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# Roadless Area Conservation

## National Forest System Lands in Idaho

### Socioeconomic Specialist Report

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## Abstract

People value, enjoy, and use national forests, including Idaho Roadless Areas. The social and economic components of this analysis address what may be regarded as some of the fundamental aspects affecting people's lives in relation to the management and use of national forests and roadless areas. Social and economic components consider the lifestyles, collaborative environment, and beliefs and values of people—which include the local economies, amenity uses, commodity uses, recreation uses, and value preferences.

## Changes Between Draft and Final

There was an error found in the acres of timber cutting under the 2001 rule for the DEIS. This number was also used to calculate the timber cutting for the Proposed Idaho Rule in the DEIS. These numbers were corrected. Road miles were also recalculated for each of the alternatives by adding all of the other road miles to a prorated total of timber miles in each alternative. The adjustment was based on the proportion of GFRG acres in the Proposed and Modified alternatives compared to the Existing Plans alternative. These two classes of road miles were then summed to produce annual estimates which are used to model annual impacts for the next 15 years for each of the five economic impact areas. All recalculated impacts still remain smaller than one percent of existing jobs and labor income for each of the five economic area during the next fifteen years.

## Analysis

### Methodology

#### Methods and Data Used

**The Social Analysis** - The social analysis reviewed public comment to the notice of intent and derived three key variables: (1) public values and beliefs about natural resources and roadless areas; (2) the collaborative environment and citizen-government relationships; and (3) lifestyles. Values and beliefs are important components of public evaluations of the proposed Idaho Roadless Rule, and these values and beliefs are also likely to influence the actions of groups and individuals in response to each alternative. The collaborative environment directly influences the willingness and ability of citizens to work with one another and with land management agencies to implement management of roadless areas. Lifestyles express the patterns of activity connecting people to public lands and particularly roadless areas.

**Demographic information** - Demographic information (population trends and population by age categories) was produced using the 2004 version of the Economic Profile System (EPS), last updated in September 2006. Databases used for EPS profiles are from: Bureau of the Census, County Business Patterns, Bureau of Labor Statistics, and the Regional Economic Information System (REIS) of the Bureau of Economic Analysis, U.S. Department of Commerce. Data for general population trends were for the years 1970 to 2004, while data on population growth by age category were restricted to Census years 1990 and 2000.

**Descriptive analysis of the economy**-- 2004 IMPLAN Pro data were used to describe the existing economic setting for each economic areas (EA) and the State (MIG 2004). This was the most recent data available when the DEIS was prepared. Employment (full- and part-time jobs),

labor income (employee compensation and proprietor income), total value added (employee compensation, proprietor and other property income and indirect business taxes) and total sales (expenditures for goods and services plus payments to value added) information was used to describe the existing economic condition. Economic impact analysis results will be compared to this information in order to understand the estimated jobs and labor income effects of each alternative.

**Economic impact analysis** – was used to evaluate potential direct, indirect and cumulative effects on the economy. Economic impacts are estimated using input-output analysis. Input-output analysis is a means of examining relationships within an economy, among businesses and between businesses and final consumers. It captures all monetary market transactions for consumption in a given time period. The resulting mathematical representation allows one to examine the effect of a change in one or several economic activities on an entire economy, all else constant. This examination is called impact analysis. IMPLAN translates changes in final demand for goods and services into resulting changes in economic effects, such as labor income and employment of the affected area's economy. The IMPLAN modeling system allows the user to build regional economic models of one or more counties for a particular year. The regional model for this analysis used the 2004 IMPLAN data.

## Assumptions

The data used to assess general population trends was for the years 1970 to 2004. Population by age category used data for Census years 1990 and 2000. We are assuming that the population trends from these years are indicative of current population growth trends in Idaho and the five BEA economic areas within Idaho.

### Definition of BEA Economic Areas

To describe the diverse economic activity in Idaho adequately, functional economic areas were delineated. Bureau of Economic Analysis economic areas (EA) were used as the functional economies in Idaho (Johnson and Kort 2004). The economic areas are derived based on factors such as labor flows, purchases of goods and services, and newspaper subscriptions. There are five BEA economic areas that cover Idaho (fig. 1 and table 1). Teton, Oneida, and Franklin counties in Idaho were part of economic areas in Wyoming and Utah. For this analysis, these counties were removed from the economic areas in those States and placed into the Southeast Idaho economic area (Pocatello / Idaho Falls) for completeness.

**Table 1. Counties by Bureau of Economic Analysis economic area**

North Idaho	Central Idaho	Southeast Idaho	South Central	Boise
Benewah	Asotin, WA	Bannock	Blaine	Ada
Bonner	Clearwater	Bear Lake	Camas	Adams
Boundary	Garfield, WA	Bingham	Cassia	Boise
Ferry, WA	Idaho	Bonneville	Gooding	Canyon
Kootenai	Lewis	Butte	Jerome	Elmore
Latah	Nez Perce	Caribou	Lincoln	Gem
Lincoln, WA		Clark	Minidoka	Malheur, OR
Pend Oreille, WA		Custer	Twin Falls	Owyhee
Shoshone		Franklin		Payette
Spokane, WA		Fremont		Valley
Stevens, WA		Jefferson		Washington
Whitman, WA		Lemhi		
		Madison		
		Oneida		
		Power		
		Teton		

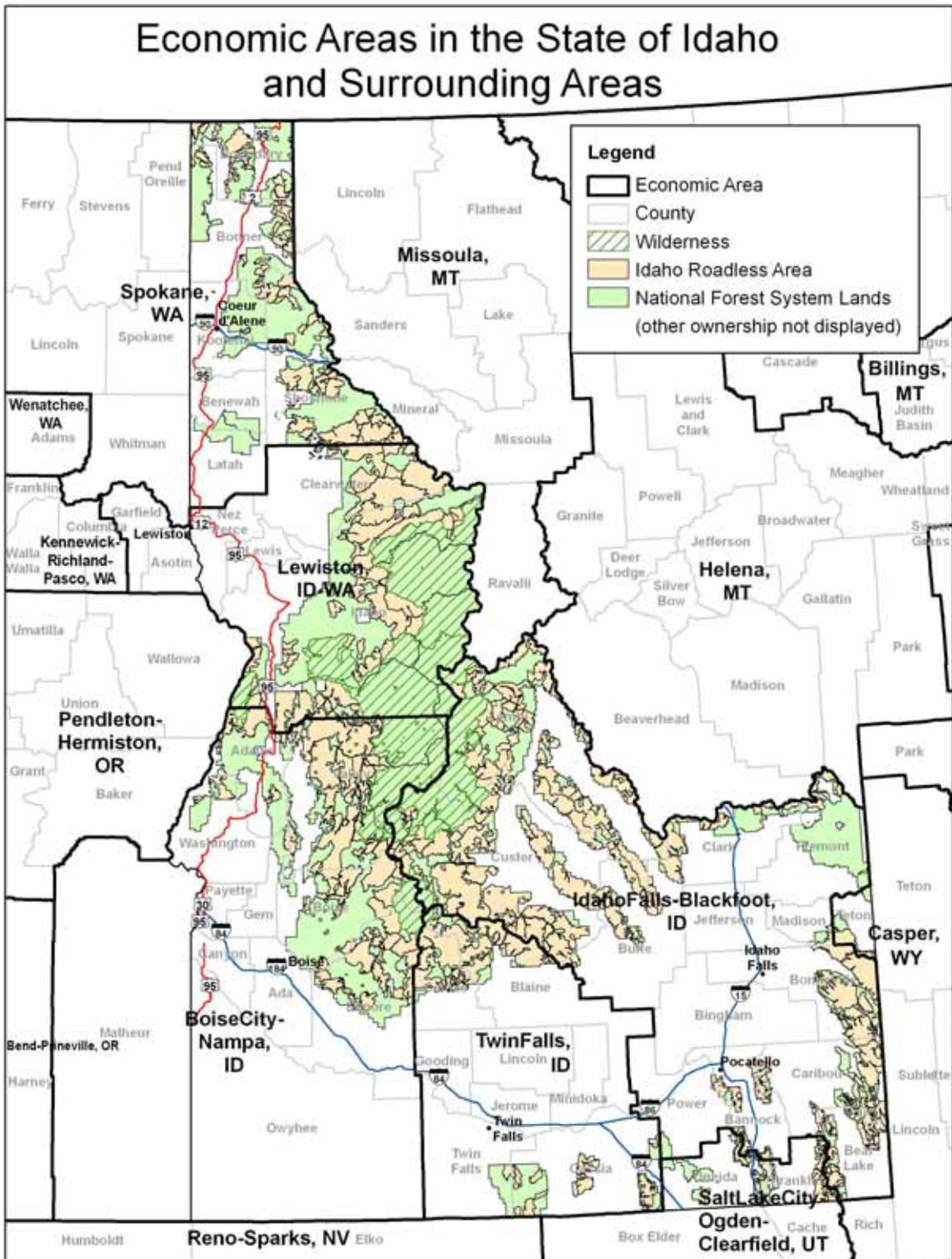


Figure 1. Bureau of Economic Analysis economic areas in the State of Idaho and surrounding areas

Timber, minerals and road data were provided by National Forests. This information needed to be assigned to each EA in order to develop economic impact estimates. Timber volume data was assigned to an EA based on information regarding the location of the National Forest within the EA and the existence of timber processing facilities in the EA. If timber processing facilities did not exist or were limited, the timber volume was assigned to the nearest EA with timber processing facilities. Road information was assigned to an EA based on the location of the road activity within the EA. We base economic impact estimates for road decommissioning of all miles of road by assigning all of the miles to the North Idaho EA.

The following is a list of national forests modeled in each economic area (EA):

North Idaho – Idaho Panhandle national forest,

Central Idaho – Clearwater, Nez Perce and Payette (for timber) national forests,

South Central - Sawtooth national forest,

Southeast – Caribou -Targhee and Salmon-Challis national forests,

Boise – Boise and Payette (for roads) national forests

We based economic impact estimates for road decommissioning of all miles of road by assigning all of the miles to the North Idaho EA.

Mineral activity consisted of phosphate mining. All phosphate mining is located on the Caribou National Forest which lies within the Southeast EA, Idaho.

## **Social - Affected Environment**

### **Values and Beliefs**

Since its inception, the Forest Service has managed NFS lands according to the principle of multiple use. This principle allows the agency to manage land for a variety of uses, including amenity, commodity, non-commodity, and recreation. The Multiple-Use Sustained-Yield Act (Public Law 104-333) formalized this management philosophy, stating that the Forest Service is to manage resources to best meet the needs of the American public, with flexibility to provide for “periodic adjustments in use to conform to changing needs and conditions” (Section 4(a) of the Act [16U.S.C. 531]). Recent social assessments and surveys indicate continued support for the principle of multiple use, including outdoor recreation, timber, watershed protection, range health and protection, minerals, wilderness characteristics, and fish and wildlife security. Beliefs and values about the multiple-use principle are noteworthy and influence the interpretation of management and planning activities. For example, some people perceive multiple use as not allowing for all uses in all places, but as allowing for mixes of diverse uses, perhaps in designated areas. Concerns regarding use conflicts have often been expressed. In general, if a particular category of use is damaging resources or disrupting user experiences, then the Forest Service may have to curtail or eliminate that use in certain areas (Russell and Adams-Russell 2004, Lybecker et al. 2005, Parker et al. 2002, Rasker and Alexander 2003).

The implication of values and beliefs provides a necessity for active balancing when implementing the multiple use principle. Designating certain areas for selected types of management requires careful consideration not only of the resources but also of people’s beliefs and values, needs and wants, and individual and community connections to forest resources. Since Americans show diverse orientations to these resources, the use, management, and

designation of National Forest System lands is often inherently controversial. This controversy is also apparent in special designations managed by the Forest Service, such as wild and scenic rivers, and wilderness.

A central issue in the controversy about Idaho Roadless Areas is debate over the balance of commodity and non-commodity uses. Whereas people once valued national forests primarily as a source of commodities, in recent years values regarding these lands have shifted towards recreation, environmental qualities, aesthetics, and amenities. Another central issue for Idaho Roadless Area management is access, particularly the designation of motorized and non-motorized areas and how they can be balanced. This topic was strongly raised in comments responding to the notice of intent for this rulemaking. Because of its complexity and site specificity, this topic will be addressed in independent travel management planning at the forest level.

Controversy and conflict over forest management is often founded on the differing values people may hold towards nature and thus its management. There are two commonly described orientations to the ways Americans tend to view nature (Russell and Adams-Russell 2004, pg. 94). The first is the “utilitarian” view: nature exists for humans to use. People with this view tend to consider active management as positive, asserting that it can shape and enhance the natural world. This orientation also tends to view human intervention as essential for the health of natural systems. The second view is the “naturalist” view: nature exists for its aesthetic and existence values. People holding this view tend to consider active management as non-effective manipulation of nature, often resulting in negative effects.

Although these two views are commonly noted in the published literature (e.g., Kempton et al. 1995), social science assessment work in Idaho (Russell and Adams-Russell 2004) and in northwestern Montana (Impact Assessment, Inc. 1995, Russell and Adams-Russell 2003) indicates that a “stewardship” perspective coexists with the utilitarian and naturalist orientations to nature. This stewardship perspective “emphasizes the coexistence of humans with natural resources, the responsibility of humans to maintain natural resources, and a respect for the integrity and health of ecological systems. Coexistence implies human activity can be compatible with the health and integrity of ecological systems” (Russell and Adams-Russell 2004, pg. 94). Stewardship values thus appear to share attributes of both the naturalist and utilitarian perspectives with an emphasis on the capacity of humans to coexist with, and to use, natural resources while also maintaining and promoting ecological health. The stewardship orientation appears to emphasize a set of contingencies about the relationship of humans with nature that evaluate actions in terms of the “balance” of ecosystem health, human intervention, and the future existence of a resource.

Other social variables may also influence how people perceive management direction, including: (1) lifestyles; (2) perceptions about the purpose of NFS lands and resources; and (3) perceptions about the role of governing agencies in managing and designating public resources (USDA Forest Service 2007m).

Research also indicates some specific values that people may hold towards forests, rangelands, and grasslands, and that these values may “play a critical role in identifying ecosystem management goals, setting the context for decision making, and guiding our choices” (Bengston and Xu 1995, p. 1). Among the values identified for forest lands are those included in table 2 (as indicated by Brown and Reed 2000, p. 243).

**Table 2. Forest (and rangeland and grassland) values that people may hold**

<b>Type of value</b>	<b>Specific aspects for which lands are valued</b>
Aesthetic value	Value the forest because of the scenery, sights, sounds, smells, etc.
Biological diversity value	Value the forest because it provides a variety of fish, wildlife, plant life, etc.
Cultural value	Value the forest because it is a place for me to continue and pass down the wisdom and knowledge, traditions, and way of life of my ancestors
Economic value	Value the forest because it provides timber, fisheries, minerals, or tourism opportunities such as outfitting and guiding
Future value	Value the forest because it allows future generations to know and experience the forest as it is now
Historic value	Value the forest because it has places and things of natural and human history that matter to me, others, or the nation
Intrinsic value	Value the forest in and of itself for its existence, no matter what others think about the forest
Learning value	Value the forest because one can learn about the environment through scientific observation or experimentation
Life sustaining value	Value the forest because it helps produce, preserve, clean, and renew air, soil, and water
Recreation value	Value the forest because it provides a place for favorite outdoor recreation activities
Spiritual value	Value the forest because it is a sacred, religious, or spiritually special place or because one can feel reverence and respect for nature there
Subsistence value	Value the forest because it provides necessary food and supplies to sustain my life
Therapeutic value	Value the forest because it makes me feel better, physically and/or mentally

Any individual value or combination of these values in table 2 may apply to National Forest System lands in general and Idaho Roadless Areas in particular. Similarly, different interest groups or geographic communities may hold different combinations of these values. The potential for compatibility or conflict among these values characterizes the relationship of interest groups and communities with National Forest System lands and roadless areas.

### **Collaborative Environment: Citizen-Governmental Relationships**

“Local vs. national” voices and their relative “weight” in planning and decision making constitute an ongoing issue in the management of national forests. This issue influences the relationship of citizens with the Forest Service that can affect compliance, collaboration, and trust of Agency decision making and planning.

The issuance of the 2001 Roadless Rule resulted in a response spectrum from support to criticism and ultimately several lawsuits and injunctions. One of the primary criticisms of the 2001 Roadless Rule is the perception that it had little recognition of local issues and needs. Concerns were raised about how the national prohibitions would affect local involvement in decision-making. Public comments on the notice of intent and those received during the public comment period for the draft EIS show that some people believe that by prescribing national prohibitions on activities, the action alternatives would reduce local involvement. This fear would then undermine the collaborative land management planning process and the existing trust between Agency officials and local citizens. People commented that this contributed to the feeling that regardless of their input, decisions would ultimately be made by officials in

Washington, D.C.—further undermining trust. People also commented that local involvement and decision-making is necessary for developing successful management approaches that are sensitive to the unique social and ecological conditions of individual forests, noting that a national policy lacks this sensitivity. Many commented that local managers are in the appropriate position to solve local management concerns. Some people commented that they oppose this rule and its national prohibitions not because of the nature of the prohibitions themselves, but because they prefer all issues to be addressed and resolved locally.

In contrast, others commented that it is appropriate for the Forest Service to make decisions regarding roadless area protection at the national level because these issues have not been resolved in an expedient fashion at the local level, and because they believe that local officials are subject to the influence of local interest groups to the neglect of other interest groups and/or the majority of American opinion. Some commented that national forests are indeed “national” and thus should be considered at broader levels than just the local level.

Several years ago, the Department of Agriculture established a national, broad-interest based group of people interested in management and designation of roadless areas to “assist” the Secretary, called the Roadless Area Conservation National Advisory Committee, or RACNAC. The RACNAC has representation of a diversity of interests and of geographical locations, and the group provides national perspective.

Using the existing Forest Plans as a base, and then comparing those to the 2001 Rule, while considering the counties’ input and that of the public, the State crafted the current Petition. The State of Idaho announced in June 2005 that it would submit a petition requesting specific regulatory protections and certain management flexibility for the 9.3 million acres of Idaho Roadless Areas. To ensure there was opportunity for local involvement, the State invited affected county commissioners to develop specific recommendations for the Idaho Roadless Areas in their respective counties. Many counties sponsored public meetings; more than 50 public meetings were held. In addition, the general public was encouraged to send comments directly to the Governor’s Office for consideration. Criticism about the inclusiveness or representativeness of such meetings is not uncommon in public responses assessing the credibility of these activities. Some comments regarding the notice of intent and in response to the county meetings indicate these types of criticisms, highlighting the potential for impacts on the relationship of communities with the Forest Service.

This was submitted to the RACNAC in November 2006, who then provided a unanimous recommendation to the Secretary in December 2006, who accepted the petition. The Idaho State Petition offers a balance of local public and county-level input with the national interests as represented by RACNAC. This provides for a more cohesive social presence. This will hopefully contribute to a more positive governance environment and also to a more collaborative environment, with opportunities to collectively come up with solutions.

It is also hoped that a more positive governance and a willingness of interest groups to work together in a collaborative environment will support the regulatory environment. One of the oft-expressed values of collaboration is that people get to participate in “the process” and getting first-hand experience and involvement often provides better “buy-in.” Better buy-in can thus foster better support and a willingness for people to adhere to the designations.

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## Lifestyle

Lifestyle can be defined by the activities and patterns of behavior based on beliefs and values within a particular context. Lifestyle is expressed in customs, styles, or patterns of working, recreating, socializing, and other activities. Here, the lifestyle discussion indicates patterns of activity that can be affected by forest management and roadless area management decisions (Russell and Adams-Russell 2004, pg. 93).

A relevant distinction is the differentiation of “urban” and “rural” lifestyles. Thirty-five of Idaho’s 44 counties are considered rural (no city with more than 20,000 residents). In 2003, rural areas accounted for about 88 percent of the State in terms of area and 36 percent of Idaho’s population. The remaining population is located in urban areas, particularly Ada, Canyon, and Kootenai Counties. The social fabric is stronger in rural areas, which have significantly fewer problems of crime, divorce, and teen pregnancy and greater community cohesiveness and spirit (Idaho Department of Commerce, 2005, pg. 3).

