

ISSUE 5: SOCIAL AND ECONOMIC IMPACTS

Changes from the Draft to the Final EIS

An expanded social and economic analysis was prepared as a supplement to the Draft EIS in response to public and Congressional interest in seeing a more detailed analysis. This was done during the extended public comment period for the Draft EIS so people would have the opportunity to comment on it. Updated recreation use data from the 2004 National Visitor Use Monitoring report were used and the latest personal income, employment, and earnings from the U.S. Department of Commerce, 2005, was used. These data were analyzed using the latest economic input/output model, IMPLAN, 2004. This report was made available for public review on June 9, 2005. There have been no changes to this report since that time.

Introduction

This section addresses the potential social and economic impacts of the seven Travel Plan alternatives. The social and economic impacts attempt to identify potential effects that the Forest Service management may have on local, county, regional economic systems and on people using and valuing the natural resources that Gallatin National Forest provides. In particular, are there changing demographics in this area and consequently what might be the potential effects for travel management? Would changes in the motorized and non-motorized use of National Forest for recreation and the amount of change in the designation of Forest roads, trails, and areas be large enough or significant enough to cause measurable economic changes? Is the economy of the local area robust enough that the proposed changes will be insignificant or will they be felt in very specific segments of the local economy?

Affected Environment

Gallatin National Forest is located in Western Montana with portions of the Forest in Carbon, Gallatin, Madison, Meagher, Park and Sweet Grass counties. Approximately 90 percent of the Gallatin National Forest is located in the three counties of Gallatin, Park and Sweet Grass. Additionally, approximately 47% of Gallatin County; 50% of Park County; 19% of Sweet Grass County; 6% of Madison County; 2% of Carbon County, and; 2% of Meagher County are within the boundaries of Gallatin National Forest. Since approximately 90 percent of Gallatin National Forest is located in the three counties of Gallatin, Park, and Sweet Grass and because larger percentages of their counties are within the boundaries of the Gallatin National Forest, the social and economic impact analysis area will focus on those three counties (Gallatin, Park and Sweet Grass). This area is collectively referred to as the Gallatin National Forest Social and Economic Area (GNF SEA) for this section. This entire area, which is adjacent to Yellowstone National Park, is mountainous and offers abundant recreation and tourism opportunities. The summer and winter recreation opportunities, such as skiing and excellent fishing, help to attract business and labor to this area. Commerce flows between all counties, especially during the summer season when open roads bisecting Yellowstone National Park directly connects all counties. Furthermore, this area is experiencing population growth and migration into the area, in part due to the natural amenities that

the Gallatin National Forest provides. The following demographic information helps to provide a general description of the GNF SEA.

Population

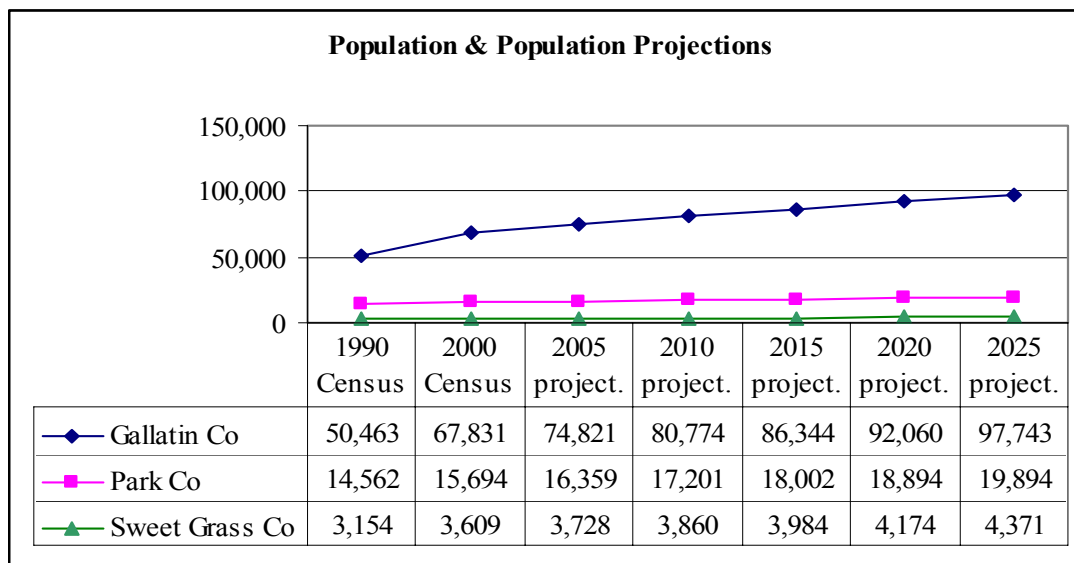
Population is an important consideration in land management planning. In particular, population structure (size, composition, density, etc) and population dynamics (how the structure changes over time) are “essential to describing the effects and consequences of forest management and planning on a social environment” (Seesholtz, Wickwar, and Russell 2005: p. 18). According to the 2000 Census (U.S. Dept. of Commerce 2000) 87,134 people reside in the counties in the GNF SEA. As indicated in Figure 3.5.1, Gallatin County has the largest population (67,831) while Sweet Grass County has the lowest (3,609). Park County has a population of 15,694. All three counties have grown in population since the 1990 Census with Gallatin County having the largest percent change/increase (34.4 %), Sweet Grass County having a 14.4% increase and Park County having a 7.8% increase in population. The increases in population may increase the diversity of activities and uses desired, and potentially result in more users and interest in travel management of the Gallatin National Forest.

Population Projections

Population projections predict what the population levels may be in the future. These numbers help to indicate whether there is the potential for increased pressures for uses and recreational opportunities on the national forests. Future population demands may increase the desire for different travel management patterns dependent upon desired uses, recreational opportunities and values (Cordell and Overdevest 2001). Population increases may lead to conflicts over forest uses, travel management, recreation activities and values; conflicts that Forest Service managers will have to contend with and attempt to balance in land management decisions.

Projections of the counties’ populations indicate that all three counties will continue to increase in population over the next 20-25 years (Figure 3.5.1) at varying rates of increase. The projections indicate that by 2025 Gallatin County will increase in population by 44.1%, whereas Park County will increase by only 26.8% and Sweet Grass County by 21.1%. This indicates that there is the potential for increased pressures for recreational opportunities and uses on the Gallatin National Forest, especially for areas inside of Gallatin County. Future population demands may increase the desire for different travel management patterns dependent upon desired uses and values.

Figure 3.5.1: Population and Population Projections for the Counties of the GNF SEA



Source: U.S. Dept. of Commerce, Census 2000, Census 1990; NPA Data Services, Inc.

Population Density, Residency and Housing Characteristics

Population is important to consider, but so is population density. Whereas population indicates the total number of people in a county, population density measures the number of people per square mile. Montana is often considered an area with wide open spaces and low population density. Statewide population density is only 6 people per square mile. Park County and Sweet Grass County also have relatively low population densities (6 and 2 people/sq. mile respectively) (Table 3.5.1). Gallatin County, however, is higher at 26 people per square mile, which is still lower than the national average of 80 people per square mile. Although population density helps to inform decision-makers about potential demand and pressures for recreational opportunities and uses of natural resources, population density for the county does not do a good job of indicating where density is highest within a county. Communities within counties may have higher population densities than the rural areas. This is particularly important if there are public lands within counties, thus possibly creating higher density communities due to having lands that cannot be populated (remembering that 47% of Gallatin County, 50% of Park County and 19% of Sweet Grass County are within Gallatin National Forest boundaries). These communities may increase pressure for more or different uses, recreational opportunities or travel routes on the Forest. In addition, population densities can change in certain areas due to increasing subdivisions and urban sprawl. This can potentially lead to increased wildland urban interface issues such as fire concerns and the need for more access for utilities and infrastructure which could impact Forest Service management actions and increase pressure for differing travel routes in the future.

Population change is determined by birth and death rates and in- and out-migration. In areas such as the GNF SEA there is often talk about the increase in population due to the in-migration of people who value the natural amenities and the associated economy that this area provides. One way to examine in-migration is by looking at the residency history of the area, specifically the percentage of the population over the age of five years old that were living in the same house for the five years before the Census or that were living in a different state. Table 3.5.2 indicates that in the

2000 Census approximately 41% of the Gallatin County residents were living in the same house in 1995 and another 24% were residing in the same county, but in a different house. Approximately 20% of the Gallatin County residents were living in a different state in 1995, compared to 13% for the state of Montana and 8% nationwide (Source: U.S. Dept. of Commerce Census 2000, Census 1990). Both Park County and Sweet Grass County had over a majority of the residents living in the same house in 1995 (approximately 52% and 55% respectively) and another 22% (Park County) and 17% (Sweet Grass County) were living in the same county, but in a different house. Only 15.4% of the residents in Park County and 14.6% of the residents of Sweet Grass County were living in another state in 1995. The Census data indicates that although a majority of the residents of all three counties remained in the county from 1995 to 2000, that in-migration from out of state is higher for the GNF SEA than for the state as a whole and the nation.

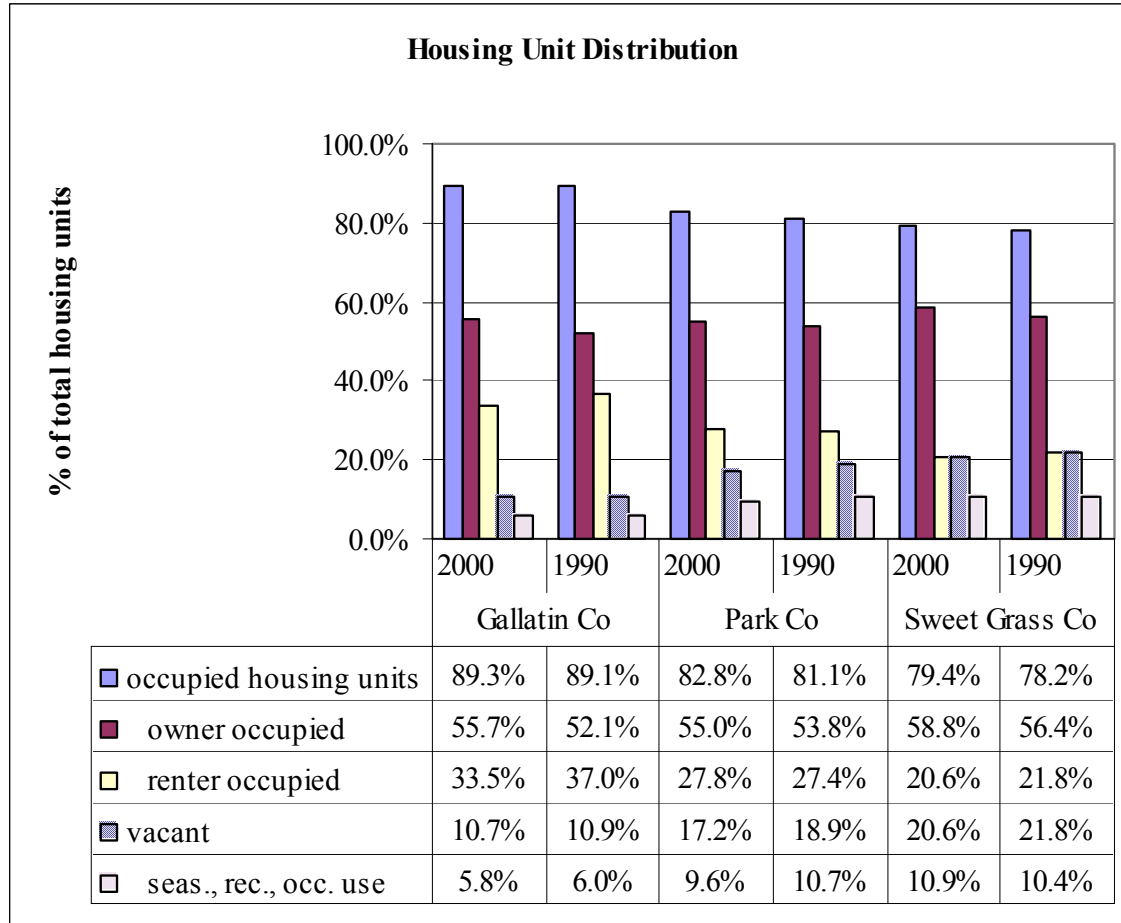
Although residency history is helpful in understanding the potential for in-migration, it does not include those people that buy second homes as seasonal or recreational homes, but reside elsewhere. Understanding whether an area has housing units that are for seasonal, recreational, or occasional use can be valuable in understanding whether there are absent landowners in the area. There may be conflicts in values or understanding of how the national forest is managed and for what by these absent landowners. The U.S. Bureau of the Census (under the U.S. Dept. of Commerce) does include housing unit numbers, including housing units that are seasonal, recreational, or occasional use units, in the Census data. Seasonal, recreational, or occasional use units are defined as “vacant units used or intended for use only in certain seasons, for weekends, or other occasional use throughout the year. Seasonal units include those used for summer or winter sports or recreation, such as beach cottages and hunting cabins. Seasonal units also may include quarters for such workers as herders and loggers. Interval ownership units, sometimes called shared-ownership or time-sharing condominiums, also are included in this category” (Definitions of Subject Characteristics, U.S. Dept. of Commerce, US Census Bureau, Census 2000). It should be noted that these housing units may be owned by other Montana state residents, other local county residents as well as out of state residents.

For all three counties of the GNF SEA there has been increasing numbers of vacant housing units for seasonal, recreational or occasional use from the 1990 Census to the 2000 Census (Table 3.5.3). Again, the owners of these seasonal, recreational or occasional use units may be from out of state or from other parts of the state. Gallatin County has both the highest number of seasonal, recreational, or occasional use units (1,723) and the greatest percent increase in number of seasonal, recreational, or occasional use units from 1990 (40%). Although Park County has the second highest number of seasonal, recreational, or occasional use units (793), its rate of increase in these units from 1990 to 2000 was only 7 percent. Sweet Grass County had a 19 percent increase in seasonal, recreational, or occasional use units ending with 202 of these units in 2000. The data does indicate that there is the potential for absent landowners in the area that could be interested in the management of Gallatin National Forest, but may not be aware of the management actions or feel unable to participate in management decision if they do not keep up with the GNF SEA local news.

Although the number of seasonal, recreational, and occasional use units has increased for all three counties from 1990 to 2000, Figure 3.5.2 indicates that the percent of seasonal, recreational, or occasional use units of the total number of housing units has declined for Gallatin and Park counties. However, the percent of owner occupied housing units has increased for all three counties

of the GNF SEA, possibly indicating future constant pressures on and increasing uses of the Gallatin National Forest. Increases in populations in the area will likely increase the pressures for public land uses, opportunities and travel routes (Cordell and Overdevest 2001).

Figure 3.5.2: Housing Units Distribution in the GNF SEA



Source: U.S. Dept. of Commerce, Census 2000, Census 1990

Gender, Age and Racial Composition & Poverty Levels

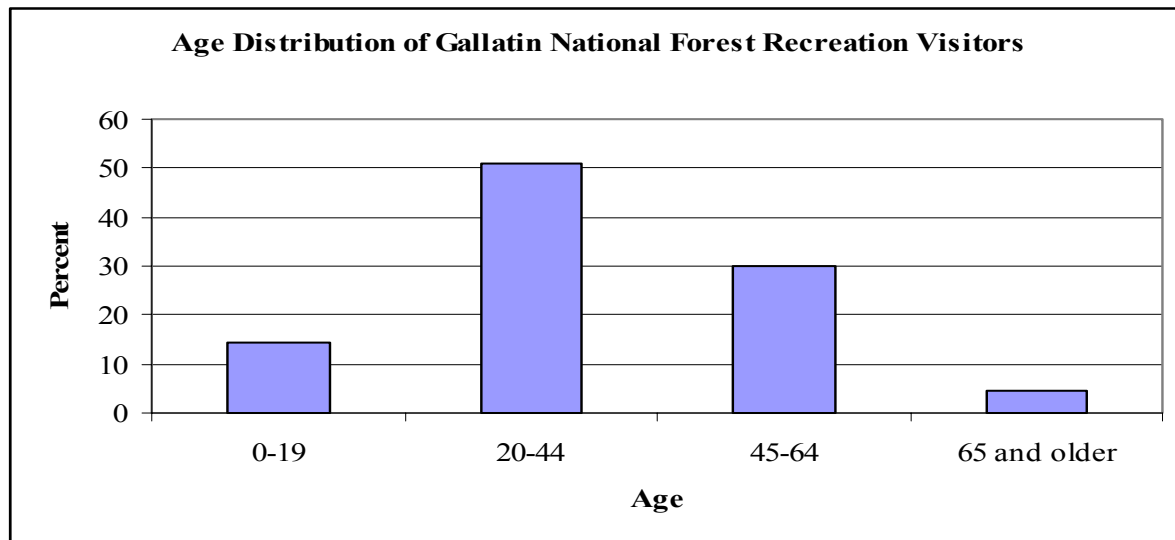
Population structure components such as gender, age and race may influence local attitudes, values and beliefs about Forest management, travel management issues and patterns of use (Manning 1999). The gender composition of the general population of Montana has more males than females, although the percentages of the total population are equal (50%) (Table 3.5.4). Park County and Sweet Grass County follow this trend and also have slightly more males comprising their county populations, whereas Gallatin County has more females and the largest difference between the percent total population, male and female (48% and 52% respectively). Although there is more females than males in Gallatin County and more males than females in Park and Sweet Grass counties, relatively speaking the counties are rather evenly split amongst gender.

