



## Resolution No. R2022-12

### Budget Amendment to create the Series 3 Light Rail Vehicle project

Meeting:	Date:	Type of action:	Staff contact:
System Expansion Committee Board	05/12/2022 05/26/2022	Recommend to Board Final Action	Ron Lewis, DECM Executive Director <b>Tracy Reed, Deputy Executive Director Project Management</b> <b>Paul Denison, Deputy Executive Director Transportation and Maintenance</b>

### Proposed action

Amends the Adopted 2022 Budget to create the Series 3 Light Rail Vehicle project by (a) establishing an authorized project allocation in the amount of \$33,000,000 and (b) establishing a 2022 annual project budget of \$1,263,000.

### Key features summary

- This action will establish the Series 3 Light Rail Vehicle (LRV) project in the Adopted 2022 Budget to complete the procurement and delivery of Series 3 LRVs in support of the ST3 light rail expansion program.
- The project's initial budget of \$33,000,000 will provide for project management support in developing the project baseline by 2025 and vehicle engineering services to support procurement of approximately 100 low floor light rail vehicles.
- The key activities of this project development phase, accomplished through two primary contracts are 1) technical consultancy services support in specifying, procuring, inspecting, commissioning, and accepting the LRVs; and 2) a goods and services contract with a car-builder will be advertised for LRV design, fabrication and delivery, and notice to proceed coordinated with timing of the future Project Baseline.
- If this budget amendment is approved, staff will return to the Board with a future action to award the contracts and establish a Project Baseline with the final number of vehicles, budget and schedule.
- Staff will also establish other supporting contract(s) to manage and monitor the progress of design and manufacturing including independent quality, safety and security oversight.
- The first Series 3 LRV delivery is targeted to occur in 2029, with the last LRV in the initial order being delivered in approximately 2032.
- The base order of LRVs is necessary to support opening of service for West Seattle and Tacoma Dome Link Extensions. The actual number of Series 3 LRVs to be ordered will be determined at the time of Project Baseline and based on the relevant rail fleet management and operations plans.
- This action initiates this project with target completion in 2032. The project schedule will continue through the final acceptance and warranty period for each LRV and may be extended to accommodate the delivery of optional LRVs added to the base order.

## Background

On November 8, 2016, voters approved the Sound Transit 3 (ST3) ballot measure. ST3 provided the next phase of high-capacity transit improvements for central Puget Sound. In accordance with the ST3 plan, the light rail system will more than double again to 116 miles with over 80 stations. Light rail will expand north to Everett, south to Federal Way and Tacoma, east to downtown Redmond, south Kirkland, and Issaquah and west to Ballard and West Seattle.

Procurement of additional LRVs is necessary and authorized in the plan to provide service across the expanded system. Sound Transit has typically established one light rail vehicle order in support of each ballot measure or long-range plan: ST1 and ST2 voter-approved capital expansions. The existing LRV fleet is made up of two types of LRV that are referred to as Series 1 or Series 2 vehicles.

The scope of the Series 3 LRV project will include all steps necessary to specify, procure, manufacture, commission, and accept new vehicles over a seven-year period (2025 – 2032), with optional extensions to support the total number of LRVs approved at the time of establishing a Project Baseline. Rail fleet management and operations plans will be refined during this first phase of project development and provide a basis for how many LRVs are needed for passenger service. The current planning work calls for procurement of approximately 100 vehicles. The Series 3 LRV project is intended to support future operation of service on the Tacoma Dome Link Extension, West Seattle Link Extension and additional infill stations, with consideration of options for the Ballard Link Extension, Everett Link Extension, and South Kirkland to Issaquah Link Extension. The delivery of the new Series 3 LRVs may also allow for the retirement of Series 1 LRVs by 2041.

If this budget amendment is approved, a Request for Proposal (RFP) will be issued and the contract to provide management, requirements definition, design review, and inspection of the vehicles through 2032 will be brought to the Board for consideration to award after the review and evaluation of proposals received.

## Project status

This action will establish and initiate the Series 3 LRV Project. Staff are working to issue the project and technical consultants services RFP in June 2022. The subsequent timeline for the project is projected as follows:

- Q4 2022: Issuance of Notice to Proceed (NTP) for project and technical consultant services.
- Q4 2024: ST Board establish Project Baseline budget and schedule.
- Q1 2025: Issuance of NTP for Series 3 LRVs procurement contract.
- Q4 2029: Delivery of 1<sup>st</sup> Series 3 LRV to Sound Transit.
- Q4 2030: 1<sup>st</sup> Series 3 LRV ready for revenue service.
- Q3 2032: Final Acceptance (FA) of Series 3 LRVs.

