

3.22 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable resource commitments refer to the use of nonrenewable resources and the effects the use of these resources would have on future generations. The resources could be natural, physical, human, or fiscal. Irreversible commitments involve permanent loss of resources or loss of resources that cannot be replaced within a reasonable period. Irretrievable commitments involve the loss in value of an affected resource for a period of time.

3.22.1 No Action Alternative

The No Action Alternative would include routine maintenance of existing transportation facilities but no capital improvements to the I-25 corridor project area. Therefore, the No Action Alternative would not involve a commitment of resources to construction activities but would require natural, physical, and fiscal resources to maintain the current infrastructure. Some of these commitments, such as the energy required to produce and overlay asphalt, are irretrievable. In addition, travelers would lose money and time due to loss of mobility on I-25 through Pueblo.

3.22.2 Build Alternatives

Construction of either Build Alternative would involve a commitment of resources, including a range of natural, physical, human, and fiscal resources. Because the scale of the alternatives is similar, their irreversible and irretrievable commitments are also similar. Irreversible commitments for construction of the Build Alternatives include loss of historic properties and wetlands, expenditure of public funds, and displacement of residences and businesses that would need to be relocated due to right-of-way (ROW) requirements. Irretrievable commitments for construction of the Build Alternatives include acquisition of ROW, changes in land uses, changes to the visual landscape, and loss of vegetation and habitat.

Considerable amounts of fossil fuels, labor, and construction materials (such as asphalt, steel, aggregates, sand, gravel, and cement) would be expended during construction of the Build Alternatives. These resources are generally not retrievable, although some materials can be and are recycled or reused to minimize consumption of new (virgin) materials.

Construction of the Build Alternatives would have immediate and positive effects on the economy and employment in the Pueblo region. The Build Alternatives also would have long-term benefits to the social, economic, and natural environments. Travelers and residents would benefit from improved mobility and safety. Time and money would be saved, and crashes resulting in injuries or fatalities would occur less frequently. Operation of the improved transportation network would continue to provide economic benefits by attracting businesses and providing better access to existing businesses. The design of new bridges and roadways will incorporate best management practices (BMPs) in resource conservation, and facilities will require less maintenance and associated energy/materials usage. Water quality treatment features would provide long-term improvement to water body quality and improve environmental sustainability. These positive effects of the Build Alternatives would offset some of the irretrievable and irreversible losses of resources.

3.22.3 Mitigation Measures

Employing the concepts of sustainability and BMPs can reduce the impacts associated with resource losses. CDOT encourages the identification and incorporation of proven materials that are longer lasting and require less maintenance when the use of such materials is consistent with meeting the primary obligation of providing a safe and efficient transportation system. Alternative materials and practices must meet the performance goals in the construction specifications, demonstrate legitimate expenditure of public funds, and comply with all other applicable laws and regulations. Sustainable practices will be explored during the project design phase to the extent practicable. Some of the concepts to be explored may include, but are not limited to:

- ❖ Resource conservation
- ❖ Material reuse
- ❖ Waste minimization
- ❖ Minimal use of virgin materials
- ❖ Conservation and efficient use of water and energy
- ❖ Air pollution prevention
- ❖ Use of locally available resources