Lifestyles in rural areas tend to have a more diverse and direct relationship with natural resources and public lands than most lifestyles in urban areas. There are about 53,487,000 acres of land in Idaho, of which about 20,464,000 acres are NFS lands. The Federal Government manages approximately 63 percent of all Idaho lands. Idahoans do care about management of NFS lands, if for no other reason than it is difficult for them not to be affected by indirect and/or direct impacts. National Forest System lands are noteworthy components of the lifestyles in Idaho communities. For example, in a social assessment for the Clearwater and Nez Perce National Forests, Russell and Adams-Russell (2004) provide a succinct description of lifestyles for the northern part of Idaho, which has relevance for the entire State.

“Lifestyles are customs and patterns of behavior. These are among the most straightforward aspects of community and social life that can be affected by forest management decisions. The characteristics of lifestyle identified by this work as noteworthy are occupation; recreation and outdoor activity; and, the integration of family, place, work, and recreation. To some extent these characteristics exist across the diverse lifestyles in the project area. Most lifestyles are associated with occupations connected to natural resource development such as ranching, farming, logging, mill work, and mining. Others are associated with the place of work such as rural towns and rural cities, where there is a more complex mix of people’s lives. Occupation is a common organizing characteristic of lifestyles, but it is by no means the only relevant attribute. For this discussion, the relevant point is the association of lifestyles with occupation and especially those occupations in the natural resource extraction industries. These lifestyles have emerged from the traditions of frontier settlement and they have now moved into what might be termed a “settled frontier” pattern in which there is a high value placed on the continued use of natural resources for community development and as a source of jobs to support and raise a family.

A second noteworthy lifestyle characteristic is outdoor recreation and activity. These communities place a high value on the recreational amenities offered by the project area’s extraordinary landscape. The rivers, lakes, mountains, trails, wildlife, and wilderness areas are important resources because they enable the resident’s recreational lifestyles....

Hunting, fishing, hiking, trail riding, rafting, wildlife viewing, berry picking, bird watching, and a variety of other outdoor recreational activities are the past-times of people when they are not working. These activities are sometimes the occasion for family gatherings or otherwise reinforcing social bonds.

After work during the week, weekends, and vacations are occasions to pursue the range of outdoor recreation activities that are important parts of this outdoor lifestyle. A corollary proposition is the “tradeoff” that is made to live in these communities because of the availability of these recreational resources.... The outdoor recreational activities, and the perceived tradeoffs to pursue them, are an important characteristic of lifestyles in these communities.

The third noteworthy characteristic of lifestyles in these communities is the linkage of family, work, place, and recreation. This point is a logical conclusion from the first two lifestyle characteristics, but it is distinguished here to call attention to the value placed on living in a scenic rural environment offering ample recreation opportunities and the capability to work and support a family.

Family work, place, and recreation are interdependent. The ability to raise a family in close proximity to scenic amenities coupled with ample recreation opportunities motivates a strong interest in any management action or plan affecting any one of these linked elements. These linkages... [Are] vulnerable to change.... (2004, pg. 99–100).”

This description suggests a tight linkage of activity patterns, values, and beliefs, with National Forest System lands. Combined with the ratio of public to private lands and the overall rural character of Idaho communities, this suggests the potential for impact on lifestyles from any management decision about Idaho Roadless Areas.

## Social—Environmental Consequences

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### Values, beliefs and lifestyles.

A content analysis of the comments on the notice of intent indicates that there are strong proponents and strong opponents of the proposed rule. This analysis also indicates a strong expression of the “utilitarian” and “naturalist” orientations to nature. These orientations appear to structure beliefs about what is acceptable or what is not in the management of Idaho Roadless Areas.

Supporters of the Proposed Rule often identify themselves as persons who engage in motorized recreation on public lands or who, because of age or disability, are dependent on motorized access. Those who oppose the proposed rule are not as easily categorized. Although they generally do not identify themselves in terms of background and lifestyles, it is clear that the life experience of many opponents is rooted in a certain kind of relationship to forest lands, a relationship that clearly motivates a certain way of looking at the land.

Thus, if road building were to occur in the Backcountry and the GFRG themes, those people in support of the proposed rule would likely be generally okay with that decision. Those who oppose the rule would not.

Proponents of the Proposed Rule tend to see NFS lands in terms of the resources they offer for human use. Proponents see the forest as an ecosystem that, under proper management, is capable of providing a host of goods for human well-being, including numerous recreational

opportunities. For these people, protection usually consists of managing these lands to ensure access, healthy forests, and sustained economic benefits. Hence, roads are viewed as necessary for some management activities including those that promote forest health, responsible and sustainable resource extraction, and emergency access; and that contribute to meeting increasing recreational demands. The failure to actively manage NFS lands, argue these people, would subject these lands to uncharacteristic insect infestations and catastrophic fire. They tend to see true protection as depending on active and prudent care of these lands. If timber cutting or mineral development were allowed in the Backcountry or in the GFRG themes, these people would likely evaluate the alternatives based on how they enhance economies or resource-dependent lifestyles and would generally be okay with that decision. They would support limited road construction/reconstruction in the Backcountry theme to facilitate timber cutting to improve forest health and reduce hazardous fuels.

On the other hand, those opposing the proposed rule, favoring greater protection of Idaho Roadless Areas, tend to see forest lands as whole ecosystems that are disrupted by human activity. For those respondents, protection usually consists of leaving Idaho Roadless Areas alone to evolve naturally through their own dynamic processes. Persons holding this view place a high priority on environmental protection. They believe Idaho Roadless Areas should be protected for their own intrinsic value as undisturbed (by humans) wildland, for the benefit of wildlife, and for the benefits that these areas offer humans. These places are seen as important sources of clean drinking water and clean air, as a curb on climate changes, and as places of solitude and spiritual renewal. Opponents tend to hold an inclusive view of all living things; however, they are not entirely insensitive to the competing concerns of those whose sources of enjoyment and/or livelihood depend on more active uses of NFS lands. But ultimately, opponents believe that the need for roadless protection outweighs those other concerns, and that those concerns can be mitigated—for example, through development of alternative materials and energy resources and the designation of less sensitive areas for motorized recreation.

Those opposing the Idaho Roadless Rule tend to do so because they see it as less restrictive than the 2001 Roadless Rule, particularly in the GFRG theme. They are concerned the GFRG theme would not limit road construction/reconstruction, timber cutting, or discretionary mineral activities and that activities permitted on these lands would adversely affect roadless characteristics. They are also concerned about permitting limited road construction/reconstruction to support timber cutting in the Backcountry theme. They would likely evaluate alternatives in terms of the overall effect on intrinsic values or how they provide environmental and ecosystem service benefits. If road construction, timber cutting, motorized travel, or mineral development were allowed to occur or increase, these people generally would be dissatisfied and in opposition.

Similar comments as described above were received on the draft EIS and the alternative described in the draft. Based on these comments, the Proposed Rule was modified to address some of the concerns and to try and provide a better balance between the views. For the GFRG theme, the Modified Idaho Roadless Rule reduces the acreage. It removes the permissions to permit road construction and reconstruction to access new mineral leases, other than for phosphate in select areas. Definitions and conditions are made more explicit than forest plan management direction.

In the Backcountry theme in the Modified Rule the permissions for road construction/reconstruction have been changed by refining the conditions under which roads may be built to support timber cutting with the objective of reducing hazardous fuels. Temporary roads could only be constructed in the community protection zones to support hazardous fuel treatment projects. Temporary roads could also be constructed to reduce significant risk to at-risk communities or municipal water supply systems, but the rule has been modified to provide additional sideboards and constraints on using this exception. Use of this exception is expected to be infrequent. Most areas outside the CPZ would be managed similar to the 2001 Roadless Rule. Another change to the Backcountry theme removes the permission for road construction/reconstruction to access new phosphate leasing areas. Instead, road construction/reconstruction to access new phosphate leasing areas would only be permitted in the GFRG theme and only to select areas.

These changes provide a better balance for the nationally recognized desire for conservation of roadless area characteristics with the objective of the Forest Service to be a good neighbor locally. These changes allow limited fuel treatment activities on NFS lands in order to reduce risk to private and public property and municipal watersheds from the effects of catastrophic wildfires. These changes allow for some local economic growth for communities highly dependent on resources found on the NFS. In addition, the majority of the Idaho Roadless Areas would be maintained and preserved in an unroaded state for the use and enjoyment of all Americans, present and future. As America's population grows, as it expands into rural areas, and as the pressures for goods and services from the NFS increase, these roadless lands will only increase in their value as bastions for public drinking water, plant and animal diversity, natural appearing landscapes, and other unique characteristics.

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### **Collaborative Environment.**

Those people who support the proposed Idaho Roadless Rule generally favor a multiple-use management strategy that allows a wide range of uses. They appear to believe that the proposed rule would allow greater local participation and influence in management decisions regarding NFS lands within Idaho, and that land within Idaho are best managed by Idahoans.

Opponents of the proposed Idaho Roadless Rule generally express a preference for the 2001 Roadless Rule, which provides management prohibitions for Idaho Roadless Areas and sets a national standard for the management of roadless areas within national forests. Opponents express concern that the proposed rule would give local governments and agencies too much authority over national resources and that these local entities too often prefer "development and exploitation over conservation." They frequently note that NFS lands in Idaho are there for all Americans, not just those who live in Idaho. They assert that Idaho Roadless Areas are best managed at the national level because the lands are paid for by taxpayers throughout the country, not just those living in Idaho. These respondents believe that these Federal lands should not be managed for the economic benefit of residents from a single State.

Proponents seem to perceive the Idaho Roadless Rule as resulting in a balance of State, local, and national interests. The Federal Government retains control of management and decision-making, but State' rights are strengthened. Similarly, those who live nearby or adjacent to these lands and are likely to be most affected by their management have more direct input through the Governor's Office; these same persons can provide locally informed input about forest conditions and management. Proponents argue this local input can improve overall

management of Idaho Roadless Areas and adapt management needs to specific locations rather than a single approach to Idaho Roadless Area management. Proponents appear to accept the Federal role in roadless area management but argue for consideration of the local communities and economies most affected by national-level decision-making.

The State of Idaho's intent is to contribute to a more positive governance environment and also to a more collaborative environment, with opportunities to collectively come up with solutions. One of the oft-expressed values of collaboration is that people get to participate in "the process," and that such first-hand experience and involvement often provides better "buy-in." Better buy-in, in turn, can foster better support and willingness from people to adhere to the designations. With this in mind, the Governor of Idaho established a roadless Rule Implementation Commission by Executive Order 2006-43 to foster the collaborative development of any projects under the Idaho Roadless Rule.

The Proposed Rule was modified as described above to provide a balance between national and local interests. The proposed rule was modified based on public comment, including, but not limited to, tribal government-to-government consultation, recommendations from the Roadless Area Conservation National Advisory Committee, consultation with adjacent states, and input from the public at large. This modification is intended to meet the Agencies and States intent of using a collaborative process to address the challenges of managing Idaho's roadless areas.

Collaborating with the State on the long-term strategy for the management of Idaho Roadless Areas allows for the recognition of national values and local situations and resolution of unique resource management challenges. Collaboration with others who have a strong interest in the conservation and management of roadless areas also helps to ensure balanced management decisions that maintain the most important characteristics and values of those areas.

## **Economic – Affected Environment**

**Terminology.** To understand the economic context and consequences described in this document, it is important to clarify the meaning of some of the basic economic terminology used. In particular, the word "value" can mean multiple things depending on the context of its use. Public land valuation has been described with various frameworks by various authors, often leading to confusion and inconsistent application of economic terminology.

Economics is the study of value tradeoffs used to allocate scarce resources to society. In economics, the value of a good or service is measured by what you would be willing to give up to obtain that good or service. An important distinction can first be drawn between use and non-use values. Use is actual interaction with the resource or roadless area, be it consumptive (which can involve renewable and non-renewable resources) or non-consumptive.

There is a spectrum of use levels that constitute the total value of roadless lands to people at various geographic scales. The most obvious values are direct consumptive use values from activities such as timber cutting and mining. Recently, there has been a heightened recognition of the value of many indirect consumptive uses, such as the provision of clean air and clean water by natural systems such as roadless areas. There are also many non-consumptive use activities such as recreation and wildlife and scenery viewing. Less obvious indirect use values also exist, such as reading about and watching television programs based on the wildlife and ecosystems located in Idaho Roadless Areas.

In contrast, non-use values are the values that people derive from goods or services (including natural resources and public lands) that are independent of any use they may make of the good or service. These non-use values, which apply to Idaho Roadless Areas and the flora and fauna that live there, include existence, option, and bequest values (described in a later section). Although these values are often small on a personal basis, they extend over large geographic areas and, therefore, can be surprisingly large in total. The techniques used to estimate these values have improved in the past few decades, but relative comparisons are more readily accepted than total value estimates. Total economic value is the technically correct measurement to report existing economic value. Marginal economic value (the change in economic value associated with an incremental or unit change in production or consumption), on the other hand, is the reporting measure most useful when exploring value tradeoffs stemming from proposed management options.

Calculation of all of these types of values involves some combination of consumer expenditures and consumer surplus. Although expenditures related to timber cutting, mineral extraction and recreation in Idaho Roadless Areas can be impressive; they convey only the price multiplied by quantity information and cannot be used to describe total economic value. Expenditures are the market clearing price multiplied by the equilibrium quantity of any good or service. Expenditures and revenues are components of costs and benefits, respectively. However, these are only the financial components of total costs and benefits. Consumer surplus is the amount of willingness to pay above the price in a market transaction (referred to as the net economic value or benefits minus costs). For example, the value of timber (cut to support hazardous fuel reduction) upwind of communities at risk is not simply the cost to cut and transport logs to a processing facility; the stumpage value also includes additional value not captured by the cost to obtain the resource alone.

In many cases, true markets are not available to help economists' measure land management values. For example, expenditures associated with recreational use in roadless areas may be the amount of money spent to access and participate in an activity. Methods such as the travel cost method have been applied to calculate the money spent to obtain specific recreation experiences. Although, through the use of standard microeconomic theory, both the demand for and value of these experiences can be calculated, obtaining the data to perform this analysis is often prohibitively expensive. In this example, the travel cost method relies on expenditure information, but expenditures should not be confused with total economic value, which is the sum of both consumer expenditures and consumer surplus.

While expenditure data alone do not convey total valuation information, they do illuminate an important idea, analyst perspective (Boardman et al. 1996, pg. 12). Expenditures represent costs to consumers but at the same time they represent revenues to various industries. This distinction helps explain why estimates of changes to jobs and income, called regional economic impacts, that accrue to an economic area as a result of changes to consumer demand cannot be summed with the total economic values of people willing to pay for goods and services from Idaho Roadless Areas. Accidentally summing these figures would result in double counting values that represent both costs and benefits accruing to the two distinct groups, with two different analytic perspectives. That is not to say that economic impacts are not important, they are, which explains why they are detailed and ascribed to the five Idaho economic areas and are summarized below.

## Economic Non-commodity Values

NFS lands provide a variety of non-commodity benefits to society. Examples include clean air, clean water, recreation opportunities, aesthetics, and biodiversity protection. Recreation values are associated with developed and primitive, motorized and non-motorized uses of the national forests and grasslands. Table 3 shows that, according to the National Visitor Use Monitoring (NVUM) surveys conducted between 2000 and 2004 (USDA Forest Service, 2004e), the top seven primary recreation activities on the 10 Idaho national forests were hunting, viewing natural features, downhill skiing, snowmobiling, relaxing, fishing, and developed camping. Other activities that constitute the top three on any given national forest include hiking, walking, and sightseeing. Unfortunately, the data collection protocols used for the NVUM do not currently have sampling techniques capable of sorting out activities specific to Idaho Roadless Areas.

The rough terrain in many roadless areas restricts road-based development, and this has limited human access and by default maintained the wild and scenic characteristics in areas that support many of the primary activities listed above. These wild and scenic qualities attract adventurous recreational visitors for both consumptive and non-consumptive visitation. While wilderness areas are often noted as hotspots for outfitting, guiding, hunting, and fishing, many of these designated areas start at a ridgeline, making the area only slightly visible from scenic highways. Idaho Roadless Areas, in contrast, often surround these designated areas; they provide an area between actively and passively managed NFS lands and provide opportunities for scenic viewing of lands with a very natural appearance.

**Table 3. Primary recreation activities on Idaho national forests based on national visitor use monitoring surveys**

	All Idaho forests	Boise	Clearwater	Caribou-Targhee	Idaho Panhandle	Nez Perce	Payette	Salmon-Challis	Sawtooth
Number of national forest visits*	7,906,315	1,422,516	726,073	2,449,099	787,975	731,535	619,094	348,741	821,292
Lower bound 80% CI**	7,553,816	1,281,759	606,511	2,188,984	721,627	614,182	583,893	322,865	772,192
Upper bound 80% CI	8,258,814	1,563,273	845,635	2,709,194	854,323	848,888	654,295	374,617	870,392
<b>Percent primary activity participation***</b>									
Developed camping	6.2	11.2	5.8	6.2	2.8	6.5	2.5	3.2	5.8
Primitive camping	2.8	0.2	5.7	3.6	0.9	6.8	2.2	1.4	1.0
Backpacking	0.9	0.4	0.6	1.3	0.5	1.1	0.5	0.6	1.0
Resort use	0.8	2.3	0.0	0.1	1.3	1.9	0.3	0.2	0.6
Picnicking	2.1	1.7	1.2	1.4	2.3	36.0	1.0	0.9	5.1
Viewing natural features	12.0	17.3	9.5	13.0	11.7	12.4	6.8	5.5	8.3
Visiting historic sites	0.5	0.0	0.8	0.0	0.7	0.9	1.2	3.2	0.1
Nature center activities	0.2	0.0	0.1	0.6	0.1	0.0	0.0	0.3	0.1
Nature study	0.1	0.0	0.4	0.0	0.0	0.2	0.0	0.0	0.1
Relaxing	11.2	6.0	23.5	2.6	9.0	17.0	9.4	8.0	23.6
Fishing	7.9	8.3	10.2	8.0	6.3	8.1	8.4	16.4	2.1
Hunting	15.4	18.6	7.8	21.2	16.9	14.2	13.2	16.0	2.9
OHV use	4.2	0.1	3.6	8.4	6.0	3.0	2.5	2.6	1.3
Driving for pleasure	3.6	0.7	3.0	4.3	6.9	3.1	5.5	8.1	1.0

	All Idaho forests	Boise	Clearwater	Caribou-Targhee	Idaho Panhandle	Nez Perce	Payette	Salmon-Challis	Sawtooth
Snowmobiling	11.2	10.0	6.4	25.8	1.0	4.7	4.8	0.1	1.1
Motorized water activities	1.0	2.6	0.0	0.4	0.5	2.4	0.9	0.0	0.9
Other motorized activity	0.1	0.0	0.0	0.0	0.7	0.1	0.1	0.2	0.2
Hiking/walking	4.6	1.4	5.3	1.2	11.4	5.0	4.6	12.1	8.9
Horseback riding	0.3	0.0	0.1	0.2	1.0	0.2	0.3	1.0	0.5
Bicycling	1.7	0.3	0.9	2.1	4.6	0.0	1.8	0.0	2.9
Non-motorized Water	1.3	3.3	0.3	0.1	0.9	3.9	1.2	1.4	0.5
Downhill skiing	11.3	20.1	2.3	5.6	2.8	0.1	14.9	0.0	40.4
Cross-country skiing	3.3	6.2	7.7	1.6	0.3	6.4	0.7	0.0	2.1
Other non-motorized	1.4	3.4	0.3	0.4	1.8	1.6	2.1	2.1	0.8
Gathering forest products	1.4	0.3	1.7	0.0	8.8	1.5	4.6	0.7	0.0
Viewing wildlife	3.5		1.2		6.3		1.9	4.2	
Sightseeing	2.8	1.0		3.2		13.4			0.5
No activity reported	5.6	2.7	8.7	0.1	10.5	9.6	18.3	14.4	3.2

\* National forest visits are annual figures compiled from a single year of sampling that occurred between 2000 and 2004.

\*\* CI = confidence interval. The sampling design allows estimation of upper and lower estimates around the mean at the 0.8 confidence level; these form the limits of the confidence interval. \*\*\* Survey respondents were asked to select just one primary activity.

## Amenities and Environmental Functions

Many people who hold ecological values (described in the social section as “naturalists”) view NFS lands as valuable because of the life-supporting environmental functions and services (for example, provision of clear air and clean water) they provide. When prices are not charged for Idaho Roadless Areas goods or services, such that expenditures are not required to experience benefits from a roadless area, the total economic value can be described simply by revealing the consumer surplus.

