

At-grade Crossings Program

Draft Master Plan - Rainier Valley Focus

Board of Directors
10/24/2024



Why we are here

- Enhancing safety in the Rainier Valley
 - Program priorities
 - Completed work
 - Draft Master plan – Rainier Valley focus
 - Objectives
 - Projects
 - Engagement
- Next steps



Program priorities

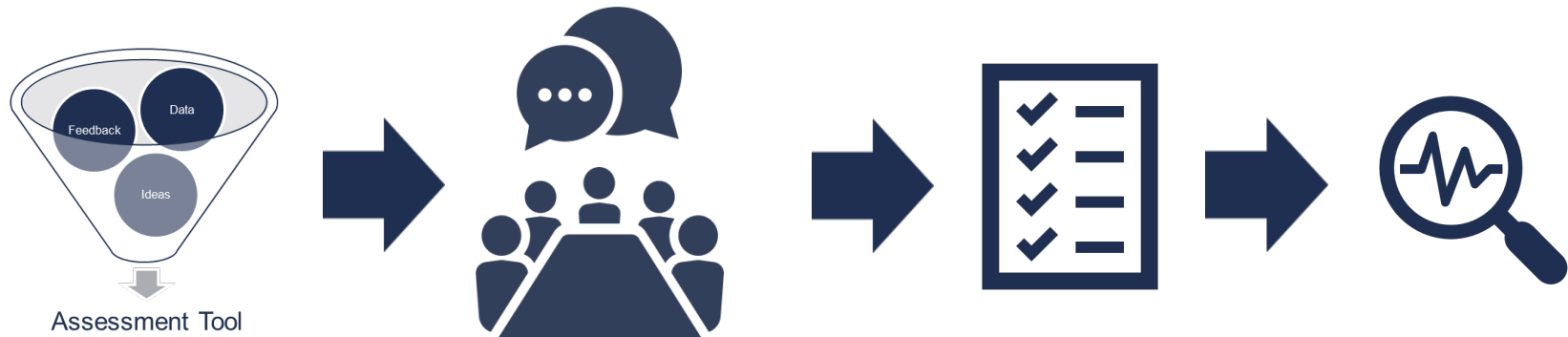
- Reduce collisions and near misses with vehicles and pedestrians.
- Provide a consistent and safe passenger experience systemwide.
- Provide reliable service without degradation to operational performance.
- Increase accessibility of the Sound Transit network for all.
- Build positive, proactive relationships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



Screening safety enhancement ideas

Identification and Initial Assessment









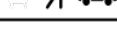
1. Collect all safety enhancement ideas.
2. Team research and discussion.
3. Prioritize efforts based on screening.
4. Further research / planning.



Safety enhancement ideas

Administrative Controls		Engineering Controls		Roadway Redesign
<p>Safety Education</p> <ul style="list-style-type: none"> • 5 Core Safety Messages • Safety campaigns with partners • Safety education campaigns • Engagement activities • Outreach and training on specific mitigations <p>Encouragement</p> <ul style="list-style-type: none"> • Rainier Area Security Emphasis Team • Crossing guards • Using red light cameras to mail education materials 	<p>Operations Procedures</p> <ul style="list-style-type: none"> • Audible warning signage for operators • Training emphasis 	<p>Audible</p> <ul style="list-style-type: none"> • Enhance wayside bells • Localized audible announcements <p>Visual</p> <ul style="list-style-type: none"> • Updated static signage • Dynamic no left turn warning signs • Dynamic “Another Train Coming” warning signs • Retroreflective tape around signal heads • Refreshed pavement markings • Paint to visually emphasize trackway • In pavement lights <p>Physical Infrastructure</p> <ul style="list-style-type: none"> • Pedestrian gates at station locations • Channelization / fencing 	<p>Technology</p> <ul style="list-style-type: none"> • Leading pedestrian intervals • Traffic signal reprioritization pilot • Video Analytics • V2X • Touchless pedestrian push buttons • Smarter traffic signal controller • Signal system battery backup • ROW detection <p>Vehicle</p> <ul style="list-style-type: none"> • Adjust LRV bell volume • Wig-wag headlights 	<ul style="list-style-type: none"> • Consolidate crossings • Eliminate crossings • Grade separate • Full corridor quad gates & flashers • 2 Phase crossing • Larger pedestrian refuge areas • Other traffic calming measures

