Washington Highway-Rail Grade Crossing State Action Plan

Progress Report October 2023









Summary

The Fixing America's Surface Transportation Act (FAST Act) of 2015, Section 11401, mandated that all states develop and implement a State Action Plan (SAP). The Federal Railroad Administration (FRA) published a rule and a series of requirements for the development of SAPs.

The FRA rule required that each SAP:

- A. Identify highway-rail grade crossings that have experienced recent highway-rail crossing accidents or incidents or multiple highway-rail at-grade crossing accidents or incidents or are at higher-risk for accidents or incidents.
- B. Identify specific strategies for improving safety at highway-rail grade crossings, including highway-rail grade crossing closure or grade separations.
- C. Cover a period of at least four years.

The Washington Utilities and Transportation Commission (UTC) developed the Washington SAP with a focus on safety improvement efforts at higher-risk highway-railroad grade crossings in the state to reduce accidents and incidents. The SAP identifies the top 58 higher-risk crossings and includes data gathered on the crossings during 2016-2020.

The UTC submitted its SAP to the FRA for approval in February 2022. While the UTC has not received an official letter from the FRA approving the SAP, FRA staff advised informally by email that there were no issues with the UTC's SAP.

The goals of the UTC SAP include:

- 1. Implementing the SAP.
- 2. Strengthening coordination and cooperation between the UTC and key partners.
- 3. Enhancing grade crossing safety education and outreach activities.
- 4. Supporting enforcement efforts to address dangerous behavior at or near crossings.
- 5. Improving and modernizing UTC's rail data collection, storage, and analysis system.
- 6. Monitoring SAP progress and reporting annually.

This progress report provides information on UTC staff's progress toward each of these goals to date.





Status of Goals, Objectives, and Implementation Strategies

The UTC SAP project team established specific goals, objectives, and strategies for the SAP implementation grouped by goal.

The SAP also included an initial implementation timeline; however, the delay in receiving word from the FRA on approval of the SAP, as well as hiring UTC staff to implement the plan, required the UTC to modify its timeline for some of the goals, objectives, and strategies from the original dates listed in the SAP.

Go	Goal 1: Implement the UTC Highway-Rail Grade Crossing State Action Plan		
Ot	Objective/Implementation Strategy Status		
•	Hire a staff person to facilitate implementation of the Washington State Highway-Rail State Action Plan.	Complete	
	The UTC's Rail Safety section hired Tyler Whitcomb in August 2022 to facilitate the implementation of the SAP.		
•	Develop implementation tactics related to each SAP Implementation Strategy.	Complete	
	The UTC staff project team developed implementation tactics related to the SAP strategies.		
•	Begin outreach to local agencies and railroads to discuss the priority higher-risk crossings identified in the SAP and identify next steps.	Complete	
•	Conduct outreach to railroads about the crossings identified in the SAP to increase awareness and discuss possible improvements, gauge interest, and determine priorities.	Complete	
•	Engage in outreach to cities, counties, and other public agencies about crossings identified in the SAP to increase awareness, gauge interest, and discuss possible improvements and priorities.	Complete	
	As part of its outreach, UTC staff contacted local agency road authorities and railroads to initiate conversations, discuss potential crossing improvements, and determine priorities at the 58 higher- priority crossings identified in the SAP.		





