An Economic Profile of the Shoshone National Forest

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INTRODUCTION

The relationship between the Shoshone National Forest and the local economy and lifestyles in the surrounding region is highly integrated and complex. Outdoor recreation, tourism, livestock grazing and timber are all important aspects of the Shoshone National Forest to the surrounding region. This report examines the present economic conditions and forecasts for the counties that both influence and are influenced by the Shoshone National Forest.

The Shoshone National Forest's 2.4 million acres is located in portions of five Wyoming counties including: Fremont (845,747 acres), Hot Springs (54,386 acres), Park (1,524,707 acres), Sublette (9,697 acres), and Teton (2,682 acres). Due to the small number of Forest acres located in Teton and Sublette, only Fremont, Hot Springs, and Park are considered in the analysis.

The main report is separated into three sections – Demographics, Economics, and Local Governments. Following the main report are three industry reports – Travel, Livestock Grazing, and Timber. Finally, a section on the economic impact of non-labor income is included with a summary of the economic impact of the SNF on the region's economy.

DEMOGRAPHICS

Population

The population of the three-county region has generally been increasing over time. The region's population increased by 8 percent from 1990 to 2000 (Table 1). Park County was the fastest growing county in the three-county region with population increasing by 11 percent. The slowest growing county was Hot Springs which increased by less than two percent. Fremont County's population increased by 6 percent during this time period. Population growth in the region was fairly modest compared to the national rate between 1990 and 2000 (13 percent). The region's population growth rate was comparable to that for Wyoming (9 percent) during this time period, however Wyoming ranked 32nd in the country in population growth.

Region's population increased by 2 percent from 2000 to 2005 (Table 1). Again, Park County was the fastest growing county at 4 percent, followed by Fremont County at 2 percent. Hot Springs County was estimated to have lost more than 6 percent of its population between 2000 and 2005. Population growth in the region continued to be relatively modest compared to the national rate between 2000 and 2005 (5 percent). The region's population growth rate was still comparable to that for Wyoming (3 percent), however Wyoming ranked 31st in the country in population growth between 2000 and 2005. On an annual basis the region's average population growth rate decreased from 0.8 percent per year between 1990 and 2000 to 0.4 percent per year from 2000 to 2005.

The regions population is forecasted to increase by more than 6 percent between 2005 and 2020 (Table 1). Fremont County is projected to grow the fastest at 9 percent, followed by Park County at 6 percent. Due to an aging population and limited in-migration, Hot Springs County is projected to loose 8 percent of its population between 2005 and 2020. Population growth for the region is forecast to lag behind the growth rate for the state which is projected to be 14 percent during the time period. On an annual basis the region's average population growth rate is projected to be 0.4 percent per year from 2005 to 2020.

Population is an important variable because the ability to attract and retain individuals to live and work is critical to the survival of a community and its economy. Population statistics only account for permanent residents. However, seasonal workers, who are often missed in the April census counts and second home owners who are not counted, are temporary residents that are also important to the local economy.

Table 2 focuses on the portion of the region's population that is retirement age, i.e. 65 and over. Historically, with the exception of Fremont County, the region has had an older population than either Wyoming or the U.S. and this trend has been increasing over time. In 1990 the percent of the region's population 65 & over was 13 percent. This compares to 10 percent for Wyoming and 13 percent for the U.S. The oldest population was in Hot Springs County where 19 percent of the population was 65 & over. The youngest population was in Fremont County where 11 percent of the population was 65 & over. In Park County the percent of the population 65 & over was 13 percent in 1990.

By 2005, the percent of the region's population 65 & over had increased to 15 percent. This compares to 12 percent for Wyoming and 12 percent for the nation. Hot Springs County again had the oldest population with 21 percent of its population 65 and over. Fremont County had the youngest population with 14 percent 65 and over. In Park County 15 percent of the population was 65 and over. In 2005, Hot Springs had the oldest median age of any county in Wyoming (47.4). However, the median ages for Fremont (38.7) and Park Counties (41.9) were also above the median for the state (37.1).

By 2020 it is projected that over 20 percent of the region's population will 65 & over. The range is forecasted to be from 20 percent in Fremont County and 21 percent in Park County to 26 percent in Hot Springs County. This population shift will manifest itself in many ways, from preferred outdoor recreation activities on public lands to services provided by local government to the business mix on Main Street.

Ethnicity

Population changes related not only to the number of residents in the region but also to their ethnicity. Tables 3 and 4 provide demographic statistics for identifying the ethnic component of counties and communities in the analysis area. Except for American Indians the region is not very ethnically diverse with 84 percent of the population being classified as white in 2000. Due to the presence of the Wind Indian River Reservation, 19 percent of the population in the Fremont County was classified as American Indian in

2000. As a result the three-county region has a higher percent of American Indian population than the state as a whole (10 percent vs. 2 percent). Also as a result of the concentration of the American Indian population in the region the percent of the population classified as white in the region is somewhat lower than that for the state (84 percent vs. 89 percent). The percent of the population for every other non-white racial component is less than the state average. The racial composition of the region did not change dramatically between 1990 and 2000, although the percent of the population classified as white decreased slightly and the percent of the population classified as Hispanic increased slightly.

At the community level, the population is also not very ethnically diverse. Only Lander (93 percent) and Riverton (89 percent) among the incorporated communities in the region have less than 95 percent of their population classified as white. Approximately 6 percent of Lander's population and 8 percent of Riverton's population was classified as American Indian. In addition, more than 5 percent of Hudson's population and more than 6 percent of East Thermopolis's population were multi-race. More than 5 percent of Hudson's population, more than 7 percent of Riverton's population, more than 7 percent of Kirby's population, and nearly 7 percent of Powell's population were Hispanic. Some of the un-incorporated rural communities in Fremont County probably have a high proportion of American Indian residents. In some cases the percentage by racial component sum to more than 100 percent. This represents an overlap in the racial categories.

School Enrollment

Demographic changes in any region are often first detected in local schools. Due to an aging population school enrollments in the three-county region have been declining over time. Region-wide total school enrollment declined by 16 percent between 1997 and 2006 (Table 5). Hot Springs County had the largest decrease with a 31 percent decline, followed by Park County (-18 percent), and Fremont County (-13 percent). These declines compare to a 12 percent decline in school enrollment statewide between 1997 and 2006. All eight school districts in Fremont County had declining enrollments, except the Fort Washakie and Arapahoe Districts. All three of the Park County school districts and the lone Hot Springs County school district also had declining enrollments. However, both Park County and Fremont County have experienced slight upturns in school enrollment since 2004.

School enrollments in kindergarten classes can provide some indication of future enrollment in local schools. Region wide kindergarten enrollment was 8 percent lower in 2006 than it was in 1997 (Table 6). Park County had the largest decrease with a 10 percent decline, followed by Fremont County (-9 percent). Surprisingly, kindergarten enrollment in Hot Springs County was 23 percent higher in 2006 than it was in 1997. Statewide kindergarten enrollment was 1 percent higher in 2006 than it was in 1997. Kindergarten enrollments in Park and Fremont Counties, as well as at the state level, all bottom-out in 2000 with a general increased student numbers since then. This may bode well for future school enrollments in the region.

Housing

The availability of housing is a serous issue in most of Wyoming and the three-county region is no exception. While the percentage increase in housing units from 1990 to 2000 exceeded the percentage increase in population for all three counties, the percentage increase in housing units was less than the percentage increase in households for all three counties (Table 7). The percentage increase in households was more than the percentage increase in population due to declining average household size. Average household size declined due to an aging population, families having fewer children, and more single parent families. As a result it requires more housing units to house the same number of people. In addition some of the increase in housing units represented second-homes that are typically not available to residents. Because of the tightening of the housing market in the region there was pressure for vacancy rates to decline and for housing prices to increase. This was also true for most of the communities in the region as well as at the state level in Wyoming. These trends are still continuing in Wyoming today.

Due to the tightening of the housing market the average home sale price has increased in all three counties (Table 8). From 1997 to 2006, the average home sale price in Fremont County increased by 83 percent ($76,857 to $140,499). For Hot Springs County the average sale price increased by 50 percent ($70,180 to $105,128) and for Park County the average sale price increased by 38 percent ($113,568 to $157,271). These increases compare with a 68 percent increase in the average sale price at the state level ($96,122 to $161,168). Because wage rates in the area have not matched increases in housing costs, affordable housing has become a problem for the local workforce.

There is tremendous variation in housing prices in Wyoming. In 2006, prices ranged from $81,420 in Niobrara County to $806,287 in Teton County with the statewide average being $161,168 (Table 9). In 2006 the average home sale price in Fremont County was 87 percent of the state average. For Hot Spring County the average sale price was 65 percent of the state average and for Park County the average sale price was 98 percent of the state average. In 2006, Park County ranked 9th out of 23 counties in the state in terms of average home sale price, Fremont ranked 11th, and Hot Springs ranked 17th .

Housing is a major determinant of the cost of living in an area. The State of Wyoming's Economic Analysis Division (October 2006) estimated that the cost-of-living in Park County for the second quarter of 2006 ranked 12th among counties in the state at 95 percent of the statewide average. Fremont County ranked 13th at 94 percent of the statewide average and Hot Springs County ranked 16th at 91 percent of the statewide average.

Commuting

Differences in wage rates, cost-of-living, job opportunities, workforce capabilities, community amenities, household preferences, and the presence of regional business centers all create the need for individuals to commute to work. Travel time, transportation

corridors, and winter weather also become factors in commuting patterns. Commuting can be a significant part of life affecting families, the community, local government finances, and business development. As shown in Table 10, commuting is an important part of life throughout the three-county region and helps define the economic connections between communities.

In recent years commuting in Fremont County has been declining. The number of in-commuting workers in Fremont County has declined by 14 percent from 4,039 in 2000 to 3,458 in 2005 (Table 10). In addition, the number of out-commuting workers has declined by 13 percent from 3,391 in 2000 to 2,935 in 2005. Meanwhile, the total number of workers in the county increased by 2 percent while the number of resident workers employed in the county has increased by 7 percent. This shift away from both in-commuting and out-commuting workers in the county has reduced the importance of nonresident workers in the county's labor force and reduced the net inflow of workers to the county. Still, Fremont County was a net importer of labor five of the six years between 2000 and 2005.

In 2005 the three largest sources of non-resident workers for Fremont County were: Out-of-State, Natrona County, and Teton County. The three largest destinations for resident workers out-commuting were: Natrona County, Sweetwater County, and Laramie County. Commuting has also been seasonal in Fremont County with third quarter in-commuting averaging one-third higher than first quarter in-commuting and with third quarter out-commuting averaging 20 percent higher than first quarter out-commuting between 2000 and 2005.

In recent years in-commuting in Hot Springs County has been declining. The number of in-commuting workers in Hot Springs County has declined by 22 percent from 937 in 2000 to 732 in 2005 (Table 10). On the other hand, the number of out-commuting workers has remained fairly stable with 633 in 2000 and 637 in 2005. Meanwhile, the total number of workers in the county decreased by 10 percent while the number of resident workers employed in the county decreased by only three percent. This indicates that most of the decline in total workers between 2000 and 2005 was in in-commuting workers. This shift has reduced the importance of nonresident workers in the county's labor force and reduced the net inflow of workers to the county. Hot Springs County was a net importer of labor four of the six years between 2000 and 2005.

In 2005 the three largest sources of non-resident workers for Hot Springs County were: Out-of-State, Washakie County, and Park County. The three largest destinations for resident workers out-commuting were: Natrona County, Washakie County, and Fremont County. Commuting has also been seasonal in Hot Springs County with third quarter in-commuting averaging 31 percent higher than first quarter in-commuting and with third quarter out-commuting averaging 18 percent higher than first quarter out-commuting.

In recent years in-commuting in Park County has increased slightly. The number of in-commuting workers in Park County has increased by four percent from 4,190 in 2000 to 4,373 in 2005 (Table 10). On the other hand, the number of out-commuting workers has

declined by 6 percent from 2,046 in 2000 to 1,912 in 2005. Meanwhile, the total number of workers in the county increased by six percent while the number of resident workers employed in the county also increased by six percent. As a result the importance of nonresident workers in the county's labor force has remained fairly steady and the net inflow of workers to the county has increased. Park County was a net importer of labor in all six of the six years between 2000 and 2005.

In 2005 the three largest sources of non-resident workers for Park County were: Out-of-State, Big Horn County, and Washakie County. The three largest destinations for resident workers out-commuting were: Big Horn County, Natrona County, and Campbell County. Commuting has also been seasonal in Park County with third quarter in-commuting averaging 117 percent higher than first quarter in-commuting and with third quarter out-commuting averaging 16 percent higher than first quarter out-commuting. The substantial seasonality in in-commuting is probably a reflection of the large travel industry in Park County.

ECONOMICS

Employment

The employment data presented here was obtained from the U.S. Department of Commerce; Bureau of Economic Analysis's Regional Economic Information System (REIS) and represents the latest data that is currently available for counties in the United States (2005). REIS data was used because it provides estimates of all employment in a region, including those individuals that are self-employed. In some case employment for an individual industry is not reported by REIS due to confidentiality requirements. In these cases the industry employment was estimated based on information from the Census Bureau's County Business Patterns.

In 2005 total employment in the three-county region was 45,343 jobs (Table 11). The five largest employers were Government (20 percent), Retail Trade (12 percent), Accommodations and Food Services (9 percent), Health Care and Social Assistance (9 percent), and Construction (8 percent). Combined these five sectors represented 59 percent of the total employment in the region. Based on the percent of total employment in the region compared to the national economy, the three-county region was specialized in Mining (regional employment was 6.4 times the national average), Agriculture (regional employment was 2.8 times the national average), Government (regional employment was 1.5 times the national average), Accommodations and Food Services (regional employment was 1.4 times the national average, Construction (1.3 times the national average), and Art/Entertainment/Recreation (1.3 times the national average). Specialization was defined as having a location quotient of greater than 1.25 and representing at least 2 percent of the region's total employment.

In 2005 total employment in Fremont County was 22,766 jobs (Table 11). The five largest employers were Government (23 percent), Retail Trade (11 percent), Health Care and Social Assistance (10 percent), Construction (8 percent) and Accommodations and

Food Services (8 percent). Combined these five sectors represented 60 percent of the total employment in the county. Based on the percent of total employment in the county compared to the national economy, the county was specialized in Mining (county employment was 6.0 times the national average), Agriculture (county employment was 3.0 times the national average), and Government (county employment was 1.7 times the national average). Specialization was defined as having a location quotient of greater than 1.25 and representing at least 2 percent of the county's total employment.

In 2005 total employment in Hot Springs County was 3,124 jobs (Table 11). The five largest employers were Government (18 percent), Health Care and Social Assistance (12 percent), Accommodations and Food Services (10 percent), Retail Trade (9 percent), and Other Services (8 percent). Combined these five sectors represented 57 percent of the total employment in the county. Based on the percent of total employment in the county compared to the national economy, the county was specialized in Mining (county employment was 12.1 times the national average), Agriculture (county employment was 3.8 times the national average), Arts/Entertainment/Recreation (county employment was 1.6 times the national average), Accommodations and Food Services (county employment was 1.5 times the national average), Other Services (county employment was 1.3 times the national average), Government (county employment was 1.3 times the national average) and Health Care and Social Services (county employment was 1.3 times the national average).

In 2005 total employment in Park County was 19,453 (Table 11). The five largest employers were Government (18 percent), Retail Trade (13 percent), Accommodations and Food Services (11 percent), Construction (9 percent), and Health Care and Social Assistance (8 percent). Combined these five sectors represented 59 percent of the total employment in the county. Based on the percent of total employment in the county compared to the national economy, the county was specialized in Mining (county employment was 5.9 times the national average), Agriculture (county employment was 2.4 times the national average), Accommodations and Food Services (county employment was 1.6 times the national average), Arts/Entertainment/Recreation (county employment was 1.6 times the national average), Construction (county employment was 1.4 times the national average), and Government (county employment was 1.3 times the national average).

Total employment in the three-county region increased by 24 percent from 1990 to 2000 (Table 12). The largest increase was in Park County where employment grew by 27 percent. The smallest increase was in Hot Springs County where employment grew by 11 percent. During this time period, Fremont County's employment increased by 25 percent. The region's employment growth rate was higher than either Wyoming's rate (20 percent) or the national rate (20 percent) between 1990 and 2000.

The region's employment increased by 8 percent from 2000 to 2005 (Table 12). Again Park County had the largest increase with employment growing by 10 percent. Following Park County was Fremont County with 8 percent employment growth and Hot Springs with a slight increase in employment of 0.2 percent. The region's employment growth

rate between 2000 and 2005 was higher than the national rate (4 percent), but lower than the Wyoming rate (10 percent). On an annual basis the region's average employment growth rate decreased from 2.2 percent per year between 1990 and 2000 to 1.6 percent per year from 2000 to 2005.

The region's employment is forecasted to increase by nearly 22 percent between 2005 and 2020 (Table 12). Park County is projected to increase the most (25 percent), followed by Fremont County at 21 percent, and Hot Springs County at 9 percent. The employment growth rate for the region is forecasted to be only slightly lower than the state rate between 2005 and 2020 (23 percent). On an annual basis the region's average employment growth rate is projected to be 1.3 percent per year from 2005 to 2020.

For the most part, the three-county region has not been troubled by severe unemployment in recent years (Table 13). Fremont County has the average highest unemployment rate at 5.1 percent. Some of this is probably due to the presents of the Wind River Indian Reservation in the county where unemployment rates are very high. However, the average unemployment for the county is the same as the national average. Hot Springs and Park Counties' average unemployment rates are both lower than the national average and were only slightly higher than the state average. All three counties have experienced a general decline in unemployment rates since 2003 paralleling state and national trends.

All three counties exhibit some degree of seasonal variability in unemployment rates. Park County has the highest variability with a coefficient of variation (standard deviation/mean) of 23 percent. Following Park County was Hot Springs County with a coefficient of variation of 17 percent and Fremont County with a coefficient of variation of 11 percent. Park and Hot Springs Counties' unemployment rates are both more variable than the state rates (coefficient of variation of 12 percent). Fremont County's unemployment rates are less variable than the state rates. Some of the variability in unemployment rates in the region may be associated with the seasonality of the travel industry in the region.

Personal Income

The sources of a region's personal income provide some insight into the economy of the area. Labor earnings (including wages, salaries, and proprietor income) were the largest source of personal income for all three counties representing 56 to 57 percent of total personal income in the region (Table 15). Investment income (representing dividends, interest, rent, and other property income) was the second largest source of personal income in Fremont and Park Counties and the third largest source of personal income for Hot Springs County representing 21 to 27 percent of total personal income in the region. Transfer payments (income received from government sources, such as Social Security, Medicare, Medicaid, and welfare) were the third largest source of personal income in Fremont and Park Counties and the second largest source of personal income in Hot Springs County representing 15 to 23 percent of total personal income in the region.

