical role relating to overall operations and ridership, safety (particularly around new rail activations and at-grade crossings), service planning, and transit-oriented development. ST's System Engagement is integral to the transition to operations for our Link light rail extensions. Planning bus service restructures, engagement for living near transit, and preparing communities for new transformative infrastructure in their neighborhoods is crucial to a successful rail activation.

The System Engagement team also includes the equitable engagement center of expertise, which designs and manages systemwide program frameworks to support our engagement with underrepresented communities and individuals. This team is developing guidelines for compensating communities for their time, managing relationships with community-based organizations, engaging riders and residents with limited English proficiency, and implementing Sound Transit's Equitable Engagement Toolkit.



The Free Youth Transit Pass is just like any other ORCA card, usable on all modes of public transportation in the Seattle-Tacoma metro area.

Engaging the next generation of transit riders who will inherit the system we're building and operating today is also a key priority for Sound Transit. In addition to facilitating youth participation on system and capital project outreach, we partner directly with dozens of schools across the region to reach children and youth ages 3 to 21. Youth engagement includes subjects such as Sound Transit basics (current and future service and modes), safety around trains and tracks, and how to ride with a Free Youth Transit Pass. Based on ages and schools, we also often customize engagement activities to include subjects like career planning (design, engineering, construction, and other transit-related opportunities), transit planning and Board decision-making, accessibility, sustainability, and more.

In December 2023, ST partnered with SDOT on its inaugural Youth Transportation Summit, designed to help embed youth feedback into the development of the new Seattle Transportation Plan. We're beginning preparations for a similar ST-led event in 2025.

ST is also the proud sponsor of Senior Design Projects from Seattle University's College of Science and Engineering for eight years and counting. Over the course of the program, we've worked with around 40 STEM students to solve all kinds of real-world engineering problems. Examples of projects from previous years include research on wave buoy instruments to gather marine data on Lake Washington and upgrading environmental monitoring systems in critical server rooms. Sponsorship of Seattle University's Senior Design Projects provides great opportunities for ST staff to continually innovate and connect with the next generation of engineers.

System expansion

We evaluate program performance as projects progress through the project development process, from initiation through to a Board baselining action that sets the construction schedule and budget, including staffing and other associated costs. Through the environmental review process, the Board reviews alternatives, identifies the preferred alternative and other alternatives to study, and selects the project to be built.

Since the 2023 Annual Program Review, projects in planning and construction have continued to advance while navigating effects from scope changes, unforeseen events, and challenges from limited labor, along with construction quality issues the agency continues to navigate.

Projects in planning

The planning phase is from initiation through environmental review, alternatives analysis, and selecting the project to be built. As projects progress toward construction, cost and schedule are monitored for risks and potential solutions. The Board then takes a baselining action to set the project's budget and schedule for the final design, construction, and testing/activation portions of the project.

The section below outlines each category of planning work, along with broad updates since the last annual review. For project-specific updates, refer to the project status sheets later in this report.

Environmental

As required by state and federal law, Sound Transit evaluates potential effects on the built and natural environment associated with alternatives identified by the Board. "Environmental review" refers to this process to develop, review, and evaluate project alternatives, resulting in publication of Environmental Impact Statements or other environmental review documentation. Alternatives are refined until the Board selects the project to be built.

Several projects are in the environmental review phase, including the West Seattle, Ballard, Everett, and Tacoma Dome Link extensions, along with OMF North and OMF South. Since the last annual review, more than 12 environmental documents are in development for planning projects. This is a historic high for Sound Transit and for our local, state, and federal partners, including the FTA Region X.

Permitting

Sound Transit acquires permits from local jurisdictions, including land use approvals, noise variances, storm water discharge, effects on wetlands, and many others. A light rail project requires separate permits from each jurisdiction it travels through. Many of our projects therefore require coordination with, and permits/approvals from, Tribes and federal, state, and local agencies in the final design/construction phase. Projects in planning establish permitting frameworks to help them advance as efficiently as possible.

Property acquisition

Major transportation projects often require purchasing properties and easements to ensure projects have the necessary space for the facilities and infrastructure that are scoped. As we reported in last year's Annual Program Review, property acquisition has generally not begun for projects that have not completed environmental review.

However, because increasing property and right-of-way costs are a substantial risk, and as discussed with the Board, we are exploring opportunities for potential early acquisition of critical parcels:

- We've advanced early acquisitions for the Ballard, West Seattle, and Everett Link extensions, and for OMF South.
- We're assessing additional early acquisition opportunities for the Ballard, Tacoma Dome, and Everett Link extensions, along with early title analysis and rights of entry.

Sound Transit's ability to perform early acquisitions is subject to environmental limitations for federally funded projects and requires Sound Transit Board and Federal Transit Administration approval.

Consistent with last year's review, real property costs have started to cool, but are still high. As a result, increased real estate costs are likely to continue affecting projects.

Agreements

Third-party agreements are written contracts detailing the understanding between the agency and other jurisdictions. Most agreements require approval by the Board and require lengthy, detailed negotiations to reach consensus between Sound Transit and the other entity. In the past year, the Board has approved numerous third-party agreements for projects in planning, such as:

- The Ballard and West Seattle Link extensions executed two new task orders with the City of Seattle for project administration to support preliminary engineering and permit streamlining.
- The Everett Link Extension executed Project Administration Agreements with Snohomish County and the cities of Everett and Lynnwood.

Establishing third-party agreements remains a central focus and could prove a detriment to project schedules where it's difficult to reach a consensus.

Delayed parking

The Board's 2021 realignment action deferred certain ST3 parking projects until after the associated Link or Stride project opens for passenger service. Delaying parking helps spread project costs over time and makes the transit project more affordable by helping Sound Transit issue less debt during the period when the Financial Plan is most constrained.

- Sound Transit's Office of Planning and Integration is leading Board-directed work to "identify
 opportunities and make recommendations to deliver flexible, innovative, and affordable methods to
 get people to transit stations where parking has been delayed."
- Specifically, the realignment action delayed parking for the Everett and Tacoma Dome Link extensions and Stride. Since the last annual review, Stride projects have the following updates:
 - Stride BRT I-405: Parking at South Renton Transit Center and NE 44th is delayed until 2034 and at Totem Lake/Kingsgate until 2035. When the Board baselined the Stride program in July 2023, they also identified an amount for I-405 delayed parking, and the 2024 budget established a new project for those delayed parking investments. In addition, staff are coordinating with the City of Renton on a potential opportunity to advance delayed parking at NE 44th.
 - Stride BRT SR 522: Parking in Kenmore and Bothell is delayed until 2034. Parking in Lake Forest Park is delayed until 2044. When the Board baselined the Stride program in July 2023, they also identified an amount for SR 522 delayed parking, and the 2024 budget established a new project for those delayed parking investments.

Projects in construction

Since our last annual review, Sound Transit has opened three Link projects within 12 months.

Project openings

- The Hilltop Tacoma Link Extension opened Sept. 16, 2023. The project extended the existing T Line from downtown Tacoma to the Hilltop neighborhood. The extension travels at grade along Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr. Way. Project construction included seven new stations, additional signals, overhead catenary systems, traction power, and communications infrastructure. The OMF was expanded to support the procurement of five new light rail vehicles. Staff are completing work on open items identified during pre-revenue service and evaluating the contractor's request for change. Refer to the Hilltop Tacoma Link Extension project status sheet for more information.
- The initial segment of the 2 Line ("East Link Starter Line") opened April 27. With eight stations and 6.6 miles of track, this was the largest opening in a single day since Link's historic first trip in July 2009; this stretch is roughly the length of University Link and Northgate Link combined. Originally scheduled to open in June 2023 all the way from Redmond Technology to Northgate, the East Link project has required major repair work along the I-90 portion of the route, delaying the full 2 Line opening by two years. The remaining 7 miles of track and two stations to complete the full 2 Line is expected to open in late 2025.

The Lynnwood Link Extension opened Aug. 30. Most recently, Snohomish County was introduced to light rail by way of four new 1 Line stations: Shoreline South/148th, Shoreline North/185th, Mountlake Terrace, and Lynnwood City Center.

Remaining projects in construction

The highlights of our major projects in construction shown below. Refer to project status sheets for details.

- East Link Extension work along the I-90 corridor is progressing toward an end of 2025 opening.
- The Downtown Redmond Link Extension is on track to open in spring 2025. The project began Systems Integration Testing in April.
- The Federal Way Link Extension is on track to open in 2026, with advancements in integrated construction and completing the long-span bridge known as Structure C. The new Bus Loop at the Federal Way Downtown Station is expected to open in spring 2025.

During the construction phase, project teams manage risks and potential solutions to the baseline cost and schedule. Decisions that may affect the project's overall scope, schedule, or budget will be elevated to the CEO, and to the Board when necessary, to understand the risks and evaluate tradeoffs.

As projects in construction continue to advance, staff are focusing on resources needed for opening each line. See Activation work: On our way to delivering new service below for more details.

Project cost estimates and schedules

Projects in planning

Projects in planning (pre-baseline) progress over time as we advance environmental review, evaluate the impacts of each alternative, and develop supporting engineering information. Existing site conditions, findings from field investigations, required environmental mitigation from permitting agencies and other AHJs, and input from the community all influence design development.

As the design of each project proceeds, we develop project cost estimates at key phases of the process. These emerging project cost estimates may pose a long-term affordability challenge for the agency. In light of this, we are looking ahead to anticipate how estimates might evolve given the information being collected by the project teams, along with cost drivers. Mitigation strategies are discussed in the system expansion program performance and the financial capacity "What we're doing about it" sections.

Table 2 below compares the fall 2024 Financial Plan values to the spring 2023 Financial Plan values for projects in planning. This table also compares current forecasted in-service dates to the forecasted inservice dates from the 2023 Annual Program Review. The financial plan variances are as follows:

- OMF South's value increased in this update due to the transfer of guideway costs from the Tacoma Dome Link Extension project and costs reallocated from the Light Rail Support Facilities fund for a test track and larger truck overhaul facility.
- As such, Tacoma Dome Link Extension's value decreased in this update due to the transfer of guideway costs to OMF South.

 The Series 3 light rail vehicles project value decreased by \$78M in this update due to the transferred cost of 10 LRVs to the Series 2 LRV project, as per R2023-35.

Table 2 also includes a cost trend column. The cost trend is a measure of how we anticipate the estimated cost to change due to factors such as cost drivers and information being gathered by the design team as the emerging cost estimates are received at the key phases of the project design.

- Projects with costs trending near the Finance Plan value show a green circle (
).
- Projects with costs trending higher than the 2024 Finance Plan value show a red diamond (◆). Effort is underway to develop a workplan for the programmatic and project level opportunities to reduce costs in accordance with Motion No. M2024-59.

These forward-looking measures are a catalyst for early actions and strategies throughout the design process. We will keep the Board informed as we receive and validate new cost estimates.

Table 2: Projects in planning

Projects in Planning	Financial Plan Value 2024\$ in millions		Financial Plan change from 2023		Cost Trend	Forecasted Service Date		Change from 2023
Name	2023 BAPR	2024 BAPR	2024\$	%		2023 BAPR	2024 BAPR	Years
Ballard Link Extension	11,363	11,363	-	-	•	2039	2039	-
Boeing Access Road Infill Station	267	267	-	-	•	2031	2031	-
DuPont Sounder Extension	480	480	-	-		2045	2045	-
Everett Link Extension	6,242	6,242	-	-	•	2037	2037	-
Everett Link Extension Parking	154	154	-	-		2046	2046	-
Graham Street Infill Station	118	118	-	-	•	2031	2031	-
North Corridor Maintenance of Way	58	58	-	-		2027	2027	-
Operations & Maintenance Facility North	1,539	1,539	-	-		2034	2034	-
Operations & Maintenance Facility South	1,506	1,967	461	31%		2029	2029	-
Series 3 Light Rail Vehicles	2,140	2,062	(78)	-4%		2035	2035	-
Sounder South Capacity Expansion	1,374	1,374	-	-		2046	2046	-
Tacoma Dome Link Extension	4,729	4,419	(310)	-7%	•	2035	2035	-
Tacoma Dome Link Extension Parking	151	151	-	-		2038	2038	-
Tacoma Dome Station Access & Parking Improvements	19	19	-	-		2032	2032	-
West Seattle Link Extension	3,999	3,999	-	-		2032	2032	-

Projects in construction

Several projects in construction have estimates at completion that differ from their authorized allocations. In some cases, these are cost savings that may decrease as the project approaches completion, while some are anticipating cost overruns, as shown in Table 3.

- We expect that claims on the East Link Extension will force the project to exceed its budget.
- While the Hilltop Tacoma Link Extension is now in revenue service, we are in the process of addressing a claim. This combined with other closeout work will likely exceed the remaining contingency.
- The SR 522/NE 145th Stride BRT project is forecast slightly above budget based on 100% design cost estimates indicating that market conditions/construction costs are increasing more quickly than staff anticipated when the project budget was baselined in July 2023.

The cost trend column in Table 3 below shows the cost trend of estimate at completion (EAC) compared to the authorized allocation. It also considers potential claims, as noted above for two projects.

- Projects with an EAC less than the authorized allocation show a green circle (
).
- Projects with an EAC less than 5% greater than authorized allocation show a yellow triangle (△).
- Projects with an EAC more than 5% greater than the authorized allocation show a red diamond (♦).

Regarding revenue service dates, the table below notes schedule shifts since the 2023 Annual Program Review. These can arise in two ways:

- 1. As systems integration testing is initiated and the activation phase approaches, we are able to confirm with more certainty the forecasted in-service date. Since the 2023 Annual Program Review, we have refined dates in this manner for the following projects: Hilltop Tacoma Link Extension, East Link Starter Line and Lynnwood Link Extension (all now open), and the Federal Way Link Extension, NE 130th Infill Station, and Sumner, Kent, and Auburn Station Parking & Access Improvements.
- 2. Schedules for a few projects shown have shifted for other reasons, as follows:
 - Bus Base North and Stride BRT projects: Schedules updated through baselining action in July 2023.
 - East Link Extension: Reconstruction of non-conforming work in the I-90 segment.
 - Series 2 LRV: Project schedule updated due to anticipated conditional acceptance of 152 LRVs by Q4 2025 and adding 10 additional LRVs to be conditionally accepted by Q1 2028.

Table 3: Projects in construction

Projects in Construction Costs, YOE\$ in		in Millions	Change Cost Trend				In-Service Date		
Name	Authorize Allocatio August 20	n	Estimate at Completion August 2024	,	OE\$	%		2023 BAPR	2024 BAPR
Bus Base North	\$	500	\$ 500		-	-		2026	Q4 2027
Downtown Redmond Link Extension	\$ 1,	530	\$ 1,143	\$	(387)	-25.3%		Spring 2025	Spring 2025
East Link Extension	\$ 3,	677	\$ 3,653	\$	(24)	-0.7%	•	Starter Line: Q2 2024	Starter Line: April 2024 East Link: 2025
Federal Way Link Extension	\$ 2,	452	\$ 2,384	\$	(68)	-2.8%		2025/2026	2026
Hilltop Tacoma Link Extension	\$	283	\$ 283		-	-	•	Q3 2023	September 2023
I-405 Stride BRT	\$ 1,	269	\$ 1,269		-	1		2028	S1 Line I-405 S: Q3 2028 S2 Line I-405 N: Q2 2029
Lakewood Station Access Improvements	\$	68	\$ 68		-	-		n/a	Q4 2030
Lynnwood Link Extension	\$ 2,	772	\$ 2,740	\$	(32)	-1.1%		Summer/Fall 2024	August 2024
NE 130th St. Infill Station	\$	240	\$ 225	\$	(15)	-6.4%		Summer 2026	Q2 2026
Series 2 Light Rail Vehicle Fleet Expansion*	\$	837	\$ 814	\$	(23)	-2.8%		2026	152 LRVs - Q4 2025 10 add'l LRVs - Q1 2028
South Tacoma Station Access Improvements	\$	70	\$ 70		-	-		n/a	Q4 2030
SR 522/NE 145th Street Stride BRT	\$	582	\$ 589	\$	7	1.3%		2027	Q2 2028
Sumner, Kent, Auburn Station Parking & Access Improvements	\$	360	\$ 335	\$	(25)	-6.9%		2027	Sumner: Q1 2026 Kent: Q2 2027 Auburn: Q1 2027

^{*} In the last year, Financial Plan Estimate was increased \$96M to accelerate 10 LRVs from the Series 3 Project.

