



## Resolution No. R2023-19

### Baseline Budget and Schedule for the SR522/NE 145<sup>th</sup> Street Stride Bus Rapid Transit Project

Meeting:	Date:	Type of action:	Staff contact:
System Expansion Committee Board	07/13/2023 07/27/2023	Recommend to Board Final action	Brooke Belman, Deputy CEO, Chief Expansion Delivery Officer Ron Lewis, DECM Executive Director <b>Bernard Van de Kamp,</b> <b>Program Executive</b>

### Proposed action

Adopts the SR522/NE 145<sup>th</sup> Street Stride Bus Rapid Transit project baseline schedule and budget by (a) increasing the authorized project allocation to-date by \$330,851,655 from \$250,648,345 to \$581,500,000, (b) decreasing the annual allocated budget by \$21,653,035 from \$82,341,035 to \$60,688,000, and (c) establishing the project open for service date of Q2 2028 for the S3 Line.

### Key features summary

- The SR522/NE 145<sup>th</sup> Street Stride Bus Rapid Transit project will have a baseline budget of \$581,500,000. The combined Stride Bus Rapid Transit (BRT) program will have a total baseline budget of \$2,350,000,000 in year-of-expenditure dollars (YOE\$).
- The Stride BRT program is comprised of three projects (I-405 BRT, SR 522/NE 145<sup>th</sup> Street BRT, and Bus Base North), each of which will be baselined individually. Each project will maintain its own budget and contingency that are not allowed to be shared among the Stride BRT projects without board approval.
- The SR 522/NE 145<sup>th</sup> Street BRT project exceeds the Spring 2023 Financial Plan cost estimate by approximately 18%. The total proposed program budget exceeds the re-alignment cost estimate as assumed in the financial plan by approximately 14%.
- The increase in project cost can be attributed to multiple factors. Firstly, there is an increased level of effort required to advance the design and administer the project, which includes activities such as project coordination with agencies-having-jurisdiction, permitting, public and stakeholder engagements, and design revisions. Secondly, the project has experienced schedule impacts, which have led to additional costs. Additionally, the project cost increase can be attributed to the underlying market conditions in the construction industry. Lastly, the real estate market conditions have also played a role, with rapid increases in property acquisition costs.
- The SR 522/NE 145<sup>th</sup> Street BRT-related parking projects at Bothell, Kenmore, and Lake Forest Park were put on hold during the pandemic and eventually deferred to future years as Tier 4 projects in Board Resolution R2021-05. The sunk costs of these projects, such as environmental assessments but not the future design, construction, right-of-way, and project administration budgets, are included in Stride's Proposed Baseline.
- The current authorized project allocation includes budget to complete the final design, right-of-way acquisitions, and certain third-party delivered construction projects, such as the I-5/NE 145<sup>th</sup> Street

Roundabouts, UW Bothell Station Platform, SR 522 BAT Lane Stage 3, and NE 185<sup>th</sup> Street improvement projects.

- The proposed increase of project allocation will provide the reasonably foreseeable budget for the remaining agency administration, design, acquisition of right-of-way, construction, construction services, and third-party activities to complete all SR 522/NE 145<sup>th</sup> Street BRT project elements.
- The proposed baseline budget and opening service date for each project are consistent with the Sound Transit Program Control Policy & Procedure, which requires baselining the project budget and schedule at a minimum 80% confidence level, or P80, based on the Quantitative Risk Assessment (QRA). One of the key factors considered in the QRA is the assumption that inflation and market conditions would stabilize at a more predictable level of up to 4-5% annually, as opposed to the extraordinary inflation experienced in the past two years.
- The program schedule indicates that the SR 522/NE 145<sup>th</sup> Street BRT S3 Line could be opened for service in 2027 approximately one year later than the Program Realignment Affordable and Target Schedule Milestones. However, due to risks and uncertainties involved, the proposed baseline milestones, based on the QRA P80 dates, forecasts the opening date of S3 Line in Q2 2028.

## Background

A Bus Rapid Transit (BRT) system is part of Sound Transit's 2016 voter-approved system expansion program ST3. BRT will provide fast, reliable high-capacity transit service every ten minutes at peak for both the I-405, and SR-522/NE 145<sup>th</sup> Street BRT corridors (and every 15 minutes off-peak for the I-405 BRT), providing connections to light rail service in Bellevue, Tukwila, Shoreline and Lynnwood.

