

## Motion No. M2021-42

### Amendment to Operations and Maintenance Agreement with University of Washington for Vibration and Magnetic Fields for the Northgate Link Extension

Meeting:	Date:	Type of action:	Staff contact:
System Expansion Committee Board	07/08/2021 07/22/2021	Recommend to Board Final action	Ron Lewis, DECM Executive Director <b>Don Davis, Executive Project Director, Northgate Link Extension</b> <b>Kristin Hoffman, Light Rail Development Manager, Northgate Link</b> <b>Shankar Rajaram, Engineering Vehicles Manager</b>

### Proposed action

Authorizes the chief executive officer to (1) execute an amendment to the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement During Revenue Service with the University of Washington; and (2) execute any necessary amendments to other agreements with the University of Washington to be consistent with the new terms of the Operations and Maintenance Agreement for the Northgate Link Extension.

### Key features summary

- The Master Implementation Agreement (MIA), adopted in 2007 and amended in 2014, provided terms and conditions for Sound Transit's access to and use of University of Washington (UW) property for purposes of constructing, operating, monitoring and maintaining the light rail transit system. The MIA anticipated development of follow-on agreements including one documenting detailed vibration and magnetic field monitoring programs prior to revenue service.
- Under this amendment, the Parties agree to increase certain thresholds for operational vibration levels defined in the amended MIA for some sensitive buildings near the light rail line under the UW campus, reducing Sound Transit's risk of not achieving or maintaining these levels during operations while maintaining the integrity of UW's research environment.
- Sound Transit agrees to operate light rail transit service at or below the newly established thresholds for all sensitive receiver buildings identified in the Agreement. Also under this amendment Sound Transit and the UW also agree to:
  - Expand upon the agreement's scope to cover operation of both the University Link and Northgate Link extensions.
  - Detailed communication and reporting protocols between Sound Transit and the UW for notification and verification of, and response to, suspected and confirmed vibration and magnetic field threshold exceedances and trends.
  - Revise certain liquidated damages applicable if Sound Transit exceeds the thresholds for vibration and magnetic field or Sound Transit's vibration monitoring system fails.

- Provisions modified by this amendment are mirrored in other agreements with the UW. This action also authorizes staff to execute amendments to implicated agreements for the limited purpose of making all necessary agreements between Sound Transit and the UW consistent.

## Background

Northgate Link Extension is a 4.3 mile light rail extension with three new stations. Of the 4.3 miles, 3.5 miles are entirely underground with tunnels traveling northwest from the University of Washington Station under the University of Washington's main campus to an underground station in the U District (U District Station). The tunnels continue north under City of Seattle surface streets to an underground station in the Roosevelt neighborhood (Roosevelt Station). The tunnels proceed northward under surface streets and eventually underneath WSDOT right-of-way to the tunnel portal (Maple Leaf Portal) at 1<sup>st</sup> Ave NE and NE 94<sup>th</sup> Street. The track continues north first at grade and then elevated to the Northgate Station which is an elevated station. This last 0.8 miles of track is west of 1<sup>st</sup> Ave NE and east of Interstate 5.

In 2007, Sound Transit and the University of Washington (UW) entered into the MIA, which established terms and conditions for access to and use of UW property for purposes of constructing, operating, monitoring, and maintaining the light rail transit system. UW wanted to protect their sensitive research facilities from potential impacts from vibration and magnetic fields created by light rail operations under campus. The MIA identified vibration and magnetic field thresholds for 26 UW buildings, as well as mitigation and operations monitoring requirements, to prevent and/or mitigate impacts to UW research from vibration and magnetic fields caused by Link operations. The MIA included financial disincentives, by way of liquidated damages provisions, for exceeding thresholds established for vibration and magnetic field impacts directly associated with light rail operations, and for failing to maintain an effective vibration monitoring system.

The MIA was amended in 2014. The amendment established thresholds for operational vibration and magnetic field levels higher than originally defined in the MIA for some sensitive buildings near the light rail line under the UW campus. In addition, the UW accepted the responsibility for relocating, or otherwise mitigating impacts, to all sensitive research or other UW activities that cannot be conducted in buildings in which they were located because the agreed upon thresholds for vibration or magnetic field exceeded the levels the UW requested for those buildings.