Recent attempts have been made to quantify some of these ecological values as both amenity values and ecosystem services values. In the past economists focused solely on market or observable portions of valuation. Amenity values from land management resources, on the other hand, do not have traditional markets to convey value information. Webster’s dictionary (1984, pg. 100) defines an amenity as the quality of being pleasant or attractive, a feature that increases attractiveness or value, especially a piece of property and also as something that increases physical or material comfort. These amenities represent a combination of direct and indirect use and have been estimated recently with hedonic<sup>1</sup> pricing models typically applied to real estate markets. For example, Garrod and Willis (1992) found that distance to woodland and water both raised house prices in Great Britain; Powe et al. (1997) investigated the amenity benefits gained by local residents from access to recreation sites; and Kim and Johnson (2002) added consideration of forest management near houses, noting that visible recent clearcuts reduced house values in Oregon. This is important in the analyses because the various

<sup>1</sup> Models where value is a function of quality.

alternatives contain different mixes of land management emphases that make subtle adjustments to the level of amenities supplied to the American public.

These amenities also attract new residents and help retain long-time residents who collectively help support the quality of life and economic vitality. As Idaho transitions to a new century, there is a heightened awareness of the value of the national forests as a source of national ecosystem health, unique habitats and wildlife setting, and magnets for new residents. Several authors have published both theoretical and empirical articles describing how high-amenity physical settings are attracting both tourism and new business to the Western United States (Johnson and Rasker 1995, Beale and Johnson 1998). Public lands and opportunities for adventure and solitude associated with the Idaho Roadless Areas clearly fall within the class of public lands believed by these authors to be directly affecting settlement patterns. Other evidence supports the relationship between high population growth and areas with high recreation use (Johnson and Beale 1994). Ashton and Pickens (1995) found that recreation counties tend to be diversifying more rapidly than non-recreation counties, attributing this to Forest Service multiple-use policy that provides an environment that attracts both tourists and permanent residents to the area. Rasker (1994) and Power (1998, pg. 1-56) have emphasized the role of a high-quality natural environment, scenic beauty, and recreation opportunities in influencing population growth and shaping local economies.

Air purification, hydrologic system functioning, maintenance of biodiversity, pollination, waste filtration, carbon sequestration, and other ecosystem services occur daily on all NFS lands including Idaho Roadless Areas. The value of Idaho Roadless Areas as biological strongholds for terrestrial and aquatic plants and wildlife and as sources of clean water have become increasingly important as habitat loss, nonnative species invasions, and development continue to occur on other NFS lands and other lands nationally. For example, dams, water diversions, stream-channel control projects, and development have affected more than three million miles, or about 98 percent, of the streams in the United States. In every State in this country, the Environmental Protection Agency (US EPA 1998) has found stream and lake sediments polluted by contaminants from surrounding watersheds, and EPA estimates that about 10 percent of the stream and lake sediments in the United States contain contaminate levels sufficiently high to pose risks to fish-consuming wildlife and humans. In the mid-1980s, the U.S. Geological Survey estimated that the number of wetland habitat acres in the contiguous United States had diminished more than 50 percent since European colonization in the early 1600s; the estimated change was from 221 million acres to 103 million acres (USDI Geological Survey 1996). With the exception of Alaska, few large, relatively undisturbed areas remain in this country outside of designated wilderness areas—which increases the relative value of the waters, wetlands, and other habitats that roadless areas support, and the biological diversity that they foster. While attempts to quantify the total economic value of these ecosystem services are underway across the world, debate persists regarding the magnitude of these values.

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### **Non-use values from Idaho Roadless Areas.**

Non-use values can be another important consideration in management decisions. Non-use values are often difficult to measure because they are not consumptive values and in most cases they involve no purchase or direct use by those who benefit from them. Through both studies and contributions to conservation organizations, many Americans have demonstrated a willingness to protect wildlife and habitat in the remaining wild areas of North America, even though they will never interact with or use these resources. Krutilla (1967) and Krutilla and

Fischer (1975) were responsible for publishing the first discussion of existence values, which is now seen by many as a substantial part of the willingness to pay for wildlife conservation and open space preservation.

The aquatic and terrestrial wildlife section of this statement describes the current status of many wildlife species whose existence is extremely valuable to many Americans. With many of these species showing general declines in population and adverse reactions to resource development, the significance and value of Idaho Roadless Areas as wildlife refuge areas is clear. In general these roadless areas are relatively free of non-native weeds infestation, habitat fragmentation, and human-caused disturbances that threaten many wildlife species and are harmful to watershed health, making them strong contributors to existence values.

A similar non-use value associated with Idaho Roadless Areas is option value, a term coined in Weisbrod's (1964) first discussion on the topic. Like other options in financial markets, this value is what people are willing to pay to have the option to use or enjoy use and existence values in the future. This option value is a distinct value, in addition to the existence value mentioned above. The next category of value in the non-use realm is bequest value. Like option value, the willingness to pay for this value derives from future persistence, but in this case it relates to the ability to pass use, existence, and option values to future generations.

Arrow and Fisher (1974) added the term quasi-option value to the non-use value literature, defining it as the willingness to pay to delay an irreversible decision. The reason authors gave for the value of delaying irreversible decisions was to prevent the potential value loss of wildlife-related benefits to humans. These benefits may come for example, in the form of yet undeveloped health-related products such as plant extracts useful for manufacturing or through the future recognition of wildlife social structures useful for business organization. For these reasons, quasi-option value is offered as an additional reason to preserve remaining intact ecosystems.

The non-use values described above can extend well beyond the jurisdictional boundaries circumscribing lands affected by management changes. That is to say, many people across the country obtain value from the land, flora, and fauna in the Idaho Roadless Areas. Simply accounting for the values of people of Idaho would likely neglect a large portion of the non-use values held for these areas. For example, after studying four natural resource public goods in the United States, Loomis (2000) made a general statement about how State and economic value jurisdictions compare for non-use value. He stated that "the results indicate commonly used state and political jurisdictions reflect an average of 13 percent of total benefits in the economic jurisdiction."

The understanding of the impact of management emphasis changes on non-use values attached to Idaho Roadless Areas is further complicated by the recent recognition that healthy forests systems are dynamic and require disturbance. When most of the non-use values emerged in the literature, the forestry community's understanding of ecosystem dynamics was far less mature; therefore, the ideas of preserving a static condition were more credible in terms of maintaining ecosystem health and the associated non-use values.

## Economic Commodity Values

Commodities produced from NFS lands provide benefits to society in a variety of products. These include timber and non-timber forest products (sawlogs, roundwood, herbs, mushrooms, decorative boughs, and other greens); metals; minerals; crude oil; natural gas; and meat. Many people appreciate both the commodity and non-commodity values of NFS lands. They view humans as trying to make use of natural resources on a sustained yield basis to meet their needs (Grumbine 1999) and see a role of NFS lands as providing goods and services for people.

Moving along the spectrum of non-commodity toward commodity uses, hunting and fishing is an important activity on Idaho National forests. The roadless areas in Idaho provide core habitat supporting abundant game species that provide pursuit and dietary subsistence opportunities; as well as wide-ranging carnivore species that now persist only in limited areas of the Nation. The aquatic and terrestrial wildlife sections of this statement disclose how important many of Idaho's Roadless Areas are in supporting habitat for many species facing rapid population declines.

Several studies have been done in Idaho to estimate the value of some of the popular wildlife-related recreation activities in Idaho. The relative magnitude of expenditures compared to consumer surplus varies based on many factors. For example, several decades ago Sorg and Loomis (1985) estimated that the gross value of a cold-water fishing trip in Idaho was \$80 (which was worth roughly \$125 in 2004 dollars when adjusted for inflation with the gross domestic product (GDP) deflator). This represented roughly \$37 per trip in expenditures (for example, transportation, food, lodging, tackle), plus \$43 per trip in consumer surplus (that is, the amount the typical angler would be willing to pay over and above actual expenditures). Similarly, Sorg and Nelson (1986) also estimated that net willingness to pay in addition to actual expenditures for elk hunting in Idaho ranged from \$52 to \$100 (\$87 to \$167 in 2004 dollars) per trip in 1982 and 1983. These are just two examples of how values accrue to people through social and personal benefits.

Phosphate production from NFS lands has increased since the mid-1980s, both in total quantity and as a proportion of domestic production. Western production will remain important for providing raw material for fertilizer in the western region and for production of elemental phosphorous (Jasinski 1999). Most western NFS production occurs on the Caribou portion of the Caribou-Targhee National Forest, accounting for about 15 percent of domestic production in 2001 (USDA Forest Service 2003). Oil and gas mining, on the other hand, is not occurring in Idaho Roadless Areas; there are no existing oil and gas leases in these areas. Saleable minerals in Idaho Roadless Areas are also negligible across the State.

The full extent of Idaho's geothermal resource has yet to be discovered. The Geothermal Task Force of the Western Governor's Association estimated that Idaho has 855 mega-watts (MW) of near-term economic potential reserves (by 2015) and 1,670 MW of long-term potential (by 2025). Apart from this specific site resource estimate, there is no overall estimate of geothermal resource capacity in Idaho Roadless Areas.

There has been some timber cutting in Idaho Roadless Areas between 2001 and 2004, with sales operating in the Idaho Panhandle, Nez Perce, and Sawtooth National Forests, totaling about 950 acres (roughly 1.5 square miles) and producing approximately 8.5 million board feet (MMBF) of timber. As forest plans have been revised in recent years, there has been a substantial decrease in the allowable timber sale quantity and areas designated as suitable for timber cutting. This

decrease in timber cutting reflects the increased recognition that roadless areas are important for ecological and other human-centered reasons. It also shifted the environmental effects of U.S. wood fiber consumption to Canada and the southern United States (MacCleery and LeMaster 1999). Overall, NFS lands supply approximately 2 percent of the Nation's timber harvest. Although the amount coming off the Idaho Roadless Areas is very small in comparison to the national program, it can be critical to the economies of certain local communities. Nationally, any decrease in timber harvest from roadless areas would likely be compensated with offerings from private lands or imports.

### Timber Revenue and Costs

The Forest Service spends money to prepare timber sales, do environmental analyses, and conduct other administrative and planning activities associated with timber sales. However, the Forest Service does not necessarily recover its costs from timber sales; therefore, costs may exceed revenues (table 4). Timber sales on national forests are conducted for a number of reasons other than for commodity purposes. Many sales are conducted to meet other resource management objectives that require the manipulation of vegetation, such as hazardous fuels reduction, and forest health and or wildlife habitat improvement.

Table 4 provides information on the costs and revenues associated with timber sales in Idaho's national forests. Revenue data were compiled from Cut and Sold Reports compiled by the Northern and Intermountain Regions. The average revenue figures below were calculated using a 3-year average (fiscal years 2004–2006) of timber volumes and values (adjusted for inflation to 2006 dollars) for forest products sold on the national forests.<sup>2</sup>

**Table 4. Average annual revenues and costs and average net revenue for Idaho National Forest timber sale programs (2004–2006)**

Forest	Average revenue per MBF*	Average cost per MBF	Average net revenue per MBF
	----- dollars -----		
<b>Region 1</b>			
Idaho Panhandle	148	141	7
Clearwater	156	120	36
Nez Perce	71	77	-6
<b>Region 4</b>			
Boise	51	101	-50

<sup>2</sup> Recent information on timber management costs were not readily available because of changes in how these items are tracked in the agency's accounting system. Therefore, information obtained from the Forest Service Washington Office on timber management outlays for fiscal years 2000 to 2002 was used to provide estimates of timber management costs for Idaho's national forests, and these costs were adjusted to reflect 2006 costs. Costs used in this analysis included silvicultural exams, sale preparation, harvest administration, and appeals and litigation. The sum of costs for the 3 years (after adjusting to 2006 dollars) was divided by the sum of timber volumes sold during the period 2004 to 2006 to arrive at the average cost figures shown in the table. For most Idaho national forests, average net revenue per million board feet was negative, ranging from a negative \$6/MBF for the Nez Perce National Forest to a negative \$90/MBF for the Salmon-Challis. Average net revenue was positive for two forests, the Idaho Panhandle and the Clearwater.

Forest	Average revenue per MBF*	Average cost per MBF	Average net revenue per MBF
	----- dollars -----		
Payette	117	238	-121
Salmon-Challis	35	125	-90
Sawtooth	48	100	-52
Caribou-Targhee	96	125	-29

\* MBF=thousand board feet

### Revenue Sharing.

In the mid-1800s, as Federal lands began to be reserved from disposal, local governments became concerned about lost property tax revenues because these Federal lands were not subject to property taxation. Therefore, starting in the early 20th century, the Forest Service was directed to share 25 percent of its revenues with local governments for the benefit of public schools or roads. This was followed over the years by other revenue-sharing legislation (such as the Taylor Grazing Act and Refuge Revenue Sharing Act), but the controversy over revenue-sharing continued because of two main issues. First, revenue sharing was tied to the value and amount of the products sold, both of which fluctuate from year to year, so revenue-sharing was an undependable source of income for local governments. Second, many felt that the amount of the payments was too low compared to the taxes these lands would have generated if privately held.

To alleviate some of these problems, in 1976 Payment in Lieu of Taxes (PILT) legislation was passed to provide an additional, and more stable, source of Federal land payments. However, over the years revenue-sharing payments began to falter, as harvests from Federal timber lands declined and Congress continued to fail to appropriate the funds necessary to fully fund the PILT program. In 2000, the Secure Rural School and Community Self-Determination Act (SRSA) was enacted to provide transitional payments to rural counties affected by declining revenue-sharing payments. Counties receiving 25 percent fund payments were given the option of continuing these payments or switching to the SRSA, which provides payments based on a county's pro-rated share of each State's average high-three payments from the old system (1986–1999) (Gebert et al. 2005, 2004). This legislation ran through fiscal year 2006. However, in May, 2007, Congress extended the act for an additional year and legislation has been proposed to extend it through 2013.

As long as the SRSA remains in effect, these payments would remain the same (except for adjustments for inflation) regardless of alternative selected. However, should this legislation lapse, payments would once again be based upon the resources extracted and the prices those resources command on the market. In recent history, such payments have been substantially less than those received under the SRSA. Additionally, if the SRSA is not extended, the payments received by counties would differ depending on the alternative selected because of the various amounts of timber harvest.

## BEA Economic Areas

### Economic Profile

#### State-Level Economic Profile

The Idaho economy is a diverse economy with a blend of industries such as agriculture, manufacturing, services, and government accounting for a large proportion of economic activity. Based on industry output, manufacturing is by far the largest contributor to the Idaho economy with approximately 23 percent of the total output (table 5). Wood products manufacturing contributes nearly 4 percent of total output and 1.5 to 2.5 percent of employment, value added, and labor income. Mining makes up a very small part of the Idaho economy, accounting for less than 1 percent of output, employment, labor income, and value added. Road construction also accounts for less than 1 percent of Idaho's total output, employment, labor income, and value-added.

Table 5 displays economic information for Idaho using 2004 IMPLAN data. This information provides a snap shot of the 2004 Idaho economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales), and value added to inputs.

**Table 5. Two-digit NAICS information for Idaho (2004 IMPLAN data)**

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$6,088	7.1%	52,653	6.3%	\$1,504	5.3%	\$2,487	5.9%
21 Mining	\$516	0.6%	2,776	0.3%	\$132	0.5%	\$277	0.7%
22 Utilities	\$984	1.1%	1,872	0.2%	\$198	0.7%	\$574	1.4%
23 Construction	\$6,185	7.2%	61,928	7.4%	\$2,160	7.6%	\$2,568	6.1%
Roads	\$622	0.7%	7,366	0.9%	\$264	0.9%	\$312	0.7%
31-33 Manufacturing	\$19,619	22.8%	54,349	6.5%	\$2,961	10.4%	\$3,941	9.4%
Wood Products	\$3,159	3.7%	12,801	1.5%	\$610	2.1%	\$1,043	2.5%
42 Wholesale Trade	\$3,189	3.7%	27,332	3.3%	\$1,199	4.2%	\$2,180	5.2%
48-49 Transportation & Warehousing	\$2,499	2.9%	25,696	3.1%	\$983	3.5%	\$1,301	3.1%
44-45 Retail trade	\$5,275	6.1%	89,453	10.7%	\$2,099	7.4%	\$3,329	7.9%
51 Information	\$2,225	2.6%	11,411	1.4%	\$457	1.6%	\$869	2.1%
52 Finance & insurance	\$4,029	4.7%	28,286	3.4%	\$1,113	3.9%	\$2,146	5.1%
53 Real estate & rental	\$2,754	3.2%	30,925	3.7%	\$506	1.8%	\$1,760	4.2%
54 Professional-scientific & tech svcs	\$5,383	6.3%	49,180	5.9%	\$2,762	9.7%	\$3,031	7.2%
55 Management of companies	\$1,297	1.5%	7,424	0.9%	\$588	2.1%	\$803	1.9%
56 Administrative & waste services	\$2,081	2.4%	47,123	5.6%	\$965	3.4%	\$1,192	2.8%
61 Educational svcs	\$405	0.5%	9,898	1.2%	\$196	0.7%	\$213	0.5%
62 Health & social services	\$4,636	5.4%	72,992	8.7%	\$2,443	8.6%	\$2,784	6.6%

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
71 Arts- entertainment & recreation	\$686	0.8%	15,466	1.8%	\$275	1.0%	\$401	1.0%
72 Accommodation & food services	\$2,382	2.8%	56,130	6.7%	\$717	2.5%	\$1,065	2.5%
81 Other services	\$2,263	2.6%	48,994	5.9%	\$844	3.0%	\$1,126	2.7%
92 Government	\$9,583	11.2%	122,284	14.6%	\$5,496	19.3%	\$8,725	20.7%
<b>TOTAL</b>	<b>\$85,860</b>	<b>100.0%</b>	<b>836,338</b>	<b>100.0%</b>	<b>\$28,472</b>	<b>100.0%</b>	<b>\$42,133</b>	<b>\$1.000</b>

Source:2004 IMPLAN data

### North Idaho

For the period 1990 to 2000, the population of North Idaho grew by around 21% (table 6). The majority of this growth was in residents 40-54 years of age (the baby boom generation), which had an increase in population of 56% (59,473 residents) leading to an aging of the population. Median age in 2000 was 35.6 years, up from 32.8 years in 1990. The fastest growth also occurred among the baby boomers, with the age group 50-54 years growing by more than 22,000, increasing its share of the population by 2.2%. The largest segment of the North Idaho population was still under 20 years of age (29%) in 2000, with the largest age category being 15-19 years (8.2% of the total). Of the five Idaho economic areas, North Idaho is the most densely populated, with 35 residents per square mile in 2000.

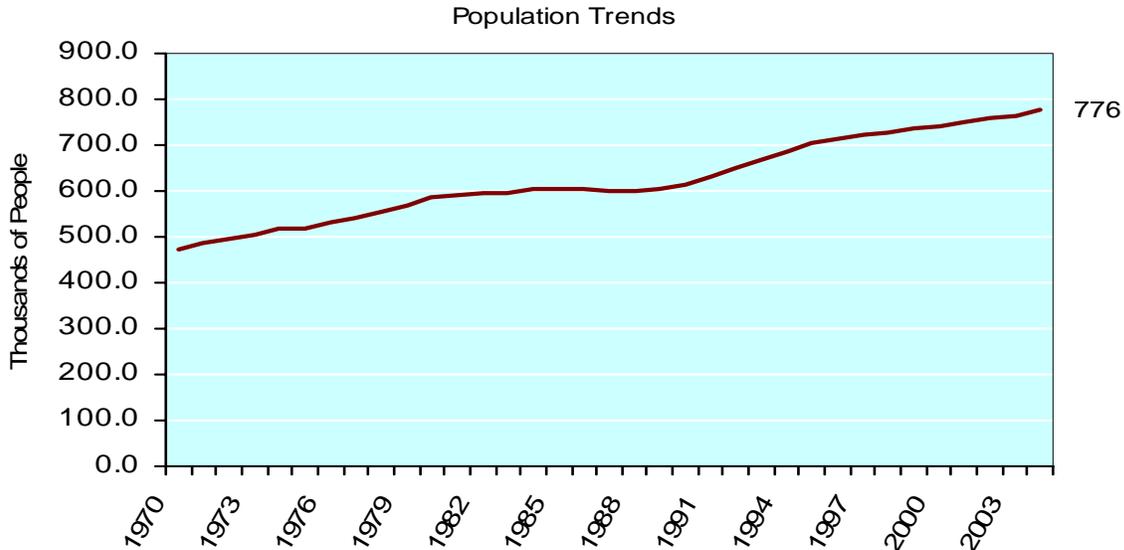


Figure 2. Population trend in North Idaho EA, 1970-2004 (Source: BEA REIS 2004 Table CA30)

Table 6. Population of North Idaho EA, by age and sex

	Total Number	Under 20 years		40 - 54 (Baby Boom in 2000)		65 years and over		Median Age	Density (Pop. per sq. mi.)
		Number	Share	Number	Share	Number	Share		
<b>Total Population</b>									
2000	741,189	215,162	29%	164,992	22%	91,989	12%	35.6	35
1990	612,395	182,847	30%	105,519	17%	79,680	13%	32.8	29
10 Yr. Change	128,794	32,315	-1%	59,473	5%	12,309	-1%	2.8	6
10 Yr. % Change	21%	18%		56%		15%		9%	21%
<b>2000 Sex Breakout</b>									
Male	367,264	110,251	30%	82,041	22%	39,447	11%	34.3	
Female	373,925	104,911	28%	82,951	22%	52,542	14%	36.7	
<b>Male/Female Split</b>									
	50% / 50%	51% / 49%		50% / 50%		43% / 57%			

**Economic Profile:**

North Idaho is a diverse economy dominated by manufacturing, government, and service-related industries. Based on industry output, manufacturing and government are the largest contributors to the North Idaho economy, each accounting for approximately 15.8 percent of total output. Services, especially health and social services, is also a relatively large contributor from the standpoint of industry output, as is retail trade and construction. Based on employment (18.1 percent of the total), labor income (23.9 percent of the total), and value added (25.1 percent), the government sector contributes the largest relative share to the North Idaho economy. Retail trade, health and social services, manufacturing, and construction also have relatively large shares of employment, labor income, and value added (table 6).