The gender composition of the GNF SEA population (48.6% male and 51.4% female) is not reflective of the gender distribution of Gallatin National Forest recreation visitors. The Gallatin

National Forest National Visitor Use Monitoring data (NVUM) (Kocis, English, Zarnock, Arnold, Warren, and Ruka 2004) indicates that 61.4% of the Gallatin National Forest recreation visitors are male and 38.6% are female and 52.6% of the Wilderness visitors were male and 47.4% female. Although the gender distribution is not reflective of the general population of the GNF SEA, it follows the trend in recreation participation that indicates females may tend to participate in fewer recreation activities than males and “participate less often in outdoor recreation activities that may be considered strenuous or traditionally masculine, such as hunting, fishing, and backcountry or wilderness-related activities” (Manning 1999:p.47).

Across the West there have been discussions about the aging of the West and the potential impacts that may have on natural resource management. Research indicates that popular retirement areas include natural amenities, such as scenic beauty and recreational opportunities, and can often be in close proximity to national forests and/or national parks (Cordell and Overdevest 2001). The impact of retirement aged people on their community can be complex, but can include bringing in other sources of income and the desire for different types of recreation. However, the GNF SEA does not appear to fall into the category of the aging West. In fact, Table 3.5.5 indicates that a majority of the population for all three counties in the GNF SEA is in the 0 to 44 age range (71% of Gallatin County, 57.9% of Park County, and 56% of Sweet Grass County). The age range from 45 to 64 is the next highest percent of the population for all three counties. The age distribution may suggest that more pressure for forest uses/recreational opportunities is going to be from the segment of the population 44 years and younger. This is also reflected in the National Visitor Use Monitoring data (NVUM 2004) which shows that the majority of Gallatin National Forest recreation visitors are 44 years old or younger (Figure 3.5.3). This, however, should not discount the needs and desires of other age segments of the population.

Figure 3.5.3: Age Distribution of Gallatin National Forest Recreation Visitors



Source: Kocis et al. 2004. Note: NVUM age distribution is collected in age class categories different than shown above (NVUM age classes as collected are: under 16; 16-19; 20-29; 30-39; 40-49; 50-59; 60-69; 70 plus). In order for comparison to Census data, the NVUM age classes were aggregated in the following manner, as suggested by the Region 1 NVUM coordinator: (under 16 age class + 16-19 age class = 0-19 age class); (20-29 age class + 30-39 age class + (40-49 age class/2) = 20-44 age class); ((40-49 age class/2) + 50-59 age class + (60-69 age class/2) = 45-65 age class); and ((60-69 age class/2) + 70 plus age class = 65 and older age class).

Understanding the racial composition and poverty characteristics of the surrounding populations helps to identify whether there are environmental justice concerns that need to be addressed. Environmental Justice concerns are addressed in Chapter 4 of this FEIS under the section "Other Disclosures." The data to support that discussion is presented here. The counties of the GNF SEA are racially less diverse than the state of Montana as a whole. Table 3.5.6 highlights the minority characteristics of the counties of the GNF SEA, indicating that whites account for 96% - 97% of the population for Gallatin, Park, and Sweet Grass counties.

Table 3.5.7 displays poverty characteristics for the counties of the GNF SEA. Only in Sweet Grass County was there an increase in the number of families below the poverty level. However, none of the counties in the Gallatin National Forest Social and Economic Area contain low-income populations or minority populations as defined by Executive Order 12898 (20% at or below the poverty level or 50% minority). Environmental Justice concerns are addressed in Chapter 4 of this FEIS under the section "Other Disclosures."

Lifestyle

Historically, agriculture has been a dominant cultural force in this area. However, traditional agriculture is suffering in most of the counties in this area even though the number of farms is increasing. Farms are defined as any place from which \$1,000 or more of agricultural products were produced or sold, or normally would have been sold, during the census year (USDA National Agricultural Statistics Service 2002). There had been 1,442 farms in the GNF SEA in 1992, increasing to 1,958 farms in 2002. The number of farms and the amount of land (in acres) in farms has increased for all three counties (Gallatin, Park, and Sweet Grass) (Table 3.5.8). However, the average size of farms in acres has decreased for all three counties. This may indicate an increase in non-traditional style ranchettes/small acreage farms.

There has been a transition to more service sector tourism and recreation support services, with some people now working low-wage high turnover jobs. Raising a family often requires two of these incomes. Children graduating from high school typically depart to Bozeman, or other urban areas to gain education and employment options. Montana State University and abundant local artists provide cultural offerings for people in this area.

All counties in the Gallatin National Forest Social and Economic Area have growing populations. The natural landscapes are likely attracting many new residents and new business. Infrastructure development is not keeping pace with the population in many of these communities. Furthermore, many new residents bring greater expectations for infrastructure including paved roads, fiber optic telecommunication connections and prompt emergency services. The last of these is especially problematic when residents build homes great distances from the service center cities. On the other hand, several of the counties have developed growth management plans to identify and rectify infrastructure problems which could deter future growth.

The Gallatin National Forest has long been known for being an area with natural resource amenities and an outdoor recreation haven. It has a vast numbers of trails, expansive backcountry and wilderness resources, outstanding big game hunting opportunities, world class snowmobiling, down hill and cross country skiing and ice climbing. It is an area that provides a niche for a wide range of

outdoor recreational opportunities (discussed in more detail in Issue 16: Recreation). These opportunities help to create a type of lifestyle that allows people close interaction with the natural resources that people in this area may desire.

Attitudes, Values, and Beliefs

The Gallatin National Forest Social and Economic Area is an attractive place to live, work and play and people may value the area and the Gallatin National Forest for different reasons. For some, travel to and on the Gallatin National Forest is directly related to personal income and jobs. This can include such jobs and income from timber and non-timber production, outfitter-guide services, and special use permits for such uses as ski areas. In addition, surrounding communities may expect income related to tourism, tourism based on the amenities that the Gallatin National Forest provides.

Travel to and on the Gallatin National Forest also may be tied to the recreational opportunities that are provided. People may value the Gallatin National Forest because it provides a favorite or special place or a place to do a favorite activity. For a more thorough discussion on the recreational opportunities that the Gallatin National Forest provides, please refer to Issue 16: Recreation.

People may also be interested in or concerned about management issues of the Gallatin National Forest for reasons other than income or recreational opportunities. Often conflict over forest management, travel management included, is founded on the differing values people may hold towards the forest and natural resource management. Research indicates that there can be a variety of values that people may hold towards forests, 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). A variety of forest values (why a person may value the forest) exist and can include the following values (as indicated by Brown and Reed, 2000, p. 243): aesthetic value, cultural value, economic value, historic value, recreational value, spiritual value, for example.

These values may help to suggest why people value Gallatin National Forest and why there may be potential conflicts over travel management.

Economic Conditions and Trends

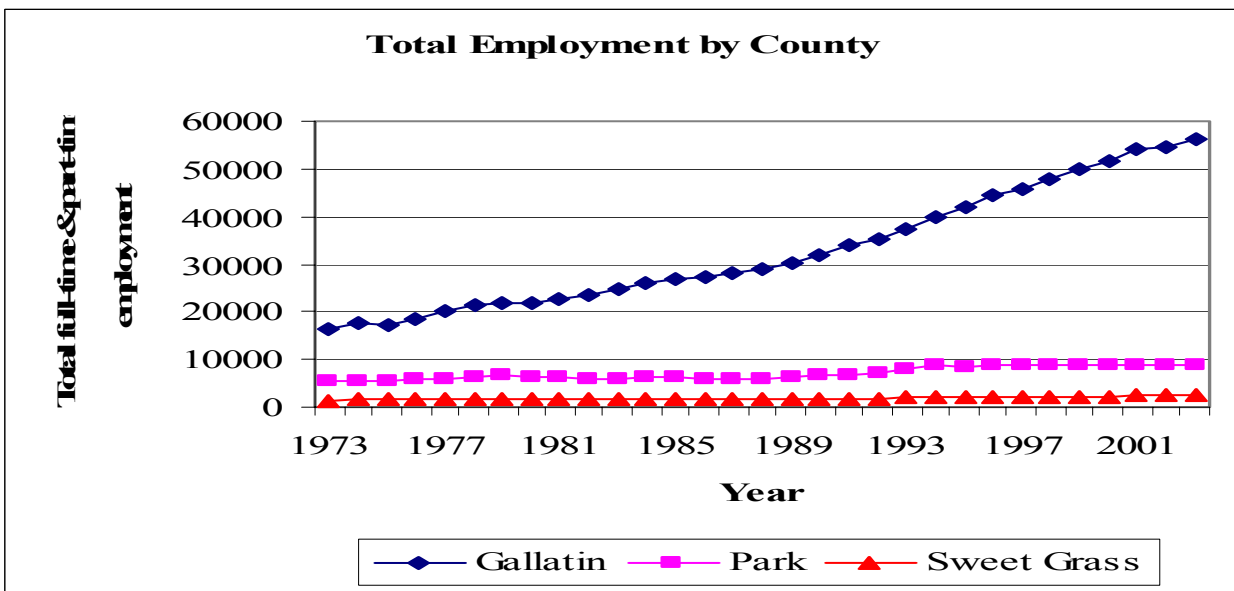
Employment, earnings, personal income, and unemployment trend information from the 1970’s to the present are provided for each of the counties of the Gallatin National Forest Social and Economic Area (GNF SEA). This economic information is used to describe the underlying economic structure and how it has changed over the last 30 years in Gallatin, Park and Sweet Grass counties.

Employment Trends

Figure 3.5.4 displays the total employment (full- and part-time jobs) trend by county from 1973 to 2003 (U.S. Dept. of Commerce 2005). In Gallatin County, there were approximately 40,000 new jobs created during this 30 year time period (Table 3.5.9). This is an average annual rate of growth

of approximately 4.2%. In Park County, there were approximately 3,600 new jobs created from 1973 to 2003 (Table 3.5.10). This is an average annual rate of growth of approximately 1.7%. In Sweet Grass County, there were approximately 960 new jobs created from 1973 to 2003. This is an average annual rate of growth of approximately 1.7% (Table 3.5.11). Over the last 30 years, Gallatin County has enjoyed robust employment growth (4.2%) in comparison to Park and Sweet Grass Counties (1.7%).

Figure 3.5.4: Total Employment by County, 1973-2003 for the GNF SEA



Tables 3.5.9 through 3.5.11 present employment by wage and salary employment (people who work for someone else) and proprietors (sole proprietorships, partnerships and tax-exempt cooperatives) for three points in time – 1973, 1993 and 2003 (U.S. Dept. of Commerce 2005 Table CA30). This information explains the source of job growth that was highlighted in Figure 3.5.4 above.

In Gallatin County, a majority of the new job growth is attributable to wage and salary employment (Table 3.5.9). Of the approximately 40,100 new jobs created during this 30-year time period, approximately 28,300 (70.5%) of the new jobs were in the wage and salary category. From the standpoint of proprietor employment, nonfarm proprietors accounted for 98% of the new jobs (11,599) in this category during 1973 to 2003. During the last ten-year period (1993-2003) approximately 71% of the new job growth was in the wage and salary category, which is very consistent with the entire 30-year period.

In Park County, there were approximately 3,600 new jobs created from 1973 to 2003 (Table 3.5.10). Approximately 45% of the new employment is attributable to wage and salary employment and 55% attributable to proprietorships. Approximately 95% of the new jobs created in the proprietor’s category are attributable to nonfarm proprietors from 1973 to 2003. The data indicates that job creation in Park County is quite different in comparison to Gallatin County. Park County job creation has been fueled by sole proprietorships, partnerships or cooperatives. From 1993 to 2003, proprietorships have become an even more important source of job creation, accounting for 85% of the job growth.

In Sweet Grass County, there were approximately 960 new jobs created from 1973 to 2003 (Table 3.5.11). Approximately 45% of the new employment is attributable to wage and salary and 55% attributable to proprietorships, with nonfarm proprietor employment accounting for the bulk of the new jobs in the proprietorship category. The job creation in Sweet Grass County is almost a mirror image of Park County from 1973 to 2003 – job creation was mostly attributable to sole proprietorships, partnerships or cooperatives. During the last ten years, Sweet Grass County did not experience the increasing dominance of proprietor employment as did Park County. From 1993 to 2003, approximately 52% of the job creation was attributable to wage and salary employment.

Figure 3.5.4 and Tables 3.5.9 through 3.5.11 provide information regarding employment growth and the employment type responsible for that growth (i.e., wage and salary employment or proprietors) for the last 30 years. Tables 3.5.12 through 3.5.17 display employment by industry (e.g., economic structure) and the distribution of employment across those industries for 1970 through 2003 for the counties of the GNF SEA. This information is used to understand employment changes by economic sectors since not all economic sectors grow or decline at the same rates. Displaying the economic data by economic sector (industry) allows one to determine the “winners” and “losers” in terms of job growth.

The Department of Commerce, Bureau of Economic Analysis changed how the economic information is gathered because of the North American Free Trade Act (NAFTA). From 1970 to 2000, the Standard Industrial Classification System (SIC) was used. This information is presented in Tables 3.5.12, 3.5.14 and 3.5.16 for Gallatin, Park and Sweet Grass Counties, respectively. From 2001 through 2003, the North American Industrial Classification System (NAICS) is used. The NAICS information is presented in Tables 3.5.13, 3.5.15 and 3.5.17 for Gallatin, Park and Sweet Grass Counties, respectively. The information needs to be presented separately since the two systems are not consistent at a detailed industry specific level.

Gallatin County

Tables 3.5.12 and 3.5.13 display employment by industry for Gallatin County (U.S. Dept. of Commerce 2005 Table CA25) for 1970 through 2003. From 1970 to 2003 farm employment remained relatively stable. The employment growth experienced in Gallatin County is attributable to the nonfarm sector of the economy. In 1970, there were approximately 12,200 full- and part-time jobs in the nonfarm sectors of the economy. By 2003, the nonfarm sector had grown to approximately 55,250 jobs. This is an average annual growth rate of 4.8%. In 1970, approximately 68% of the nonfarm employment was attributable to the private sector portion of the nonfarm component. By 2003, the private sector portion of the nonfarm component had grown to 85% of the total nonfarm employment. In 1970, approximately 41% of the private sector portion of nonfarm employment was attributable to retail trade and services. By 2000, retail and trade and services accounted for the majority (51.8%) of employment in the private sector portion of nonfarm employment. Table 3.5.13 shows that the trend of retail trade and services dominating the economy continued through 2003. In 2003, retail trade and services accounted for the approximately 54% of the private sector portion of nonfarm employment. For Gallatin County the general employment trend is characterized by 1) nonfarm employment accounts for most of the employment growth, 2) the private sector portion of nonfarm employment in comparison to government has become more dominant overtime, and 3) service industries are the largest employers in 2003. (Note: The NAICS

accounting system has provided more detail in the services sector in comparison to the SIC system. The sectors considered to be service oriented are labeled with an (S) by the industry name in tables 3.5.13, 3.5.15 and 3.5.17).

Park County

Tables 3.5.14 and 3.5.15 display employment by industry for Park County (U.S. Dept. of Commerce 2005 Table CA25) for 1970 through 2003. From 1970 to 2003 farm employment showed a slight decline from 630 full- and part-time jobs in 1970 to 579 in 2003. The growth in employment in Park County is attributable to the nonfarm sector of the economy. In 1970, there were approximately 4,100 full- and part-time jobs in the nonfarm sectors of the economy. By 2003, the nonfarm sector had grown to approximately 8,400 jobs. This is an average annual growth rate of approximately 2.2%. In 1970, approximately 86% of the nonfarm employment was attributable to the private sector portion of nonfarm employment. By 2003, the private sector portion accounted for approximately 90% of nonfarm employment. In 1970, services, retail trade and transportation were the top 3 economic sectors accounting for approximately 64% of nonfarm employment. By 2000, the top 3 economic sectors were services, retail trade and construction accounting for approximately 67% of nonfarm employment. Table 3.5.15 shows that the trend of services, retail trade and construction were still the dominant sectors in the economy in 2001 through 2003. Given disclosure issues it is not possible to estimate the approximate percentages attributable to services, but even without accounting for the industries with disclosure issues services account for approximately 43% of nonfarm employment in 2003. For Park County the general employment trend is characterized by 1) nonfarm employment accounts for most of the employment growth, 2) the private and government sector share in employment has remained relatively stable, and 3) approximately 10% of nonfarm employment is attributable to the construction industry in 2003, the third largest private sector employer. (Note: The NAICS accounting system has provided more detail in the services sector in comparison to the SIC system. The sectors considered to be service oriented are labeled with a (S) by the industry name in Tables 3.5.13, 3.5.15 and 3.5.17).

