

Motion No. M2024-45

A motion of the Board of the Central Puget Sound Regional Transit Authority directing the chief executive officer to: (1) expand the geographic scope of Sound Transit's at-grade crossing program to not only include all Link light rail at-grade crossings, but also Tacoma Link and Sound Transit-owned Sounder at-grade crossings while still prioritizing improvements in the Rainier Valley; (2) accelerate current at-grade projects, and expand projects as needed (3) conduct a comprehensive study of at-grade crossings in the Rainier Valley identifying short-, mid-, and long-term at-grade safety improvements; and (4) deliver a [Rainier Valley](#) safety master plan of potential at-grade safety improvements to the Board in October 2024 that prioritizes at-grade safety improvements where the most collisions occur (e.g. along MLK Jr. Way S. in the Rainier Valley), [followed by a system-wide at-grade safety plan in November 2024](#), and provide regular progress reporting to the Rider Experience and Operations and System Expansion Committees until the safety master plans [are is](#) transmitted.

Background

Public transportation plays a critical role in increasing mobility, especially for individuals and families who lack a private means of transportation, have no- or low-income, live in communities without essential goods and services, and must travel for school, work, and other opportunities. As Sound Transit expands its Link light rail, the agency must continue to improve rider and pedestrian safety at at-grade crossings along the existing lines, especially where service has disproportionately impacted BIPOC communities.

In 2022, Sound Transit and the Seattle Department of Transportation (SDOT) signed a partnership agreement reaffirming a shared commitment to enhance safety, equity, community access, and mobility in the Rainier Valley. This motion seeks to build upon that partnership to study and expeditiously implement enhancements for at-grade stations in the area.

When the 1 Line was constructed, it was built at-grade through the Rainier Valley with three stations along Martin Luther King Jr. Way South: Columbia City, Othello, and Rainier Beach. MLK Jr. Way S is one of the two main roadways in the Rainier Valley, making it a vital and highly used corridor for various modes of transportation. The Rainier Valley is also historically one of the most diverse zip codes in the Puget Sound region.

The at-grade design along MLK Jr. Way S means that pedestrian and vehicle collisions with the light rail can and have occurred. The Seattle Times has reported that since service began in 2009, light rail vehicles have collided with a vehicle, person, or object at least 136 times in the Rainier Valley. In 2023, Sound Transit reported 26 collisions with light rail vehicles for the year. Of these collisions, 20 occurred at grade crossings and 18 occurred along the MLK Jr. Way S corridor. Of the 11 collision-related fatalities throughout the Link's operating history, 8 individuals have tragically lost their lives in the Rainier Valley.

Collisions in the MLK corridor also have significant effects on overall Link system operations. When collisions occur, trains may be one tracked, but the disruption and delay often interrupts scheduled service for the entire 1 Line. This poses future service and rider experience concerns as the Link system expands and new lines are integrated with this corridor. This section of track is the largest source of variability in the Link light rail system performance due to delays and service disruptions caused by traffic signals and collisions. The variability in the Rainier Valley can result in "train bunching," which can cause crowding and other operational challenges, up and down the alignment, including the interlining of trips for both the 1 and 2 Lines between International District Station and Lynnwood City Center. In addition, variability can result in the need for additional light rail fleet to maintain service levels across

the system while accommodating slower travel times. Having improved reliability in the Rainier Valley will assist in Sound Transit's ability to meet federal grant commitments related to service levels as the system expands.

A disproportionate amount of train collisions occur along the MLK Jr. Way S corridor, negatively impacting communities that live, work, and commute through in this region. Sound Transit and SDOT have affirmed that reducing collisions and near misses is a top priority for both agencies. The direction provided by this motion will expand upon the current work to better understand the feasibility of safety enhancements to at-grade crossings that can help achieve these goals.

Sound Transit's Link light rail includes 27 at-grade Link light rail crossings in the MLK Jr. Way S corridor. Outside the corridor there are an additional 22 at-grade Link light rail crossings. The Sounder commuter rail service has 16 at-grade crossings on the Sound Transit-owned Lakewood subdivision, and Tacoma Link includes 47 at-grade crossings.

