

3.26 Irreversible and Irretrievable Commitments of Resources

All of the build alternatives and, to a lesser degree, the planned improvements associated with the No Build Alternative, would require a commitment of natural, physical, human, and fiscal resources for implementation. This section discusses, in general terms, the irreversible and irretrievable commitment of resources of the build alternatives.

3.26.1 Environmental Consequences

3.26.1.1 No Build Alternative

Direct and Indirect Impacts

The land devoted to the existing highway would remain dedicated to use for transportation. A limited amount of undeveloped land would be committed to new highway development for the purpose of the construction of the three new bridges. The impacts associated with the construction of these activities are addressed in Section 3.27, Cumulative Impacts.

3.26.1.2 Issues Applicable to the Build Alternatives

Direct and Indirect Impacts

The land for the construction of the highway build alternatives would be a conversion from existing land uses to a dedicated transportation facility. Undeveloped lands used for the highway would no longer be available for other uses. Each of the build alternatives requires the use of undeveloped, pristine land that would be irreversibly modified. However, should a greater need arise for use of the land and should the highway system no longer be needed, the land could be converted back to other uses; however, that is not anticipated to be likely. Land use impacts are discussed in greater detail in Section 3.2, Land Use Plans and Policies. The irretrievable uses of other resources (e.g., the conversion of wetlands or use of energy) are discussed in their respective sections.

Building the alternatives would commit construction materials that could have been used for other projects to the building of the selected Sterling Highway alternative. Construction of an alternative would cause financial resources that could have been used elsewhere to be irreversibly committed to this project. Table 3.26-1 identifies the major construction materials and financial resources that it would take to construct the various project alternatives based on the preliminary engineering completed for the project. In general, the alternatives are anticipated to use similar quantities of materials. These types of construction materials are usually readily available and not likely to become scarce.

Table 3.26-1. Irreversible and irretrievable commitments of resources, major construction elements

	Build Alternative			
	Cooper Creek	G South	Juneau Creek	Juneau Creek Variant
Borrow/Aggregate (yds ³)	682,000	780,800	671,000	1,053,000
Riprap (yds ³)	14,000	14,000	11,000	11,000
Asphalt/Concrete (tons)	57,000	57,800	55,900	54,270
Guardrail – steel (linear feet)	22,500	30,000	34,000	34,000
Financial resources ^a (million)	\$309	\$312	\$280	\$288

^a This cost represents the total construction cost. See Section 3.5, Economic Environment, for other costs associated with the build alternatives.

The commitment of these resources is based on the concept that all highway users, and particularly residents in the project area, Borough, and State, would benefit by the improved quality of the transportation system. These benefits would consist of a more efficient and safe transportation system with improved accessibility for local traffic and other traffic bound for recreation destinations in the area.

In its comments on the Draft Supplemental Environmental Impact Statement, the Forest Service, U.S. Department of Agriculture, requested that it and other adjacent landowners receive advance notice of intent to request large quantities of materials and sufficient opportunity to prepare any necessary required environmental reviews to make material sites available for the project. The Alaska Department of Transportation and Public Facilities (DOT&PF) has not identified material sites for this project. The roadway would be designed to optimize the use of excavated materials from within the project footprint. Additional materials would need to be obtained by the contractor from a permitted material site. Given the large number of cultural, historic, and recreation resources within the project area, DOT&PF assumes that the material would be sourced outside the project area and hauled by truck to the project area. Phasing project construction over several years should provide sufficient time for land managers to be notified and to conduct environmental/permit reviews, should the contractor request a local material source that is not already permitted.