

At-grade Crossings Program

Master Plan

Community Oversight Panel
06/11/2025



At-Grade Program priorities

- Reduce collisions and near misses with vehicles and pedestrians
- Provide a consistent and safe passenger experience systemwide
- Provide reliable service without degradation to operational performance
- Increase accessibility of the Sound Transit network for all
- Build positive, proactive relationships with surrounding communities that foster trust and increase perception of safety of Sound Transit's service



Completed Projects



Link Light Rail



Sounder



Pedestrian

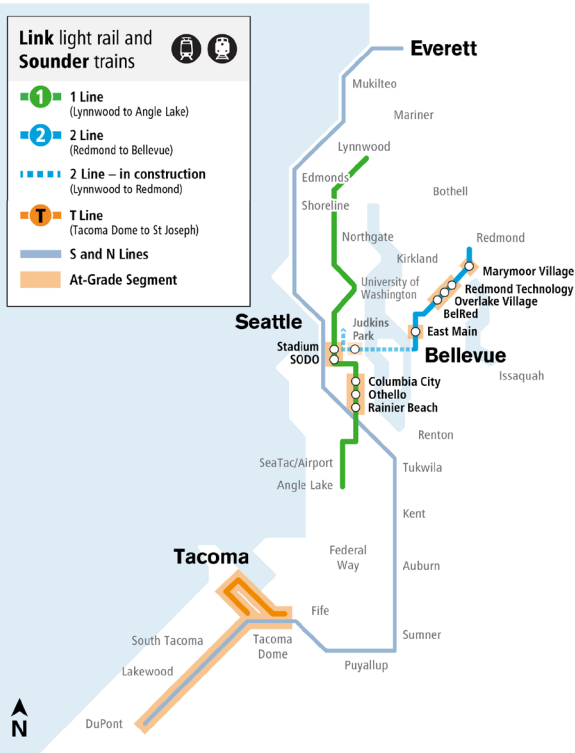


Vehicle

- + (Preliminary results indicate positive findings)
- (Not included in data analysis)

Project Type	Project Name	Safety Focus Area	Completion Date
Signage Enhancement	+ LED flashing no left turn signs		Mar 2022
Signage Enhancement	+ LED flashing another train coming signs at station intersections		Sep 2023
Signage Enhancement	+ Other signage updates		Jan 2024
Pavement Markings	+ R X R pavement markings in left turn pockets		Jun 2021
Pavement Markings	+ “LOOK” pavement markings		Sep 2023
Pavement Markings	+ Corridor pavement marking refresh		Sep 2023
Traffic Signal Enhancements	+ Leading pedestrian intervals		Aug 2023
Traffic Signal Enhancements	+ Retroreflective tape added to signal heads		May 2024
Traffic Signal Enhancements	• Signal reprioritization pilot		Jun 2024
Train Enhancements	+ Light Rail Vehicle Audible Warning Bells Pilot		Dec 2024

Program Master Plan



In alignment with Board Motion No. M2024-45

“...(4) deliver a Rainier Valley Safety Master Plan of potential at-grade crossing safety improvements to the Board... followed by a systemwide at-grade crossing safety plan in November 2024...”

Master Plan Objectives

- Establish criteria for identifying and prioritizing enhancements and advancing investments
- Provide a transparent process for program and project decisions
- Collaborate with the public and regional partners
- Identify safety enhancement projects, considerations, and costs
- Summarize corridor data trends before and after project implementation

Project identification and prioritization

Enhancement Identification

- Identification is informed by extensive research, segment monitoring, community engagement, and collaboration with regional partners

Assessment Tool: Criteria and Ranking

- **Pre-Screen:** evaluate safety impact and compliance with regulatory standards
- **Risk Assessment:** identify challenges, evaluate likelihood/impact of risks, and determine whether enhancements negatively impact operations, cost, or timelines
- **Ranking:** prioritize most effective solutions using a weighted evaluation criterion

Project Development

- Enhancement options are bundled into project packages for faster delivery while minimizing operational impacts and service disruptions

Data Collection/Monitoring

- Once safety enhancement projects are implemented, the agency's Safety Department actively monitors safety data, conducts regular safety inspections, and tracks all safety-related incidents to assess the effectiveness of the implemented mitigations and ensure continuous improvement in our safety performance



Current Projects



Link Light Rail



Pedestrian



Sounder



Vehicle

Note: All projects require coordination and a level of approval with partner agencies; the two Pedestrian Gate Pilots () require a more detailed review and approval.*