Note: Negative values in this table reflect estimate at completion being lower than the authorized allocation **and constitute estimated cost savings**.

System expansion program performance: What we're doing about it

This report includes several potential solutions to the challenges listed herein. Specific to system expansion delivery, the agency has been focused on the following additional strategies:

- Identifying opportunities for early property acquisition as a tool to manage cost and schedule risks: Project teams are continuing to evaluate opportunities to acquire properties under the FTA's National Environmental Policy Act Documented Categorical Exclusion conditions for early acquisitions. Where feasible and with FTA approval, early acquisition provides a benefit to the estimated project cost and can support early utility relocations, materials procurement, and early construction.
- Researching options to better estimate and control construction material costs: A recent consultant-led effort shared ideas under evaluation. They span all facets of project delivery, including, for example, early procurement of materials and construction equipment, evaluating potential phasing for all ST projects; building and expanding the agency's contractor and vendor pools; and updating policies and standard practices for construction procurement. A number of these strategies echo recommendations by the Board's Technical Advisory Group and independent consultant, which staff have been following.
- Adopting progressive design-build project delivery method: The agency is adopting the application of progressive design-build as a delivery method where appropriate for project scope and complexity. We are developing contract documents to support this type of procurement. Progressive design-build enables critical engagement between the owner, the designer, and the

PROGRAM PERFORMANCE

contractor through collaboration during design, appropriate risk allocation to the contractor, and cost transparency.

- Using progressive design-build project delivery for OMF South: This project has undergone early value engineering and cost analysis, and the agency is employing progressive design-build delivery method. We are working with external subject matter experts to align project scope and complexity or risk to the appropriate delivery approach. This is essential to successfully continue to implement cost savings while ensuring quality and applying innovative constructability strategies to deliver the project on schedule.
- Considering options to include contract adjustment and escalation clauses for commodities that have had drastic changes in price: We aim to be ready to do this by early 2025 to apply to West Seattle Link Extension contract documents and other subsequent projects. Procurement documents would need to include this clause language. We are evaluating this approach with Series 3 LRVs as well.
- Recruiting and hiring executives with megaproject expertise to ensure project delivery oversight and accountability: New Deputy CEO for Megaproject Delivery Terri Mestas stepped into her role in late April and is focused on leadership toward becoming a world-class agency and owner of choice. She has begun that work by filling vacant leadership positions. Steve Cusick has accepted the role of Chief of Staff for the Capital Delivery Department. In addition, Brad Owen, Michael Morgan, and Manan Garg have been appointed as Executive Directors, each tasked with leading Capital Delivery Teams to provide guidance and empowerment to project staff.
- Implementing private-sector feedback to reduce process delays for change orders and contract closeouts: After receiving private-sector feedback and peer agency input, we launched strategic working groups to identify process pinch points, review current tools and systems, propose performance benchmarks, and evaluate training opportunities to partner with the Associated General Contractors of America on these agency objectives. We aim to have updated contract language and tools in place by no later than the Q1 2025 to support upcoming construction procurements.
- Improving internal agency governance, scope and cost controls, and budget decision-making to ensure more consistent application of standards and more efficient processes and resources: We are updating system expansion governance processes (such as the agency's internal Change Control Board and Phase Gate) to minimize scope and budget creep, while empowering project teams and therefore refocusing these bodies on the bigger picture of evaluating effects on the portfolio when things change. More specifically, the agency retired the Capital and Operations Change Control Board and revised it into the Executive Review Committee in July 2024 to discuss enterprise-wide issues. We are also updating and streamlining, as the Technical Advisory Group recommended internal project management requirements and processes.
 - In addition, while we are developing design standards, we have a cost-estimating consultant evaluating cost and constructability that will define the standards. Through this study, we are looking at past costs and current trends, and targeting areas of high cost and risk. We are accelerating this study so that these standards and approaches can be applied quickly to future projects.
- Presenting options to the Board at major project milestones to complete projects in planning within the current Financial Plan value, including incorporating strategic delivery methods, phasing options, and minimum operable segments.

PROGRAM PERFORMANCE

Service delivery projects

Agency projects that are not a part of the capital system expansion program have historically been referred to as "non-system expansion" work. In early 2024, the agency renamed these projects to "service delivery projects" to emphasize the importance of this body of work, which will be an ongoing need for the agency's long-term future. Service delivery projects involve construction, installation/removal, and/or renewal of physical assets in the operating realm.

The largest number of projects within the service delivery portfolio are categorized as "state of good repair." SOGR projects are aimed at keeping existing assets in a condition that meets or exceeds their expected useful life and minimizes service disruptions. Examples of SOGR work include small work projects, Link CCTV upgrades, and the Sounder and Link vehicle overhaul program.

As mentioned earlier, Sound Transit is in the process of working on a SOGR roadmap, which is designed to help us adopt a more data-driven approach to facilitate better asset renewal planning and prioritize critical asset reinvestment needs (see <u>Cost drivers</u> section for more information).

The Financial Plan assumes that service delivery projects are fully funded through 2046 for almost \$1.3B. Currently we have more than 247 active projects. As the system expands and the number and scope of these projects increase, we need more structure in place to administer and manage these projects.

Systemwide challenges

We consistently monitor a range of potential challenges and risks that could affect our work to more than double the region's transit system. This section outlines the top two issues staff are working to monitor, minimize, and solve to ensure safety and readiness of the entire system.

Light rail vehicle storage and effects on system operation

As mentioned in the cost drivers section, long-term storage needs for LRVs remain of a concern for the agency. To open the Lynnwood Link Extension with 8-minute peak period service, we are temporarily storing up to 36 LRVs overnight along the 1 Line because the connection to OMF East is not yet available and there is not enough storage capacity at OMF Central.

We are also analyzing options to better manage long-term capacity needs and crowding, focusing on improving efficiencies to reduce run times and fleet spare ratio, accelerate future LRV purchases, and increase LRV capacity.

We are addressing these issues with a two-pronged approach: (1) pursue the most promising efficiencies where planned peak service is tailored to demand (focusing on providing frequent service that addresses most forecasted crowding) and (2) remain flexible as new extensions open (i.e. be ready to advance additional vehicle procurement and add capacity at the new OMF South, including assessing options to expand other OMF locations) and explore alternate service patterns that might reduce vehicle needs.

PROGRAM PERFORMANCE

Following Board direction in April 2024, staff are:

- Updating long-term light rail service plans to continue to achieve anticipated levels over time through operating efficiencies.
- Updating the FTA-required Rail Fleet Management Plan.
- Highlighting capital project choices that affect fleet and service.
- Providing progress updates at least annually.

Activation work: On our way to delivering new service

We are actively managing programmatic risks within the next few years of extension openings, including overlapping activities from system expansion and service delivery, to ensure critical staff and resources are forecasted and secured in advance. The activation office continues to implement a formal lessons-learned program to analyze and apply critical takeaways from recent activations.

PROJECT STATUS SHEETS

PROJECT STATUS SHEETS

Project-specific details for each active ST2 and ST3 project are found in the status sheets or write-ups in the following section of this report. Projects in planning (pre-baselined) are presented first, followed by projects in construction (baselined).

For additional information and background on how these were developed, please refer to <u>Appendix D:</u> Guide to project status sheets.

BALLARD LINK EXTENSION



Scope

The Ballard Link Extension includes nine new stations and 7.7 miles of light rail from downtown Seattle to Ballard's Market Street. The completed extension will provide connections to dense residential and job centers in the Chinatown-International District, downtown Seattle, Interbay, and Ballard neighborhoods. A new downtown Seattle light rail tunnel will provide capacity for the entire regional system to operate more efficiently.

For more information on this project, visit www.soundtransit.org/BallardLink.

Forecasted in-service date

2039

Major Board milestones: Select project to be built: Q2 2026 Approval of project baseline: Q1 2028



Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$11,363M	\$11,363M	0%

Note: Amounts shown in 2024 dollars.

Key highlights

The Board identified the preferred alternative for the Ballard Link Extension in March 2023 and modified the preferred location for Denny Station in July 2023. The project team is advancing preliminary engineering for the preferred alternative and preparing a new Ballard Link Extension Draft Environmental Impact Statement that will include analysis of the preferred alternative, other refinements and alternatives identified in the Board actions, and all previous Ballard Link alternatives studied in the January 2022 West Seattle and Ballard Link Extensions Draft EIS.

Key highlights

In December 2023, the Board directed staff to assess the feasibility of a potential new alternative location for the South Lake Union Station. We shared the feasibility study findings with the Board this spring for their consideration and no action was taken to include the alternative in the Draft EIS.

The project team has continued to engage with partner and regulatory agencies, community and stakeholder groups, and property owners regarding areas of study, the environmental process, and next steps.

The project team hosted in-person workshops as part of the South Downtown Hub planning effort, in collaboration with the City of Seattle and King County in Union Station in February and July and did wraparound engagement to gather input on improving accessibility and the pedestrian realm throughout the South Downtown area. In addition, there were in-person information sessions in the Chinatown-International District in March and April to share Ballard Link Extension project information on the topic of equity as well as regional and local access.

Risks and opportunities

Cost and schedule: The complexity of tunneling through a mature urban environment poses potential cost and schedule risks.

Design and construction: Unforeseen design and/or construction challenges due to limited understanding of utilities, ground conditions, and building conditions could emerge as work progresses, causing additional cost and delay.

Environmental: Potential additional environmental process delays may further affect the schedule for completion of environmental documentation and design.

Market conditions: Project costs may increase more than the projected escalation and inflation rates as a result of general construction costs and real estate cost increases in the region.

Permitting: There's potential risk in processing multiple reviews/approvals with permitting authorities in a timely manner due to complex, lengthy processes and resource limitations. It's also possible that project delivery, contract packaging, and/or construction procurement decisions and processes could be delayed/modified. Also, market conditions could limit the number of potential bidders.

Right-of-way: Potential cost and schedule risks are associated with complexity of real estate acquisition processes.



Permitting

Sound Transit and the City of Seattle continued to streamline permitting for the Ballard Link Extension, completing the third draft West Seattle and Ballard Link Extensions permitting plan in June 2023.

Key progress/deliverables to date include:

- Agreement on draft concepts for City of Seattle code amendments.
- Permitting tools to support implementation of streamlined land use, street use, and Seattle Design Commission review processes.
- Proposed City of Seattle Design Guidelines, incorporating ST feedback, to guide Seattle Design Commission review.
- Continued collaboration toward shared understanding of station, transit integration, and street configuration and design direction.

We will complete the final Ballard permitting plan in 2026 to document the policy framework, processes, tools, and design concurrences needed to ensure streamlined permitting. Many elements of the Ballard plan will be consistent with the West Seattle plan, including the policy framework, key permitting processes, and tools. Other elements will be specific to the Ballard plan, including streamlined processes for design-build delivery and documentation of shared understanding on key planning and engineering design topics.

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Property acquisition

The project is still in the planning phase and has not started property acquisition.

We are pursuing opportunities for early acquisition of critical properties.

Early title analysis and rights of entry were started in 2023 and have continued through 2024.

The total number of properties required won't be known until after the Board selects the project to be built and a record of decision is issued.



Environmental

The Draft EIS published in January 2022 evaluated both the West Seattle and Ballard extensions together as one project. They were evaluated together in the Draft EIS because of their location, schedule, and review efficiencies for partner agencies.

In July 2022, the Board directed further studies be prepared for Ballard Link, to evaluate additional station options and other refinements.

Rather than delay environmental review completion for West Seattle Link, Sound Transit, in consultation with the Federal Transit Administration, decided to move forward under separate environmental reviews for each extension.



Agreements

Agreements being developed: As design and environmental review advances, we'll determine what other agreements the agency may need to develop.

Executed agreements: Partnering Agreement with Seattle. Project Administration Agreement with Seattle. Partnering, service, and/or administration agreements with other planning partners.

BOEING ACCESS ROAD INFILL STATION



Scope

This project adds a new elevated light rail station to the existing 1 Line in the vicinity of S Boeing Access Rd, E Marginal

Way S, and I-5 in Tukwila.

The project addresses a 5.5-mile access gap between the existing Rainier Beach and Tukwila International Boulevard stations and increases access to the Tukwila and Duwamish manufacturing and industrial centers, as well as neighborhoods in north Tukwila and south Seattle.

The project also includes a 300-stall surface parking lot and supports a flexible approach to rider access, including improvements to pedestrian, bicycle, and bus facilities.

For more information on this project, visit www.soundtransit.org/BoeingAccessLink.

Forecasted in-service date

2031

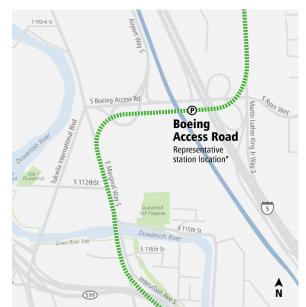
Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$267M	\$267M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones:

Identify Preferred Alternative: Q4 2024 Select project to be built: Q4 2025 Approval of project baseline: Q2 2027



Key highlights

In November 2023, the Board authorized a contract with Kimley-Horn & Associates, Inc., to provide project development services for the Graham Street Station and Boeing Access Road Station projects. Since then, staff have conducted the alternatives analysis and coordinated with planning partners and Tribe(s). Public engagement activities, including online and in-person open houses, briefings, and tabling events, were conducted from March through September 2024. Staff will brief the Board on a Preferred Alternative in Q4 2024.

Risks and opportunities

Cost: Third-party, stakeholder, or internal Sound Transit scope changes could lead to increased costs. If desired improvements beyond ST3 scope are included, the costs may exceed the Financial Plan budget.

Schedule: The ST3 schedule is aggressive and may not reflect the complexity associated with constructing a new station along the in-service 1 Line. Third-party, stakeholder, or internal Sound Transit scope changes could lead to delays in the schedule while reaching concurrence.



Permitting

Permitting needs and requirements will be identified as the project progresses.



Property acquisition

The project is still in the planning phase, and property acquisition has not yet begun. Early title analysis and rights-of-entry work may begin in Q4 2024. The total number of properties required won't be known until after the Board selects the project to be built and a record of decision is issued.



Agreements

As further design and environmental review progresses, we will determine what other agreements may need to be developed.



Environmental

This station was included in the 1999 Central Link Final Environmental Impact Statement. In 2001, the Board deferred it when identifying the preferred Initial Segment for Central Link (Resolution R2001-16). We'll complete additional environmental review as part of project development, beginning in fall 2024.

DUPONT SOUNDER EXTENSION



Scope

This project will extend the Sounder S Line south from Lakewood to DuPont, adding new stations at Tillicum and DuPont, both with parking and track and signal improvements. The new stations will provide service to Joint Base Lewis-McChord and to residents and businesses in south Pierce County. Staff are currently planning only the second mainline track and signal improvements portions of the project. Station area planning is scheduled to begin in 2034.

For more information on this project, visit www.soundtransit.org/DupontSounder.

Forecasted in-service date

2045

Project Financial Plan value

Spri	ng 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
	\$480M	\$480M	0%

Note: Amounts shown in 2024 dollars.

Key highlights

The Federal Railroad Administration awarded Sound Transit a \$10M Consolidated Rail Infrastructure & Safety Investments grant for preliminary engineering and environmental review of potential track and signal improvements only. Station area planning would begin in 2034.

The National Environmental Policy Act Categorical Exclusion environmental review is in progress, and conceptual engineering design has been initiated.

Sound Transit and the Federal Railroad Administration meet monthly.

Major Board milestone:

Approval of project baseline: Q3 2041



Risks and opportunities

Engineering and environmental: The track and signal components of the project are in early conceptual engineering and environmental review, and we'll identify risks related to both as the project design progresses.

Opportunities: Quarterly risk management reviews provide opportunities for identifying early risks and mitigation.