Goal 1: Implement the UTC Highway-Rail Grade Crossing State Action Plan			
Objective/Implementation Strategy Status			
 With these discussions, UTC staff's intent was not to prescribe a particular path forward or define specific crossing modifications. According to the Manual on Uniform Traffic Control Devices¹ (MUTCD), because of the large number of significant variables to be considered, no single standard system of traffic control devices is universally applicable for all highway-rail grade crossings. The appropriate traffic control system to be used at a crossing should be determined by an engineering study involving both the local agency road authority and the railroad company. UTC staff requested that each local agency road authority and railroad provide information about any projects already underway or being contemplated at the identified higher-risk crossings within their jurisdictions. If no projects were planned or underway, UTC staff asked that the local agency road authority and railroad review the crossing and determine, based on an engineering review of the crossing, whether additional modifications were warranted. 			
• Follow up with railroads and public agencies to improve highway-rail safety at the priority higher-risk crossings.	Ongoing		
UTC staff's work with railroads and local agency road authorities on the priority higher-risk crossings identified in the SAP is ongoing. At many of the identified higher-risk crossings, improvement projects have either been completed or are planned or underway. For some identified crossings, local agency road authorities are seeking funding to complete improvements.			

¹ The UTC adopts the Manual on Uniform Traffic Control Devices (MUTCD) by reference in <u>WAC 480-62-999</u>. The MUTCD sets minimum standards and provides guidance, ensuring uniformity of traffic control devices nationwide.





Goal 1: Implement the UTC Highway-Rail Grade Crossing State Action Plan		
Objective/Implementation Strategy Status		
For other identified crossings, neither the railroad nor the local agency road authority determined the need for any additional improvements after a review of existing crossing conditions. In some cases, the identified crossing only experienced one accident, resulting from driver negligence or error, during the review period in the SAP. (For example, the single crossing accident at an identified crossing involved a police chase where a stolen vehicle hit the train). Status and project information for each identified higher-risk crossing is included in Appendix A.		
Regularly monitor and document SAP implementation	Ongoing	
UTC staff continues to monitor and document the ongoing goals and implementation strategies in the SAP.		

Goal 2: Strengthen coordination and cooperation between the UTC and key partners to advance grade crossing safety				
Objective/Implementation Strategy Status				
sta 0 0	 Stablish quarterly meetings with WSDOT Local Programs and FHWA aff to discuss: Grade Crossing Protective Fund and FHWA Section 130 project funding, coordination, and implementation. Improving highway-rail grade crossing safety efforts statewide, with a focus on the SAP priority higher-risk crossings. Information on program and agency challenges and opportunities to understand background issues and experiences related to highway-rail safety funding programs. Ways to enhance technical assistance efforts for local communities implementing highway-rail grade crossing improvement projects. 	Complete		
	TC staff established quarterly meetings with WSDOT Local Programs ad FHWA staff to share information and discuss common issues,			

crossing project concerns, and funding programs and opportunities.





	Goal 2: Strengthen coordination and cooperation between the UTC and key partners to advance grade crossing safety		
Ob	Objective/Implementation Strategy Status		
•	Establish regular communication with key interested parties to discuss grade crossing improvement issues.	Complete	
	UTC staff communicates with interested parties to discuss grade crossing improvement issues as part of its regular work.		
•	Educate key interested parties about state and federal grade crossing funding programs to increase awareness of various potential resources.	Complete	
	The UTC website provides information on the UTC's Grade Crossing Protective Fund, as well as federal and state funding opportunities.		
•	Inform key interested parties about the status and progress of grade crossing improvement projects within Washington to generate awareness of highway-rail safety efforts.	Ongoing	
	To generate awareness of highway-rail safety efforts in the state, UTC staff is considering utilizing the UTC's website and social media to highlight UTC-approved grade crossing improvement projects around the state.		

Goal 3: Enhance grade crossing safety education and outreach activities			
Objective/Implementation Strategy Status			
 Partner with Washington Operation Lifesaver (WAOL) to target rail safety educational opportunities at select crossings identified in the SAP or along a corridor. Educate drivers and pedestrians about the dangers and benefits of driving and walking safely at highway-rail crossings. 	Complete		
In its efforts to educate the public and promote public awareness of railroad safety, the UTC is actively engaged in WAOL and supports the work of this outstanding non-profit organization.			





