Chapter 4. Short-Term Use and Long-Term Productivity/Irreversible and Irretrievable Commitment of Resources

This chapter addresses two issues that broaden the assessment and disclosure of environmental impacts and benefits of proposed projects. The issues are the trade-offs between short-term construction impacts of the Preferred Alternative and Phase 1 of the Preferred Alternative versus the long-term economic productivity of the proposed project, and the identification of any irreversible or irretrievable commitments of resources for the project.

4.1 SHORT-TERM USE AND LONG-TERM PRODUCTIVITY

NEPA requires an assessment of how short-term impacts to resources from construction of the Preferred Alternative will compare to or affect the maintenance and enhancement of long-term economic productivity in the project area. Following are descriptions of the five resource areas for which the Preferred Alternative could result in short-term impacts during construction but will improve long-term economic productivity in the project area. While construction activities may create short-term impacts for some resource areas, there may not be a change in long-term productivity.

4.1.1 Transportation

Motorists could expect short-term impacts of travel delays due to construction activities and congestion related to hauling by heavy equipment.

However, completion of the Preferred Alternative will make the area’s transportation system economically more productive and more efficient by providing the following benefits:

- The Preferred Alternative, and specifically the Bypass, will accommodate the increased volume of traffic that is projected due to anticipated growth in the project area.
- Through traffic will be diverted to the Bypass, reducing traffic and congestion on Oregon 99W.
Congestion in the downtowns of Newberg and Dundee will be reduced, and these areas will become safer for pedestrians and bicycles.

Access to most property will be easier and safer, with reduced wait times at intersections, less side street cut-through traffic, and shorter lines at traffic signals.

### 4.1.2 Land Use

Construction of the Preferred Alternative will temporarily impact businesses and residents due to congestion and travel delays, and could result in the temporary loss of agricultural land for construction staging. However, the Bypass is included in state plans, local comprehensive plans, and transportation system plans (TSPs) that identify transportation facilities needed to serve planned land use development. On a long-term basis, the proposed project helps Newberg, Dundee, and Dayton meet the transportation needs and supports the economic development, land use, and transportation goals stated in their comprehensive plans and TSPs.

### 4.1.3 Socioeconomics

Short-term socioeconomic impacts during construction of the Preferred Alternative will include the following:

- Temporary loss of income and employment in some local businesses due to traffic congestion; however, there would be increased income in some businesses and creation of jobs during the construction of the Bypass.
- Limited or more difficult access to some businesses during construction.
- Temporary loss of neighborhood character and livability.
- Increased response times for emergency responders in some project areas.

However, the project will support and improve the long-term economic productivity of the project area and region. Building the Bypass, which is identified in local comprehensive plans and TSPs, will enhance the economic development of the region by reducing congestion and travel times to area businesses and lowering trucking costs. With less congestion on Oregon 99W, there will be reduced travel times for local and regional freight traffic. With reduced congestion and more efficient travel times, the project will lead to a long-term improvement in the project area’s local economy.

### 4.1.4 Visual Resources

Construction of the Preferred Alternative will create short-term visual impacts. Construction equipment, staging areas, and construction activities will obstruct views and create an unattractive landscape. However, the Preferred Alternative’s visual resource mitigation and enhancements will give long-term benefits to the communities in the project area. Planting of trees, shrubs, and grasses will have a positive impact on visual character, increase the overall attractiveness of the project area, and could be beneficial when attracting new businesses to the area.

### 4.1.5 Energy

The short-term use of energy resources for construction of the Preferred Alternative and the long-term use for vehicle operations should be weighed against the long-term impact on energy supplies. The project will use some non-renewable energy resources (e.g., petroleum). Therefore, the short-term use of energy resources for construction and the long-term use for vehicle operations are consistent with the long-term development and productivity of the region.
4.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The construction of a large project such as the Bypass requires the commitment of natural, human, and economic resources. The following section discusses the resources that would be needed for construction of the Preferred Alternative that are irreversible and/or irretrievable.

4.2.1 Land Use

The Preferred Alternative will require about 510 acres of land to be purchased for right-of-way to construct the project. This land is considered an irreversible commitment and will not be available for other land uses since the land will be used for transportation purposes for the foreseeable future.

4.2.2 Energy

The construction of the project will require natural resources such as fossil fuels (i.e., petroleum) and construction materials such as concrete, asphalt, and steel. These will require energy to manufacture. Energy used during construction and in the manufacture of construction materials is irretrievable. However, fossil fuels are not in short supply at this time, and the use of these resources will not have an adverse effect on their continued availability.

The commitment of energy resources to the proposed project is offset by the benefits derived from improving traffic flow through the greater Newberg, Dundee, and Dayton areas. These benefits include improved accessibility, savings in travel time, and improved safety for vehicles, bicycles, and pedestrians, as well as traffic improvements to support planned land development.
This page intentionally left blank.