1 Purpose and Need for the Project

This chapter describes the Purpose and Need for the Tillamook U.S. Highway 101 (US 101)/Oregon State Highway 6 (OR 6) Project and the project’s objectives, which form the structure for the evaluation of the two alternatives considered in this Alternatives Analysis Report (AA Report). This chapter also describes the project’s setting, including a description of the project study area (illustrated in Figure 1-1) and the project’s planning and policy framework.

1.1 Project Purpose and Need and Objectives

This section describes the project purpose, need, and objectives, which provide a context for understanding why ODOT is proposing improvements to US 101 and OR 6 in downtown Tillamook. They also establish the structure within which the alternatives have been and will be evaluated.

1.1.1 Project Purpose

The Purpose of the Tillamook US 101/OR 6 Project is to improve the design, traffic performance, and safety of US 101 and OR 6 intersections in downtown Tillamook and across Hoquarten Slough while supporting local land use and economic development goals and objectives; ensuring a fiscally-responsible design; and being sensitive to important adjacent parks and natural resources.

1.1.2 Project Need

The Need for the Tillamook US 101/OR 6 Project results from the following:

1. During peak periods, future vehicular volumes on US 101 and OR 6 in downtown Tillamook are projected to exceed available intersection capacity and future intersection queues would back up through adjacent intersections (and to a lesser degree, peak period queues at those intersections currently back up through adjacent intersections).

   - Based on historic traffic patterns and trends, vehicular volumes on US 101 and OR 6 in downtown Tillamook will increase approximately 60 percent by 2036. If no roadway improvements are made, the Oregon Department of Transportation (ODOT) forecasts that vehicle volumes would exceed capacity at three signalized intersections on US 101 and OR 6 in downtown Tillamook during peak periods (Main Avenue [US 101]/1st Street [OR 6], Main Avenue [US 101]/3rd Street [OR 6], and Main Avenue [US 101]/4th Street).
1. Vehicular queues at the four US 101/OR 6 intersections (Main and Pacific Avenues at 1st and 3rd Streets) currently, and will continue to, back up into upstream intersections during peak periods, due in part to relatively short block lengths in downtown Tillamook (north-south blocks are 200 feet long and east-west blocks are 150 feet long). Queues that extend into upstream intersections exacerbate the capacity constraints of those intersections.

2. Travel patterns on US 101 and OR 6 within downtown Tillamook can be confusing to infrequent users.

3. The intersections of 1st Street and Pacific Avenue and 1st Street and Main Avenue constitute the northern terminus of the US 101 couplet in downtown Tillamook (Pacific and Main Avenues). Northbound traffic on Pacific Avenue currently transitions to Main Avenue via a short (200 feet) block on 1st Street (OR 6). The abrupt northern end of the couplet and transition to the three-lane bridge over Hoquarten Slough (one lane in the northbound direction) leads to vehicles being positioned in the wrong travel lane on 1st Street between Pacific and Main Avenues.

4. The travel lanes on US 101 in downtown Tillamook are too narrow to adequately accommodate current and projected levels of automobile, truck and recreational vehicle traffic, while maintaining on-street parking.

5. Due to downtown Tillamook’s proximity to industrial development and resource lands and to regional and statewide recreational sites, about 7 to 9 percent of vehicles on US 101 and OR 6 in 2010 were medium and large-sized trucks and recreational vehicles.

6. The existing travel lanes on Pacific and Main Avenues (US 101) between 1st and 4th Streets are 10 feet wide, which cannot safely accommodate two side-by-side large trucks (a semi-truck is approximately 10 feet wide).

3. Narrow travel lanes on US 101 and the confusing traffic patterns at the convergence of US 101 and OR 6 at the Main Avenue/1st Street and Pacific Avenue/1st Street intersections likely contribute to the relatively high number of low-speed crashes on state roadways within the project study area (within the top 25 percent for similar facilities statewide between 2008 and 2010).

4. The existing free-flow right turn from westbound OR 6 to northbound US 101, which is designed to improve vehicular operations through the intersection, does not allow crosswalks on the north and east sides of the Main Avenue/1st Street intersection, requiring out-of-direction travel for pedestrians.

5. Local plans, policies, and objectives for downtown Tillamook are based on and are to be supported by a state highway network that can accommodate increasing local, regional, and state travel demand.

- In 2006, ODOT, in cooperation with the City of Tillamook and Tillamook County, completed the Tillamook Transportation Refinement Plan (TTRP) (ODOT et al., 2006). The plan identifies a variety of transportation issues in downtown Tillamook and led
to an analysis and screening of alternatives to be evaluated within the Tillamook US 101/OR 6 Alternatives Study.