A comparison of sources of personal income for the region with Wyoming and the U.S. indicates that the percentage of personal income from labor earnings in the region is lower than either the state (64 percent) or the nation (69 percent). On the other hand, the percentage of personal income from investment income in all three counties is higher than the nation (16 percent) and the percentage for Park Counties is also higher than the state (23 percent). In addition, the percentage of personal income from transfer payments in the region is also higher than either the state (13 percent) or the nation (15 percent). The greater importance of non-labor income as a source of personal income in the region probably results from the region's older population (for example Hot Springs County), the attractiveness of the region to individuals with outside sources of income (for example Park County), and the presence of the Wind River Indian Reservation (for example Fremont County).

Per capita income is often used as a measure of economic well-being in a region. Per capita income in the three-county region was consistently lower than the Wyoming average of $37,305 in 2005 (Table 15). Fremont County had the lowest per capita income at $29,125 which was 22 percent below the state average. Following Fremont was Hot Springs County at $31,763 which was 15 percent below the state average. Park County had the highest per capita income at $34,313 which was 8 percent below the state average. It should be noted that Wyoming per capita incomes is above the national average; however the three-counties were also below the national average of $34,471 in 2005 (although Park County's was only slightly below).

Another factor of economic well-being is cost-of-living. Wyoming's Economic Analysis Division estimates that the cost-of-living in Fremont County for the second quarter of 2005 was 94 percent of the state average, while per capita income in 2005 was 78 percent of the state average. For Hot Springs County the cost-of-living was 91 percent of the state average, while per capita income was 85 percent of the state average. For Park County the cost-of-living was 95 percent of the state average, while per capita income was 92 percent of the state average. This suggests that, on average, residents of the three counties are somewhat less well off economically than at the state level.

While per capita income is a measure of economic well-being for the total population, average earnings per job is perhaps a better measure of the economic well-being of the workforce in a region. Average earnings per job in the three-county region were consistently below the Wyoming average of $37,967 in 2005 (Table 15). Hot Springs County had the lowest average earnings per job at $26,830 which was 29 percent below the state average. Following Hot Springs was Fremont County at $28,636 which was 25 percent below the state average. Park County had the highest average earnings per job at $30,475 which was 20 percent below the state average. It should be note that, unlike per capita income, average earnings per job in Wyoming were substantially below the U.S. average of $45,817 in 2005.

Comparing cost-of-living with average earnings per job indicates that while average earnings per job in Fremont County were 75 percent of the state average, the cost-of-living was 94 percent of the state average. For Hot Spring County while the average

earnings per job were 71 percent of the state average, the cost-of-living was 91 percent of the state average. For Park County while the average earnings per job were 80 percent of the state average the cost-of-living was 91 percent of the state average. This suggests that on average the workforce in the three counties are less well off than at the state level, unless they hold multiple jobs.

One of the disadvantages of the using per capita income and average earnings per job to measure economic well-being is that neither addresses the distribution of income within the region. As a result, the number of individual living below the poverty level is usually also considered. As shown in Table 15, the poverty level in the three-county region was a mixed bag. Fremont County has the highest poverty rate at 14.9 percent in 2005. This rate was higher than either the state (10.6 percent) or national (13.3 percent) rate. The presence of the Wind River Indian Reservation in Fremont County probably contributes the high poverty rate in the county. Hot Springs County has the second highest poverty rate in the region at 11.5 percent. This rate is higher than the state rate but below the national rate. Park County has the lowest poverty rate in the region at 10.3 percent. This rate was below both the state and national rate.

LOCAL GOVERNMENTS

Introduction

The fiscal condition of local governments in a region can be affected in several ways by the presence of a National Forest. Tourism, livestock grazing, and timber on the National Forests may all increase the revenues and cost to counties, towns, and special districts. For instance, revenue sources from a national forest presence can include sales and lodging taxes, property taxes, and federal land related payments from federal land management agencies. Costs could include higher demand for police, fire, and search-and-rescue services; increased need for roads, sewer and water systems, public buildings; more calls for social services such as daycare, welfare, schools, and medical facilities. Local officials are well aware of the relationship between the revenues and costs associated of neighboring national forests. Looking at only the revenue side of nearby public land is an incomplete viewpoint that can be misleading. None the less, it is recognized that the burden of public land in general can be multi-faceted and sizable.

The following section examines federal lands related payments and the role they play in local government revenue. While these payments are intended to offset costs borne by local government for the presence of federal land, there is no specific data to determine the extent to which such costs are offset for the Shoshone National Forest.

Payment in Lieu of Taxes and Secure Rural Schools payments

Payment in Lieu of Taxes (PILT) payments are annual payments made by the federal government to counties with federal land within their boundaries. Since counties cannot tax the federal government, these tax dollars would otherwise be revenue “lost” to the

counties. PILT payments were first authorized in 1976 (Pub. L. 94-565, 31 Chap. 69 [as amended by PL98-63 and PL103-397]) and have undergone several revisions in the foregoing years.

The process for calculating PILT payments is complicated. A detailed discussion of PILT can be found in *Payment in Lieu of Taxes in Wyoming* by Pindell et al (1998). Payments and calculations for Shoshone National Forest counties from 1998 to 2007 can be obtained from *Payment in Lieu of Taxes to Wyoming Counties* by Foulke et al at the following web address: http://agecon.uwyo.edu/EconDev/PILT1.htm .

The first row in Table 16 summarizes the total PILT payments to Shoshone National Forest counties for the year 2007. The total payments for the three-county area were $3.2 million. PILT payments are based on total eligible federal acres in a county. The second row of Table 16 summarizes the total federal acres used in the PILT calculations for each of the Shoshone NF counties. The total for the three-county area was 7.35 million acres.

Since PILT payments are based on all federally managed lands and because all counties in the region have significant amounts of other federal lands, including other National Forests, Bureau of Land Management (BLM), and National Park Service (NPS) lands, only a portion of the area's PILT payment are associated with the Shoshone NF. To estimate the percentage of PILT payments from Shoshone NF lands, the acres of Shoshone NF land in each county (the third row of Table 16) were divided by the total federal lands in each county (the second row of Table 16) to determine the percent of PILT payments associated with the Shoshone NF. For the three-county area the Shoshone NF represented nearly 33 percent of the total PILT acres. However the percentage ranges from almost 42 percent in Park County to less than ten percent in Hot Springs County.

Based on the percentage of total PILT acres it is estimated that the Shoshone NF accounted for nearly $967,000 of the total PILT payments for the three-county area. Of this total more than $509,000 went to Park County. Following Park County was Fremont County with more than $416,000 and Hot Springs with more than $41,000.

In addition to PILT payments, counties with forest lands within their borders also share revenue from the forest. Originally, 25 percent of the annual revenue to the forest was divided up among the counties with forest lands, based on the number of acres of forest land in each county. These payments came to be called "25 percent" payments. Payments were paid as a lump sum to the state and the state distributed these monies back to the counties. State statutes mandated that at least 5 percent of these payments be used for education and roads.

The Secure Rural Schools and Self Determination Act of 2000 (SRS) changed the process. When the act was signed into law, counties had to choose whether to follow Title I or Title II. Instead of receiving the actual 25 percent of forest revenues, Title I gave counties a fixed payment based on a historical average of their three highest "25 percent" payments. Counties that opted to follow Title II of the law continued to receive their 25 percent payments but had to create a Resource Advisory Committee (RAC) to

develop projects to use the monies. In the face of declining timber harvests, all but one county in Wyoming (Crook) decided to accept the fixed payment scheme (Title I). The sixth line of Table 16 lists these SRS payments from the Shoshone NF. The total SRS payments for the three-county area are more than $305,000 for 2007. Of this total, Park received the largest share ($191,000) while Hot Springs received the smallest share ($6,000).

The combined total of Shoshone NF PILT and Shoshone SRS payments to the three-county area were nearly $1.3 million (line 7 in Table 16). Park County received the largest share ($700,000) while Hot Springs received the smallest share ($48,000). The combined PILT and SRS payments from the Shoshone NF represented 1.7 percent of the total county revenues for the three-county area (line 9 in Table 16), ranging from a high of 3.4 percent in Park County to a low of 0.3 percent in Hot Springs County.

The Secure Rural Schools Self Determination Act of 2000 authorization ended 30 September, 2006. The last payments were made in December of 2006. President Bush signed the Iraq Accountability Act of 2007 (P.L. 110-28) on 27 May, 2007, which funded the SRS through 2007. Additional appropriations were attached to the 2008 Energy bill, but were excluded in from the bill before final passage in December 2007. As of this writing (April, 2008) future funding is uncertain. More information can be found at the USFS 'Payments to States' website:
http://wwwnotes.fs.fed.us:81/r4/payments_to_states.nsf .

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Table 1. Population by County in Shoshone NF Area, 1990-2020.

Year	Fremont	Hot Springs	Park	Region
1990a	33,662	4,809	23,178	61,649
2000a	35,804	4,882	25,786	66,472
2005b	36,580	4,568	26,723	67,871
2010c	38,200	4,500	27,600	70,300
2015c	39,060	4,350	27,920	71,330
2020c	39,880	4,200	28,220	72,300
Change 1990-2000	6.4%	1.5%	11.3%	7.8%
Change 2000-2005	2.2%	-6.4%	3.6%	2.1%
Change 2005-2020	9.0%	-8.1%	5.6%	6.5%

Note: a = Census Data, b = Census Estimates, c= EAD Forecasts

Source: Wyoming Economic Analysis Division, December 2006

Table 2. Share of Population Age 65+ in Shoshone NF Area, 1990-2020.

Year	Fremont	Hot Springs	Park	Region
1990	11.5%	18.7%	13.3%	12.7%
2000	13.3%	20.1%	14.5%	14.3%
2005	14.2%	20.9%	15.2%	15.0%
2010	15.3%	21.8%	16.2%	16.1%
2015	17.2%	23.6%	18.2%	18.0%
2020	19.7%	26.2%	20.7%	20.5%

Source: Wyoming Economic Analysis Division, December 2006

Table 3. Racial Component of Population by County, 1990-2000.

County	Total Population 1990	White 1990	Black 1990	American Indian 1990	Asian or Pacific Islander 1990	Other/ Multi-Race 1990	Hispanic Any Race 1990
Fremont	33,662	79.5%	0.2%	18.5%	0.3%	1.5%	4.0%
Hot Springs	4,809	96.9%	0.3%	2.1%	0.0%	0.6%	1.4%
Park	23,178	97.4%	0.1%	0.6%	0.5%	1.5%	3.6%
Region	61,649	87.6%	0.1%	10.5%	0.4%	1.4%	3.6%
Wyoming	453,588	94.2%	0.8%	2.1%	0.6%	2.3%	5.7%

County	Total Population 2000	White 2000	Black 2000	American Indian 2000	Asian or Pacific Islander 2000	Other/ Multi-Race 2000	Hispanic Any Race 2000
Fremont	35,804	74.6%	0.1%	18.8%	0.3%	1.8%	4.4%
Hot Springs	4,882	94.5%	0.3%	1.5%	0.2%	1.1%	2.4%
Park	25,786	94.5%	0.1%	0.4%	0.5%	0.9%	3.7%
Region	66,472	83.7%	0.1%	10.4%	0.4%	1.4%	4.0%
Wyoming	493,782	88.9%	0.7%	2.1%	0.6%	1.3%	6.4%

Source: Wyoming Economic Analysis Division

Table 4. Racial Component of Population by Community, 2000.

Community	Total Population	White	Black	American Indian	Asian or Pacific Islander	Other/ Multi-Race	Hispanic Any Race
Fremont							
Dubois	944	98.0%	0.1%	1.3%	0.3%	2.2%	1.2%
Hudson	393	95.9%	0.3%	2.3%	0.0%	5.1%	5.1%
Lander	6,727	92.7%	0.1%	6.1%	0.3%	2.8%	3.6%
Pavillion	159	97.5%	0.0%	1.9%	0.0%	4.4%	2.5%
Riverton	9,070	89.1%	0.2%	8.3%	0.5%	4.6%	7.3%
Shoshoni	615	96.4%	0.2%	1.3%	1.1%	4.2%	4.1%
Hot Springs							
East Thermopolis	260	96.9%	0.4%	1.5%	0.0%	6.5%	3.8%
Kirby	56	96.4%	0.0%	0.0%	3.6%	1.8%	7.1%
Thermopolis	3,135	97.0%	0.5%	1.7%	0.3%	1.7%	2.3%
Park							
Cody	8,737	98.0%	0.1%	0.4%	0.6%	2.0%	2.2%
Meeteetse	346	98.6%	0.0%	0.3%	0.3%	2.3%	2.6%
Powell	5,319	96.4%	0.1%	0.5%	0.4%	3.6%	6.9%

Source: Wyoming Economic Analysis Division

Table 5. Total School Enrollments by County in Shoshone NF Area, 1997-2006.

Year	Fremont	Hot Springs	Park	Region	Wyoming
1997	7,342	908	4,785	13,035	96,504
1998	7,196	871	4,629	12,696	94,420
1999	6,970	817	4,436	12,223	91,883
2000	6,739	763	4,293	11,795	89,531
2001	6,639	752	4,226	11,617	87,897
2002	6,505	702	4,055	11,262	86,117
2003	6,346	699	3,941	10,986	84,741
2004	6,299	679	3,893	10,871	83,772
2005	6,373	634	3,896	10,903	83,705
2006	6,360	623	3,935	10,918	84,611
Change 1997-2006	-13.4%	-31.4%	-17.8%	-16.2%	-12.3%

Source: Wyoming Department of Education

Table 6. Kindergarten Enrollments by County in Shoshone NF Area, 1997-2006.

Year	Fremont	Hot Springs	Park	Region	Wyoming
1997	512	44	317	873	6,496
1998	493	50	309	852	6,338
1999	446	55	258	759	6,130
2000	410	35	269	714	5,825
2001	442	57	269	768	6,002
2002	464	44	291	799	6,165
2003	469	43	309	821	6,224
2004	473	51	259	783	6,263
2005	474	55	270	799	6,381
2006	464	54	285	803	6,575
Change 1997-2006	-9.4%	22.7%	-10.1%	-8.0%	1.2%

Source: Wyoming Department of Education

Table 7. Percent Changes in Population, Households, Housing Units, and Vacancy Rates between 1990 and 2000 in the Shoshone NF Area.

Area	Total Population Percent Change	Total Households Percent Change	Total Housing Units Percent Change	Vacancy Rate Percent Change
Wyoming	8.9%	14.7%	10.1%	-20.6%
Fremont	6.4%	12.9%	7.6%	-24.3%
Dubois	7.5%	16.2%	11.9%	-13.7%
Hudson	3.8%	4.3%	0.0%	-15.3%
Lander	-2.2%	6.0%	5.1%	-9.1%
Pavillion	31.0%	40.0%	20.3%	-47.5%
Riverton	1.2%	10.1%	9.9%	-1.0%
Shoshoni	27.8%	23.6%	18.4%	-11.9%
Hot Springs	1.5%	8.5%	4.4%	-15.5%
East Thermopolis	24.0%	10.3%	-10.3%	-63.8%
Kirby	-3.4%	16.0%	-9.8%	-44.6%
Thermopolis	-2.3%	18.5%	1.6%	-9.4%
Park	11.3%	17.8%	15.2%	-12.7%
Cody	11.9%	16.3%	15.4%	-10.3%
Meeteetse	-4.6%	-3.8%	-6.5%	-10.0%
Powell	1.5%	5.3%	3.4%	-18.7%

Source: Wyoming Economic Analysis Division

Table 8. Average Home Sale Prices by County 1997-2006 (2000$).

Year	Fremont	Hot Springs	Park	Wyoming
1997	$76,857	$70,180	$113,568	$96,122
1998	$99,670	$68,459	$112,246	$100,450
1999	$112,430	$75,635	$114,331	$103,728
2000	$102,957	$70,625	$113,178	$111,437
2001	$109,023	$84,806	$116,440	$113,740
2002	$109,254	$83,144	$127,515	$116,272
2003	$118,198	$73,968	$130,579	$124,721
2004	$120,853	$78,240	$138,834	$130,226
2005	$124,757	$86,242	$143,244	$141,395
2006	$140,499	$105,128	$157,271	$161,168
Change 1997-2006	82.8%	49.8%	38.5%	67.7%
Percent of Wyoming	87.2%	65.2%	97.6%	100.0%

Source: Wyoming Housing Database Partnership

Table 9. Average Home Sale Prices by County, 2006.

County	Price	Rank
Teton	$806,287	1
Sublette	$269,795	2
Lincoln	$259,458	3
Sheridan	$220,225	4
Campbell	$199,945	5
Sweetwater	$195,981	6
Johnson	$194,500	7
Albany	$184,159	8
Park	$183,326	9
Laramie	$179,338	10
Fremont	$163,775	11
Natrona	$158,950	12
Converse	$148,804	13
Uinta	$145,243	14
Crook	$138,568	15
Washakie	$123,072	16
Hot Springs	$122,544	17
Carbon	$118,335	18
Goshen	$116,812	19
Platte	$115,617	20
Weston	$107,437	21
Big Horn	$87,384	22
Niobrara	$81,420	23

Source: Wyoming Housing Database Partnership

Table 10. In and Out Commuting of Workers in the Shoshone NF Area, 2000-2005.

Fremont County

Yearly Average	In-Commuting Workers	Out-Commuting Workers	Non-Commuting Resident Workers	Total In-County Workers	Percent In-Commuting Workers	Net In-Flow
2000	4,039	3,391	13,418	17,457	23.1%	648
2001	4,586	3,661	13,529	18,114	25.3%	925
2002	4,458	3,263	13,681	18,139	24.6%	1,196
2003	2,780	2,867	13,860	16,641	16.7%	-87
2004	3,060	2,926	14,409	17,469	17.5%	135
2005	3,458	2,935	14,413	17,871	19.4%	523
Change	-14.4%	-13.4%	7.4%	2.4%		-19.2%

Hot Springs County

Yearly Average	In-Commuting Workers	Out-Commuting Workers	Non-Commuting Resident Workers	Total In-County Workers	Percent In-Commuting Workers	Net In-Flow
2000	937	633	1,657	2,594	36.1%	304
2001	922	655	1,673	2,594	35.5%	267
2002	883	557	1,699	2,582	34.2%	326
2003	591	633	1,663	2,254	26.2%	-42
2004	591	660	1,668	2,259	26.2%	-69
2005	732	637	1,605	2,336	31.3%	94
Change	-22.0%	0.6%	-3.1%	-9.9%		-69.0%

Park County

Yearly Average	In-Commuting Workers	Out-Commuting Workers	Non-Commuting Resident Workers	Total In-County Workers	Percent In-Commuting Workers	Net In-Flow
2000	4,190	2,046	9,957	14,147	29.6%	2,144
2001	4,397	2,052	10,054	14,451	30.4%	2,345
2002	4,297	1,798	10,277	14,573	29.5%	2,499
2003	4,257	1,984	10,167	14,423	29.5%	2,273
2004	4,045	1,919	10,582	14,627	27.7%	2,127
2005	4,373	1,912	10,587	14,959	29.2%	2,461
Change	4.4%	-6.5%	6.3%	5.7%		14.8%

Source: Wyoming Department of Employment

Table 11. Employment by Major Industry and County, 2005.

