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Socioeconomic Baseline Report Update

1.0 INTRODUCTION AND BACKGROUND

Lander County is located in the north central portion of the state of Nevada. It is a rugged area dominated by vast, sweeping valleys of sage, and bordered by majestic pine-covered mountain ranges. There is a great deal of wildland offering unique opportunities for outdoor recreation. Adjoining counties include Churchill, Elko, Eureka, Humboldt, Mineral, Nye and Pershing. Lander County was created on December 19, 1862 and named in honor of General Fredrick W. Lander who was a prominent road builder for the Department of the Interior. Lander is the ninth largest of Nevada's seventeen counties, covering approximately 5,621 square miles (14,558 square kilometers) and accounting for nearly 5.1 percent of Nevada's total surface area of 110,540 square miles (286,297 square kilometers). Lander County's population was 5,794 or 0.3% of Nevada's total of 1,998,257 people in 2000. Leading employers based on 2005 average employment include Government with 29 percent; Natural Resources and Mining with 32 percent; and leisure and hospitality at 10 percent.

Lander County is unique in that all of its communities have strong transportation links to California and other western markets including Boise, Idaho and Salt Lake City, Utah. Lander County with its major rail lines (Union Pacific/Burlington Northern), an extensive highway system (US Interstate 80 and US Highway 50), and air service is an ideal location from which to transport goods.

Lander County is an area rich in ranching and mining. Ranchers rounding up cattle on horseback or shepherders tending their flocks on rugged mountainsides are a common site. Untamed, open and full of western flavor, Lander County offers recreational opportunities ranging from fishing and big game hunting to camping, backpacking and golfing.

Over 100 years ago, towns surfaced and grew overnight because the area was rich in minerals and gemstones. Today that sense of boom or bust is still in the air. Large mining operations continue to yield billions of dollars out of the County's mountains and high desert valleys. Battle Mountain lies in the middle of the most productive gold mining areas in the United States.

1.1 Purpose and Organization

This report provides a baseline description of existing conditions in Lander County as of 2006. The report provides information on social, economic, public services and facilities, and natural resources available in Lander County and its communities. The report will be used to measure potential changes to Lander County as a result of the high-level nuclear waste repository at Yucca Mountain and associated transportation activities. Additionally, material presented in the

following chapters represents a compilation of previous impact investigations undertaken for the repository program.

The baseline report contains information about population, labor force, employment, wages, fiscal conditions, natural resources, and land uses. The Yucca Mountain draft and final environmental impact statement contained very little information about Lander County. This report will help supplement the lack of information developed by DOE. The baseline report will be updated annually as part of Lander County's on-going efforts to assess potential impacts associated with the Yucca Mountain Project.

2.0 LANDER COUNTY DEMOGRAPHIC CONDITIONS

Since 1990, the population of Lander County has decreased from 6,266 in 1990 to 5,797 in 2000. In the last two years the population has increased from 5,277 in 2003 to 5,509 in 2005. Population should continue to increase as employment opportunities expand in Lander County. Population growth in the southern portion of Lander County has remained more stable with minor increases in the Kingston area (Table 2-1).

Similar to other mining communities, there is a high percentage of working age households with families in Lander County. About 73.0 percent of the households in Lander County were composed of family households, nearly 40 percent are family households with children under 18. Persons age 65 and older comprised about 7.0 percent of Lander County's population whereas persons age 65 and older comprised about 11 percent of the population statewide. Lander County also has a high concentration of Hispanics accounting for approximately 18.5 percent of the total population in 2000 (2000 Census).