Completed projects

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

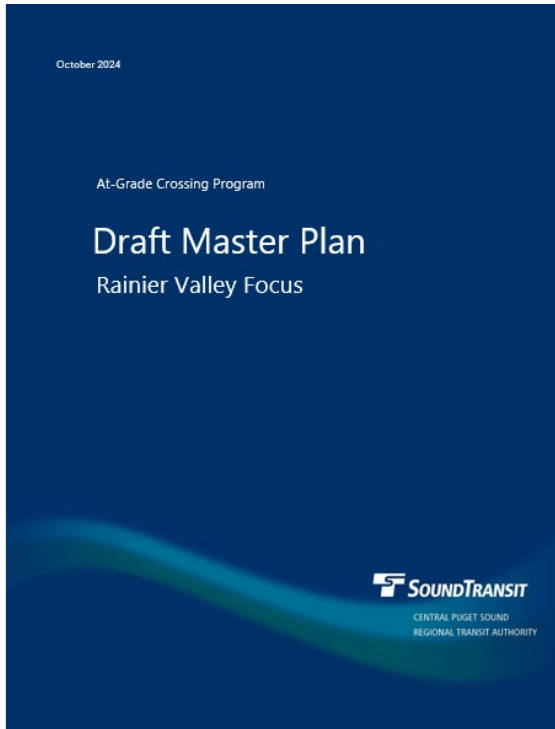
+ (Preliminary results indicate positive findings) ° (Not included in data analysis)

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

Master Plan organization



- Executive Summary
- Results
- Master Plan Development Process
- Appendices
 - A – Geographic Content
 - B – July 2024 Board Motion
 - C - Data Analysis and Prior Studies
 - D - Rainier Valley At-Grade Crossing Engagement Memo June 2024
 - E – Project Pages

Rainier Valley current projects

Project Type	Project Name	Safety Focus Area	Status	Cost Range	Target Completion Date
Near-Term Projects (2025 – 2026)					
Pavement Marking	Trackway Visibility Pavement Markings Pilot	  	Fully Funded	\$800K-1M	Q3 2025
Technology	SMART Grant: Rainier Valley Safe Project Pilot, Phase 1	  	Fully Funded	\$2.5M	Q3 2025
Signage Enhancement	Another Train Coming Signage Between Stations	  	Adopted	\$2-3M	Q4 2025
Train Enhancement	Alternating (Wig Wag) Train Headlights	  	Adopted	\$2.5M	Q1 2026
Infrastructure Project	Automatic Pedestrian Gate Pilot, Phase 1	  	Adopted	\$8-9M	Q2 2026
Infrastructure Project	SMART Grant: Rainier Valley Safe Project Pilot, Phase 2	  	Proposed	\$16-18M	TBD
Signage Enhancement	Additional Static Signage and Delineators	  	Proposed	\$400K-1M	TBD
Signage Enhancement	Another Train Coming Sign Enhancements	  	Proposed	\$400K-1M	TBD
Mid-Term Projects (2027 – 2029)					
Infrastructure Project	Automatic Pedestrian Gate Pilot, Phase 2	  	Adopted	\$10-11M	Q1 2027
Infrastructure Project	Pedestrian Crossing Upgrades Between Stations	  	Proposed	\$7-9M	TBD

* **Proposed:** Projects under consideration and not yet programmed.

Adopted: Projects in the development or design phase but not yet fully funded for construction.

Fully Funded: Adopted projects with secured funding and an approved budget for full implementation.