Stride service lines will replace existing ST Express regional bus service currently run by transit partners. The S1 Line: I-405 South will replace Route 560, the S2 Line: I-405 North will replace Route 535, and the S3 Line will replace Route 522. Stride buses will be connecting to light rail and to communities north, east, and south of Lake Washington.

The SR 522/NE 145<sup>th</sup> BRT Project establishes BRT service along the corridor, primarily operating in business access and transit (BAT) or bus queue bypass lanes for 9 miles between Shoreline and Bothell, with separate, connecting service options to Woodinville. Project development began in 2018 and involved planning, environmental studies, and preliminary design of BRT elements, including routing, roadway, and sidewalk improvements; 12 BRT station pairs between the termini; and parking facilities. The analysis during the Preliminary Engineering phase confirmed the station locations and identified speed and reliability project elements.

At the beginning of the COVID-19 pandemic and the program realignment process, the project activities focused on finalizing the environmental studies, preliminary engineering, and establishing a strategic design/construction partnership with the City of Bothell on the SR 522 BAT Lane Stage 3. During the realignment process, the Board instructed the team to pursue delivery efficiencies and cost savings. In the fall of 2020, the Board designated the SR 522/NE 145<sup>th</sup> Street BRT project as a project to advance through near-term actions to prioritize its implementation. Subsequently, Resolution R2021-05 identified the SR 522/NE 145<sup>th</sup> Street BRT project as a Tier 1 project. The associated parking facilities were identified as Tier 4 projects, with a 10 or more year delay in delivery.

Sound Transit held one online open house and a series of live virtual town halls along corridor cities for the SR 522/NE 145<sup>th</sup> BRT project in March 2021. Sound Transit issued a State Environmental Policy Act (SEPA) Determination of Nonsignificance (DNS) for the SR 522/NE 145<sup>th</sup> BRT Project on March 25, 2021. In September 2021, the board adopted the Resolution R2021-07 selecting the route and station locations, or Project to be Built, for the SR 522/NE 145<sup>th</sup> Street BRT Project, which confirmed the station locations and identified speed and reliability improvements. As final design progresses, Sound Transit will evaluate design refinements to determine if additional environmental review is warranted.

Throughout 2022, Sound Transit advanced the final design of the stations and roadway improvements along the SR 522 corridor.

In February to May 2023, Sound Transit performed cost estimates based on the 60 percent design and conducted a quantitative risk assessment of the project. The risk assessment informed the proposed baseline budget and schedule.

### Project status

○					
Project Identification	Project Refinements	Conceptual Engineering/ Environmental Review	Preliminary Engineering	Final Design	Construction

The proposed Open for Service baseline milestone for the SR522/NE 145<sup>th</sup> St BRT project: Q2 2028.

Project scope, schedule and budget summary are located on page 157 of the May 2023 Agency Progress Report.

### Fiscal information

This action establishes the baseline budget and schedule for the SR 522 /NE 145<sup>th</sup> Bus Rapid Transit project. The authorized project allocation is increased by \$330,851,655 from \$250,648,345 to \$581,500,000. The annual project budget is decreased by \$21,653,035 from \$82,341,035 to \$60,688,000.

The baseline budget will fund the project through revenue service by amending the authorized project allocation in the following phases: agency administration, preliminary engineering, final design, third-party agreements, right-of-way, construction, and construction services.

### SR 522 Bus Rapid Transit

(in thousands)	Annual Project Budget			Authorized Project Allocation		
	Adopted 2023 Annual Allocation	Allocation Change	Revised 2023 Annual Project Allocation	Authorized Project Allocation (Current)	Allocation Change	Authorized Project Allocation (New)
Agency Administration	\$6,257	(557)	\$5,700	18,819	\$38,991	\$57,810
Preliminary Engineering		0		15,482	308	15,790
Final Design	16,984	3,120	20,104	41,549	1,851	43,400
Third Party Agreements	1,887	(429)	1,458	7,896	(546)	7,350
Right of Way	48,854	(22,895)	25,959	84,399	5,221	89,620
Construction	8,359	(1,528)	6,831	50,991	252,379	303,370
Construction Services		636	636	1,512	24,328	25,840
Vehicles				30,000	8,320	38,320
Contingency						
<b>Total</b>	<b>\$82,341</b>	<b>(21,653)</b>	<b>\$60,688</b>	<b>\$250,648</b>	<b>\$330,852</b>	<b>\$581,500</b>