Sweet Grass County

Tables 3.5.16 and 3.5.17 display employment by industry for Sweet Grass County (U.S. Dept. of Commerce 2005 Table CA25) for 1970 through 2003. From 1970 to 2003 farm employment remained relatively stable with 473 full- and part-time jobs in 1970 and 463 jobs in 2003. As in Gallatin and Park Counties, the growth in employment in Sweet Grass County is attributable to the nonfarm sectors of the economy. In 1970, there were approximately 900 full- and part-time jobs in the nonfarm sectors. By 2003, the nonfarm sector had grown to approximately 1,950 jobs. This is an average annual growth rate of approximately 2.4%. In 1970, approximately 77% of the nonfarm employment was attributable to the private sector portion of the nonfarm economy. By 2003, the private sector portion had grown to account for approximately 80% of nonfarm employment. In 1970, services and retail trade sectors were the top 2 economic sectors accounting for approximately 53% of nonfarm employment. By 2000, the top 3 economic sectors were services, retail trade and construction accounting for approximately 57% of nonfarm employment. Table 3.5.17 shows that the trend of services, retail trade and construction continued to be the top three sectors in the economy in 2001 through 2003. For Sweet Grass County the general employment trend is very similar to Park County. The trend is characterized by 1) nonfarm employment accounts for most of the employment growth, and 2) retail trade, services and construction are the top three employers. (Note: The NAICS accounting system has provided more detail in the services sector in

comparison to the SIC system. The sectors considered to be service oriented are labeled with an (S) by the industry name in Tables 3.5.13, 3.5.15 and 3.5.17).

Summary of Employment for the Gallatin SEA (2003)

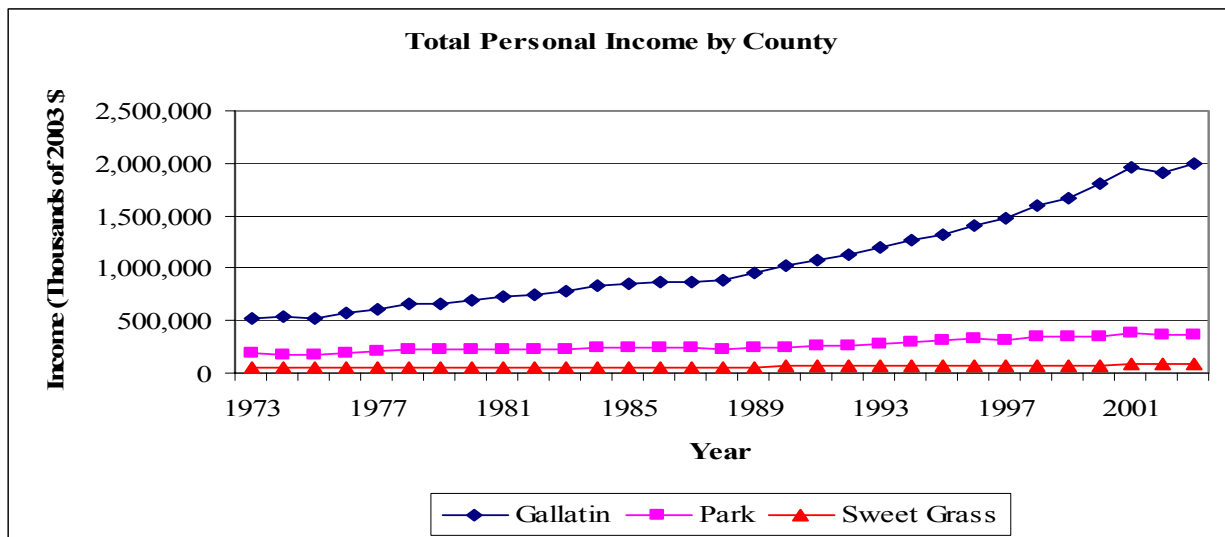
Gallatin County	56,416
Park County	8,977
Sweet grass County	2,420
<u>Total</u>	<u>67,813 jobs</u>

Personal Income Trends

Figure 3.5.5 displays the trend in total personal income by county from 1973 to 2003 in inflation adjusted 2003 dollars (U.S. Dept. of Commerce 2005 Table CA05). Personal income is generally considered a key indicator of a region’s economic vitality. Personal income includes all sources of income – income from work (labor income), income from private investments (dividends, interest and rent) and income from government transfer payments (Social Security, Medicare and Medicaid).

From 1973 to 2003 in Gallatin County, personal income increased by \$1,483 million in real terms (Table 3.5.18). This is an average annual rate of growth of approximately 4.6%. In Park County, personal income increased by approximately \$178 million in real terms (Table 3.5.19). This is an average annual rate of growth of approximately 2.3%. From 1973 to 2003 in Sweet Grass County, personal income increased by \$23.6 million in real terms (Table 3.5.20). This is an average annual rate of growth of approximately 1.2%. Over the last 30 years, Gallatin County has enjoyed a more robust personal income growth (4.6%) in comparison to the other counties. This same conclusion was drawn previously when considering employment growth. Sweet Grass and Park Counties had similar employment growth rates, but Sweet Grass County did not keep pace with respect to personal income.

Figure 3.5.5: Total Personal Income by County (thousands of 2003 dollars) for GNF SEA



Tables 3.5.18 through 3.5.20 present the sources of personal income (labor and non-labor sources) for three points in time – 1973, 1993 and 2003 (U.S. Dept. of Commerce 2005 Table CA05) for Gallatin, Park and Sweet Grass Counties. This information explains the source of personal income growth that was portrayed in Figure 3.5.5 above.

In Gallatin County, 70% of the new personal income growth is attributable to labor sources, 20% to dividends, interest and rent, and 10% to transfer payments for the time period 1973 to 2003 (Table 3.5.18). When considering only the last ten years (1993-2003), 79% of new personal income growth is attributable to labor sources, 14% to dividends, interest and rent, and 7% to transfer payments. This trend is supported by the Census data presented earlier, which indicated that the largest segment of the population is the age group of 25 to 44.

In Park County, 49% of the new personal income growth is attributable to labor sources, 25% to dividends, interest and rent, and 26% to transfer payments for the time period 1973 to 2003 (Table 3.5.19). When considering only the last ten years (1993-2003) the trend is quite different. From 1993 to 2003, 74% of new personal income growth is attributable to labor sources, 15% to dividends, interest and rent, and 12% to transfer payments. Given the last ten years, Park County is becoming more dependent on labor sources as a generator of personal income much like Gallatin County.

In Sweet Grass County, 5% of the new personal income growth is attributable to labor sources, and 95% non-labor sources for the time period 1973 to 2003 (Table 3.5.20). The majority of the non-labor income growth was attributable to dividends, interest and rent (63%). Over the most recent ten years (1993-2003), labor sources account for 38% of the total, dividends, interest and rent account for 44%, and transfer payments account for 23% of the new personal income growth. In summary, personal income is generated by nonlabor sources in Sweet Grass County. This is quite different from the other counties in the GNF SEA.

Earnings Trends

Figure 3.5.5 and Tables 3.5.18 through 3.5.20 provide information regarding personal income growth and the source of that growth (i.e., labor versus non-labor sources of personal income) for the last 30 years. In Tables 3.5.21 through 3.5.26 we concentrate on only the labor income portion of personal income, and we display those earnings by industry (e.g., economic structure). This information is needed to better understand changes in earnings and which industries are the sources of growth in labor income and which industries are the sources of decline.

Once again, from 1970 to 2000 the data is presented in the Standard Industrial Classification System (SIC) format. This information is presented in Tables 3.5.21, 3.5.23 and 3.5.25 for Gallatin, Park and Sweet Grass Counties, respectively. From 2001 through 2003, the North American Industrial Classification System (NAICS) is used. The NAICS information is presented in tables 3.5.22, 3.5.24 and 3.5.26 for Gallatin, Park and Sweet Grass Counties, respectively. The information needs to be presented separately since the two systems are not comparable.

Gallatin County

Tables 3.5.21 and 3.5.22 display earnings by industry for Gallatin County (U.S. Dept. of Commerce 2005 Table CA05) for 1970 through 2003 in 2003 dollars (i.e., adjusted for inflation). From 1970 to 2003 farm earnings declined substantially. In 1970, farm earnings were \$32.1 million and declined to \$7.5 million by 2003. Nonfarm earnings increased from \$279.3 million in 1970 to \$1,621.3 million in 2003. This is an average annual growth rate of 5.5%. In 1970, approximately 66% of the nonfarm labor income was attributable to the private sector portion of nonfarm labor income. By 2003, the private sector portion of nonfarm labor income was approximately 80% of the total nonfarm labor income. In 1970, the top three private sector industries were retail trade, services and manufacturing. By 2000, services, retail trade and construction were the top three industries. Table 3.5.22 shows that the trend of retail trade, services and construction continued to be the major sources of labor income for 2001 through 2003. For Gallatin County the general earnings trend is characterized by 1) farm earnings have steadily declined over the 34 year time period, 2) the private sector portion of nonfarm earnings accounts for a majority of the labor income increase, and 3) services, retail trade and construction are the industries that account for the largest portions of labor earnings in 2003. (Note: The NAICS accounting system has provided more detail in the services sector in comparison to the SIC system. The sectors considered to be service oriented are labeled with an (S) by the industry name in Tables 3.5.22, 3.5.24 and 3.5.26).

Park County

Tables 3.5.23 and 3.5.24 display earnings by industry for Park County (U.S. Dept. of Commerce 2005 Table CA05) for 1970 through 2003 in 2003 dollars (i.e., adjusted for inflation). From 1970 to 2003 farm earnings declined substantially. In 1970, farm earnings were \$15.2 million and declined to \$5.4 million by 2003. Nonfarm earnings increased from \$91.9 million in 1970 to \$190.9 million in 2003. This is an average annual growth rate of 2.2%. In 1970, approximately 86% of the nonfarm labor income was attributable to the private sector portion of nonfarm labor income. By 2003, the private sector portion of nonfarm labor income was approximately 83% of nonfarm labor income. In 1970, the top three private sector industries in terms of labor income were transportation, services and retail trade. By 2000, the service sector was the top industry, retail trade was second and transportation was third. Table 3.5.24 shows that the service and retail trade sectors were the top two industries with construction displacing transportation as the third largest source of labor income. For Park County the general earnings trend is characterized by 1) farm earnings have steadily declined over the 34 year time period, 2) the private sector portion of nonfarm earnings accounts for a majority of the labor income increase, and 3) services, retail trade and construction are the industries that account for the largest portions of labor earnings in 2003. These general trends are very similar to the trends experienced in Gallatin County. (Note: The NAICS accounting system has provided more detail in the services sector in comparison to the SIC system. The sectors considered to be service oriented are labeled with an (S) by the industry name in Tables 3.5.22, 3.5.24 and 3.5.26).

Sweet Grass County

Tables 3.5.25 and 3.5.26 display earnings by industry for Sweet Grass County (U. S. Dept. of Commerce 2005 Table CA05) for 1970 through 2003 in 2003 dollars (i.e., adjusted for inflation). Once again, from 1970 to 2003 farm earnings declined substantially. In 1970, farm earnings were \$9.8 million and declined to -\$1.4 million by 2003. Nonfarm earnings increased from \$16.6 million in 1970 to \$43.4 million in 2003. This is an average annual growth rate of 3.0%. Over the 34 year

time period, the proportion of labor income attributable to the private sector industries (non-governmental) was relatively stable. It ranged from a low of 71% in 1990 to a high of 77% in 2001. In 1970, the top three private sector industries in terms of labor income were retail trade, services and construction. By 2000, retail trade, services and construction were still the top three industries, but their portions of labor income were more evenly distributed. The NAICS data (Table 3.5.26) shows that the trend of the late 1990's continued into the early 2000's. For Sweet Grass County the general earnings trend is characterized by 1) farm earnings have declined substantially over the time period and were negative in 2003, and 2) government accounts for a larger portion of nonfarm earnings in comparison to Gallatin and Park Counties. (It is important to note that this is based on those industries that have reported data.) (Note: The NAICS accounting system has provided more detail in the services sector in comparison to the SIC system. The sectors considered to be service oriented are labeled with an (S) by the industry name in Tables 3.5.22, 3.5.24 and 3.5.26).

Summary of Earnings for Gallatin SEA (2003)

Gallatin County	\$1.628 billion
Park County	\$.196 billion
<u>Sweet Grass County</u>	<u>\$.042 billion</u>
Total	\$1.866 billion dollars

Unemployment Trends

Figures 3.5.6 displays the annual average unemployment rates for Gallatin, Park and Sweet Grass Counties, and the State of Montana from 1990 to 2004. Figure 3.5.7 displays the monthly unemployment rate for the economic area and the State of Montana for January 2000 to March 2005 (U.S. Dept. of Labor 2005). The unemployment rate is the percentage of the labor force that is not working, but is actively seeking work. It quantifies the magnitude of joblessness. The monthly rate (Figure 3.5.7) is displayed to illustrate the seasonal aspects of unemployment. The Montana rate is included as a point of reference to better understand how unemployment in the three counties compares to the situation at the State level.

Figure 3.5.6 indicates that Sweet Grass and Park Counties have a similar cyclical unemployment rate pattern, but with Park County having an unemployment rate that is approximately 2% higher. Sweet Grass and Gallatin Counties had the lowest unemployment rates in 2004, with an unemployment rate of approximately 2.5%. Park County and the State of Montana have unemployment rates that are approximately 4.5% in 2004. Gallatin County had an unemployment rate of approximately 5% in the early 1990s, but experienced a drop to a new lower level of approximately 2.5% in 1994, and has remained at this level for the last 11 years.

Figure 3.5.7 displays the monthly unemployment rates for the economic area and the State for January 2000 to March 2005. In general, there seems to be a fair amount of variability in the monthly unemployment rates. Table 3.5.26 provides summary statistics (mean and standard deviation) for the monthly unemployment rates. They are provided to assist in the interpretation of the highly variable data. Table 3.5.27 indicates that Gallatin and Sweet Grass Counties have similar average seasonal unemployment rates (approximately 2.6%), and Montana and Park County have similar average seasonal unemployment rate of approximately 4.6%. In terms of variability (standard deviation), Park County monthly unemployment rates have the most variability (1.3%)

and Gallatin County has the lowest at 0.6%. In general, seasonal unemployment rates are the highest in the winter months and lowest during the summer and fall seasons.

Figure 3.5.6: Annual Unemployment Rates for GNF SEA and Montana, 1990-2004

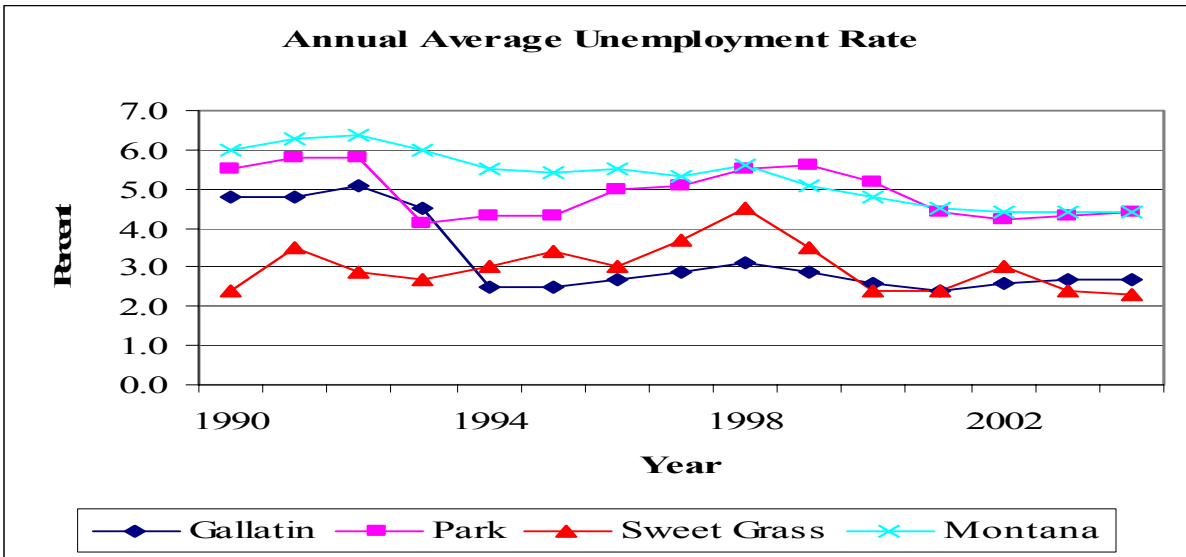
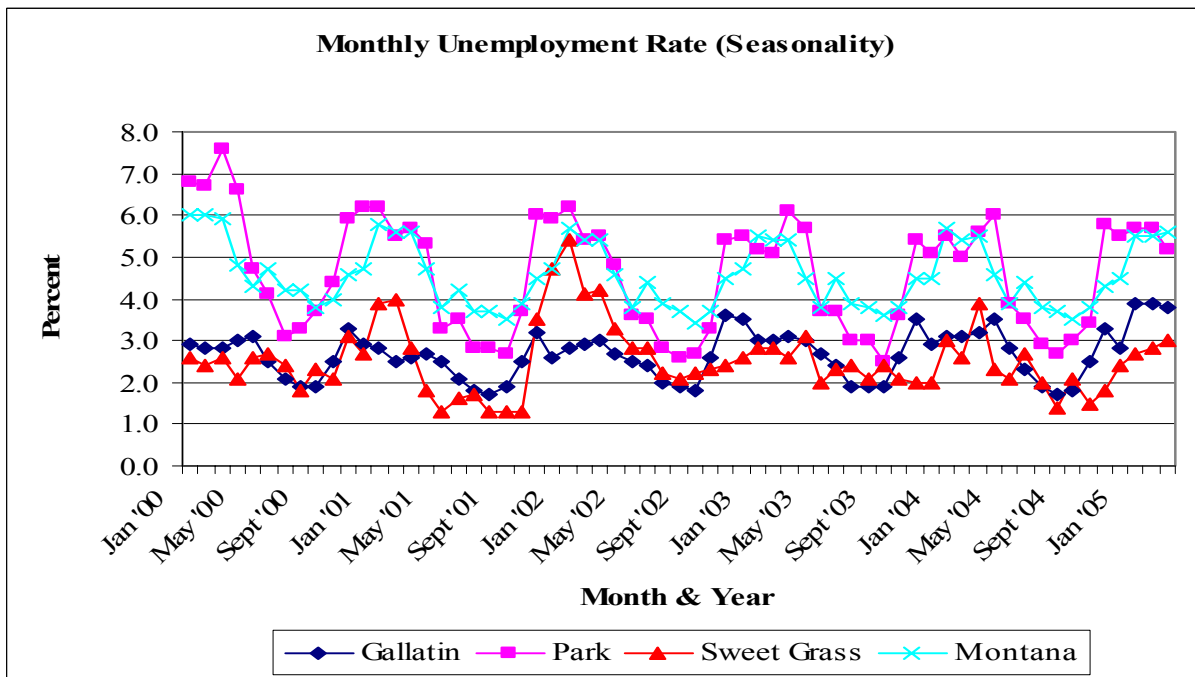