	Fremont	Hot Springs	Park	Region	U.S.
Farm employment	1,159	196	792	2,147	2,914,000
Forestry, fishing, related activities, and other	204	*0*	229	433	1,012,200
Mining	646	178	537	1,361	820,000
Utilities	*151*	*17*	88	256	594,100
Construction	1,752	184	1,693	3,629	10,845,700
Manufacturing	618	57	750	1,425	14,860,900
Wholesale trade	*380*	*17*	334	731	6,401,300
Retail trade	2,574	280	2,586	5,440	18,941,100
Transportation and warehousing	573	82	408	1,063	5,510,100
Information	402	48	267	717	3,577,100
Finance and insurance	543	93	765	1,401	8,186,600
Real estate and rental and leasing	895	116	730	1,741	6,934,300
Professional and technical services	831	136	828	1,795	11,488,700
Management of companies and enterprises	32	*5*	37	74	1,857,000
Administrative and waste services	493	*99*	485	1,077	10,645,100
Educational services	*412*	10	111	533	3,552,900
Health care and social assistance	*2,202*	387	1,515	4,104	17,267,000
Arts, entertainment, and recreation	432	98	639	1,169	3,517,300
Accommodation and food services	1,730	319	2,154	4,203	11,728,300
Other services, except public administration	1,430	236	1,069	2,735	9,758,900
Government and government enterprises	5,307	566	3,436	9,309	23,837,000
Total	22,766	3,124	19,453	45,343	174,249,600
Farm employment	5.1%	6.3%	4.1%	4.7%	1.7%
Forestry, fishing, related activities, and other	0.9%	0.0%	1.2%	1.0%	0.6%
Mining	2.8%	5.7%	2.8%	3.0%	0.5%
Utilities	0.7%	0.5%	0.5%	0.6%	0.3%
Construction	7.7%	5.9%	8.7%	8.0%	6.2%
Manufacturing	2.7%	1.8%	3.9%	3.1%	8.5%
Wholesale trade	1.7%	0.5%	1.7%	1.6%	3.7%
Retail trade	11.3%	9.0%	13.3%	12.0%	10.9%
Transportation and warehousing	2.5%	2.6%	2.1%	2.3%	3.2%
Information	1.8%	1.5%	1.4%	1.6%	2.1%
Finance and insurance	2.4%	3.0%	3.9%	3.1%	4.7%
Real estate and rental and leasing	3.9%	3.7%	3.8%	3.8%	4.0%
Professional and technical services	3.7%	4.4%	4.3%	4.0%	6.6%
Management of companies and enterprises	0.1%	0.2%	0.2%	0.2%	1.1%
Administrative and waste services	2.2%	3.2%	2.5%	2.4%	6.1%
Educational services	1.8%	0.3%	0.6%	1.2%	2.0%
Health care and social assistance	9.7%	12.4%	7.8%	9.1%	9.9%
Arts, entertainment, and recreation	1.9%	3.1%	3.3%	2.6%	2.0%
Accommodation and food services	7.6%	10.2%	11.1%	9.3%	6.7%
Other services, except public administration	6.3%	7.6%	5.5%	6.0%	5.6%
Government and government enterprises	23.3%	18.1%	17.7%	20.5%	13.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Bureau of Economic Analysis

Table 12. Employment by County in Shoshone NF Area, 1990-2020.

Year	Fremont	Hot Springs	Park	Region	Wyoming
1990	16,937	2,815	13,892	33,644	272,431
2000	21,105	3,117	17,655	41,877	328,036
2005	22,766	3,124	19,453	45,343	360,558
2010	24,360	3,225	21,064	48,649	387,760
2015	25,952	3,323	22,682	51,957	415,023
2020	27,546	3,421	24,299	55,266	442,439
Change 1990-2000	24.6%	10.7%	27.1%	24.5%	20.4%
Change 2000-2005	7.9%	0.2%	10.2%	8.3%	9.9%
Change 2005-2020	21.0%	9.5%	24.9%	21.9%	22.7%

Source: 1990-2005 = Bureau of Economic Analysis
2010-2020 = Woods & Poole Economics

Table 13. Unemployment Rates in the Shoshone NF Area, 2000-2006.

Year	Fremont	Hot Springs	Park	State	U.S.
2000	5.2%	3.6%	4.0%	3.8%	4.0%
2001	5.2%	4.2%	4.3%	3.9%	4.7%
2002	5.3%	4.7%	4.5%	4.1%	5.8%
2003	5.8%	4.3%	4.5%	4.4%	6.0%
2004	5.1%	3.9%	4.0%	3.9%	5.5%
2005	4.7%	4.0%	3.9%	3.6%	5.1%
2006	4.3%	3.7%	3.6%	3.3%	4.6%
Average	5.1%	4.1%	4.1%	3.9%	5.1%

Source: Bureau of Labor Statistics

Table 14. Unemployment Rates by Month by County, 2006.

	Fremont	Hot Springs	Park	Wyoming
January	5.4%	5.0%	5.2%	4.1%
February	4.9%	4.4%	4.7%	3.7%
March	4.9%	4.4%	4.4%	3.4%
April	4.3%	3.9%	3.8%	3.3%
May	4.0%	3.7%	3.3%	3.1%
June	4.1%	3.3%	2.9%	3.1%
July	4.2%	2.8%	2.5%	2.8%
August	4.0%	2.9%	2.7%	2.8%
September	3.9%	3.2%	2.9%	2.9%
October	3.9%	3.2%	3.1%	2.9%
November	4.0%	3.5%	3.8%	3.1%
December	4.4%	3.6%	4.0%	3.1%
Mean	4.3%	3.7%	3.6%	3.2%
Standard Deviation	0.5%	0.6%	0.8%	0.4%
Coefficient of Variation	10.7%	17.4%	22.6%	11.6%

Source: Wyoming Department of Employment

Table 15. Personal Income by Source and County, 2005.

Income	Fremont	Hot Springs	Park	Wyoming	U.S.
Net Labor Earnings	$601,109	$81,122	$522,006	$12,222,173	$7,103,199,000
Investment Income	$238,558	$29,886	$252,579	$4,366,069	$1,591,151,000
Transfer Payments	$225,711	$34,086	$142,354	$2,392,620	$1,526,592,000
Total	$1,065,378	$145,094	$916,939	$18,980,862	$10,220,942,000
Net Labor Earnings	56.4%	55.9%	56.9%	64.4%	69.5%
Investment Income	22.4%	20.6%	27.5%	23.0%	15.6%
Transfer Payments	21.2%	23.5%	15.5%	12.6%	14.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Per Capita Income	$29,125	$31,763	$34,313	$37,305	$34,471
Average Earnings	28,636	26,830	30,475	37,967	45,817
Cost-of-Living (2005Q2)	94%	91%	95%	100%	
Poverty Level	14.9%	11.5%	10.3%	10.6%	13.3%

Source: Bureau of Economic Analysis, Wyoming Economic Analysis Division, and U.S. Census Bureau

Table 16. PILT and SRS payments to Shoshone NF counties, 2007.

Type	Fremont	Hot Springs	Park	Area
Total PILT	$1,570,615	$435,258	$1,200,021	$3,205,894
Total Acres	3,190,646	570,156	3,591,379	7,352,181
Shoshone NF Acres (2007)	845,747	54,386	1,524,707	2,424,840
Percent Shoshone NF	26.5	9.5	42.4	33.0
Shoshone NF PILT	$416,324	$41,518	$509,465	$967,307
SRS Payment	$107,521	$6,489	$191,082	$305,092
Total Shoshone NF Payments	$523,845	$48,007	$700,547	$1,272,399
Total County Revenue (As of 30 June, 2007)	$36,829,705	$16,510,563	$20,666,101	$74,006,369
Percent Shoshone NF	1.42	0.29	3.39	1.72

Sources: Fouke et al, 2008; USFS, 2008

TRAVEL

Total Visitor Spending

Dean Runyan Associates provides an annual report to the Wyoming Business Council on the economic impact of travel by county in Wyoming. The following information was taken from their most recent report (September 2007). Dean Runyan Associates estimates that total visitor spending in the three-county area during 2006 was $355.1 million. These expenditures represented overnight trips and day trips to the area that were not of a local or commuting nature and presumably included trips to the Shoshone National Forest. They include trips for both business and pleasure. Of the total spending, $217.2 million was in Park County (61 percent), $111.1 million was in Fremont County (31 percent), and $26.8 was in Sublette County (8 percent).

Table 1 shows that, after adjusting for inflation, total visitor spending in the three-county area increased from $243.3 million in 1997 to $304.6 million in 2006 (+25 percent). This represents a compound average growth rate of 2.5 percent per year. Among the individual counties, the fastest growth rate for visitor spending was in Hot Springs County which increased by 48 percent between 1997 and 2006 or about 4.5 percent per year. Following Hot Springs County was Fremont County which grew by 41 percent between 1997 and 2006 or 3.9 percent per year and Park County which grew by 17 percent between 1997 and 2006 or 1.7 percent per year.

Based on the type of accommodations used by visitors, 41 percent of the total visitor spending in the three-county area was by visitors staying in Hotels/Motels, 28 percent was by visitors staying in private campgrounds, 12 percent was by visitors staying in private homes (i.e. with friends and relatives), 8 percent was by visitors on day trips, 7 percent was by visitors staying in public campgrounds, and 4 percent was by visitors staying in their own vacation home (Table 2). Fremont County had a lower percent of visitor expenditures from visitors staying in hotel/motel and private campgrounds, but a higher percent of visitor expenditures from visitors staying in public campgrounds, private homes, vacation homes, and on day trips (Table 2). Hot Springs County had a higher percent of visitor expenditures from visitor staying in hotel/motel, but a lower percent of visitor expenditures from all other types of accommodations. Park County had a higher percent of visitor expenditures from visitors staying in hotel/motel, private campgrounds and public campgrounds, but a lower percent of visitor expenditures from visitors staying in private homes, vacation homes, and on day trips.

Labor Earnings

The Dean Runyan report also provides information on industry earnings generated by travel spending in Wyoming. These earnings represent direct earnings in sectors that sell directly to travelers. The report indicated that direct labor earnings from travel spending in the three-county area were $98.7 million in 2006. Of this total, 59 percent of the labor earnings were in Park County ($58.2 million), with 34 percent in Fremont County ($33.2 million) and 7 percent in Hot Springs County ($7.3 million).

Table 3 shows that, after adjusting for inflation, labor earnings from travel spending in the three-county area increased from $70.5 million in 1997 to $84.7 million in 2006 (+20 percent). This represented a compound average growth rate of 2 percent per year. Among individual counties, the fastest growth rate for labor earning from travel spending was Hot Springs which increased by 39 percent between 1997 and 2006 or about 3.7 percent annually. Following Hot Springs County was Fremont County which grew by 29 percent between 1997 and 2006 or about 2.9 percent annually and Park County which grew by 13 percent between 1997 and 2006 or about 1.4 percent annually.

Employment

The Dean Runyan report indicated that direct travel employment in the three-county area was 5,050 jobs in 2006. Of this total, 64 percent of the jobs were in Park County (3,230 jobs), with 28 percent in Fremont County (1,400 jobs), and 8 percent in Hot Springs County (420 jobs).

Table 4 indicates the travel industry employment in the three-county area increased from 4,590 jobs in 1997 to 5,050 jobs in 2006 (+10 percent). This represents a compound average growth rate of 1.1 percent per year. Among individual counties, the fastest growth rate for employment from travel spending was in Hot Springs County which increased by 20 percent between 1997 and 2006 or about 2.0 percent annually. Following Hot Springs County was Park County which grew by 11 percent between 1997 and 2006 or about 1.2 percent annually and Fremont County which grew by 5 percent between 1997 and 2006 or about 0.6 percent annually.

Local Tax Revenue

The Dean Runyan report for Wyoming indicated that local tax revenue from travel spending in the three-county area was $4.1 million in 2006. Of this total 66 percent was in Park County ($2.7 million), with 22 percent in Fremont County ($900,000) and 12 percent in Hot Springs County ($500,000).

Table 5 indicates that local tax revenue from travel spending in the three-county area increased from $2.5 million in 1997 to $3.5 million in 2006 (+40 percent). This represents a compound average growth rate of 3.8 percent per year. Among individual counties, the fastest growth rate for local tax revenue was Hot Springs County which increased by over 100 percent between 1997 and 2006 or about 8 percent annually. Following Hot Springs County was Fremont County which grew by 47 percent between 1997 and 2006 or 4.4 percent per year and Park County which grew by 30 percent between 1997 and 2006 or 3.0 percent per year. The large increase in local tax revenue for Hot Springs County is probably a reflection of the increase in the county's lodging tax rate from 2 percent to 4 percent in 2006.

Seasonality

Changes in monthly private employment in the Leisure & Hospitality sector suggest that the travel industry in the three-county area is seasonal in nature. In 2006, area employment in the area Leisure & Hospitality sector peaked in July at 5,517 jobs (Table 6). June (5,272) and August (5,304) also had high levels of employment. The July level of employment was more than two-thirds higher than the lowest monthly level of employment in January (6,308 jobs). By county, the largest difference between high and low levels of employment in the Leisure & Hospitality sector was in Park County which had more than twice as many Leisure and Hospitality jobs in July (3,313 jobs) as in January (1,587 jobs). For Hot Springs County the difference was 39 percent and for Fremont the difference was 31 percent. July (403 jobs) was the peak month for Hot Springs County and January (289 jobs) the low month. For Fremont County, August (1,849 jobs) was the peak month and April (1,414 jobs) was the low month.

Average Earnings Per Job

Based on the Dean Runyan report, average earnings per job for the travel industry in the three-county area were $19,545 in 2006. For individual counties, averaged earnings per job for the travel industry ranged from a low of $17,381 in Hot Springs County to a high of $23,714 in Fremont County. For Park County the average earnings per job in 2006 were $18,019.

Table 7 shows that average earning per job for the travel industry in the three-county area increased in inflation-adjusted dollars from $15,367 in 1997 to $16,767 (+9 percent). Fremont County had the largest increase in average earnings per job (+23 percent). Following Fremont County were, Hot Springs County (+16 percent) and Park County (+2 percent).

2006 data on average earnings per job for all jobs in the region is not currently available from the U.S. Department of Commerce. However, in 2005 the average earning per job for all jobs in Park County was $30,475. Following Park County were Fremont County at $28,636 per job and Hot Springs County at $26,830.

Characteristics of Visitors to the Shoshone NF

Information from the National Visitor Use Monitoring Project report for the Shoshone NF provides a description of visitors to the Forest (Kocis et al, 2004). This report was based on an intercept survey of visitors to the Forest conducted by the Forest Service from October 2002 through September 2003. Data from a total of 562 visitors was collected by the survey. The following discussion is based on the results of that report.

In terms of age distribution the largest group of recreation visitors to the Forest was older adults (age 40 to 59). This category represented 46 percent of total Forest visitors (Table 8). The second largest age groups were young adults (age 20 to 39), and youth which both represented about 20 percent of the recreation visitors to the Forest. The smallest

age group was retirement aged adults (age 60 or more) which represented 14 percent of the recreation visitors to the Forest. Recreational visitors to the Forest were predominately white (97 percent) and the Forest was the primary destination of the trip for 76 percent of the visitors surveyed (Table 8).

In terms of visitor origin, 43 percent of the visitors to the Forest were from the three-county area (Table 9). For local visitors, Fremont County residents represented 31 percent of total visitors, with Park County representing 11 percent and Hot Springs County representing 0.9 percent. Regional residents from other Wyoming counties and bordering states represented 25 percent of the total visitors to the Forest. Among neighboring states, Montana had the largest proportion of Forest visitors (6 percent). The rest of the Forest visitors were from other states (33 percent) or other counties (0.2 percent).

In terms of travel distance, over 40 percent of the visitors traveled less than 100 miles to get to the Forest with 28 percent traveling less than 50 miles (Table 10). Another 9 percent traveled 100 to 199 miles and 12 percent traveling 200 to 499 miles. On the other hand, more than one-third of the visitors traveled 500 miles or more to get to the Forest. The distribution of travel distances seems consistent with the visitor origins reported in Table 9.

The average length of stay per visit on the Forest was 27.6 hours (Table 11). For individual site visits the average stay ranged from 43.8 hours for developed overnight use to 1.2 hours for developed day use. The average site visit for wilderness was 22.5 hours and for general forest areas was 14.1 hours. The average for all site visits was 18.0 hours. On average, visitors went to 1.5 sites during each visit to the Forest. Approximately 4 percent of the total site visits on the Forest were to wilderness areas.

The NVUM report provides information on both participation rates by recreation activity and what the primary recreation activity was for visits to the Forest (Table 12). In terms of participation rates, the five top recreation activities were Viewing Natural Features (60 percent), Viewing Wildlife (55 percent), Relaxing (48 percent), Hiking/Walking (38 percent), and Driving for Pleasure (33 percent). Rounding out the top ten were Picnicking (16 percent), Fishing (14 percent), Nature Study (13 percent), Visiting Historical Sites (10 percent), and Hunting (10 percent).

In terms of the primary activity for the trip, the top five recreation activities were Viewing Natural Features (19 percent), Hiking/Walking (11 percent), Relaxing (10 percent), Hunting (9 percent), and Fishing (7 percent). Rounding out the top 10 were Snowmobiling (7 percent), Viewing Wildlife (5.1 percent), Developed Camping (5 percent), Picnicking (5 percent), and Gathering Forest Products (4 percent). For some activities such as Snowmobiling and Hunting the percentage for primary activity was nearly the same as the percentage for participation which indicates that these activities are typically the sole activity participated in during the visits. For other activities such as Nature Study or Visiting Historical Sites, the percentage for primary activity was much

lower than the percentage for participation indicating that these activities tend to be part of a number of other activities engaged in during the visit.

In terms of facilities and areas on the Shoshone NF, Table 13 shows that the most frequently used were Forest Roads (23 percent), Forest Trails (19 percent), Scenic Byway (17 percent), Picnic Area (10 percent), Developed Campgrounds (7 percent), Snowmobile Area/Trails (7 percent), and Wilderness (7 percent).

Economic Impact of Visitors to the Shoshone NF

Estimates of the economic impact of visitors to the Shoshone NF were based on the National Visitor Use Monitoring Results (NVUM) for the Forest (Kocis et al, 2004). The NVUM results were developed from an intercept survey of 562 visitors to the Shoshone NF between October 2002 and September 2003. The visitation data use in this analysis is actually updated information from the NVUM for the Shoshone NF obtained from the Forest Service's Natural Resource Information System – Human Dimensions.

