JTC Road-Rail Conflicts Project: Proposed Criteria

LEVEL 1 CRITERIA

ID	Data/Criterion	Proposed Weight	Possible Measurement	Objective Measured	Notes	Data Source
Level 1 Criteria						
1	Class I, II, or III Railroad Classification	Medium	Classification	Mobility	• Readily available • Reliable data source	• UTC • WSDOT
2	Vehicle Volumes	High	ADT; AADT	Mobility	• Not readily available for all crossings • Some data is outdated • Would be inconsistent sourcing	• WSDOT • local cities • INRIX • RTPOs/MPOs
3	Rail Volumes/Frequencies	High	Daily Train Traffic	Mobility	• Freight/passenger volumes readily available for Class I rail lines • Freight/passenger volumes not readily available for class II or III rail lines • Existing coal and oil train volumes are readily available • Future coal and oil train volumes are readily available • Varying sources of data need to be reconciled • May not reflect daily fluctuations	• WSDOT • Pacific Northwest Marine Cargo Forecast • Federal Railroad Administration • Department of Ecology • Gateway Pacific Terminal Project Document
4	Presence of Unit Trains	Medium	Presence of Potential Activity	Mobility	• Information on routing for unit trains readily available	• WSDOT • Department of Ecology • Gateway Pacific Terminal Project Document • Pacific Northwest Marine Cargo Forecast
5	Crossing Exposure Factor	Medium	Trains per day by average daily traffic at crossing	Safety, Mobility	• Dependent upon obtaining traffic volumes and train volume information	• Same as criteria #2 and #3
6	Previously Identified Project	High	Yes or no: previously identified project	Community Impacts	• Data is readily available	• JTC
7	Traffic Impact	High (if criteria #2 is not used)	Measure of roadway classification and population/employment density	Mobility	• Data is readily available • Proxy measure for lack of readily available traffic data	• US Census Bureau • WSDOT

LEVEL 2 CRITERIA

ID	Data/Criterion	Possible Measurement	Objective Measured	Notes	Data Source
Level 2 Criteria					
8	General Purpose Delay/Gate-Down Time	Total Daily Gate-Down Time; Marginal Increase in Gate-Down Time	Mobility	• Data is readily available • Calculated using total number of trains, assumed average train lengths, and maximum train speed allowable • May not reflect daily fluctuations	• Same as criteria #3 • FRA • BNSF • UTC
9	Freight Truck Delay	Freight Truck Percentage	Mobility	• Data available for some crossings • Data would be outdated for some crossings • Inconsistent freight truck percentage data	• UTC • FRA • WSDOT
10	Roadway Freight Classification	Roadway Freight Classification	Mobility	• Roadway Freight Classification data is readily available • Reliable data set	• WSDOT
11	Emergency Vehicle Access	Proximity to fire station, police station, or hospital; network redundancy; proximity to grade-separated crossing	Safety	• Grade-separated crossing data is readily available • Roadway network data is readily available • Fire station, police station, and hospital station data is readily available for some areas	• UTC • WSDOT
12	Collision History	5-year collision history; accidents per million entering vehicles; accidents per thousand entering trains	Safety	• Collision history at crossing is readily available • Collision history near crossing is not readily available for all crossings • Collision rates dependent on availability of traffic and train volume data	• UTC • WSDOT • FRA
13	Safety Enhancement/Level of Protection	Type of Enhancement (active vs passive)	Safety	• Data is readily available • Reliable data set	• UTC
14	Proximity to Ports and Intermodal Facilities	Proximity to facilities	Mobility	• Data is readily available • Reliable data set	• Washington Ports
15	Located on State Highway	State highway classification	Mobility	• Data is readily available • Reliable data set	• WSDOT
16	Environmental Impact	Proximity to aquatic sensitive areas, shorelines, lakes, protected lands	Community Impacts, Environmental	• Data is readily available • Reliable data set	• WSDOT • ESRI
17	Social Equity Impacts	Proximity to minority populations; proximity to low-income populations	Community Impacts	• Data is readily available • Reliable data set	• US Census Bureau