Permitting

Permits are needed for a biological assessment for the track and signal improvements from Lakewood south to DuPont in 2024. The biological assessment will be submitted to the U.S. Fish and Wildlife Service and National Marine Fisheries Service in late 2024 or early 2025. Planned track and signal improvements would be constructed within Sound Transit's railroad right-of-way, not requiring permits from local jurisdictions.



Property acquisition

Temporary construction easements would be needed for construction of track and signal improvements. No property acquisitions have been identified yet.



Environmental

We continue to coordinate with the Federal Railroad Administration and anticipate beginning environmental review under National Environmental Policy Act for track and signal improvements between Lakewood and DuPont in fall 2024.



Agreements

Agreements needed: Sound Transit will need to obtain concurrence from WSDOT, Amtrak, BNSF Railway, and Tacoma Rail on the 30% preliminary engineering design.

As further design and environmental review develops, we will determine what other agreements may be needed.

EVERETT LINK EXTENSION



Scope

This project extends light rail 16 miles north from Lynnwood City Center to Everett Station.

The project includes six new stations at West Alderwood, Ash Way, Mariner, Southwest Everett Industrial Center, SR 526/Evergreen, and Everett. It also includes one provisional station at SR 99/Airport Road.

Everett Link Extension is being planned concurrently with Operations and Maintenance Facility North, including a combined Environmental Impact Statement.

For more information on this project, visit www.soundtransit.org/EverettLink.

Forecasted in-service dates

To Southwest Everett Industrial Center: 2037

To Everett Station: 2037; 2041 affordable schedule

Parking (Mariner and Everett): 2046

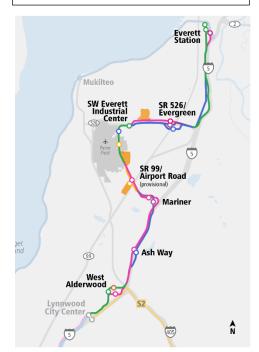
Project Financial Plan value

	Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
Everett Link Extension	\$6,242M	\$6,242M	0%
Everett Link parking	\$154M	\$154M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones:

Begin Preliminary Engineering: Q2 2026 Select project to be built: Q2 2027 Approval of project baseline: Q4 2028



Key highlights

Coordination continues with Tribes and partner agencies including the City of Lynnwood, the City of Everett, Snohomish County, Community Transit, Puget Sound Regional Council, and WSDOT regarding conceptual engineering and the Draft EIS process.

Risks and opportunities

Unknowns: Engineering challenges over lengthy and varied geography are yet to be investigated, given limited design at this time. Right-of-way needs are also unknown in early design. There could be potential effects from higher real estate and relocation costs and potential complex relocations.

Cost: A Quantitative Risk Assessment conducted in Q2 2023 showed comparative cost estimates trending higher than the current Financial Plan value.

Design: Operational modeling conducted to account for train turnback time and desired service frequencies resulted in additional infrastructure needs and cost.

Schedule: No end-to-end preferred alternative for the entire route/all stations leads to schedule risk related to proceeding with advanced conceptual engineering.



Permitting

Completed early Tribal and regulatory agency coordination on the project's effects on wetlands and streams. This year we began preparing preliminary permitting plans and conducting fieldwork to verify affected wetlands and streams. Additional permitting needs and requirements will be identified as the project progresses.



Agreements

Executed agreements: Project Administration Agreements with the City of Everett, Snohomish County, and the City of Lynnwood. Archaeology and Historic Preservation Agreement with Washington State Historic Preservation Officer and Dept of Archaeology and Historic Preservation. Multi-Jurisdictional Partnering Agreement with the City of Everett, Snohomish County, the City of Lynnwood, and Community Transit. Funding Agreement for Contribution to the Construction of the Everett Station Park & Ride Expansion Project.

As further design and environmental review progresses, staff will determine what other agreements may be needed.



Property acquisition

The Federal Transit Administration granted a categorical exclusion for early acquisition of one property at the beginning of 2023. Negotiations for a portion of the property are underway. Staff will review potential opportunities for early acquisitions in the future.



Environmental

The Board identified alternatives to study in a Draft Environmental Impact Statement in June 2023. Conceptual design and environmental technical analysis are underway for both EVLE and OMF North in one Draft EIS.

In order for the FTA to meet their newly required two-year timeline to complete an EIS (Notice of Intent to Record of Decision), the project is proceeding under State Environmental Policy Act only at this time. A National Environmental Policy Act Notice of Intent will be issued in mid-2025. The current intent is to issue one combined NEPA/SEPA Draft EIS.



Delayed parking

Parking at Mariner Station and Everett Station is delayed until 2046. When light rail service begins, riders will be able to access Link via other improved modes of access as well as via existing parking facilities at Everett, Ash Way, and Mariner stations.

GRAHAM STREET INFILL STATION



Scope

This project will add a new at-grade light rail station to the existing 1 Line on Martin Luther King Jr. Way S between S Graham St and S Morgan St in Seattle. It will bridge the 1.6-mile access gap between Columbia City and Othello stations. It will also increase light rail access in the growing Hillman City, Brighton, New Holly, and Beacon Hill neighborhoods. The work also includes rider accessibility improvements for pedestrians, bicycles, and buses.

For more information on this project, visit www.soundtransit.org/GrahamStLink.

Forecasted in-service date

2031

Project Financial Plan value

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S Raymond St	S	awe S	,			S Raymond S	
S 10	35th Ave S		artin Lu	Brighton Playfield		S Spencer Si	
32nd Ave S			Martin Luther King Jr Way S		42nd Ave S	S Graham Si	
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32nd Ave S		S	S		S		SH
	Holly Park D	37th Ave S	38th Ave S	N	42nd Ave S	S Willow St	

Major Board milestones:

Identify Preferred Alternative: Q4 2024

Select project to be built: Q4 2025 Approval of project baseline: Q2 2027

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$118M	\$118M	0%

Note: Amounts shown in 2024 dollars.

Key highlights

In November 2023, the Board authorized a contract with Kimley-Horn & Associates, Inc., to provide project development services for the Graham Street Station and Boeing Access Road Station projects. Since then, staff have conducted the alternatives analysis and coordinated with planning partners and Tribe(s). Public engagement activities, including online and in-person open houses, briefings, and tabling events, were conducted from March through September 2024. Staff are expected to brief the Board on a Preferred Alternative in Q4 2024.

Risks and opportunities

Cost: Additional costs may arise due to the complexity of adding a station along the in-service 1 Line. Third-party, stakeholder, or internal Sound Transit scope changes could lead to increased costs, and if desired improvements beyond ST3's scope are included, the costs may exceed the Financial Plan budget.

Schedule: The ST3 schedule is aggressive and may not reflect the complexity associated with constructing a new station along the in-service 1 Line. Third-party, stakeholder, or internal Sound Transit scope changes could lead to delays in the schedule while reaching concurrence.



Permitting

Permitting needs and requirements will be identified as the project progresses.



Property acquisition

The project is still in the planning phase and has not started property acquisition. Early title analysis and rights-of-entry work may begin in Q4 2024. The total number of properties required won't be known until after the Board selects the project to be built and a record of decision is issued.



Agreements

As further design and environmental review progresses, we will determine what other agreements may need to be developed.



Environmental

This station was included in the 1999 Central Link Final Environmental Impact Statement and deferred in the 2000 Central Link Record of Decision. We'll complete additional environmental review as part of project development, beginning in fall 2024.

NORTH CORRIDOR MAINTENANCE OF WAY



Scope

This project will construct a maintenance facility to serve and support the Northgate, Lynnwood, and Ballard Link Extensions.

The site has a leased warehouse property that will undergo improvements to support a temporary facility serving near-term Lynnwood Link Extension operations until a permanent facility can be built. The leased site included an option for Sound Transit to purchase the property. Sound Transit elected to purchase the property and completed acquisition in Q2 2024.

Forecasted in-service date

Temporary facility: 2024 Permanent facility: 2027

Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$58M	\$58M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones:

Begin Preliminary Engineering: Q2 2025 Select project to be built: Q3 2026 Approval of project baseline: Q3 2026



Key highlights

As of September 2024, limited tenant improvements for the temporary facility were completed August to support Lynnwood Link operations. The full interim tenant imprivement in the existing facility are expected to be comepte in Q1 2025. To advance the permanent facility, the project team continues conceptual engineering, budgeting for work through preliminary engineering, and advancing toward the ultimate "project to be built" milestone. The team began developing a project estimate and final program for the permanent facility in 2024, and expect approval to award a progressive design-build contract in Q2 2025.

Risks and opportunities

Delay: Tenant improvements anticipated to support Lynnwood Link pre-revenue service have been delayed. To offset this changea phased delivery strategy has been implemented to allow partial use of the facility to support Lynnwood Link operations for the August 30 opening.

Permitting: Permits for the temporary facility are taking longer than expected and delayed the start of construction requiring limited ealry works be comepleted to faciliate use to support the Lynnwood Link opening. Work for the permanent facility has not yet started and expect to begin a design-build contractor procurement in 2025, at the earliest.



Permitting

Permitting needs and requirements will be identified as the project progresses.



Property acquisition

Authorization to acquire a single parcel required for the temporary facility was granted in mid-2023. Negotiations successfully concluded in Q1 2024, and the acquisition process concluded in Q2 2024.



Agreements

As further design and environmental review progresses, we will determine what other agreements may need to be developed.



Environmental

Once the programming and design for the permanent facility is further along, we will initiate environmental review under the State Environmental Policy Act and update the Title VI Facility Equity Analysis.

OPERATIONS & MAINTENANCE FACILITY NORTH



Scope

The OMF North will support overall system operation and have the capacity to receive, store, and service at least 152 light rail vehicles.

It will be strategically located along the Everett Link Extension and is being planned concurrently, including being addressed within one combined Environmental Impact Statement with Everett Link Extension.

For more information on this project, visit www.soundtransit.org/EverettLink.

Forecasted in-service date

2034

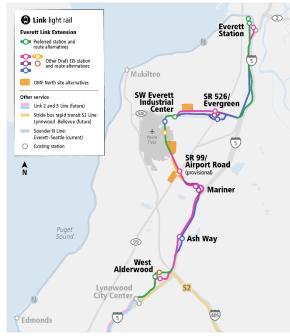
Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$1,539M	\$1,539M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones:

Begin Preliminary Engineering: Q2 2026 Select project to be built: Q2 2027 Approval of project baseline: Q4 2028



Key highlights

This project is currently in the Draft Environmental Impact Statement and conceptual engineering phase. In June 2023, the Board identified three OMF North site alternatives to move forward into the Draft EIS. The Board did not identify a preferred alternative for OMF North.

Coordination continues with Tribes and partner agencies, including the City of Lynnwood, the City of Everett, Snohomish County, Community Transit, Puget Sound Regional Council, and WSDOT regarding conceptual engineering and the Draft EIS process.

Risks and opportunities

Unknowns: Engineering challenges over lengthy and varied geography are yet to be investigated, given limited design at this time. Right-of-way needs are also unknown in early design. There could be potential effects from higher real estate and relocation costs and potential complex relocations.

Cost: A Quantitative Risk Assessment conducted in Q2 2023 showed comparative cost estimates trending higher than the current Financial Plan estimate.

Schedule: No preferred alternative for OMF North leads to some schedule risk related to proceeding with advanced conceptual engineering.



Permitting

We've completed early Tribal and regulatory agency coordination on the project's effects on wetlands and streams. We've begun preparing preliminary permitting plans and conducting fieldwork to verify affected wetlands and streams began. We'll identify additional permitting needs and requirements as the project progresses.



Property acquisition

The project is still in the planning phase and has not started property acquisition. We are exploring opportunities for early acquisition of critical properties.



Agreements

Executed agreements: Project Administration Agreements with the City of Everett, Snohomish County, and the City of Lynnwood. Multi-Jurisdictional Partnering Agreement with the City of Everett, Snohomish County, the City of Lynnwood, and Community Transit.

As further design and environmental review develops, we will determine what other agreements may need to be developed.



Environmental

The Board identified alternatives to study in a Draft Environmental Impact Statement in June 2023. Conceptual design and environmental technical analysis are underway for both EVLE and OMF North in one Draft EIS.

In order for the FTA to meet their newly required two-year timeline to complete an EIS (Notice of Intent to Record of Decision), the project is proceeding under State Environmental Policy Act only at this time. A National Environmental Policy Act Notice of Intent will be issued in mid-2025. The current intent is to issue one combined NEPA/SEPA Draft EIS.

OPERATIONS & MAINTENANCE FACILITY SOUTH



Scope

The Operations and Maintenance Facility South will be strategically located in the South Corridor and will store, maintain, and deploy a minimum of 144 light rail vehicles for daily service. The facility will receive, test, and commission new vehicles for supporting the Tacoma Dome and West Seattle Link Extensions, the Graham and Boeing Access Road infill stations, and the entire light rail system, including a Maintenance of Way facility.

For more information on this project, visit www.soundtransit.org/omfs.

Forecasted in-service date

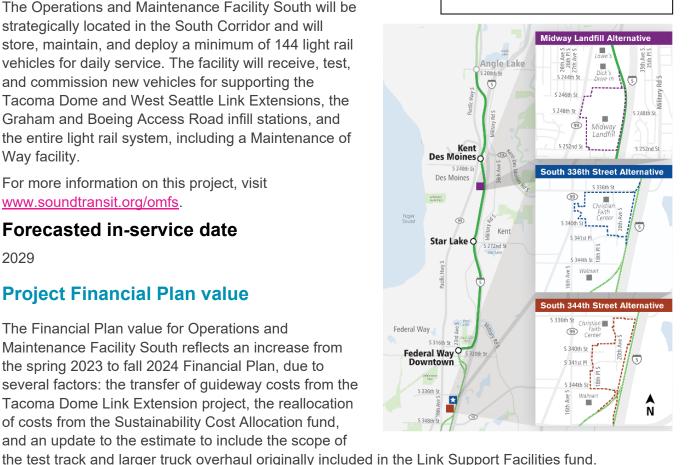
2029

Project Financial Plan value

The Financial Plan value for Operations and Maintenance Facility South reflects an increase from the spring 2023 to fall 2024 Financial Plan, due to several factors: the transfer of guideway costs from the Tacoma Dome Link Extension project, the reallocation of costs from the Sustainability Cost Allocation fund, and an update to the estimate to include the scope of

Major Board milestones:

Approval of project baseline: Q2 2027



Spring 2023 Financial Plan value Fall 2024 Financial Plan value Variance from spring 2023

\$1.967M

Note: Amounts shown in 2024 dollars.

\$1.506M

31%

Key highlights

In June 2024, the Board selected the South 336th Street site as the project to be built and future location of the OMF South facility and guideway. Subsequently, the record of decision (ROD) was signed by the FTA in August.

Also in June 2024, the Board took action to split the TDLE and OMF South projects for budgetary, planning, and reporting purposes.

The project team realized schedule recovery opportunities through accelerated NEPA Draft EIS publication in coordination with the FTA (culmulating in the ROD); Board approval for early design-build project management procurement; and Board approval of early acquisition of key parcels. We are also exploring additional schedule recovery opportunities, including continued environmental review streamlining and advancing design on early construction package opportunities.

Efforts to manage costs within the Financial Plan value continue. These efforts include a value management exercise resulting in cost reductions totaling \$200M+ with minimal effects on operations and structuring the forthcoming progressive design-build procurement to incentivize innovation and cost efficiency.

The project team is continuing to develop third-party and partnering agency agreements.

Risks and opportunities

Environmental permitting: Environmental permits and approvals would be required from federal, state, and local jurisdictions for effects on wetlands, streams, and buffers (known as ecosystem resources). An ecosystem mitigation plan acceptable to all parties may take longer to negotiate and/or cost more than anticipated.

City permitting: Necessary street vacation and code deviations could cause delays.

Site conditions: Unidentified utility conflicts, contaminated soil, or groundwater may be discovered during construction, which could increase cost and cause delays.

Property acquisition: Right-of-way cost may increase more than projected escalation rates as a result of property value increases in the region.

Schedule: Series 3 LRV project design and procurement of long-lead construction materials, along with the risks identified above, pose risks to project schedule.