In order to estimate visitor spending the Forest Service breaks the NVUM visitation data in seven trip segments or types. These types include: 1) Non-local residents on day trips, 2) Non-local residents staying overnight on the national forest, 3) Non-local residents staying overnight off the national forest, 4) Local residents on day trips, 5) Local residents staying overnight on the national forest, 6) Local residents staying overnight off the national forest, and 7) Visits where recreating on the national forest was not the primary trip purpose.

Table 14 summarizes the estimated total recreation visits to the Shoshone NF by type of visit. Total visits to the forest were estimated to be more than 528,000. A visit is defined as the entry of one person upon the national forest to participate in recreation activities for an unspecified period of time. Of the total visits, nearly 143,000 (27 percent) were estimated to be visits by non-local residents with more than 269,000 estimated to be by local residents (51 percent) and more than 116,000 estimated to be non-primary visits (22 percent). For this analysis non-primary visits were assumed to be by non-locals. Local visitors were defined as individuals living within 50 miles of the recreation site. Visits by local residents tended to be day visits while non-local resident visits usually involved an overnight stay in the area either on the forest or adjacent to the forest.

Because only one-third of the visitors sampled in the NVUM process were asked questions about their spending, there was not a large enough sample to reliably estimate visitor spending by individual forest. Instead the Forest Service estimated visitor spending for three categories of forests: 1) Above Average Spending Forests, 2) Average Spending Forests, and 3) Below Average Spending Forests (Stynes and White, 2005). The Average Spending Forests estimates were used for the Shoshone NF based on the NVUM data. Downhill skier visits were estimated separately from other visits due to their higher spending. Table 15 summarizes the per-group per-visit spending estimates used in the analysis. Because recreation visits were on an individual basis while spending is reported on a per group basis, the per person visit estimates in Table 14 were converted

to per party visits. For non-primary visits the non-local day trip spending estimate was used rather than the entire spending for the trip. Although the downhill ski area on Shoshone NF is currently not in operation, some visits to downhill ski were sampled in 2003. Since the number of visits was relatively small (less than 1 percent of total group visits) this should not significantly affect the results of the analysis.

By combining the recreation visits information in Table 14 and the per visit spending estimates from Table 15, it was possible to estimate total visitor spending for the Shoshone NF. These results are summarized in Table 16. Total visitor spending for the Shoshone NF was estimated to be $20.1 million. Of this total $11.2 million (56 percent) was estimated to be by non-local residents with $6.3 million (31 percent) by local residents and $2.6 million (13 percent) by non-primary visitors which were assumed to be non-local residents. Non-locals represent a higher proportion of total spending despite being a lower proportion of total visits due to their higher expenditures per visit.

Since spending by non-local visitors to the Shoshone NF represents new money to the region's economy, the economic impact of these expenditures was estimated using a modified IMPLAN model of the three-county area. Table 17 summarizes the estimated economic impact of non-local Shoshone NF visitor spending generated by the IMPLAN model. The results indicate that the $13.8 million in non-local visitor expenditures supported more than 260 jobs and $4.8 million in labor earnings within the economy of the three-county area. Average earnings per job ranged from an estimated $18,363 for spending from non-local day trips to an estimated $19,288 for spending by non-local visitors staying overnight on the forest. The average for all non-local visitor spending was $21,386 per job.

Commercial Recreation on Shoshone NF

In addition to the general recreation use of the Shoshone NF, a number of commercial recreation businesses operate on the Forest. Information from the Forest indicated that it administers 460 special use permits of which 230 are for recreation related activities. This total includes 101 outfitters and guides, 18 resort permits, 3 organization camps, 2 ski areas, and 100 recreation residences. The Forest Service indicated that of the 101 outfitting and guide permits, virtually none of them focus solely on hunting. Rather, the Forest's outfitting and guiding permittees offer a variety of recreation services, including hiking, horseback riding, fishing, rafting, mountaineering, goat-packing, llama-packing, dog-sledding, snowmobiling, automobile-touring, and various forms of educational activities.

Since commercial recreation permit fees are based on a percentage of the permit holder's gross revenue, it was possible to estimate the gross revenue for commercial recreation on the Forest based on the fees paid to the Forest Service by the permit holder. Table 18 indicates that the gross revenue for the 18 resort permits that were active in 2006 was $6.7 million. The table also indicates that the gross revenue for the 98 outfitter and guide permits that were active in 2006 was $7.8 million. The combined total of these two categories of commercial recreation on the Forest was $14.5 million. This is a

conservative estimate of the spending by visitors using these recreation services since it only accounts for expenditures with the permittee and does not consider other expenditures during the visitors stay in the area.

Since this spending presumably represents new money to the region's economy, the economic impact of these expenditures was estimated using a modified IMPLAN model of the three-county area. The lower part of Table 18 summarizes the estimated economic impact of that this visitor spending generated by the IMPLAN model. The results indicated that the $14.5 million in spending supported more than 424 jobs and $6.7 million in labor earnings within the economy of the three-county area. Average earnings per job were $15,850.

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Table1. Visitor Spending for at Destination for Shoshone NF Area, 1997-2006.

Year	Deflated Fremont	Deflated Hot Springs	Deflated Park	Deflated Area
1997	$67,809,755	$15,511,351	$159,934,601	$243,255,707
2001	$77,051,534	$17,480,639	$180,861,141	$275,393,314
2002	$76,017,161	$16,508,777	$187,451,409	$279,977,348
2003	$78,192,549	$17,198,602	$188,714,710	$284,105,861
2004	$82,978,451	$16,997,788	$184,234,094	$284,210,334
2005	$88,761,062	$19,292,035	$194,159,292	$302,212,389
2006	$95,309,993	$22,991,070	$186,330,608	$304,631,671
Total Change 1997 to 2006	40.6%	48.2%	16.5%	25.2%
Annual Change 1997 to 2006	3.9%	4.5%	1.7%	2.5%

Source: Dean Runyan Associates (In 2000 dollars)

Table 2. Visitor Spending by Type of Accommodation for Shoshone NF Area, 2006.

	Fremont (000$)	Hot Springs (000$)	Park (000$)	Total (000$)	Fremont Percent	Hot Springs Percent	Park Percent	Total Percent
Hotel/Motel	$38,400	$14,800	$92,800	$146,000	34.5%	55.2%	42.7%	41.1%
Private Campground	$21,900	$7,100	$71,300	$100,300	19.7%	26.5%	32.8%	28.2%
Public Campground	$9,100	$0	$14,500	$23,600	8.2%	0.0%	6.7%	6.6%
Private Home	$24,200	$1,900	$15,700	$41,800	21.8%	7.1%	7.2%	11.8%
Vacation Home	$6,800	$800	$6,300	$13,900	6.1%	3.0%	2.9%	3.9%
Day Spending	$10,800	$2,200	$16,700	$29,700	9.7%	8.2%	7.7%	8.4%
Total	$111,200	$26,800	$217,300	$355,300	100.0%	100.0%	100.0%	100.0%

Source: Dean Runyan Associates

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Table 3. Travel Industry Earnings for Shoshone NF Area, 1997-2006.

Year	Deflated Fremont	Deflated Hot Springs	Deflated Park	Deflated Area
1997	$22,009,349	$4,506,676	$44,018,697	$70,534,722
2001	$24,316,644	$4,882,860	$49,023,916	$78,223,420
2002	$24,475,222	$4,703,082	$51,062,033	$80,240,337
2003	$24,905,079	$4,793,053	$52,441,638	$82,139,769
2004	$26,867,472	$4,752,070	$52,638,313	$84,257,855
2005	$27,433,628	$5,221,239	$53,274,336	$85,929,204
2006	$28,481,474	$6,262,493	$49,928,367	$84,672,334
Total Change 1997 to 2006	29.4%	39.0%	13.4%	20.0%
Annual Change 1997 to 2006	2.9%	3.7%	1.4%	2.0%

Source: Dean Runyan Associates (In 2000$)

Table 4. Travel Industry Employment for Shoshone NF Area, 1997-2006.

Year	Fremont	Hot Springs	Park	Area
1997	1,330	350	2,910	4,590
2001	1,360	340	3,270	4,970
2002	1,350	320	3,370	5,040
2003	1,320	340	3,470	5,130
2004	1,470	330	3,500	5,300
2005	1,460	360	3,440	5,260
2006	1,400	420	3,230	5,050
Total Change 1997 to 2006	5.3%	20.0%	11.0%	10.0%
Annual Change 1997 to 2006	0.6%	2.0%	1.2%	1.1%

Source: Dean Runyan Associates

Table 5. Travel Industry Local Tax Revenue for Shoshone NF Area, 1997-2006.

Year	Deflated Fremont	Deflated Hot Springs	Deflated Park	Deflated Area
1997	$524,032	$209,613	$1,781,709	$2,515,354
2001	$585,943	$292,972	$2,050,801	$2,929,716
2002	$671,869	$287,944	$2,207,569	$3,167,382
2003	$657,870	$281,944	$2,255,554	$3,195,369
2004	$639,702	$274,158	$2,193,263	$3,107,123
2005	$707,965	$353,982	$2,389,381	$3,451,327
2006	$772,088	$428,938	$2,316,264	$3,517,290
Total Change 1997 to 2006	47.3%	104.6%	30.0%	39.8%
Annual Change 1997 to 2006	4.4%	8.3%	3.0%	3.8%

Source: Dean Runyan Associates (In 2000 dollars)

Table 6. Private Leisure & Hospitality Employment in Shoshone NF Area, 2006.

Month	Fremont Employment	Hot Springs Employment	Park Employment	Area Employment
Jan	1,432	289	1,587	3,308
Feb	1,435	300	1,596	3,331
Mar	1,480	309	1,621	3,410
Apr	1,414	341	1,758	3,513
May	1,506	350	2,322	4,178
Jun	1,746	385	3,141	5,272
Jul	1,801	403	3,313	5,517
Aug	1,849	366	3,089	5,304
Sep	1,666	350	2,686	4,702
Oct	1,480	304	2,120	3,904
Nov	1,407	311	1,776	3,494
Dec	1,447	303	1,755	3,505
Average	1,555	334	2,230	4,120
Peak	1,849	403	3,313	5,517
Low	1,414	289	1,587	3,308
Difference	30.8%	39.4%	108.8%	66.8%

Source: Bureau of Labor Statistics

Table 7. Travel Industry Average Earnings Per Job in Shoshone NF Area, 1997-2006.

Year	Deflated Fremont Earnings	Deflated Hot Springs Earnings	Deflated Park Earnings	Deflated Area Earnings
1997	$22,009,349	$4,506,676	$44,018,697	$70,534,722
2001	$24,316,644	$4,882,860	$49,023,916	$78,223,420
2002	$24,475,222	$4,703,082	$51,062,033	$80,240,337
2003	$24,905,079	$4,793,053	$52,441,638	$82,139,769
2004	$26,867,472	$4,752,070	$52,638,313	$84,257,855
2005	$27,433,628	$5,221,239	$53,274,336	$85,929,204
2006	$28,481,474	$6,262,493	$49,928,367	$84,672,334

Year	Fremont Employment	Hot Springs Employment	Park Employment	Area Employment
1997	1,330	350	2,910	4,590
2001	1,360	340	3,270	4,970
2002	1,350	320	3,370	5,040
2003	1,320	340	3,470	5,130
2004	1,470	330	3,500	5,300
2005	1,460	360	3,440	5,260
2006	1,400	420	3,230	5,050

Year	Fremont Average Earnings Per job	Hot Springs Average Earnings Per job	Park Average Earnings Per job	Area Average Earnings Per job
1997	$16,548	$12,876	$15,127	$15,367
2001	$17,880	$14,361	$14,992	$15,739
2002	$18,130	$14,697	$15,152	$15,921
2003	$18,867	$14,097	$15,113	$16,012
2004	$18,277	$14,400	$15,040	$15,898
2005	$18,790	$14,503	$15,487	$16,336
2006	$20,344	$14,911	$15,458	$16,767
Change	22.9%	15.8%	2.2%	9.1%

Source: Dean Runyan Associates (In 2000 dollars)

Table 8. Description of Visitors to Shoshone N.F., 2003.

Age of Shoshone NF Recreation Visitors

Under 16	17.7%
16 to 19	2.1%
20 to 29	8.3%
30 to 39	12.1%
40 to 49	19.2%
50 to 59	26.5%
60 to 69	10.8%
70 Plus	3.2%
Total	100.0%

White	96.9%
Hispanic	0.8%
Native American	1.2%
African American	0.1%
Asian	1.5%
Pacific Islander	0.0%
Other	0.0%
Total*	100.6%

Yes	76.0%
No	24.0%
Total	100.0%

Source: Shoshone NF NVUM

Table 9. Origin of Shoshone NF Recreation Visitors, 2003.

Local	
Fremont	31.0%
Park	10.7%
Hot Springs	0.9%
Total Local	42.6%
Regional	
Other Wyoming	10.5%
Montana	6.5%
Colorado	5.1%
Utah	1.6%
Idaho	0.9%
Total Regional	24.6%
Other States	32.6%
Other Countries	0.2%
Total	100.0%

Source: Shoshone NF NVUM

Table 10. Distance Visitors Traveled to Shoshone NF, 2003.

Distance	Number	Percent
Under 25 Miles	82	17.9%
25-49 Miles	48	10.5%
50-74 Miles	35	7.6%
5-99 Miles	28	6.1%
100-199 Miles	43	9.4%
200-499 Miles	55	12.0%
500+ Miles	168	36.6%
Total	459	100.0%

Source: Shoshone NF NVUM

Table 11. Forest and Site Visit Length of Stay, 2003.

	Average (Hours)
National Forest Visit	27.6
Site Visits:	
Developed Overnight Use	43.8
Wilderness	22.5
General Forest Area	14.1
Developed Day Use	1.2
Average - All Sites	18.0

Source: Shoshone NF NVUM

Table 12. Recreation Activities on Shoshone NF, 2003.

Activity	Participation Rate*	Primary Activity	Percent Primary*
Developed Camping	8.1%	4.8%	59.3%
Primative Camping	5.1%	2.0%	39.2%
Backpacking	5.6%	1.2%	21.4%
Resort Use	8.8%	2.0%	22.7%
Picnicking	15.6%	4.7%	30.1%
Viewing Natural Features	60.2%	18.9%	31.4%
Visiting Historic Sites	10.0%	0.0%	0.0%
Nature Center Activities	5.1%	0.0%	0.0%
Nature Study	12.9%	0.0%	0.0%
Relaxing	47.9%	9.6%	20.0%
Fishing	14.1%	7.4%	52.5%
Hunting	9.6%	9.1%	94.8%
OHV Use	5.8%	1.4%	24.1%
Driving for Pleasure	33.5%	3.3%	9.9%
Snowmobiling	6.8%	6.8%	100.0%
Motorized Water Activities	0.1%	0.0%	0.0%
Other Motorized Activities	0.2%	0.0%	0.0%
Hiking/Walking	38.1%	10.9%	28.6%
Horseback Riding	5.0%	1.9%	38.0%
Bicycling	1.0%	0.2%	20.0%
Non-motorized Water	2.9%	0.5%	17.2%
Downhill Skiing	1.1%	0.7%	63.6%
Cross-country Skiing	1.8%	0.3%	16.7%
Other Non-motorized	3.8%	0.7%	18.4%
Gathering Forest Products	8.8%	4.4%	50.0%
Viewing Wildlife	55.4%	5.1%	9.2%
No Activity Reported	18.2%	19.1%	N.A.

* Individuals may indicate more than one activity

Source: Shoshone NF NVUM

Table 13. Use of Facilities and Areas on Shoshone NF, 2003.

Facility	Visitor Use
Forest Roads	23.5%
Forest Trails	19.2%
Scenic Byway	16.7%
Picnic Area	10.0%
Developed Campground	7.2%
Snowmobile Area/Trail	7.2%
Wilderness	7.1%
Motorized Trails	5.3%
Museum	4.3%
Interpretive Displays	4.2%
Information Sites	3.4%
Designated ORV Area	1.7%
Nordic Trails	1.7%
FS Fire Lookout	1.6%
Boat Launch	1.6%
FS Lodge	1.2%
Developed Fishing Site	1.0%
Snowplay Area	0.9%
Organization Camp	0.6%
Downhill Ski Area	0.5%
Developed Swim Sites	0.5%
Recreation Residences	0.0%

Source: Shoshone NF NVUM

Table 14. Total Recreation Visits to Shoshone NF, 2003.

Trip Type	Visits	Percent
Non-local Day Trips	15,851	3.0%
Non-local Overnight on Forest	36,985	7.0%
Non-local Ovenight off Forest	89,820	17.0%
Total Non-local Visits	142,656	27.0%
Local Day Trips	221,908	42.0%
Local Overnight on Forest	26,418	5.0%
Local Ovenight off Forest	21,134	4.0%
Total Local Visits	269,460	51.0%
Non Primary Visits	116,238	22.0%
Total Visits	528,354	100.0%

Source: Shoshone NF NVUM

Table 15. Visitor Spending Estimates for Shoshone NF, 2003.

Trip Type	Downhill Skiing	Other Visits
Non-local Day Trips	$79.54	$51.60
Non-local Overnight on Forest	N.A.	$161.25
Non-local Ovenight off Forest	$341.97	$245.25
Local Day Trips	$53.34	$32.85
Local Overnight on Forest	N.A.	$124.49
Local Ovenight off Forest	$205.17	$116.14
Non Primary Visits	$79.54	$51.60
Average Spending	$151.91	$111.88

Source: National NVUM Data

Table 16. Total Visitor Spending for the Shoshone NF, 2003.

Trip Type	Amount	Percent
Non-local Day Trips	$354,040	1.8%
Non-local Overnight on Forest	$2,302,650	11.4%
Non-local Overnight off Forest	$8,541,056	42.5%
Total Non-local Visits	$11,197,746	55.7%
Local Day Trips	$4,000,472	19.9%
Local Overnight on Forest	$1,310,257	6.5%
Local Overnight off Forest	$993,034	4.9%
Total Local Visits	$6,303,763	31.3%
Non Primary Visits	$2,618,048	13.0%
Total Spending	$20,119,557	100.0%

Table 17. Economic Impact of Non-Local Visitor Spending for Shoshone NF.

Type	Total Spending	Total Employment	Total Earnings	Average Earnings Per Job
Non-local Day Trips	$354,040	6.2	$113,853	$18,363
Non-local Overnight on Forest	$2,302,650	38.9	$750,293	$19,288
Non-local Overnight off Forest	$8,541,056	173.0	$3,092,796	$17,877
Non-Primary Visits	$2,618,048	45.6	$841,918	$18,463
Total	$13,815,794	263.7	$4,798,860	$18,198

Source: Modified IMPLAN Model for Three-County Area

Table 18. Commercial Recreation on Shoshone NF, 2006.