Train safety is an important issue in the U.S. where every three hours in the U.S. a person or vehicle is hit by a train, and more than 60% of collisions occur at crossing equipped with lights and/or gates.

In light of safety issues related to at-grade crossings in August of 2021, Sound Transit unified work taking place across the agency into one multi-disciplinary work group that focuses specifically on at-grade crossing safety.

Sound Transit's At-Grade Crossing Program is focused on Link light rail at-grade crossings and works to reduce the safety risk to the lowest practical level as defined by the Federal Transit Administration (FTA) on the existing operational system and voter approved projects currently under construction. While Tacoma Link and Sound Transit-owned Sounder at-grade crossings are not currently within the program's scope they are planned to be incorporated.

Sound Transit, in partnership with SDOT, has completed work in the Rainier Valley Corridor, including pavement markings, LED signs, traffic signals, additional studies on treatments, and analysis on risks and costs. Sound Transit has many active studies, pilot projects, and projects underway in the Rainer Valley Corridor, including but not limited to, an eye-tracking study/analysis, a signal reprioritization pilot, an audible warning modification pilot, paint to enhance trackway visibility pilot, a pilot for automated pedestrian gates at station locations, and light rail vehicle wig wag headlights, as well as traffic modeling.

In recognition of the series of efforts underway, as well as continuing community concerns related to at-grade crossing safety in communities in King, Pierce, and Snohomish Counties where Sound Transit rail service operates, the agency must accelerate the pace and expand the geographic scope of these at-grade safety projects, intensify focus on the short-term at-grade safety concerns on existing corridors, and identify medium and long-term issues and opportunities that impact at-grade safety, and system operations and reliability of Sound Transit service. The identification of these medium and long-term issues could present significant opportunities for system expansion, as well as future needs for rolling-stock acquisition.

Because Sound Transit-owned at-grade crossings intersect with the rights-of-way of jurisdictions including Seattle, Bellevue, Redmond, Tacoma, Lakewood, and DuPont, it is necessary to ensure strong agency relationships with partner jurisdictions.

Motion

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is directed to expand the geographic scope of Sound Transit's at-grade crossing program to not only include all Link light rail at-grade crossings, but also Tacoma Link and Sound Transit-owned Sounder at-grade crossings while prioritizing improvements in the Rainier Valley, and accelerate the execution of current at-grade crossing projects underway to improve near-term at-grade safety and expand current projects as needed.

The chief executive officer is further directed to conduct a comprehensive study in which Sound Transit staff will: (a) analyze past at-grade crossing safety incidents on MLK Jr. Way S; (b) identify and evaluate short-, mid-, and long-term at-grade safety improvements that could be implemented at at-grade stations along MLK Jr. Way S.; (c) explore the feasibility of different options in their evaluation such as gates, pedestrian spaces, reduced speed limits for cars, lane reductions, grade separation, and other possible upgrades, as well as develop a potential funding plan identifying any possible grant sources; (d) build upon work already underway to work collaboratively with SDOT and other regional partners where appropriate to assess at-grade safety enhancements; (e) identify any opportunities to accelerate actions under their current at-grade safety studies/planning work.

The chief executive officer is further directed to develop and compile a [Rainier Valley](#) safety master plan with a focus on the Rainier Valley [and a system-wide at-grade safety plan](#) in which staff will: (a) evaluate the feasibility, costs, benefits, and potential impacts of each proposed potential improvement including recommendations for project prioritization based on the highest risk areas; (b) ensure the language used in the document is easily understandable or use layman's terms if highly technical language must be utilized; (c) detail what actions would be needed to implement improvements including any required collaboration with other agencies; and (d) work to improve at-grade crossing safety on projects under construction, projects in planning, and any long range plans.

Staff will transmit a report on the [Rainier Valley](#) safety master plan to the Board in October 2024, [followed by a system-wide at-grade safety plan in November 2024](#), and must provide monthly updates to the Rider Experience and Operations Committee and System Expansion Committee on the progress of all current work on at-grade crossing projects until the safety master plans ~~are~~ transmitted.

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

Dow Constantine
Board Chair

Attest:

Kathryn Flores
Board Administrator