Go	Goal 3: Enhance grade crossing safety education and outreach activities		
Obj	ective/Implementation Strategy	Status	
	In April 2022, WAOL received the 2022 Operation Lifesaver Inc. (OLI)/FRA Competitive State Grant Award (supplemented by Posner Foundation of Pittsburgh funds) of \$20,000. With those funds, WAOL funded a digital media campaign focused on the 58 higher-risk crossings identified in the SAP. The digital media campaign ran from August through September 2022 and included mobile geo-fencing, as well as social media, blended video display, and over-the-top advertising services. In addition, WAOL used its social media to share public service announcements and other safety messaging through Facebook boosts and Instagram messaging. In total, the combined digital media and WAOL campaigns achieved 3,228,660 impressions.		
•	Conduct outreach to professional drivers (trucking companies/transit/delivery firms) and safety officers with information to increase awareness of highway-rail safety.	Ongoing	
	UTC staff's outreach to professional drivers and safety officers is underway. Through WAOL, UTC staff purchased 5,000 professional driver safety brochures produced by OLI. UTC Motor Carrier staff will distribute these brochures to motor carriers registered with the UTC and provide the information to new entrants in UTC-regulated industries, such as household goods movers and passenger charter companies.		

Goal 4: Support enforcement efforts to address dangerous behavior at or near railroad crossings

Objective/Implementation Strategy Status		
0	o law enforcement associations about Ongoing vareness of the WAOL program and its ety.	
 Encourage eligible law enforcement enhance highway-rail crossing safet Washington. 	agencies to apply for FRA grants to y and enforcement activities in	
Support law enforcement agencies s connections with appropriate funding		





Goal 4: Support enforcement efforts to address dangerous behavior at or near railroad crossings			
Ob	Objective/Implementation Strategy Status		
	UTC staff's outreach to law enforcement agencies about grade crossing safety and grant opportunities is in progress and planned for completion by 2024.		
•	Actively participate with Amtrak and OLI to facilitate and support an Operation Clear Track event in Washington.	Ongoing	
	Operation Clear Track took place on Tuesday, Sept. 19, 2023, in partnership with law enforcement agencies nationwide to share the rail safety message in communities. During this event, OLI encouraged all first responders, including firefighters, emergency medical services and Offices of Emergency Management, to post lifesaving grade crossing safety and trespass prevention information for drivers and pedestrians on their websites and share on social media.		
	UTC staff and WAOL supported these efforts by reaching out to state law enforcement organizations to encourage participation in the event and by posting information on the UTC website and WAOL social media.		

Goal 5: Monitor SAP progress and report annually			
Objective/Implementation Strategy Status			
 Provide a report on the progress toward achieving the goals and objectives of the SAP and updates on the status of the priority higherrisk crossings. Collect information regularly for inclusion in the progress report. Utilize information from various implementation strategies in compiling the report. Share the SAP progress report with key interested persons and public officials. 	Ongoing		
UTC staff will continue to provide annual updates on the status of the SAP until all goals are complete.			





Goal 6: Improve and modernize the UTC's rail data collection, storage, and analysis system		
Objective/Implementation Strategy	Status	
 Work with UTC information technology staff to determine the feasibility of deploying a new data system. If a new data system is deemed feasible: Research alternative data systems. Study the data systems of other State Grade Crossing programs to gather information on system capabilities and shortcomings. Develop a detailed list of requirements. Consider how data is collected, analyzed, and reported by UTC staff and how that will change in the future to develop a data strategy for the UTC. If a new data system is deemed feasible and preferable to the current system: Develop cost estimates and identify potential revenue sources to fund a new data system purchase, deployment, and ongoing maintenance. Develop a business case for the new data system and demonstrate the merits of system replacement. The UTC's Rail Safety program's data management staff is currently working with the agency's information technology staff on this goal. 	Ongoing	