Expenditures

Type	Number of Permits	Estimated Gross Revenue
Resorts	18	$6,700,000
Outfitters & Guides	98	$7,800,000
Total	116	$14,500,000

Source: Shoshone NF

Economic Impact

Direct Expenditures	$14,500,000
Total Economic Activity	$20,833,878
Total Employment	424.3
Total Earnings	$6,725,230
Average Earning Per Job	$15,850

Source: Modified IMPLAN Model for Three-County Area

AGRICULTURE

Gross Income

Data from the U.S. Department of Commerce's Bureau of Economic Analysis indicates that the gross income for agriculture in the three-county area totaled $168.9 million in 2005 (Table 1). Of this total $97.2 million (58 percent) was from livestock marketing, $44.5 million (26 percent) was from crop marketing, and $27.2 million (16 percent) was from other sources. Other sources include government payments, value of home consumption, machine/custom work income, rental income, and income from forest products.

Park County had the largest agricultural gross income in the region with $82.8 million (49 percent of the total). Fremont County was second with $74.5 million (44 percent of the total), and Hot Springs county was third with $11.6 million (7 percent of the total). Livestock marketing was the largest source of gross income for agriculture in all three counties, ranging from 81 percent in Hot Springs County to 44 percent in Park County. Livestock represented 68 percent of the gross income for agriculture in Fremont County.

Between 1970 and 2005 the gross income from agriculture for the three-county area averaged $180.8 million (Table 2). However, there was substantial variability in gross income during this time period, ranging from a high of $287.3 million in 1979 to a low of $137.6 million in 1996. Despite an extended drought, the 2005 gross income from agriculture in the region ($151.3 million) was only slightly less than the gross income in 1970 ($164.6 million) after accounting for inflation. Livestock marketing has remained the largest source of gross income for agriculture in the region averaging 64 percent of the total from 1970 to 2005. Livestock marketing ranged from a high of 79 percent of total gross income in 1979 to a low of 50 percent in 1996.

Employment

In 2005 there were a total of 2,147 agricultural jobs in the three-county region (U.S. Department of Commerce, 2007). Fifty-four percent of these jobs were in Fremont County, with 37 percent in Park County and 9 percent in Hot Springs County (Table 3). Despite the fluctuations in gross income, agricultural employment in the region remained fairly stable between 1970 and 2005. In 1970 there were 2,200 agricultural jobs in the region. By 2000 that number had increased to by 39 to 2,239 (+2 percent). In 2001 the federal government changed the classification system they used to report employment; as a result employment estimates for 2001 through 2005 may not be entirely comparable to the previous years. Between 2001 and 2005 agricultural employment in the region, under the new classification system, declined by 36 jobs from 2,183 in 2001 to 2,147 in 2005 (-2 percent).

There were, however, some substantial changes in agricultural employment by county. For example agricultural employment in Fremont County increased by 226 jobs between 1970 and 2000 (+23 percent). Meanwhile, agricultural employment in Park County

declined by 192 jobs (-19 percent) between 1970 and 2000. For Hot Springs County agricultural employment remained fairly stable at 199 in 1970 and 204 in 2000. All three counties have experienced slight declines in agricultural employment since 2001.

Labor Earnings

In 2005, labor earnings for agriculture in the three-county region totaled $21.7 million (Table 4). Forty-five percent of these earnings were in Fremont County with an additional 45 percent in Park County. Hot Springs County had 10 percent of the total labor earnings for agriculture. In contrast to the relative stability of agricultural employment between 1970 and 2005, labor earnings for agriculture in the region were highly variable, ranging from $68.6 million in 1973 to $7.0 million in 1986. This variability probably reflects price variability resulting from the cyclical nature of cattle prices, and in recent years, variability associated with weather conditions, particularly drought.

For Fremont County labor earning for agriculture ranged from highs of over $20 million in 1972, 1974, 1991, 1992, and 1993 to a low of -$615,000 in 1987. In 2005 labor earnings for agriculture in Fremont County were $9.7 million. For Hot Springs County labor earnings for agriculture ranged from highs of over $8 million in 1972 and 1973 to a low of -$952,000 in 1984. In 1984,1985,1986,1987, 1988, 1996, and 2002 agricultural earnings in Hot Springs County were negative. In 2005 labor earnings for agriculture in Hot Springs County were $2.1 million. For Park County labor earnings for agriculture ranged from a high of $45.5 million in 1973 to a low $7.2 million in 1982. Perhaps due to greater diversification in its agriculture production, Park County did not experience any years of negative labor earnings for agriculture between 1970 and 2005. In 2005 labor earnings for agriculture in Park County were $9.8 million. Due to the federal government's change in classification systems for reporting employment, labor earnings estimates for 2001 through 2005 may not be entirely comparable to the previous years.

Average Earnings Per Job

In 2005 average earnings per job for agriculture in the three-county area averaged $10,101 (Table 5). Park County had the highest average earnings per job with $12,447. Hot Springs County was next with average earnings per job of $10,836. Fremont County had the lowest average earnings per job with $8,375. Average earnings per job have been highly variable in the region. This is not surprising since employment has remained relatively constant while labor earnings have fluctuated. Between 1970 and 2005 average earnings per job for agriculture in the region has varied from a high of $31,321 in 1973 to a low of $3,202 in 1987. During this time frame average earnings per job have been more than $20,000 six times and below $5,000 five times. Again, this variability probably reflects price variability resulting from the cyclical nature of cattle prices, and in recent years, variability associated with weather conditions, particularly drought.

Among individual counties, average earnings per job for agriculture in Fremont County ranged from a high $24,220 in 1974 to a low of -$533 in 1987. Average earnings per job have been negative in Fremont for only one year during this time frame. For the other

counties, average earnings per job for agriculture ranged from a high of $50,720 in 1973 to a low of -$4,080 in 1986 in Hot Springs County. Average earnings per job have been negative in Hot Springs County for seven years during the time frame, including five years in a row from 1984 to 1998. For Park County average earnings per job for agriculture have ranged from a high of $42,947 in 1973 to a low of $7,481 in 1982. Average earnings per job were not negative for any of the years in the time frame. When viewing average earnings per job for agriculture it is important to remember that the figures include a large number of small and/or part-time operators who receive very little income from agriculture but are still counted as employed in agriculture. Again, due to the federal government's change in classification systems for reporting employment, average earnings per job estimates for 2001 through 2005 may not be entirely comparable to the previous years.

Beef Cow Inventory

In 2005, the beef cow inventory in the region was slightly more than 100,000 head. Sixty percent of the inventory was in Fremont County, with 17 percent in Hot Springs County and 23 percent in Park County. From 1970 through 2007 the beef cow herd in the three-county area has averaged slightly more than 95,800 head (Table 6). During this time, the beef cow inventory in the region has ranged from a low of 76,300 head in 1985 to a high of 116,900 head in 2000. Much of this variability was related to the cyclical nature of the cattle production and weather. In 1970 the region's beef cow inventory was 100,680 head. In 2007 the region's beef cow inventory was practically the same at 101,000.

There have, however, been some substantial changes in beef cow inventories by county. For example, the beef cow inventory in Fremont County increased by 11,850 head between 1970 and 2007 (+24 percent). On the other hand, the beef cow inventory in Hot Springs County declined by 2,830 head (-14 percent) and the beef cow inventory in Park County declined by 8,700 head (-27 percent) from 1970 to 2007. Most of the decline in beef cow inventory occurred after 2002 suggesting that the decrease may be drought related.

Breeding Sheep Inventory

In 2005, the breeding sheep inventory in the region was 22,000 head. Sixty-four percent of the inventory was in Fremont County, with 14 percent in Hot Springs, and 23 percent in Park County (Table 7). In contrast to beef cattle, the sheep inventory in the three-county region has declined substantially over time. Between 1970 and 2007 the number of breeding sheep in the region decline by 130,000 head (-85 percent).

The majority of the regional decline in breeding sheep inventory occurred in Fremont County where the number of sheep decreased from 84,000 head in 1970 to 14,000 head in 2007 (-83 percent). In Hot Springs County the breeding sheep inventory decreased from 24,000 head in 1970 to 3,000 head in 2007 (-87 percent). In Park County the breeding sheep inventory decreased from 44,000 head in 1970 to 5,000 head in 2007 (-89 percent). These declines were consistent with an overall decline in the sheep industry in

the Western United States due in part to low commodity prices, predators, and lack of labor availability.

Land Use

Agriculture is the dominate private land use in the three-county area. Agricultural land accounts for 1.8 million of the 1.9 million acres (94 percent) of private land in the region (Table 8). Approximately 1.5 million acres of the private land in the region is classified as range land. This represents 81 percent of the private land in the region. The percentage of private land in agriculture ranged from 90 percent in Fremont County to 97 percent in Hot Springs County and 98 percent in Park County. The percentage of private land classified as range land ranged from 75 percent in Fremont County and 82 percent in Park County, to 91 percent in Hot Springs County. Due to its importance as a landholder agriculture plays a major role in private land use in the region.

Agricultural operations holding grazing permits are particularly important in terms of private land use in the region. Fifty-one percent of the ranches in the region (434) hold grazing permits (Table 9). This ranges from approximately 50 percent in Fremont and Park Counties to 63 percent in Hot Springs County. Approximately two-thirds of these grazing permits are federal permits (either Forest Service or Bureau of Land Management) with some operations holding more than one type of permit. This ranges from 59 percent in Fremont County to 76 percent in Park County and 84 percent in Hot Springs County. Agricultural operations holding grazing permits tend to be the larger operations in the region. Because of this, they represent 2.6 million of the 3.0 million acres (87 percent) of agricultural land in the region (Note: not all land in agricultural use is private). Because much of the agricultural land in the region is tied to grazing permits, changes in permitted grazing may have implications for private land use in the region.

Amenity Value

In addition to food and fiber production, the agricultural industry enjoys a long tradition and directly influences the majority of private land within the region. The open spaces associated with agriculture offer landscapes, lifestyles, and wildlife habitat. As a result, significant changes in the economic viability of the industry, regardless of cause, are likely to have important economic, social, cultural, and environmental implications. A recent survey conducted for a group including the Wyoming Stock Growers Association, the Ruckelshaus Institute of Environment and Natural Resources, and the Nature Conservancy (Public Opinion Strategies and FMMA, 2007) found that nearly three-fourths of state residents felt that they personally benefit from the presence of farms and ranches in Wyoming. In addition nearly 60 percent of respondents were concerned about the availability of water for farming and ranching in Wyoming and nearly 50 percent were concerned with the loss of family farms and ranches in the State. The concerns regarding agriculture, water and retaining farms and ranches ranked 3rd and 5th out of 17 possible concerns facing Wyoming residents.

Much of the agricultural land in the region is productive ranchland for both livestock and wildlife. The American Farmland Trust (AFT) classified 1.4 million acres of the private land in the three-county area as "prime' ranchland (American Farmland Trust, 2002). This includes 464,000 acres in Fremont County, 217,600 acres in Hot Springs County, and 697,600 acres in Park County. The AFT defines "prime" ranchland as high quality land with desirable wildlife characteristics including proximity to publicly owned lands, year-round water availability, mixed grass and tree cover, and a variety of vegetation. The AFT has also estimated that, due to the proximity of the "prime" ranchland to developed areas, up to 46 percent of the "prime" ranchland in the region could potentially be developed by 2020. This would represent the conversion of more than 631,040 acres of agricultural land in the region to residential development. Such a conversion would affect 64 percent of the "prime" ranchland in Fremont County and 48 percent of the "prime" ranchland in Park County. The AFT study ranked Park County (15th) and Fremont County (21st) among the top 25 counties in the Rocky Mountain Region in terms of acres that potentially could be developed by 2020.

In addition to the social, cultural, and environmental implications of the conversion of "prime" ranchland in the region, there would also be significant economic implications beyond food and fiber production. Studies in Colorado have found that ranchland provides important economic benefits to both residents and visitors. Magnan et al (2005) found that the natural environment, ranchlands, and western historical preservation were the three most important contributors to local quality of life in Routt County. The analysis indicated that the value of ranchlands to current Routt County residents is likely to be $20-$30 million. Ellingson et al (2005) found that the natural environment, ranch open space, western historical preservation, and recreational amenities are local assets that strongly add to the summer visitors' experience. The analysis indicated that 50 percent of Routt County's summer tourists would reduce their expenditures and time spent in the area if existing ranchlands were converted to urban uses. This reduction would cost the county about $8 million per year in lost direct revenue. Orens and Seidl (2004) found that Gunnison's public open space and private working landscapes contribute to the quality of the winter tourism in the area. Their analysis indicates that wholesale conversion of local ranchland to tourism infrastructure and second homes may reduce winter tourism by as much as 40 percent. The impact of such a change could reach $14 million dollars and 350 jobs per year. While it is unclear precisely how these economic values might translate to the three-county area considered in this analysis, it does seem likely that there are significant amenity values closely associated with agricultural lands in the region.

Livestock Grazing on the Shoshone NF

Information from the Shoshone NF indicated that the grazing permits for the Forest represent 62,569 Animal Unit Months (AUM) of livestock grazing in 2007. Almost all this grazing is for cattle with only limited sheep grazing remaining on the Forest. Approximately one half of the grazing is located on the southern part of the Forest on the Wind River District and the Washakie District. The remaining one-half of the grazing is

located on the northern part of the Forest on the Clarks Fork District, the Greybull District, and the Wapiti District. The only sheep grazing is located on the Washakie Ranger District.

Livestock grazing on the Shoshone NF has been declining over time. In the 1940's there were a total of 231,577 AUM of grazing on the Forest, including 183,812 AUM of sheep grazing and 47,765 AUM of cattle grazing (Table 10). Since 2000 the average has been 55,987 AUM including 55,199 AUM of cattle grazing and 789 AUM of sheep grazing. This represents a 76 percent decrease in livestock grazing on the Forest and was exclusively a result of declining sheep grazing. This decrease was consistent with the previously discussed decline in sheep numbers in the region. In contrast, cattle grazing has remained relatively stable over time averaging slightly more than 52,000 AUMs since the 1940's.

Ranch Simulation Model

Although most ranches are typically only partially dependent on federal land grazing for forage, this forage source is a critical part of their livestock operation. Greer (1994) and Taylor et al (1992) both found that while the reliance of ranchers on forage from federal land grazing can appear relatively unimportant when calculated on an acreage or AUM basis, they become quite important when calculated on a seasonal dependency basis. The rigidity of seasonal forage availability means that the optimal use of other forages and resources are impacted when federal AUMs are not available, Torell et al (2002). Bartlett (1983), Gee (1983), Hahn et al (1989), Bartlett et al (1979), Gee (1981), Perryman and Olson (1975), Rowe and Bartlett (2001), Torell et al (1981), and Van Tassell and Richardson (1998) have all found that potential reductions in income and net ranch returns are greater than just the direct economic loss from reductions in federal grazing.

In order to account for the overall importance of federal grazing, a multi-year linear programming model of cattle ranching was used to evaluate the economic importance of Shoshone NF grazing. This model solves for the profit maximizing livestock production given a defined forage base. Profit maximization was evaluated over a 40 year time period using 100 sets of random prices that ranchers would likely face over the 40 year planning horizon. The reported "optimal" solution is the average level of production and profit realized across the 100 alternative beef price scenarios. The model was used to define an optimal solution given the base forage resources of the ranching operation. Changes in production and profitability levels were then observed with reductions or elimination of Forest Service grazing. Within the model, losses from reduced livestock production are partially offset by increased hay sales. The Western Wyoming USFS Grazing Model used for the Shoshone NF analysis is an updated version of previous work in Fremont and Park Counties (Taylor et al, 2004, 2005). The purpose of reducing Forest Service grazing in the analysis was not to imply that such reductions are likely. Rather the purpose was to evaluate its importance by comparing ranch profitability with and without Forest Service grazing.

The results from the updated ranch model simulation are summarized in Table 11. In the base line scenario the model ranch was running 610 brood cows and replacement heifers and was selling 170 tons of grass hay. This was estimated to generate on average $244,163 in gross revenue and $27,822 in profits for the ranching operation. The cow herd decreases by 12 percent to 539 head with a 25 percent reduction in Forest Service grazing. This reduction decreased gross ranch revenue for the ranch by 7 percent to $226,513 and reduces profitability by 17 percent to $23,056. The loss of livestock revenue is partially offset by increased hay sales from 170 tons to 271 tons. The cow herd is reduced by 23 percent to 467 head with a 50 percent reduction in Forest Service grazing. This reduction decreases gross ranch revenue for the ranch by 15 percent to $206,238 and reduces profitability by 39 percent to $16,836. The loss of livestock revenue is again partially offset by increased hay sales from 170 tons to 386 tons. The cow herd is reduced by 34 percent to 403 head with a 75 percent reduction in Forest Service grazing. This reduction decreases gross ranch revenue by 25 percent to $184,166 and reduces profitability by 67 percent to $9,293. The loss of livestock revenue is once again partially offset by increase hay sales from 170 tons to 510 tons. Finally, the cow herd is reduced by 45 percent to 332 head with a 100 percent reduction in Forest Service grazing. This reduction decreases gross ranch revenue for the ranch by 33 percent to $162,910 and reduces profitability by 139 percent to -$10,803. The loss of livestock revenue is only partially offset by increased hay sales from 170 tons to 627 tons. It should be noted that the analysis assumes that there is a market for the increased hay sales. If this is not the case the reduction in profitability would be much greater.

Economic Impact

Results from the ranch model simulations indicate the economic importance of Forest Service grazing to ranching operations in region. Because ranching operations have economic linkages with other sectors of the region's economy, changes in Shoshone NF grazing also have implications for the overall economy in the region. Results from the ranch level analysis suggest that that there are at least three possible approaches to evaluating the economic importance of federal grazing to local communities: 1) evaluating Forest Service AUMS only, 2) evaluating Forest Service AUMS and the effects on total production, and 3) evaluating Forest Service AUMS and their effect on the economic viability of the ranch operation. The following considers the economic impact of Shoshone NF grazing on the local economy under each of the three perspectives. For the analysis cattle and sheep grazing have been combined and the reductions estimated for cattle ranching from a loss of Forest Service grazing are assumed to apply to sheep ranching.

1.) Forest Service grazing only perspective
The top part of the second column of Table 12 summarizes the estimated economic of one AUM of Shoshone NF grazing to the region's economy if the Forest Service grazing is considered in isolation. This information was estimated from a modified 2004 IMPLAN model of the three-county area. These estimates are based on the 1996-2005 average value of production for cow/calf operations in the Basin and Range region of the United States (USDA-ERS), which includes the Shoshone NF area and a 2004 University

of Idaho cow/calf budget. On a per AUM basis, the average value of production was $41.27. Due to economic linkages between ranching and the rest of the region's economy, the total economic impact from the production associated with one AUM of grazing was estimated to be $86.19. This represents the total economic activity that occurs within the region as a result of production from one AUM of livestock grazing. As a result of this economic activity it is estimated that $27.56 of labor income are generated throughout the local economy and 0.000825 jobs are supported per AUM of livestock grazing. The 0.000825 jobs represent about one job for every 1,200 AUMS of livestock grazing. Average earnings per job for this employment are $33,396 per year.

