

## **19.0 COMMITMENT OF RESOURCES**

### **19.1 Introduction**

This chapter presents a discussion of the permanent commitment of resources as a result of the Preferred Alternative and an evaluation of the potential “costs” of consumption of environmental resources during the short-term construction phase compared to the longer term productivity benefits associated with the operation of the Preferred Alternative.

In accordance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality’s implementing procedures under Title 40, Part 1502 of the Code of Federal Regulations (C.F.R.), any Environmental Impact Statement (EIS) prepared pursuant to NEPA must include an analysis of both the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, and of any irreversible or irretrievable commitments of resources that would occur should the action be implemented (see 40 C.F.R. § 1502.16).

### **19.2 Irreversible and Irretrievable Commitment of Resources**

Resources that would be irreversibly and irretrievably committed to the Preferred Alternative include funds, land, construction materials, energy and labor. However, based on social and economic studies undertaken for the analysis of potential impacts as a result of the proposed project, these are not considered to be in limited supply. Thus, the use of such resources in the construction of the Preferred Alternative would not adversely impact the availability of such resources for other projects both now and in the future. It is estimated that construction of the Preferred Alternative would generate approximately 200 construction and construction-related jobs annually over the estimated three-year construction period (see Section 16.2.2). Thus, the use of labor for the construction of the proposed project would be a temporary benefit consistent with local and county plans for the maintenance and expansion of employment opportunities in the Chittenden County region.

#### **19.2.1 Preferred Alternative Irreversible and Irretrievable Commitment of Resources**

##### **Commitment of Funds**

The total commitment of Federal funds for the construction of the Preferred Alternative is estimated to be approximately \$75.5 million in 2007 dollars. This includes construction costs, right-of-way acquisition costs and design and permitting costs (see Section 16.2.2). The construction and operation of the Preferred Alternative would require the commitment and expenditure of state and federal funds which would not be available for other projects and activities.

The commitment of financial resources would produce a one-time benefit to the local and regional economy through labor and capital expenditures for construction and, secondarily, through the flow of these monies within the local economy. These benefits would take the form of a temporary increase in demand for goods and services provided locally, earnings of local employees and jobs. (see Section 16.2.2).

Direct losses to the local and county governments as a result of the Preferred Alternative include property tax payments which would be lost due to the acquisition of taxable properties. Under the Preferred Alternative, the Town of Williston could lose \$1,380 in municipal tax revenue and \$13,218 in education tax revenue each year. These losses represent less than one-tenth of one percent of the municipal and education tax grand list revenues in Williston. This loss is considered to be an irretrievable commitment associated with the Preferred Alternative.

### **Commitments of Land**

A total of approximately 7.7 acres of acquired land adjacent to the existing Circ A/B right-of-way would be committed for the construction and operation of the Preferred Alternative. In the VT 2A corridor, approximately one acre of land would be acquired for spot improvements at intersections. The land used in the construction of the Preferred Alternative is considered to be an irreversible commitment during the time period that the land is used for construction and during the operational periods. Should, however, a greater need arise for the use of the land, or should the Preferred Alternative no longer be needed, the land can be converted and committed to another use, although at this time, there is no indication that such a need for conversion could develop or be desirable.

### **Commitments of Energy and Materials**

The Preferred Alternative would also require the use of various types of fossil fuels, electrical energy and other resources during the construction and operation. These resources are considered to be irretrievably committed to the project. An estimate of construction energy consumption is presented in Section 16.3.6. At this time, these resources are not in short supply and considered to be readily available for the Preferred Alternative. As a result, the use of these resources is not expected to result in an adverse effect upon the continued availability of these resources.

The Preferred Alternative would require the commitment of various types of construction materials, including cement, aggregate, steel and asphalt (bituminous materials), electrical supplies, piping and other raw materials such as metal, stone, sand and fill material. Additionally, large amounts of labor and natural resources will be committed to the fabrication and preparation of these construction materials. This commitment of resources is irretrievable, but the resources are not in short supply and their use would not result in any adverse effect upon their continued availability. Much of the material accumulated for construction may at some time be recycled or used for fill or for some other use.

Development of the Preferred Alternative would result in a temporary increase in energy and fuel consumption during construction. The operation of the proposed project would be expected to result in a long-term decrease in energy consumption, through increased travel efficiency along new or improved roadways (See Chapter 15: Energy and Greenhouse Gas Emissions).

### **Commitments of Labor**

The construction of the Preferred Alternative would require the commitment of an estimated 600 person-years of employment, or approximately 200 workers per year during the three-year construction period. These workers would, by necessity, not be available for other projects during the construction period and should be considered as irretrievably committed to the proposed project. However, this resource is not considered to be in short supply.