Wood products manufacturing contributes nearly 5% of total output for North Idaho. It also accounts for 2 to 3% of the total economy as measured by employment, labor income, and value-added. Mining and road construction make up a very small part of the North Idaho economy, each accounting for less than 1% of output, employment, labor income, and value added. Table 7 displays economic information for North Idaho using 2004 IMPLAN data. It provides a snap shot of the North Idaho economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales) and value added to inputs.

Table 7. Two-digit NAICS information for North Idaho EA (2004 IMPLAN data)

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$988	2.4%	9,206	2.2%	\$242	1.6%	\$551	2.3%
21 Mining	\$297	0.7%	1,093	0.3%	\$77	0.5%	\$173	0.7%
22 Utilities	\$329	0.8%	909	0.2%	\$75	0.5%	\$229	1.0%
23 Construction	\$2,715	6.7%	25,714	6.3%	\$1,084	7.0%	\$1,286	5.4%
Roads	\$232	0.6%	2,548	0.6%	\$108	0.7%	\$128	0.5%
31-33 Manufacturing	\$6,401	15.8%	22,853	5.6%	\$1,223	7.9%	\$1,592	6.7%
Wood Products	\$1,906	4.7%	7,773	1.9%	\$378	2.5%	\$673	2.9%
42 Wholesale Trade	\$1,683	4.2%	13,241	3.2%	\$664	4.3%	\$1,208	5.1%
48-49 Transportation & Warehousing	\$1,203	3.0%	11,927	2.9%	\$543	3.5%	\$717	3.0%
44-45 Retail trade	\$3,191	7.9%	49,293	12.0%	\$1,315	8.5%	\$2,142	9.1%
51 Information	\$1,003	2.5%	4,974	1.2%	\$242	1.6%	\$441	1.9%
52 Finance & insurance	\$2,690	6.6%	15,744	3.8%	\$828	5.4%	\$1,655	7.0%
53 Real estate & rental	\$1,572	3.9%	13,189	3.2%	\$306	2.0%	\$1,082	4.6%
54 Professional- scientific & tech svcs	\$1,795	4.4%	18,673	4.6%	\$846	5.5%	\$1,017	4.3%
55 Management of companies	\$501	1.2%	3,472	0.8%	\$221	1.4%	\$303	1.3%
56 Administrative & waste services	\$876	2.2%	17,012	4.1%	\$406	2.6%	\$524	2.2%
61 Educational svcs	\$280	0.7%	6,225	1.5%	\$152	1.0%	\$163	0.7%
62 Health & social services	\$3,355	8.3%	47,941	11.7%	\$1,840	12.0%	\$2,122	9.0%
71 Arts- entertainment & recreation	\$356	0.9%	7,392	1.8%	\$142	0.9%	\$226	1.0%
72 Accommodation & food services	\$1,424	3.5%	30,616	7.5%	\$478	3.1%	\$715	3.0%
81 Other services	\$1,313	3.2%	25,848	6.3%	\$538	3.5%	\$724	3.1%
92 Government	\$6,425	15.8%	74,332	18.1%	\$3,684	23.9%	\$5,923	25.1%
<b>Total</b>	<b>\$40,537</b>	<b>100.0%</b>	<b>409,975</b>	<b>100.0%</b>	<b>\$15,390</b>	<b>100.0%</b>	<b>\$23,592</b>	<b>100.0%</b>

Source: 2004 IMPLAN data

### Central Idaho

For the period 1990 to 2000, the population of Central Idaho grew by around 12% (table 8). The majority of this growth was in residents 40-54 years of age (the baby boom generation), which had an increase in population of 40% (5,611 residents) leading to an aging of the population. Median age in 2000 was 39.7 years, up from 36 years in 1990. The fastest growth occurred among the baby boomers, with the age group 45-49 years growing by more than 2,100, increasing its share of the population by 1.8%. The largest segment of the Central Idaho

population also falls within the baby boom generation, with 45-49 year-olds making up 7.8% of the population in 2000. Of the five Idaho economic areas, Central Idaho is the least densely populated, with only 7 residents per square mile in 2000.

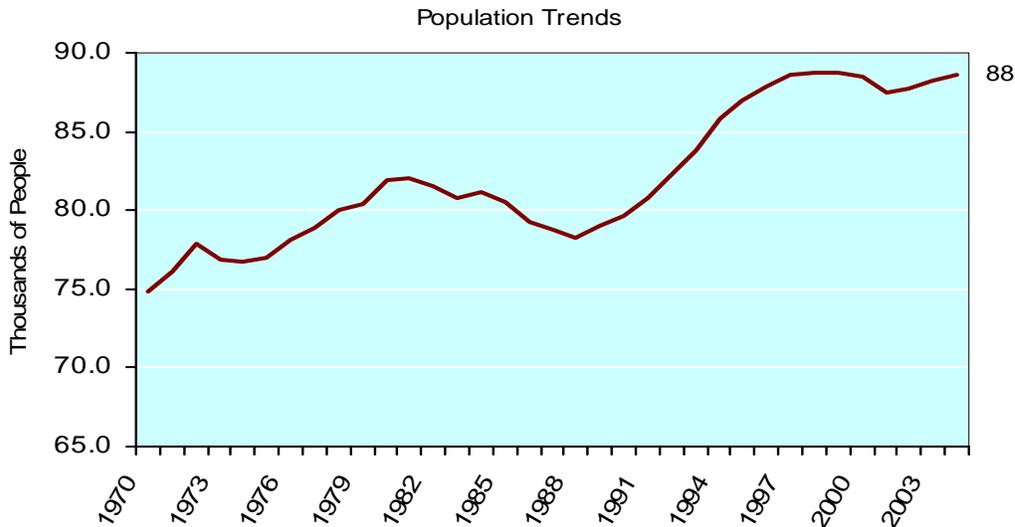


Figure 3. Population trend in Central Idaho EA, 1970-2004 (Source: BEA REIS 2004 Table CA30)

Table 8. Population of Central Idaho EA, by age and sex

	Total Number	Under 20 years		40 - 54 (Baby Boom in 2000)		65 years and over		Median Age	Density (Pop. per sq. mi.)
		Number	Share	Number	Share	Number	Share		
<b>Total Population</b>									
2000	88,546	24,081	27%	19,673	22%	14,761	17%	39.7	7
1990	79,411	22,720	29%	14,062	18%	12,887	16%	36	6
10 Yr Change	9,135	1,361	-1%	5,611	5%	1,874	0%	3.7	1
10 Yr. % Change	12%	6%		40%		15%		10%	12%
<b>2000 Sex Breakout</b>									
Male	43,902	12,369	28%	9,875	22%	6,489	15%	38.7	
Female	44,644	11,712	26%	9,798	22%	8,272	19%	40.7	
<b>Male/Female Split</b>									
	50% / 50%	51% / 49%		50% / 50%		44% / 56%			

**Economic Profile:**

Based on industry output, the largest sector in the Central Idaho economy is the wood products industry, which contributes approximately 23.1 percent of Central Idaho’s total output. However, based on employment (18.5 percent of the total), labor income (23.6 percent of the total), and value added (24.4 percent), the government sector contributes the largest relative share to the Central Idaho economy. Retail trade, health and social services, and wood products

also have relatively large shares of employment, labor income, and value added. Mining and road construction make up a very small part of the Central Idaho economy, each accounting for less than 1 percent of output, employment, labor income, and value added (table 9).

Table 9 displays economic information for Central Idaho using 2004 IMPLAN data. It provides a snap shot of the Central Idaho economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales), and value added to inputs.

**Table 9. Two-digit NAICS information for Central Idaho EA (2004 IMPLAN data)**

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$286	6.2%	2,740	5.8%	\$79	4.9%	\$149	6.0%
21 Mining	\$38	0.8%	223	0.5%	\$15	0.9%	\$24	1.0%
22 Utilities	\$77	1.7%	162	0.3%	\$16	1.0%	\$55	2.2%
23 Construction	\$256	5.5%	2,516	5.3%	\$98	6.0%	\$115	4.6%
Roads	\$24	0.5%	279	0.6%	\$10	0.7%	\$13	0.5%
31-33 Manufacturing	\$317	6.8%	1,589	3.4%	\$69	4.3%	\$90	3.6%
Wood Products	\$1,074	23.1%	2,980	6.3%	\$178	11.0%	\$319	12.9%
42 Wholesale Trade	\$101	2.2%	1,046	2.2%	\$40	2.4%	\$72	2.9%
48-49 Transportation & Warehousing	\$197	4.2%	2,174	4.6%	\$80	4.9%	\$104	4.2%
44-45 Retail trade	\$312	6.7%	5,247	11.1%	\$131	8.1%	\$205	8.2%
51 Information	\$69	1.5%	484	1.0%	\$16	1.0%	\$23	0.9%
52 Finance & insurance	\$253	5.5%	1,544	3.3%	\$67	4.1%	\$134	5.4%
53 Real estate & rental	\$97	2.1%	980	2.1%	\$23	1.4%	\$56	2.3%
54 Professional- scientific & tech svcs	\$99	2.1%	1,187	2.5%	\$46	2.9%	\$56	2.3%
55 Management of companies	\$94	2.0%	499	1.1%	\$46	2.8%	\$63	2.5%
56 Administrative & waste services	\$40	0.9%	873	1.8%	\$17	1.0%	\$21	0.9%
61 Educational svcs	\$10	0.2%	368	0.8%	\$6	0.4%	\$5	0.2%
62 Health & social services	\$359	7.7%	5,600	11.8%	\$194	11.9%	\$219	8.8%
71 Arts- entertainment & recreation	\$35	0.7%	766	1.6%	\$14	0.9%	\$22	0.9%
72 Accommodation & food services	\$135	2.9%	3,254	6.9%	\$43	2.6%	\$64	2.6%
81 Other services	\$127	2.7%	4,058	8.6%	\$54	3.3%	\$67	2.7%
92 Government	\$644	13.9%	8,741	18.5%	\$383	23.6%	\$604	24.4%
<b>Total</b>	<b>\$4,643</b>	<b>100.0%</b>	<b>47,311</b>	<b>100.0%</b>	<b>\$1,626</b>	<b>100.0%</b>	<b>\$2,482</b>	<b>100.0%</b>

2004 IMPLAN data

### South Central Idaho

For the period 1990 to 2000, the population of South Central Idaho grew by around 19% (table 10). The majority of this growth was in residents 40-54 years of age (the baby boom generation), which had an increase in population of 48% (10,842 residents). The median age of the South Central Idaho population is slightly younger than that of North Idaho and Central Idaho, but older than that of Southeast Idaho, with the median age of South Central Idaho residents increasing from 32.4 in 1990 to 34.5 in 2000. The fastest growth occurred among the baby boomers, with the age group 45-49 years growing by about 4,172, increasing its share of the population by 1.7%. The largest segment of the Southeast Idaho population was still under 20 years of age (32%) in 2000, with the largest age category being 15-19 years (8.6% of the total). The population density of Southeast Idaho in 2000 was fairly low, with 14 residents per square mile.

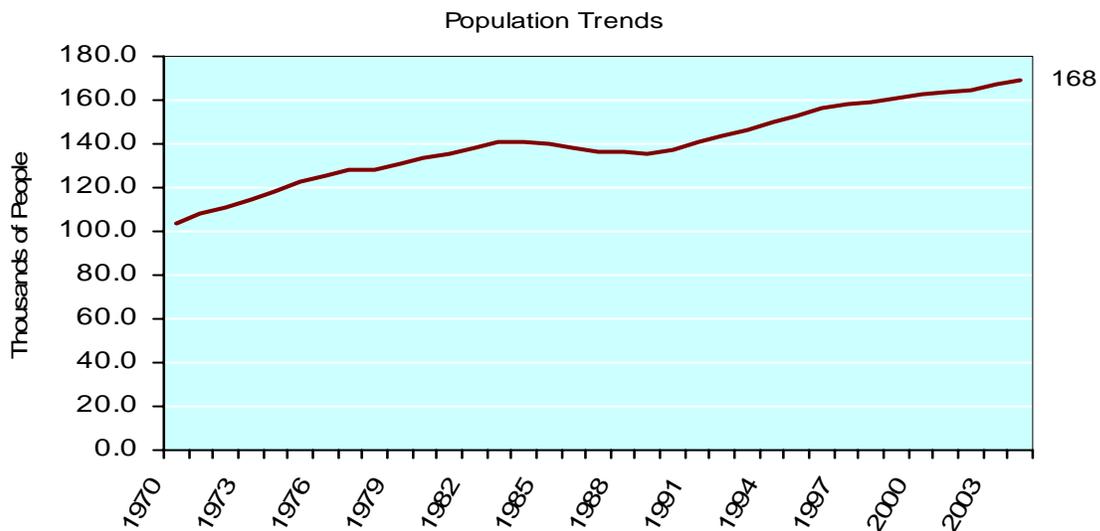


Figure 4. Population trend in South Central Idaho EA, 1970-2004 (Source: BEA REIS 2004 Table CA30)

Table 10. Population of South Central Idaho EA, by age and sex

	Total Number	Under 20 years		40 - 54 (Baby Boom in 2000)		65 years and over		Median Age	Density (Pop. per sq. mi.)
		Number	Share	Number	Share	Number	Share		
<b>Total Population</b>									
2000	162,397	52,687	32%	33,332	21%	21,128	13%	34.5	14
1990	136,831	46,834	34%	22,490	16%	18,651	14%	32.4	12
10 Yr. Change	25,566	5,853	-2%	10,842	4%	2,477	-1%	2.1	2
10 Yr. % Change	19%	12%		48%		13%		6%	19%
<b>2000 Sex Breakout</b>									
Male	81,469	27,168	33%	16,758	21%	9,334	11%	33.2	
Female	80,928	25,519	32%	16,574	20%	11,794	15%	35.7	
<b>Male/Female Split</b>									
	50% / 50%	52% / 48%		50% / 50%		44% / 56%			

**Economic Profile:**

The South Central Idaho economy is dominated by agriculture, manufacturing, and services. Based on industry output, manufacturing is the largest contributor to the South Central Idaho economy, with approximately 24.0 percent of the total output. Manufacturing is followed closely, in terms of output, by the agriculture, forestry, hunting and fishing sector, which contributes 21.3 percent of total output. Government is also a relatively large contributor from the standpoint of industry output. Based on employment, labor income, and value-added, government and agriculture contribute the largest relative shares to the South Central Idaho economy. Agriculture comes in first with respect to employment, contributing 15.1 percent of South Central Idaho's total employment. In terms of labor income and value-added, government contributes the largest share, with 15.6 percent of labor income and 17.6 percent of value-added, with agriculture a close second, and manufacturing coming in third. Wood products manufacturing contributes around 1 percent of total output, labor income, and value added, and less than 1 percent of employment. Mining also makes up a very small part of the South Central Idaho economy, accounting for less than 0.5 percent of output, employment, labor income, and value added. Road construction is slightly higher, contributing about 1 percent of labor income and less than 1 percent of total output, employment, and value-added (table 11).

Table 11 displays economic information for South Central Idaho using 2004 IMPLAN data. It provides a snap shot of the South Central Idaho economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales) and value added to inputs.

**Table 11. Two-digit NAICS information for South Central Idaho EA (2004 IMPLAN data)**

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$2,480	21.3%	16,172	15.1%	\$505	14.9%	\$889	16.6%
21 Mining	\$43	0.4%	308	0.3%	\$12	0.3%	\$23	0.4%
22 Utilities	\$78	0.7%	294	0.3%	\$20	0.6%	\$54	1.0%
23 Construction	\$766	6.6%	7,771	7.3%	\$277	8.2%	\$330	6.2%
Roads	\$77	0.7%	925	0.9%	\$34	1.0%	\$40	0.7%
31-33 Manufacturing	\$2,784	24.0%	7,214	6.7%	\$325	9.6%	\$478	8.9%
Wood Products	\$168	1.4%	622	0.6%	\$39	1.1%	\$54	1.0%
42 Wholesale Trade	\$315	2.7%	3,203	3.0%	\$124	3.7%	\$226	4.2%
48-49 Transportation & Warehousing	\$458	3.9%	4,694	4.4%	\$176	5.2%	\$231	4.3%
44-45 Retail trade	\$673	5.8%	11,575	10.8%	\$279	8.2%	\$445	8.3%
51 Information	\$208	1.8%	1,286	1.2%	\$44	1.3%	\$77	1.4%
52 Finance & insurance	\$332	2.9%	2,317	2.2%	\$104	3.1%	\$225	4.2%
53 Real estate & rental	\$401	3.5%	4,884	4.6%	\$77	2.3%	\$277	5.2%
54 Professional- scientific & tech svcs	\$451	3.9%	4,469	4.2%	\$232	6.8%	\$258	4.8%
55 Management of companies	\$72	0.6%	544	0.5%	\$30	0.9%	\$42	0.8%

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
56 Administrative & waste services	\$182	1.6%	4,919	4.6%	\$92	2.7%	\$113	2.1%
61 Educational svcs	\$14	0.1%	468	0.4%	\$8	0.3%	\$8	0.2%
62 Health & social services	\$382	3.3%	6,261	5.8%	\$215	6.3%	\$246	4.6%
71 Arts- entertainment & recreation	\$109	0.9%	1,904	1.8%	\$47	1.4%	\$66	1.2%
72 Accommodation & food services	\$319	2.7%	7,252	6.8%	\$104	3.1%	\$157	2.9%
81 Other services	\$309	2.7%	6,825	6.4%	\$115	3.4%	\$170	3.2%
92 Government	\$1,002	8.6%	13,209	12.3%	\$530	15.6%	\$940	17.6%
Total	\$11,622	100.0%	107,116	100.0%	\$3,390	100.0%	\$5,348	100.0%

Source: 2004 IMPLAN data

### Boise Idaho

For the period 1990 to 2000, the population of the Boise area grew by around 41% (table 12). The majority of this growth was in residents 40-54 years of age (the baby boom generation), which had an increase in population of 70% (48,029 residents). Median age during the period remained virtually unchanged rising only slightly from 32 years in 1990 to 32.7 in 2000. The fastest growth in the Boise area occurred among the baby boomers, with the age group 50-54 years growing by more than 15,759, increasing its share of the population by 1.5%. In 2000, the largest segment of the Boise area population fell right below the baby boomers, with 35-39 year-olds making up 7.9% of the population. Population density in the Boise area is still fairly low, despite its large population, with 18 residents per square mile compared to 35 residents per square mile in North Idaho.

