

Description of Alternatives

2.1 Introduction

This chapter describes the Columbia River Crossing's (CRC's) locally preferred alternative (LPA), including the proposed

TERMS & DEFINITIONS

Locally preferred alternative (LPA)

The locally preferred alternative represents the alternative preferred by the local and regional agencies sponsoring the CRC project. The FTA and FHWA preferred alternative is the same as the LPA.

design, operations, and how the project would be constructed (Exhibit 2.1-1). It also describes the No-Build Alternative and the other alternatives considered in the Draft Environmental Impact Statement (DEIS). Exhibit 2.1-2 illustrates the existing conditions in the project area. This chapter also summarizes the early studies that evaluated and screened alternatives prior to the DEIS, and the process used to adopt and refine the LPA

after the DEIS. The LPA is a refined version of one of the DEIS alternatives (referred to as Alternative 3 in the DEIS). This chapter concludes by summarizing the key findings that support the selection of the LPA.

CHAPTER CONTENTS

2.1	Introduction	2-1
2.2	The Locally Preferred Alternative	2-4
2.3	Construction Methods	2-41
2.4	The No-Build Alternative	2-54
2.5	Alternatives Evaluated in the Draft EIS	2-55
2.6	Key Findings Supporting Selection of the LPA	2-65
2.7	Alternatives Development and Screening Process	2-70

Project Area Map Dimensions are approximate. MLE WASHINGTON Hayden Ha **Project Area** Portland Vancouver Main McLoughlin Blvd Vancouver Fourth Plain Interstate Ave NE Columbia Blvd (99E) Martin Luther King Jr. Blvd ъ **Steel Bridge** NE Killingsworth St NE Prescott St Columbia River OREGON (500) 14 Mill Plain Blvd NE Lombard St NE 42nd Ave Fourth Plain Blvd NE 82nd Ave 102nd Ave 205 NE Sandy Blvd Ruby Junction E Burnside St Possible Staging or Casting Areas Existing MAX Lines Interchange Improvements New Light Rail Alignment **Highway Improvements** Other Light Rail-related Improvements 181st Ave 223rd Ave V Camas Lacamas Lake

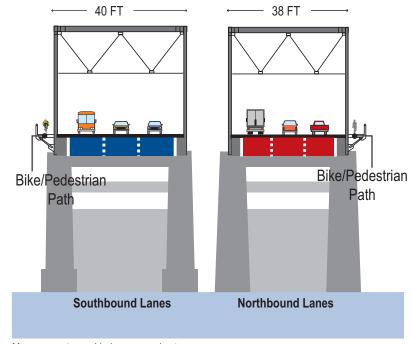
Exhibit 2.1-1

2-2 • CHAPTER 2

Exhibit 2.1-2



Existing Columbia River Crossing



Measurements provided are approximate.

2.2 The Locally Preferred Alternative

The following are the primary transportation improvements included in the LPA; these are described in more detail in the following sections, in the order listed.

- The new river crossing over the Columbia River and the I-5 highway improvements, including improvements to seven interchanges, north and south of the river, as well as related enhancements to the local street network.
- Extension of light rail from the Expo Center in Portland to Clark College in Vancouver, and associated transit improvements, including transit stations, park and rides, bus route changes, and expansion of a light rail transit maintenance facility.
- Bicycle and pedestrian improvements throughout the project corridor.
- A toll on motorists using the river crossing.
- Transportation demand and system management measures to be implemented with the project.

The LPA includes two design options and a construction phasing option. The two design options, referred to as LPA Option A and LPA Option B, are the result of substantial public input and additional analysis and design work around the Hayden Island and Marine Drive interchanges (see Section 2.7.9). The preferred option, which is described in this FEIS as LPA Option A, includes local vehicular access between Marine Drive and Hayden Island on a local multimodal bridge. LPA Option B does not have traffic lanes on the light rail bridge, but instead provides direct auto access between Marine Drive and the island with collector-distributor (CD) lanes on the two new bridges that would be built adjacent to I-5. Exhibit 2.2-1 illustrates the two options.

In addition to the two design options, this FEIS also evaluates the potential for phasing construction, that is, building part of the project in an initial phase and constructing the remaining elements of the project at a later date. It has become increasingly evident that there may not be adequate funding to construct all elements of the LPA in a single phase and it is common for large projects to be built in phases. Possible phasing options for the CRC project are numerous, and the actual phasing cannot be known until the precise timing and availability of funding are finalized, which will occur sometime after the Record of Decision (ROD). However, the project team, working with stakeholder groups, identified several highway elements of the LPA that could be reasonably postponed to reduce initial construction costs. This Final Environmental Impact Statement (FEIS) identifies these potentially phased elements, and refers to that possible initial investment as the "LPA with highway phasing."The LPA with highway phasing option would build most of the LPA in the first phase, but would defer construction of specific elements of the project, including:

- Construction of the I-5 braided on- and off-ramps at Victory Boulevard.
- Construction of the Marine Drive interchange flyover.
- Construction of the northern half of the I-5/SR 500 interchange.