Permitting

The preferred alternative will affect wetlands and streams. Staff are evaluating design refinements to avoid and minimize effects on wetlands and streams. Staff have secured rights of entry to several potential mitigation parcels and are identifying mitigation sites in Federal Way to compensate for these effects. In addition, mitigation credits will be purchased from the King County In-lieu Fee Program. Permits and approvals will be required from the U.S. Army Corps of Engineers, Washington Department of Fish and Wildlife, Washington State Department of Ecology, and the City of Federal Way, in coordination with Tribes. Consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service was completed in May 2024 but will be re-initiated if project design changes occur. We anticipate submitting a request for a Critical Areas Partial Exemption to the City of Federal Way, as well as submitting the Joint Aquatic Resources Permit Application for the OMF South project to the Corps of Engineers and Ecology in the fall 2024.



Agreements

Agreements being developed: Development Agreement with the City of Federal Way, Resource Conservation Area with Washington Department of Transportation, Utility Relocation Agreements with Zayo, CenturyLink, Puget Sound Energy, MCI Metro, and Comcast.



Property acquisition

The Board authorized early acquisition for two properties in Q3 2023. Negotiations are now underway.



Environmental

Working with the FTA, we issued a Final EIS in May 2024, and the FTA issued its record of decision in August 2024.

SERIES 3 LRV FLEET EXPANSION



Scope

Major Board milestones:

Approval of project baseline: Q1 2026

The Series 3 LRV project includes all work necessary to identify specifications, procure, manufacture, commission, and accept approximately 106 new light rail vehicles. Forecasted delivery will happen over a nine-year period, with an optional extension of the service to support the procurement of an additional 130 vehicles. (The LRV count in this report is based on assumed vehicle length of 95 feet).

The project will support future operations of the existing system and extensions in planning.

Project completion date

Conditional acceptance for 106 LRVs: 2035*

*Industry feedback on time needed for design optimization and car delivery suggests that conditional acceptance of 106 LRVs would realistically be completed in 2035 updated from 2032 based on this input. Staff will be seeking Board approval in early 2026 for this likely schedule shift.

Project Financial Plan value

Series 3 light rail vehicles Financial Plan value decreased in this fall update due to the transferred cost of ten LRVs to Series 2 LRV project as per R2023-35.

The Financial Plan includes \$2.1B for 236 Series 3 LRVs that are each 95 feet long (or 118 LRVs that are each 190 feet long) as of fall 2024. This estimate has not been fully updated to account for post-COVID market pressures in the transit vehicle industry. We expect the estimate to be 25-30% higher than currently shown in the Financial Plan.

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$2,140M	\$2,062M	-4%

Note: Amounts shown in 2024 dollars.

Key highlights

Sound Transit completed evaluation of Early Design Concept (EDC) submittals from five qualified car builders in Q3 2024. The EDC focused on assessing market interest and capability to design and manufacture new generation vehicles for Sound Transit that can increase passenger capacity, enhance passenger experience, and improve maintainability, with minimal need to modify Sound Transit's infrastructure.

Between Q4 2023 and Q3 2024, Sound Transit developed draft RFP materials for Series 3 LRVs and is expecting to release the draft for industry review in Q4 2024. The final RFP is expected to be published by Q1 2025. We also continue engaging the car builder industry to build understanding of

Key highlights

market conditions for designing and manufacturing new vehicles, to maintain the high level of car builder interest, and to ensure competition and fair pricing during procurement.

In August 2023, we presented a revised schedule to the Board as a part of a briefing on the assumptions of the engineering and inspection contract that we were pursuing at that time. This update included the new projection of May 2035 for conditional acceptance of the 106th LRV if the LRVs are 95 feet long (53rd LRV if the LRVs are 190 feet long).

Risks and opportunities

Delay: This revised delivery date is based on industry feedback on reasonable durations for the project's testing phase and includes float, which may cause schedule slippage.

Market conditions: Potential lack of car builders bidding for LRV procurement could cause the schedule to be pushed out.



Permitting

Permitting needs and requirements will be identified as the project progresses.



Agreements

As further design and environmental review progresses, we will determine what other agreements may need to be developed.



Property acquisition

We do not anticipate needing real property for this project.



Environmental

Environmental review for light rail system expansion (including operations and maintenance base capacity expansion to serve Series 3 LRVs) is underway via the OMF South and OMF North projects.

SOUNDER SOUTH CAPACITY EXPANSION



Scope

This project establishes a program of capital elements to enhance South Sounder capacity, service, and access.

Program elements may include platform extensions, track and signal upgrades, new trips (to be negotiated with BNSF), and other related infrastructure to facilitate additional capacity and access elements such as improvements for pedestrians, bicyclists, buses, and private vehicles prioritized consistent with Sound Transit's System Access Policy.

For more information on this project, visit www.soundtransit.org/sounder-capacity.

Forecasted in-service date

Platform extensions: 2036 Pierce County access: 2036

South King County access: 2041

Additional roundtrips*: 2046

*Potential new trips supported by easements from BNSF, track and signal improvements, and vehicle purchases.

Tacoma Tacoma Tacoma Payallup South Tacoma Puyallup Lakewood Tillicum DuPont N

Major Board milestone:

Approval of project baseline: Q4 2029

Seattle

Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$1,374M	\$1,374M	0%

Note: Amounts shown in 2024 dollars.

Key highlights

King Street Station Platform Area Improvements: Staff advanced conceptual engineering and initiated environmental review under the National Environmental Protection Act. We will complete a State Environmental Policy Act Checklist for the project as well. Online public open house and engagement continued through September 2024.

Sounder Strategic Plan: Completed in March 2020, the plan prioritized capacity expansion capital projects. The Plan was updated in May 2024 and staff presented key findings to the System

Key highlights

Expansion Committee in June 2024. The Board directed staff to discuss the potential for off-peak and weekend trips with the host railroad, Burlington Northern Santa Fe.

Sounder Rail Track and Signal Project in Tacoma: Staff initiated conceptual engineering and environmental review under NEPA.

Risks and opportunities

Opportunities: Conducting quarterly risk management sessions to identify potential risks and discuss mitigation opportunities.



Permitting

We will prepare a biological assessment for the track and signal improvements in Tacoma and south to DuPont in fall 2024. We expect to submit the assessment to the U.S. Fish and Wildlife Service and National Marine Fisheries Service in late 2024 or early 2025.



Property acquisition

Staff will determine whether any property interests are required for each project as project development advances.



Agreements

As further design and environmental review proceeds for the King Street Station Platform Area Improvement Project, we will determine what other agreements may need to be developed.

For the Sounder Rail Track & Signal Project, Sound Transit will need to obtain WSDOT, Amtrak, BNSF Railway, and Tacoma Rail concurrence on the preliminary engineering design.



Environmental

We initiated NEPA environmental review for the King Street Station Platform Area Improvements project in late 2023 with the FTA. Staff continued coordination with the Federal Railroad Administration for the Sounder Rail Track & Signal Project, and we anticipate beginning NEPA environmental review in fall 2024.

TACOMA DOME LINK EXTENSION



Scope

The Tacoma Dome Link Extension expands the regional light rail system approximately 10 miles south from Federal Way in

King County to Tacoma in Pierce County. TDLE will have a primarily elevated alignment and include four stations: one in South Federal Way, one in Fife, and two in the Tacoma area. The project also includes a rail-only fixed-span bridge crossing the Puyallup River and two parking facilities near the South Federal Way and Fife stations.

For more information on this project, visit www.soundtransit.org/TDLink.

Forecasted in-service date

Tacoma Dome Link: 2035

Parking at South Federal Way & Fife: 2038

Project Financial Plan value

In 2023, the Board identified additional alternative alignments in South Federal Way and station options in Fife to be studied in the Draft

Environmental Impact Statement, and staff subsequently revised the estimate. The Financial Plan value decreased in fall 2024 due to the transfer of a portion of the TDLE guideway, which will be delivered via the OMF South project.

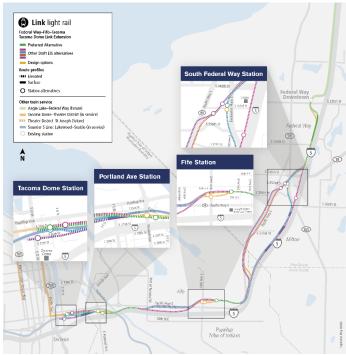
	Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
Tacoma Dome Link Extension	\$4,729M	\$4,419M	-7%
TDLE parking	\$151M	\$151M	0%

Note: Amounts shown in 2024 dollars.

Begin Preliminary Engineering - Q2 2025 Select project to be built – Q2 2027

Major Board Milestones:

Approval of project baseline - Q2 2028



Key highlights

In 2023, the Board identified an additional alignment and station alternatives in South Federal Way and additional station options in Fife to be studied in the Draft EIS. We continue to develop the Draft EIS in partnership with the Federal Transit Administration, including these additional alternatives/options.

In June 2024, the Board took action to split the TDLE and OMF South projects for budgetary, planning and reporting purposes.

We anticipate Draft EIS publication in late 2024 or early 2025. Staff also continue to coordinate with the Puyallup Tribe of Indians, local jurisdictions and other agencies.

Risks and opportunities

Design changes: Heightened risk of design changes or unanticipated mitigation associated with cultural and/or natural resources may increase project cost and extend schedule.

Design and construction: Potential design or construction challenges could emerge as work progresses and may increase cost or affect the schedule. These include crossing the Puyallup River, the potential for encountering archaeological resources, and unknown utilities.

Permitting: Potential permitting challenges and other necessary timely coordination/approvals with many permitting authorities may cause schedule delays. Environmental permits and approvals would be required from federal, Tribal, state, and five local jurisdictions addressing effects on wetlands, streams, and buffers (known as ecosystem resources). An ecosystem mitigation plan acceptable to all parties may take longer to negotiate and/or cost more than anticipated.



Permitting

The project will affect floodplains, shorelines, wetlands, and streams, including crossings of the Puyallup River and Hylebos Creek. The effects on wetlands and streams will require permits and approvals from Tribes, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Coast Guard, several state permit agencies, and five local municipalities. Sound Transit is continuing to coordinate with the Puyallup Tribe of Indians on the Puyallup River crossing. In 2025, staff will prepare a biological assessment report to assess effects on threatened and endangered species and evaluate potential mitigation strategies. Additional permits will be required for land use, master land use, including critical areas, right-ofway, road use and street work.



Property acquisition

Staff are considering potential opportunities for early acquisition of critical properties. One early acquisition in Fife was approved by the Board in March 2024.



Environmental

Design and analysis advanced on the additional alternatives identified by the Board in 2023. We are working with the FTA to publish the Draft EIS in late 2024 or early 2025. A 45- or 60-day comment period will follow issuance of the Draft EIS.



Delayed parking

Parking is delayed at Fife Station and South Federal Way Station until 2038. When Link light rail service begins, riders will be able to access it via improvements to other modes and existing transit parking at Tacoma Dome Station.



Agreements

Agreements being developed: Sound Transit and the sovereign nation of the Puyallup Tribe of Indians will jointly develop an intergovernmental agreement to advance construction on any Tribal properties. As further design and environmental review proceeds, agreements with local agencies, such as development agreements, may be needed. We anticipate transit way agreements with some local jurisdictions.

Executed agreements: Partnering Agreement and Project Administration Agreement with some local jurisdictions. Service agreements with WSDOT and Bonneville Power Administration.

TACOMA DOME STATION ACCESS & PARKING IMPROVEMENT



Scope

This project will provide a surface parking lot near Tacoma Dome Station with up to 300 parking stalls and/or non-motorized improvements to help riders access the transit hub. The goal of this project is to accommodate future demand for ridership on transit services by improving access to Tacoma Dome Station. This work is being developed in conjunction with the Tacoma Dome Link Extension to ensure complementary and coordinated investments.

For more information on this project, visit www.soundtransit.org/TDLink.

Forecasted in-service date

2032

Project Financial Plan value

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$19M	\$19M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones: Select project to be built: Q2 2026



Key highlights

The project team has identified preliminary sites for up to 300 parking stalls near Tacoma Dome Station (a current hub for Sounder, Link T Line, and bus connections; with future Link 1 Line service via the Tacoma Dome Link Extension).

In coordination with planning partners, TDLE staff also identified candidate non-motorized improvement projects to increase 1 Line access and create easy transfers between these transit modes. We will evaluate parking and non-motorized improvements against criteria established for the Station Access Allowance. We expect to open a comment period in Q3 2024 to seek feedback on these potential parking and non-motorized improvements. After the list of improvements is refined, we will complete State Environmental Policy Act environmental review and then proceed to the Board for consideration.

Risks and opportunities

Cost: Market forces and inflation pressures could increase the project cost. The desired project scope could exceed the Financial Plan budget.

Schedule: This project is scheduled to advance ahead of the Tacoma Dome Link Extension. TDLE has a target schedule service date of 2035. Changes to TDLE's schedule may in turn result in adjustments to this project's schedule.



Permitting

During the future design and environmental review phase, staff will identify any potential permits that may be required for the project.



Property acquisition

If relevant, acquisition would commence following completion of the environmental review and the Board's selection of the project to be built.



Environmental

Following the anticipated comment period in Q3 2024, the SEPA environmental review process is scheduled to begin in 2025.

WEST SEATTLE LINK EXTENSION



Scope

The West Seattle Link Extension includes 4.1 miles of light rail from SODO to West Seattle's Alaska Junction neighborhood with four new stations and a bridge across the Duwamish Waterway. The completed extension will provide connections to dense residential and job centers in the SODO, Delridge, and West Seattle neighborhoods.

For more information on this project, visit www.soundtransit.org/wslink.

Forecasted in-service date

2032

Project Financial Plan value

Updated estimates in support of the WSLE Final Environmental Impact Statement have been completed, and a draft preliminary engineering (30% design) estimate of the preferred alternative is currently in review. The latest estimates are above the current Financial Plan value. Cost growth is attributable to several factors: cost escalation and market price increases; design progression in certain areas of the corridor that affect construction costs, right-of-way needs, and environmental mitigation requirements; and several refinements in response to agency and community feedback.

Staff are continuing to evaluate estimates for effects of extraordinary market conditions and are exploring potential opportunities to reduce costs.

The Board approved a motion on Sept. 26, 2024, directing the agency to develop a workplan on the programmatic, financial, and project-level measures and opportunities we will pursue to improve the agency's financial situation and move WSLE through design to inform a financially sound project to be baselined, including timelines and scale of potential benefits for each measure, and whether each measure is WSLE-specific or applies broadly to future projects. The Board will consider the workplan in October, and staff will provide a report to the Board on workplan progress in Q1 2025.

Spring 2023 Financial Plan value	Fall 2024 Financial Plan value	Variance from spring 2023
\$3,999M	\$3,999M	0%

Note: Amounts shown in 2024 dollars.

Major Board milestones: Select project to be built: Q4 2024 Approval of project baseline: Q1 2027



Key highlights

The project team completed preliminary engineering on the preferred alternative and published the Final EIS. The team is advancing toward a potential Board action to select the project to be built in October 2024. Other activities in 2023 and 2024 have included ongoing engagement with partner and regulatory agencies, stakeholder groups, and property owners regarding environmental process and next steps. We also hosted in-person station planning engagement events in October 2023 and March 2024 to gather community feedback as we advance station design.

The agency executed Phase 1 of a Program Management Support Services contract for the WSLE Project in December 2023. Phase 1 services include establishment of tools and processes to manage design, secure third-party agreements, and prepare for procuring final design and early construction packages for WSLE. Procurement for the Engineering Design Services (final design) contract is currently underway and contract award is anticipated in late 2024.

Risks and opportunities

Market conditions: Project costs have and may continue to increase more than the projected escalation and inflation rates as a result of general construction cost and real estate cost increases in the region.

Cost: Additional cost elements of the preferred alternative in the West Seattle Junction and Delridge segments are dependent on third-party funding.

Environmental: Potential additional environmental process delays, including completion of Section 106 consultation required for National Environmental Policy Act Record of Decision, may further affect the schedule for completion of the environmental process and design.

Design and construction: Potential that unforeseen design and/or construction challenges due to limited understanding of utilities, ground conditions, and building conditions could emerge as work progresses, causing additional costs and delays.

Right-of-way: Potential cost and schedule risks associated with complexity of real estate acquisition processes.