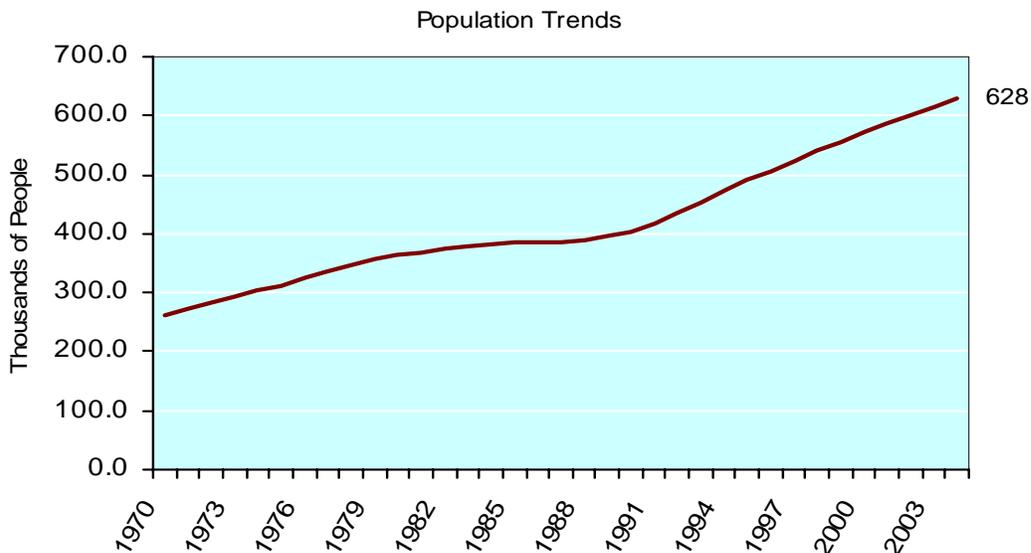


Figure 5. Population trend in Boise Idaho EA, 1970-2004 (Source: BEA REIS 2004 Table CA30)

Table 12. Population of Boise Idaho EA, by age and sex

	Total Number	Under 20 years		40 - 54 (Baby Boom in 2000)		65 years and over		Median Age	Density (Pop. per sq. mi.)
		Number	Share	Number	Share	Number	Share		
<b>Total Population</b>									
2000	567,267	177,243	31%	116,887	21%	58,742	10%	32.7	18
1990	401,186	129,288	32%	68,858	17%	48,619	12%	32	13
10 Yr. Change	166,081	47,955	-1%	48,029	3%	10,123	-2%	0.7	5
10 Yr. % Change	41%	37%		70%		21%		2%	41%
<b>2000 Sex Breakout</b>									
Male	286,560	90,939	32%	59,373	21%	25,158	9%	31.8	
Female	280,707	86,304	31%	57,514	20%	33,584	12%	33.6	
<b>Male/Female Split</b>									
	51% / 49%	51% / 49%		51% / 49%		43% / 57%			

**Economic Profile:**

The Boise economy is a diverse economy, with the largest sectors being manufacturing, government, and service-related industries. Based on industry output, manufacturing is the largest contributor to the Boise economy, with approximately 27.2 percent of the total output. Government, construction, and services are also relatively large contributors from the standpoint of industry output. Based on employment (13.1 percent of the total), labor income (18.9 percent of the total), and value added (20.3 percent), the government sector contributes the largest relative share to the Boise economy. Retail trade, health and social services, and construction also have relatively large shares of employment, labor income, and value added.

Wood products manufacturing contributes 1.6 percent of total output in the Boise area. Wood products manufacturing also accounts for about 1 percent of the total Boise economy as measured by employment, labor income, and value-added. Road construction accounts for slightly less than 1 percent of the Boise economy, regardless of the measure used, while mining makes up less than 0.5 percent (table 13).

Table 13 displays economic information for the Boise Idaho area using 2004 IMPLAN data. It provides a snap shot of Boise's economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales) and value added to inputs.

Table 13. Two-digit NAICS information for Boise Idaho EA (2004 IMPLAN data)

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$1,836	4.2%	18,805	4.6%	\$460	3.0%	\$805	3.6%
21 Mining	\$111	0.3%	870	0.2%	\$30	0.2%	\$60	0.3%
22 Utilities	\$525	1.2%	721	0.2%	\$112	0.7%	\$289	1.3%
23 Construction	\$3,079	7.1%	30,077	7.4%	\$1,158	7.6%	\$1,376	6.2%
Roads	\$310	0.7%	3,556	0.9%	\$141	0.9%	\$167	0.7%
31-33 Manufacturing	\$11,874	27.2%	31,367	7.8%	\$2,026	13.3%	\$2,563	11.5%
Wood Products	\$685	1.6%	3,947	1.0%	\$173	1.1%	\$269	1.2%
42 Wholesale Trade	\$1,755	4.0%	12,856	3.2%	\$692	4.5%	\$1,258	5.6%
48-49 Transportation & Warehousing	\$1,050	2.4%	11,016	2.7%	\$454	3.0%	\$587	2.6%
44-45 Retail trade	\$2,429	5.6%	41,735	10.3%	\$1,039	6.8%	\$1,615	7.3%
51 Information	\$1,184	2.7%	5,436	1.3%	\$263	1.7%	\$504	2.3%
52 Finance & insurance	\$2,524	5.8%	18,118	4.5%	\$723	4.7%	\$1,315	5.9%
53 Real estate & rental	\$1,549	3.6%	17,040	4.2%	\$291	1.9%	\$1,058	4.7%
54 Professional- scientific & tech svcs	\$2,297	5.3%	21,899	5.4%	\$1,207	7.9%	\$1,402	6.3%
55 Management of companies	\$1,016	2.3%	5,627	1.4%	\$489	3.2%	\$667	3.0%
56 Administrative & waste services	\$1,358	3.1%	29,741	7.4%	\$669	4.4%	\$824	3.7%
61 Educational svcs	\$268	0.6%	6,012	1.5%	\$140	0.9%	\$143	0.6%
62 Health & social services	\$2,575	5.9%	38,007	9.4%	\$1,413	9.2%	\$1,608	7.2%
71 Arts- entertainment & recreation	\$281	0.6%	7,196	1.8%	\$122	0.8%	\$173	0.8%
72 Accommodation & food services	\$1,104	2.5%	25,643	6.3%	\$357	2.3%	\$524	2.3%
81 Other services	\$1,071	2.5%	21,858	5.4%	\$434	2.8%	\$558	2.5%
92 Government	\$4,696	10.8%	53,011	13.1%	\$2,881	18.9%	\$4,515	20.3%
Total	\$43,578	100.0%	404,538	100.0%	\$15,273	100.0%	\$22,280	100.0%

Source: 2004 IMPLAN data

### Southeast Idaho

For the period 1990 to 2000, the population of Southeast Idaho grew by around 14% (table 14). The majority of this growth was in residents 40-54 years of age (the baby boom generation), which had an increase in population of 46% (19,195 residents). The population of Southeast Idaho is younger than that for North Idaho or Central Idaho, with the median age of Southeast Idaho residents increasing from 27.9 in 1990 to 29.7 in 2000. The fastest growth occurred among the baby boomers, with the age group 45-49 years growing by about 7,400, increasing its share of the population by 1.7%. The largest segment of the North Idaho population was still under 20 years of age (36%) in 2000, with the largest age category being 15-19 years (10.6% of the total).

The population density of Southeast Idaho in 2000 was fairly low, with 11 residents per square mile.

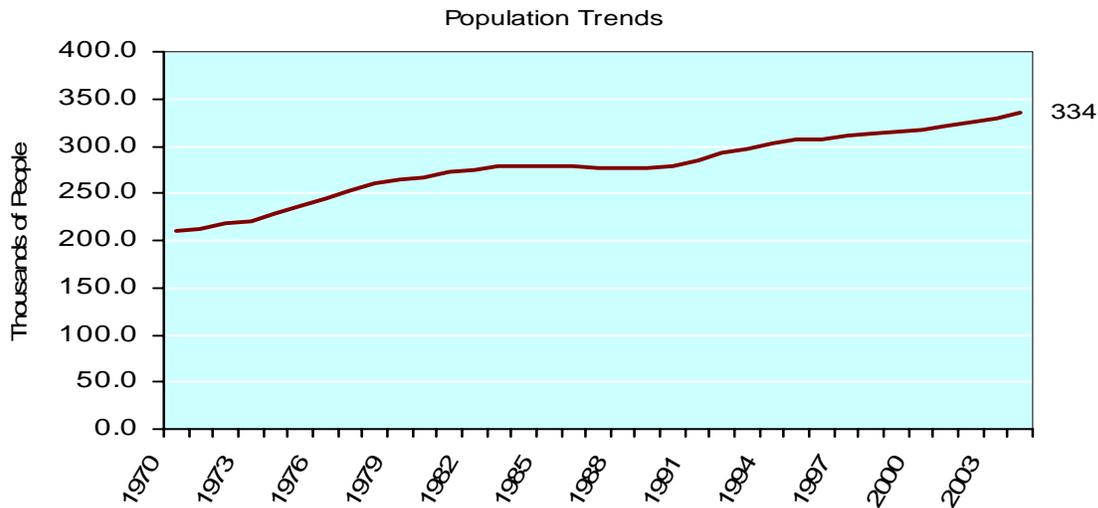


Figure 6. Population trend in Southeast Idaho EA, 1970-2004 (Source: BEA REIS 2004 Table CA30)

Table 14. Population of Southeast Idaho EA, by age and sex

	Total Number	Under 20 years		40 - 54 (Baby Boom in 2000)		65 years and over		Median Age	Density (Pop. per sq. mi.)
		Number	Share	Number	Share	Number	Share		
<b>Total Population</b>									
2000	317,038	114,121	36%	61,132	19%	32,944	10%	29.7	11
1990	277,978	109,159	39%	41,937	15%	28,071	10%	27.9	10
10 Yr. Change	39,060	4,962	-3%	19,195	4%	4,873	0%	1.8	1
10 Yr. % Change	14%	5%		46%		17%		6%	14%
<b>2000 Sex Breakout</b>									
Male	157,815	57,427	36%	30,801	20%	14,642	9%	29.1	
Female	159,223	56,694	36%	30,331	19%	18,302	11%	30.5	
<b>Male/Female Split</b>									
	50% / 50%		50% / 50%		50% / 50%		44% / 56%		

**Economic Profile:**

The Southeast Idaho economy is dominated by manufacturing, government, and service-related industries. Based on industry output, manufacturing is the largest contributor to the Southeast Idaho economy, accounting for approximately 22.1 percent of total output. Services, especially professional scientific and technical services, and government are also relatively large contributors from the standpoint of industry output at about 12 percent each. Based on employment (15.9 percent of the total), labor income (19.6 percent of the total), and value added

(21.2 percent), the government sector contributes the largest relative share to the Southeast Idaho economy. Based on employment, retail trade is the next largest contributor to the economy at 11 percent. However, based upon labor income and value-added, professional scientific and technical services surpasses retail trade, accounting for 18.4 percent of labor income and 13.1 percent of value-added. Wood products manufacturing, mining, and road construction each contributes less than 1 percent of total output, employment, labor income, and value added in Southeast Idaho (table 15).

Table 15 displays economic information for Southeast Idaho using 2004 IMPLAN data. It provides a snap shot of the Southeast Idaho economy from an industry perspective measured by employment, labor income (payments to employees and proprietors), industry output (sales) and value added to inputs.

**Table 15. Two-digit NAICS information for Southeast Idaho EA (2004 IMPLAN data)**

Industry	Industry output (million \$)	Industry output % of total	Employment	Employment % of total	Labor income (million \$)	Labor income % of total	Total value added (million \$)	Value added % of total
11 Ag, Forestry, Fish & Hunting	\$1,613	8.9%	16,353	8.8%	\$526	8.0%	\$835	8.8%
21 Mining	\$137	0.8%	756	0.4%	\$38	0.6%	\$75	0.8%
22 Utilities	\$181	1.0%	409	0.2%	\$35	0.5%	\$114	1.2%
23 Construction	\$1,237	6.9%	12,830	6.9%	\$438	6.7%	\$521	5.5%
Roads	\$123	0.7%	1,527	0.8%	\$54	0.8%	\$63	0.7%
31-33 Manufacturing	\$3,993	22.1%	11,158	6.0%	\$527	8.0%	\$825	8.7%
Wood Products	\$116	0.6%	557	0.3%	\$33	0.5%	\$48	0.5%
42 Wholesale Trade	\$891	4.9%	9,235	5.0%	\$352	5.4%	\$639	6.7%
48-49 Transportation & Warehousing	\$615	3.4%	5,558	3.0%	\$245	3.7%	\$345	3.6%
44-45 Retail trade	\$1,025	5.7%	18,764	10.1%	\$420	6.4%	\$663	7.0%
51 Information	\$457	2.5%	2,591	1.4%	\$96	1.5%	\$183	1.9%
52 Finance & insurance	\$589	3.3%	4,156	2.2%	\$171	2.6%	\$362	3.8%
53 Real estate & rental	\$340	1.9%	3,807	2.1%	\$72	1.1%	\$204	2.1%
54 Professional- scientific & tech svcs	\$2,166	12.0%	17,703	9.6%	\$1,209	18.4%	\$1,238	13.1%
55 Management of companies	\$49	0.3%	386	0.2%	\$20	0.3%	\$27	0.3%
56 Administrative & waste services	\$298	1.7%	7,332	4.0%	\$135	2.1%	\$169	1.8%
61 Educational svcs	\$86	0.5%	2,054	1.1%	\$39	0.6%	\$55	0.6%
62 Health & social services	\$911	5.0%	14,832	8.0%	\$506	7.7%	\$578	6.1%
71 Arts- entertainment & recreation	\$94	0.5%	2,509	1.4%	\$39	0.6%	\$57	0.6%
72 Accommodation & food services	\$473	2.6%	11,857	6.4%	\$140	2.1%	\$208	2.2%
81 Other services	\$518	2.9%	11,413	6.2%	\$191	2.9%	\$266	2.8%
92 Government	\$2,126	11.8%	29,451	15.9%	\$1,285	19.6%	\$2,010	21.2%
	\$18,038	100.0%	185,237	100.0%	\$6,567	100.0%	\$9,485	100.0%

Source: 2004 IMPLAN data

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## Economic Dependency

The National Forest-Dependent Rural Communities Economic Diversification Act of 1990 was passed to provide assistance to rural communities that are located in or near national forests and are economically dependent on forest resources or are likely to be economically disadvantaged by Federal or private sector natural resource or land management practices. The act specifies several eligibility criteria for program assistance for counties, including proximity to national forests (within 100 miles), exclusion from any metropolitan statistical area (as defined by the U.S. Office of Management and Budget), and total labor income (equal to or greater than 15 percent from forestry resources). Distribution of labor income attributable to forest- or wildland-related industries, including primary and secondary labor income effects, was recently estimated to assess changes in eligibility status; distributions are estimated using 2000 data (Gebert and Odell 2007).

A list of natural resource dependent counties was developed for this analysis (table 16). Timber-dependent counties where there are reasonable foreseeable adverse effects are assumed to be those where timber harvest is projected to decrease significantly within the economic area as discussed in other sections of this report. North Idaho had the largest number of timber-dependent counties where timber harvest opportunities might be affected (8), followed by Central Idaho (4) (table 16).

Dependent counties where opportunities related to road construction potentially decrease are assumed to be those counties where indices are negative and where labor income related to all wildland uses is greater than 15%. The number of wildland-dependent counties where road construction opportunities may potentially decrease under the State Petition is limited to the seven counties shown in table 16, but opportunities in four of the seven counties potentially decrease only in comparison to the 2001 Rule, not with respect to existing plans. It should be noted that the counties listed under the wood products and road construction columns of table 16 are the counties where there are increases in roadless area acreage assigned to management themes that place *greater restrictions* on activities related to wood products and road construction.

The Forest Service identified mining-dependent counties using a criterion of 15% of total earnings attributable to mining for the regulatory flexibility analysis for the 2001 Roadless Rule (USDA Forest Service 2001) and found a total of 109 out of more than 3000 counties in the lower 48 that satisfied the criterion. Included in these numbers was a discussion of Caribou County ID where earnings from leaseable minerals is largely dependent on phosphate mining on the Caribou NF within the Southeast BEA. Using a similar criterion of 15% of labor income attributable to mining for the 2000 data (Gebert and Odell 2007), Caribou County does not appear as a mining-dependent county (due most likely to disclosure constraints), however Oneida county qualifies within the Southeast BEA. (Custer (10.2%) and Clark (8.3%) also have significant percentages of labor income attributable to mining). Counties significantly affected by the Smoky Canyon Phosphate mine are Caribou, Power and Bannock counties in Idaho. However, based on increases in the number of roadless area acres assigned to management themes removing restrictions on phosphate mining (e.g., GFRG theme) for counties within the Southeast BEA under the State Petition, it is unlikely that mining-dependent counties will experience adverse effects under the State Petition and would likely see greater opportunities (table 16).

Table 16. Nature resource dependent counties in Idaho economic areas potentially affected by the State Petition.

Bureau of Economic Analysis economic area	Counties where Potential Opportunities Decrease under the State Petition <sup>a</sup>		
	Wood Products <sup>b</sup>	Roads <sup>c</sup>	Mining-dependent counties <sup>d</sup>
North	Boundary, Bonner, Kootenai, Benewah, Ferry(WA), Latah, PendOreille(WA) Stevens(WA)	None	
Central	Clearwater, Idaho, Lewis, Nez Perce, Asotin WA	Idaho	
Southeast	Bear Lake	Fremont	Caribou, Oneida, Power, and Bannock
South Central	Blaine	Camas	
Boise	None <sup>e</sup>	Adams, <i>Boise</i> , <i>Washington</i> , <i>Gem</i>	

- a. Counties not listed would see no change or potential increases in opportunities under the State Petition.
- b. No counties were identified where wood products opportunities decreased under the State Petition relative to the 2001 rule
- c. County(s) in *italics* are those where opportunities decrease only when compared to the 2001 Rule.
- d. Mining-dependent counties (likely to see increases in opportunities under the State Petition).
- e. Less than 200 acres, scattered across three counties within the Boise BEA were found where opportunities decreased

## Economic - Environmental consequences

### Commodity Values—

#### 2001 Roadless Rule (No Action)

2001 Roadless Rule prohibits road construction/reconstruction actions, except those associated with seven exceptions, and prohibits timber cutting, sale, or removal, with some exceptions. Table 17 displays the foreseeable outputs in Idaho Roadless Areas, by economic area, based on the 2001 Roadless Rule. Some timber cutting would be permitted for ecosystem restoration and hazardous fuel reduction purposes. No road construction is permitted to support timber cutting for these purposes. Timber cutting is projected to occur on about 9,000 acres over the next 15 years, primarily within the North Idaho area.

Road construction/reconstruction associated with existing mineral leases would continue; therefore, phosphate mining on the 7,230 acres of existing leases on the Caribou-Targhee National Forest would continue. About 2,000,000 tons of phosphate deposits are projected to be removed over the foreseeable future (15 years) in the Southeast Idaho economic area.

About 17 miles of road would likely be constructed associated with roaded access to existing leases or areas associated with valid existing rights over the next 15 years. Fifteen miles of road decommissioning are projected to occur under the 2001 Roadless Rule.

Phosphate mining on 14,460 acres in known unleased phosphate areas on the Caribou-Targhee National Forest would not occur under the 2001 Roadless Rule. This mining is not anticipated to occur within the foreseeable future (next 15 years); however, under the 2001 Roadless Rule

these areas would not be developed in the planning period, foregoing any future economic contributions from this activity.

*Forest Output* –The forest outputs relevant to this report include timber, phosphate, road decommissioning, and road construction. Under the 2001 Roadless Rule, roughly 45,000 MBF would be harvested using exiting roads and aerial yarding during the next 15 years. Timber harvest occurring mainly in the North Idaho economic area (table 17). No change in phosphate mining would occur under the three alternatives, with 2,000,000 tons of phosphate projected in the Caribou National Forest within the Southeast Idaho economic area. During the first five years, one mile of road decommissioning is associated with the 2001 Roadless Rule, and roughly one mile of road would likely be constructed, split about evenly between phosphate mining of existing leases, and access easements (table 17).

**Table 17. Annual forest level outputs, 2001 Roadless Rule, summarized by BEA EA**

Bureau of Economic Analysis economic area	Harvest (MBF)	Phosphate (tons)	Road decommissioning (miles)	Roads (miles)
North	2560	0	1	0.07
Central	100	0	0	0.00
Southeast	290	2,000,000	0	1.04
South central	10	0	0	0.05
Boise	30	0	0	0.00
Total	3000	2,000,000	1	1.15

### Existing Plans

About 3,224,600 acres within Idaho Roadless Areas have Existing Plan prescriptions that limit activities, especially those prescriptions that recommend the area for wilderness or manage the area for its primitive character. About 4,482,000 acres within Idaho Roadless Areas have prescriptions that permit road construction/reconstruction, timber cutting, and discretionary mineral activity to some degree. Similarly, about 1,263,200 acres are in a management prescription similar to GFRG. Road construction/reconstruction, timber cutting, and discretionary mineral activity would be permitted.