Figure 3.5.7: Monthly Unemployment Rates for GNF SEA and Montana, 1990-2004



Motorized and Nonmotorized Use

One of the issues of Travel Planning is the economic effects of motorized and non-motorize uses. Various sources of information are used to display use and trends in motorized and nonmotorized use in Montana and on the Gallatin National Forest. Vehicle registration from the Montana

Department of Justice, Motor Vehicle Registration Bureau was used to understand the state-wide trend in snowmobiles, ATVs and motorcycles (MT Dept. of Justice 2005). The National Visitor Use Monitoring survey (NVUM) was used to understand forest-level use (visits) for various motorized and nonmotorized activities. Research by Cordell and Overdevest (2001) was used to understand trends in nonmotorized use in the United States. Refer to the “Recreation Issue” section in the FEIS for further discussion.

National Visitor Use Monitoring (NVUM)

The NVUM survey process was implemented as a response to the need to better understand recreation use occurring on National Forest system lands (Kocis, English, Zarnock, Arnold, Warren, and Ruka 2004). During October 2002 through September 2003 the Gallatin National Forest participated in the NVUM survey process. A final report of the survey findings was published in June 2004 (Gallatin NVUM 2004). Examples of information provided in the Gallatin report include 1) total number of visits, 2) participation rates, and 3) user satisfaction. The survey also collected information regarding user spending within 50 miles of the National Forest boundary. Users reported expenditures for various activities, such as groceries, restaurants, gas/oil, and lodging. The specific spending profiles and expenditures are found in Stynes and White (2004).

The final report indicates that 1,980,548 visits occurred on the Gallatin National Forest during the survey period (October 2002 through September 2003). Table 3.5.28 presents participation rates by activity for the Gallatin National Forest during the NVUM survey period (Gallatin NVUM 2004). The **% Participation** column of the table presents the participation rates by activity. Participation rates can exceed 100% since visitors can participate in multiple activities. The **% as Main Activity** column presents the participation rates in terms of primary activity. Table 3.5.28 indicates that the top five most popular non-wildlife related activities were 1) hiking / walking, 2) relaxing, 3) downhill skiing, 4) snowmobiling, and 5) developed camping.

The primary activity participation rates (% as Main Activity in Table 3.5.28) were used to estimate use by activity. For this analysis, OHV use, snowmobiling, driving for pleasure, and other motorized activities were considered motorized use, while backpacking, hiking / walking, horseback riding, bicycling, and cross-country skiing were considered nonmotorized use.

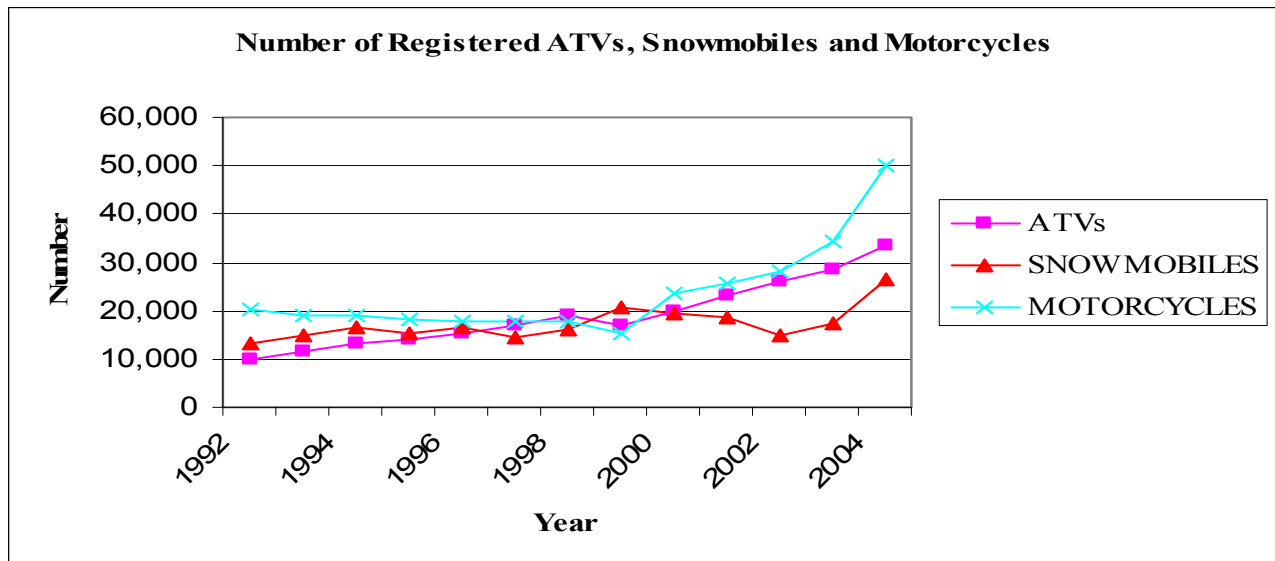
Table 3.5.29 displays the number of visits for these activities. The number of visits by activity are based on the primary purpose displayed in Table 3.5.27 and the total number of visits of 1,980,548 reported in the Gallatin National Forest NVUM report. Users were determined to be either local or nonlocal based on the miles from the user’s residence to the forest boundary. If the user reported living within 50 miles of the forest boundary, they are considered local; if over 50 miles, they are considered nonlocal. The table indicates that the most popular nonmotorized activity is hiking / walking, and the most popular motorized activity is snowmobiling. Of the nonmotorized activities, nonlocal cross-country skiers spend the most per visit (\$24.55 for locals and \$108.70 for nonlocals). From the standpoint of motorized activities, local and nonlocal snowmobilers and other motorized users spend the most per visit (\$38.92 for locals and \$77.41 for nonlocals) (Note: snowmobiling and other motorized share the same expenditure profile).

Trends in Motorized Use

Figure 3.5.8 shows the trend in the number of registered ATVs, snowmobiles and motorcycles (street and dirt bikes) in Montana (MT Dept. of Justice 2005). This information is useful in gauging the popularity of outdoor activities that use this equipment since trend information is difficult to obtain for these types of dispersed activities. In general, the data indicates an upward trend in ownership in Montana. The average annual growth rates for ATVs, snowmobiles and motorcycles are 9.7%, 5.4%, and 7.3%, respectively. This compares to an average annual population growth rate in Montana of approximately 1% during this time period. The growth rate in registration far exceeds the population growth rate, indicating that activities that use this equipment are gaining popularity.

The Bureau and Business and Economic Research (BBER) at the University of Montana has studied the economic contributions of snowmobiling in Montana during the years of 1988, 1994, 1998 and 2002 (BBER 2003). In their latest survey, they estimated that there were approximately 1.4 million activity days during Montana’s 2001-2002 winter season. Nonresident snowmobilers (users from states other than Montana) spent over \$44 million in Montana during the 2001-2002 season for daily personal expenses. BBER estimated that nonresident snowmobilers generate over \$11 million per year in labor income and about 800 full and part-time jobs.

Figure 3.5.8: Number of Registered ATVs, Snowmobiles, and Motorcycles in Montana, 1992-2004

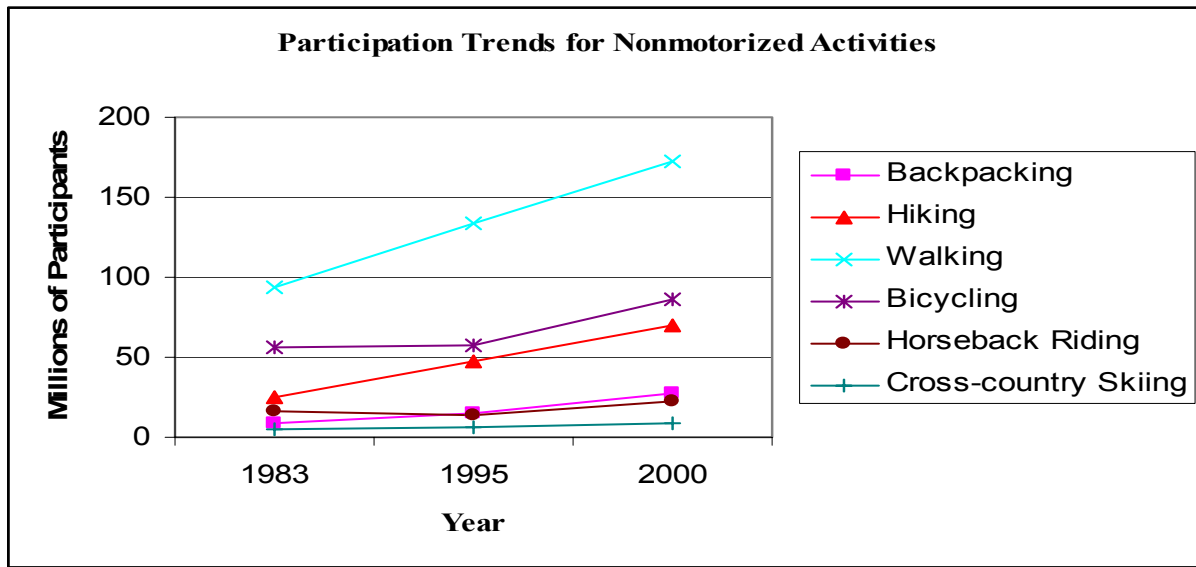


Trends in Nonmotorized Use

Figure 3.5.9 displays use trends from 1983 to 2000 in the United States for the following nonmotorized activities: backpacking, hiking, walking, bicycling, horseback riding and cross-country skiing (Cordell and Overdeest 2001). Even though the data is for the entire U.S., it provides useful trend information for nonmotorized activities that are of interest for this analysis. During this time period walking was the most popular activity with 172.3 million participants, and cross-country skiing was the least popular activity with 8.8 million participants in 2000.

Backpacking and hiking participation grew at an average annual growth rate of approximately 6 percent during this time period. The other activities had participation growth rates of approximately 2 to 3 percent per year. The average annual population growth rate in the U.S. was approximately 1 percent per year during this time period. All of these activities are experiencing growth rates that are exceeding the population growth rate.

Figure 3.5.9: Participation Trends in the U.S. for Selected Nonmotorized Activities, 1983-2000.



Economic Effects

The employment and labor income effects stemming from current motorized and nonmotorized activities occurring on the Gallatin National Forest were estimated. Also, the marginal economic effects (employment and labor income effects per 10,000 visits) of motorized and nonmotorized use are provided. The response coefficients are useful for performing sensitivity analyses of various management alternatives.

Analysis Methodology

Economic effects can be categorized as direct, indirect and induced. Direct effects are changes associated with the initial spending by a recreationist. Indirect and induced effects are the multiplier effects resulting from subsequent rounds of spending in the local economy.

Input-output analysis was used to estimate the direct, indirect and induced employment and labor income effects stemming from motorized and nonmotorized use. Input-output analysis (Hewings 1985) is a means of examining relationships within an economy both between businesses as well as 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. This examination is called impact analysis. Input-output analysis requires identifying an economic

impact area. The GNF SEA of Gallatin, Park and Sweet Grass Counties serve as the economic impact area for this analysis.

The IMPLAN Pro input-output modeling system and 2002 IMPLAN data (the most recent data available) were used to develop the input-output model for this analysis (IMPLAN Professional 2004). 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. For the economic impact area, employment and labor income estimates that were attributable to current motorized and nonmotorized activities for the Gallatin National Forest were generated.

The expenditure and use information collected by the NVUM survey are crucial elements in the economic analysis. As reported earlier, the NVUM survey collects use and expenditure information for various activity types. The expenditure information is collected by eight spending categories (see Stynes and White 2005). The reported spending for each of the spending categories is allocated to the appropriate industry within the IMPLAN model (Note: the allocation process, also referred to as "bridging", was conducted by the USDA Forest Service, Planning Analysis Group in Fort Collins, CO.). The bridged IMPLAN files were used to estimate economic effects (e.g., employment and labor income) related to changes in spending (i.e., changes in spending – technically referred to as changes in final demand - are caused by changes in use).

Estimated Economic Effects

Table 3.5.30 displays the estimated employment and labor income response coefficients (employment and labor income per 1,000 visits) resulting from the IMPLAN input-output model for the GNF SEA. The response coefficients indicate the number of full and part-time jobs and dollars of labor income per thousand visits by activity type. The response coefficients are useful in 1) understanding the economic effects tied to a given use level, and 2) understanding projected employment effects for various use scenarios (sensitivity analysis). The response coefficients displayed in Table 3.5.30 along with the visits presented in Table 3.5.29 were used to estimate the economic effects for local and nonlocal use by activity type.

Table 3.5.31 displays the estimated employment and labor income effects for current use levels reported by NVUM for nonmotorized and motorized activities by local and nonlocal users. In general, the estimated economic effects are a function of the number of visits and the dollars spent by the visitors. For example, nonlocal users typically spend more money per visit than local users. Also, activities that draw more users will be responsible for more economic activity in comparison to activities that draw fewer users, holding constant spending per visit.

Table 3.5.31 indicates that approximately 330 total jobs (direct, indirect and induced) and \$7.3 million total labor income (direct, indirect and induced) are attributable to nonmotorized use in the GNF SEA. The hiking and walking activity is responsible for the largest portion of the economic effects -- approximately 260 total jobs (79% of total jobs) and \$5.9 million total labor income (81% of the total labor income). (Recall, Table 3.5.29 indicated that approximately 83% of the nonmotorized use was related to the hiking / walking activity.).

Motorized activities were responsible for approximately 185 total jobs (direct, indirect and induced) and \$3.9 million total labor income (direct, indirect and induced) (Table 3.5.31). Snowmobiling accounted for approximately 110 total jobs (62% of the total) and \$2.5 million in total labor income (64% of the total). Driving for pleasure accounts for approximately 55 total jobs (30% of the total motorized employment) and \$1.1 million total labor income (27% of total labor income attributable to motorized activities). The remaining motorized activities account for less than ten percent of the economic activity.

To better understand the economic effects from an industry perspective employment and labor income response coefficients were derived in a NAICS 2-digit format for local and nonlocal motorized and nonmotorized activities (Table 3.5.32 and 3.5.33). These response coefficients are similar to the response coefficients presented in Table 3.5.29 earlier, with the following exceptions: Tables 3.5.32 and 3.5.33 are 1) disaggregated to reveal employment and labor income response by industry, and 2) based on a 100,000 visit basis rather than 1,000 visits to better display small effects that may not appear at the lower visit level.