Permitting: If there are extended delays with processing permits, multiple reviews and approvals with permitting authorities may be required, causing schedule delays.

Schedule: Complicated contract packaging and construction procurement processes and decisions, along with difficult contracting market conditions, could cause schedule delay.



Permitting

Sound Transit and the City of Seattle continued coordinating on opportunities to streamline permitting for the West Seattle Link Extension, completing the third draft of the West Seattle and Ballard permitting plan in June 2023. An online permitting management tool will be launched in Q1 2025 to provide consolidated access to the policies, processes, tools, and design concurrences needed to streamline permitting. The final West Seattle permitting plan will be completed in Q2 2025 to provide a comprehensive record of the collaborative permit streamlining effort and ensure continuity over time.

Key progress/deliverables to date include:

- Agreement on draft concepts for City of Seattle code amendments.
- Permitting tools to support implementation of streamlined land use, street use, and Seattle Design Commission review processes. This includes a permitting schedule tool to forecast City and ST staffing needed to support future permitting.
- Proposed City of Seattle Design Guidelines, incorporating ST feedback, to guide Seattle Design Commission review.
- Continued collaboration toward shared understanding on key issues that will inform final design, including: station and street configuration, incorporating community feedback, and permitting requirements.

Property acquisition

The project is still in the planning phase and has not fully started property acquisition. Early title analysis and rights of entry were started in 2023 and will continue through 2024. The Board authorized early acquisition of certain critical properties and opportunities for additional early acquisitions are being pursued. The total number of properties required won't be known until after the Board selects the project to be built and a record of decision is issued.



Environmental

The Draft EIS published in January 2022 evaluated both the West Seattle and Ballard extensions together as one project. They were evaluated together in the Draft EIS because of their location, schedule, and review efficiencies for partner agencies.

In July 2022, the Board directed further studies be prepared for Ballard Link, to evaluate additional station options and other refinements.

Rather than delay environmental review completion for West Seattle Link, Sound Transit, in consultation with the Federal Transit Administration, decided to move forward with separate environmental reviews for each extension.

The West Seattle Link Extension Final EIS was published on Sept. 20, 2024, and the project is now advancing toward a record of decision in late 2024.



Agreements

Agreements being developed: Section 106 Programmatic Agreement, Transit Way Agreement with City of Seattle. As further design and environmental review progresses, we will determine what other agreements may need to be developed.

Executed agreements: Partnering Agreement and Project Administration Agreement with City of Seattle. Partnering, service and/or administration agreements with other planning partners.

BUS BASE NORTH



Scope

This project will create a new Bus Base North to accommodate up to 120 buses to serve new I-405 and SR 522/145th Stride bus rapid transit, as well as ST Express bus routes operated by Community Transit.

For more information on this project, visit www.soundtransit.org/bus-base-north.

In-service date

Q4 2027

Project budget

Bus Base North was baselined in July 2023, along with other projects that make up the Stride BRT program. As noted during the baseline process, market conditions

pose a significant risk to the budget, since costs are increasing rapidly and unpredictably. However, project cost estimates currently remain within the baseline.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$500M	\$500M	\$0

Note: Amounts shown in year of expenditure dollars.

Key highlights

The project was baselined in July 2023. Design reached 100% completion in April 2024.

The construction contract Invitation for Bid/Advertisement for Bid is planned for October 2024. We expect contract award and Notice to Proceed in Q1 2025.

Sound Transit also issued the Request for Proposal for the contracted operator and maintainer of Stride BRT in Q1 2024.

We awarded the Bus Operation Technologies contract in September 2024.



Risks and opportunities

Market conditions: Potential cost changes from higher-than-budgeted construction cost escalation, inflation, and market conditions.

Permitting: Unidentified permitting requirements and uncertainties related to conditional-use permit requirements may cause a delay to the pre-construction schedule.

Site conditions: Differing site conditions could result in additional cost beyond planned contingency.

DOWNTOWN REDMOND LINK EXTENSION



Scope

This project will extend light rail from Redmond Technology Station to downtown Redmond. The alignment will run along SR 520 and SR 202 with stations at Marymoor Village and Downtown Redmond.

For more information on this project, visit www.soundtransit.org/RedmondLink.

Downtown Redmond Redmond Federace from The form Center Form Marymoor Fork Marymoor Village

In-service date

Spring 2025

Project budget

The most recent Quantitative Risk Assessment (performed in June 2023) and current projections indicate the estimate at completion to be within the approved baseline budget.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$1,530M	\$1,143M	-\$387M

Note: Amounts shown in year of expenditure dollars.

Key highlights

The project team has made significant construction progress. Contractors have installed the track and advanced the stations and garage structure, and they began System Integrated Testing in April 2024. Punch list inspections have started and SIT has advanced into live wire and signals testing.

Risks and opportunities

Design changes during construction: Potential cost increases and schedule delays if there are late design changes or additional agency-directed changes to requirements, including passenger experience, safety, security, and operations and maintenance.

Permitting and third-party requirements: The schedule could be delayed if third parties don't offer timely support, including final inspections, permit closeout, and commissioning.

Completion of stations and garage: The stations and garage work has been behind schedule. Continued schedule slip would result in added pressure during the pre-revenue service period and towards an early spring 2025 opening.

Operational readiness: If we identify issues during pre-revenue testing, that could lead to rework and cause schedule and cost changes.

Resources: Rail activation resource challenges, including supporting multiple concurrent projects with King County Metro and Sound Transit, may increase cost and could cause schedule delays.

EAST LINK EXTENSION



Scope

East Link Extension

This project comprises a 14-mile light rail extension from Seattle's International District/Chinatown Station across Lake Washington to Mercer Island, and through Bellevue to Redmond Technology Station. It includes eight stations, two parking structures, and one surface parking lot.



East Link Starter Line (2 Line)

This segment of the East Link Extension

(6.6 miles and eight stations) opened as the 2 Line in April 2024. Stations include South Bellevue, East Main, Bellevue Downtown, Wilburton, Spring District/120th, Bel-Red/130th, Overlake Village, and Redmond Technology.

For more information on this project, visit www.soundtransit.org/EastLink.

In-service date

East Link Starter Line (2 Line): Opened April 27, 2024

I-90 segment of East Link Extension: 2025

Project budget

There is sufficient project funding to complete the base scope of work based on the optimistic forecast. However, the pessimistic forecast estimate at completion shows a potential overrun. This reflects uncertainty on the resolution of construction claims on I-90 segment civil construction (E130) and systems (E750) contracts.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$3,677M	\$3,653	-\$24M

Note: Amounts shown in year of expenditure dollars.

Key highlights

East Link Starter Line (2 Line)

In January 2023, the Board approved \$6M for additional work needed to preserve the option of opening a starter line. In August 2023, the Board authorized a phased East Link opening, beginning with the initial segment of the 2 Line in spring 2024. This initial 2 Line segment opened for revenue service on April 27, 2024.

The South Bellevue Station Garage opened in fall 2021, followed by the Redmond Technology Station Garage in October 2023 and the Overlake Pedestrian Bridge in January 2024.

East Link Extension (I-90 segment)

Work continues on the East Link segment from International District/Chinatown Station to the East Channel Bridge (which connects Mercer Island to South Bellevue). The forecasted opening is 2025.

Crews are continuing to reconstruct non-conforming direct fixation track plinths and other defective work across this entire segment. Work on overhead contact power systems and signal and communication systems restarted in April 2024 between the Mercer Island Tunnel (connecting the Homer M. Hadley floating bridge to Mercer Island) and the I-90 crossover (where the elevated alignment curves northward from the interstate toward South Bellevue). Early Systems Integration Testing began in early Q3 2024.

Other activities continue, including punch list and commissioning at Mercer Island and Judkins Park stations, along with fan testing and emergency ventilation systems installations in the Mercer Island Tunnel and Mount Baker Tunnel (just east of Judkins Park Station, under the Mount Baker neighborhood to the Homer M. Hadley floating bridge).

Risks and opportunities

East Link Extension (I-90 segment)

Contractor quality issues: Reconstruction of non-conforming work has had the most significant effect on project schedule and cost, including time-related overhead costs on the E750 systems contract. The timing uncertainty around this work continues to be a significant risk to the overall project schedule.

Resources: Multiple items have the potential to create schedule delays, including potential delays in King Country Metro hiring key positions and Sound Transit resourcing shortages of staff needed to test and operate the system.

FEDERAL WAY LINK EXTENSION



Scope

This project will add approximately 7.8 miles of light rail between Angle Lake Station in the city of SeaTac and Federal Way City Center. It includes stations and garages at Kent Des Moines, Star Lake, and Federal Way Downtown.

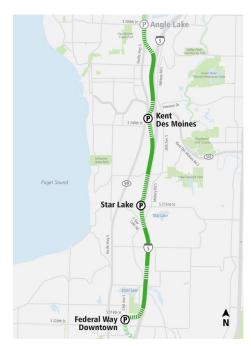
For more information on this project, visit www.soundtransit.org/FWLink.

In-service date

2026

Project budget

The most recent Quantitative Risk Assessment performed in mid-2023 indicated the estimate at completion to be within the approved baseline budget. Contingency drawdowns through 2023 remained well above planned levels for the project.



Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$2,452M	\$2,384M	-\$68M

Note: Amounts shown in year of expenditure dollars.

Key highlights

Construction is underway for all aspects of the project. The project team continues to progress and work though challenges, including ground stability issues related to the "Structure C" long-span bridge construction on a portion of the alignment in Kent, south of the former Midway landfill.

We continue to develop options to address these issues while advancing other construction, utility and telecommunications installations, right-of-way acquisitions, and third-party and public agency agreements.

Mitigation continues on construction challenges, project interdependencies, and the addition of parking at all three stations late in the project.

Substantial completion of all work north of Structure C is scheduled for Q3 2024.

Risks and opportunities

Permitting and third-party requirements: Permit approval delays or stop work orders for code discrepancies and development agreement interpretation by the City of Federal Way have the potential to create schedule delays or affect costs.

Any schedule delays could likewise affect project permit closeout. We will continue to work with the design-builder, local agencies, and internal ST stakeholders to develop a new permit closeout schedule based on anticipated completion of stations, final road improvements, and conveyance of property.

Resources: If current contract resources and staff are unavailable to support deploying systems such as Supervisory Control and Data Acquisition and the Passenger Information Management System, it may delay project completion and Revenue Service Date.

Substantial completion timing: As a result of updated interim substantial completion milestones, work on various assets like stations and garages will finish before final acceptance, which will result in increased maintenance costs for those assets prior to operation.

HILLTOP TACOMA LINK EXTENSION



Scope

This project opened for revenue service on Sept. 16, 2023. It doubled the existing T Line, extending from downtown Tacoma to the Hilltop neighborhood. The new alignment travels at-grade along Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr. Way. Project construction included seven new stations, additional signals, overhead catenary systems, traction power, and communications infrastructure. We also expanded the T Line Operations and Maintenance Facility to support procurement of five new light rail vehicles.

In-service date

September 16, 2023

Project budget

This report includes a placeholder value for "current estimate at completion", in accordance with Sound Transit Finance and

Accounting procedures. As contractor claim and closeout activity costs are quantified, we will revise the estimate at completion and provide an updated variance to authorized allocation.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$283M	\$283M	\$0

Note: Amounts shown in year of expenditure dollars.

Key highlights

Construction achieved substantial completion in early September 2023, and revenue service began Sept. 16, 2023.

Project closeout is underway and work on the TAC2 Light Rail Vehicles continues, with Final Acceptance forecasted for Q4 2024.



Risks and opportunities

Project closeout: The timeline for project closeout may be delayed due to additional design and construction of specific scope elements necessary to close out open items. The estimated level of effort required for design and construction may require additional funding in excess of the available project budget.

Contractor claims: The T100 contractor submitted an initial cumulative impact Request for Change in December 2023, which was subsequently rejected by Sound Transit. The contractor submitted a certified claim in June 2024 which is under review by Sound Transit. This claim, in addition to the closeout activities addressed above, is forecasted to exceed the project's remaining contingency and require additional funding.

I-405 STRIDE BRT



Scope

This project creates new bus rapid transit service along the I-5, I-405, and SR 518 corridors. Stride BRT will serve Lynnwood, Bothell, Kirkland, Bellevue, Renton, SeaTac, Tukwila, and Burien. Buses will operate in high-occupancy vehicle lanes, express toll lanes, busonly lanes, and general-purpose lanes. This project will add stations to Lynnwood City Center, Canyon Park, SR 522/I-405 Transit Hub, Brickyard, Totem Lake/Kingsgate, NE 85th, Bellevue Transit Center, NE 44th, South Renton Transit Center, Tukwila International Blvd Station, and Burien Transit Center.

For more information on this project, visit our project pages:

S1 Line: www.soundtransit.org/stride-s1-line S2 Line: www.soundtransit.org/stride-s2-line

In-service date

S1 Line (I-405 South): Q3 2028 S2 Line (I-405 North): Q2 2029

S2 Line (I-405 North): (Project budget

I-405 BRT was baselined in July 2023, along with other projects that make up the Stride program (however, delayed parking investments were *not* included in baselining). Therefore the 2024 agency budget action established a new project for delayed parking investments.

As noted during the baseline process, market conditions pose a significant risk to the budget since costs are increasing rapidly and unpredictably. However, project cost estimates currently remain within the baseline.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$1,269M	\$1,269M	\$0

Note: Amounts shown in year of expenditure dollars.



Key highlights

This project was baselined in July 2023. Groundbreaking for the NE 85th/l-405 Interchange and Stride BRT Station was held in September 2023. Design for the South Renton Transit Center reached 60% in early 2023, and moved to 100% in September 2024.

The agency amended its Funding Agreement with the Washington Department of Transportation (WSDOT) for design-build delivery of the I-405 BRT Brickyard to SR 527 Improvement Project. The agency issued its Notice to Proceed in Q4 2023.

Sound Transit also issued a purchase order to Alexander Dennis for Stride's battery-electric double-decker bus fleet in Q4 2023.

The planned Tukwila International Boulevard Station (TIBS) will be indefinitely deferred due to an unanticipated and unfunded WSDOT fish barrier correction near the project. In the interim, the Stride program will improve and serve the existing Link station at TIBS.

Finally, staff are coordinating with the City of Renton on a potential opportunity to advance delayed parking at NE 44th.

Risks and opportunities

Interdependencies: Resolution of the unfunded WSDOT fish passage correction at TIBS could substantially delay the project. As noted above, an interim solution will be implemented at the existing TIBS Link station.

Resource: Staff constraints may result in augmenting internal resources with consultants, which could increase project costs. Third-party staffing constraints could also affect the schedule.

Third-party agreements: Delays in finalizing the funding commitment from King County Metro betterments (layovers, active bays, and other county-only facilities) for the South Renton Transit Center could affect cost and schedule.

LAKEWOOD STATION ACCESS IMPROVEMENTS



Scope

This project will provide access improvements to the existing station, including: investments in safer walking (signage, ADA ramps, sidewalks), rolling, and bicycling connections between the station and surrounding neighborhoods; improved pickup and drop-off areas; and additional station lighting and weather shelters.

For more information on this project, visit www.soundtransit.org/lakewood-station-access.

In-service date

Q4 2030



Project estimate

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$68M	\$68M	\$0

Note: Amounts shown in year of expenditure dollars.

Key highlights

In March 2024, the Board selected the project to be built and authorized an amendment to the ST2 Plan. The Board selected the following improvements:

- At the station: Curb ramps and sidewalk improvements, wayfinding, public address system, and expanded tactile pavers.
- Priority 1: Approximately 5 miles of bicycle facilities and sidewalks and transit stop improvements.
- Priority 2: Additional non-motorized improvements.

Sound Transit will deliver the improvements at the station. Pending an agreement to be completed in 2024, the City of Lakewood will deliver the improvements within city right-of-way through a capped funding agreement. This approach to project delivery is intended to manage the total project cost

Key highlights

within the agency's Financial Plan value. Priority 1 improvements will be completed first, followed by Priority 2 improvements, if funding remains.

