

STUDY OF ROAD-RAIL CONFLICTS PHASE 2 - DEVELOPMENT OF PROJECT PRIORITIES

August 2018

PURPOSE

In 2016, the Legislature directed the Joint Transportation Committee (JTC) to conduct a study evaluating the impacts of prominent road-rail conflicts and to develop a corridor-based prioritization process for addressing the impacts on a statewide level. From this Phase 1 Study, an initial set of recommendations was developed to assist in developing solutions and to prioritize investments.

In 2017, the Legislature then directed the Freight Mobility Strategic Investment Board (FMSIB) to update the JTC's Study of Road-Rail Conflicts in Cities*. As a result, FMSIB completed the following tasks during the Phase 2 Study, which are summarized in this document:

- ▶ Updated the Road-Rail Conflicts Database
- ▶ Developed a Corridor-Based Project Prioritization Process
- ▶ Identified and Recommended a Statewide List of Projects

**Engrossed Substitute Senate Bill SB 5096 (2017), Section 206*

BACKGROUND

At-grade railroad crossings, where roads cross railroad tracks at the same level, can typically function adequately while population and traffic levels remain low. As both rail and road traffic increases, and trains get longer, at-grade crossings become more problematic, impacting communities in a variety of ways. The phrase "road-rail conflict" is used to describe potentially problematic at-grade crossings.

Examples of potential conflicts include the following:

- ▶ Long and unpredictable travel delays for both the general public and freight users
- ▶ Collisions between trains and vehicles, bicycles, or pedestrians
- ▶ Temporary increase of emergency response times

Washington has more than 2,180 public, active at-grade railroad crossings. With the growth of the state's population and increasing road and rail traffic, communities throughout the state are concerned about the reliable and safe movement of rail and truck freight, general traffic, and emergency vehicles.

At-grade railroad crossings are where roads cross railroad tracks at the same level... the phrase "road-rail conflict" is used to describe potentially problematic at-grade crossings.



TO EVALUATE AND PRIORITIZE the railroad crossing projects identified and submitted by the regions around the state, FMSIB developed a project prioritization process. The process utilized data and evaluation criteria from the Phase 1 study. Projects were placed in three tiers, based on the level of project development (see descriptions to right.) The following tables contain the full list of projects submitted by Metropolitan Planning Organizations (MPOs).

PROJECT DEVELOPMENT TIERS

- ▶ **TIER 1:** Projects that are in design and awaiting full construction funding
- ▶ **TIER 2:** Projects that are planned and/or scoped but have not proceeded to engineering or design of any substantial kind
- ▶ **TIER 3:** A road-rail conflict ranked in the Phase 1 Study, but for which no project has been studied, scoped, or identified in the regional plan for that location.

TIER 1			
ID* T1-	PROJECT NAME	TOTAL COST	RANK
13	Pines Road / BNSF Grade Separation (SR27/SR290), Spokane Valley	\$22,891,000	1
2	McKittrick Street Grade Separation, Wenatchee	\$25,000,000	2
3	South 228th Union Pacific Grade Separation, Kent	\$40,100,000	3
5	Canyon Road Improvements, Pioneer Way E to 52nd St E / 62nd Ave E, Pierce County	\$62,720,190	4
1	Connell Rail Interchange Project, Connell	\$24,100,000	5
16	Regional Beltway Phase II, Union Gap	\$17,950,000	5
4	I-5 @ SR 529 Interchange Improvements, Marysville	\$84,400,000	Fully Funded
6	South Lander Street Grade Separation, Seattle	\$123,000,000	Fully Funded
7	I-5/Mounts Rd to Thorne Ln Corridor Improvements, Lakewood and Dupont	\$482,430,000	Fully Funded
8	River S Bridge Replacement, Ridgefield	\$8,759,600	Fully Funded
9	Pioneer St Rail Overpass, Port of Ridgefield	\$14,923,000	Fully Funded
10	SR 14/Bingen Point Access Improvements, Port of Klickitat	\$22,900,000	Fully Funded
11	Riverside Dr / 4th St N Safety Improvements, Mount Vernon	\$1,449,000	Fully Funded
12	Barker Road / BNSF Grade Separation, Spokane Valley	\$18,738,000	Fully Funded
14	Birch Bay Lynden/Portal Way Signalization Project	\$3,900,000	Fully Funded
15	F Street, Bellingham	\$730,000	Fully Funded

