

# ***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 22<sup>th</sup> 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



Link light rail



Pedestrian



Sounder



Vehicle

*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 <sup>th</sup> St, S 56 <sup>th</sup> 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)<br>\$15M (Ph 2) | Q4 2025 (Ph 1)<br>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  |
|--|---|
| <b><i>Rail - Pedestrian incidents</i></b><br>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 |
| <b><i>Rail - Vehicle incidents</i></b><br>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 |



# ***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              | -                                  | -               | -                                  |
| <b>Total</b>             | <b>\$9,806</b>                     | <b>\$3,300</b>  | <b>\$13,106</b>                    |

| 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                              |
| -                                       | -                 | -                                   |
| -                                       | -                 | -                                   |
| <b>\$18,380</b>                         | <b>\$70,800</b>   | <b>\$89,180</b>                     |

*Thank you.*



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