Tables 3.5.32 and 3.5.33 display the 2-digit NAICS response coefficients (direct as well as indirect and induced) for nonmotorized and motorized activities by local and nonlocal users. There are several common patterns that are displayed by the employment and labor income response coefficients. First, nonlocal activities have an overall larger economic impact on the economy of the GNF SEA. This was also displayed by the aggregate response coefficients presented in Table 3.5.30. Second, the response coefficients indicate that the industries most affected by the spending of motorized and nonmotorized users are 1) accommodation and food services (e.g., hotels and restaurants), 2) retail trade (e.g., merchandise stores), and 3) government (e.g., admission and camping fees). Third, for nonlocal activities that require lodging (e.g., cross-country skiing and snowmobiling versus backpacking) the overall economic impacts are larger and concentrated in the accommodations and food services industry (considered part of the service industry). Fourth, nonmotorized and motorized activities tend to have similar economic impacts with only slight variation. From the standpoint of the overall effect on the economy, the economic impacts attributable to motorized and nonmotorized activities occur in sectors of the economy that are major employers (services and retail trade) and that are experiencing positive employment and labor income growth in the three county area (see Tables 3.5.12-3.5.17 and 3.5.21-3.5.26 for general economic trends).

Direct and Indirect Effects of Travel Management

Comparison of Alternatives

Economic effects (e.g., employment and labor income) of an alternative are predictable when recreation visitation and visitation changes by alternative is known. Recreation visitation is available only for the current situation, Alternatives 1 and 2 as described previously. The expenditure data indicates that non-local National Forest visitors spend more per visit to the National Forest than do local users. Because of the larger expenditure and the level of non-local recreation visitation, the non-local visitor is responsible for more of the economic effects than the local visitor (Table 3.5.30). However, it is difficult to predict at what point non-local visitation will increase or decrease to the Forest based on any one of the seven alternatives. With the continued

population growth in the area it is likely that local and non-local visitation will increase to the Gallatin National Forest.

Table 3.5.29 shows the number of visits and expenditures per visit for the recreation activities that can clearly be categorized as motorized or non-motorized uses. These activities account for approximately 40% of all current recreation visitation on the Gallatin National Forest (Table 3.5.28). The economic activities related to the motorized and non-motorized recreation visitation to the Gallatin National Forest account for less than 1% of the total employment and labor income of the three county area. Even though it is difficult to predict changes in visitation by alternative, it is possible to estimate the potential economic effects of an increase or decrease in visitation without knowing the exact amount of visitation that would occur for an alternative.

Utilizing the employment and labor income response coefficients in Table 3.5.30 one can estimate the economic effects attributable to an increase (or decrease) of 1,000 visits to the National Forest by nonmotorized and motorized visitors. For example, if there were an increase of 10,000 of hiking and walking visits, there would be approximately 12 total jobs (direct plus multiplier effects) and \$257,000 of total labor income (direct plus multiplier effect) attributable to non-local hiking / walking visitation. The economic effects attributable to local hiking and walking visitation are approximately 3 total jobs and \$65,000 of total labor income. A decrease of the same number of hiking/walking visits would result in a decrease in the same number of jobs and labor income. If there were an increase of 10,000 of non-local snowmobiling visits, there would also be approximately 12 total jobs (direct plus multiplier effects) and \$266,000 of total labor income (direct plus multiplier effect) attributable to non-local snowmobiling visitation. The economic effects attributable to an additional 10,000 local snowmobiling visitations are approximately 7 total jobs and \$148,000 of total labor income. A decrease of the same number of snowmobiling visits would result in a decrease in the same number of jobs and labor income.

Tables 3.5.32 and 3.5.33 display the response coefficients by NAICS industry for each of the motorized and nonmotorized activities. The non-local and local hiking / walking and snowmobiling response coefficients displayed in Table 3.5.32 indicate that the majority of the employment and labor income effects would be in the accommodation and food services and retail trade sectors of the economy. Tables 3.5.32 and 3.5.33 indicate that accommodation and food services and retail trade industries are typically the industries affected by expenditures by all of the nonmotorized and motorized activities. In general, visitation, expenditures and the total economic effect differ by activity, but the economic effects tend to be concentrated in these industries.

When compared to the total economic activity in 2003 in the three county area of 67,000 jobs and \$1.8 billion labor income (Tables 3.5.12 -3.5.17 and Tables 3.5.21-3.5.26), the total jobs and labor income related to motorized and non-motorized use on the Forest is minor and increase or decreases in uses of 10,000 visits is relatively small. These kinds of shifts in a small community like West Yellowstone or Cooke City can be felt, however.

Monitoring information from snowmobile counters in the West Yellowstone area provide a picture of a general increase in use from 1980 until approximately 2000. Counter data shows an increase of 40,000 passes in 1980 to 110,000 passes in 2000. During that time there were variations from year to year of as much as 20,000 passes (these do not equate to a single visit because a snowmobile

could pass through more than one counter on a visit). Since 2000 there have been variations in our monitoring data, generally caused by weather and by the uncertainty caused by Yellowstone National Park snowmobile policies and the effect they have had on non-local visitors. Forest Service monitoring data from 2004 shows that only 70,000 passes were recorded which indicates a large variation in snowmobile visits in the last five years although the trend has been upward. During this time the management of the snowmobile areas and trails around West Yellowstone has not changed. There have been no closures of areas and, in fact, trail grooming has increased. Monitoring information from Cooke City has not been completed, but it appears that the decreases of snowmobile visits seen in West Yellowstone have not occurred in Cooke City.

None of the Travel Plan Alternatives except Alternative 6, which was not incorporated into Alternative 7-M, significantly changes the management of snowmobiling around the communities of Cooke City and West Yellowstone. Therefore future variations in snowmobile use and the related economic effects in these two heavily used areas would likely be caused by factors outside of the Travel Plan decisions.

The alternatives for the Travel Plan differ in the areas open or closed to motorized use in the winter and miles of road and trail open or closed to motorized and non-motorized summer uses. The economic question stated at the beginning of ISSUE 5: is whether any of these differences is large enough or significant enough to cause economic changes in the area. The analysis shows that the approximately 1.9 million local and non-local visits to the Gallatin National Forest in 2003 have employment and labor income effects of less than 2% of the total employment and labor income in Gallatin, Park, and Sweet Grass Counties.

It is difficult to predict at what point recreationists would change their activities, and there is little evidence to suggest that changes in road, trail, and area closures on various parts of the National Forest will cause recreationists to reduce their visitation or choose not to use the National Forest for that activity. Continued increasing demand for wildland recreation and continued population growth in the area will lead to more recreation visitation on the Gallatin National Forest and it is likely the area will not experience significant economic effects from the Alternative 7-M.

Cumulative Effects

The economy can be affected by a variety of factors including population growth, changes in interest rates, location of new magnet industries, recession, growth of new sectors, tax policy, State economic policy, etc. When compared to these kinds of variables, the management of travel and recreation on the National Forest has a relatively small effect. Most of the area of southwest Montana and the Greater Yellowstone area outside Gallatin, Park, and Sweet Grass counties is also in an economic growth pattern and activities in the larger area will likely affect the Gallatin SEA positively. Because the decisions of the Travel Plan will have little direct and indirect effects on the Gallatin SEA, there should be no cumulative effects.

Consistency with Laws, Regulations, Policy, and Other Direction

There are no laws or regulations which give direction to the National Forests to manage for the economic benefit of the local areas, though Forest Service policy recognizes that in some instances

management decisions can have economic effects. There is no other direction that the Gallatin National Forest has, such as local economic development plans, to manage for the economic benefit of local communities.

Tables

Table 3.5.1: Population Density of the GNF SEA

	1990 Census Year			2000 Census Year		2025 Projected	
	Area Sq Mi	Population	Density Pop/Sq Mi	Population	Density Pop/Sq Mi	Population	Density Pop/Sq Mi
Montana	145,552	799,065	5	902,195	6	1,148,162	8
Gallatin Co	2,605	50,463	19	67,831	26	97,743	38
Park Co	2,802	14,562	5	15,694	6	19,894	7
Sweet Grass Co	1,855	3,154	2	3,609	2	4,371	2

Source: U.S. Dept. of Commerce Census 2000, Census 1990

Table 3.5.2: Residency Characteristics for the Percent of the Population 5 Years and older for the GNF SEA

	Gallatin Co		Park Co		Sweet Grass Co	
	1995	1985	1995	1985	1995	1985
% Population 5 years and over						
same house	40.8%	39.2%	51.9%	47.3%	55.3%	61.0%
same county, different house	24.3%	23.3%	22.1%	20.1%	17.0%	22.4%
different state	20.3%	17.6%	15.4%	22.5%	14.6%	6.8%
living abroad	1.4%	1.3%	1.3%	1.6%	1.0%	0.2%

Source: U.S. Dept. of Commerce, Census 2000, Census 1990

Table 3.5.3: Housing Unit Numbers in the GNF SEA

	Gallatin Co		Park Co		Sweet Grass Co	
	2000	1990	2000	1990	2000	1990
Total # housing units	29,489	21,350	8,247	6,926	1,860	1,639
occupied housing units	26,323	19,015	6,828	5,619	1,476	1,281
owner occupied	16,434	11,125	4,536	3,724	1,093	924
renter occupied	9,889	7,890	2,292	1,895	383	357
vacant	3,166	2,335	1,419	1,307	384	358
seasonal, recreational, or occasional use	1,723	1,286	793	740	202	170

Source: U.S. Dept. of Commerce, Census 2000, Census 1990

Table 3.5.4: Gender Composition of the Counties of GNF SEA, Census 2000

	# of Males	% of Total Population, Male	# of Females	% of Total Population, Female
Montana	452,715	50%	449,480	50%
GNF SEA	42,315	48.6%	44,819	51.4%
Gallatin Co	32,557	48%	35,274	52%
Park Co	7949	51%	7745	49%
Sweet Grass Co	1809	50%	1800	50%

Source: U.S. Dept. of Commerce, Census 2000

Table 3.5.5: Age of Population of the Counties for the GNF SEA, Census 2000

Age (yrs)	Gallatin Co		Park Co		Sweet Grass Co	
	Population	% of Population	Population	% of Population	Population	% of Population
0 to 19	18,294	27.0%	4,039	25.7%	995	27.6%
20 to 44	29,814	44.0%	5,059	32.2%	1,026	28.4%
45 to 64	13,953	20.6%	4,260	27.1%	953	26.4%
65 to 84	5,067	7.5%	2,032	12.9%	523	14.5%
85 and over	703	1.0%	304	1.9%	112	3.1%

Source: U.S. Dept. of Commerce, Census 2000

Table 3.5.6: Racial Diversity for the GNF SEA, Census 2000

	White	Black or African American	American Indian, Alaskan Native	Asian, Native Hawaiian, Other Pacific Islander	Some other race	Hispanic or Latino (of any race)
Montana						
Population	817,229	2,692	56,068	5,161	21,045	18,081
Percent of Total Population	90.6%	0.3%	6.2%	0.6%	2.3%	2.0%
Gallatin Co						
Population	65,251	156	598	649	1,177	1,047
Percent of Total Population	96.2%	0.2%	0.9%	1.0%	1.7%	1.5%
Park Co						
Population	15,168	63	145	61	257	288
Percent of Total Population	96.6%	0.4%	0.9%	0.4%	1.6%	1.8%
Sweet Grass						
Population	3,500	2	20	13	74	54
Percent of Total Population	97.0%	0.1%	0.6%	0.4%	2.1%	1.5%

Source: U.S. Dept. of Commerce, Census 2000

Table 3.5.7: Family Poverty Levels for the GNF SEA

		Census Year 2000				Census Year 1990	
		Total	Pct of Total	Net Pop Change 1990-2000	Net Pct Change 1990-2000	Total	Pct of Total
Montana	Number of families	238,733	--	25,108		213,625	--
	Above poverty level	213,729	89.5%	25,795	1.6%	187,934	88.0%
	Below poverty level	25,004	10.5%	-687	-1.6%	25,691	12.0%
Gallatin Co	Number of families	16,344	--	3,875		12,469	--
	Above poverty level	15,318	93.7%	4,085	3.6%	11,233	90.1%
	Below poverty level	1,026	6.3%	-210	-3.6%	1,236	9.9%
Park Co	Number of families	4,220	--	418	0.0%	3,802	--
	Above poverty level	3,916	92.8%	571	4.8%	3,345	88.0%
	Below poverty level	304	7.2%	-153	-4.8%	457	12.0%
Sweet Grass Co	Number of families	997	--	130		867	--
	Above poverty level	907	91.0%	88	-3.5%	819	94.5%
	Below poverty level	90	9.0%	42	3.5%	48	5.5%

Source: U.S. Dept. of Commerce, Census 2000, Census 1990

Table 3.5.8: Farm Statistics for the GNF SEA

	Gallatin Co			Park Co			Sweet Grass Co		
	1992	2002	% change 1992-2000	1992	2002	% change 1992-2000	1992	2002	% change 1992-2000
# of Farms	789	1,074	36.1%	358	527	47.2%	295	357	21.0%
Land in Farms (acres)	699,409	708,728	1.3%	777,803	847,067	8.9%	837,904	867,058	3.5%
average size of farm (acres)	886	660	-25.5%	2,020	1,607	-20.4%	2,840	2,429	-14.5%

Source: USDA National Agricultural Statistics Service, 2002 Census of Agriculture, 1992 Census of Agriculture

Table 3.5.9: Employment by Type, Gallatin County

GALLATIN COUNTY Employment by Type Changes from 1973 to 2003							New Employ (73-03)	% New Employ	New Employ (93-03)	% New Employ
	1973	% of Total	1993	% of Total	2003	% of Total				
Total full-time and part-time employment	16,333		37,147		56,416		40,083		19,269	
Wage and salary employment	13,211	80.9%	27,809	74.9%	41,462	73.5%	28,251	70.5%	13,653	70.9%
Proprietors employment	3,122	19.1%	9,338	25.1%	14,954	26.5%	11,832	29.5%	5,616	29.1%
Farm proprietors employment	726	4.4%	839	2.3%	959	1.7%	233	0.6%	120	0.6%
Nonfarm proprietors employment	2,396	14.7%	8,499	22.9%	13,995	24.8%	11,599	28.9%	5,496	28.5%

Table 3.5.10: Employment by Type, Park County

PARK COUNTY							New	%	New	%
Employment by Type							Employ	New	Employ	New
Changes from 1973 to 2003							(73-03)	Employ	(93-03)	Employ
	1973	% of Total	1993	% of Total	2003	% of Total				
Total full-time and part-time employment	5,337		7,998		8,977		3,640		979	
Wage and salary employment	4,053	75.9%	5,533	69.2%	5,680	63.3%	1,627	44.7%	147	15.0%
Proprietors employment	1,284	24.1%	2,465	30.8%	3,297	36.7%	2,013	55.3%	832	85.0%
Farm proprietors employment	370	6.9%	399	5.0%	462	5.1%	92	2.5%	63	6.4%
Nonfarm proprietors employment	914	17.1%	2,066	25.8%	2,835	31.6%	1,921	52.8%	769	78.5%

Table 3.5.11: Employment by Type, Sweet Grass County

SWEET GRASS COUNTY							New	%	New	%
Employment by Type							Employ	New	Employ	New
Changes from 1973 to 2003							(73-03)	Employ	(93-03)	Employ
	1973	% of Total	1993	% of Total	2003	% of Total				
Total full-time and part-time employment	1,462		1,912		2,420		958		508	
Wage and salary employment	924	63.2%	1,091	57.1%	1,354	56.0%	430	44.9%	263	51.8%
Proprietors employment	538	36.8%	821	42.9%	1,066	44.0%	528	55.1%	245	48.2%
Farm proprietors employment	267	18.3%	320	16.7%	344	14.2%	77	8.0%	24	4.7%
Nonfarm proprietors employment	271	18.5%	501	26.2%	722	29.8%	451	47.1%	221	43.5%

Table 3.5.12: Gallatin County Employment by Industry (SIC), 1970, 1980, 1990, 2000

GALLATIN COUNTY								
Employment by Industry (SIC-based)								
1970 to 2000								
	1970		1980		1990		2000	
Total Employment	13,396		21,797		31,978		51,586	
Farm employment	1,212		1,075		1,128		1,193	
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm employment	12,184	100.0%	20,722	100.0%	30,850	100.0%	50,393	100.0%
Private	8,265	67.8%	14,627	70.6%	23,681	76.8%	41,886	83.1%
Ag services	106	0.9%	172	0.8%	370	1.2%	882	1.8%
Mining	30	0.2%	105	0.5%	174	0.6%	173	0.3%
Construction	656	5.4%	1,227	5.9%	1,805	5.9%	4,801	9.5%
Manufacturing	1,002	8.2%	1,328	6.4%	2,030	6.6%	3,164	6.3%
Transportation & public utility	420	3.4%	772	3.7%	1,025	3.3%	1,519	3.0%
Wholesale trade	247	2.0%	555	2.7%	1,101	3.6%	1,692	3.4%
Retail trade	2,394	19.6%	4,355	21.0%	6,334	20.5%	10,733	21.3%
FIRE	812	6.7%	1,622	7.8%	2,315	7.5%	3,562	7.1%
Services	2,598	21.3%	4,491	21.7%	8,527	27.6%	15,360	30.5%
Gov't & gov't enterprises	3,919	32.2%	6,095	29.4%	7,169	23.2%	8,507	16.9%
Federal, civilian	454	3.7%	567	2.7%	610	2.0%	580	1.2%
Military	293	2.4%	279	1.3%	404	1.3%	374	0.7%
State & local	3,172	26.0%	5,249	25.3%	6,155	20.0%	7,553	15.0%