Prior to the Board action, the project team finalized conceptual engineering for all proposed improvements and updated the project estimate. We completed a Quantitative Risk Assessment and value engineering workshop and selected the project delivery method. After completing a State Environmental Policy Act Checklist, Sound Transit issued a Determination of Nonsignificance for the project.

In August 2024, the Sound Transit Board approved the baseline budget and schedule for the project.

Risks and opportunities

Cost: Materials and labor cost escalation could affect affordability within the agency's Financial Plan value for the project.

Scope: Consistent with the funding agreement approved by the Board in August 2024, the City of Lakewood will complete final design and construction of improvements within the city right-of-way; this strategy provides opportunities to streamline the approval process for the non-motorized access improvements. Sound Transit will delivery improvements in the station footprint.



Permitting

The City of Lakewood would complete final design and construction of improvements within city right-of-way, and permits would not be required. Sound Transit would pursue any required permits for station area improvements.



Property acquisition

Temporary construction easements for station area improvements may be required. We do not anticipate that property acquisition will be required, based on the current level of design.



Agreements

Sound Transit and the City of Lakewood reached concurrence on terms of a funding agreement for a capped Sound Transit contribution for the city to complete final design and construction of improvements within city right-of-way. The agreement was approved by the Sound Transit Board in August 2024.

Sound Transit and WSDOT will determine if an agreement is required for the nonmotorized improvements to be constructed on WSDOT roadway bridges.



Environmental

Sound Transit issued a Determination of Nonsignificance under the State Environmental Policy Act in January 2024.

LYNNWOOD LINK EXTENSION



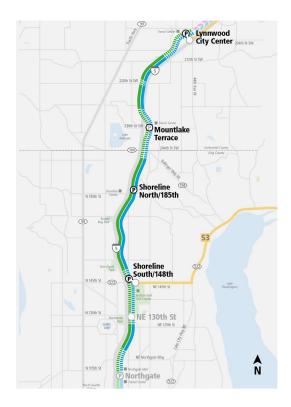
Scope

Lynnwood Link extends light rail 8.5 miles to Snohomish County along I-5 from Northgate in Seattle to the Lynnwood Transit Center, adding four new light rail stations: Shoreline South/148th, Shoreline North/185th Mountlake Terrace, and Lynnwood City Center.

For more information on this project, visit www.soundtransit.org/LLE.



An LRV being used as part of System Integration Testing in north Seattle.



In-service date

Opened Aug. 30, 2024

Project budget

After initial contingency drawdowns related to execution of the major construction contracts in 2019 and 2020, project contingency levels stabilized and returned to planned levels. Current estimates at completion indicate that the project will finish within the approved baseline budget.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$2,772M	\$2,740M	-\$32M

Note: Amounts shown in year of expenditure dollars.

Key highlights

The permanent park-and-ride lot at Mountlake Terrace opened for operation in March 2024, consistent with bus service changes programmed for the spring.

The project opened on Aug. 30, 2024, opening for 1 Line service. Pre-revenue service operations, including operator certification and simulated service, prior to opening.



An aerial view of Lynnwood City Center Station and its adjacent bus loop and parking garage.

Risks and opportunities

Interdependencies: Delayed access to the Operations and Maintenance Facility East presents challenges to vehicle storage and maintenance, and there is potential for crowding. Additional express bus service is planned, along with additional vehicle storage areas throughout the 1 Line alignment, which could affect schedule and cost.

NE 130TH STREET INFILL STATION



Scope

This project will construct an elevated Link infill station at NE 130th Street and 5th Avenue NE in Seattle.

For more information on this project, visit www.soundtransit.org/NE130Link.

In-service date

Q2 2026

Project budget

The baseline budget established in mid-2022 included funding for completing station finishes following previous authorizations, allowing for major structural elements to be integrated with Lynnwood Link construction. Current budget projections indicate project completion within the approved baseline budget.



Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$240M	\$225M	-\$15M

Note: Amounts shown in year of expenditure dollars.



This photo shows the station's structural slab and steel canopy supports before the station finishes contractor began work.



A soldier pile retaining wall will support the station plaza.

Key highlights

In summer 2022, the Board approved budget, contract, and schedule changes to accelerate the project. Station opening is now planned for mid-2026, revised from the original ST3-projected opening of 2031. This station will serve a growing residential neighborhood between the Northgate and Shoreline South/148th stations.

Construction of station finishes has begun, and work is progressing at the plaza level as procurement of major mechanical, electrical, and vertical transportation equipment proceeds. The station will begin to take its final form in the year ahead.

Risks and opportunities

Interdependencies: Remaining station work will take place adjacent to Lynnwood Link revenue service operation, and we believe there will be increased requirements for safety protocols to avoid affecting operation, which may cause schedule delays and could have project cost ramifications.

SERIES 2 LRV FLEET EXPANSION



Scope

This project includes design, manufacturing, assembly, inspection, testing, and delivery of 162 low-floor light rail vehicles for service requirements of ST2 Link projects (Northgate, Lynnwood, Federal Way, Downtown Redmond, and East Link extensions). New vehicles are referred to as Series 2 LRVs.

Project completion date

152 LRVs: Q4 2025

10 additional LRVs: Q1 2028



Project budget

The project was re-baselined in November 2023 to add budget, time, and scope for the 10 additional LRVs noted above.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$837M	\$814M	-\$23M

Note: Amounts shown in year of expenditure dollars.

Key highlights

The agency has received 133 LRVs, and the project team has conditionally accepted and placed 124 into service as of August 2024.

The remaining deliveries, commissioning, and testing are forecasted to be completed and all 152 LRVs conditionally accepted by Q4 2025, with 10 additional cars manufactured, delivered, and conditionally accepted by Q1 2028.

This project also includes retrofitting 62 Series 1 LRVs with automatic train protection onboard systems. This work is 92% complete and being managed to minimize operation delays due to out-of-service time. We expect to finish all 62 retrofits by the end of 2024.

Risks and opportunities

Interdependencies: Receiving and readying a growing LRV fleet requires both of ST's current Operations and Maintenance Facilities (OMF Central in Seattle and OMF East in Bellevue), and rail connection between those facilities (via the I-90 segment of East Link) is critical. Construction delays on the East Link alignment could create cost and schedule changes or inefficiency for the fleet expansion project.

Resources: The schedule for acceptance and service may be affected if there are competing demands for light rail extension project simulated services. Upcoming revenue service resource requirements will influence the availability of operation labor and vehicle maintenance personnel to support LRV commissioning.

SOUTH TACOMA ACCESS IMPROVEMENTS



Scope

This project provides access improvements to the existing station, including investments in safer walking (signage, ADA ramps, sidewalks), rolling, and bicycling connections between the station and surrounding neighborhoods; improved pickup and drop-off areas; and additional station lighting and weather shelters.

For more information on this project, visit www.soundtransit.org/south-tacoma-station-access.



In-service date

Q4 2030

Project estimate

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$70M	\$70M	\$0

Note: Amounts shown in year of expenditure dollars.

Key highlights

In March 2024, the Board selected the project to be built and authorized an amendment to the ST2 Plan. The Board selected the following improvements:

- At station: Curb ramps and sidewalk improvements, lighting, wayfinding, public address system, and expanded tactile pavers.
- Priority 1: Approximately 6 miles of bicycle facilities and sidewalks.
- Priority 2: Additional non-motorized improvements.

Sound Transit will deliver the improvements at the station. Pending an agreement to be completed in 2024, the City of Tacoma will deliver the improvements within city right-of-way through a capped funding agreement. This approach to project delivery is intended to manage the total project cost

Key highlights

within the agency's Financial Plan value. Priority 1 improvements will be completed first, followed by Priority 2 improvements, if funding remains.

Prior to the Board action, the project team completed conceptual engineering for all proposed improvements and updated the project estimate. We completed a Quantitative Risk Assessment and value engineering workshop and selected the project delivery method. After completing a State Environmental Policy Act Checklist, Sound Transit issued a Determination of Nonsignificance for the project.

Risks and opportunities

Cost: Materials and labor cost escalation could affect affordability within the agency's Financial Plan value for the project.

Scope: Consistent with the Letter of Concurrence completed in 2023 and pending a funding agreement, the City of Tacoma will complete final design and construction of improvements in the city right-of-way; this strategy provides opportunities to streamline the approval process for the non-motorized access improvements.



Permitting

The City of Tacoma would complete final design and construction of improvements within city right-of-way and permits would not be required. Sound Transit would pursue any required permits for station area improvements.



Agreements

Sound Transit and the City of Tacoma reached concurrence on terms of a funding agreement for a capped Sound Transit contribution for the city to complete final design and construction of improvements within city right-of-way. The agreement is scheduled to be approved by the Sound Transit Board in Q4 2024.



Property acquisition

Temporary construction easements for station area improvements may be required. We do not anticipate property acquisition will be required, based on the current level of design.



Environmental

Sound Transit issued a Determination of Nonsignificance under SEPA in February 2024.

SR 522/NE 145TH STREET STRIDE BRT



Scope

This project will launch Stride bus rapid transit service (the S3 Line) in the SR 522/SR 523 corridor between the Shoreline South/148th Link station and the SR 522/I-405 Transit Hub near the UW Bothell campus. The route will connect to I-405 BRT (the S2 Line) at the SR 522/I-405 interchange. Buses will operate primarily in Business Access and Transit lanes, transit queue bypass lanes, and general-purpose lanes.

For more information on this project, visit www.soundtransit.org/sr522brt.



In-service date

Q2 2028

Project budget

SR 522/NE 145th Street BRT was baselined in July 2023, along with other projects that make up the Stride BRT program (however delayed parking investments were *not* included in baselining). Therefore the 2024 agency budget action established a new project for delayed parking investments.

As noted during the baseline process, market conditions pose a significant risk to the budget since costs are increasing rapidly and unpredictably.

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$582M	\$589M	\$7M

Note: Amounts shown in year of expenditure dollars.

Key highlights

In 2023, the agency executed a funding agreement with the City of Bothell for the construction of the NE 185th Street Improvement project and baselined the project in July. Sound Transit also issued a purchase order to the bus manufacturer RIDE Mobility for Stride's 60-foot articulated battery-electric bus fleet.

Key highlights

In order to limit risk to the project cost and schedule, the agency repackaged the civil construction contracts, changing two contracts to three in alignment with the third parties. Staff plan to begin Invitation for Bid/Advertisement for Bids for the three construction packages in Q4 2024, with construction contract awards targeted to begin in Q2 2025. Concurrent with several projects, outreach to potential contractors began in April 2024.

Risks and opportunities

Design and construction challenges: The improvements for BRT in the SR 522/NE 145th Street corridor are complex. There may be cost increases due to the permitting process and requirements for more maintenance of traffic, nighttime work, and utility relocations than expected.

Resources: Due to staff constraints, we may need to augment internal resources with consultants, which could increase project costs. Our regional partners are also experiencing staffing constraints that may add time to the schedule.

Right-of-way acquisition: Challenges related to right-of-way, especially late design changes required by third parties, may require additional time for acquisitions. Challenges in property acquisitions and permitting are creating schedule pressures which may lead to delay.

SUMNER, KENT, & AUBURN STATIONS PARKING & ACCESS IMPROVEMENTS



Scope

This project provides additional parking at Sounder stations in Sumner, Kent, and Auburn. All three locations will have a new multi-story garage and potentially new surface parking stalls, with the goal of building as much new capacity as possible (up to the stall count analyzed in NEPA/SEPA environmental review and within the project budget).

Additional enhancements include vehicular and pedestrian access improvements to rail stations, non-motorized improvements, and associated utility, roadway, traffic, stormwater, lighting, and landscape improvements. Kent Station also has executed an option to include scope for a bus layover facility for King County Metro.

For more information on these projects, visit:

www.soundtransit.org/sumner-station-access

www.soundtransit.org/kent-station-access

www.soundtransit.org/auburn-station-access

In-service date

Sumner: Q1 2026

Kent: Q2 2027

Auburn: Q1 2027







Project budget

Authorized allocation (baseline)	Current estimate at completion	Variance to authorized allocation (baseline)
\$360M	\$335M	-\$25M

Note: Amounts shown in year of expenditure dollars.

Key highlights

In January 2023, the Board authorized combining the parking and access improvement project budgets for Sumner, Kent, and Auburn stations into one project baseline budget with shared contingencies.

Sound Transit has issued a Notice to Proceed for the three major design-build construction contracts. Sumner foundation piles are being installed and will start vertical of construction of the garage in late 2024. In Kent, demolition of buildings on the project site has commenced as the project seeks building permits. The Auburn site has been fences and utility relocation work is being finished as the project seeks building permits. All three sites will be fully under construction during 2025.

The baseline opening date for the project is Q2 2027. Work is progressing on target for the approved interim milestone opening dates of Sumner in Q1 2026, Auburn in Q1 2027, and Kent in Q2 2027. Schedule float for the Auburn date having been reduced due to property aquistion challenges.

Risks and opportunities

Design changes: There may be cost and schedule ramifications if additional scope and/or project changes are requested from stakeholders and accepted by the agency.

Permitting and third-party requirements: Any delay in third-party design review and permitting process or changes due to either could cause a schedule delay and cost increase.

Right-of-way acquisitions: All but 25 days of the Auburn site schedule float have been exhausted due to extended negotiations with the City of Auburn related to real property interests, delaying issuance of the contract Notice to Proceed. This delay could increase project costs if property acquisition costs come in significantly higher than estimated.

Glossary

Term	Definition
Administrative costs	Costs from capital project staff that are not directly charged to the capital project. They include items such as paid time off that are not considered direct project capital costs.
Anticipated drivers	Trends that are monitored and reported in the construction industry, as well as from direct experiences, that are not yet included in the current cost estimates supporting the Financial Plan.
Bond covenants	Legally binding term of an agreement between a bond issuer and a bondholder, designed to protect the interests of both parties. These include additional coverage ratios as required by bondholders.
Construction cost index (CCI)	Applied to construction-related elements of the capital program (including state of good repair). A Seattle-area forecast of the construction cost index is produced by an independent third party.
Consumer price index	A measure of change in prices for consumer goods and services in the Seattle area. Used to update operations and maintenance expenses and "soft" capital costs.
Current drivers	(1) Economic factors that the Pacific Northwest transportation industry and Sound Transit are experiencing now (as defined by 2023 and early 2024) and (2) the comparative differences between newly received project estimates compared to a previous estimate for the same project, if any.
Debt capacity	According to Washington state law, the amount of debt issued by Sound Transit cannot exceed 1.5% of the assessed valuation of real property located within the regional transit authority district. An important metric of the agency's financial health is the remaining amount of debt that can be issued — available debt capacity.
Emergency/loss fund	This fund includes reserves for uninsured capital and operating losses. The Board authorizes the use of the emergency/loss fund on a case-by-case basis.
Engineer's estimate	Project cost estimate prepared when design is finished, used to validate the budget for a project and compare against bids received. The estimate is used for programming and funding purposes. Preparing the estimate requires knowledge of construction methods, fabrication processes, and construction costs based on the measurement and payment section in the specifications.
Net debt service coverage ratio (DSCR)	A ratio intended to measure the ability of an agency to meet its financial obligations and pay back debt. The net DSCR is calculated as annual revenues minus operating costs, then divided by annual debt service. This allows us to ensure we can pay back our debt after paying for operating costs in a given year.

Term	Definition
Revenue collection fees	The state of Washington charges Sound Transit revenue collection fees on sales and use tax, rental car tax, and motor vehicle excise tax.
Right-of-way index	This index is applied to property acquisition costs using a market transaction valuation forecast based on parcels within a 15-mile radius of the Sound Transit rail alignments.
Sales and Use Tax Offset Fee	As required by RCW 81.112, Sound Transit must remit to the Washington Department of Revenue a fee of 3.25% on Rule 171 eligible construction contract expenditures for ST3 projects, until a total of \$0.5 billion is paid.
Specifications	Specifications describe the products, materials, and work required by a construction contract. They do not include cost, quantity, or drawn information, and so need to be read alongside other information such as quantities, schedules, and drawings.
Value engineering	Value engineering is a systematic, organized approach to providing necessary functions in a project at the lowest cost.
Vehicle index	A composite index applied to vehicle-related elements of the capital program. The vehicle index is produced by an independent third party.
Year of expenditure	Refers to a project's cost in real dollars, inclusive of annual inflationary factors.