The UW also accepted the responsibility for designing, implementing, and maintaining a continuous and long-term magnetic field monitoring system. The amendment authorized a lump sum payment to the UW which compensated for and funded the UW's implementation of lab relocation or other additional receiver-based mitigation measures and the UW's implementation of the magnetic field monitoring. The MIA anticipated that Sound Transit and the UW would enter follow-on agreements to support a range of design, construction, and operations functions. The University granted Sound Transit transportation easements for two light rail segments on UW property: University Link (Segment 1), which comes from the south and ends at the University of Washington Station, and Northgate Link (Segment 2), which goes north from the University of Washington Station and travels in a northwesterly direction under the UW campus. The MIA specifically required an operating agreement for a detailed vibration and magnetic field monitoring program be developed before revenue service of each segment.

The proposed Vibration and MF Agreement establishes the detailed vibration and magnetic field monitoring program that fulfills the MIA requirement for Northgate Link (Segment 2). It also incorporates the Vibration and MF Agreement for University Link (Segment 1) so that there is only one Vibration and MF Agreement governing UW's Seattle campus. The agreement implements, interprets, and is consistent with prior Board agreements between Sound Transit and the UW with regard to vibration and magnetic fields, and provides additional detail and clarification on the parties' roles, responsibilities, and communications protocols for vibration and magnetic fields.

Sound Transit will be responsible for providing a long-term vibration monitoring program and the UW is responsible for providing a long-term magnetic field monitoring program. This Vibration and MF Agreement establishes criteria to ensure the UW’s magnetic field monitoring program provides accurate and timely communication of suspected exceedances. The agreement provides detailed communication and reporting protocols between Sound Transit and the UW for notification and verification of, and response to, suspected and confirmed vibration and magnetic field threshold exceedances and trends. Liquidated damages will be assessed for exceeding the established vibration and magnetic field thresholds directly associated with light rail operations, and for failing to maintain an effective vibration monitoring system.

**Project status**

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<b>Project Identification</b>	<b>Alternatives Identification</b>	<b>Conceptual Engineering/ Draft EIS</b>	<b>Preliminary Engineering/ Final EIS</b>	<b>Final Design</b>	<b>Construction</b>

Projected completion date for Revenue Service: 4Q 2021

Project scope, schedule and budget summary are located on page 15 of the April 2021 Agency Progress Report – Capital Programs.

**Fiscal information**

While this agreement has no direct fiscal impact, the annual cost to maintain the vibration monitoring program will be addressed during the annual budget development process. The agreement expands the existing long term vibration monitoring to include the additional section of the Northgate Link Extension which travels under the University of Washington campus.

**Disadvantaged and small business participation**

Not applicable to this action.

**Public involvement**

Not applicable to this action

**Time constraints**

A one-month delay could create an impact to the project schedule and start of revenue service.

**Prior Board/Committee actions**

Motion No. M2016-17: Authorized the chief executive officer to execute the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement (Segment 1) During Revenue Service.

Motion No. M2014-35: Authorized the chief executive officer to execute an amendment to the Master Implementation Agreement with the University of Washington to establish new vibration and magnetic field level thresholds that Sound Transit will meet during operation of light rail transit under University property, confirms the University’s approval of the University Link and Northgate Link Extensions final design, mitigation plan, and monitoring plan, and includes compensation to the University of Washington in the amount of \$43,300,000 to relocate or otherwise mitigate anticipated impacts to sensitive research labs and activities.

Motion No. M2007-62: Authorized the chief executive officer to execute a Master Implementation Agreement with the University of Washington establishing terms and conditions to acquire access to and use of University of Washington property for purposes of design, construction, operation, monitoring, and maintenance of Link light rail transit system for a total authorized agreement amount of \$35,200,000.

Resolution No. R2000-08: Approved a Memorandum of Agreement with the University of Washington related to the purchase of University of Washington property to build a portion of the Central Link Light Rail line on and adjacent to University of Washington owned property.

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**Environmental review** – KH 6/16/21

**Legal review** – MT 7/2/21



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## **Motion**

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to (1) execute an amendment to the Light Rail Transit System Operations and Maintenance Agreement for Vibration and Magnetic Fields on University of Washington Transportation Easement During Revenue Service with the University of Washington and (2) execute any necessary amendments to other agreements with the University of Washington to be consistent with the new terms of the Operations and Maintenance Agreement for the Northgate Link Extension.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on \_\_\_\_\_.

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Kent Keel  
Board Chair

## **Attest:**

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Kathryn Flores  
Board Administrator