From the Forest Service Grazing Only Perspective, the 62,569 AUMS of livestock grazing on the Shoshone NF results in $2.6 million of production, $5.4 million in total economic activity, $1.7 million in labor earnings, and 52 jobs in the region's economy (bottom part of the second column of Table 12). This perspective assumes that the only affect on the ranching operation from Forest Service grazing is the direct production associated with the Shoshone NF AUMS.

2.) Ranch production perspective
As noted in the ranch simulation discussion above, estimating the economic impact of federal grazing based solely on federal AUMS probably underestimates the actual importance of federal grazing to the ranching operation. The results from the Western Wyoming USFS Grazing Model indicate that, in terms of ranch production, one AUM of Shoshone NF grazing generates an estimated $57.78 of livestock production (top part of the third column in Table 12). This reflects that since Shoshone NF AUMS are part of an overall grazing system, a change in Forest Service grazing affects the profit maximizing use of the rest of the forage resources. Under this scenario, the total economic impact of the production associated with a Shoshone NF AUM of grazing throughout the economy of the region is $120.66. As a result of this economic activity it is estimated that $38.59 of labor earnings are generated per AUM and 0.001156 jobs are supported in the region's economy. The 0.001156 jobs represent about one job for every 865 AUMS of livestock grazing. Average earnings per job for this employment are again $33,396 per year.

From the Ranch Production Perspective, the 62,569 AUMS of livestock grazing on the Shoshone NF results in $3.6 million of production, $7.5 million in total economic activity, $2.4 million in labor earnings, and 72 jobs in the region's economy (bottom part of the third column in Table 12). This perspective considers the change in total ranch production resulting from the change in Shoshone NF grazing assuming that the ranch still remains in operation.

3.) Ranch viability perspective
Previous research and the results from the Western Wyoming USFS Grazing Model indicate that the availability of federal grazing may be critical to the economic viability of many federal grazing dependent ranches. As was observed in the ranch simulation model, the net profit for a Forest Service grazing dependent ranch without Shoshone NF grazing was negative.

The results from the Western Wyoming USFS Grazing Model indicate that if Forest Service grazing affects the economic viability of the ranch, one AUM of Forest Service grazing actually represents an estimated $125.87 of livestock production (top part of column 4 in Table 12). Under this scenario, the total economic impact of the production associated with one Shoshone NF AUM of grazing throughout the region's economy is $262.86. As a result of this economic activity it is estimated that $84.07 of labor earnings are generate per AUM and 0.002517 jobs are supported in the region's economy. The 0.002517 jobs represent about one job for every 397 AUMS of grazing. Average earnings per job for this employment are again $33,396 per year.

From the Ranch Viability Perspective, the 62,569 AUMS of livestock grazing on the Shoshone NF results in $7.9 million of production, $16.4 million in total economic activity, $5.3 million in labor earnings, and 158 jobs in the region's economy (bottom part of column 4 in Table 12). This perspective considers the change in total ranch production resulting from the change in Shoshone NF grazing assuming that the ranch ceases operation without Forest Service grazing.

Livestock grazing summary and conclusions

The total economic impact estimates for Shoshone NF livestock grazing range from 52 to 158 jobs and $1.7 million to $5.3 million in labor earnings. Which of these values is the most relevant depends on a number of factors including the individual ranch's level of dependency on Forest Service grazing, the magnitude of the proposed change in grazing, the financial solvency of the ranch, the availability of alternative sources of forage, and the desire of the rancher to remain in ranching. For small changes in Shoshone NF grazing the Forest Service Grazing Only perspective may be the most appropriate. For larger changes where the ranching operation might still stay in operation, the Ranch Production Perspective may be the most appropriate. For larger changes where the economic viability of the ranching operation is uncertain the Ranch Viability Perspective may be the most appropriate.

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Table 1. Gross Income for Agriculture in Shoshone NF Area, 2005.

	Fremont (000$)	Hot Springs (000$)	Park (000$)	Region (000$)
Livestock Marketing	$51,001	$9,381	$36,868	$97,250
Crop Marketing	$13,586	$1,075	$29,811	$44,472
Other Revenue	$9,960	$1,107	$16,100	$27,167
Total	$74,547	$11,563	$82,779	$168,889
Percent of Total	44.1%	6.8%	49.0%	100.0%

Source: Bureau of Economic Analysis

Table 2. Trends in Agriculture Gross Income in Shoshone NF Area, 1970-2005.

Year	Deflated Area Livestock (000$)	Deflated Area Crops (000$)	Deflated Area Other (000$)	Deflated Area Total (000$)	Livestock Percent
1970	$117,574	$36,850	$10,186	$164,610	71.4%
1971	$131,885	$38,888	$10,383	$181,156	72.8%
1972	$167,327	$44,686	$13,005	$225,018	74.4%
1973	$193,923	$70,024	$11,821	$275,769	70.3%
1974	$132,241	$85,493	$9,491	$227,224	58.2%
1975	$131,189	$68,641	$10,772	$210,602	62.3%
1976	$132,070	$55,942	$8,973	$196,985	67.0%
1977	$156,652	$46,630	$7,634	$210,916	74.3%
1978	$186,746	$47,512	$8,380	$242,638	77.0%
1979	$226,788	$53,811	$6,666	$287,265	78.9%
1980	$180,537	$59,887	$5,832	$246,256	73.3%
1981	$157,400	$51,522	$5,026	$213,947	73.6%
1982	$146,356	$39,947	$4,952	$191,254	76.5%
1983	$155,207	$44,024	$5,715	$204,946	75.7%
1984	$131,100	$47,977	$6,519	$185,596	70.6%
1985	$115,860	$49,417	$6,551	$171,828	67.4%
1986	$96,901	$46,840	$6,251	$149,992	64.6%
1987	$93,502	$38,220	$9,052	$140,774	66.4%
1988	$101,936	$49,670	$11,807	$163,413	62.4%
1989	$94,337	$55,701	$9,442	$159,480	59.2%
1990	$90,098	$53,703	$8,087	$151,888	59.3%
1991	$96,426	$61,771	$9,040	$167,238	57.7%
1992	$89,320	$67,090	$11,873	$168,283	53.1%
1993	$88,728	$60,213	$13,351	$162,292	54.7%
1994	$86,874	$49,910	$12,932	$149,716	58.0%
1995	$79,741	$50,389	$13,806	$143,936	55.4%
1996	$68,580	$55,205	$13,802	$137,588	49.8%
1997	$85,231	$56,663	$12,791	$154,684	55.1%
1998	$85,681	$48,058	$20,562	$154,301	55.5%
1999	$81,730	$50,616	$23,951	$156,297	52.3%
2000	$93,986	$44,463	$18,416	$156,865	59.9%
2001	$95,237	$44,881	$21,164	$161,282	59.0%
2002	$81,798	$37,143	$28,658	$147,599	55.4%
2003	$73,207	$40,452	$24,544	$138,203	53.0%
2004	$97,468	$41,425	$19,250	$158,143	61.6%
2005	$87,151	$39,854	$24,346	$151,351	57.6%
Average	**$117,522**	**$50,931**	**$12,362**	**$180,815**	**63.7%**

Source: Bureau of Economic Analysis (Adjusted to 2000$)

Table 3. Trends in Agricultural Employment for Shoshone NF Area, 1970-2005.

Year	Fremont (Jobs)	Hot Springs (Jobs)	Park (Jobs)	Area (Jobs)
1970	977	199	1,024	2,200
1971	964	191	1,028	2,183
1972	959	182	1,045	2,186
1973	958	175	1,059	2,192
1974	982	174	1,110	2,266
1975	989	185	1,066	2,240
1976	1,041	200	1,076	2,317
1977	1,056	204	1,035	2,295
1978	1,076	215	1,016	2,307
1979	1,133	241	1,071	2,445
1980	1,130	250	1,052	2,432
1981	1,112	251	1,012	2,375
1982	1,076	251	968	2,295
1983	1,188	269	1,028	2,485
1984	1,149	253	966	2,368
1985	1,092	231	874	2,197
1986	1,107	232	869	2,208
1987	1,112	232	854	2,198
1988	1,121	224	849	2,194
1989	1,105	211	819	2,135
1990	1,126	206	825	2,157
1991	1,126	195	812	2,133
1992	1,148	192	819	2,159
1993	1,154	194	820	2,168
1994	1,139	191	799	2,129
1995	1,172	198	825	2,195
1996	1,166	197	813	2,176
1997	1,118	188	754	2,060
1998	1,182	201	813	2,196
1999	1,159	195	790	2,144
2000	1,203	204	832	2,239
2001*	1,175	199	809	2,183
2002*	1,199	203	826	2,228
2003*	1,162	197	799	2,158
2004*	1,158	196	797	2,151
2005*	1,159	196	792	2,147

* Note 1970-2000 = SIC & 2001-2005 = NAICS

Source: Bureau of Economic Analysis

Table 4. Trends in Agricultural Earnings for Shoshone NF Area, 1970-2005.

Year	Deflated Fremont (000$)	Deflated Hot Springs (000$)	Deflated Park (000$)	Deflated Area (000$)
1970	$16,383	$3,331	$18,500	$38,215
1971	$17,524	$3,456	$22,195	$43,175
1972	$21,228	$8,188	$29,115	$58,532
1973	$14,298	$8,876	$45,481	$68,655
1974	$23,784	$3,760	$32,605	$60,149
1975	$13,280	$2,912	$14,908	$31,100
1976	$11,479	$2,514	$8,757	$22,750
1977	$7,090	$2,311	$11,047	$20,448
1978	$8,202	$4,287	$7,714	$20,202
1979	$8,294	$5,338	$10,070	$23,702
1980	$4,361	$2,986	$10,367	$17,714
1981	$3,181	$2,301	$7,798	$13,279
1982	$242	$910	$7,242	$8,395
1983	$2,316	$80	$9,339	$11,735
1984	$3,060	-$952	$7,919	$10,027
1985	$1,531	-$487	$8,581	$9,626
1986	$4,298	-$946	$8,603	$11,954
1987	-$615	-$834	$8,488	$7,039
1988	$1,920	-$628	$10,612	$11,904
1989	$3,892	$955	$12,184	$17,031
1990	$11,223	$2,586	$15,718	$29,527
1991	$21,866	$2,961	$20,461	$45,287
1992	$21,545	$4,195	$22,686	$48,426
1993	$20,901	$5,464	$22,153	$48,518
1994	$7,394	$1,277	$12,017	$20,688
1995	$9,834	$55	$10,755	$20,644
1996	$6,112	-$188	$12,753	$18,677
1997	$15,254	$2,460	$14,336	$32,050
1998	$6,241	$125	$10,532	$16,898
1999	$13,436	$1,231	$17,833	$32,500
2000	$7,297	$870	$9,031	$17,198
2001*	$9,976	$1,081	$9,751	$20,808
2002*	$4,631	-$349	$9,085	$13,368
2003*	$8,216	$974	$9,355	$18,545
2004*	$9,251	$1,722	$8,251	$19,224
2005*	$9,706	$2,124	$9,858	$21,688

* Note: 1970-2000 = SIC & 2001-2005 = NAICS

Source: Bureau of Economic Analysis (Adjusted to 2000$)

Table 5. Average Earnings for Agriculture in Shoshone NF Area, 1970-2005.

Deflated Fremont Average	Deflated Hot Springs Average	Deflated Park Average	Deflated Area Average

Year	Earnings Per Job	Earnings Per Job	Earnings Per Job	Earnings Per Job
1970	$16,769	$16,739	$18,067	$17,370
1971	$18,178	$18,095	$21,590	$19,778
1972	$22,136	$44,991	$27,861	$26,776
1973	$14,925	$50,720	$42,947	$31,321
1974	$24,220	$21,610	$29,374	$26,544
1975	$13,428	$15,740	$13,985	$13,884
1976	$11,027	$12,570	$8,138	$9,819
1977	$6,714	$11,330	$10,673	$8,910
1978	$7,622	$19,939	$7,592	$8,757
1979	$7,320	$22,149	$9,403	$9,694
1980	$3,859	$11,944	$9,855	$7,284
1981	$2,860	$9,166	$7,705	$5,591
1982	$225	$3,627	$7,481	$3,658
1983	$1,949	$298	$9,085	$4,722
1984	$2,664	-$3,764	$8,198	$4,234
1985	$1,402	-$2,108	$9,818	$4,381
1986	$3,882	-$4,080	$9,900	$5,414
1987	-$553	-$3,597	$9,939	$3,202
1988	$1,713	-$2,802	$12,500	$5,426
1989	$3,522	$4,526	$14,876	$7,977
1990	$9,967	$12,555	$19,053	$13,689
1991	$19,419	$15,184	$25,198	$21,232
1992	$18,768	$21,847	$27,700	$22,430
1993	$18,112	$28,167	$27,016	$22,379
1994	$6,492	$6,687	$15,040	$9,717
1995	$8,391	$276	$13,036	$9,405
1996	$5,242	-$955	$15,686	$8,583
1997	$13,644	$13,085	$19,013	$15,558
1998	$5,280	$622	$12,954	$7,695
1999	$11,593	$6,312	$22,574	$15,159
2000	$6,066	$4,265	$10,855	$7,681
2001*	$8,490	$5,434	$12,053	$9,532
2002*	$3,862	-$1,717	$10,999	$6,000
2003*	$7,071	$4,942	$11,709	$8,594
2004*	$7,988	$8,788	$10,352	$8,937
2005*	$8,375	$10,836	$12,447	$10,101

* Note: 1970-2000 = SIC & 2001-2005 = NAICS

Source: Bureau of Economic Analysis (Adjusted to 2000$)

Table 6. Beef Cow Inventory for Shoshone NF Area, 1970-2007.

Year	Fremont (Head)	Hot Springs (Head)	Park (Head)	Area (Head)
1970	49,150	19,830	31,700	100,680
1971	47,840	19,750	32,930	100,520
1972	49,860	20,450	34,470	104,780
1973	52,570	20,450	35,960	108,980
1974	56,450	18,450	33,000	107,900
1975	56,050	18,960	31,160	106,170
1976	50,650	18,460	29,150	98,260
1977	52,200	18,950	30,600	101,750
1978	38,300	17,950	23,700	79,950
1979	41,450	18,950	23,700	84,100
1980	39,550	19,950	24,650	84,150
1981	39,500	17,950	26,700	84,150
1982	42,450	20,950	28,700	92,100
1983	45,800	23,000	31,600	100,400
1984	44,800	20,000	29,500	94,300
1985	36,900	17,000	22,400	76,300
1986	42,050	17,000	24,500	83,550
1987	42,900	16,000	19,200	78,100
1988	43,900	17,000	23,200	84,100
1989	46,000	17,000	26,100	89,100
1990	41,000	17,000	19,100	77,100
1991	40,000	17,000	21,100	78,100
1992	47,300	17,000	27,200	91,500
1993	49,300	16,000	28,300	93,600
1994	50,400	16,000	28,300	94,700
1995	52,700	15,000	28,300	96,000
1996	52,800	15,000	27,200	95,000
1997	57,800	17,000	29,200	104,000
1998	62,800	17,000	27,200	107,000
1999	68,800	17,000	29,200	115,000
2000	66,800	18,000	32,100	116,900
2001	65,000	15,000	34,100	114,100
2002	64,900	17,000	33,000	114,900
2003	53,910	14,000	22,100	90,010
2004	53,000	14,000	25,100	92,100
2005	59,000	15,000	24,100	98,100
2006	62,000	18,000	22,000	102,000
2007	61,000	17,000	23,000	101,000

Source: Wyoming Agricultural Statistics

Table 7. Breeding Sheep Inventory for Shoshone NF Area, 1970-2007.

Year	Fremont (Head)	Hot Springs (Head)	Park (Head)	Area (Head)
1970	84,000	24,000	44,000	152,000
1971	82,100	24,700	43,800	150,600
1972	68,000	20,400	36,700	125,100
1973	63,500	18,000	34,500	116,000
1974	55,000	14,000	33,000	102,000
1975	48,000	13,500	28,000	89,500
1976	43,000	11,500	20,000	74,500
1977	41,000	16,000	22,000	79,000
1978	40,000	14,000	22,000	76,000
1979	40,000	16,000	22,000	78,000
1980	39,000	16,000	20,000	75,000
1981	38,000	15,000	18,000	71,000
1982	43,000	15,000	15,000	73,000
1983	42,000	14,000	15,000	71,000
1984	41,000	14,000	18,000	73,000
1985	35,000	12,500	13,000	60,500
1986	33,000	12,000	14,000	59,000
1987	31,000	10,000	16,000	57,000
1988	38,000	7,000	20,000	65,000
1989	39,000	8,000	18,000	65,000
1990	40,000	7,000	15,000	62,000
1991	40,000	8,000	17,000	65,000
1992	28,000	6,000	15,000	49,000
1993	30,000	7,000	12,000	49,000
1994	23,000	5,000	9,000	37,000
1995	19,000	3,000	8,000	30,000
1996	18,000	4,000	9,000	31,000
1997	15,000	5,000	9,000	29,000
1998	16,000	5,000	7,000	28,000
1999	13,000	2,000	7,000	22,000
2000	14,000	2,000	6,000	22,000
2001	14,000	3,000	5,000	22,000
2002	14,000	3,000	4,000	21,000
2003	14,000	2,000	4,000	20,000
2004	14,000	1,500	5,000	20,500
2005	14,000	2,000	5,000	21,000
2006	13,000	2,000	4,000	19,000
2007	14,000	3,000	5,000	22,000

Source: Wyoming Agricultural Statistics

Table 8. Private Land in Shoshone NF Area, 2007.

	Fremont (Acres)	Hot Springs (Acres)	Park (Acres)	Area (Acres)
Irrigated Lands	124,129	24,265	112,134	260,528
Dry Farm Lands	0	0	98	98
Range Lands	620,791	363,821	561,010	1,545,622
Total Ag Land	744,920	388,086	673,242	1,806,248
Irrigated Lands	16.7%	6.3%	16.7%	14.4%
Dry Farm Lands	0.0%	0.0%	0.0%	0.0%
Range Lands	83.3%	93.7%	83.3%	85.6%
Total Ag Land	100.0%	100.0%	100.0%	100.0%
Total Private Land	829,895	401,680	685,476	1,917,051
Percent Ag Land	89.8%	96.6%	98.2%	94.2%
Percent Range	74.8%	90.6%	81.8%	80.6%

Source: Wyoming Department of Revenue Annual Report, 2007 & Equality State Almanac, 2007

Table 9. Agricultural Operations with Grazing Permits, 1997.

