

### 3. EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES

Each section in this chapter summarizes key findings for one or more elements of the environment. Following a brief discussion of new information or changes in existing conditions since the NEPA evaluation for the Columbia River Crossing project, each section identifies the benefits and effects of the No-Build Alternative and the Modified LPA, including how benefits or effects would differ across the various design options.

Each section includes a detailed discussion of the long-term benefits and effects (those that will remain after construction of the Modified LPA is completed), the short-term benefits and effects (those that would occur during construction), and the indirect effects (those caused by the Modified LPA and that occur later in time but are still reasonably foreseeable). In addition, each section identifies the potential mitigation measures that can address the identified effects. Mitigation will be finalized in the Final SEIS. Cumulative effects, which are the incremental effects of the Modified LPA when added to those of other past, present, and future actions, are analyzed in Section 3.23. The analysis of the Modified LPA includes all design options described in Chapter 2, Description of Alternatives, and listed in Table 3-1. If there is a difference in effects among design options, those differences are identified and described specifically.

The findings summarized in this chapter are based on detailed technical reports prepared for the Draft SEIS. The technical reports are cited throughout the chapter, as appropriate, and are incorporated by reference into the Draft SEIS. All technical reports are listed in Appendix H and published with the Draft SEIS. All projections and forecasts are for the design year of 2045 unless otherwise stated.

A summary of the components of the Modified LPA analyzed in the Draft SEIS is shown in Table 3-1.

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Table 3-1. Summary of Components of the Modified LPA

Component	Modified LPA
<p><b>Columbia River Bridges</b></p>	<ul style="list-style-type: none"> <li>• Two bridges built west of the existing Interstate Bridge (which would be removed).                             <ul style="list-style-type: none"> <li>– Three bridge configuration options: double-deck fixed-span (truss bridge type); single-level fixed-span (girder, extradosed, or finback bridge type); or single-level movable-span (vertical lift bridge type). The effects and benefits analysis of a particular bridge configuration would be the same for each bridge type, unless otherwise specified.</li> </ul> </li> <li>• Variable-rate tolling for motorists using the river crossing as a demand-management and financing tool.</li> </ul>
<p><b>I-5</b></p>	<ul style="list-style-type: none"> <li>• One auxiliary lane in each direction from Marine Drive to Mill Plain Boulevard or two auxiliary lanes in each direction (one from Marine Drive to Mill Plain Boulevard and one from Interstate Avenue/Victory Boulevard to SR 500/39th Street)</li> <li>• Improvements to seven interchanges between Victory Boulevard in Portland and SR 500 in Vancouver.                             <ul style="list-style-type: none"> <li>– An option to eliminate the existing C Street ramps.</li> <li>– An option to shift I-5 to the west in downtown Vancouver near the SR 14 interchange.</li> </ul> </li> <li>• Reconfiguration of some local streets to complement the new interchange designs.</li> </ul>
<p><b>LRT</b></p>	<ul style="list-style-type: none"> <li>• Extension of the MAX Yellow Line from Expo Center Station in North Portland to a terminus near Evergreen Boulevard in Vancouver.<sup>a</sup></li> <li>• Modifications to the existing Expo Center Station and new stations at Hayden Island, Vancouver Waterfront, and near Evergreen Boulevard.</li> <li>• Up to two park and rides in Vancouver along the light-rail alignment: one near the Waterfront Station (three site options) and one near the Evergreen Station (two site options).</li> <li>• Associated LRT improvements such as traction power substations, signal and communications support facilities, an overnight light-rail vehicle facility at the Expo Center, and an expanded maintenance facility at Ruby Junction.</li> </ul>
<p><b>Associated Bus Improvements</b></p>	<ul style="list-style-type: none"> <li>• Wider inside shoulders on I-5 from Victory Boulevard to SR 500 to accommodate express bus-on-shoulder service.</li> <li>• Improvements to local bus transit service to integrate the proposed new LRT service and local bus routes.</li> </ul>
<p><b>Active Transportation</b></p>	<ul style="list-style-type: none"> <li>• A variety of improvements for people who walk, bicycle, and roll, including a shared-use path over the Columbia River and North Portland Harbor, enhanced wayfinding, and facility improvements to comply with the Americans with Disabilities Act.</li> </ul>
<p><b>North Portland Harbor Bridges</b></p>	<ul style="list-style-type: none"> <li>• Replacement bridges that would carry LRT, I-5 through traffic, traffic to/from N Marine Drive, and an arterial bridge for local traffic to and from Hayden Island.</li> </ul>

Note:

<sup>a</sup> TriMet, which operates the MAX system, would also operate the Yellow Line extension.

Key: I-5 = Interstate 5; LRT = light-rail transit; MAX = Metropolitan Area Express; N/A = not applicable; SR = State Route; TriMet = Tri-County Metropolitan Transportation District of Oregon