#### **19.2.2 No Build Alternative Irreversible and Irretrievable Commitment of Resources**

The No Build Alternative would result in an irreversible or irretrievable commitment of resources associated with maintenance and potential rehabilitation activities that could be taken over the short-term and long-term to address safety and level of service deficiencies of existing project area roadways. Maintenance and rehabilitation activities under the No Build Alternative would require commitments of construction materials, energy, labor, funds and land.

Over the short-term, commitments of funds, materials, energy, land and labor under the No Build Alternative would be less than those under the Preferred Alternative because construction of the proposed project would not occur. However, over the long-term, energy use under the Preferred Alternative would be lower than the No Build Alternative because of improvements in traffic flow.

The cost of long-term roadway maintenance under the No Build Alternative compared to the Preferred Alternative is uncertain. The Preferred Alternative would create a new roadway that would need to be maintained in the future. The No Build Alternative may require more maintenance to compensate for the increased use of existing roadways without the proposed project. There is no reasonable method available to determine the future roadway maintenance costs associated with the Build and No Build Alternatives.

#### **19.3 Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity**

NEPA requires the disclosure of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, in other words, the tradeoffs between the potential adverse impacts of the proposed project and the potential long-term benefits of the proposed project. This section defines “short-term” as being construction related and “long-term” as being the operational phase of the proposed project.

##### **19.3.1 Short-Term Uses**

The No Build Alternative would not require construction and this would not result in any short-term impacts.

Short-term construction impacts of the Preferred Alternative would be associated with the economics of property acquisitions; traffic detours; pedestrian and bicycle access; noise and vibration; and air quality, including dust. The construction of the Preferred Alternative would create economic benefits during construction, in the form of jobs and

the direct and indirect demand for goods and services associated with construction activities (see Chapter 16: Construction Impacts).

The construction of the Preferred Alternative would be phased and only portions of the project area would be committed as a construction site at any given time. Therefore, the land area to be used during the various construction phases is considered as a short-term use, while during the operation of the proposed project this land area is considered to be a long-term use. The productivity of this land, in terms of its economic productivity in generating property and sales taxes, would be lost during this period and in the long-term.

The construction period would generate new productivity in terms of new construction related employment, new payrolls and purchases of materials, supplies and services. As a result of the Preferred Alternative, non-construction related employment would be generated temporarily during the period of construction, with the addition of new purchases both from construction related activity and the added expendable income resulting from the generated part-time and permanent employment.

The Preferred Alternative would have greater impacts during the construction period than the No Build Alternative. The environmental effects of all the Build Alternatives (including the Preferred Alternative) are described in detail in Chapters 6 through 16. Under the Preferred Alternative, adverse direct construction impacts may include temporary noise and dust, and the disturbance of vegetation and soils. Disruption of existing traffic patterns would be minimal as the Preferred Alternative primarily involves the construction of new roadway. Most of the adverse impacts can be minimized through mitigation, as described in detail for each resource topic in Chapters 6 through 16. Beneficial short-term construction impacts include economic benefits to the local region through the generation of new employment and local expenditures.

### **19.3.2 Long-Term Productivity**

The highway system and the local road network do not meet the local or regional transportation needs for which they were intended. If the Preferred Alternative was not constructed, VT 2A would remain a primary facility utilized by locally and regionally generated traffic. As a result, the levels of service which are at unacceptable levels would decrease and service to and from the area's traffic generators would continue to decline.

The operation of the Preferred Alternative may have long-term adverse impacts including the encroachment/fragmentation of some wildlife habitat, wetland filling, increased use of deicing salts, and minor increases in pollutant loadings to surface water bodies. Most of the adverse impacts can be mitigated.

The long-term benefits of the Preferred Alternative include reduced roadway congestion and time delays and enhanced access to important employment centers in Williston and Essex. The Preferred Alternative would also improve safety conditions, as described in Chapter 5: Traffic and Transportation. The Preferred Alternative would also improve the efficiency of the transportation system by reducing vehicle hours traveled. While vehicle miles traveled would increase, the Preferred Alternative is still expected to result in a net reduction in energy consumption and greenhouse gas emissions in Chittenden County in comparison to the No Build Alternative (See Chapter 15). As described in Chapter 9, the

Preferred Alternative would reduce the number of receptors impacted by noise in the VT 2A corridor by diverting a portion of VT 2A traffic volumes.

In comparison to the short-term and long-term environmental consequences and mitigation, the operation of the Preferred Alternative contributes to the overall enhancement of the quality of life in the project area and throughout the region. The Preferred Alternative would improve travel conditions and efficiency, thus contributing to long-term productivity.