	Fremont	Hot Springs	Park	Total
Ranches w/Permits	267	56	111	434
Total Ranches	536	89	226	851
Percent w/Permits	49.8%	62.9%	49.1%	51.0%
Forest Service Permits	45	3	44	92
BLM Permits	151	54	68	273
Indian Lands	66	1	4	71
Other Permits	68	10	32	110
Total Permits	330	68	148	546
Percent Federal	59.4%	83.8%	75.7%	66.8%
Ag Land w/Permits (Acres)	898,112	874,729	831,845	2,604,686
Total Ag Land (Acres)*	1,044,926	944,205	1,011,425	3,000,556
Percent w/Permits	85.9%	92.6%	82.2%	86.8%

* Fremont County was adjusted to account for the Wind River Indian Reservation

Source: 1997 Census of Agriculture

Table 10. Livestock Grazing on the Shoshone NF by Decades.

Average by Decades	Cattle Numbers	Cattle AUMs	Sheep Numbers	Sheep AUMs	Total AUMs
1930's	18,943	N.A.	122,144	N.A.	N.A.
1940's	9,761	47,765	73,795	183,812	231,577
1950's	19,490	54,682	52,512	88,683	143,364
1960's	21,660	57,034	40,152	63,658	120,692
1970's	19,708	54,796	19,809	28,433	83,229
1980's	16,543	50,794	7,793	13,545	64,340
1990's	14,652	46,613	4,541	7,403	54,016
2000's	16,792	55,199	2,810	789	55,987

Source: Shoshone NF

Table 11. Results of Ranch Simulation Model.

	Base	25% Reduction USFS Grazing	50% Reduction USFS Grazing	75% Reduction USFS Grazing	100% Reduction USFS Grazing
Gross Returns	$244,163	$226,513	$206,238	$184,166	$162,910
Ranch Profits	$27,822	$23,056	$16,836	$9,293	-$10,803
Cow Herd Size	610	539	467	403	332
Hay Sold (Tons)	170	271	386	510	627

Source: Western Wyoming USFS Grazing Model

Table 12. Economic Impact of Forest Service Grazing, Shoshone NF.

	SNF USFS Grazing Only Cattle	SNF Ranch Production Perspective Cattle	SNF Ranch Viability Perspective Cattle
Per AUM			
Value of Production	$41.27	$57.78	$125.87
Total Economic Impact	$86.19	$120.66	$262.86
Total Labor Earnings	$27.56	$38.59	$84.07
Total Employment (Jobs)	0.000825	0.001156	0.002517
Ave Earnings Per Job	$33,396	$33,396	$33,396
Total SNF AUMs			
Total AUMs	62,569	62,569	62,569
Value of Production	$2,582,223	$3,615,112	$7,875,779
Total Economic Impact	$5,392,512	$7,549,517	$16,447,163
Total Labor Earnings	$1,724,708	$2,414,591	$5,260,359
Total Employment (Jobs)	51.6	72.3	157.5
Ave Earnings Per Job	$33,396	$33,396	$33,396

Source: Based on three-county IMPLAN model

TIMBER

Introduction

The University of Montana's Bureau of Business Research maintains a database on timber production in the Intermountain West. Information from this database indicates that a total of 7.9 million board feet (MMBF) was commercially harvested in the three-county area in 2005 (Table 1). Of this total, 6.2 MMBF was harvested in Park County (78 percent) and 1.8 MMBF was harvested in Fremont County (22 percent). The reported timber harvest for Hot Springs County was only 3,000 board feet (less than .01 percent of the regional total). Approximately 60 percent of the timber harvest in the region was from National Forests, although not exclusively from the Shoshone National Forest. In addition, approximately 60 percent of the timber harvest for both Fremont and Park County was from National Forests. Private, State, or Bureau of Land Management lands provided the rest of the harvest in the region. Total timber harvest in the three-county area represented slightly more that 12 percent of the total commercial timber harvest in the state. Discussions with the Forest Service and the timber industry operating in the region indicate that the majority of the timber harvested in the region is processed outside the region.

The University of Montana database also contains information on the number of wood product facilities located in the three-county area. Information from the database indicates that there a total of 19 wood product facilities located in the three-county area in 2005 (Table 2). Of the 19 businesses, 8 were house log manufactures, 7 were sawmills, 3 were log furniture manufacturers, and 1 was a post and pole business. This total does not include any logging businesses that are located in the area. Among individual counties, Park County had the largest number of wood product facilities with 13, including 6 house log manufactures, 3 sawmills, 3 log furniture manufactures, and 1 post and pole business. Following Park was Fremont County with 6 wood product facilities, including 4 sawmills and 2 house log manufacturers. No wood product facilities were reported for Hot Springs County in 2005. Approximately one-third of the total wood product facilities in the state are located in the three-county area. Given that most of the timber harvested in the region is exported for processing, the wood product facilities located in the three-county area tend to be smaller operations.

Labor Earnings

The lumber and wood products industry in the three-county area has been declining over time. Table 3 provides information on the change in lumber and wood products labor earnings for the region from 1970 to 2000. All labor earnings are expressed in 2000 dollars to account for inflation. Due to nondisclosure, labor earnings had to be extrapolated for some years. After generally increasing from 1970 to 1978, labor earnings for the lumber and wood products industry in the area peaked at $14.3 million in 1978. After 1978, labor earnings from lumber and wood products declined steadily to under $2.0 million in 2000. Since the federal government switch from the Standard Industrial Classification Code to the North American Industrial Classification Code in 2001,

county-level information specifically for lumber and wood products industry is no longer available. With the recent closure of the sawmill in Cody, labor earnings from the lumber and wood products sector in the region may have declined even further since 2000.

Most of the decline in labor earnings for the lumber and wood products sector in the region occurred in Fremont County where a major sawmill closed in Dubois. In Fremont County labor earnings from the lumber and wood products sector peaked at $13.4 million in 1978 and had declined to less than $1.0 million in 2000.

Shoshone NF Timber Harvest

The 1986 Forest Plan set an average annual Allowable Sale Quantity (ASQ) volume of 11.2 million board feet. The 1986 decision also projected that an additional 1.2 million board feet of products other than logs (POL) would be sold annually. POL includes posts, poles, firewood, etc. The Forest Plan was amended in 1994 to an ASQ of 4.5 million board feet, including 4.3 million board feet of sawtimber and 0.2 million board feet of POL. The amendment also projected that additional 3.0 million board feet of POL would be sold annually.

Timber harvest on the Shoshone NF has varied substantially over time. Between 1976 and 2005 total harvest has ranged from over 17 MMBF in 1979 and 1990 to less than 4 MMBF between 2000 and 2003 (Table 4). In recent years there has been an upswing in timber harvested with 14.7 MMBF harvested in 2005. Since 1994 the total timber harvest on the Forest has averaged 5.9 MMBF. Most of the variability in total timber harvest on the Forest has been the result of fluctuations in sawtimber with POL remaining relatively more constant over time. Between 1976 and 2005 the quantity of sawtimber harvested on the Forest has ranged from more than 17.2 MMBF in 1979 to less than 400,000 board feet in 1998. In 2005, 11.9 MMBF of timber was harvested on the Forest. During this time period, the quantity of POL harvested has ranged from slightly more than 340,000 board feet in 1976 to 4.8 MMBF in 1987. In 2005, 2.7 MMBF of POL was harvested on the Forest.

Economic Impact of Shoshone NF Timber Harvest

Due to current salvage efforts related to insect damage, the timber harvest levels on the Forest are temporarily higher than average. Once the salvage efforts are completed, it is anticipated that the Forest will return to a harvest level of around 4.5 MMBF of sawtimber and 2.5 MMBF of POL per year. The economic impact of the Forest's timber harvest was based on these projected levels of production (Table 5).

Because there is no major timber processor in the three-county region the majority of the sawtimber harvested on the Forest is exported outside the area for processing. As a result the major economic impact on the region's economy from the harvest of sawtimber on the Forest is logging. Although some of the workers involved in this logging may be from outside the region, it is assumed for purposes of this analysis that all logging is done by either permanent or temporary residents. Similar assumptions were used for POL in the

analysis. In addition it was assumed that future POL harvest would be for commercial use.

The first column of Table 5 summarizes the estimated economic impact per MMBF of logging in the three-county area. The University of Montana database estimates that the average direct employment for logging per MMBF is 5.9 jobs. The three-county IMPLAN model indicates that logging generates approximately 1.2 additional jobs throughout the region's economy for every direct job in the logging sector. This represents an employment multiplier for logging in the region of approximately 2.2. Applying this multiplier to the 5.9 direct jobs results in estimated secondary employment of 7.0 jobs for a total employment of 12.9 jobs in the region per MMBF of timber harvested.

The Department of Labor's Bureau of Labor Statistics estimates that in 2005 logging jobs in Wyoming averaged nearly $29,000 per job. For 5.9 jobs this represented direct labor earnings of slightly more than $171,000 per MMBF of timber harvest. The three-county IMPLAN model indicates that logging generates approximately $0.75 of additional labor earnings throughout the regions economy for every $1.00 of direct labor earnings in logging. This represents a labor earnings multiplier of 1.7. Applying this multiplier to the $171,000 in direct labor earnings resulted in estimated secondary earnings of nearly $129,000 for total labor earnings of nearly $300,000 in the region per MMBF of timber harvested. The average earnings per job based on total employment resulting from the harvest of one MMBF of timber in the regions are estimated to be $23,253.

The second column of Table 5 summarizes the estimated economic impact of harvesting 4.5 MMBF of sawtimber in the three-county region. Based on the estimates in the first column of Table 5, 4.5 MMBF of sawtimber would generate a total of 58.0 jobs in the region and $1.3 million in labor earnings. The third column of Table 5 summarizes the estimated economic impact of harvesting 2.5 MMBF of POL in the three-county area. Based on the estimates in the first column of Table 5, 2.5 MMBF of POL would generate a total of 32.2 jobs in the region and nearly $750,000 in labor earnings. Column three of Table 5 summarizes the combined economic impact of harvesting 4.5 MMBF of sawtimber and 2.5 MMBF of POL. The total economic impact of the combined timber harvest was estimated to be a total of 90.2 jobs and $2.01 million in labor earnings.

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Table 1. Commercial Timber Harvest for Shoshone NF Counties, 2005

County	USFS (MBF)	Private (MBF)	Other (MBF)	Total (MBF)	Percent
Fremont	1,041	562	160	1,763	22.2%
Hot Springs	0	0	3	3	0.0%
Park	3,527	1,150	1,512	6,189	77.8%
Total	4,568	1,712	1,675	7,955	100.0%
Percent	57.4%	21.5%	21.1%	100.0%	

Source: University of Montana, Bureau of Business Research

Table 2. Number of Wood Product Facilities in Shoshone NF Counties, 2005

	Fremont	Hot Springs	Park	Area
Sawmills	4	0	3	7
Post and Pole	0	0	1	1
House Logs	2	0	6	8
Log Furniture	0	0	3	3
Other (1)	0	0	0	0
Total	6	0	13	19

(1) Other facilities include firewood manufacturers and pellet mills.

Source: University of Montana, Bureau of Business Research

Table 3. Lumber and Wood Products Labor Earnings for Shoshone NF Counties, 1970-2000.

Year	Fremont (000$)	Hot Springs (000$)	Park (000$)	Deflator	Deflated Fremont (000$)	Deflated Hot Springs (000$)	Deflated Park (000$)	Deflated Area (000$)
1970	$1,923	$65	$136	26.448	$7,271	$246	$514	$8,031
1971	$2,080	$51	$119	27.574	$7,543	$185	$432	$8,160
1972	$2,473	$50	$190	28.528	$8,669	$175	$666	$9,510
1973	$3,008	$50	$215	30.081	$10,000	$166	$715	$10,881
1974	$3,342	$50	$191	33.191	$10,069	$151	$575	$10,795
1975	$2,814	$50	$163	35.955	$7,826	$139	$453	$8,419
1976	$3,364	$50	$221	37.948	$8,865	$132	$582	$9,579
1977	$4,639	$50	$298	40.410	$11,480	$124	$737	$12,341
1978	$5,806	$50	$351	43.248	$13,425	$116	$812	$14,352
1979	$5,383	$0	$313	47.059	$11,439	$0	$665	$12,104
1980	$3,462	$0	$301	52.078	$6,648	$0	$578	$7,226
1981	$3,979	$0	$266	56.720	$7,015	$0	$469	$7,484
1982	$1,738	$0	$252	59.859	$2,903	$0	$421	$3,324
1983	$2,583	$0	$238	62.436	$4,137	$0	$381	$4,518
1984	$2,168	$0	$224	64.795	$3,346	$0	$346	$3,692
1985	$2,551	$0	$210	66.936	$3,811	$0	$314	$4,125
1986	$2,330	$0	$196	68.569	$3,398	$0	$286	$3,684
1987	$2,334	$0	$182	70.947	$3,290	$0	$257	$3,546
1988	$1,547	$0	$167	73.755	$2,097	$0	$226	$2,324
1989	$694	$0	$134	76.972	$902	$0	$174	$1,076
1990	$656	$0	$1,042	80.498	$815	$0	$1,294	$2,109
1991	$739	$0	$852	83.419	$886	$0	$1,021	$1,907
1992	$806	$0	$991	85.824	$939	$0	$1,155	$2,094
1993	$838	$0	$1,192	87.804	$954	$0	$1,358	$2,312
1994	$911	$0	$1,055	89.654	$1,016	$0	$1,177	$2,193
1995	$747	$0	$1,055	91.577	$816	$0	$1,152	$1,968
1996	$555	$0	$1,055	93.547	$593	$0	$1,128	$1,721
1997	$812	$0	$1,055	95.124	$854	$0	$1,109	$1,963
1998	$845	$0	$1,055	95.978	$880	$0	$1,099	$1,980
1999	$862	$0	$1,055	97.575	$883	$0	$1,081	$1,965
2000	$924	$0	$1,055	100.000	$924	$0	$1,055	$1,979

Source: Bureau of Economic Analysis

Table 4. Timber Harvest for the Shoshone NF, 1970-2005.

Fiscal Year	Sawtimber Harvested (MBF)	POL Harvested (MBF)	Total Harvested (MBF)
1970	11,519	501	12,020
1971	11,569	388	11,957
1972	N.A.	N.A.	3,678
1973	N.A.	N.A.	7,798
1974	N.A.	N.A.	6,121
1975	N.A.	N.A.	2,852
1976	3,996	341	4,337
1977	5,557	998	6,555
1978	5,108	1,107	6,215
1979	17,187	351	17,538
1980	7,682	842	8,524
1981	10,653	1,574	12,227
1982	3,625	2,415	6,040
1983	5,366	1,749	7,115
1984	6,490	4,052	10,542
1985	11,575	4,345	15,920
1986	8,799	4,360	13,159
1987	14,639	4,824	19,463
1988	12,351	3,509	15,860
1989	5,982	2,109	8,091
1990	14,709	2,360	17,069
1991	10,055	2,489	12,544
1992	6,926	3,300	10,226
1993	4,222	2,975	7,197
1994	3,965	3,790	7,755
1995	1,141	3,796	4,937
1996	2,234	3,627	5,861
1997	1,732	3,975	5,707
1998	385	5,230	5,615
1999	1,289	4,092	5,381
2000	2,020	1,611	3,631
2001	1,068	2,895	3,963
2002	630	2,619	3,249
2003	1,044	2,591	3,635
2004	5,762	2,465	8,227
2005	11,939	2,731	14,670

Source: Shoshone NF

Table 5. Economic Impact of Shoshone NF Timber Harvest.

	Per Unit	Sawtimber	POL	Total
Timber Volume (MMBF)	1	4.5	2.5	7.0
Direct Employment (1)	5.9	26.55	14.8	41.3
Multiplier (2)	2.184	2.184	2.184	2.184
Total Employment	12.9	58.0	32.2	90.2
AEPJ - Direct (3)	$28,987	$28,987	$28,987	$28,987
Direct Earnings	$171,023	$769,605	$427,558	$1,197,163
Multiplier (2)	1.752	1.752	1.752	1.752
Total Earnings	$299,633	$1,348,348	$749,082	$2,097,430
Average Earnings Per Job	$23,253	$23,253	$23,253	$23,253

Sources: *(1) University of Montana*
(2) IMPLAN Model of three-county area
(3) Bureau of Labor Statistics, 2005

NON-LABOR INCOME

Total Non-Labor Income

Non-labor income represents personal income from sources other than labor earnings. This includes wages, salaries, and self-employed income. Non-labor income is divided into two components: 1) government transfer payments (primarily retirement income such as social security) and 2) investment income (property related income such as dividends, interest, and rents).

In 2005, total non-labor income for the three-county area was $923.1 million (Table 1). Of this total $464.3 million was in Fremont County (50 percent), $394.9 million was in Park County (43 percent), and $64.0 million was in Hot Springs County (7 percent).

For the most part, non-labor income can be thought of as income that comes from sources that are external to the local economy. Labor earnings, on the other hand, primarily come from sources internal to the local economy. As a result, non-labor income is less directly dependent activity within the local economy.

Non-labor income is an important source of income for residents of the three-county area. Table 1 shows that in 2005, non-labor income represented 43 percent of total personal income in the region. For all three counties, non-labor income represented between 43 and 44 percent of total personal income in the county. Compared to Wyoming (36 percent) and the U.S. (30 percent), all three counties were more dependent on non-labor income as a source personal income than either the state or the nation.

Sources of Non-Labor Income

Table 1 also illustrates the relative size of the three components of personal income (labor earnings, transfer payments, and investment income) in the three-county area. In all three counties and the region as a whole, labor earnings represent 56 to 57 percent of total personal income. This range is substantially below the percent at both the state and national levels (64 and 69 percent).

In terms of non-labor income, for Fremont and Hot Springs the sources of non-labor income are fairly evenly divided between investment income (22 percent and 21 percent) and transfer payments (21 percent and 23 percent). For Park County, investment income is a higher proportion than transfer payments (27 percent vs. 15 percent). At the state level investment income is also larger than transfer payments (23 percent vs. 13 percent). However, at the national level investment income and transfer payments are more comparable (16 percent vs. 15 percent).

Trends in Non-Labor Income

Table 2 shows that non-labor income has become relatively more important as a source of personal income in the three-county area over time. In 1970 the percent of personal

income from non-labor income was 24 percent of total personal income in the area. By 1998 non-labor income had increased to 45 percent of total personal income in the area. Since 1998 non-labor income has remained fairly stable, averaging 44 percent through 2005. In 1970 the percent of personal income from non-labor income in the area was comparable to the percent for Wyoming and the U.S. (24 percent vs. 24 percent vs. 23 percent). However, at its peak in 1998, the relative importance of non-labor income in the area was substantially greater than for Wyoming and the U.S. (45 percent vs. 39 percent vs. 32 percent). This trend which started in 1982 has continued through 2005. The increase importance of non-labor indicates that non-labor income has grown faster than other sources of income in the area during this time period and that it has grown proportionately faster than either the Wyoming or U.S.