Notes:

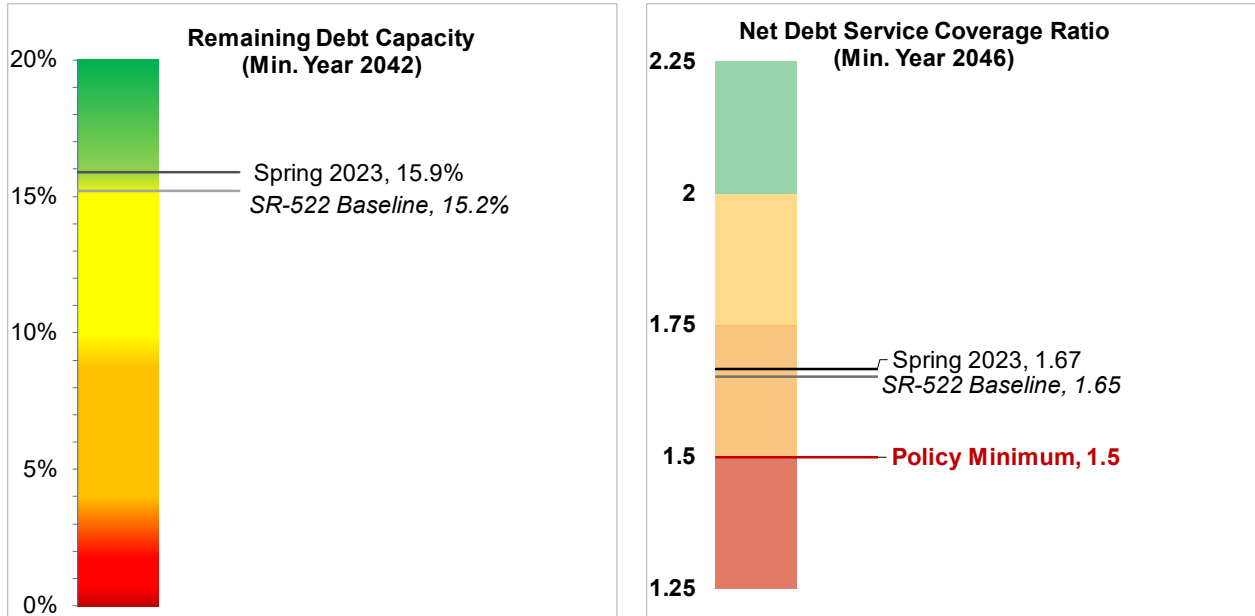
Amounts are expressed in Year of Expenditure.

### Affordability and Impact on Financial Plan

The Spring 2023 Financial Plan cost estimate for the combined Stride program is \$2,062M (YOE\$), while the proposed baseline budget is \$2,350M (YOE\$). The proposed program baseline budget is \$288M (YOE\$), 14%, higher than the Agency’s Financial Plan assumption.

