

At-Grade Crossing Program

Master Plan

Board of Directors
06/26/2025



Why we are here

Resolution No. R2025-11:

- Adopt the 2025-2029 At-Grade Crossing Program Master Plan and merge existing Transit Improvement Projects (TIP) projects to create one program.
- Amend the programs authorized allocation to increase by \$70.8M.
- Amend the programs 2025 annual spend to allow the At-Grade Crossing Program to continue progressing current project work through implementation.



What we heard

May 22th Board of Directors Meeting:

- Community input on Master Plan
- Update to maps
- Clarify project prioritization process
- Connection between data and projects

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 service.



Program Master Plan

In alignment with 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...”

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



Note: All projects require coordination and a level of approval with regional partners; 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		\$800k - \$1M	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

7 Highlighted boxes indicate Rainier Valley focused projects.

Connection between projects and data:

Key takeaways

Data type	Project name
<p><i>Rail - Pedestrian incidents</i></p> <p>Intersection locations with the highest events are at station locations (Columbia City, Othello, and Rainier Valley Stations) and one future station location (Graham St.).</p>	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
<p><i>Rail - Vehicle incidents</i></p> <p>Most collisions result from prohibited left turns when train and vehicle travel in the same direction.</p>	Dynamic Envelope Pavement Markings Pilot
	Alternating (Wig Wag) Train Headlights
	1-Line Enhancements
	SMART Grant: Rainier Valley Safe Project Pilot, Phase 1 & Phase 2

Budget amendment: At-grade work

- ***Request Board approval of budget amendment in June***
- ***Streamline projects (6) and combine into one At-Grade Program***
- ***Increase 2025 budget and lifetime Program allocation***
 - 2025 annual Program budget: increase to \$13.1M (+\$3.3M)
 - Total lifetime Program allocation: increase to \$89.2M (+\$70.8M)
- ***Long-term service delivery projects forecast has sufficient funding for system enhancements***

Budget amendment: At-grade work

- Creates new “At-Grade Crossing Program”
- Increases lifetime allocation by \$70.8M

At-grade Crossings Program

(in thousands)

Project Phase	Annual Project Budget		
	Adopted 2025 Annual Project Budget	Budget Revision	Revised 2025 Annual Project Budget
Operations + Maintenance	1,329	-	1,329
Agency Administration	2,382	200	2,582
Preliminary Engineering	605	180	785
Final Design	1,343	420	1,763
Third Party Agreements	-	450	450
Right of Way	-	-	-
Construction	4,115	1,580	5,695
Construction Services	33	470	503
Vehicles	-	-	-
Contingency	-	-	-
Total	\$9,806	\$3,300	\$13,106

Authorized Project Allocation		
Authorized Project Allocation (Current)	Allocation Change	Authorized Project Allocation (New)
2,816	-	2,816
3,466	5,134	8,600
4,437	4,934	9,371
1,946	7,656	9,602
-	2,155	2,155
-	-	-
5,651	40,179	45,830
63	10,742	10,805
-	-	-
-	-	-
\$18,380	\$70,800	\$89,180

Thank you.



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