Among individual counties, Hot Springs has tended to have a higher proportion of total personal income from non-labor income starting at 29 percent in 1970 and peaking at 49 percent in 1998. Fremont County has tended to have a lower proportion of total personal income from non-labor income starting at 21 percent in 1970 and peaking at 45 percent in 1998. Park County has tended to be in between these two starting at 26 percent in 1970 and peaking at 45 percent in 1998.

Economic Impact of Non-Labor Income

The $923.2 million of non-labor income for residents of the three-county area in 2005 generated considerable employment and labor earnings in the local economy. The following employment and earnings impacts of non-labor income in the area have been estimated using 2004 IMPLAN models for each of the three counties and an aggregated model for the three-county area. Due to regional interactions between the economies of the three counties the economic impact for the three-county area will be greater than the sum of the totals for the individual counties.

After adjusting for non-disposable income, the $923.1 million in non-labor incomes is estimated to represent $799.5 million of disposable income for residents of the three-county area (Table 3 – top part). The local spending of this disposable income generates an estimated 5,502 direct jobs in the area's economy. Among individual counties, non-labor income in Fremont County is estimated to generate 2,585 direct jobs in the county's economy. For Park County, the estimate is 2,437 direct jobs in the county's economy, with 296 direct jobs for Hot Springs County. Regional interactions between the economies of the three counties are estimated to generate 184 additional direct jobs from non-labor income in the region.

The labor earnings associated with the direct employment resulting from non-labor income in the three-county area was estimated to be $121.4 million. Among individual counties, the direct employment from non-labor income in Fremont County was estimated to support $57.2 million in labor earnings (Table 3 – top part). For Park County, direct employment from non-labor income supported an estimated $52.3 million in labor earnings, with $5.5 million in labor earnings for Hot Springs County. Regional

interactions between the economies of the three counties are estimated to support an additional $6.4 million in labor earnings from non-labor income.

Average earnings per job for direct employment from non-labor income averaged $22,069 for the three-county area (Table 3 – top part). For individual counties, average earnings per job ranged from a low of $18,784 in Hot Springs County to a high of $22,127 in Fremont County. For Park County the average was $21,448 per job.

One of the reasons that residents of the three-county area received a higher proportion of their total personal income from non-labor sources may be the presence of natural resource amenities such the Shoshone National Forest. This concept is perhaps re-enforced by the fact that, in places like Park County, the dominate source of non-labor income in the area is investment income rather than transfer payments. This suggests that the area may be an attractive place to live for individuals with outside sources of income. However, it would probably not be appropriate to attribute all the non-labor income in the area to natural resource amenities since even regions with limited natural resource amenities still receive significant non-labor income. The question is how much of the non-labor income in the area is attributable to natural resource amenities?

While there may not be a definitive answer to the above question, an assumption could be made that the proportion of non-labor income in the three-county area above the national average is the result of the area's natural resource amenities. Under this assumption, all the non-labor income above 30.5 percent of total personal income (the U.S. average for 2005) would be due to natural resource amenities. For the three-county area this would represent approximately 30 percent of the total non-labor income in the region or $274.3 million of non-labor income due to natural resource amenities (Table 3 – middle part). After adjusting for non-disposable income this amount becomes $237.6 million of disposable income for residents of the three -county area. Local spending of this disposable income resulting from natural resource amenities is estimated to generate 1,635 direct jobs in the three-county economy. Among individual counties, non-labor income resulting from natural resource amenities is estimated to generate 776 direct jobs in Fremont County. For Park County, employment from non-labor income associated with natural resource amenities is estimated to generate 711 direct jobs, and for Hot Springs County the estimate is 91 direct jobs. Regional interactions between the economies of the three counties are estimated to generate an additional 57 direct jobs in the region due to natural resource amenities.

The labor earnings associated with the direct employment from natural resource amenities related non-labor income for the three-county area is estimated to be $36.1 million. For individual counties the labor earnings associated with the direct employment from natural resource amenities in Fremont County is estimated to be $17.2 million. For Park County the estimate is $15.3 million, and for Hot Springs County the estimate is $1.7 million. Regional interactions between the economies of the four counties are estimated to generate an additional $1.9 million in labor earnings due to natural resource amenities.

An alternative assumption regarding the role of natural resource amenities in non-labor income for the area is that the proportion of non-labor income in the three-county area above the state average is the result of the area's natural resource amenities. This assumption considers that individuals with outside sources of income may be attracted to Wyoming not only for natural resource amenities, but also due to other factors such as the lack of state income tax, lack of crime, and the presence of a small town atmosphere. Under this assumption, all the non-labor income above 35.6 percent of total personal income (the Wyoming average for 2005) would be due to natural resource amenities. For the three-county area this would represent 18 percent of the total non-labor income in the region or $165.8 million of non-labor income due to natural resource amenities (Table 3 - bottom). After adjusting for non-disposable income this amount becomes $143.6 million of disposable income for residents of the three-county area. Local spending of this disposable income resulting from natural resource amenities is estimated to generate 988 direct jobs in the three-county economy. Among individual counties under this scenario, non-labor income resulting from natural resource amenities is estimated to be more than 473 direct jobs in Fremont County. For Park County, employment from non-labor income associated with natural resource amenities under this scenario is estimated to be nearly 423 direct jobs, and for Hot Springs County the estimate is 57 jobs. Regional interactions between the economies of the four counties are estimated to generate an additional 35 direct jobs in the region due to natural resource amenities.

The labor earnings associated with the direct employment from natural resource amenities related non-labor income for the three-county area is estimated to be $21.8 million. For individual counties the labor earnings associated with the direct employment from natural resource amenities in Fremont County is estimated to be $10.5 million. For Park County the estimate is $9.1 million, and for Hot Springs the estimate is $1.1 million. Regional interactions between the economies of the three counties are estimated to generate an additional $1.2 million due to natural resource amenities.

In summary, non-labor income is an important part of the economy in the three-county area. In 2005 the region's $923.1 million of non-labor income was responsible for an estimated 5,502 direct jobs and $121.4 million in direct labor earnings. The older age of the area's population may contribute to the higher proportion of non-labor income in the region. Natural resource amenities such as those found on the Shoshone National Forest contribute to attracting and retaining individuals with non-labor income to the area. It should be noted that the Shoshone is only part of the natural resource amenities in the region. Yellowstone National Park and other public lands also make substantial contributions to the scenic setting of the area. In addition numerous other amenities such as commercial air service, retail and service outlets, and cultural attractions all contribute to make the area a highly desirable location to live with plenty of outdoor recreational opportunities.

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Table 1. Sources of Personal Income for Shoshone NF Counties, 2005.

	Fremont (000$)	Hot Springs (000$)	Park (000$)	Area (000$)	Wyoming (000$)	U.S. (000$)
Net Labor Earnings	$601,109	$81,122	$522,006	$1,204,237	$12,222,173	$7,103,199,000
Investment Income	$238,558	$29,886	$252,579	$521,023	$4,366,069	$1,591,151,000
Transfer Payments	$225,711	$34,086	$142,354	$402,151	$2,392,620	$1,526,592,000
Total	$1,065,378	$145,094	$916,939	$2,127,411	$18,980,862	$10,220,942,000
Non-Labor Income	$464,269	$63,972	$394,933	$923,174	$6,758,689	$3,117,743,000

	Fremont Percent	Hot Springs Percent	Park Percent	Area Percent	Wyoming Percent	U.S. Percent
Net Labor Earnings	56.4%	55.9%	56.9%	56.6%	64.4%	69.5%
Investment Income	22.4%	20.6%	27.5%	24.5%	23.0%	15.6%
Transfer Payments	21.2%	23.5%	15.5%	18.9%	12.6%	14.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Non-Labor Income	43.6%	44.1%	43.1%	43.4%	35.6%	30.5%

Source: Bureau of Economic Analysis

Table 2. Trends in Sources of Personal Income for Shoshone NF Counties, 2005.

Year	Fremont Non-Labor Income	Hot Springs Non-Labor Income	Park Non-Labor Income	Area Non-Labor Income	Wyoming Non-Labor Income	U.S. Non-Labor Income
1970	21.2%	29.1%	26.0%	23.8%	24.1%	22.8%
1971	21.9%	30.2%	26.1%	24.4%	24.8%	23.6%
1972	22.3%	28.3%	25.0%	24.0%	23.7%	23.4%
1973	24.4%	28.6%	24.7%	25.0%	23.7%	23.7%
1974	23.6%	31.5%	26.4%	25.5%	23.7%	25.0%
1975	24.6%	31.7%	27.5%	26.5%	24.2%	26.8%
1976	24.2%	33.5%	27.8%	26.4%	24.1%	26.2%
1977	23.0%	33.4%	27.4%	25.6%	23.3%	25.9%
1978	22.2%	33.1%	26.9%	24.8%	22.7%	25.5%
1979	22.5%	34.1%	27.9%	25.4%	22.8%	26.0%
1980	23.7%	35.7%	30.0%	27.0%	23.6%	28.2%
1981	26.8%	38.7%	32.8%	30.1%	25.4%	30.2%
1982	32.6%	43.5%	36.6%	35.2%	29.7%	31.9%
1983	31.6%	42.7%	36.1%	34.4%	29.8%	32.3%
1984	33.8%	43.4%	36.8%	35.9%	30.2%	32.0%
1985	35.5%	41.8%	38.6%	37.4%	30.4%	31.9%
1986	37.7%	44.2%	39.6%	39.1%	31.6%	31.8%
1987	38.1%	44.1%	40.6%	39.7%	32.7%	31.0%
1988	37.8%	44.2%	40.2%	39.4%	32.9%	30.8%
1989	39.9%	45.2%	40.7%	40.7%	33.9%	32.0%
1990	39.0%	44.0%	41.0%	40.2%	34.1%	32.3%
1991	39.4%	44.5%	40.3%	40.2%	34.9%	32.9%
1992	39.9%	43.1%	42.2%	41.2%	34.9%	32.5%
1993	40.4%	40.9%	41.8%	41.0%	34.1%	32.2%
1994	41.8%	43.7%	42.6%	42.3%	35.4%	32.5%
1995	43.2%	47.5%	42.5%	43.2%	36.4%	32.8%
1996	44.4%	46.2%	42.5%	43.7%	37.4%	32.9%
1997	44.1%	46.6%	43.2%	43.9%	37.4%	32.7%
1998	44.6%	49.1%	44.9%	45.0%	38.8%	32.3%
1999	43.8%	47.8%	44.2%	44.2%	38.5%	31.2%
2000	43.9%	47.2%	45.4%	44.8%	38.5%	31.1%
2001	43.0%	45.6%	43.8%	43.5%	37.3%	31.4%
2002	43.1%	47.9%	42.2%	43.1%	37.2%	31.2%
2003	45.3%	49.0%	42.6%	44.4%	37.8%	30.8%
2004	44.5%	49.1%	43.3%	44.3%	36.9%	30.7%
2005	43.6%	44.1%	43.1%	43.4%	35.6%	30.5%

Source: Bureau of Economic Analysis

Table 3. Economic Impact of Non-Labor Income in Shoshone NF Counties, 2005.

All Non-Labor Income

County	Non-Labor Income	Disposable Income	Direct Employment	Direct Earnings	Average Earnings Per Job
Fremont	$464,269,000	$405,306,837	2,585	$57,190,658	$22,127
Hot Springs	$63,972,000	$56,167,416	296	$5,550,818	$18,784
Park	$394,933,000	$336,087,983	2,437	$52,276,753	$21,448
Area*	$923,174,000	$799,468,684	5,502	$121,431,870	$22,069

* Note: The Area totals are greater than the sum of the individual counties due to regional linkages

Non-Labor Income Above National Average

County	Non-Labor Income	Disposable Income	Direct Employment	Direct Earnings	Average Earnings Per Job
Fremont	$139,328,710	$121,633,964	776	$17,163,111	$22,127
Hot Springs	$19,718,330	$17,312,694	91	$1,710,949	$18,784
Park	$115,266,605	$98,091,881	711	$15,257,686	$21,448
Area*	$274,313,645	$237,555,617	1,635	$36,082,492	$22,069

* Note: The Area totals are greater than the sum of the individual counties due to regional linkages

Non-Labor Income Above Wyoming Average

County	Non-Labor Income	Disposable Income	Direct Employment	Direct Earnings	Average Earnings Per Job
Fremont	$84,994,432	$74,200,139	473	$10,469,981	$22,127
Hot Springs	$12,318,536	$10,815,675	57	1,068,873	$18,784
Park	$68,502,716	$58,295,811	423	9,067,613	$21,448
Area*	$165,815,684	$143,596,382	988	$21,810,957	$22,069

* Note: The Area totals are greater than the sum of the individual counties due to regional linkages

Source: IMPLAN Models

ECONOMIC SUMMARY

Table 1 provides a summary of the economy of the three-county region and the impact of the Shoshone NF on the region's economy. This summary includes information on: 1) regional totals for employment and earnings, 2) the economic importance of forest related industries, and 3) estimates of the Shoshone NF impact on the area's economy. All the information is for 2004 to be consistent with the IMPLAN model used in the analysis.

Regional Totals

In terms of regional totals, Table 1 indicates there were a total of 44,173 jobs in the three-county area in 2004. Fifty percent of this employment was in Fremont County with 43 percent in Park and 7 percent in Hot Springs. Total labor earnings for the three-county area were $1.2 billion in 2004. Forty-nine percent of this income was in Fremont County, 45 percent was in Park County and 6 percent was in Hot Springs County. The average earnings per job for the area were $27,680. County averages ranged from $24,650 in Hot Springs County to $28,825 in Park County, with Fremont County at $27,096.

Forest Related Industries

One way of considering the impact of the Shoshone NF on the economy of the three-county area is through Forest Related Industries (FRI). FRI are industries that are at least partially dependent on National Forest resources. In other words, a portion of the economic activity associated with these industries is dependent on the use of natural resources within the Shoshone NF. For this analysis, FRI were defined as Agriculture, Logging and Wood Products Manufacturing (Logging – WPM), Travel, and Non-Labor income above the average of the state and national percentages (NLI+). In this section the percent of Non-Labor Income above the average of the state and national percentage was used as a proxy for amenity residents. Amenity residents are those residents that live in the area specifically because of the area's amenities. Some unknown portion of the attractiveness of the area is associated with the Shoshone NF.

Total direct regional employment for the FRI was 8,914 jobs in 2004 (Table 1). This represented 20 percent of the total employment in the three-county area. Travel was the largest FRI in terms of employment (59 percent), followed by Agriculture (24 percent), NLI+ (14 percent), and Logging – WPM (2 percent). Among individual counties, the percent of total employment from FRI ranged from 15 percent in Fremont County to 26 percent in Park County with Hot Springs County at 20 percent. In all three counties the largest FRI in terms of employment were Travel and Agriculture.

Total direct regional labor earning for the FRI was $148.8 million in 2004 (Table 1). This represented 12 percent of total labor earnings in the three-county area. Travel was the largest FRI in terms of labor earnings (62 percent), followed by NLI+ (18 percent), Agriculture (16 percent), and Logging – WPM (3 percent). Among individual counties, the percent of total employment from FRI ranged from 9 percent in Fremont County to 15 percent in Park County, with Hot Springs County at 12 percent.

Average earnings per job for FRI related employment were below the regional average. In 2004 average earnings per job for FRI were $16,695 which was 40 percent below the area's average ($27,680). Much of this difference was due to the low labor earnings in agriculture in 2004, although average earnings per job for the other three industries were also below the regional average in 2004. Among individual counties, average earnings per job for FRI were also approximately 40 percent below the county average.

Shoshone NF Economic Impact

For some FRI it was possible to estimate the specific impact of the Shoshone NF on the three-county economy. For those industries, it is estimated that economic activity on the Shoshone NF generated 936 jobs in the three-county economy (Table 1). This estimate is based on the IMPLAN model for the region and includes both direct and secondary jobs. The total jobs from the Forest represent 2 percent of the total jobs and 11 percent of the total FRI jobs in the region. Approximately 70 percent of the forest related jobs were associated with recreation with 20 percent in livestock grazing and 9 percent in timber. It was not possible to estimate the proportion of NLI+ that was strictly related to the Shoshone NF.

Forest related employment was estimated to generate a total of $18.9 million in labor earnings in the region. These labor earnings represented 2 percent of total labor earnings and 13 percent of total FRI labor earnings in the region. Average earnings per job for forest related employment was $20,179 which was 27 percent below the regional average.

While the economic impacts of the Shoshone NF are not a large percent of total employment and labor earnings in the region, they are important. This is particularly true for the FRI where forest related employment and labor earnings were a significant part of the total employment and earnings. At the national level, the specific economic impact of the Shoshone NF, that can be quantified, on the three-county area would be equivalent to 3.7 million jobs and $121.1 billion in labor earnings in 2004.

Table 1. Economic Impact Summary for the Shoshone NF, 2004.

Regional Totals (1)

County	Employment (Jobs)	Labor Earnings (000$)	Average Earnings Per Job
Fremont	22,027	$596,852	$27,096
Hot Springs	2,995	$73,828	$24,650
Park	19,151	$552,036	$28,825
Totals	44,173	$1,222,716	$27,680

Forest Related Industries (2)

Industry	Fremont (Jobs)	Hot Springs (Jobs)	Park (Jobs)	Area (Jobs)
Agriculture	1,159	196	798	2,153
Logging - WPM	73	0	122	195
Travel	1,470	330	3,500	5,300
NLI+	625	74	567	1,266
Totals	3,327	600	4,987	8,914

Industry	Fremont (Earnings) (000$)	Hot Springs (Earnings) (000$)	Park (Earnings) (000$)	Area (Earnings) (000$)
Agriculture	$11,439	$2,237	$10,588	$24,264
Logging - WPM	$1,844	$0	$3,136	$4,980
Travel	$29,400	$5,200	$57,600	$92,200
NLI+	$13,816	$1,390	$12,163	$27,369
Totals	$56,499	$8,827	$83,487	$148,813
Ave. Earnings/Job	$16,984	$14,712	$16,741	$16,695

Shoshone NF Economic Impact (3)

	Area Employment (Jobs)	Area Earnings (000$)	Average Earnings Per Job
Livestock Grazing	157.5	$5,260	$33,396
Timber	90.2	$2,097	$23,253
NL Forest Visitors	263.7	$4,799	$18,198
Commercial Recreation	424.3	$6,725	$15,850
NLI+	N.A.	N.A.	N.A.
Totals	935.7	$18,882	$20,179

Sources: 1) U.S. Department of Commerce

2) U.S. Department of Commerce, IMPLAN, Dean Runyan Associates

3) 2004 Three-County IMPLAN Model