Appendix A: Financial capacity analysis

The fall 2024 Financial Plan projections indicate that although the Financial Plan currently adheres to our ST3 and statutory policies for debt compliance, Sound Transit faces challenges with the long-term affordability of the ST2/ST3 program. This is shown by the Financial Plan's projected decrease in available debt capacity and net debt coverage ratio, as well as cost uncertainties and risks which are detailed in the Cost Drivers section. Projected minimum remaining available debt capacity (the agency's ability to issue debt) fell to 10.1% from 13.1% in fall 2023. The projected net minimum debt service coverage ratio (the agency's ability to repay debt) also fell to 1.56x from 1.63x in fall 2023. These decreases are due to higher projected debt issuances from lower projected sales tax revenue and increased operating and capital costs.

The points below summarize the major changes to the Financial Plan since fall 2023:

- A decrease in sales tax revenue projections of \$3.5B as employment in the region falls and household incomes stagnate.
- An increase in projected grant assumptions of \$3.7B based on updated expectations of federal funding.
- An increase in projected operating expenditures of \$555M mostly due to updated purchased transportation labor rates.

The fall 2024 Financial Plan reflects the agency's long-term financial projections for the voter-approved programs outlined in the Sound Move (1996), ST2 (2008), and ST3 (2016) ballot measures. The Financial Plan incorporates forecasts of sources of funds and program cost estimates over the long-range planning horizon (2017–2046). A summary of the fall 2024 Financial Plan Source and Uses follows.

Table 1: Summary of sources and uses, 2017-2046

SOUNDTRANSIT

Financial Plan - Sources & Uses Summary Fall 2024 Financial Plan (Affordable Schedule)

2017 through 2046; YOE Dollars in Millions

	Snohomish	North King	South King	East King	Pierce	System- wide	Total
Sources of Funds							
Tax Revenues							
Sales and Use	9,020	22,665	9,285	19,072	14,051	-	74,093
Motor Vehicle Excise Tax	1,457	2,261	1,332	2,934	2,220	-	10,204
Property Tax	662	2,152	668	1,841	837	-	6,159
Rental Car Tax	8	23	134	15	11	-	191
Total Tax Revenues	11,148	27,101	11,418	23,862	17,118	-	90,647
Other Revenue							
Grant Revenue	4,310	6,723	3,207	1,273	2,769	666	18,948
Fare Revenue	401	3,088	770	798	474	-	5,531
Other Revenue	17	152	68	86	69	241	633
Interest Earnings	-	-	-	-	-	1,333	1,333
Total Other Revenue	4,729	9,963	4,044	2,156	3,312	2,239	26,444
Bond Proceeds (with DSRF)	6,520	12,610	6,107	2,647	55	-	27,939
TIFIA / RRIF Proceeds	479	1,259	1,014	1,398	174	-	4,325
Changes in Cash (addtl funding to offset deficits)	544	320	750	499	(1,000)	(0)	1,113
Total Sources	23,420	51,252	23,334	30,562	19,660	2,239	150,467
Jses of Funds							
System Expansion Expenditures							
Light Rail Transit	12,129	19,044	6,597	13,530	4,334	7,332	62,967
Tacoma Link	-	-	-	-	1,802	-	1,802
Commuter Rail	142	_	1,511	-	3,155	0	4,808
Regional Express Bus	174	66	134	389	371	0	1,134
Bus Rapid Transit	66	504	409	1,894	-	-	2,873
System-wide	106	136	62	106	93	664	1,168
Total System Expansion Expenditures	12,617	19,750	8,713	15,918	9,756	7,997	74,751
O&M Expenditures	•	•	•	· · · · · · · · · · · · · · · · · · ·	•	,	,
Light Rail Transit	2,196	12,413	3,946	3,449	790	_	22,794
Tacoma Link	-	-	-	, -	984	_	984
Commuter Rail	418	_	1,399	-	1,631	-	3,448
Regional Express Bus	762	_	529	2,363	1,543	-	5,197
Bus Rapid Transit	169	314	222	881	-	-	1,587
System-wide	10	14	18	20	4	2,814	2,880
Total O&M Expenditures	3,555	12,741	6,114	6,713	4,952	2,814	36,889
Service Delivery Projects	·		·	-	·	•	
Service Delivery Projects - Capital	1,024	3,168	1,600	1,925	1,653	2,235	11,605
Service Delivery Projects - Operations	200	821	457	457	425	597	2,957
Total Service Delivery Project Expenditures	1,224	3,989	2,057	2,382	2,078	2,832	14,562
Other Expenditures	•	•	•	•		,	
Debt Service	4,335	10,788	4,713	2,351	634	-	22,822
Reserve Contributions*	275	547	277	177	62	105	1,443
System-Wide Activities	1,414	3,437	1,460	3,022	2,177	(11,509)	-
Changes in Cash (cumulative surplus)	-	-	-	-	-	-	_
Total Uses	23,420	51,252	23,334	30,562	19,660	2,239	150,467

*Includes Capital Replacement, Debt Service Reserve Fund, Affordable Housing, Emergency Loss, and O&M Reserves.

Note: Totals may be different due to rounding

Revenue shifts

Compared to the fall 2023 Financial Plan, there has been a decrease in total projected revenues over the life of the program. The decrease is mostly due to changes in sales tax.

Projected revenues and financing sources for 2017-2046 total \$150.5 billion and include tax revenue, grant revenue, fare revenue, interest earnings, and other income, such as advertising, real estate sales proceeds, rental income, and local contributions. Proceeds from debt issuances in the form of bonds and Transportation Infrastructure Financing and Innovation Act and Railroad Rehabilitation and Improvement Financing loans are used to bridge gaps between available sources and uses. The table below shows a comparison between fall 2023 and fall 2024.

Table 2: Changes in projected revenues and financing sources

Revenues and financing sources, 20	Fall 2024 vs fall 2023			
Category	Fall 2023 update	Fall 2024 update	\$	%
Tax revenue	\$93,728	\$90,647	\$(3,080)	-3.3%
Grant revenue	\$15,262	\$18,948	\$3,686	24.2%
Fare revenue	\$5,505	\$5,531	\$26	0.5%
Other revenue	\$616	\$633	\$16	2.6%
Interest earnings	\$1,134	\$1,333	\$199	17.5%
Bonds, TIFIA, and RRIF proceeds, cash	\$31,908	\$33,376	\$1,468	4.6%
Total (2017-2046)	\$148,154	\$150,467	\$2,314	1.6%

SOURCES: Fall 2024 Financial Plan, September 2024.

Tax revenues

Tax revenue projections through 2046 decreased \$3.1 billion, or 3.3%, from the fall 2023 Financial Plan. The main drivers of this include:

- \$3.5 billion, or 4.5%, decrease in projected sales tax from a reduction in our current tax base, depressing the entire forecast. The tax-base reduction is driven by a slowdown in the regional economy, as reflected by a decline in employment, anticipated to decline 0.9% this year, and little to no growth in household income, anticipated to be less than 0.1% growth by year's end.
- \$452 million, or 5%, increase to MVET projections due to an improved vehicles sales forecast, mostly attributed to easing of supply chain constraints.
- \$23 million decrease in property tax revenue due to lower projected new construction.
- \$8 million increase in projected rental car tax.

Grant revenue

Grant revenue projections through 2046 increased \$3.7 billion, or 24%. Updates include:

- \$2.6 billion increase to our full funding grant agreement assumptions to align our projects' grant share and size with recent national trends.
- Adding a \$600 million Federal Railroad Administration grant for the Sounder South Capacity Expansion project's track and signal improvements.
- \$434 million increase in FTA formula funding due to updates in Puget Sound Regional Council's earned-share methodology and the agency operating statistics.
- \$52 million increase across all other grant types.

Fare revenue

Compared to the fall 2023 Financial Plan, projected fare revenues increased by \$26 million, or 0.5%, through 2046 reflecting slightly higher average fares per boarding, due to a higher percentage of passengers paying full fares.

In the fall 2023 Financial Plan, assumptions around Link boardings with fare media were updated to reflect lower compliance seen post-pandemic. The assumed rate for 2024 is 55% of boardings with fare media, increasing each year by 5% until the rate reaches 75% by the end of 2028. At the end of 2023, boardings with fare media were 57%, trending in line with these new assumptions.

Interest earnings & other revenues

Projected interest earnings increased \$199 million, or 17.5%, through 2046 from the fall 2023 Financial Plan, mostly due to actuals being higher than assumed due to high interest rates and larger-than planned cash balances. The Financial Plan assumes that Sound Transit earns a 2% rate of return on cash and investment balances throughout the planning horizon of 2046.

Other revenues increased by \$16 million, or 2.6%, through 2046 compared to the fall 2023 Financial Plan, primarily due to an increased advertising forecast.

Spending/expenditures shifts

Compared to the fall 2023 Financial Plan, there has been an increase in total projected expenditures of \$2.3 billion or 1.6% over the life of the program. The increase is mostly due to changes in projected operating and maintenance expenditures and debt service on increased issuances. Uses of funds for 2017-2046 of \$150.5 billion include expenditures for system expansion, operations and maintenance, service delivery projects, contributions to reserves, and debt service. The table below shows a comparison between fall 2023 and fall 2024.

Table 3: Expenditure changes

Summary of expenditures, 2017-2	Fall 2024 vs fall 2023			
Category	Fall 2023 update	Fall 2024 update	\$	%
System expansion expenditures	\$74,549	\$74,751	\$203	0.3%
Operating and maintenance expenditures	\$36,334	\$36,889	\$555	1.5%
Service delivery projects - capital	\$11,696	\$11,605	\$(91)	-0.8%
Service delivery projects - operating	\$2,644	\$2,957	\$314	11.9%
Reserve contributions	\$1,528	\$1,443	\$(85)	-5.5%
Debt service ¹	\$21,405	\$22,822	\$1,417	6.6%
Total (2017-2046)	\$148,154	\$150,467	\$2,314	1.6%

SOURCES: Fall 2024 Financial Plan, March 2024.

NOTE: 1 Includes TIFIA debt service

System expansion expenditures

Projected system expansion expenditures increased \$203 million, or 0.3%, through 2046 from the fall 2023 Financial Plan.

- Most of this increase (\$349 million) comes from updated inflation indices, including:
 - The incorporation of a new light rail vehicle component index which adds a projected \$305 million in cost over the previously assumed consumer price index used to inflate vehicle costs.
 - A projected increase through 2046 of \$183 million from incorporating the construction cost index forecast.
 - A projected increase of \$150 million from incorporating the consumer price index forecast.
 - A projected decrease of \$289 million from incorporating the right-of-way index forecast, which partially offsets the other inflation increases.
- \$146 million decrease due to earlier spending assumptions, primarily updated light rail vehicle payment milestones based on industry trends.

The "Financial Capacity" section includes a description of how the inflation indices have changed, including more information about the new VEH index staff procured.

The fall Financial Plan did not incorporate estimates for any projects receiving with new opinions of probable cost (such as OMF South, Tacoma Dome Link Extension, West Seattle Link Extension, Everett Link Extension, and Ballard Link Extension). Pre-baselined cost estimates are updated in the Financial Plan at major milestones to reflect Board decisions.

Operations and maintenance expenditures

Projected operating and maintenance expenses increased \$555 million, or 1.5%, through 2046 from the fall 2023 Financial Plan. The main drivers of this include:

- \$527 million increase from new labor rates in the King County Metro labor contract.
- \$221 million increase to the insurance forecast from higher Sounder and property insurance premiums.
- \$193 million decrease in expenditures due to identified budget savings from reduced FTEs and associated costs as part of the 2025 budgeting process.

Service delivery project expenditures

The projected costs to repair and replace key operating assets, known as service delivery projects, have increased \$223 million, or 1.6%, through 2046 from the fall 2023 update. This increase is primarily due to updated inflation indices, resulting in \$191M increase to SDP expenditures. Updated project costs increased SDP spending by \$137 million, and an effort to reprioritize spending on critical service delivery projects offset these increases, by reducing SDP spending by \$105 million.

Reserve contributions

The agency maintains reserves to meet agencywide revenue shortfalls or cost increases, including an operations and maintenance reserve, bond reserve, emergency loss reserve, and a capital replacement reserve. Projected contributions to reserves decreased \$85 million, or 5.5%, through 2046 from the fall 2023 update, mainly due to reducing the O&M reserve balance to two months from three months, to align with the agency's budget policy.

Debt and affordability constraints

Bond issuance and debt service projections

The agency uses debt to bridge the gap between the timing of expenditures and the receipt of revenues. The fall 2024 Financial Plan forecasts \$32 billion in bonds will be issued from 2017-2046, an increase of \$1.4 billion, or 5%, through 2046 compared to the fall 2023 Financial Plan. Projected debt service through 2046 increased by \$1.4 billion, or 6.6%, compared to the fall 2023 Financial Plan.

Updated forecasts indicate an increase in the agency's need to issue debt, based on when projected expenditures occur versus when projected revenues come in. The major reason is a lower short-term sales tax revenue forecast.

In terms of affordability and financing metrics, remaining available debt capacity and the ability to repay debt remains a challenge, as described in the section below.

Shifts in agency debt constraints

Sound Transit's financial performance to date, and in the future, is evaluated by the agency's credit rating and financial policies including net debt service coverage ratio, bond covenants required by bondholders, and debt capacity required by state law. Since realignment in 2021, the agency's ability to

repay debt, measured by our net DSCR, has become the primary constraint to the financial health of the program. Debt capacity, the lack of which led to realignment, has also been decreasing.

According to voter-approved financial policies, Sound Transit's net revenues (after deducting operating expenses) may not fall below 1.5 times our total debt service in any given year. This key affordability metric is referred to as the agency's net debt service coverage ratio (DSCR) and is an important measure of the agency's financial health, conveying our ability to pay back debt.

The agency's projected minimum net DSCR reaches a minimum of 1.56x in 2049, which is a decrease from the fall 2023 plan. The policy minimum for this ratio is 1.50x.

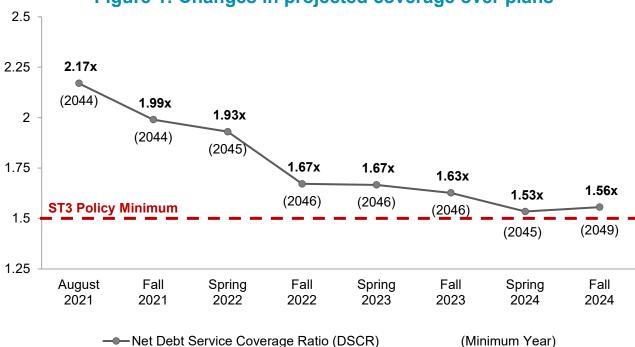


Figure 1: Changes in projected coverage over plans

According to Washington state law, the amount of debt issued by Sound Transit cannot exceed 1.5% of the assessed valuation of real property located within the regional transit authority district. An important metric of the agency's financial health is the remaining amount of debt that can be issued or remaining available debt capacity.

The agency will come closest to reaching its projected debt limit in 2042 with \$3.2 billion remaining, or 10.1% headroom. The chart below shows projected debt capacity and utilization in the year of most constraint.

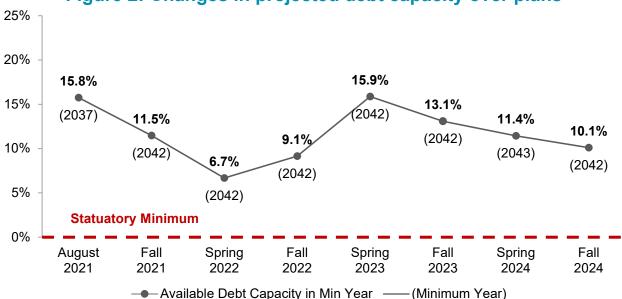


Figure 2: Changes in projected debt capacity over plans

Project-level affordability gaps

Realignment identified project-level affordability gaps for four Link extension projects: West Seattle and Ballard (which were combined at the time but have since separated), Everett, Tacoma Community College, and South Kirkland to Issaquah. Project-level affordability gaps are the difference in cost estimates between the "affordable schedule" and the "target schedule" (earlier delivery), while accounting for financial capacity, subarea affordability, and required system facilities. Using these criteria, each individual project affordability gap is an apportionment of a single agencywide affordability gap assigned to the specific project. The affordability gaps calculated in the realignment resolution assume that, if possible, all gaps would be simultaneously offset and that all projects would advance to their target schedules together.