Appendix A

Completed Projects

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
16	085414L	Seattle	Broad St.	2020 - City of Seattle made crossing modifications, including installation of upgraded advance warning signs and markings, new guardrails, and replacing missing flex posts on the roadway median. 2021 – City updated signage to required sizes.
17	085647H	Auburn	37th St. NW	2017 - City of Auburn constructed a pre-signal and coordinated with BNSF to have advance preemption installed.
20	085650R	Auburn	29th St. NW	2017 - City of Auburn coordinated with BNSF to install advance preemption.
21	104520Y	Toppenish	State Hwy. 223	2019 – WSDOT installed four-quadrant gates, upgraded crossing circuitry, installed active advance warning signs intertied with the railroad warning system, and added guardrails.
34	085652E	Auburn	3rd St. NW	2017 - City of Auburn coordinated with BNSF to install advance preemption.
47	085655A	Auburn	W Main St.	2017 - City of Auburn coordinated with BNSF to install advance preemption.
50	084805C	Bellingham	Bayview Drive	2022 - City of Bellingham installed four-quadrant gates and pedestrian gates.
58	808728J	Tacoma	E 15th St./E J St.	2019 - City of Tacoma installed new advance warning signs on both approaches to the crossing.

Projects Planned or In Process

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
1	927461X	Seattle	Holgate St.	June 2023 - City of Seattle awarded FRA Railroad Crossing Elimination (RCE) funding to conduct a feasibility study to evaluate the effect of closing the two S. Holgate St. crossings and determine appropriate safety improvements at three nearby crossings also identified in the SAP (Eastbound and Westbound Spokane St. and Horton St.). The City of Seattle is providing a 20 percent non-Federal match.





Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
3	085640K	Kent	State Route 516/ Willis St.	May 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs and upgrading all warning lights to LED.
4	085625H	Kent	S 212th St.	April 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs and non-traversable median curbs on crossing approaches and adding signage.
5	084764A	Burlington	Greenleaf St.	June 2023 - City of Burlington awarded FRA RCE funding for a proposed project that will support planning and project development work to identify one crossing to grade separate (overcrossing). The city will provide a 20 percent non-Federal match.
7	085629K	Kent	James St.	April 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs and non-traversable median curbs on crossing approaches and adding signage.
11	089775E	Othello	Lee Rd.	2023 - WSDOT awarded Section 130 funding to Adams County to upgrade this crossing from passive protection (Yield sign) to active (lights and gates). The project is currently in the design phase.
23	085633A	Kent	Smith St.	April 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs and non-traversable median curbs on crossing approaches, sidewalk modifications, and adding signage.
29	084765G	Burlington	Fairhaven St. (1)	June 2023 – City of Burlington awarded FRA RCE funding for a proposed project that will support planning and project development work to identify one crossing to grade separate via an overcrossing. The City of Burlington will provide a 20 percent non-Federal match.
30	085637C	Kent	Gowe St.	April 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs and non-traversable median curbs on crossing approaches, roadway channelization changes, sidewalk modifications, and adding signage.
32	066367E	Spokane Valley	Pines Rd.	2022 - City received Federal and state funding to replace the existing at-grade crossing with a grade separation (undercrossing). <u>Spokane Valley – Pines Road</u>
33	085642Y	Kent	S 259th St.	April 2023 - UTC approved the City of Kent's petition to modify warning devices at the crossing. Modifications include installing LED-edge flashing "Do Not Stop on Tracks" signs, non-traversable median curbs on crossing approaches, and detectable warning surfaces, adding signage, and upgrading all warning lights to LED.





Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
40	092259B	Burlington	Walnut St.	June 2023 – City of Burlington awarded FRA RCE funding for a proposed project that will support planning and project development work to identify one crossing to grade separate via an overcrossing. The City of Burlington will provide a 20 percent non-Federal match.
41	092261C	Burlington	Fairhaven St. (2)	June 2023 – City of Burlington awarded FRA RCE funding for a proposed project that will support planning and project development work to identify one crossing to grade separate via an overcrossing. The City of Burlington will provide a 20 percent non-Federal match.
43	932777T	Tacoma	Lincoln Ave.	2020 - WSDOT awarded Section 130 funding to the City of Tacoma for a project to install active warning devices at this crossing. The project is currently in the design phase, with a plan for installation in late 2023.
45	099180B	Wapato	Donald Rd.	2023 - County informed UTC staff that new crossing pavement markings and crossing signs are planned.