- The City of Tillamook Comprehensive Plan (City of Tillamook, 1972, amended 2003) includes policies, goals, and objectives related to promoting economic development, guiding vehicular circulation and parking, and encouraging a safe, convenient, and economical transportation system.

6. There are topographic, natural environment, and built environment constraints within the study area that can limit the ability of ODOT to improve the highway infrastructure in the study area, including:

- Current transportation infrastructure and development in and north of downtown Tillamook;
- Sue H. Elmore and Hoquarten Interpretive Trail Parks; and
- Hoquarten Slough and federally-listed species and critical habitat within the slough.

7. Funding ($27 million) for the planning, engineering design, and construction of the proposed project is being provided through State of Oregon’s Oregon Jobs and Transportation Act of 2009 (House Bill 2001).

1.1.3 Project Objectives

The project’s objectives are the key elements of the project’s Purpose Statement and are used to organize the criteria used to evaluate the alternatives:

- Improve mobility in the study area;
- Improve safety for vehicles and pedestrians in the study area;
- Minimize adverse effects to the natural and community environment; and
- Comply with and support local land use and transportation policies, plans, goals, and objectives.

Chapter 4 summarizes the performance of each alternative in meeting the project’s Purpose Statement, based on the project’s objectives.

1.2 Project Setting

This section describes the project setting, which includes the project study area and the planning and policy framework.

1.2.1 Project Study Area

The project study area (Figure 1-1) is located within Tillamook city limits, which is located approximately 6 miles inland from the northern Oregon Coast. Tillamook is the county seat of Tillamook County. US 101 and OR 6 intersect in downtown Tillamook, immediately south of Hoquarten Slough. US 101 is the primary north-south highway on the Oregon Coast, connecting coastal communities from California to Washington. OR 6 connects the
northern Oregon Coast (via US 101) and Tillamook with the Willamette Valley and the Portland metropolitan area (via US Highway 26). Main Avenue (US 101 southbound) and Pacific Avenue (US 101 northbound) form the US 101 couplet in downtown Tillamook. First Street (OR 6 westbound) and 3rd Street (OR 6 eastbound) form the OR 6 couplet in downtown Tillamook. The western terminus of OR 6 is at US 101. Figure 1-1 depicts the project study area.

The project study area is located in an urban setting with mixed commercial, recreational, and residential land uses. Hoquarten Slough, which flows east to west, traverses and divides the project study area. US 101 crosses the slough via a three-lane bridge built in 1931. Hoquarten Slough begins approximately 0.5 mile northeast of Tillamook and ends approximately 2 miles west of the US 101 bridge, at the confluence of the Dougherty Slough, which flows into the Trask River. The Trask River flows into Tillamook Bay.

Two City of Tillamook public parks – Sue H. Elmore Park (formerly Marine Park) and Hoquarten Interpretive Trail Park (Phase One) – are located immediately south of Hoquarten Slough and adjacent to US 101. The Port of Tillamook Bay owns an undeveloped former railroad corridor located south of Hoquarten Interpretive Trail Park and east of US 101. Commercial and civic land uses are concentrated within downtown Tillamook. Main Avenue and Pacific Avenue are the central core of downtown Tillamook. Civic land uses include the Tillamook City Hall, the Tillamook County Courthouse, the Tillamook County Pioneer Museum, the Tillamook Transit and Visitor Center, and the Tillamook U.S. Post Office. Single-family residential land uses are located on the eastern and western extents of the project study area.

Within the project study area north of Hoquarten Slough, all land uses are commercial. However, many of the commercial structures are vacant because the entire project study area north of Hoquarten Slough, including all of US 101, is within the slough’s floodway and 100-year floodplain. This area regularly experiences flooding events that affect businesses and close US 101. Because of the frequency of these events, the City of Tillamook and the Federal Emergency Management Agency (FEMA) have begun the process of purchasing properties and relocating businesses. Therefore, the City of Tillamook does not anticipate that this area will develop further. ODOT evaluated raising the elevation of US 101 between Hoquarten Slough and the Dougherty Slough. However, ODOT determined that US 101 would need to be built on structure to remain open during floods, which would entail high costs and adverse environmental effects. For this reason and because Wilson River Loop Road provides an alternate detour route during flooding events, ODOT did not pursue a project to raise the elevation of US 101 north of Hoquarten Slough.

1.2.2 Planning and Policy Framework

This section provides an overview of the planning and policy framework within which ODOT has developed and evaluated alternatives and options that address the project’s Purpose and Need.