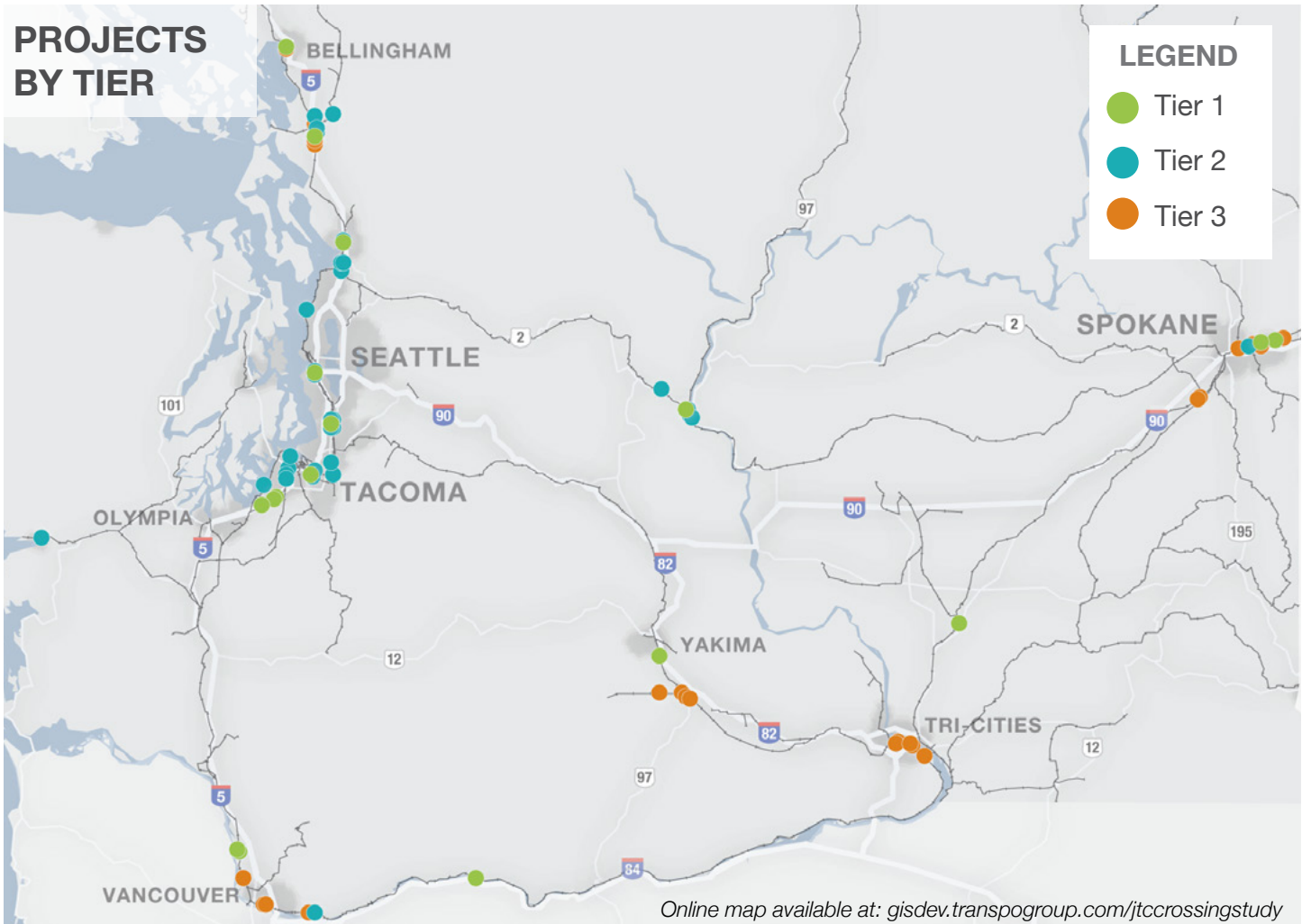
TIER 2			
ID* T2-	PROJECT NAME	TOTAL COST	RANK
17	Zehnder Street BNSF Crossing at-grade improvements, Sumner	\$300,000	1
19	Railroad Crossing Delay Warning System, Seattle	\$250,000	2
24	Steilacoom Ferry Lane Modification, Pierce County	\$650,000	3
1	Division Street Crossing Safety & ADA Improvements, Cashmere	\$1,500,000	4
25	Stewart Avenue East/66th Avenue East, Pierce County	\$4,000,000	5
16	8th St at UPRR crossing and Butte Ave SE intersection Signal, Sumner	\$4,704,000	6
12	Chestnut St / Eclipse Mill Road Improvements from Pacific to 36th, Everett	\$4,288,000	7
32	Park Road / BNSF Grade Separation, Spokane Valley	\$23,000,000	8
13	Willis St (SR 516)/Union Pacific Railroad Grade Separation, Kent	\$26,500,000	9
26	32nd Street/Russell, Washougal	\$17,863,000	10
28	Cook Road Reconstruction, Skagit County	\$15,500,000	11
33	Bell Road - SR 548, WSDOT	\$13,400,000	12
27	College Way Railroad Grade Separation, Mount Vernon	\$22,700,000	13
7	Willis St BNSF Grade Separation, Kent	\$61,000,000	14
15	Grove Street RR Overcrossing, Marysville	\$21,540,000	15
18	S. Holgate St. Rail Crossing Improvements, Seattle	\$40,000,000	16
10	Lenora St/BNSF Rail Line Overcrossing, Everett	\$17,300,000	17
14	S 212th St/Union Pacific Railroad Grade Separation, Kent	\$33,000,000	18