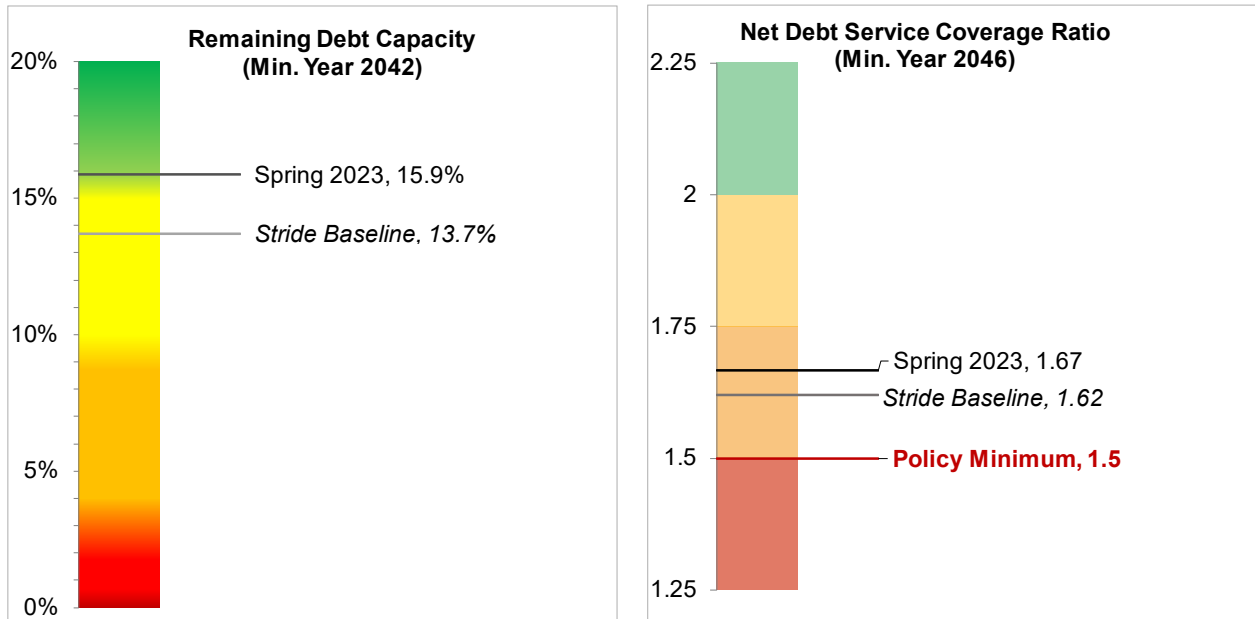
The SR522 BRT/NE 145<sup>th</sup> Street project itself exceeds its financial plan assumption by approximately \$89M (18%). The proposed baseline budget for the SR522/NE 145<sup>th</sup> Street Bus Rapid Transit project would decrease the remaining debt capacity by a projected 0.7% and net debt service coverage by 0.01; the resulting debt capacity and coverage ratio would be 15.2% and 1.65, respectively.

**SR-522 Affordability and Impact on Financial Plan**



The proposed baseline budgets for the entire Stride Bus Rapid Transit program would decrease remaining available debt capacity by a projected 2.2% and net debt service coverage by 0.05; the resulting debt capacity and coverage ratio would be 13.7% and 1.62, respectively.

## Stride Bus Rapid Transit Program Affordability and Impact on Financial Plan



### Deferred Parking

The amount currently set aside in the Financial Plan for the combined Stride Parking program is \$386M (2023\$). Of this amount, \$40M (2023\$) is included in the Stride baseline budget. This includes parking costs already spent, as well as cost for temporary surface parking at South Renton Transit Center. (These costs are converted to 2023\$ using the Spring 2023 Inflation Indices.) As a result, \$346M (2023\$) will remain in the Financial Plan to complete the remainder of the deferred parking.

### Stride Parking Summary

All Costs 2023\$ in Millions

Project	Total Stride Parking	Parking Included in Stride Baseline Budget	Remaining Stride Parking Included in Financial Plan
I-405 Parking	\$174	\$34	\$140
SR 522/ NE 145th St Parking	\$211	\$6	\$205
<b>Total</b>	<b>\$386</b>	<b>\$40</b>	<b>\$346</b>

### Sustainability Cost Allocation

As per Resolution No. R2022-21, authorizing a change to the Sustainability Cost Estimates maintained in the Financial Plan, funds from the agency’s Sustainability Cost Allocation (SCA) will be authorized for the Stride BRT project as part of the baseline budget. Project leadership, in coordination with sustainability staff, will determine how these funds will be used on the project.

The following table documents the SCA Fund by subarea in 2023\$ in millions that will be applied to the Stride BRT program by project. Following board approval of this action, the SCA Fund will be reduced in the Financial Plan from \$131.44 million (2023\$) to \$125.72 million (2023\$).

