
Chapter Seven

Overview of Findings

This chapter presents an overview of engineering features for Alternatives B and I (**Exhibit 7-1**). In addition, it provides a generalized summary of potential impacts for each environmental and community resource by alternative (including the No Action). This table does not include construction impacts (except in the case of potential relocations). **Exhibit 7-2** presents this summary matrix.

Review of the potential impacts and benefits, as well as community input, has led to the selection of a preferred alternative.

What is the Preferred Alternative?

Working together with the Vancouver community and local agencies, the Washington State Department of Transportation has identified Alternative I, Option 1 (Westerly Bypass with Vehicular Overpass) as the preferred alternative. This alternative was chosen after the project team carefully reviewed the environmental and community impacts of all alternatives. Public comments were also incorporated into the decision-making process.

Following circulation of this Final Environmental Impact Statement, the U.S. Federal Highway Administration will identify a “selected alternative”. If the selected alternative is the preferred alternative, the selected alternative will advance to design and permitting following circulation of a Record of Decision.¹ Mitigation measures identified in this Environmental Impact Statement and in permit conditions will be incorporated into the design of the selected alternative.

How will mitigation measures be selected?

As presented throughout this environmental document, various mitigation measures can be used to minimize and/or avoid impacts to the natural environment and the surrounding communities. However, as suggested in this document, some mitigation measures may not be appropriate under certain conditions. **Exhibit 7-3** provides a general approach that is typically used to select and incorporate mitigation measures into a transportation project. This general approach illustrates the many components that are necessary to choose the appropriate measure that would minimize impacts while also meeting agency and permit requirements.

¹A Record of Decision (ROD) is the final public document released by FHWA stating their decision of a selected alternative.

Summary and Comparison of Alternatives: Design Elements and Characteristics
Exhibit 7-1

ALTERNATIVE	ESTIMATED CAPITAL COST FOR THE BYPASS AND STRUCTURE*	BRIDGE STRUCTURE* LENGTH	OVERALL STRUCTURE* WIDTH
Alternative A: No Action	Note #1	N/A	N/A
Alternative B: Easterly Bypass			
Option 1: Vehicular Overpass, Eliminate at-grade crossing	\$55 million	850 feet	50 feet
Option 2: Close West 39 th Street	\$47 million	N/A	N/A
Option 3: Pedestrian/Bicycle Overpass, Eliminate at-grade crossing	\$49 million	800 feet	12 feet
Alternative I: Westerly Bypass			
Option 1: Vehicular Overpass, Eliminate at-grade crossing	\$57 million	640 feet	50 feet
Option 2: Close West 39 th Street	\$50 million	N/A	N/A
Option 3: Pedestrian/Bicycle Overpass, Eliminate at-grade crossing	\$52 million	590 feet	12 feet

*At West 39th Street

Note #1: Although a “project” would not be built under the No Action Alternative, costs of not doing anything should not be ignored. Under the No Action Alternative, passenger rail service between Seattle and Portland would continue to be delayed. Additional round-trip service could not be added. In addition, freight traffic would continue to idle in the Vancouver rail yard, contributing to air and noise quality impacts. Traffic increases at West 39th Street would result in lost time, and potential accidents. These costs, while not direct costs of a construction project, are external costs of not doing anything. For more information about external costs, please refer to the Pacific Northwest Rail Corridor Economic Analysis, Washington State Department of Transportation, September 1998.

Summary of Impacts by Alternative

Exhibit 7-2

Resource Group (DISCIPLINE REPORTS)	ALTERNATIVE A	ALTERNATIVE B (EASTERLY BYPASS)			ALTERNATIVE I (WESTERLY BYPASS)		
	No Action	Option 1 Vehicle Overpass	Option 2 Pedestrian Overpass	Option 3 Close At-Grade Crossing	Option 1 Vehicle Overpass	Option 2 Pedestrian Overpass	Option 3 Close At-Grade Crossing
Soils and Geology (Soils & Geology)	No impact	Cut and fill adjacent to existing slopes could create ground instability	Same as Option 1	Same as Option 1	Cut and fill adjacent to existing slopes could create ground instability	Same as Option 1	Same as Option 1
Air (Air Quality)	-Increased vehicle emissions associated with delays -Continued train idling and associated emissions	Decreased train emissions due to decreased idling	-Same as Option 1 -Increased vehicular emissions on other roadways	Same as Option 2	Decreased train emissions due to decreased idling	-Same as Option 1 -Increased vehicular emissions on other roadways	Same as Option 2
Water (Water Quality, Hydrology, Floodplains)	No impacts	Slightly increased stormwater volumes	No impacts	Same as Option 1	Slightly increased stormwater volumes	No impacts	Same as Option 1
Plants and Animals (Fisheries, Wetlands, Vegetation & Wildlife)	No impact	-Loss of 6.27 acres of woody vegetation	Same as Option 1	Same as Option 1	-Loss of 5.27 acres of woody vegetation	Same as Option 1	Same as Option 1
Energy (Energy)	Fuel consumption tied to train idling will continue	Fuel consumption tied to train idling will decrease	Same as Option 1	Same as Option 1	Fuel consumption tied to train idling will decrease	Same as Option 1	Same as Option 1

