Resolution No. R2019-06
Portable Wheel Truing Machine Budget Amendment

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<tr>
<th>Meeting:</th>
<th>Date:</th>
<th>Type of action:</th>
<th>Staff contact:</th>
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</thead>
<tbody>
<tr>
<td>Rider Experience and Operations Committee Board</td>
<td>03/07/2019</td>
<td>Recommend to Board</td>
<td>Bonnie Todd, Executive Director Operations</td>
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<tr>
<td></td>
<td>03/28/2019</td>
<td>Final action</td>
<td>Paul Denison, Executive Operations Director, Light Rail</td>
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Proposed action
Amends the Adopted 2019 Budget to create the Portable Wheel Truing Machine Project by (1) establishing an authorized project allocation to date in the amount of $960,000 and (2) establishing a 2019 annual project budget of $960,000.

Key features summary
- A wheel truing machine is an operational necessity for Link light rail service.
- The current fixed wheel truing machine at the Operations and Maintenance Facility (OMF) is over ten years old and is approaching the maintenance overhaul period. Sound Transit has no backup equipment should the existing equipment fail or to cover the time when it is being overhauled. Without backup equipment, Sound Transit faces a significant risk to fleet availability for revenue service.
- Sound Transit has an agreement with the University of Washington to keep noise and vibration levels to a minimum when operating beneath the university’s campus. Wheel truing is critical to meeting that agreement requirement.
- Wheel truing operations are expected to rise in 2020 with the testing and commissioning of new ST2 vehicles and then sharply increase in 2022 with preparations for expanded revenue service.
- A portable wheel truing machine will serve a vital role in providing additional wheel truing capacity now at the OMF and in the future at the OMF: East.

Background
The light rail vehicle (LRV) fleet of 62 Kinkisharyo cars, as well as the ST2 planned fleet of an additional 152 Siemens LRVs, will require access to wheel truing capabilities at all times in order to maintain current and future service expectations. Wheel truing operation is key to maintaining the LRV fleet in a State of Good Repair and keeping the LRVs’ noise and vibration levels within agreed upon requirements with the University of Washington. With a limited spare factor, cars cannot be held for any extended period of time without jeopardizing current and future service levels.

The 152 Siemens LRVs will be subjected to friction brake and propulsion testing as a part of the testing and commissioning process. Such testing often results in wheel defects such as flat spots due to hard braking. This activity represents a direct increase over current wheel truing operational frequency. The OMF-East yard will eventually increase the overall wheel truing capacity of Link, but will not be commissioned until 2023 and is primary to support the LRV fleet stored at OMF: East yard.
The portable wheel truing machine could be transported between facilities with minimal effort to support an immediate need. This equipment does not require dedicated infrastructure.

The current wheel truing machine at the OMF is 10 years old and is reaching the point of overhaul. The original equipment manufacturer (OEM) has issued a notice of obsolescence to Sound Transit for the current equipment. Lead times associated with part replacement and repair of the current machine are long due to overseas sourcing of material and limited OEM aftermarket support. These factors limit response time to unforeseen failures. This budget amendment request does not include overhaul or replacement of the existing in-floor wheel truing equipment. With increased wheel truing required to meet Sound Transit’s agreement with the University of Washington, the agency is assessing whether to overhaul the current OMF equipment or to replace it.

**Fiscal information**

The proposed action establishes an authorized project allocation to date in the amount of $960,000 and a 2019 annual budget in the amount of $960,000.

### Portable Wheel Truing Machine

(in thousands)

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Adopted 2019 Annual Project Budget</th>
<th>Revised 2019 Annual Project Budget</th>
<th>Authorized Project Allocation to Date</th>
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<td>Agency Administration</td>
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<tr>
<td>Total</td>
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*Notes:*

Amounts are expressed in Year of Expenditure.

### Small business participation and apprenticeship utilization

Not applicable to this action.

### Public involvement

Not applicable to this action.

### Time constraints

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

### Environmental review – KH 2/28/19

### Legal review – AJP 3/1/19
Resolution No. R2019-06

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority amending the Adopted 2019 Budget to create the Portable Wheel Truing Machine Project by (1) establishing an authorized project allocation to date in the amount of $960,000 and (2) establishing a 2019 annual project budget of $960,000.

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;

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;

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;

WHEREAS, a wheel truing machine is an operational necessity for the Link light rail operations, and the current fixed wheel truing machine at the Operations and Maintenance Facility (OMF) is ten years old and approaching the maintenance overhaul period;

WHEREAS, Sound Transit has no backup equipment should the existing wheel truing machine fail or be out of service for an extended time;

WHEREAS, the light rail vehicle (LRV) fleet of 62 Kinkisharyo cars, as well as the ST2 planned fleet of an additional 152 Siemens LRVs, will require access to wheel truing capabilities at all times in order to maintain current and future service expectations;

WHEREAS, wheel truing operation is key to maintaining the LRV fleet in a State of Good Repair and keeping the LRVs’ noise and vibration levels within agreed upon requirements with the University of Washington;

WHEREAS, wheel truing operations are expected to rise significantly in 2020 with the testing and commission of new ST2 vehicles and then a sharp increase in 2022 with preparations for expanded revenue service; and

WHEREAS, a portable wheel truing machine will serve a vital role in providing additional wheel truing capacity now at the OMF and in the future at the OMF: East.
NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority that the Adopted 2019 Budget is amended to create the Portable Wheel Truing Machine Project by (1) establishing an authorized project allocation to date in the amount of $960,000 and (2) establishing a 2019 annual project budget of $960,000.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 28, 2019.

Attest:

[Signature]
John Marchione
Board Chair

Kathryn Flores
Board Administrator