All Costs 2023\$ in Millions		Transfer for Baseline Milestone				Remaining SCA Fund
Subarea	SCA Fund*	I-405 BRT	SR 522/ NE 145th St BRT	Bus Base North	Total	
Snohomish	\$ 30.82	\$ 0.02	\$ -	\$ 0.14	\$ 0.17	\$ 30.65
North King	\$ 38.65	\$ -	\$ 0.41	\$ -	\$ 0.41	\$ 38.24
South King	\$ 12.23	\$ 0.15	\$ -	\$ 0.90	\$ 1.05	\$ 11.18
East King	\$ 22.90	\$ 0.54	\$ 0.31	\$ 3.25	\$ 4.10	\$ 18.80
Pierce	\$ 26.85	\$ -	\$ -	\$ -	\$ -	\$ 26.85
<b>Total</b>	<b>\$ 131.44</b>	<b>\$ 0.71</b>	<b>\$ 0.71</b>	<b>\$ 4.29</b>	<b>\$ 5.72</b>	<b>\$ 125.72</b>

\*SCA Fund as of Resolution No. 2022-21 converted to 2023\$ using Spring 2023 Indices.

### Disadvantaged and small business participation

Not applicable to this action.

### Public involvement

Sound Transit is committed to proactively engaging and empowering communities along the I-405, SR 522/NE 145<sup>th</sup> and Bus Base North BRT Project corridor. The overarching goals for the stakeholder involvement program are to create public trust and build relationships through transparent communication, meaningful involvement, and responsiveness to comments. Project engagement along the corridor includes local and elected leaders, agency partners, businesses, residents, and other stakeholders to help shape the program. Sound Transit’s open, inclusive, and ongoing stakeholder involvement program includes a variety of tools and techniques to inform and engage the public.

### Time constraints

A one-month delay would not create a significant impact to the project schedule.

### Prior Board/Committee actions

Resolution No. R2023-13: Amended ST2 plan to use funds from the Bothell transit center/park-and-ride project towards the NE 185<sup>th</sup> Street Improvement project in Bothell to improve pedestrian access, rider experience, and operations for the State Route 522/NE 145th Bus Rapid Transit Project.

Resolution No. R2021-07: Selected the route, roadway improvements, and station locations for the State Route 522/NE 145th Bus Rapid Transit Project.

Resolution No. R2021-05: Established a flexible and accountable framework to implement ST2 and ST3 projects.

**Environmental review – KH 6/29/23**

**Legal review – MT 7/7/23**



## Resolution No. R2023-19

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority adopting the SR522/NE 145th Street Stride Bus Rapid Transit project baseline schedule and budget by (a) increasing the authorized project allocation to-date by \$330,851,655 from \$250,648,345 to \$581,500,000, (b) decreasing the annual allocated budget by \$21,653,035 from \$82,341,035 to \$60,688,000, and (c) establishing the project open for service date of Q2 2028 for the S3 Line.

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

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

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

WHEREAS, in November 2016, the voter approved ST3 Plan included funding to implement a regional high-capacity Bus Rapid Transit system; and

WHEREAS, the SR522/NE 145<sup>th</sup> Street Bus Rapid Transit project is one component of the Stride BRT Program; and

WHEREAS, Resolution No. R2021-05 identified the SR522/NE145<sup>th</sup> Street Bus Rapid Transit project as a Tier 1 project to proceed without funding delay; and

WHEREAS, Resolution No. R2021-07 selected the route, roadway improvements, and station locations for the SR522/NE 145<sup>th</sup> Street Bus Rapid Transit Project; and

WHEREAS, in the spring of 2023, Sound Transit performed a quantitative risk assessment of the 60 percent design, and the results validated that Sound Transit's baseline estimate and schedule were reasonably adequate.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that the SR522/NE 145th Street Stride Bus Rapid Transit project baseline schedule and budget is adopted by (a) increasing the authorized project allocation to-date by \$330,851,655 from \$250,648,345 to \$581,500,000, (b) decreasing the annual allocated budget by \$21,653,035 from \$82,341,035 to \$60,688,000, and (c) establishing the project open for service date of Q2 2028 for the S3 Line.

ADOPTED by a supermajority of the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on July 27, 2023.



Dow Constantine  
Board Chair

**Attest:**



Adam Montee, on behalf of

Kathryn Flores  
Board Administrator