1.2.2.1 Oregon Highway Plan

The Oregon Highway Plan (OHP) (ODOT, 1999, amended 2011) designates US 101 (Main Avenue and Pacific Avenue) between 1st Street and 12th Street in downtown Tillamook as a Special Transportation Area (STA). The OHP designates US 101 as a Statewide Highway
and OR 6 as a Regional Highway. OR 6 in the project study area is designated a Freight Route.

An STA is an ODOT-designated district that may be applied to a state highway segment that is located within an existing downtown or other area of compact development. According to the OHP (page 49):

“The primary objective of an STA is to provide access to and circulation amongst community activities, businesses and residences and to accommodate pedestrian, bicycle and transit movement along and across the highway. Direct street connections and shared on-street parking are encouraged. Local auto, pedestrian, bicycle and transit movements to the area are generally as important as the through movement of traffic. Traffic speeds are slow, generally 25 miles per hour or lower.”

According to the Oregon Highway Design Manual (HDM) (ODOT, 2003), the standard width for travel lanes within an STA is at least 10 feet, but at least 11 feet is preferred. The standard width for sidewalks within an STA is 10 feet.

### 1.2.2.2 City of Tillamook Comprehensive Plan – 2003

The City of Tillamook Comprehensive Plan (City of Tillamook, 1972, amended 2003) includes policies, goals, and objectives related to promoting economic development, guiding vehicular circulation and parking, and encouraging a safe, convenient, and economical transportation system. STA goals and objectives, and local plans, policies, and objectives for downtown Tillamook provide the planning and policy context for the project setting. These goals and objectives for downtown Tillamook are based on, and are to be supported by, a state highway network that can accommodate increasing local, regional, and state travel demand.

### 1.2.2.3 Tillamook Transportation System Plan – 2003

The 2003 Tillamook Transportation System Plan (Tillamook TSP) (City of Tillamook, 2003) identifies issues related to the adverse effects of traffic on US 101 and OR 6 in downtown Tillamook. These issues include the desire to minimize the effects of local and through freight traffic in downtown Tillamook and in residential neighborhoods. The 2003 Tillamook TSP studies these issues at a cursory level and does not recommend specific solutions. However, the 2003 Tillamook TSP recommends additional study of the effects of traffic on US 101 and OR 6 in downtown Tillamook. The 2003 Tillamook TSP also identifies for further study a number of proposed improvements to vehicle, bicycle, and pedestrian safety in the downtown area, including changes to intersections to improve mobility and safety. None of these improvements are funded.

### 1.2.2.4 Tillamook Transportation Refinement Plan – 2006

In 2006, ODOT, in cooperation with the City of Tillamook and Tillamook County, developed the TTRP (ODOT et al., 2006) to address a variety of transportation issues and recommendations included in the 2004 Tillamook TSP. These included the following items related to mobility in downtown Tillamook:
• Modifying on-street parking
• Reducing truck traffic
• Evaluating design improvements on Main Avenue and Pacific Avenue (the US 101 couplet)

The TTRP identifies the following recommendations for further study:
• Implement two-way traffic on 1st and 3rd Streets to reduce congestion and reduce truck trips downtown
• Add an additional northbound travel lane over Hoquarten Slough
• Implement a combination of the two above recommendations
• Consider other traffic solutions at 1st Street and Main and Pacific Avenues, either alone or in combination with one of the above options

These recommendations for further study from the TTRP were adopted in the Tillamook TSP¹ and were forwarded into a subsequent alternatives analysis (that is, the US 101/OR 6 Alternatives Study), summarized below.

1.2.2.5  US 101/OR 6 Alternatives Study
Between January 2009 and March 2010, ODOT, in cooperation with the City of Tillamook and Tillamook County, considered a wide range of alternatives to improve the safety and mobility of US 101 and OR 6 in downtown Tillamook, including the recommendations from the TTRP. The US 101/OR 6 Alternatives Study focused on improving mobility and safety at the four intersections of US 101 and OR 6 in downtown Tillamook:
• Main Avenue (US 101 southbound) and 1st Street (OR 6 westbound)
• Main Avenue (US 101 southbound) and 3rd Street (OR 6 eastbound)
• Pacific Avenue (US 101 northbound) and 1st Street (OR 6 westbound)
• Pacific Avenue (US 101 northbound) and 3rd Street (OR 6 eastbound)

Chapter 2 summarizes the decision-making process used to evaluate and screen the alternatives identified during the US 101/OR 6 Alternatives Study and identifies the alternatives that were advanced.

¹ City Ordinance #1208 adopted the TTRP as a supporting document to the Tillamook TSP and amended the Tillamook TSP to include the TTRP on April 17, 2006.
This page left blank intentionally.