Potential timber harvest under Existing Plans over the next 15 years is projected to occur on about 40,500 acres, with around 47 percent coming from the North Idaho economic area and 38 percent from the Central Idaho economic area (table 18). About 165 miles of road construction/reconstruction are projected to facilitate timber cutting. In addition, 15 miles of road are projected to be constructed/reconstructed to facilitate mineral access and roaded access in response to valid existing rights. In addition, about 48 miles of road decommissioning are projected to be accomplished over the next 15 years.

The Caribou Forest Plan allows for development of phosphate in existing lease areas (7,230<sup>3</sup>acres) as well as in those known phosphate areas that are not leased (13,620 acres)<sup>4</sup>. About 2,000,000 tons of phosphates are projected to be removed on 1,100 acres over the foreseeable

<sup>3</sup> About 30 acres of existing leases in roadless areas are already mined

<sup>4</sup> Estimate excludes 840 acres of unleased KPLA in Sage Creek roadless area which the Forest Service recommended unavailable per 1998 leasing analysis.

future (15 years) in the Sage Creek and Meade Peak Roadless Areas in the Southeast Idaho economic area (table 18) associated with the expansion of the Smoky Canyon Mine.

Phosphate mining on 6,750 acres in known unleased phosphate deposits on the Caribou portion of the Caribou-Targhee National Forest could occur under Existing Plans. This mining is not anticipated to occur within the foreseeable future (next 15 years); however, it is likely to occur sometime in the extended future (50 or more years) and would provide jobs and income if it is developed. Phosphate mining on the 6,870 acres of known unleased phosphate deposits on the Targhee portion of the forest would have to undergo environmental analysis to determine whether or not mineral leasing is permitted.

Existing Plans would allow road construction/reconstruction for geothermal development in some locations in management prescriptions similar to Backcountry and GFRG. It is unknown where and to what degree geothermal resources would be developed; however, since about half of Idaho Roadless Areas have high to moderate potential it is likely some development would eventually occur.

Currently lease applications have been submitted for geothermal exploration, which could affect about 7,000 acres of the Peace Rock Roadless Area on the Boise National Forest and 33 acres of the West Panther Roadless Area on the Salmon National Forest. If fully developed, roads, transmission lines, and other facilities would likely be constructed.

Potential timber harvest under the existing forest plans would be approximately 200,400 MBF, during the next fifteen years, with around 47 percent coming from the North Idaho economic area and 38 percent from the Central Idaho economic area (table 18). During the next fifteen years, 48 miles of road decommissioning is associated with existing forest plans and approximately 60 miles of road construction/reconstruction associated with phosphate mining and timber harvest (table 18).

**Table 18. Annual forest level outputs under Existing Plans<sup>1</sup>, summarized by BEA EA**

Bureau of Economic Analysis economic area	Harvest (MBF)	Phosphate (tons)	Road decommissioning (miles)	Roads (miles)
North	6,290	0	3.2	8.57
Central	5,020	0	0	0.86
Southeast	2,020	2,000,000	0	2.34
South central	10	0	0	0.05
Boise	30	0	0	0.20
TOTAL	13,360	2,000,000	3.2	12.01

**Proposed Idaho Roadless Rule**

About 3,101,500 acres are in the Wild Land Recreation, Primitive, and SAHTS themes, where limited to no road construction/reconstruction, timber harvest, or discretionary mineral activities would occur. About 5,258,700 acres are in Backcountry, which would allow for some road construction/reconstruction, timber cutting and discretionary mineral activities to occur. About 609,600 acres are in the GFRG theme, which does not limit road construction/reconstruction, timber cutting, and discretionary mineral activities.

Under the Proposed Rule, timber harvest is projected to increase relative to the 2001 Roadless Rule but be substantially less than under existing forest plans. Timber harvest of 87,450 MBF is projected to occur over the next 15 years on 18,000 acres with around 63 percent coming from the North Idaho economic area and 32 percent from the Southeast Idaho economic area (table 19). Based on foreseeable projections, over the next 15 years, about 61 miles of road are likely to be constructed or reconstructed, associated with timber cutting, phosphate production and access easements. About 40.5 miles of road decommissioning are also anticipated in the next fifteen years.

There are 14,460 acres of known unleased phosphate deposits on the Caribou-Targhee National Forest. About 13,190 acres (90 percent) are located within Backcountry and GFRG themes. Under these themes road construction or reconstruction would be permissible to develop phosphate deposits. About 1,280 acres of unleased phosphate deposits are in the Primitive theme. The Primitive theme prohibits road construction/reconstruction or surface occupancy for phosphates; therefore, this area would likely not be developed (see the Minerals section).

The Idaho Roadless Rule would also permit road construction/reconstruction for geothermal development in the GFRG theme. About 7 percent of Idaho Roadless Areas are in this theme, and about 4 percent could be developed because of slope restrictions (see the Minerals section). It is likely some of these areas would be developed over time; however, except for two pending lease applications there is no information about where or when the activity would occur. If fully developed, roads, transmission lines, and other facilities would likely be constructed. Site-specific analysis would occur prior to exploration or development of geothermal energy.

Currently lease applications have been submitted for geothermal exploration within 7,000 acres of the Peace Rock Roadless Area on the Boise National Forest and 33 acres of the West Panther Roadless Area on the Salmon National Forest. Both these areas are in either the Primitive or Backcountry theme; therefore, they would not be developed because of the inability to construct roads to access the area (see the Minerals section).

**Table 19. Annual forest level outputs under the Proposed Idaho Roadless Rule, summarized by BEA EA**

Bureau of Economic Analysis economic area	Harvest (MBF)	Phosphate (tons)	Road decommissioning (miles)	Roads (miles)
North	3,700	0	2.7	1.60
Central	180	0	0	0.00
Southeast	1,880	2,000,000	0	2.34
South Central	20	0	0	0.05
Boise	60	0	0	0.20
TOTAL	5,830	2,000,000	2.7	4.18

### Modified Idaho Roadless Rule

About 3,251,000 acres are in the Wild Land Recreation, Primitive, and SAHTS themes, where limited to no road construction/reconstruction, timber harvest, or discretionary mineral activities would occur. About 5,312,900 acres are in Backcountry, which would allow for some road construction/reconstruction, timber cutting and discretionary mineral activities to occur. About 405,900 acres are in the GFRG theme, which does not limit road construction/reconstruction, timber cutting, but does limit some discretionary mineral activities.

Under the Modified Idaho Roadless Rule, timber harvest is projected to increase relative to the 2001 Roadless Rule but be substantially less than under existing forest plans. Timber harvest of 75,600 MBF is projected to occur over the next 15 years on 15,000 acres with around 70 percent coming from the North Idaho economic area and 26 percent from the Southeast Idaho economic area (table 20). Based on foreseeable projections, over the next 15 years, about 50 miles of road are likely to be constructed or reconstructed, associated with timber cutting, phosphate production and access easements. About 36 miles of road decommissioning are also anticipated in the next fifteen years.

There are 14,460 acres of known unleased phosphate deposits on the Caribou-Targhee National Forest. About 5,770 acres (40 percent) are located within the GFRG theme<sup>5</sup>. Under this theme road construction or reconstruction would be permissible to develop phosphate deposits. About 8,690 acres of unleased phosphate deposits are located in the Primitive, Backcountry and GFRG themes in the Bear Creek, Bald Mountain, and Poker Peak Roadless Areas. Road construction/reconstruction and/or surface occupancy for phosphates would be prohibited in these areas. Without road access it is unlikely these deposits would be developed (see Minerals and Energy Specialist report).

The Modified Rule would prohibit road construction/reconstruction to access geothermal development and oil and gas in all themes. Surface use and occupancy could occur, unless prohibited by the forest plans.<sup>6</sup>

**Table 20. Annual forest level outputs under the Modified Idaho Roadless Rule, summarized by BEA EA**

Bureau of Economic Analysis economic area	Harvest (MBF)	Phosphate (tons)	Road decommissioning (miles)	Roads (miles)
North	3,510	0	2.4	1.34
Central	180	0	0	0.00
Southeast	1,280	2,000,000	0	1.88
South Central	0.01	0	0	0.05
Boise	60	0	0	0.20
TOTAL	5,040	2,000,000	2.4	3.47

## Employment and Labor Income

### 2001 Roadless Rule (No Action)

Table 21 displays the average annual estimated employment and labor income resulting from the IMPLAN input-output modeling for each economic impact area based on the forest-level outputs projected from the 2001 Roadless Rule

In North Idaho activities allowed under the 2001 Roadless Rule would annually contribute roughly 15 part- and full-time jobs to the 409,975 existing jobs and approximately \$402,900 in

<sup>5</sup> About 900 acres in the Bear Creek roadless area are in known phosphate deposits that are unleased in the GFRG theme; however road construction/reconstruction would not be permitted to access these deposits (see Minerals and Energy Specialist report).

<sup>6</sup> A prior decision was made in the Targhee Forest Plan which prohibits surface use and occupancy for oil and gas.

labor income to the roughly \$15.390 billion in existing labor income (tables 7 and 21). Overall, contributions to North Idaho's diverse economy would be less than 1 percent.

In Central Idaho, the 2001 Roadless Rule would annually contribute one part- and full-time jobs to the existing 47,311 jobs and \$13,600 in labor income to the existing \$1.626 billion in labor income (tables 9 and 21). No sectors would be affected. Overall, contributions to the existing economy (the largest sector being the wood products industry) would be less than 1 percent.

In South Central Idaho, the 2001 Roadless Rule would annually contribute no part- and/or full-time job to the existing 107,116 jobs and approximately \$3,000 in labor income to the existing \$3.390 billion in labor income (tables 11 and 21). No sectors would be affected. Overall, contributions to South Central Idaho's diverse economy would be minimal.

In Boise Idaho, the 2001 Roadless Rule would annually contribute no part- and full-time jobs to the existing 404,538 jobs and \$5,100 in labor income to the \$15.273 billion in annual labor income (tables 13 and 21). No sectors would be affected. Overall, contributions to Boise Idaho's diverse economy would be minimal.

In Southeast Idaho, the 2001 Roadless Rule would annually contribute 585 part- and full-time jobs to the existing 185,237 jobs and approximately \$23.62 million in labor income to the existing \$6.568 billion in labor income (tables 15 and 21). The jobs and labor income are associated with continuation of phosphate mining under existing leases. Mining and agricultural sectors would be affected most in this economic sector, as well as accommodations, food services, retail, transportation, wholesale, and other service sectors. Overall, contributions to the Southeast Idaho's existing economy (the largest sector being the mining industry) would be less than 1 percent.

**Table 21. Part- and full-time jobs contributed annually and labor income (in thousands of dollars) by Forest Service resource programs under the 2001 Roadless Rule**

Resource program	North ID		Central ID		South Central ID		Boise		Southeast	
	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)
Recreation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wildlife & fish	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grazing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Timber	14	394.9	1	13.6	0	1.3	0	5.1	2	37.8
Minerals	0	0.0	0	0.0	0	0.0	0	0.0	582	23,543.1
Roads	1	7.9	0	0.0	0	1.7	0	0.0	1	43.3
Payments to States/counties	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FS expenditures	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total forest mgmt	15	402.9	1	13.6	0	3.0	0	5.1	585	23,624.2

*Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.*

## Existing Plans

Table 22 displays the average annual estimated employment and labor income resulting from the IMPLAN input-output modeling for each economic impact area based on the forest level outputs projected from the Existing Plans.

In North Idaho activities allowed under Existing Plans would annually contribute roughly 44 part- and full-time jobs to the 409,975 existing jobs and approximately \$1.32 million in labor income to the roughly \$15.390 billion in existing labor income (table 7 and 22). The most notable sectors affected would be agriculture and manufacturing and to a lesser degree healthcare and retail trade. Although Existing Plans could contribute more than the other alternatives, the contributions to North Idaho's diverse economy would still be less than 1 percent.

In Central Idaho, the Existing Plans would annually contribute 27 part- and full-time jobs to the existing 47,311 jobs and approximately \$694,400 in labor income to the existing \$1.626 billion in labor income (tables 9 and 22). Primarily the agriculture and manufacturing sectors could see additional jobs and labor income and to a lesser extent retail trade, health care, accommodations, and other services. Although Existing Plans could contribute more than the other alternatives, the contributions to Central Idaho's economy would still be less than 1 percent.

In South Central Idaho, Existing Plans would annually contribute no part- and full-time jobs to the existing 107,116 jobs and approximately \$3,000 in labor income to the existing \$3.390 billion in labor income (table 11 and 22). No sectors would be affected. Overall, contributions to South Central Idaho's diverse economy would be minimal.

In Boise Idaho, the Existing Plans would annually contribute no part- and full-time jobs to the existing 404,538 jobs and approximately \$12,700 in labor income to the \$15.273 billion in annual labor income (tables 13 and 22). No sectors would be affected. Overall, contributions to Boise Idaho's diverse economy would be minimal.

In Southeast Idaho, the Existing Plans would annually contribute 598 part- and full-time jobs to the existing 185,237 jobs and approximately \$23.88 million in labor income to the existing \$6.568 billion in labor income (tables 15 and 22). The jobs and labor income are associated with continuation of phosphate mining under existing leases, as well as timber harvest projected under Existing Plans. Mining and agricultural sectors would be affected most in this economic sector, as well as accommodations, food services, retail, transportation, wholesale, and other service sectors. Overall, contributions to the Southeast Idaho's existing economy (the largest sector being the mining industry) would be less than 1 percent.

**Table 22. Part- and full-time jobs contributed annually and labor income (in thousands of dollars) by Forest Service resource programs under Existing Plans**

Resource program	North ID		Central ID		South Central ID		Boise		Southeast ID	
	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)
Recreation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wildlife & fish	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grazing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Timber	35	969.4	26	665.0	0	1.3	0	5.1	14	262.0
Minerals	0	0.0	0	0.0	0	0.0	0	0.0	582	23,543.1
Roads	9	346.4	1	29.4	0	1.7	0	7.6	2	77.4
Payments to States/counties	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FS expenditures	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total forest mgmt	44	1315.7	27	694.4	0	3.0	0	12.7	598	23,882.5

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

### Proposed Idaho Roadless Rule (Proposed Action)

Table 23 displays the average annual estimated employment and labor income resulting from the IMPLAN input-output modeling for each economic impact area based on the forest level outputs projected from the Idaho Roadless Rule.

In North Idaho activities allowed under the Idaho Roadless Rule would annually contribute roughly 23 part- and full-time jobs to the 409,975 existing jobs and approximately \$645,100 in labor income to the roughly \$15.390 billion in existing labor income (tables 7 and 23). The most notable sectors affected would be agriculture and manufacturing and to a lesser degree healthcare and retail trade. Overall, the contributions to North Idaho's diverse economy would be less than 1 percent.

In Central Idaho, the Idaho Roadless Rule would annually contribute one part- and full-time job to the existing 47,311 jobs and approximately \$23,500 in labor income to the existing \$1.626 billion in labor income (tables 9 and 23). Primarily the agriculture, manufacturing sectors could see additional jobs and labor income. Overall, the contributions to Central Idaho's economy would be less than 1 percent.

In South Central Idaho, the Idaho Roadless Rule would annually contribute no part- and/or full-time jobs to the existing 107,116 jobs and approximately \$4,300 in labor income to the existing \$3.390 billion in labor income (tables 11 and 23). No sectors would be affected. Overall, contributions to South Central Idaho's diverse economy would be minimal.

In Boise Idaho, the Idaho Roadless Rule would annually contribute one part- and/or full-time job to the existing 404,538 jobs and approximately \$17,800 in labor income to the \$15.273 billion in annual labor income (tables 13 and 23). No sectors would be affected. Overall, contributions to Boise Idaho's diverse economy would be minimal.

In Southeast Idaho, the Idaho Roadless Rule would annually contribute 597 part- and full-time jobs to the existing 185,237 jobs and approximately \$23.86 million in labor income to the existing \$6.568 billion in labor income (tables 15 and 23). The jobs and labor income are associated with continuation of phosphate mining under existing leases, as well as timber harvest projected under the Idaho Roadless Rule. Mining and agricultural sectors would be affected most in this economic sector, as well as accommodations, food services, retail, transportation, wholesale, and other service sectors. Overall, contributions to the Southeast Idaho’s existing economy (the largest sector being the mining industry) would be less than 1 percent.

**Table 23. Part- and full-time jobs contributed annually and labor income (in thousands of dollars) by Forest Service resource programs under the Proposed Idaho Roadless Rule**

Resource program	North ID		Central ID		South Central ID		Boise		Southeast ID	
	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)
Recreation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wildlife & fish	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grazing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Timber	21	569.4	1	23.5	0	2.6	0	10.2	13	243.9
Minerals	0	0.0	0	0.0	0	0.0	0	0.0	582	23,543.1
Roads	2	75.7	0	0.0	0	1.7	0	7.6	2	77.4
Payments to States/counties	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FS expenditures	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total forest mgmt	23	645.1	1	23.5	0	4.3	1	17.8	597	23,864.5

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

**Modified Idaho Roadless Rule (Preferred Alternative)**

Table 24 displays the average annual estimated employment and labor income resulting from the IMPLAN input-output modeling for each economic impact area based on the forest level outputs projected from the Idaho Roadless Rule.

In North Idaho activities allowed under the Idaho Roadless Rule would annually contribute roughly 21 part- and full-time jobs to the 409,975 existing jobs and approximately \$604,500 in labor income to the roughly \$15.390 billion in existing labor income (tables 7 and 24). The most notable sectors affected would be agriculture and manufacturing and to a lesser degree healthcare and retail trade. Overall, the contributions to North Idaho’s diverse economy would be less than 1 percent.

In Central Idaho, the Idaho Roadless Rule would annually contribute one part- and full-time job to the existing 47,311 jobs and approximately \$23,500 in labor income to the existing \$1.626 billion in labor income (tables 9 and 24). Primarily the agriculture, manufacturing sectors could see additional jobs and labor income. Overall, the contributions to Central Idaho’s economy would be less than 1 percent.

In South Central Idaho, the Idaho Roadless Rule would annually contribute no part- and full-time jobs to the existing 107,116 jobs and approximately \$3,600 in labor income to the existing \$3.390 billion in labor income (tables 11 and 24). No sectors would be affected. Overall, contributions to South Central Idaho's diverse economy would be minimal.

In Boise Idaho, the Idaho Roadless Rule would annually contribute 1 part- and/or full-time job to the existing 404,538 jobs and approximately \$17,800 in labor income to the \$15.273 billion in annual labor income (tables 13 and 24). No sectors would be affected. Overall, contributions to Boise Idaho's diverse economy would be minimal.

In Southeast Idaho, the Idaho Roadless Rule would annually contribute 593 part- and full-time jobs to the existing 185,237 jobs and approximately \$23.77 million in labor income to the existing \$6.568 billion in labor income (tables 15 and 24). The jobs and labor income are associated with continuation of phosphate mining under existing leases, as well as timber harvest projected under the Idaho Roadless Rule. Mining and agricultural sectors would be affected most in this economic sector, as well as accommodations, food services, retail, transportation, wholesale, and other service sectors. Overall, contributions to the Southeast Idaho's existing economy (the largest sector being the mining industry) would be less than 1 percent.

**Table 24. Part- and full-time jobs contributed annually and labor income (in thousands of dollars) by Forest Service resource programs under the Modified Idaho Roadless Rule**

Resource program	North ID		Central ID		South Central ID		Boise		Southeast ID	
	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)	Jobs (#)	Labor income (thousand \$)
Recreation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wildlife & fish	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grazing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Timber	20	540.3	1	23.5	0	2.0	0	10.2	9	165.9
Minerals	0	0.0	0	0.0	0	0.0	0	0.0	582	23,543.1
Roads	2	64.1	0	0.0	0	1.7	0	7.6	2	62.2
Payments to States/counties	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FS expenditures	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total forest mgmt	21	604.5	1	23.5	0	3.6	1	17.8	593	23,771.2

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

## All Alternatives

Tables 25 and 26 display the average annual estimated employment and labor income (employment and labor income effects for the four alternatives, by Forest Service program), resulting from the IMPLAN input-output modeling for the North Idaho economic impact area. The changes to management guided by Alternative 1 (the 2001 roadless area conservation rule) would annually contribute roughly 15 part and full-time jobs and approximately \$402,900 in labor income. Nearly all of this change would be related to the timber program. Management guided by Alternative 2 (the existing land management plans) would annually contribute 44

part and full-time jobs and roughly \$1.32 million in labor income. Alternative 3 (the Proposed Rule) would annually contribute roughly 23 part and full time jobs and \$645,100 in labor income. Alternative 4 (the Modified Rule) would annually contribute roughly 21 part and full time jobs and \$604,500 in labor income.