SDOT coordination

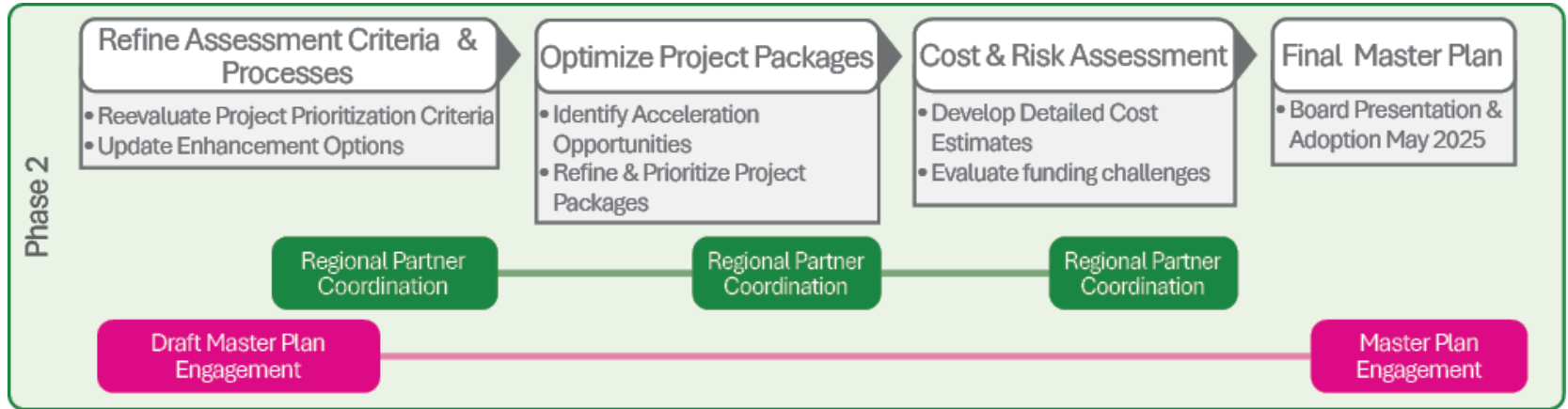
SDOT partnership is critical to advancing safety enhancement projects in the Rainier Valley.

- 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 and Operations Agreements

Advancing the Master Plan projects

Phase 2 is focused on the steps needed to advance and finalize the Master Plan between **December 2024 – May 2025**

This phase will integrate feedback from the Board, gather and integrate community feedback on assessment criteria and enhancements, and continue coordination with SDOT



Program Engagement – Three Focus Areas

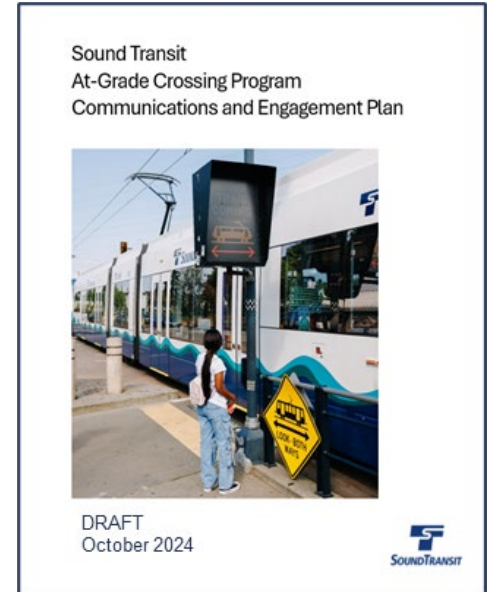
Master Plan Engagement

- Fall 2024 – Spring 2025

Project Development and Construction

- Beginning as early as Winter 2024

Ongoing Safety Education and Awareness



Tailored, Equity-Focused Engagement

Connecting with communities where they are.



Local events such as
Talipapa Cultural Festival
& Rainier Boo Bash



Visually rich accessible
materials



Multicultural
engagement
& media



Canvassing
businesses,
neighbors, &
community
gathering spaces

Next Steps

November Board Meeting

- Presentation of draft System-wide Master Plan
- Additional details on Automatic Pedestrian Gate pilot projects

Community Engagement Continues

- Survey closes at the end of October
- 3-Year Engagement & Communications Plan
 - Prioritize equity-centered engagement and community-based organization coordination to shape plan implementation
 - Focus on in-person and community events and promote January open house

May Board Meeting

- Presentation of final At-grade Crossing Master Plan

Key Early Engagement Actions

November

- Identify and orient Community Liaisons
- Community-based organization briefings
- Launch website
- Develop education and awareness campaign
- Initiate canvassing
- Expand youth engagement
- Media and social media outreach
- Develop online open house and survey

December

- Launch canvassing
- Plan in-person and online open house
- Develop postcard mailer
- Prepare posters
- Plan community liaison events

Thank you.



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