Project Type	Mode	Project Name (Near-term 2025-2026)	Safety Focus Area	Estimated Cost Range	Target Completion Date
Pavement Marking	Link	Dynamic Envelope Pavement Markings		\$500k - \$800k	Q3 2025
Planning	Sounder	Crossing Evaluation and safety analysis at Bridgeport Way S, S 74 th St, S 56 th St (Sounder Lakewood Subdivision)		\$200k - \$250k	Q1 2026
Planning	Sounder	Crossing Evaluation and safety analysis on 16 at-grade crossings (Sounder Lakewood Subdivision)		\$700K - \$1M	Q1 2026
Technology	Link	SMART Grant: Rainier Valley Safe Project Pilot, Phases 1 & 2		\$2.5M (Ph 1) \$15M (Ph 2)	Q4 2025 (Ph 1) Q3 2027 (Ph 2)
Planning	T-Line	Data collection, inventory, and input on new standards		\$500k - \$750k	Q4 2026
Train Enhancement	Link	Alternating (Wig Wag) Train Headlights		\$5M	Q4 2026
Project Type	Mode	Project Name (Mid-term 2027-2029)	Safety Focus Area	Estimated Cost Range	Target Completion Date
Infrastructure	Link	Automatic Pedestrian Gates, Stadium Station		\$6M - \$9M	Q1 2028 – Q2 2028
Infrastructure	Link	1-Line Enhancements		\$7M - \$16M	Q1 2028 – Q2 2028
Infrastructure	Link	Automatic Pedestrian Gate Pilot, Columbia City & Othello*		\$10M - \$14M	Q2 2028 – Q4 2029
Infrastructure	Link	Automatic Pedestrian Gate Pilot, Rainier Beach*		\$8M - \$15M	Q3 2028 – Q2 2029

Highlighted boxes indicate Rainier Valley focused projects.

Connection between projects and data: key takeaways

Data Type	Project Name
<i>Rail - Pedestrian Incidents</i> <ul style="list-style-type: none">Intersection locations with the highest events are at station locations (Columbia City, Othello, and Rainier Valley Stations) and one future station location (Graham St.)	Alternating (Wig Wag) Train Headlights
	Automatic Pedestrian Gates, Stadium Station
	1-Line Enhancements
	Automatic Pedestrian Gate Pilot, Columbia City & Othello
	Automatic Pedestrian Gate Pilot, Rainier Beach
	SMART Grant: Rainier Valley Safe Project Pilot, Phase 1 & Phase 2
<i>Rail - Vehicle Incidents</i> <ul style="list-style-type: none">Most collisions result from prohibited left turns when train and vehicle travel in the same direction	Dynamic Envelope Pavement Markings Pilot
	Alternating (Wig Wag) Train Headlights
	1-Line Enhancements
	SMART Grant: Rainier Valley Safe Project Pilot, Phase 1 & Phase 2

Regional & Internal Coordination

Regional Partners

- Regional partners are responsible for implementing significant changes to their roadways and the operation of traffic signal systems, including:
 - Vehicle speed limit changes
 - Lane reductions
 - Vehicle & Pedestrian gates
 - Restricted movements, closing or consolidating intersections
- Permitting
- Maintenance & Operations Agreements

Other Sound Transit Projects

- Share lessons learned and project updates and strategies
- Collaborate on safety enhancement projects to identify project efficiencies and streamline processes
- Development of design requirements

3-Year Communications and Engagement Plan

Three Focus Areas

Master Plan Engagement

Fall 2024 – Spring 2025

Ongoing Safety Education and Awareness

Beginning Fall 2024

Project Development and Construction

Beginning Spring 2025

Tailored, Equity-Focused Engagement

*Connecting with communities where
they are*



Winter 2024/25 Engagement

Crossing Safety Online Forum and Other Activities

- Communicated commitment to at-grade safety
- Connected with the community on the Master Plan and current projects.
- Paid social media notifications in multiple languages

BY THE NUMBERS



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Join our online forum!

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Learn more

Enhancing crossing safety
At-Grade Crossing Program Overview

What is the At-Grade Crossing Program?

The At-Grade Crossing (AGC) Program is a comprehensive initiative to enhance safety at grade crossings along the Sound Transit Link and Sounder trains.

Key points where safety connectivity intersect, improved access for those with lower mobility, and enhance the reliability of rail and Sounder trains, the Rainier Valley due to a light rail in the area.

SOUNDTRANSIT

Spring 2025 Engagement

Community Safety Fair

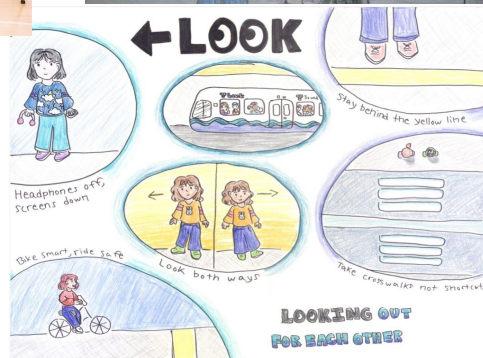
Over 200 attendees

6 community partners and 2 ST teams



Youth Poster Contest

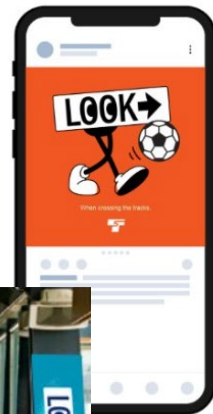
60 design submissions



Summer – Winter 2025 Engagement

Continue LOOK safety education + awareness campaign and project communications

- Web + Social content
- Fairs and Festivals
- Stadium station domination (coinciding w/ Rail Safety Week)



Thank you.



 [*soundtransit.org*](https://soundtransit.org)