**Table 25. North Idaho Economic Area Part and full-time jobs contributed annually by Forest Service resource programs**

Resource Program	Total Number of Jobs Contributed Annually			
	2001 Roadless Rule	Existing Plans	Proposed Rule	Modified Rule
Recreation	0	0	0	0
Wildlife and Fish	0	0	0	0
Grazing	0	0	0	0
Timber	14	35	21	20
Minerals	0	0	0	0
Roads	0	9	2	2
Payments to States/Counties	0	0	0	0
Forest Service Expenditures	0	0	0	0
<b>Total Forest Management</b>	<b>15</b>	<b>44</b>	<b>23</b>	<b>21</b>

**Table 26. North Idaho Economic Area Labor income contributed annually by Forest Service resource programs.**

Resource Program	Thousands of 2007 Dollars Contributed Annually			
	2001 Roadless Rule	Existing Plans	Proposed Rule	Modified Rule
Recreation	\$0.0	\$0.0	\$0.0	\$0.0
Wildlife and Fish	\$0.0	\$0.0	\$0.0	\$0.0
Grazing	\$0.0	\$0.0	\$0.0	\$0.0
Timber	\$394.9	\$969.4	\$569.4	\$540.3
Minerals	\$0.0	\$0.0	\$0.0	\$0.0
Roads	\$7.9	\$346.4	\$75.7	\$64.1
Payments to States/Counties	\$0.0	\$0.0	\$0.0	\$0.0
Forest Service Expenditures	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total Forest Management</b>	<b>\$402.9</b>	<b>\$1,315.7</b>	<b>\$645.1</b>	<b>\$604.5</b>

Table 27 displays the average annual impacts by the two-digit NAICS economic sectors for the North Idaho economic area between 2008 and 2012. Under all alternatives, the most notable sectors impacted would be agriculture (logging effects), construction (road effects), and manufacturing (timber processing effects). The direct effects based on forest outputs are found in these sectors. Healthcare and social assistance, retail, and several service sectors would also experience notable contributions from the national forests in the next five years. These sectors capture the indirect and induced effects tied to the direct effects of timber and roads. Overall, the effects relative to the existing economy are less than 1% and the effects occur in sectors of the economy that are quite sizeable in terms of employment and labor income.

**Table 27. North Idaho Economic Area Part and full-time jobs and labor income contributed annually by NAICS 2-digit economic sectors.**

Industry	Employment					Labor Income (1000)				
	Annual Contribution from Rule					Annual Contribution from Rule				
	Existing	Alt 1	Alt 2	Alt 3	Alt 4	Existing	Alt 1	Alt 2	Alt 3	Alt 4
Agriculture	11,527	6	15	9	8	\$347,693	\$163.4	\$401.5	\$235.7	\$223.7
Mining	1,093	0	0	0	0	\$76,834	\$0.0	\$0.2	\$0.1	\$0.1
Utilities	909	0	0	0	0	\$74,491	\$1.2	\$3.6	\$1.9	\$1.7
Construction	28,262	0	5	1	1	\$1,191,890	\$6.1	\$233.9	\$51.8	\$44.0
Manufacturing	28,306	3	7	4	4	\$1,495,542	\$106.2	\$264.5	\$153.8	\$145.9
Wholesale Trade	13,241	1	1	1	1	\$663,831	\$18.5	\$52.6	\$28.1	\$26.5
Transportation & Warehousing	11,927	0	1	1	1	\$542,469	\$11.3	\$36.0	\$17.9	\$16.8
Retail Trade	49,293	1	2	1	1	\$1,314,468	\$13.5	\$49.0	\$22.6	\$21.1
Information	4,974	0	0	0	0	\$242,088	\$2.4	\$7.9	\$3.9	\$3.6
Finance & Insurance	15,744	0	1	0	0	\$827,657	\$11.5	\$35.9	\$18.1	\$17.0
Real Estate & Rental & Leasing	13,189	0	1	0	0	\$306,231	\$4.9	\$16.4	\$7.9	\$7.4
Prof, Scientific, & Tech Services	18,673	0	1	1	0	\$846,083	\$9.1	\$39.1	\$16.4	\$15.1
Mngt of Companies	3,472	0	0	0	0	\$221,871	\$3.6	\$10.2	\$5.4	\$5.1
Admin, Waste Mngt & Rem Serv	17,012	0	1	0	0	\$405,644	\$4.1	\$14.1	\$6.7	\$6.2
Educational Services	6,225	0	0	0	0	\$152,458	\$2.0	\$6.5	\$3.2	\$3.0
Health Care & Social Assistance	47,941	1	3	1	1	\$1,839,830	\$22.2	\$72.5	\$35.5	\$33.3
Arts, Entertainment, and Rec	7,392	0	0	0	0	\$141,297	\$1.6	\$5.2	\$2.5	\$2.4
Accommodation & Food Services	30,616	1	2	1	1	\$477,280	\$6.3	\$20.3	\$10.0	\$9.4
Other Services	25,848	1	2	1	1	\$538,314	\$11.1	\$34.3	\$17.4	\$16.4
Government	74,332	0	0	0	0	\$3,683,944	\$3.9	\$12.1	\$6.1	\$5.8
<b>Total</b>	<b>409,975</b>	<b>15</b>	<b>44</b>	<b>23</b>	<b>21</b>	<b>\$15,389,915</b>	<b>\$402.9</b>	<b>\$1,315.7</b>	<b>\$645.1</b>	<b>\$604.5</b>
Percent of Total		0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

**Central Idaho Economic Area**– Tables 28 and 29 display the average annual estimated employment and labor income (employment and labor income effects for the four alternatives, by Forest Service program), resulting from the IMPLAN input-output modeling for the Central Idaho economic impact area. The changes to management guided by Alternative 1 (the 2001 roadless area conservation rule) would annually contribute one part and full-time job and \$13,600 in labor income. Management guided by Alternative 2 (the Existing Plans) would annually contribute 27 part and full-time jobs and roughly \$694,400 in labor income. Both Alternative 3 (the Proposed Rule) and Alternative 4 (the Modified Rule) would annually contribute roughly one part and full time job and \$23,500 in labor income.

**Table 28. Central Idaho Economic Area Part and full-time jobs contributed annually by Forest Service resource programs.**

<b>Total Number of Jobs Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	0	0	0	0
Wildlife and Fish	0	0	0	0
Grazing	0	0	0	0
Timber	1	26	1	1
Minerals	0	0	0	0
Roads	0	1	0	0
Payments to States/Counties	0	0	0	0
Forest Service Expenditures	0	0	0	0
<b>Total Forest Management</b>	<b>1</b>	<b>27</b>	<b>1</b>	<b>1</b>

**Table 29. Central Idaho Economic Area Labor income contributed annually by Forest Service resource programs.**

<b>Thousands of 2007 Dollars Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	\$0.0	\$0.0	\$0.0	\$0.0
Wildlife and Fish	\$0.0	\$0.0	\$0.0	\$0.0
Grazing	\$0.0	\$0.0	\$0.0	\$0.0
Timber	\$13.6	\$665.0	\$23.5	\$23.5
Minerals	\$0.0	\$0.0	\$0.0	\$0.0
Roads	\$0.0	\$29.4	\$0.0	\$0.0
Payments to States/Counties	\$0.0	\$0.0	\$0.0	\$0.0
Forest Service Expenditures	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total Forest Management</b>	<b>\$13.6</b>	<b>\$694.4</b>	<b>\$23.5</b>	<b>\$23.5</b>

Table 30 displays the average annual impacts by the two-digit NAICS economic sectors for the Central Idaho economic area between 2008 and 2012. Under all alternatives, the most notable sectors impacted would be agriculture (logging effects) and manufacturing (timber processing effects). The direct effects based on forest outputs are found in these sectors. Healthcare and social assistance, accommodation and food services and retail service sectors would also experience notable contributions from the national forests in the next five years. These sectors capture the indirect and induced effects tied to the direct effects of timber and roads. Overall the effects relative to the existing economy are less than 1% and the effects occur in sectors of the economy that are quite sizeable in terms of employment and labor income.

**Table 30. Central Idaho Economic Area Part and full-time jobs and labor income contributed annually by NAICS 2-digit economic sectors.**

Industry	Employment					Labor Income (1000)				
	Existing	Change from Existing				Existing	Change from Existing			
		Alt 1	Alt 2	Alt 3	Alt 4		Alt 1	Alt 2	Alt 3	Alt 4
Agriculture	3,444	0	11	0	0	\$113,403	\$6.1	\$298.3	\$10.5	\$10.5
Mining	223	0	0	0	0	\$14,179	\$0.0	\$0.1	\$0.0	\$0.0
Utilities	162	0	0	0	0	\$16,146	\$0.1	\$4.4	\$0.2	\$0.2
Construction	2,794	0	1	0	0	\$108,010	\$0.0	\$22.1	\$0.0	\$0.0
Manufacturing	3,865	0	6	0	0	\$213,881	\$4.1	\$201.9	\$7.1	\$7.1
Wholesale Trade	1,046	0	1	0	0	\$39,772	\$0.3	\$16.4	\$0.6	\$0.6
Transportation & Warehousing	2,174	0	1	0	0	\$79,870	\$0.4	\$18.8	\$0.6	\$0.6
Retail Trade	5,247	0	1	0	0	\$131,227	\$0.4	\$22.5	\$0.7	\$0.7
Information	484	0	0	0	0	\$15,876	\$0.0	\$2.3	\$0.1	\$0.1
Finance & Insurance	1,544	0	0	0	0	\$67,208	\$0.3	\$13.2	\$0.5	\$0.5
Real Estate & Rental & Leasing	980	0	0	0	0	\$22,872	\$0.1	\$3.9	\$0.1	\$0.1
Prof, Scientific, & Tech Services	1,187	0	0	0	0	\$46,594	\$0.2	\$10.4	\$0.3	\$0.3
Mngt of Companies	499	0	0	0	0	\$46,075	\$0.1	\$6.3	\$0.2	\$0.2
Admin, Waste Mngt & Rem Serv	873	0	0	0	0	\$16,896	\$0.1	\$3.2	\$0.1	\$0.1
Educational Services	368	0	0	0	0	\$5,873	\$0.0	\$1.2	\$0.0	\$0.0
Health Care & Social Assistance	5,600	0	2	0	0	\$194,245	\$0.7	\$38.1	\$1.3	\$1.3
Arts, Entertainment, and Rec	766	0	0	0	0	\$13,912	\$0.0	\$2.4	\$0.1	\$0.1
Accommodation & Food Services	3,254	0	1	0	0	\$42,885	\$0.2	\$10.4	\$0.4	\$0.4
Other Services	4,058	0	1	0	0	\$53,719	\$0.3	\$15.3	\$0.5	\$0.5
Government	8,741	0	0	0	0	\$383,060	\$0.1	\$3.2	\$0.1	\$0.1
Total	47,311	1	27	1	1	\$1,625,703	\$13.6	\$694.4	\$23.5	\$23.5
Percent of Total		0.00%	0.06%	0.00%	0.00%		0.00%	0.04%	0.00%	0.00%

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

**South Central Idaho Economic Area**— Tables 31 and 32 display the average annual estimated employment and labor income (employment and labor income effects for the four alternatives, by Forest Service program), resulting from the IMPLAN input-output modeling for the South Central Idaho economic impact area. The changes to management guided by Alternative 1 (the 2001 roadless area conservation rule) would annually contribute no part and/or full-time jobs and approximately \$3,000 in labor income. Management guided by Alternative 2 (the existing land management plans) would annually contribute no part and full-time jobs and roughly \$3,000 in labor income. Alternative 3 (the Proposed Idaho Roadless Rule) would annually contribute no part and/or full time jobs and \$4,300 in labor income. Alternative 4 (the Modified Idaho Roadless Rule) would annually contribute no part and full time jobs and \$3,600 in labor income.

**Table 31. South Central Idaho Economic Area Part and full-time jobs contributed annually by Forest Service resource programs.**

<b>Total Number of Jobs Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	0	0	0	0
Wildlife and Fish	0	0	0	0
Grazing	0	0	0	0
Timber	0	0	0	0
Minerals	0	0	0	0
Roads	0	0	0	0
Payments to States/Counties	0	0	0	0
Forest Service Expenditures	0	0	0	0
Total Forest Management	0	0	0	0

**Table 32. South Central Idaho Economic Area Labor income contributed annually by Forest Service resource programs.**

<b>Thousands of 2007 Dollars Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	\$0.0	\$0.0	\$0.0	\$0.0
Wildlife and Fish	\$0.0	\$0.0	\$0.0	\$0.0
Grazing	\$0.0	\$0.0	\$0.0	\$0.0
Timber	\$1.3	\$1.3	\$2.6	\$2.0
Minerals	\$0.0	\$0.0	\$0.0	\$0.0
Roads	\$1.7	\$1.7	\$1.7	\$1.7
Payments to States/Counties	\$0.0	\$0.0	\$0.0	\$0.0
Forest Service Expenditures	\$0.0	\$0.0	\$0.0	\$0.0
Total Forest Management	\$3.0	\$3.0	\$4.3	\$3.6

Table 33 displays the average annual impacts by the two-digit NAICS economic sectors for the South Central Idaho economic area between 2008 and 2012. Under all alternatives, sectors would not be impacted substantially in the next five years.

**Table 33. South Central Idaho Economic Area Part and full-time jobs and labor income contributed annually by NAICS 2-digit economic sectors.**

Industry	Employment					Labor Income (1000)				
	Change from Existing					Change from Existing				
	Existing	Alt 1	Alt 2	Alt 3	Alt 4	Existing	Alt 1	Alt 2	Alt 3	Alt 4
Agriculture	16,373	0	0	0	0	\$515,329	\$0.6	\$0.6	\$1.2	\$0.9
Mining	308	0	0	0	0	\$11,322	\$0.0	\$0.0	\$0.0	\$0.0
Utilities	294	0	0	0	0	\$19,904	\$0.0	\$0.0	\$0.0	\$0.0
Construction	8,696	0	0	0	0	\$311,163	\$1.2	\$1.2	\$1.2	\$1.2
Manufacturing	7,636	0	0	0	0	\$353,341	\$0.4	\$0.4	\$0.7	\$0.6
Wholesale Trade	3,203	0	0	0	0	\$124,111	\$0.1	\$0.1	\$0.1	\$0.1
Transportation & Warehousing	4,694	0	0	0	0	\$176,796	\$0.1	\$0.1	\$0.1	\$0.1
Retail Trade	11,575	0	0	0	0	\$278,833	\$0.1	\$0.1	\$0.2	\$0.1
Information	1,286	0	0	0	0	\$44,405	\$0.0	\$0.0	\$0.0	\$0.0
Finance & Insurance	2,317	0	0	0	0	\$103,447	\$0.0	\$0.0	\$0.1	\$0.1
Real Estate & Rental & Leasing	4,884	0	0	0	0	\$76,762	\$0.0	\$0.0	\$0.0	\$0.0
Prof, Scientific, & Tech Services	4,469	0	0	0	0	\$231,555	\$0.1	\$0.1	\$0.1	\$0.1
Mngt of Companies	544	0	0	0	0	\$30,761	\$0.0	\$0.0	\$0.0	\$0.0
Admin, Waste Mngt & Rem Serv	4,919	0	0	0	0	\$92,649	\$0.0	\$0.0	\$0.0	\$0.0
Educational Services	468	0	0	0	0	\$8,488	\$0.0	\$0.0	\$0.0	\$0.0
Health Care & Social Assistance	6,261	0	0	0	0	\$214,819	\$0.1	\$0.1	\$0.2	\$0.1
Arts, Entertainment, and Rec	1,904	0	0	0	0	\$47,099	\$0.0	\$0.0	\$0.0	\$0.0
Accommodation & Food Services	7,252	0	0	0	0	\$103,859	\$0.0	\$0.0	\$0.1	\$0.1
Other Services	6,825	0	0	0	0	\$115,057	\$0.1	\$0.1	\$0.1	\$0.1
Government	13,209	0	0	0	0	\$529,868	\$0.0	\$0.0	\$0.0	\$0.0
Total	107,116	0	0	0	0	\$3,389,568	\$3.0	\$3.0	\$4.3	\$3.6
Percent of Total		0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

**Boise Idaho Economic Area**– Tables 34 and 35 display the average annual estimated employment and labor income (employment and labor income effects for the four alternatives, by Forest Service program), resulting from the IMPLAN input-output modeling for the Boise Idaho economic impact area. The changes to management guided by Alternative 1 (the 2001 roadless area conservation rule) would annually contribute no part and full-time jobs and approximately \$5,100 in labor income. Management guided by Alternative 2 (the existing land management plans) would annually contribute no part and full-time jobs and roughly \$12,700 in labor income. Alternative 3 (the Proposed Rule) and Alternative 4 (the Modified Rule) would each annually contribute one part and/ or full time job and \$17,800 in labor income. All of the labor income impacts would be derived from projected road building.

**Table 34. Boise Idaho Economic Area Part and full-time jobs contributed annually by Forest Service resource programs.**

Resource Program	Total Number of Jobs Contributed Annually			
	2001 Roadless Rule	Existing Plans	Proposed Rule	Modified Rule
Recreation	0	0	0	0
Wildlife and Fish	0	0	0	0
Grazing	0	0	0	0
Timber	0	0	0	0
Minerals	0	0	0	0
Roads	0	0	0	0
Payments to States/Counties	0	0	0	0
Forest Service Expenditures	0	0	0	0
Total Forest Management	0	0	1	1

**Table 35. Boise Idaho Economic Area Labor income contributed annually by Forest Service resource programs.**

Resource Program	Thousands of 2007 Dollars Contributed Annually			
	2001 Roadless Rule	Existing Plans	Proposed Rule	Modified Rule
Recreation	\$0.0	\$0.0	\$0.0	\$0.0
Wildlife and Fish	\$0.0	\$0.0	\$0.0	\$0.0
Grazing	\$0.0	\$0.0	\$0.0	\$0.0
Timber	\$5.1	\$5.1	\$10.2	\$10.2
Minerals	\$0.0	\$0.0	\$0.0	\$0.0
Roads	\$0.0	\$7.6	\$7.6	\$7.6
Payments to States/Counties	\$0.0	\$0.0	\$0.0	\$0.0
Forest Service Expenditures	\$0.0	\$0.0	\$0.0	\$0.0
Total Forest Management	\$5.1	\$12.7	\$17.8	\$17.8

Table 36 displays the average annual impacts by the two-digit NAICS economic sectors for the Boise Idaho economic area between 2008 and 2012. Under all alternatives, sectors would not be impacted substantially in the next five years.