*Each project identification number (in the ID column) will begin with either T1, T2 or T3, and uniquely identifies a project in order to cross-reference in the project database.

TIER 3

ID* T3-	PROJECT NAME	RANK	ID* T3-	PROJECT NAME	RANK
18,19,20	Study of Three Crossings in Cheney	1	2	Edison/BNSF Grade Separation, Kennewick	13
10	SR 536/Kincaid near S 3rd Street, Mount Vernon	2	3	Kellogg Street, Kennewick	14
11	SR 20/Avon Ave near S Spruce St, Burlington	3	22	Wharf Street, Bellingham	15
15	Argonne Road, Millwood	4	4	Washington Street Corridor Improvements, Kennewick	16
12	Fairhaven near Spruce St, Burlington	5	6	Beach Drive, Vancouver	17
14	Pines Road at I-90, Spokane Valley	6	7	6th Street, Washougal	18
16	Mission Avenue, Spokane	7	25	BNSF/ E McDonald Rd, Track Circuitry, Toppenish	19
13	Old 99/Blackburn Road near S 3rd Street, Mount Vernon	8	5	Bowles Road, Benton County	20
1	Fruitland Street, Kennewick	9	8	NW 122nd Street, Vancouver	21
17	Harvard Road / BNSF Crossing, Spokane County	10	9	SE Chelsea Avenue, Vancouver	22
21	Cornwall Ave, Bellingham	11	26	Branch Road, Toppenish	23
24	SR 22-Buena Way, Toppenish	12	27	White Swan Branch Line, Safety Upgrade, Harrah	24

PROJECTS BY TIER



Online map available at: gisdev.transpogroup.com/jtccrossingstudy

FINDINGS

- The need for solutions to road-rail conflicts remains high and has been better quantified since the Phase 1 Study.
- Projects throughout the state are in various stages of project development, and MPO awareness of project status varies throughout the state.
- Planners and project sponsors are having a difficult time identifying, developing, and completing plans and projects to address road-rail conflicts because of the high costs and lack of available funding.
- Several state programs at WSDOT, UTC, FMSIB and other sources fund safety and mobility improvements at road-rail conflicts, but the need is still great.
- Besides the 2017 Update of the Freight and Goods Transportation System (FGTS), other data elements in the Phase 1 database have not substantially changed.

RECOMMENDATIONS

- 1 Implement ongoing efforts to continuously identify and recommend funding for road-rail conflict needs throughout the state.
- 2 Prioritize road-rail projects based substantially on the evaluation criteria developed through the Phases 1 and 2 study process.
- 3 Prior to providing design or construction funding to projects, ensure that the project sponsor has provided verifiable status of project development and committed funding.
- 4 Before providing funding to project sponsors, require that the project sponsor coordinate with other existing road-rail conflict funding programs.

For more information:

Phase 1 & 2 Study documents available at www.fmsib.wa.gov/roadrail.cfm

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