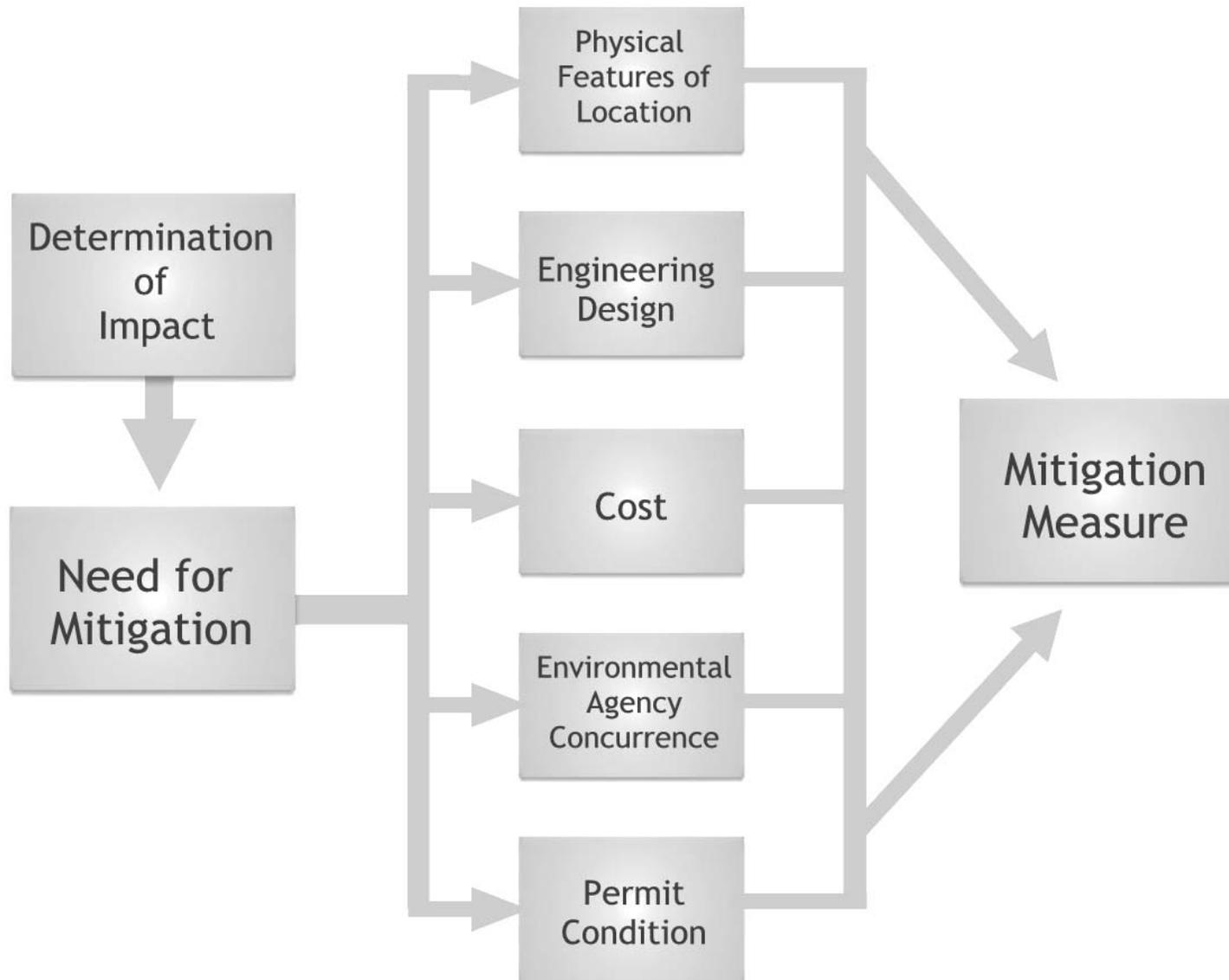
Continued on next page

Summary of Impacts by Alternative

Exhibit 7-2 - Continued

RESOURCE GROUP (DISCIPLINE REPORTS)	ALTERNATIVE A	ALTERNATIVE B (EASTERLY BYPASS)			ALTERNATIVE I (WESTERLY BYPASS)		
	No Action	Option 1 Vehicle Overpass	Option 2 Pedestrian Overpass	Option 3 Close At-Grade Crossing	Option 1 Vehicle Overpass	Option 2 Pedestrian Overpass	Option 3 Close At-Grade Crossing
Environmental Health (Hazardous Materials, Noise & Vibration)	Noise from idling and train horns would continue	Columbia Crest development may experience increased noise An historic structure located on NW 69 th Circle may experience noise and vibration impacts	Same as Option 1	Same as Option 1	Columbia Crest development may experience increased noise An historic structure located on NW 69 th Circle may experience noise and vibration impacts	Same as Option 1	Same as Option 1
Land Use (Historic, Cultural & Archeological; Environmental Justice; Land Use; Relocation; Social Elements; Visual Quality)	-Continued safety concerns at West 39 th Street -Continued passenger train delays	-New access for emergency vehicles -Safer access to recreational facilities -Decreased risk of accidents -An historic resource may be adversely affected -As many as 31 parcels may be disrupted or relocated	-Decreased risk of accidents -Perceived isolation by the community -An historic resource may be adversely affected	-Safer access to recreational facilities -Decreased risk of accidents -An historic resource may be adversely affected -As many as 26 parcels may be disrupted or relocated	-New access for emergency vehicles -Safer access to recreational facilities -Decreased risk of accidents -An historic resource may be adversely affected -As many as 31 parcels may be disrupted or relocated	-Safer access to recreational facilities -Decreased risk of accidents -An historic resource may be adversely affected	-Safer access to recreational facilities -Decreased risk of accidents -An historic resource may be adversely affected -As many as 26 parcels may be disrupted or relocated

Mitigation Measures: Making a Determination
Exhibit 7-3



This page intentionally left blank.