

Motion No. M2024-39 – STRIKER DRAFT 1

A motion of the Board of the Central Puget Sound Regional Transit Authority directing the chief executive officer is directed to (1) accelerate the execution of current at-grade crossing projects underway to improve near-term safety and expand current projects as needed; (2) 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 Sound Transit-owned Sounder, and T Line at-grade crossings; (3) report to the Board on (a) progress on all current work on at-grade crossing projects, (b) opportunities for additional short, medium, and long-term safety improvements, (c) feasibility, costs, benefits, and potential impacts of each potential improvement, (d) actions needed to implement improvements including any partnerships needed, (e) recommendations for project prioritization based on the highest risk areas. In making this report, staff should include information on work to improve at-grade crossing safety on active train lines, projects under construction, projects in planning, and any long range plans.

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.

Light rail transit technology allows Sound Transit's Link Light Rail network to be designed to partially operate on streets. Commuter rail, including Sound Transit Sounder service, gives individuals a dependable, congestion-free commute using dedicated heavy rail tracks. Modern streetcar technology, such as the T Line in Pierce County, with its low-floor boarding means it can operate in curbside or a median right of way, as well as in mixed traffic, or in dedicated right-of-way.

At-grade crossings, also known as Highway-rail grade crossings, are the intersection of two or more modes of transportation with very different physical and operational characteristics.

Sound Transit's Link light rail includes 49 at grade light rail crossings, its commuter rail Sounder service has 16 at-grade crossings on the Sound Transit-owned Lakewood subdivision, and T Line includes 47 crossings. According to the WSDOT Design Manual, operations at roadway intersections located near grade crossings can present significant challenges for grade crossing safety.

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. Since opening in 2009, there have been 11 fatalities on Link light rail service that involved the train striking a car or pedestrian. Of those, 8 were incidents that occurred in the Rainier Valley at-grade segment. 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 Rainier Valley at-grade segment.

The at-grade segment in the Rainier Valley has 27 at-grade vehicle and pedestrian crossings. It is located within one of the most diverse zip codes in the Puget Sound region. 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., 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 needing more light rail fleet to accommodate 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.

In light of safety issues related to at-grade crossings in August of 2021, Sound Transit formalized 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 the Sounder and T Line are not currently within the program's scope they are planned to be incorporated.

Sound Transit in partnership with [the Seattle Department of Transportation \(SDOT\)](#) has completed work on the Rainier Valley Corridor, including pavement markings, LED signs, traffic signals, and additional studies on treatments, and analysis on risks and costs. Sound Transit has many active studies, pilot projects, and projects underway in the Rainier 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 series of efforts underway, as well as continuing the community concerns related to transportation safety in communities in King, Pierce, and Snohomish Counties where Sound Transit rail service operates, ~~it is important~~ the agency must ~~to~~ accelerate the pace and expand the geographic scope of these at-grade safety projects, intensify focus on the short-term safety concerns on existing corridors, and identify medium and long-term issues and opportunities that impact safety, and system operations and reliability of Sound Transit service. [As Sound Transit expands its Link light rail, the agency must continue to improve rider and pedestrian safety along the existing lines, especially where service has disproportionately impacted BIPOC communities.](#) 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. [Notably, in 2022, Sound Transit and SDOT signed a partnership agreement to describe the roles, responsibilities, and shared values \(safety, equity, access and mobility, and community\) of the two agencies for activities in the Rainier Valley to enhance safety in the existing system and describe how success will be measured in the future. This motion seeks to build upon existing and future partnerships to study and expeditiously implement enhancements for at-grade crossings.](#)

Motion

[It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is directed to \(1\) accelerate the execution of current at-grade crossing projects underway to improve near-term safety and expand current projects as needed; \(2\) 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 Sound Transit-owned Sounder, and T Line at-grade crossings; \(3\) report to the Board on \(a\) progress on all current work on at-grade crossing projects, \(b\) opportunities for additional short, medium, and long-term safety improvements, \(c\) feasibility, costs, benefits, and potential impacts of each potential improvement, \(d\) actions needed to implement improvements](#)

including any partnerships needed, (e) recommendations for project prioritization based on the highest risk areas In making this report, staff should include information on work to improve at-grade crossing safety on active train lines, projects under construction, projects in planning, and any long range plans.

Staff will transmit the required report by [INSERT DATE] to the Rider Experience and System Expansion committees and provide those committees monthly updates on implementation of the above activities carried out by the at-grade crossing program.

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