## Fiscal information

This action establishes the Series 3 Light Rail Vehicle project and its authorized project allocation for the project to perform to complete the procurement and delivery of Series 3 LRVs in support of the ST3 light rail expansion program.

The proposed action establishes the Series 3 Light Rail Vehicle project with an authorized project allocation amount of \$33,000,000 and a 2022 annual budget in the amount of \$1,263,000.

**LRV Series 3**  
(In thousands)

Project Phase	Annual Project Budget			Total Project Allocation		
	Adopted 2022 Annual Project Budget	Budget Revision	Revised 2022 Annual Project Budget	Total Project Allocation	Change	Revised Total Project Allocation
Agency Administration		\$702	\$702		\$6,243	\$6,243
Preliminary Engineering						
Final Design						
Third Party Agreements						
Right of Way						
Construction						
Construction Services		561	561		26,757	26,757
Vehicles						
System Testing + Startup						
Contingency						
<b>Total</b>	<b>\$0</b>	<b>\$1,263</b>	<b>\$1,263</b>	<b>\$0</b>	<b>\$33,000</b>	<b>\$33,000</b>

**Notes:**  
Amounts Are expressed in Year of Expenditure.

The proposed action is affordable within the ST3 LRV Fleet expansion project cost estimate of \$1,851M in 2022\$. This action does not impact the affordability of any other system expansion project.

**Disadvantaged and small business participation**

Not applicable to this action.

**Public involvement**

Not applicable to this action.

**Time constraints**

A one-month delay would impact the project by delaying procurement and delivery activities.

**Prior Board/Committee actions**

Resolution R2021-21: Adopted an annual budget for the period from January 1 through December 31, 2022 and adopted the 2022 Transit Improvement Plan.

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**Environmental review** – KH 4/28/22

**Legal review** – AJP 5/9/22



## Resolution No. R2022-12

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority amending the Adopted 2022 Budget to create the Series 3 Light Rail Vehicle project by (a) establishing an authorized project allocation in the amount of \$33,000,000 and (b) establishing a 2022 annual project budget of \$1,263,000.

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

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

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

WHEREAS, the Series 3 Light Rail Vehicle (LRV) project will serve to fulfill the procurement and delivery of additional LRVs in support of the ST3 light rail expansion program; and

WHEREAS, the Lifetime Budget of \$33,000,000 will provide for project management support in developing the project baseline up to the end of year 2025, and acquisition of external consultancy services to support future procurement of approximately 100 low floor light rail vehicles; and

WHEREAS, the actual number of Series 3 LRVs to be ordered will be determined at the time of Project Baseline based on the relevant rail fleet management and operations plans; and

WHEREAS, the establishment of this project is to deliver two primary contracts—an initial contract to provide technical consultancy services to support in specifying, procuring, inspecting, commissioning, and accepting the LRVs, and a second contract with a car-builder will be advertised for LRV design, fabrication and delivery—as well as other supporting contract(s) to manage and monitor the progress of manufacturing such as but not limited to the independent quality, safety and security oversight contract(s); and

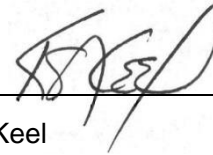
WHEREAS, this action establishes the approval for the initiation of this project by April 2022 with target completion in 2032; and

WHEREAS, the first Series 3 LRV delivery is targeted to occur in 2029, with the last LRV in the initial order being delivered in approximately 2032. The project schedule will continue through the final acceptance and warranty period for each LRV and may be extended to accommodate the delivery of optional LRVs added to the base order at the time of Project Baseline. Initiation of optional LRVs procurement support beyond the base order will require Board approval; and

WHEREAS, a two-thirds affirmative vote of the entire membership of the Sound Transit Board is required to amend the Adopted 2022 Budget.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that the Adopted 2022 Budget be amended to create the Series 3 Light Rail Vehicle project by (a) establishing an authorized project allocation in the amount of \$33,000,000 and (b) establishing a 2022 annual project budget of \$1,263,000.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on May 26, 2022.



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Kent Keel  
Board Chair

**Attest:**



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Kathryn Flores  
Board Administrator