**Table 36. Boise Idaho Economic Area Part and full-time jobs and labor income contributed annually by NAICS 2-digit economic sectors.**

Industry	Employment					Labor Income (1000)				
	Existing	Change from Existing				Existing	Change from Existing			
		Alt 1	Alt 2	Alt 3	Alt 4		Alt 1	Alt 2	Alt 3	Alt 4
Agriculture	19,154	0	0	0	0	\$479,132	\$2.3	\$2.3	\$4.6	\$4.6
Mining	870	0	0	0	0	\$30,352	\$0.0	\$0.0	\$0.0	\$0.0
Utilities	721	0	0	0	0	\$112,177	\$0.0	\$0.1	\$0.1	\$0.1
Construction	33,633	0	0	0	0	\$1,298,238	\$0.0	\$5.0	\$5.0	\$5.0
Manufacturing	34,965	0	0	0	0	\$2,181,318	\$1.2	\$1.4	\$2.6	\$2.6
Wholesale Trade	12,856	0	0	0	0	\$691,920	\$0.2	\$0.4	\$0.6	\$0.6
Transportation & Warehousing	11,016	0	0	0	0	\$454,506	\$0.2	\$0.4	\$0.5	\$0.5
Retail Trade	41,735	0	0	0	0	\$1,038,948	\$0.2	\$0.5	\$0.7	\$0.7
Information	5,436	0	0	0	0	\$263,115	\$0.0	\$0.1	\$0.1	\$0.1
Finance & Insurance	18,118	0	0	0	0	\$723,497	\$0.1	\$0.3	\$0.4	\$0.4
Real Estate & Rental & Leasing	17,040	0	0	0	0	\$291,212	\$0.1	\$0.2	\$0.2	\$0.2
Prof, Scientific, & Tech Services	21,899	0	0	0	0	\$1,206,917	\$0.1	\$0.6	\$0.7	\$0.7
Mngt of Companies	5,627	0	0	0	0	\$488,776	\$0.1	\$0.1	\$0.2	\$0.2
Admin, Waste Mngt & Rem Serv	29,741	0	0	0	0	\$668,134	\$0.1	\$0.2	\$0.3	\$0.3
Educational Services	6,012	0	0	0	0	\$139,087	\$0.0	\$0.1	\$0.1	\$0.1
Health Care & Social Assistance	38,007	0	0	0	0	\$1,412,159	\$0.3	\$0.7	\$0.9	\$0.9
Arts, Entertainment, and Rec	7,196	0	0	0	0	\$121,494	\$0.0	\$0.1	\$0.1	\$0.1
Accommodation & Food Services	25,643	0	0	0	0	\$356,538	\$0.1	\$0.2	\$0.3	\$0.3
Other Services	21,858	0	0	0	0	\$434,721	\$0.1	\$0.3	\$0.4	\$0.4
Government	53,011	0	0	0	0	\$2,880,721	\$0.0	\$0.0	\$0.0	\$0.0
Total	404,538	0	0	1	1	\$15,272,964	\$5.1	\$12.7	\$17.8	\$17.8
Percent of Total		0.00%	0.00%	00.0%	0.00%		0.00%	0.00%	0.00%	0.00%

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

**Southeast Idaho Economic Area**– Tables 37 and 38 display the average annual estimated employment and labor income (employment and labor income effects for the four alternatives, by Forest Service program), resulting from the IMPLAN input-output modeling for the Southeastern Idaho economic impact area. The changes to management guided by Alternative 1 (the 2001 roadless area conservation rule) would annually contribute 585 part and full-time jobs and approximately \$23.62 million in labor income. Management guided by Alternative 2 (the existing land management plans) would annually contribute 598 part and full-time jobs and roughly \$23.88 million in labor income. Alternative 3 (the Proposed Idaho Roadless Rule) would annually contribute 597 part and full time jobs and \$23.86 million in labor income. Alternative 4 (the Modified Idaho Roadless Rule) would annually contribute 593 part and full time jobs and \$23.77 million in labor income.

For all of these alternatives, nearly all of this change would be related to the phosphate mining and timber programs.

**Table 37. Southeast Idaho Economic Area part and full-time jobs contributed annually by Forest Service resource programs**

<b>Total Number of Jobs Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	0	0	0	0
Wildlife and Fish	0	0	0	0
Grazing	0	0	0	0
Timber	2	14	13	9
Minerals	582	582	582	582
Roads	1	2	2	2
Payments to States/Counties	0	0	0	0
Forest Service Expenditures	0	0	0	0
<b>Total Forest Management</b>	<b>585</b>	<b>598</b>	<b>597</b>	<b>593</b>

**Table 38. Southeast Idaho Economic Area Labor income contributed annually by Forest Service resource programs**

<b>Thousands of 2007 Dollars Contributed Annually</b>				
<b>Resource Program</b>	<b>2001 Roadless Rule</b>	<b>Existing Plans</b>	<b>Proposed Rule</b>	<b>Modified Rule</b>
Recreation	\$0.0	\$0.0	\$0.0	\$0.0
Wildlife and Fish	\$0.0	\$0.0	\$0.0	\$0.0
Grazing	\$0.0	\$0.0	\$0.0	\$0.0
Timber	\$37.8	\$262.0	\$243.9	\$165.9
Minerals	\$23,543.1	\$23,543.1	\$23,543.1	\$23,543.1
Roads	\$43.3	\$77.4	\$77.4	\$62.2
Payments to States/Counties	\$0.0	\$0.0	\$0.0	\$0.0
Forest Service Expenditures	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total Forest Management</b>	<b>\$23,624.2</b>	<b>\$23,882.5</b>	<b>\$23,864.5</b>	<b>\$23,771.2</b>

Table 39 displays the average annual impacts by the two-digit NAICS economic sectors for the Southeast Idaho economic area between 2008 and 2012. Mining and Agriculture (logging effects) sectors would be impacted most in this economic area. The direct effects based on forest outputs are found in these sectors. Accommodation and food services, retail, transportation, warehousing, wholesale and other services sectors would also experience notable contributions from the national forests in the next five years. These sectors capture the indirect and induced effects tied to the direct effects of timber and roads. Overall the effects relative to the existing economy are less than 1% and the effects occur in sectors of the economy that are quite sizeable in terms of employment and labor income.

**Table 39. Southeast Idaho Economic Area Part and full-time jobs and labor income contributed annually by NAICS 2-digit economic sectors**

Industry	Employment					Labor Income (1000)				
	Existing	Change from Existing				Existing	Change from Existing			
		Alt 1	Alt 2	Alt 3	Alt 4		Alt 1	Alt 2	Alt 3	Alt 4
Agriculture	16,502	3	8	8	6	\$533,487	\$61.6	\$168.9	\$160.3	\$122.9
Mining	756	356	356	356	356	\$38,004	\$17,115.8	\$17,115.9	\$17,115.9	\$17,115.8
Utilities	409	2	2	2	2	\$35,126	\$146.4	\$147.0	\$147.0	\$146.8
Construction	14,356	2	3	3	3	\$490,835	\$74.5	\$99.5	\$99.5	\$88.4
Manufacturing	11,566	6	8	8	8	\$551,217	\$280.0	\$348.1	\$342.6	\$318.9
Wholesale Trade	9,235	14	15	14	14	\$351,426	\$531.4	\$539.3	\$538.7	\$535.9
Transportation & Warehousing	5,558	29	30	30	30	\$244,901	\$1,120.6	\$1,124.7	\$1,124.5	\$1,122.9
Retail Trade	18,764	37	38	38	38	\$419,936	\$815.6	\$823.9	\$823.4	\$820.3
Information	2,591	4	4	4	4	\$95,469	\$142.1	\$143.4	\$143.3	\$142.8
Finance & Insurance	4,156	10	10	10	10	\$171,113	\$405.9	\$410.0	\$409.7	\$408.2
Real Estate & Rental & Leasing	3,807	7	7	7	7	\$72,751	\$176.5	\$178.3	\$178.2	\$177.5
Prof, Scientific, & Tech Services	17,703	10	10	10	10	\$1,209,321	\$516.7	\$522.0	\$521.8	\$519.7
Mngt of Companies	386	2	2	2	2	\$20,270	\$116.6	\$117.0	\$116.9	\$116.8
Admin, Waste Mngt & Rem Serv	7,332	9	9	9	9	\$135,617	\$160.0	\$161.4	\$161.4	\$160.8
Educational Services	2,054	3	3	3	3	\$39,130	\$50.8	\$51.4	\$51.3	\$51.1
Health Care & Social Assistance	14,832	30	30	30	30	\$505,384	\$1,022.7	\$1,034.4	\$1,033.5	\$1,029.3
Arts, Entertainment, and Rec	2,509	5	5	5	5	\$38,662	\$78.5	\$79.4	\$79.4	\$79.0
Accommodation & Food Services	11,857	35	35	35	35	\$140,086	\$417.3	\$420.6	\$420.4	\$419.2
Other Services	11,413	20	21	21	21	\$190,730	\$300.1	\$305.3	\$305.0	\$303.1
Government	29,451	2	2	2	2	\$1,284,037	\$91.1	\$91.9	\$91.8	\$91.5
Total	185,237	585	598	597	593	\$6,567,503	\$23,624.2	\$23,882.5	\$23,864.5	\$23,771.2
Percent of Total		0.32%	0.32%	0.32%	0.32%		0.36%	0.36%	0.36%	0.36%

Note: Table totals reflect sums of numbers that were rounded for presentation in the above rows, and may not match exactly.

### Economic Impact Summary

The economic impact analysis, which estimates the changes in jobs and labor income for each of the five economic areas of Idaho, reveals that the magnitude of average annual job and labor income impacts associated with all alternatives would be small, not exceeding 1 percent change in any economic area. While expected contributions are small, they would not be distributed equally geographically across the State. Most impacts are projected to occur in Southeast Idaho, associated with phosphate mining, and North Idaho, associated with timber cutting and related road construction and decommissioning. There would be some very small localized impacts in the Agricultural, Forestry, Fishery Services and Federal Government Non-Military sectors associated with timber cutting that does not produce commercial products from some future land management projects across the state, with the amounts of these activities varying slightly between alternatives, but kept small by the general financial infeasibility of these projects.

## Non-Commodity Values—Environmental Consequences

### Effects Common to All Alternatives

None of the alternatives would apply management direction to activities occurring under existing leases or where there are valid existing rights. Phosphate mining under existing lease would continue in the Dry Ridge, Huckleberry Basin, Meade Peak, Sage Creek, Schmid Peak, Stump Creek, and Mount Jefferson Roadless Areas. Roadless characteristics—including but not limited to recreation opportunities, scenic quality, habitat for fish and wildlife, and water quality—would continue to be modified on about 7,230 acres<sup>7</sup> within these roadless areas. Phosphate mining would reduce the non-commodity values, amenities, environmental functions, and non-use values in a portion of these seven roadless areas.

### 2001 Roadless Rule (No Action)

Limited road construction/reconstruction and timber cutting would occur in Idaho Roadless Areas under the 2001 Roadless Rule. Natural processes would dominate. Roadless characteristics would remain intact overall. Idaho Roadless Areas would continue to provide high quality soil, water, and air; sources of public drinking water; diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species; reference landscapes; Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of recreation; natural-appearing landscapes with high scenic quality; and protection of traditional cultural and sacred sites. Although existence, option, and bequest values may decline as wildlife populations decline in many areas of the country, Idaho Roadless Areas would continue to support these values.

### Existing Plans

Lands recommended for wilderness and managed for primitive recreation (3.24 million acres) would retain high non-commodity values, amenities, environmental function (such as ability to provide clean air, clean water), and non-use values. About 4.48 million acres would be managed similar to the Backcountry theme; some road construction/reconstruction and timber cutting would be allowed on these lands. About 1.26 million acres would be managed similar to GFRG, and there would generally be no prohibitions for road construction/reconstruction and timber cutting on these lands. About 180 miles of road construction/reconstruction could occur over a 15 year period and 40,500 acres of timber harvest which would affect less than 1 percent of the Idaho Roadless Areas.

The Caribou Forest Plan allows for phosphate mining on an additional 6,750 acres of known unleased phosphate deposits within the Dry Ridge, Huckleberry Basin, Meade Peak, Sage Creek, Schmid Peak, and Stump Creek Roadless Areas. An additional 6,870 acres of unleased phosphate deposits on the Targhee portion of the Caribou-Targhee National Forest are within the Bald Mountain, Bear Creek, and Poker Creek Roadless Areas. An environmental analysis would have to be completed to determine how much of the 6,870 acres could actually be leased.

As mines expand into these areas, non-commodity values would be further reduced. Over an extended period of time, non-commodity values and amenities could be reduced on a total of

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<sup>7</sup> About 30 acres in roadless areas have been mined to-date.

20,850 acres (acres under existing lease, plus future leasing of known phosphate deposits, assuming all the deposits on the Targhee portion of the forest are leased).

Geothermal resources could be developed in some areas under Existing Plans. However, there is no reliable information for which to base projections; therefore, it is uncertain as to where and to what degree geothermal development would occur. It is assumed that development would begin in areas with existing roads, outside Idaho Roadless Areas, because these are generally cheaper to develop; however, given that about half the high-to-moderate geothermal development overlaps Idaho Roadless Areas, it is likely some development would occur, primarily in the themes similar to Backcountry and GFRG.

Those roadless areas where activities occur could see some changes in non-commodity values, amenities, environmental functions, and non-use values. The wildlife and physical resource section of this statement reveal that Existing Plans represent some risk to soil, water, air, and wildlife resources. Activities associated with Existing Plans including roads, power lines and facilities could reduce the non-commodity values and amenities of the Idaho Roadless Areas affected. In general, because of the existing laws and regulations most environmental functions (such as the ability to provide clean air and clean water) should be retained; however, there could be some reductions in a few localized areas negatively affecting recreation use and non-use values. For example, there could be a change in the type of recreation experiences and scenic quality for visitors and nearby residents as well as impacts on populations of some rare wildlife that would affect people across the country.

### **Proposed Idaho Roadless Rule (Proposed Action)**

Lands in the Wild Land Recreation, Primitive, and SAHTS themes (3.1 million acres) would retain high non-commodity values, amenities, environmental function (such as the ability to provide clean air and clean water), and non-use values. About 5.25 million acres would be in the Backcountry theme; some road construction/reconstruction and timber cutting would be permitted on these lands. About 609,600 acres are in GFRG, and there would be no prohibitions for road construction/reconstruction and timber cutting on these lands. About 61 miles of road construction/reconstruction could occur over a 15-year period, along with 18,000 acres of timber harvest, which would affect less than two-tenths of 1 percent of the Idaho Roadless Areas.

The Proposed Rule permits phosphate mining on an additional 13,190 acres of unleased phosphate deposits within the Dry Ridge, Huckleberry Basin, Meade Peak, Sage Creek, Schmid Peak, Stump Creek, Mount Jefferson, Bear Creek, and Poker Creek Roadless Areas. As mines expand into these areas, non-commodity values and amenities within the affected roadless areas would be reduced. Mining in these areas would not occur in all the roadless areas at one time but would be done over an extensive period of time (50 or more years).

Road construction/reconstruction for geothermal development would also be permitted in the 609,600 acres of GFRG. Activities associated with this development—including roads, power lines, and facilities—would reduce the non-commodity values and amenities of the roadless areas affected. However, there is no reliable information for which to base projections; therefore, it is uncertain as to where and to what degree geothermal development would occur. It is assumed development would begin in areas with existing roads, outside Idaho Roadless Areas, because these are generally cheaper to develop; however, it is likely some development would occur over time.

Those roadless areas where activities occur could see some changes in non-commodity values, amenities, environmental functions, and non-use values. The Wildlife and Physical Resources sections of this statement reveal that this alternative does represent some risk to soil, water, air, and wildlife resources. Activities associated with the Idaho Roadless Rule—including roads, power lines, and facilities—could reduce the non-commodity values and amenities of the Idaho Roadless Areas affected. In general, because of existing laws and regulations most environmental functions (such as the ability to provide clean air, clean water) should be retained; however, there could be some reductions in a few localized areas negatively affecting recreation use and non-use values, especially from areas that experience mineral or energy development. For example, there could be a change in the type of recreation experiences and scenic quality for visitors and nearby residents as well as impacts on populations of some rare wildlife, which would affect people across the country.

### **Modified Idaho Roadless Rule (Preferred Alternative)**

Lands in the Wild Land Recreation, Primitive, and SAHTS themes (3.25 million acres) would retain high non-commodity values, amenities, environmental function (such as the ability to provide clean air and clean water), and non-use values. About 5.31 million acres would be in the Backcountry theme; some road construction/reconstruction and timber cutting are permitted on these lands, primarily within community protection zones (442,000 acres). About 405,900 acres would be in GFRG, and there would be no prohibitions for timber cutting or road construction to facilitate timber cutting on these lands, but there would be prohibitions for road construction/reconstruction to access new mineral leases other than phosphate. About 33 miles of road construction and 17 miles of road reconstruction could occur over a 15-year period, along with 15,000 acres of timber harvest, which would affect less than two-tenths of 1 percent of the Idaho Roadless Areas.

The Idaho Roadless Rule permits permits road construction/reconstruction and surface occupancy for phosphate mining on 5,770 acres of unleased phosphate deposits within the Dry Ridge, Huckleberry Basin, Meade Peak, Sage Creek, Schmid Peak, Stump Creek Roadless Areas. As mines expand into these areas, non-commodity values and amenities within the affected roadless areas would be reduced. Mining in these areas would not occur in all the roadless areas at one time but would be done over an extensive period of time (50 or more years).

Road construction/reconstruction for geothermal development is would be prohibited in all themes therefore there would be no effect to non-commodity values and amenities of the roadless areas from this activity.

Those roadless areas where activities occur (primarily on about 847,900 acres) could see some changes in non-commodity values, amenities, environmental functions, and non-use values. The Wildlife and Physical Resources sections of this statement reveal that this alternative does represent some risk to soil, water, air, and wildlife resources on those acres where road construction/reconstruction is allowed. Activities associated with the Modified Idaho Roadless Rule—including roads, power lines, and facilities to access phosphate deposits on 5,770 acres—could reduce the non-commodity values and amenities of the Idaho Roadless Areas affected. In general, because of existing laws and regulations most environmental functions (such as the ability to provide clean air, clean water) should be retained; however, there could be some reductions in a few localized areas negatively affecting recreation use and non-use values, especially from areas that experience mineral or energy development. For example, there could

be a change in the type of recreation experiences and scenic quality for visitors and nearby residents as well as impacts on populations of some rare wildlife, which would affect people across the country.

Under the Modified Rule natural processes would dominate on about 8.47 million acres because road construction/reconstruction is generally prohibited. On these lands roadless characteristics would remain intact overall. These Idaho Roadless Areas would continue to provide high quality soil, water, and air; sources of public drinking water; diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species; reference landscapes; Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of recreation; natural-appearing landscapes with high scenic quality; and protection of traditional cultural and sacred sites. Although existence, option, and bequest values may decline as wildlife populations decline in many areas of the country, Idaho Roadless Areas would continue to support these values.

## Cumulative Effects

Overall, NFS lands provide approximately 2 percent of the Nation's timber harvest. Although the amount of timber coming off of Idaho roadless areas is very small in comparison to the national program, it can be critical to the economies of certain local communities. Nationally, any decrease in timber harvest from roadless areas would likely be compensated with offerings from private lands or imports.

Mineral and energy resources from Idaho Roadless Areas can be of substantial value, and lack of road access for exploration and development could have effects on future development of these resources. On a national scale, mineral and energy contributions from roadless areas are small; however, like the timber resource, these contributions can have critical economic impacts on local communities. Other Federal, State, and private lands, or imports, would probably continue to offset any decrease in mineral and energy supply from roadless areas.

Greatest pressures for forest conversion nationally would still be the eastern half and the west coast of the 48 contiguous States (Stein et al. 2005, Stein et al. 2007). This conversion would happen mainly on privately owned lands converted to housing developments.

As population growth and land conversion due to urbanization and development in the United States increase, the value of the ecological and social characteristics of all public lands, of which Idaho Roadless Areas are a part, will continue to increase relative to the economic values of the commodity resources, such as timber and minerals, contained in these areas. In the western, northeastern, and north central States, and in southeast Alaska, rural communities that are highly dependent on timber harvest or mineral extraction from NFS lands view inventoried roadless areas as important economic resources. During the past 18 years, many of these communities experienced the economic effects of a reduction in national forest timber harvesting levels, which have dropped from more than 12 billion board feet (BBF) in 1987 to less than 3 BBF in 2006. Most of this harvest has always come from the portions of NFS lands already containing roads. Further economic changes from a reduced timber program, or additional loss from a reduction in the minerals program, without corresponding new local employment opportunities at the same wage scale, could add to the social and economic problems faced by some rural communities unable to diversify. Changes in resource production areas may require some residents to relocate to obtain comparable employment.

Idaho Roadless Areas will continue to provide non-commodity values, amenities, and environmental functions. Other programmatic policies and decisions further protect or encourage the consideration of these values. Management direction associated with INFISH, PACFISH, forest plan amendments for the Greater Yellowstone area, the Northern Rockies Lynx Management direction, and the Idaho Comprehensive Wildlife Conservation Strategy, all provide sideboards on activities to protect and enhance fish and wildlife habitat. Other programmatic policy actions such as the Roads Policy and Travel Management Policy encourage the consideration of resource needs and effects during the planning process.

The National Fire Plan, Healthy Forests Restoration Act, Healthy Forests Initiative and the Energy Policy were considered in each resource section. The reasonably foreseeable projections were based on implementing these policies; therefore, they have been considered from a cumulative effects standpoint.

## Conclusions

To reiterate, the small number of miles of road building and decommissioning associated with timber harvest designed to meet other land management objectives is not expected to substantially impact the social nor economic values that people in Idaho, or people across the entire US hold for the Idaho Roadless Areas. Phosphate mining is likely to have a greater potential to impact these values.

In summary, the economic impact analyses estimate expected changes in contributions from Idaho Roadless Areas to jobs and labor income for the four management alternatives, for each of the five economic areas of Idaho. These analyses reveal that the magnitude of average annual job and labor income impacts associated with all proposed alternatives will be small, not exceeding 1% change in any economic area for either metric. While the expected contributions are small, they will not be distributed equally geographically across the state. The majority of the impacts modeled are expected to occur in Southeast Idaho (associated with Phosphate mining) and North Idaho (associated with timber cutting and related road building and decommissioning).

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