Table 3.5.13: Gallatin County Employment by Industry (NAICS), 2001 - 2003

GALLATIN COUNTY						
Employment by Industry (NAICS-based)						
2001-2003						
	2001		2002		2003	
Total Employment	53,959		54,708		56,416	
Farm employment	1,170		1,194		1,167	
		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm employment	52,789	100.0%	53,514	100.0%	55,249	100.0%
Private	44,079	83.5%	45,381	84.8%	46,985	85.0%
Forestry, fishing, related act.	485	0.9%	551	1.0%	586	1.1%
Mining	176	0.3%	138	0.3%	112	0.2%
Utilities	(D)	N/A	71	0.1%	67	0.1%
Construction	5,249	9.9%	5,515	10.3%	6,184	11.2%
Manufacturing	2,984	5.7%	2,704	5.1%	2,625	4.8%
Wholesale trade	1,371	2.6%	1,383	2.6%	1,350	2.4%
Retail trade	7,235	13.7%	7,449	13.9%	7,574	13.7%
Transportation & warehousing	(D)	N/A	1,024	1.9%	1,056	1.9%
Information	693	1.3%	668	1.2%	653	1.2%
Finance & insurance	1,478	2.8%	1,565	2.9%	1,679	3.0%
Real estate	2,661	5.0%	2,756	5.2%	2,881	5.2%
Professional & tech services (S)	4,020	7.6%	4,055	7.6%	4,197	7.6%
Management of companies (S)	35	0.1%	37	0.1%	43	0.1%
Admin & waste services (S)	1,626	3.1%	1,720	3.2%	1,816	3.3%
Educational services (S)	650	1.2%	664	1.2%	709	1.3%
Health care (S)	3,856	7.3%	4,010	7.5%	4,034	7.3%
Arts, entertainment & rec. (S)	2,046	3.9%	2,149	4.0%	2,169	3.9%
Accommodation & food services (S)	5,721	10.8%	5,992	11.2%	6,153	11.1%
Other services (S)	2,746	5.2%	2,930	5.5%	3,097	5.6%
Gov't & gov't enterprises	8,710	16.5%	8,133	15.2%	8,264	15.0%
Federal, civilian	568	1.1%	607	1.1%	645	1.2%
Military	391	0.7%	402	0.8%	406	0.7%
State & local	7,751	14.7%	7,124	13.3%	7,213	13.1%

Table 3.5.14: Park County Employment by Industry (SIC), 1970, 1980, 1990, 2000

PARK COUNTY									
Employment by Industry (SIC-based)									
1970 to 2000									
	1970		1980		1990		2000		
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm	
Total Employment	4,692		6,301		6,654		8,832		
Farm employment	630		523		505		594		
Nonfarm employment	4,062	100.0%	5,778	100.0%	6,149	100.0%	8,238	100.0%	
Private	3,507	86.3%	5,107	88.4%	5,400	87.8%	7,415	90.0%	
Ag services	47	1.2%	70	1.2%	128	2.1%	224	2.7%	
Mining	(L)	N/A	14	0.2%	126	2.0%	30	0.4%	
Construction	156	3.8%	294	5.1%	382	6.2%	739	9.0%	
Manufacturing	295	7.3%	415	7.2%	350	5.7%	453	5.5%	
Transportation & public utility	744	18.3%	1,371	23.7%	322	5.2%	357	4.3%	
Wholesale trade	37	0.9%	55	1.0%	134	2.2%	208	2.5%	
Retail trade	872	21.5%	1,060	18.3%	1,249	20.3%	1,823	22.1%	
FIRE	357	8.8%	405	7.0%	462	7.5%	598	7.3%	
Services	998	24.6%	1,423	24.6%	2,247	36.5%	2,983	36.2%	
Gov't & gov't enterprises	555	13.7%	671	11.6%	749	12.2%	823	10.0%	
Federal, civilian	72	1.8%	80	1.4%	89	1.4%	99	1.2%	
Military	87	2.1%	77	1.3%	113	1.8%	82	1.0%	
State & local	396	9.7%	514	8.9%	547	8.9%	642	7.8%	

Table 3.5.15: Park County Employment by Industry (NAICS), 2001 - 2003

PARK COUNTY							
Employment by Industry (NAICS-based)							
2001-2003							
	2001		2002		2003		
Total Employment	8,722		8,968		8,977		
Farm employment	582		594		579		
		% total of nonfarm		% total of nonfarm		% total of nonfarm	
Nonfarm employment	8,140	100.0%	8,374	100.0%	8,398	100.0%	
Private	7,316	89.9%	7,536	90.0%	7,544	89.8%	
Forestry, fishing, related act.	161	2.0%	183	2.2%	192	2.3%	
Mining	15	0.2%	15	0.2%	13	0.2%	
Utilities	52	0.6%	51	0.6%	45	0.5%	
Construction	834	10.2%	843	10.1%	828	9.9%	
Manufacturing	392	4.8%	403	4.8%	412	4.9%	
Wholesale trade	106	1.3%	94	1.1%	68	0.8%	
Retail trade	1,091	13.4%	1,131	13.5%	1,117	13.3%	
Transportation & warehousing	217	2.7%	165	2.0%	156	1.9%	
Information	138	1.7%	141	1.7%	136	1.6%	
Finance & insurance	301	3.7%	307	3.7%	316	3.8%	
Real estate	363	4.5%	374	4.5%	394	4.7%	
Professional & tech. services							
(S)	414	5.1%	407	4.9%	421	5.0%	
Management of companies (S)	(D)	N/A	(D)	N/A	(D)	N/A	
Admin & waste services (S)	(D)	N/A	(D)	N/A	(D)	N/A	
Educational services (S)	113	1.4%	110	1.3%	114	1.4%	
Health care (S)	734	9.0%	801	9.6%	781	9.3%	
Arts, entertainment & rec. (S)	326	4.0%	343	4.1%	374	4.5%	
Accommodation & food services (S)	1,281	15.7%	1,320	15.8%	1,274	15.2%	
Other services (S)	594	7.3%	645	7.7%	659	7.8%	
Gov't & gov't enterprises	824	10.1%	838	10.0%	854	10.2%	
Federal, civilian	89	1.1%	93	1.1%	88	1.0%	
Military	83	1.0%	85	1.0%	83	1.0%	
State & local	652	8.0%	660	7.9%	683	8.1%	

Table 3.5.16: Sweet Grass County Employment by Industry (SIC), 1970, 1980, 1990, 2000

SWEET GRASS COUNTY								
Employment by Industry (SIC-based)								
1970 to 2000								
	1970		1980		1990		2000	
Total Employment	1,368		1,500		1,765		2,175	
Farm employment	473		413		431		482	
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm employment	895	100.0%	1,087	100.0%	1,334	100.0%	1,693	100.0%
Private	685	76.5%	808	74.3%	1,052	78.9%	1,361	80.4%
Ag services	11	1.2%	30		64	4.8%	(D)	
Mining	0	0.0%	0	0.0%	(L)	N/A	(L)	N/A
Construction	53	5.9%	93	8.6%	101	7.6%	227	13.4%
Manufacturing	22	2.5%	28	2.6%	55	4.1%	81	4.8%
Wholesale trade	46	5.1%	25	2.3%		3.1%	(D)	N/A
Retail trade	(L)	N/A	25	2.3%	24	1.8%	59	3.5%
FIRE	255	28.5%		30.1%	337	25.3%	367	21.7%
Services	67	7.5%	56	5.2%	109	8.2%	102	6.0%
Gov't & gov't enterprises		24.9%	224	20.6%	317	23.8%		21.4%
Federal, civilian	210	23.5%	279	25.7%	282	21.1%	332	19.6%
Military	25	2.8%	25	2.3%	39	2.9%	40	2.4%
State & local	23	2.6%	19	1.7%	24	1.8%	19	1.1%
	162		235	21.6%	219	16.4%	273	16.1%

Table 3.5.17: Sweet Grass County Employment by Industry (NAICS), 2001 - 2003

SWEET GRASS COUNTY						
Employment by Industry (NAICS-based)						
2001-2003						
	2001		2002		2003	
Total Employment	2,374		2,351		2,420	
Farm employment	470		479		463	
		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm employment	1,904	100.0%	1,872	100.0%	1,957	100.0%
Private	1,528	80.3%	1,478	79.0%	1,561	79.8%
Forestry, fishing, related act.	(D)	N/A	(D)	N/A	(D)	N/A
Mining	(D)	N/A	(D)	N/A	(D)	N/A
Utilities	(D)	N/A	(D)	N/A	(D)	N/A
Construction	319	16.8%	231	12.3%	230	11.8%
Manufacturing	87	4.6%	80	4.3%	74	3.8%
Wholesale trade	45	2.4%	41	2.2%	35	1.8%
Retail trade	271	14.2%	264	14.1%	287	14.7%
Transportation & warehousing	(D)	N/A	(D)	N/A	(D)	N/A
Information	18	0.9%	20	1.1%	23	1.2%
Finance & insurance	33	1.7%	38	2.0%	36	1.8%
Real estate	93	4.9%	96	5.1%	101	5.2%
Professional & tech. services	103	5.4%	102	5.4%	100	5.1%
Management of companies	0	0.0%	0	0.0%	0	0.0%
Admin & waste services	39	2.0%	46	2.5%	(D)	N/A
Educational services	(L)	N/A	(L)	N/A	(L)	N/A
Health care	46	2.4%	43	2.3%	47	2.4%
Arts, entertainment & rec.	64	3.4%	64	3.4%	78	4.0%
Accommodation & food services	137	7.2%	148	7.9%	174	8.9%
Other services	139	7.3%	153	8.2%	152	7.8%
Gov't & gov't enterprises	376	19.7%	394	21.0%	396	20.2%
Federal, civilian	38	2.0%	38	2.0%	40	2.0%
Military	19	1.0%	19	1.0%	19	1.0%
State & local	319	16.8%	337	18.0%	337	17.2%

Table 3.5.18: Sources of Personal Income, Gallatin County, 1973-2003

GALLATIN COUNTY Sources of Income (Thousands of 2003 dollars) Changes from 1973 to 2003							New	%	New	%
	1973	% of Total	1993	% of Total	2003	% of Total	Income	New	Income	New
							(73-03)	Income	(93-03)	Income
Total Personal Income	512,594	100%	1,198,416	100%	1,995,343	100%	1,482,749	100%	796,927	100%
Labor Sources	380,488	74%	792,409	66%	1,421,526	71%	1,041,038	70%	629,117	79%
Non-Labor Sources	132,106	26%	406,006	34%	573,817	29%	441,711	30%	167,811	21%
Dividends, Interest, and Rent	90,402	18%	273,983	23%	383,102	19%	292,700	20%	109,119	14%
Transfer Payments	41,704	8%	132,023	11%	190,715	10%	149,011	10%	58,692	7%

Table 3.5.19: Sources of Personal Income, Park County, 1973-2003

PARK COUNTY Sources of Income (Thousands of 2003 dollars) Changes from 1973 to 2003							New	%	New	%
	1973	% of Total	1993	% of Total	2003	% of Total	Income	New	Income	New
							(73-03)	Income	(93-03)	Income
Total Personal Income	183,567	100%	286,088	100%	361,457	100%	177,890	100%	75,369	100%
Labor Sources	126,675	69%	158,267	55%	213,666	59%	86,991	49%	55,399	74%
Non-Labor Sources	56,892	31%	127,821	45%	147,791	41%	90,899	51%	19,970	26%
Dividends, Interest, and Rent	36,802	20%	70,379	25%	81,363	23%	44,561	25%	10,984	15%
Transfer Payments	20,090	11%	57,442	20%	66,428	18%	46,338	26%	8,986	12%

Table 3.5.20: Sources of Personal Income, Sweet Grass County, 1973-2003

SWEET GRASS COUNTY														
Sources of Income (Thousands of 2003 dollars)							New		%		New		%	
Changes from 1973 to 2003							Income		New		Income		New	
	1973	% of Total	1993	% of Total	2003	% of Total	(73-03)	Income	(93-03)	Income	(73-03)	Income	(93-03)	Income
Total Personal Income	56,140	100%	69,310	99%	79,692	100%	23,552	100%	10,382	104%	23,552	100%	10,382	104%
Labor Sources	36,802	66%	33,919	49%	37,873	48%	1,071	5%	3,954	38%	1,071	5%	3,954	38%
Non-Labor Sources	19,338	34%	34,929	50%	41,819	52%	22,481	95%	6,890	66%	22,481	95%	6,890	66%
Dividends, Interest, and Rent	13,897	25%	24,133	35%	28,662	36%	14,765	63%	4,529	44%	14,765	63%	4,529	44%
Transfer Payments	5,441	10%	10,796	16%	13,157	17%	7,716	33%	2,361	23%	7,716	33%	2,361	23%

Table 3.5.21: Gallatin County Earnings by Industry (SIC), 1970, 1980, 1990, 2000

GALLATIN COUNTY								
Earnings (Thousands of 2003 \$) by Industry								
(SIC-based)								
1970 to 2000								
	1970		1980		1990		2000	
Farm & Nonfarm earnings	311,442		509,298		716,691		1,365,988	
Farm earnings	32,150		16,978		19,576		8,930	
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm earnings	279,292	100.0%	492,319	100.0%	697,115	100.0%	1,357,058	100.0%
Private	185,415	66.4%	337,191	68.5%	511,451	73.4%	1,074,471	79.2%
Ag services	1,474	0.5%	3,000	0.6%	6,006	0.9%	14,129	1.0%
Mining	677	0.2%	6,822	1.4%	6,862	1.0%	4,569	0.3%
Construction	25,082	9.0%	42,488	8.6%	58,053	8.3%	155,177	11.4%
Manufacturing	28,250	10.1%	44,539	9.0%	59,881	8.6%	136,779	10.1%
Transportation & public utility	13,888	5.0%	24,729	5.0%	35,782	5.1%	50,451	3.7%
Wholesale trade	9,427	3.4%	18,990	3.9%	39,169	5.6%	60,814	4.5%
Retail trade	49,803	17.8%	83,054	16.9%	106,541	15.3%	191,020	14.1%
FIRE	12,568	4.5%	26,739	5.4%	27,742	4.0%	93,324	6.9%
Services	44,244	15.8%	86,831	17.6%	171,416	24.6%	368,209	27.1%
Gov't & gov't enterprises	93,878	33.6%	155,128	31.5%	185,664	26.6%	282,587	20.8%
Federal, civilian	5,018	1.8%	14,252	2.9%	24,833	3.6%	36,360	2.7%
Military	840	0.3%	1,684	0.3%	4,841	0.7%	7,067	0.5%
State & local	18,530	6.6%	63,180	12.8%	113,273	16.2%	223,157	16.4%

Table 3.5.22: Gallatin County Earnings by Industry (NAICS), 2001 - 2003

GALLATIN COUNTY						
Earnings (Thousands of 2003 \$) by Industry (NAICS-based)						
2001-2003						
	2001		2002		2003	
		% total of nonfarm		% total of nonfarm		% total of nonfarm
Farm & Nonfarm earnings	1,504,148		1,517,136		1,628,755	
Farm earnings	14,377		12,081		7,480	
Nonfarm earnings	1,489,771	100.0%	1,505,055	100.0%	1,621,275	100.0%
Private	1,192,624	80.1%	1,195,768	79.5%	1,291,839	79.7%
Forestry, fishing, related act.	12,767	0.9%	13,237	0.9%	13,936	0.9%
Mining	5,646	0.4%	4,428	0.3%	3,623	0.2%
Utilities	(D)	N/A	6,513	0.4%	6,700	0.4%
Construction	170,888	11.5%	171,173	11.4%	205,375	12.7%
Manufacturing	121,631	8.2%	108,640	7.2%	108,721	6.7%
Wholesale trade	53,718	3.6%	54,881	3.6%	55,491	3.4%
Retail trade	156,044	10.5%	169,400	11.3%	178,858	11.0%
Transportation & warehousing	(D)	N/A	28,979	1.9%	31,173	1.9%
Information	23,942	1.6%	25,258	1.7%	26,483	1.6%
Finance & insurance	51,217	3.4%	57,973	3.9%	63,249	3.9%
Real estate	117,738	7.9%	92,204	6.1%	107,598	6.6%
Professional & tech. services (S)	135,742	9.1%	135,912	9.0%	145,161	9.0%
Management of companies (S)	1,226	0.1%	1,002	0.1%	1,273	0.1%
Admin & waste services (S)	27,785	1.9%	29,788	2.0%	30,713	1.9%
Educational services (S)	7,523	0.5%	7,557	0.5%	7,625	0.5%
Health care (S)	101,452	6.8%	111,563	7.4%	121,065	7.5%
Arts, entertainment & rec. (S)	39,061	2.6%	40,110	2.7%	40,885	2.5%
Accommodation & food services (S)	88,520	5.9%	91,285	6.1%	93,459	5.8%
Other services (S)	43,888	2.9%	45,865	3.0%	50,451	3.1%
Gov't & gov't enterprises	297,146	19.9%	309,287	20.5%	329,436	20.3%
Federal, civilian	39,518	2.7%	41,819	2.8%	44,728	2.8%
Military	8,608	0.6%	10,330	0.7%	14,400	0.9%
State & local	249,019	16.7%	257,139	17.1%	270,308	16.7%