Projects Seeking Funding

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
2	085587B	Seattle	Eastbound Spokane St.	June 2023 - City of Seattle awarded FRA RCE funding to conduct a feasibility study to evaluate the effect of closing the two S. Holgate St. crossings and determine appropriate safety improvements at three nearby crossings also identified in the SAP (Eastbound and Westbound Spokane St. and Horton St.). The City of Seattle is providing a 20 percent non-Federal match.
12	085586U	Seattle	Westbound Spokane St.	Included in SDOT's RCE grant application for study.
22	085585M	Seattle	Horton St.	Included in SDOT's RCE grant application for study.
28	104572R	Kennewick	N Fruitland St.	City of Kennewick applied to WSDOT for 2022 Section 130 funding to complete a corridor study.
42	099168U	Yakima	E Mead Ave.	City of Yakima applied to WSDOT for 2022 Section 130 for pedestrian improvements, including adding pedestrian gates, curb ramps, and channelization.
48	065839V	Wenatchee	Miller St.	City of Wenatchee was awarded Federal INFRA grant funding in 2021 to close the Miller St. at grade crossing and construct a grade separation (<u>Apple Capital Loop Infra Project</u> – <i>Confluence Parkway</i>). Project still needs \$10 million in funding.

Washington Highway-Rail Grade Crossing State Action Plan 2023 Progress Report





Top 58 Rankin	USDOT Crossing Number	City	Highway	Status
55	096029N	Aberdeen	S Tyler St./Wishkah Mall	City of Aberdeen applied for <u>RAISE Grants</u> in 2021 and 2023 to construct a grade separation (overcrossing) and eliminate the S. Tyler St./Wishkah Mall at grade crossing.

Projects Under Consideration

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
6	085695X	Puyallup	3rd St. NE	City of Puyallup included railroad crossing safety improvements and train noise reduction in its <u>Downtown and</u> <u>Meridian Streetscape Project – Recommended Projects</u> report in 2022. The project involves eight crossings, including 3 rd St. NE.
9	085696E	Puyallup	Meridian St.	City of Puyallup included railroad crossing safety improvements and train noise reduction in its <u>Downtown and</u> <u>Meridian Streetscape Project – Recommended Projects</u> report in 2022. The project involves eight crossings, including Meridian St.
13	090110F	Washougal	3rd St. NW	City of Washougal has preliminary plans to repair the existing crossing protection and upgrade signage to current standards.
19	065984U	Spokane	E Mission Ave.	City of Spokane applied to WSDOT for Section 130 funds for improvements at this crossing in 2020, but due to unforeseen issues with railroad coordination, the city declined the grant award. The city intends to reapply for Section 130 funds as soon as 2024.
24	090115P	Washougal	24th St.	City of Washougal has preliminary plans to repair the existing crossing protection and upgrade signage to current standards.
37	084664V	Marysville	136th St. NE	City of Marysville is considering pursuing a quiet zone at this crossing. The project is at 30 percent design. Plans include adding medians, replacing gates, and installing a new bungalow and constant warning train detection.
38	085382H	Tacoma	Pine St.	City of Tacoma plans to review and assess the crossing for possible updates or improvements as part of Phase 2 of the city's project along the Cedar-Pine corridor and is working with Sound Transit.
49	084644J	Marysville	8th St.	City of Marysville is considering pursuing a quiet zone at this crossing. The project is at 30 percent design. Plans include upgrading to four-quadrant gates, replacing/updating the bungalow, and installing constant warning train detection.