2024 update: Based on the affordability metrics (remaining available debt capacity and net DSCR) forecasted in the fall 2024 Financial Plan, we do not currently forecast accelerating projects to target schedules to be feasible. As noted in this report, the agency faces challenges in achieving affordable schedules due to increased projected costs with construction market conditions, additional scope considerations, and service needs.

Appendix B: Financial Plan methodology

Tax revenue projections methodology

Sound Transit receives revenue from four different tax revenue sources: sales and use tax, motor vehicle excise tax, rental car tax, and property tax. The agency receives tax-base forecasts for sales tax and MVET from an independent third party. The sales tax and MVET forecasts are grounded on economic data from the Bureau of Labor Statistics, Federal Reserve Economic Data (FRED), and Moody's Analytics as well as population projections from FRED. The variables used to predict taxable retail sales include county household income, county unemployment levels, economic growth forecasts, and historic U.S. interest rates. The MVET tax-base forecast is based on historical and forecasted U.S. vehicle sales and county household income. A Sound Transit district-specific econometric model was developed to estimate revenues by Sound Transit subarea. Staff forecast the rental car tax based on past performance. Lastly, the agency projects property taxes through an independent consultant based on the growth of assessed value for both existing property and new construction within the Sound Transit district.

Grant revenue projections methodology

Sound Transit generally secures federal funding through the Federal Transit Administration, Federal Highway Administration, and Federal Railroad Administration programs currently authorized under the Bipartisan Infrastructure Law and future authorizations. We project securing future grant funding through FTA's Capital Investment Grant program, FTA formula funding, and other regional/national grant competitions. Additionally, 2020 through 2022 includes pandemic relief funding through the Coronavirus Relief & Economic Security Act, American Rescue Plan, and Coronavirus Response & Relief Supplemental Appropriations Act.

Fare revenue projections methodology

Fare revenues are a product of transit ridership, fare compliance, fare structures, and fare rates. Ridership is the result of a complex combination of factors, including service type and frequency, speed, reliability, safety, surrounding land use, station access, and regional employment trends. In the near-term, staff estimate ridership based on past trends and the amount of transit service to be provided in the Annual Service Plan.

Ridership: For long-range ridership forecasts, Sound Transit uses a travel demand forecasting model. In this model, consultants base transit ridership forecasts on observed origins and destinations of transit riders, observed transit line volumes, and a realistic simulation of observed transit service characteristics. Ridership estimates are updated regularly with new assumptions including revised revenue service dates, performance from recently opened link extensions, and long-term ridership effects of COVID-19.

Fare revenue: The long-range Financial Plan assumes the agency continues to collect fare revenues from Sound Transit operations for ST Express bus, Link light rail, and Sounder trains. Fare collection on the T Line began when the Hilltop Tacoma Link Extension opened in September 2023. Stride bus rapid transit is projected to begin collecting fares to coincide with the two Stride project openings. Staff base fare revenue forecasts on ridership forecasts and assumptions regarding fare levels and price elasticity.

Other revenue projections methodology

Other revenue includes advertising, real estate sales proceeds, rental income, permit parking revenues, and local contributions. Local contributions include funds either granted directly to Sound Transit or provided as a credit against taxes or fees levied on construction by other jurisdictions or organizations.

Interest earnings revenue projections methodology

In accordance with Sound Transit financial policies, interest earnings are credited at the agency level to offset expenditures for systemwide programs, except where restricted by Board actions or policies. The Financial Plan assumes that Sound Transit will earn a 2% rate of return on cash and investment balances throughout the planning horizon of 2046.

System expansion project expenditure projections methodology

The Financial Plan capital spending plan consists of seven categories. These include Sound Transit's five transit modes: Link light rail, Tacoma Link light rail, Sounder commuter rail, ST Express bus service, and Stride bus rapid transit. Additionally, "systemwide" projects are those that benefit the agency or region and are not associated with a single mode (such as ST Art).

The System Expansion section of the Financial Plan includes project expenditures adopted in the Sound Move, ST2, and ST3 voter-approved programs and was updated following the Board's realignment process in Resolution 2021-05. This includes funding for projects detailed in the Transit Improvement Plan and projected future expenditures. The Transit Improvement Plan contains dollars authorized by the Board for active projects. Beyond that, future capital expenditures comprise remaining projected spending on projects that are not fully authorized by the Board yet. (This includes projects in planning and projects that are not active yet.)

For system expansion projects that are not fully authorized yet, projected expenditures are forecasted by inflating the Board-approved cost in Resolution R2021-05 using Sound Transit inflation indices and internal cash flow. This provides an estimate of the expenditures for each project until the Board fully authorizes the project and establishes the construction budget.

Administrative costs, including from capital project staff that are not directly charged to projects and central service divisions that provide general support across the agency, are allocated to system expansion project forecast based on system expansion projects' anticipated share of capital spending.

Systemwide activities

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

Operations and maintenance (O&M) expenditure projections methodology

Sound Transit services currently consist of four transit modes: Link light rail, Tacoma Link light rail, Sounder trains, and ST Express buses. The voter-approved ST3 plan includes a fifth mode: Stride bus rapid transit. These modes are managed by the Sound Transit Operations Department. Sound Transit's

Service Planning Division prepares an Annual Service Plan to guide the delivery of these modes. Total O&M expenditures include forecasts for each mode and systemwide operating costs.

Transit modes

O&M expenditures are projected by each transit mode as part of the annual budget process and consider all scheduled service expansions as laid out in the Transit Improvement Plan and internal planning documents. O&M expenditures for each mode include direct operating costs as well as allocated costs such as security, information technology, and agency overhead.

The O&M expenditure forecasts for each mode are based on a cost build-up model for each function (such as vehicle operations, vehicle maintenance, and facilities maintenance). The modal forecasts also include the cost of Sound Transit staff and other administrative expenditures allocated to transit modes. Staff include several metrics in the agency's forecasting, including platform hours, number of vehicles, number of stations, etc. The relevant metrics are based on historical data, Annual Service Plan projections, current-year budget data, and other available information.

Non-labor operating costs are inflated using the CPI for all urban consumers in the Seattle area. Labor costs are inflated according to Sound Transit's projected wage and benefit growth rates. Staff also inflate some purchased transportation costs at a higher rate based on historical experience or known contract increases. Purchased transportation refers to Sound Transit's contracts with partner operating agencies.

Systemwide O&M expenditures

Other operating expenditures in the long-range Financial Plan that are not specific to a transit mode include:

- Revenue collection fees: The state of Washington charges Sound Transit revenue collection fees
 on sales and use tax, rental car tax, and MVET.
- Sales and Use Tax Offset Fee: As required by RCW 81.112, Sound Transit must remit to the Washington Department of Revenue a fee of 3.25% on Rule 171 eligible construction contract expenditures for ST3 projects, until a total of \$500 million is paid.
- Leases: Lease expenses associates with tangible property such as office space, land (including air space leases), equipment, vehicles, and warehouses.
- SBITA: Subscription-based information technology arrangements.
- Fare and regional planning and G&A: Costs for fare planning, regional planning, and governance.

Administrative costs

Administrative costs allocated to capital projects include:

- Costs from capital project staff not directly charged to the project, including paid time off.
- Costs from central service divisions in the agency that are allocated to projects and modes based on headcount. Central service divisions are those that provide general support across the agency including finance, IT, HR, and legal.

These costs are allocated to system expansion and service delivery projects based on total project spending in each category.

Service Delivery Project expenditure projections methodology

The Financial Plan projects expenditures for the repair and replacement of key operating assets through Service Delivery Project funding. Future costs of midlife renewal and asset replacement activity are calculated based on original cost, in-service date, and other financial assumptions based on the asset class such as estimated asset life, and the percentage of the asset's original cost that is projected to be spent during the midlife renewal and replacement cycles. The forecast also includes overhead costs, such as central service division costs, allocated to these service delivery projects.

The replacement date for assets follows generally accepted principles for the useful life of transit facilities and equipment or useful lives identified for the agency's assets when local operating conditions cause actual useful lives to differ from those estimates. Service Delivery Project expenditures prior to the next budget year is included in the capital section of the Financial Plan model.

Contribution to reserves projections methodology

The agency maintains reserves to meet revenue shortfalls or cost increases, including an operations and maintenance reserve, bond reserve, emergency loss reserve, and capital replacement reserve.

- Operations and maintenance reserve fund: Sets aside funds equal to two months of O&M expenditures.
- Debt service reserve fund: Principal set aside for bond reserves is 3.5%, equivalent to 50% of maximum annual debt service.
- Capital replacement reserve fund: \$300 million in capital replacement reserve funds are set aside in the Financial Plan projections with an annual 2.0% interest rate assumption on any earnings.
- **Emergency loss fund:** This fund includes reserves for uninsured capital and operating losses. The Board authorizes the use of the emergency/loss fund on a case-by-case basis.
- Cash: Cash is managed so that a minimum of \$100 million is always available for operating expenditures.

Bond issuance and debt service projections methodology

The agency uses debt to bridge the gap between the timing of expenditures and the receipt of revenues. The Financial Plan also includes the proceeds and debt service for all executed federal loans under TIFIA.

Major assumptions related to debt are as follows:

- All-in issuance costs: 1.25% of par value.
- Bond interest rate: 4.0% from 2020-2025, 5.3% from 2026-2046.
- Bond term: 30 years.

- Interest-only payment period on bonds: First five years.
- Bonds may have a non-level principal amortization structure.

Agency financial performance and credit ratings

Sound Transit's financing performance to date, and in the future, is evaluated by the agency's credit rating and adherence to debt service coverage ratios and other financial policies.

The debt service constraints that Sound Transit must adhere to are as follows:

- Net debt service coverage ratio: According to the voter-approved financial policies, Sound Transit's net revenues (after deducting operating expenses) may not fall below 1.5 times our total debt service in any given year. This key affordability metric is referred to as the agency's net debt service coverage ratio (DSCR) and is an important measure of the agency's financial health, conveying our ability to pay back debt.
- Bond covenants: These include additional bond tests as required by the bondholders.
- Debt capacity: According to Washington state law, the amount of debt issued by Sound Transit cannot exceed 1.5% of the assessed valuation of real property located within the regional transit authority district. An important metric of the agency's financial health is the remaining amount of debt that can be issued, or available debt capacity.

Inflation methodology

Sound Transit procures forecasts of four inflation indices from independent third parties to escalate projected costs over time:

- Consumer price index for all urban consumers in Seattle, Tacoma, and Bellevue is applied to
 operations and maintenance expenses and "soft" capital costs, excluding construction-related
 elements and property acquisitions.
- **Construction cost index** is Seattle-area forecast applied to construction-related elements of the capital program (including service delivery projects).
- Right-of-way index is applied to property acquisition costs using a market transaction valuation forecast based on parcels by type (single-family, multifamily, commercial, and industrial) within a 15-mile radius of existing and planned Sound Transit rail alignments.
- Vehicle index is a component index applied to vehicle-related elements of the capital program.

Appendix C: Cost drivers supporting information

Operations and maintenance expenditures

Delivering transit service with partners

Figure 1 below shows recent Link purchased transportation costs and projections through 2030. Details of operating and maintenance requirements evolve as more information on each expansion project becomes available and as projects proceed into the activation period. Quite often, additional resources are required. Sound Transit's heavy reliance on partner agencies and agreements means the agency has limited control over escalating costs in these areas.

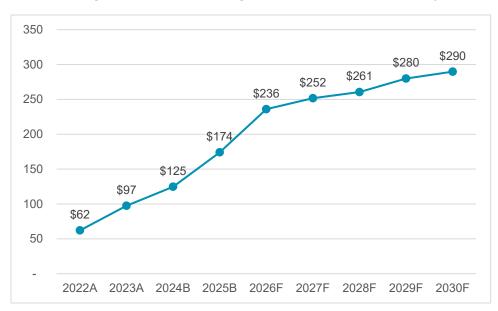


Figure 1: Link purchased transportation cost trends (in millions)

Notes: 2022 and 2023 show actuals, 2024 and 2025 shows budget, and 2026 through 2030 shows a forecast. Link purchased transportation totals include paratransit.

Passenger service expectations and insurance costs

Other key operating costs for all modes and projections through 2030 are shown in Figure 2 below. These include:

- Safety and security. Like other transit agencies, Sound Transit's need for public safety personnel has increased. Public Safety has moved from a single security contract to multiple contracts, which comes with increased cost. Vendors and contracts providing public safety and security personnel are also subject to staff cost increases to attract and retain personnel, further increasing cost risk to Sound Transit.
- **Fare Ambassadors.** In addition to enhanced security, other key initiatives to improve the passenger experience have increased costs, such as the Fare Ambassador program.
- Insurance. Insurance costs have increased significantly and will continue to rise as Link expands. Insurance premiums are the result of exposure, measured by ridership and the insurance carrier rate. As ridership increases for Sounder and especially for an expanded Link system, insurance

costs will continue to go up. Sound Transit has consistently received a lower-than-industry carrier rate, but our continued growth and expansion have led to increased exposure and higher insurance premiums.

140.0 \$117 \$111 120.0 \$105 \$99 \$94 100.0 \$85 0.08 \$66 \$65 \$62 \$59 \$57 \$54 60.0 \$45 \$43 \$35 \$34 40.0 \$19 \$17 \$18 \$17 \$18 \$15 \$14 20.0 \$9 \$7 \$3 \$0 2022A 2023A 2024B 2025B 2026F 2027F 2028F 2029F 2030F Security & Safety Fare Ambassador Insurance

Figure 2: Key operating expenses for all modes (in millions)

Note: 2022 and 2023 show actuals, 2024 and 2025 shows budget, and 2026 through 2030 shows a forecast.

Appendix D: Guide to project status sheets

Each status sheet is a high-level overview of project updates, challenges, and advancements since the 2023 Annual Program Review. They provide a summary of scope elements, key highlights, and risks and opportunities for each project. For projects in planning, additional information on environmental, permitting, property acquisition, agreements, and delayed parking issues are included, as applicable.

Status sheets also include high-level timelines to inform the Board where each project is in its lifecycle. Large projects (such as the East Link Extension) have many contracts and use multiple delivery methods by segment or by design component (such as systems). Since ST has multiple delivery methods and programs under the system expansion umbrella, each project's status sheet will show one of four different types of timelines:



Early planning work with undecided delivery method: Many projects in early planning need to evaluate several variables around scope, schedule, and budget, along with permitting, property acquisitions, and other needs as described in this report before deciding on the delivery method, with the Board's approval. All planning status sheets (outside of the Series 3 light rail vehicles) follow one of these timelines until baselining.



Design-bid-build: This method is the traditional delivery approach for many public agencies (including ST) where the project's **design** is advanced to 100% and includes a package of plans, specifications, and estimates; the package is **bid** out (advertised) to contractors where the lowest qualified bidder is selected; and followed by construction to **build** the work in the design package. NE 130th St. Infill Station is a project in construction that follows this approach.



Design-build and progressive design-build: This method allows the agency to advance the design to a point when a contractor is selected to complete the **design** and **build** the work in the same contract. This approach can be more time- and cost-effective than the traditional design-bid-build, and the agency evaluates such efficiencies before selecting it. The Federal Way Link Extension is using this delivery method.



Light rail vehicle manufacturing, delivery, and acceptance: This program is different than the others because it's focused on the agency receiving the cars needed for our transit system, not civil work. Vehicles arrive monthly and are inspected for defects and put through a series of tests. Those

with minor defects can be accepted and fixed. Otherwise, accepted cars are outfitted with additional systems unique to ST before entering service. The agency's two light rail vehicle projects, Series 3 (see planning status sheets) and Light Rail Vehicle Fleet Expansion (see construction project sheets) have this timeline.

No matter which delivery method is used, all projects adhere to the agency's longstanding Phase Gate process, which ensures that projects only advance to the next milestone once specific criteria are met.