Table 3.5.23: Park County Earnings by Industry (SIC), 1970, 1980, 1990, 2000

PARK COUNTY									
Earnings (Thousands of 2003 \$) by Industry									
(SIC-based)									
1970 to 2000									
	1970		1980		1990		2000		
Farm & Nonfarm earnings	107,065		162,697		130,304		182,197		
Farm earnings	15,166		2,545		3,756		3,842		
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm	
Nonfarm earnings	91,899	100.0%	160,152	100.0%	126,548	100.0%	178,355	100.0%	
Private	79,119	86.1%	141,342	88.3%	105,011	83.0%	149,850	84.0%	
Ag services	493	0.5%	794	0.5%	1,218	1.0%	2,638	1.5%	
Mining (L)		N/A	1,180	0.7%	6,072	4.8%	1,380	0.8%	
Construction	4,677	5.1%	7,253	4.5%	8,698	6.9%	15,280	8.6%	
Manufacturing	6,282	6.8%	11,731	7.3%	9,080	7.2%	12,450	7.0%	
Transportation & public utility	31,268	34.0%	69,425	43.3%	13,270	10.5%	14,872	8.3%	
Wholesale trade	1,274	1.4%	1,773	1.1%	3,195	2.5%	4,645	2.6%	
Retail trade	14,000	15.2%	18,061	11.3%	19,619	15.5%	26,154	14.7%	
FIRE	4,677	5.1%	6,451	4.0%	5,264	4.2%	13,153	7.4%	
Services	16,375	17.8%	24,674	15.4%	38,594	30.5%	59,277	33.2%	
Gov't & gov't enterprises	12,780	13.9%	18,810	11.7%	21,537	17.0%	28,505	16.0%	
Federal, civilian	2,406	2.6%	3,325	2.1%	3,759	3.0%	5,497	3.1%	
Military	408	0.4%	616	0.4%	1,459	1.2%	1,293	0.7%	
State & local	9,966	10.8%	14,868	9.3%	16,320	12.9%	21,715	12.2%	

Table 3.5.24: Park County Earnings by Industry (NAICS), 2001 - 2003

PARK COUNTY						
Earnings (Thousands of 2003 \$) by Industry (NAICS-based)						
2001-2003						
	2001		2002		2003	
		% total of nonfarm		% total of nonfarm		% total of nonfarm
Farm & Nonfarm earnings	194,104		200,086		196,304	
Farm earnings	7,559		12,345		5,365	
Nonfarm earnings	186,545	100.0%	187,741	100.0%	190,939	100.0%
Private	157,892	84.6%	157,456	83.9%	158,888	83.2%
Forestry, fishing, related act.	3,249	1.7%	3,234	1.7%	3,194	1.7%
Mining	248	0.1%	238	0.1%	244	0.1%
Utilities	4,340	2.3%	3,741	2.0%	3,631	1.9%
Construction	18,212	9.8%	18,224	9.7%	17,485	9.2%
Manufacturing	12,122	6.5%	12,589	6.7%	13,101	6.9%
Wholesale trade	2,918	1.6%	2,820	1.5%	1,869	1.0%
Retail trade	21,211	11.4%	22,180	11.8%	21,751	11.4%
Transportation & warehousing	9,857	5.3%	8,087	4.3%	7,685	4.0%
Information	4,384	2.4%	4,010	2.1%	3,967	2.1%
Finance & insurance	8,735	4.7%	9,331	5.0%	9,568	5.0%
Real estate	9,819	5.3%	7,450	4.0%	8,844	4.6%
Professional & tech. services (S)	10,881	5.8%	9,941	5.3%	10,096	5.3%
Management of companies (S)	(D)	N/A	(D)	N/A	(D)	N/A
Admin & waste services (S)	(D)	N/A	(D)	N/A	(D)	N/A
Educational services (S)	1,602	0.9%	1,539	0.8%	1,688	0.9%
Health care (S)	19,005	10.2%	21,137	11.3%	21,414	11.2%
Arts, entertainment & rec. (S)	3,196	1.7%	3,448	1.8%	4,014	2.1%
Accommodation & food services (S)	16,777	9.0%	17,341	9.2%	17,321	9.1%
Other services (S)	8,426	4.5%	8,754	4.7%	8,451	4.4%
Gov't & gov't enterprises	28,653	15.4%	30,285	16.1%	32,051	16.8%
Federal, civilian	5,153	2.8%	5,205	2.8%	5,101	2.7%
Military	1,447	0.8%	1,854	1.0%	2,660	1.4%
State & local	22,053	11.8%	23,226	12.4%	24,290	12.7%

Table 3.5.25: Sweet Grass County Earnings by Industry (SIC), 1970, 1980, 1990, 2000

SWEET GRASS COUNTY								
Earnings (Thousands of 2003 \$) by Industry								
(SIC-based)								
1970 to 2000								
	1970		1980		1990		2000	
Farm & Nonfarm earnings	26,345		26,853		26,579		36,688	
Farm earnings	9,750		6,523		1,853		210	
		% total of nonfarm		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm earnings	16,594	100.0%	20,329	100.0%	24,726	100.0%	36,478	100.0%
Private	12,356	74.5%	14,553	71.6%	17,555	71.0%	27,495	75.4%
Ag services	(L)	N/A	400	2.0%	710	2.9%	(D)	N/A
Mining	(L)	N/A	284	1.4%	136	0.6%	280	0.8%
Construction	1,863	11.2%	2,233	11.0%	3,264	13.2%	5,653	15.5%
Manufacturing	227	1.4%	314	1.5%	834	3.4%	1,955	5.4%
Transportation & public utility	1,605	9.7%	937	4.6%	1,465	5.9%	(D)	N/A
Wholesale trade	304	1.8%	637	3.1%	412	1.7%	1,607	4.4%
Retail trade	4,415	26.6%	5,584	27.5%	5,820	23.5%	5,915	16.2%
FIRE	524	3.2%	1,100	5.4%	639	2.6%	2,551	7.0%
Services	3,222	19.4%	3,063	15.1%	4,274	17.3%	5,090	14.0%
Gov't & gov't enterprises	4,238	25.5%	5,776	28.4%	7,171	29.0%	8,983	24.6%
Federal, civilian	855	5.1%	910	4.5%	1,650	6.7%	2,082	5.7%
Military	(L)	N/A	153	0.8%	313	1.3%	300	0.8%
State & local	3,272	19.7%	4,714	23.2%	5,208	21.1%	6,601	18.1%

Table 3.5.26: Sweet Grass County Earnings by Industry (NAICS), 2001 - 2003

SWEET GRASS COUNTY						
Earnings (Thousands of 2003 \$) by Industry (NAICS-based)						
2001-2003						
	2001		2002		2003	
Farm & Nonfarm earnings	48,829		42,352		42,122	
Farm earnings	3,095		1,286		-1,351	
		% total of nonfarm		% total of nonfarm		% total of nonfarm
Nonfarm earnings	45,734	100.0%	41,065	100.0%	43,473	100.0%
Private	35,235	77.0%	30,027	73.1%	31,803	73.2%
Forestry, fishing, related act.	(D)	N/A	(D)	N/A	(D)	N/A
Mining	(D)	N/A	(D)	N/A	(D)	N/A
Utilities	(D)	N/A	(D)	N/A	(D)	N/A
Construction	10,246	22.4%	5,446	13.3%	5,764	13.3%
Manufacturing	3,080	6.7%	2,719	6.6%	2,594	6.0%
Wholesale trade	1,284	2.8%	1,105	2.7%	823	1.9%
Retail trade	5,297	11.6%	5,503	13.4%	5,684	13.1%
Transportation & warehousing	(D)	N/A	(D)	N/A	(D)	N/A
Information	182	0.4%	198	0.5%	244	0.6%
Finance & insurance	979	2.1%	938	2.3%	812	1.9%
Real estate	4,676	10.2%	3,630	8.8%	4,102	9.4%
Professional & tech. services (S)	2,097	4.6%	2,213	5.4%	2,174	5.0%
Management of companies (S)	0	0.0%	0	0.0%	0	0.0%
Admin & waste services (S)	432	0.9%	535	1.3%	(D)	N/A
Educational services (S)	62	0.1%	60	0.1%	63	0.1%
Health care (S)	477	1.0%	519	1.3%	577	1.3%
Arts, entertainment & rec. (S)	419	0.9%	442	1.1%	550	1.3%
Accommodation & food services (S)	1,631	3.6%	1,812	4.4%	2,053	4.7%
Other services (S)	1,346	2.9%	1,414	3.4%	1,388	3.2%
Gov't & gov't enterprises	10,499	23.0%	11,038	26.9%	11,670	26.8%
Federal, civilian	2,008	4.4%	1,924	4.7%	2,173	5.0%
Military	333	0.7%	421	1.0%	605	1.4%
State & local	8,157	17.8%	8,694	21.2%	8,892	20.5%

Table 3.5.27: Summary statistics for monthly unemployment rates for the GNF SEA

Place	Mean	Standard Deviation
Montana	4.6%	.8
Gallatin County	2.7%	.6
Park County	4.6%	1.3
Sweet Grass County	2.5%	.8

Table 3.5.28: Gallatin NF activity participation and primary activity

Activity	% Participation	% as Main Activity
Developed Camping	12.66	4.53
Primitive Camping	7.20	1.80
Backpacking	2.64	0.19
Resort Use	1.34	0.21
Picnicking	10.34	1.15
Viewing Natural Features	70.72	3.76
Visiting Historic Sites	4.55	0.30
Nature Center Activities	5.43	0.96
Nature Study	9.56	0.03
Relaxing	55.83	10.62
Fishing	12.67	6.63
Hunting	9.90	9.22
OHV Use	4.03	1.39
Driving for Pleasure	20.74	1.94
Snowmobiling	9.03	7.82
Motorized Water Activities	0.91	0.12
Other Motorized Activities	0.69	0.09
Hiking / Walking	57.64	29.10
Horseback Riding	2.37	1.17
Bicycling	2.52	1.44
Nonmotorized Water	5.74	3.18
Downhill Skiing	9.64	8.25
Cross-country Skiing	4.02	2.95
Other Nonmotorized	4.67	0.86
Gathering Forest Products	5.12	2.04
Viewing Wildlife	59.97	2.89
TOTAL		102.64

Note: The column of main activity may total more than 100% because some visitors chose more than one primary activity.

Source: National Visitor Use Monitoring Results, Gallatin NF, June 2004, page 14.

Table 3.5.29: Number of Visits and Expenditures by Activity Type

Activity	Use (Visits)		Expenditures (\$ per Visit)	
	Local	Nonlocal	Local	Nonlocal
Nonmotorized				
Horseback Riding	15,352	5,418	\$16.27	\$74.98
Backpacking	2,493	880	\$18.75	\$34.78
Hiking / Walking	381,831	134,764	\$16.27	\$74.98
Bicycling	18,895	6,669	\$16.27	\$74.98
Cross-country Skiing	38,708	13,662	\$24.55	\$108.70
Motorized				
OHV	18,239	6,437	\$22.97	\$75.51
Driving for Pleasure	25,455	8,984	\$22.97	\$75.51
Snowmobiling	102,609	36,215	\$38.92	\$77.41
Other Motorized	1,181	417	\$38.92	\$77.41

Table 3.5.30: Employment and Labor Income Response Coefficients by Activity Type

	Employment (Jobs / 1,000 Visits)		Labor Income (\$ / 1,000 Visits)	
	Direct Effects	Indirect & Induced Effects	Direct Effects	Indirect & Induced Effects
Nonmotorized Use				
Local Horseback Riding	0.2090	0.0523	\$4,976	\$1,540
Nonlocal Horseback Riding	0.9517	0.2665	\$19,668	\$6,073
Local Backpacking	0.2613	0.1045	\$5,568	\$1,779
Nonlocal Backpacking	0.4949	0.1523	\$11,490	\$3,682
Local Hiking / Walking	0.2090	0.0523	\$4,976	\$1,540
Nonlocal Hiking / Walking	0.9517	0.2665	\$19,668	\$6,073
Local Bicycling	0.2090	0.0523	\$4,976	\$1,540
Nonlocal Bicycling	0.9517	0.2665	\$19,668	\$6,073
Local Cross-country Skiing	0.3658	0.1045	\$8,200	\$2,547
Nonlocal Cross-country Skiing	1.1040	0.2665	\$22,345	\$6,933
Motorized Use				
Local OHV	0.3136	0.1045	\$6,026	\$2,094
Nonlocal OHV	0.9517	0.2665	\$19,842	\$6,121
Local Driving for Pleasure	0.3136	0.1045	\$6,026	\$2,094
Nonlocal Driving for Pleasure	0.9517	0.2665	\$19,842	\$6,121
Local Snowmobiling	0.5226	0.1568	\$11,404	\$3,439
Nonlocal Snowmobiling	0.9517	0.2665	\$20,323	\$6,285
Local Other Motorized Act.	0.5226	0.1568	\$11,404	\$3,439
Nonlocal Other Motorized Act.	0.9517	0.2665	\$20,323	\$6,285

Note: Dollars are in 2002 \$

Table 3.5.31: Estimated Employment and Labor Income Effects for Current Use Levels Reported by NVUM

	Employment (full & part-time jobs) Effects		Labor Income Effects	
	Direct	Indirect & Induced	Direct	Indirect & Induced
Nonmotorized Use				
Local Horseback Riding	3.2	.8	\$76,394	\$23,644
Nonlocal Horseback Riding	5.2	1.4	\$106,566	\$32,903
Local Backpacking	.7	.3	\$13,882	\$4,435
Nonlocal Backpacking	.4	.1	\$10,110	\$3,239
Local Hiking / Walking	79.8	20.0	\$1,900,066	\$588,059
Nonlocal Hiking / Walking	128.3	35.9	\$2,650,484	\$818,359
Local Bicycling	3.9	1.0	\$94,024	\$29,100
Nonlocal Bicycling	6.3	1.8	\$131,158	\$40,496
Local Cross-country Skiing	14.2	4.0	\$317,389	\$98,595
Nonlocal Cross-country Skiing	15.1	3.6	\$305,263	\$94,719
Total	257.1	69.0	\$5,605,337	\$1,733,549
Motorized Use				
Local OHV	5.7	1.9	\$109,898	\$38,193
Nonlocal OHV	6.1	1.7	\$127,726	\$39,399
Local Driving for Pleasure	32.2	10.7	\$618,274	\$214,869
Nonlocal Driving for Pleasure	8.6	2.4	\$178,265	\$54,988
Local Snowmobiling	53.6	16.1	\$1,170,116	\$352,842
Nonlocal Snowmobiling	34.5	9.7	\$736,001	\$227,623
Local Other Motorized Act.	0.4	0.1	\$7,116	\$2,473
Nonlocal Other Motorized Act.	0.4	0.1	\$8,270	\$2,551
Total	141.7	42.8	\$2,962,222	\$934,594

Note: Dollars are in 2002 \$

Table 3.5.32: Employment and Labor Income Response Coefficients by Two-Digit NAICS Industries for Nonmotorized Activities.