No Current Project Plans

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
8	085439G	Edmonds	Dayton St.	City of Edmonds informed UTC staff that the city has no projects identified for this crossing in its six-year transportation improvement plan based on its review of crossing conditions.
10	085706H	Puyallup	52nd St. E	Pierce County informed UTC staff that it does not currently have plans for upgrades at this crossing based on its review of crossing conditions. BNSF has targeted this crossing for elimination if another Puyallup project (Canyon Blvd. Extension) moves forward.
14	085703M	Puyallup	Stewart Ave./66th St	Pierce County informed UTC staff that it does not currently have plans for upgrades at this crossing based on its review of crossing conditions.
15	092523G	Centralia	Hanford Valley Rd.	Lewis County informed UTC staff that it does not currently have plans for upgrades at this crossing based on its review of crossing conditions.
18	852612Y	Tacoma	Milwaukee Sim	City of Tacoma informed UTC staff that it has no current plans to request funding for this crossing as the future of the roadway is uncertain, based on discussions with the Port of Tacoma.
25	092484T	Vader	State Route 506	WSDOT staff informed UTC staff that it is unaware of any additional measures that can be taken at this crossing based on its review of crossing conditions.
26	092504C	Napavine	Washington St.	City of Napavine informed UTC staff that it has no plans for the crossing based on its review of crossing conditions.
27	099165Y	Yakima	Yakima Ave.	City of Yakima informed UTC staff that it has no upcoming projects at the crossing based on its review of crossing conditions.
31	092421N	Vancouver	NW 122nd St.	County informed UTC staff that it has no plans for the crossing based on its review of crossing conditions.
36	059152N	Colville	1st Ave.	City of Colville informed UTC staff that, based on its review, the existing level of crossing protective devices is adequate.
39	089695L	Mesa	Sheffield Rd.	City of Mesa informed UTC staff that, based on its review of crossing conditions, no improvements at the crossing are warranted.
44	084753M	Mount Vernon	Fir St.	City of Mount Vernon informed UTC staff that, based on its review of crossing conditions, the existing level of crossing protection is adequate, and the city has no proposed improvements.
46	396578L	Kent	W James St.	City of Kent informed UTC staff that the City has no planned projects for the crossing.





Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
51	085196G	Selah	Pomona Rd.	Yakima County informed UTC staff that, based on its review of crossing conditions, the county supports the existing level of crossing protection.
52	089682K	Hatton	Hampton Rd.	Adams County informed UTC staff that, based on its review of crossing conditions, it disagrees with the view that this is a high-risk crossing. No county improvements are planned.
53	090036D	Kennewick	Perkins Rd. 7572	Benton County informed UTC staff that, based on its review of crossing conditions, the county has no plans for the crossing as it has found no issues present.
54	092505J	Napavine	Somerville Rd.	Lewis County informed UTC staff that it does not currently have plans for upgrades at this crossing based on its review of crossing conditions.
56	104537C	Mabton	Phillips Rd.	Yakima County informed UTC staff that, based on its review of crossing conditions, the county supports the existing level of crossing protection.
57	396593N	Auburn	15th St. SW	City of Auburn informed UTC staff that, based on its review of crossing conditions, it has no plans to modify the existing level of protection at the crossing.

Under Review

Top 58 Ranking	USDOT Crossing Number	City	Highway	Status
35	090051F	Kennewick	Cushman Rd.	Benton County informed UTC staff that the county roadway ends before the crossing. UTC staff is in discussions with the railroad and the county to gather additional information.





Contact Information

For more information about the UTC's State Action Plan, contact:

Betty Young	Tyler Whitcomb
UTC Rail Operations Manager	UTC Transportation Planning Specialist
PO Box 47250	PO Box 47250
Olympia, WA 98504	Olympia, WA 98504
betty.young@utc.wa.gov	tyler.whitcomb@utc.wa.gov
(360) 292-5470	(564) 669-0943