Nonmotorized Activities Employment Effects (Jobs per 100,000 Visits)												
Industry	Nonlocal Backpacking		Local Backpacking		Nonlocal Hiking / Walking		Local Hiking / Walking		Nonlocal Bicycling		Local Bicycling	
	Direct	Indirect & Induced	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced
Ag, Forestry, Fish & Hunting	0.2	0.9	0.1	0.5	0.3	1.6	0.1	0.4	0.3	1.6	0.1	0.4
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Utilities	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Construction	0.0	0.2	0.0	0.2	0.0	0.5	0.0	0.2	0.0	0.5	0.0	0.2
Manufacturing	1.6	0.5	1.0	0.3	2.7	0.8	0.7	0.2	2.7	0.8	0.7	0.2
Wholesale Trade	2.4	0.7	1.7	0.4	3.6	1.2	1.3	0.3	3.6	1.2	1.3	0.3
Transportation & Warehousing	2.1	0.7	0.4	0.4	1.9	1.1	0.3	0.3	1.9	1.1	0.3	0.3
Retail trade	9.8	2.2	5.6	1.0	15.9	3.7	4.1	0.9	15.9	3.7	4.1	0.9
Information	0.0	0.4	0.0	0.2	0.1	0.7	0.0	0.2	0.1	0.7	0.0	0.2
Finance & insurance	0.1	0.6	0.0	0.3	0.0	1.0	0.0	0.3	0.0	1.0	0.0	0.3
Real estate & rental	0.6	0.6	0.1	0.3	0.4	1.0	0.1	0.3	0.4	1.0	0.1	0.3
Professional- scientific & tech svcs	0.4	1.0	0.2	0.5	0.5	1.6	0.1	0.4	0.5	1.6	0.1	0.4
Management of companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative & waste services	0.4	0.5	0.0	0.2	0.3	0.8	0.0	0.2	0.3	0.8	0.0	0.2
Educational svcs	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
Health & social services	0.0	1.8	0.0	0.8	0.0	3.0	0.0	0.8	0.0	3.0	0.0	0.8
Arts- entertainment & recreation	2.7	0.7	1.0	0.4	4.0	1.2	0.9	0.3	4.0	1.2	0.9	0.3
Accommodation & food services	17.7	1.9	10.4	0.8	46.6	3.0	10.6	0.7	46.6	3.0	10.6	0.7
Other services	1.0	1.4	0.5	0.7	1.3	2.4	0.3	0.6	1.3	2.4	0.3	0.6
Government	11.8	0.2	4.9	0.1	16.1	0.3	4.7	0.1	16.1	0.3	4.7	0.1
Total	50.6	14.7	25.8	7.1	93.6	24.5	23.1	6.2	93.6	24.5	23.1	6.2

Nonmotorized Activities Employment Effects (Jobs per 100,000 Visits)									
Industry	Nonlocal Cross-country Skiing		Local Cross-country Skiing		Nonlocal Horseback Riding		Local Horseback Riding		
	Direct	Indirect & Induced	Direct	Induced	Direct	Induced	Direct	Induced	
Ag, Forestry, Fish & Hunting	0.3	1.8	0.1	0.8	0.3	1.6	0.1	0.4	
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Utilities	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	
Construction	0.0	0.6	0.0	0.2	0.0	0.5	0.0	0.2	
Manufacturing	2.8	1.0	1.3	0.4	2.7	0.8	0.7	0.2	
Wholesale Trade	3.6	1.4	1.5	0.5	3.6	1.2	1.3	0.3	
Transportation & Warehousing	1.9	1.3	0.4	0.5	1.9	1.1	0.3	0.3	
Retail trade	16.6	4.2	6.0	1.6	15.9	3.7	4.1	0.9	
Information	0.1	0.8	0.1	0.3	0.1	0.7	0.0	0.2	
Finance & insurance	0.0	1.1	0.0	0.4	0.0	1.0	0.0	0.3	
Real estate & rental	0.4	1.1	0.0	0.4	0.4	1.0	0.1	0.3	
Professional- scientific & tech svcs	0.5	1.9	0.1	0.7	0.5	1.6	0.1	0.4	
Management of companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Administrative & waste services	0.3	1.0	0.0	0.3	0.3	0.8	0.0	0.2	
Educational svcs	0.0	0.4	0.0	0.2	0.0	0.3	0.0	0.1	
Health & social services	0.0	3.4	0.0	1.3	0.0	3.0	0.0	0.8	
Arts- entertainment & recreation	5.1	1.4	3.1	0.6	4.0	1.2	0.9	0.3	
Accommodation & food services	61.5	3.4	16.6	1.2	46.6	3.0	10.6	0.7	
Other services	1.4	2.9	0.3	1.0	1.3	2.4	0.3	0.6	
Government	15.7	0.3	8.3	0.1	16.1	0.3	4.7	0.1	
Total	110.2	28.0	37.7	10.4	93.6	24.5	23.1	6.2	

Nonmotorized Activities Labor Income Effects (\$ per 100,000 Visits)												
Industry	Nonlocal Backpacking Indirect & Induced		Local Backpacking Indirect & Induced		Nonlocal Hiking / Walking Indirect & Induced		Local Hiking / Walking Indirect & Induced		Nonlocal Bicycling Indirect & Induced		Local Bicycling Indirect & Induced	
	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced
Ag, Forestry, Fish & Hunting	1,506	14,151	830	8,119	2,546	24,554	612	6,157	2,546	24,554	612	6,157
Mining	1	7	1	3	2	10	1	3	2	10	1	3
Utilities	0	6,778	0	3,437	0	11,927	0	3,008	0	11,927	0	3,008
Construction	0	7,325	0	3,620	0	13,106	0	3,200	0	13,106	0	3,200
Manufacturing	32,334	14,658	20,431	7,792	53,276	24,207	15,285	6,674	53,276	24,207	15,285	6,674
Wholesale Trade	90,840	28,114	63,975	14,999	138,980	47,036	49,906	12,827	138,980	47,036	49,906	12,827
Transportation & Warehousing	65,572	26,682	14,449	12,081	61,369	40,545	11,641	10,170	61,369	40,545	11,641	10,170
Retail trade	181,232	50,297	107,108	24,110	294,752	83,863	79,857	21,221	294,752	83,863	79,857	21,221
Information	741	12,415	436	6,176	1,373	20,472	403	5,342	1,373	20,472	403	5,342
Finance & insurance	3,260	22,101	161	10,678	2,252	36,768	162	9,297	2,252	36,768	162	9,297
Real estate & rental	9,288	22,721	473	11,199	6,921	37,719	506	9,698	6,921	37,719	506	9,698
Professional- scientific & tech svcs	8,023	33,827	4,034	15,651	10,494	53,347	2,430	13,396	10,494	53,347	2,430	13,396
Management of companies	0	1,314	0	711	0	2,170	0	570	0	2,170	0	570
Administrative & waste services	10,222	12,013	489	4,258	7,025	17,561	496	3,744	7,025	17,561	496	3,744
Educational svcs	0	2,428	0	1,177	0	4,112	0	1,042	0	4,112	0	1,042
Health & social services	0	55,414	0	26,839	0	93,961	0	23,781	0	93,961	0	23,781
Arts- entertainment & recreation	71,279	8,670	25,950	4,238	105,775	14,610	22,754	3,755	105,775	14,610	22,754	3,755
Accommodation & food services	211,980	23,439	123,769	10,702	650,902	37,701	132,349	9,415	650,902	37,701	132,349	9,415
Other services	19,254	19,770	9,680	9,507	25,178	33,642	5,829	8,365	25,178	33,642	5,829	8,365
Government	443,491	6,042	185,045	2,625	605,927	9,958	175,372	2,314	605,927	9,958	175,372	2,314
Total	1,149,023	368,165	556,830	177,921	1,966,773	607,268	497,601	153,977	1,966,773	607,268	497,601	153,977

Nonmotorized Activities Labor Income Effects (\$ per 100,000 Visits)								
Industry	Nonlocal Cross-country Skiing		Local Cross-country Skiing		Nonlocal Horseback Riding		Local Horseback Riding	
	Direct	Indirect & Induced	Direct	Induced	Direct	Induced	Direct	Induced
Ag, Forestry, Fish & Hunting	2,718	26,281	1,326	11,768	2,546	24,554	612	6,157
Mining	2	11	1	4	2	10	1	3
Utilities	0	14,018	0	5,111	0	11,927	0	3,008
Construction	0	15,697	0	5,682	0	13,106	0	3,200
Manufacturing	54,893	27,487	24,416	10,509	53,276	24,207	15,285	6,674
Wholesale Trade	140,753	53,326	57,920	20,731	138,980	47,036	49,906	12,827
Transportation & Warehousing	63,549	45,666	13,543	16,258	61,369	40,545	11,641	10,170
Retail trade	306,657	95,543	115,261	34,702	294,752	83,863	79,857	21,221
Information	1,653	23,605	669	8,724	1,373	20,472	403	5,342
Finance & insurance	2,359	42,117	76	15,384	2,252	36,768	162	9,297
Real estate & rental	7,517	43,549	262	16,377	6,921	37,719	506	9,698
Professional- scientific & tech svcs	11,515	61,149	2,643	21,915	10,494	53,347	2,430	13,396
Management of companies	0	2,404	0	873	0	2,170	0	570
Administrative & waste services	7,359	20,511	209	5,887	7,025	17,561	496	3,744
Educational svcs	0	4,677	0	1,715	0	4,112	0	1,042
Health & social services	0	106,871	0	39,185	0	93,961	0	23,781
Arts- entertainment & recreation	132,227	17,010	82,662	6,869	105,775	14,610	22,754	3,755
Accommodation & food services	884,877	42,954	202,749	15,316	650,902	37,701	132,349	9,415
Other services	27,630	38,727	6,339	9,283	25,178	33,642	5,829	8,365
Government	590,749	11,724	311,890	3,871	605,927	9,958	175,372	2,314
Total	2,234,459	693,327	819,967	250,163	1,966,773	607,268	497,601	153,977

Table 3.5.33: Employment and Labor Income Response Coefficients by Two-Digit NAICS Industries for Motorized Activities.

Motorized Activities Employment Effects (Jobs per 100,000 Visits)									
Industry	Nonlocal Snowmobiling Indirect & Induced		Local Snowmobiling Indirect & Induced		Nonlocal OHV Indirect & Induced		Local OHV Indirect & Induced		
	Direct	Induced	Direct	Induced	Direct	Induced	Direct	Induced	
Ag, Forestry, Fish & Hunting	0.3	1.7	0.1	0.7	0.3	1.6	0.1	0.6	
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Utilities	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	
Construction	0.0	0.5	0.0	0.3	0.0	0.5	0.0	0.2	
Manufacturing	2.8	0.9	1.5	0.6	2.7	0.9	1.1	0.4	
Wholesale Trade	3.8	1.3	3.7	0.7	3.6	1.2	2.0	0.5	
Transportation & Warehousing	1.9	1.2	0.7	0.7	1.9	1.2	0.4	0.4	
Retail trade	16.3	3.8	13.3	2.1	16.1	3.7	6.2	1.2	
Information	0.1	0.7	0.1	0.4	0.1	0.7	0.1	0.3	
Finance & insurance	0.0	1.0	0.0	0.6	0.0	1.0	0.0	0.4	
Real estate & rental	0.4	1.0	0.1	0.6	0.4	1.0	0.0	0.3	
Professional- scientific & tech svcs	0.5	1.7	0.4	0.9	0.5	1.6	0.2	0.6	
Management of companies	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
Administrative & waste services	0.3	0.8	0.1	0.4	0.3	0.8	0.0	0.3	
Educational svcs	0.0	0.3	0.0	0.2	0.0	0.3	0.0	0.1	
Health & social services	0.0	3.1	0.0	1.7	0.0	3.0	0.0	0.9	
Arts- entertainment & recreation	4.5	1.3	1.2	0.7	4.1	1.3	2.3	0.5	
Accommodation & food services	47.7	3.1	20.1	1.7	46.9	3.0	13.6	1.0	
Other services	1.3	2.6	0.9	1.4	1.3	2.5	0.4	0.8	
Government	16.6	0.3	10.5	0.1	16.3	0.3	3.1	0.1	
Total	96.3	25.3	52.6	14.0	94.3	24.9	29.6	8.5	

Motorized Activities Employment Effects (Jobs per 100,000 Visits)									
Industry	Nonlocal Other Motorized		Local Other Motorized		Nonlocal Driving for Pleasure		Local Driving for Pleasure		
	Direct	Indirect & Induced	Direct	Induced	Direct	Induced	Direct	Induced	
Ag, Forestry, Fish & Hunting	0.3	1.7	0.1	0.7	0.3	1.6	0.1	0.6	
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Utilities	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	
Construction	0.0	0.5	0.0	0.3	0.0	0.5	0.0	0.2	
Manufacturing	2.8	0.9	1.5	0.6	2.7	0.9	1.1	0.4	
Wholesale Trade	3.8	1.3	3.7	0.7	3.6	1.2	2.0	0.5	
Transportation & Warehousing	1.9	1.2	0.7	0.7	1.9	1.2	0.4	0.4	
Retail trade	16.3	3.8	13.3	2.1	16.1	3.7	6.2	1.2	
Information	0.1	0.7	0.1	0.4	0.1	0.7	0.1	0.3	
Finance & insurance	0.0	1.0	0.0	0.6	0.0	1.0	0.0	0.4	
Real estate & rental	0.4	1.0	0.1	0.6	0.4	1.0	0.0	0.3	
Professional- scientific & tech svcs	0.5	1.7	0.4	0.9	0.5	1.6	0.2	0.6	
Management of companies	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
Administrative & waste services	0.3	0.8	0.1	0.4	0.3	0.8	0.0	0.3	
Educational svcs	0.0	0.3	0.0	0.2	0.0	0.3	0.0	0.1	
Health & social services	0.0	3.1	0.0	1.7	0.0	3.0	0.0	0.9	
Arts- entertainment & recreation	4.5	1.3	1.2	0.7	4.1	1.3	2.3	0.5	
Accommodation & food services	47.7	3.1	20.1	1.7	46.9	3.0	13.6	1.0	
Other services	1.3	2.6	0.9	1.4	1.3	2.5	0.4	0.8	
Government	16.6	0.3	10.5	0.1	16.3	0.3	3.1	0.1	
Total	96.3	25.3	52.6	14.0	94.3	24.9	29.6	8.5	

Motorized Activities Labor Income Effects (\$ per 100,000 Visits)								
Industry	Nonlocal Snowmobiling		Local Snowmobiling		Nonlocal OHV		Local OHV	
	Direct	Indirect & Induced	Direct	Indirect & Induced	Direct	Indirect & Induced	Direct	Indirect & Induced
Ag, Forestry, Fish & Hunting	2,628	25,147	954	10,541	2,569	24,726	989	8,917
Mining	2	10	1	6	2	10	1	4
Utilities	0	12,364	0	6,560	0	12,030	0	4,264
Construction	0	13,642	0	6,827	0	13,224	0	4,822
Manufacturing	55,485	25,225	33,087	15,398	53,731	24,415	23,478	9,484
Wholesale Trade	149,691	48,815	141,129	28,345	140,647	47,423	79,956	17,763
Transportation & Warehousing	61,728	41,907	27,556	22,862	60,783	40,785	15,714	14,499
Retail trade	303,580	86,682	238,848	48,317	297,489	84,541	120,791	27,237
Information	1,423	21,281	819	12,191	1,384	20,641	538	7,671
Finance & insurance	2,159	38,072	264	20,920	2,192	37,064	76	12,586
Real estate & rental	6,656	39,134	796	21,673	6,750	38,041	262	13,745
Professional- scientific & tech svcs	10,604	55,434	8,034	30,700	10,698	53,748	3,630	19,606
Management of companies	0	2,259	0	1,412	0	2,189	0	870
Administrative & waste services	6,730	17,998	812	8,353	6,835	17,608	219	5,267
Educational svcs	0	4,252	0	2,379	0	4,148	0	1,306
Health & social services	0	97,128	0	54,238	0	94,770	0	29,692
Arts- entertainment & recreation	117,576	15,247	30,874	8,045	108,393	14,759	61,023	5,397
Accommodation & food services	664,071	38,901	243,228	21,272	653,952	37,970	168,055	12,147
Other services	25,442	34,776	19,278	18,854	25,669	33,923	8,708	10,912
Government	624,539	10,259	394,694	5,000	613,117	10,022	119,143	3,199
Total	2,032,314	628,534	1,140,376	343,894	1,984,212	612,036	602,584	209,389

Motorized Activities Labor Income Effects (\$ per 100,000 Visits)								
Industry	Nonlocal Other Motorized		Local Other Motorized		Nonlocal Driving for Pleasure		Local Driving for Pleasure	
	Direct	Indirect & Induced	Direct	Induced	Direct	Induced	Direct	Induced
Ag, Forestry, Fish & Hunting	2,628	25,147	954	10,541	2,569	24,726	989	8,917
Mining	2	10	1	6	2	10	1	4
Utilities	0	12,364	0	6,560	0	12,030	0	4,264
Construction	0	13,642	0	6,827	0	13,224	0	4,822
Manufacturing	55,485	25,225	33,087	15,398	53,731	24,415	23,478	9,484
Wholesale Trade	149,691	48,815	141,129	28,345	140,647	47,423	79,956	17,763
Transportation & Warehousing	61,728	41,907	27,556	22,862	60,783	40,785	15,714	14,499
Retail trade	303,580	86,682	238,848	48,317	297,489	84,541	120,791	27,237
Information	1,423	21,281	819	12,191	1,384	20,641	538	7,671
Finance & insurance	2,159	38,072	264	20,920	2,192	37,064	76	12,586
Real estate & rental	6,656	39,134	796	21,673	6,750	38,041	262	13,745
Professional- scientific & tech svcs	10,604	55,434	8,034	30,700	10,698	53,748	3,630	19,606
Management of companies	0	2,259	0	1,412	0	2,189	0	870
Administrative & waste services	6,730	17,998	812	8,353	6,835	17,608	219	5,267
Educational svcs	0	4,252	0	2,379	0	4,148	0	1,306
Health & social services	0	97,128	0	54,238	0	94,770	0	29,692
Arts- entertainment & recreation	117,576	15,247	30,874	8,045	108,393	14,759	61,023	5,397
Accommodation & food services	664,071	38,901	243,228	21,272	653,952	37,970	168,055	12,147
Other services	25,442	34,776	19,278	18,854	25,669	33,923	8,708	10,912
Government	624,539	10,259	394,694	5,000	613,117	10,022	119,143	3,199
Total	2,032,314	628,534	1,140,376	343,894	1,984,212	612,036	602,584	209,389