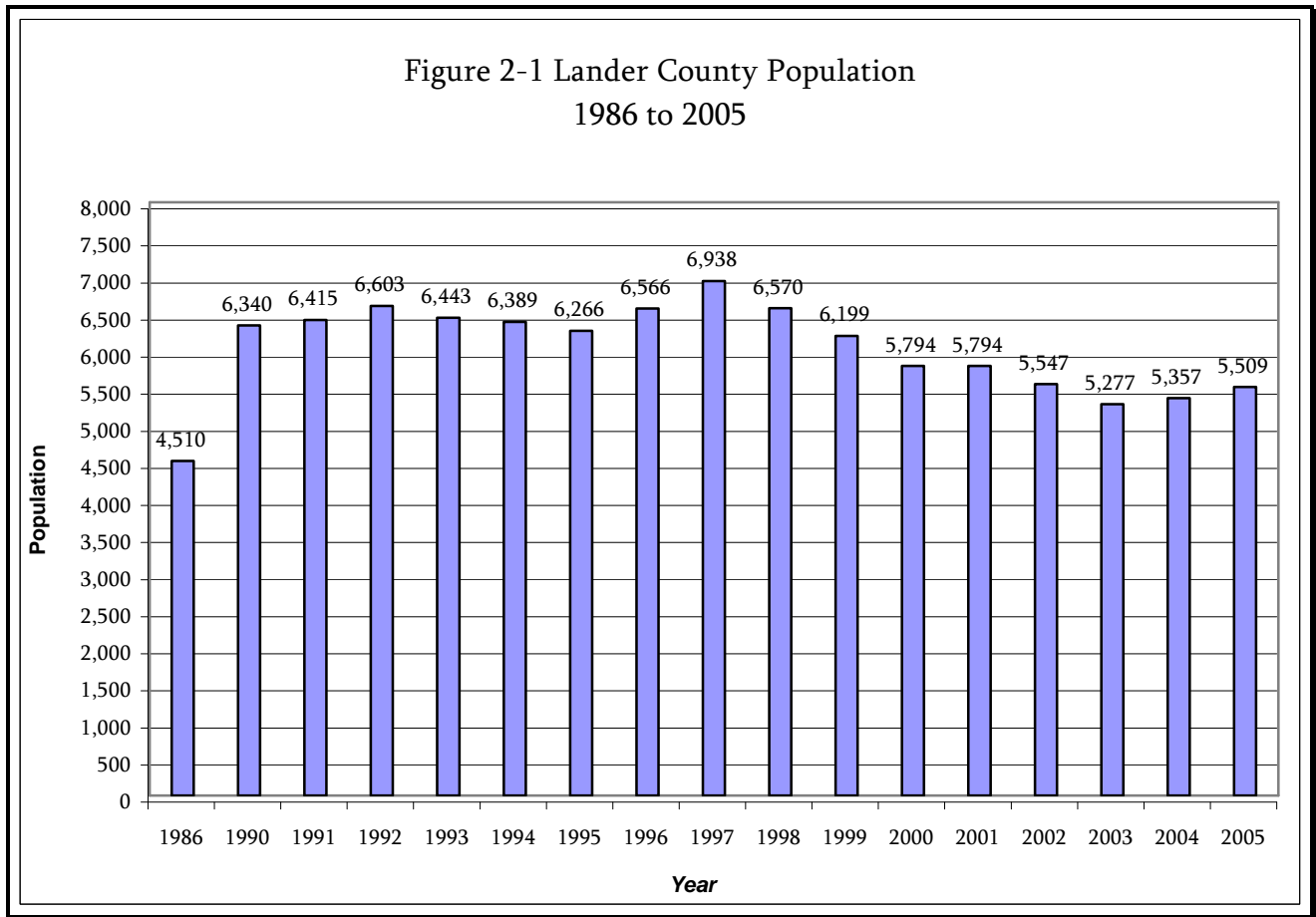
About 75 percent of the households in Lander County own their own home. Among Hispanics, the largest minority group in Lander County, almost 80 percent of the households were owners in 2000. High homeownership rates in Lander County are due to general housing affordability and the use of mobile homes as the principal housing structure. Generally, mobile home housing provides a less expensive options as compared to conventional single-family housing.

Table 2-1
Demographic Characteristics
Lander County, Nevada

Population	1990	2000	2005	90-05% Chg.
Lander County	6,266	5,794	5,509	-14.5%
Battle Mountain	3,542	3,453	2,692	-25.9%
Austin		305	288	-3.9%
Kingston		219	288	9.1%
	County		Nevada	
Age 65 Older-2000	7.0%		11.0%	
% Family Households-2000	72.8%		66.3%	
% Population White-2000	86.1%		75.2%	
% Population Hispanic-2000	18.9%		19.7%	
Unemployment-2005	4.8%		4.1%	
Per Capita Income-2004	\$28,000		\$33,787	
Median Household Income-2006	\$58,700			

Source: 2000 Census, Nevada State Demographer, Bureau of Labor Statistics, U.S. Dept of HUD.

The population density of Lander County in 2000 equaled .05 persons per square mile. With an estimated population of 3,453, over 59.6 percent of the County's population lives in Battle Mountain area. The total County population was 5,794 in 2000. The entire County is designated by U.S. Census Standards as rural. More recently, the Nevada State Demographer estimated Lander County's population for 2005 at 5,509 persons. The 2005 population of the County's unincorporated towns was Austin 288, Battle Mountain 2,692 and Kingston 288. Figure 2-1 shows historic population growth in Lander County.



Source: Nevada State Demographer 1986-2005.

Table 2-2 shows the 2000 and 2005 county population, population rankings and changes in ranking for Nevada's seventeen counties. Population for Lander County decreased from 6,266 in 1990 to 5,794 in 2000. Lander County maintained its population rank as twelfth among Nevada's seventeen counties in 2000 and 2005.

Table 2-2 Lander County Population, Rank of Population and Change in Population Rank, State of Nevada, 2000 to 2005.

County	2000		2005		Change in Rank
	Population	Rank	Population	Rank	
Clark	1,375,765	1	1,796,380	1	0
Washoe	339,486	2	396,844	2	0
Carson City	52,457	3	57,104	3	0
Douglas	45,291	4	50,108	4	0
Elko	41,259	5	47,586	6	1
Lyon	34,501	6	48,860	5	0
Nye	32,485	7	41,302	7	0
Churchill	23,982	8	26,585	8	0
Humboldt	16,106	9	17,293	9	0
White Pine	9,181	10	9,275	10	0
Pershing	6,693	11	6,736	11	0
Lander	5,794	12	5,509	12	0
Mineral	5,071	13	4,629	13	0
Lincoln	4,165	14	3,886	14	0
Storey	3,399	15	4,012	15	0
Eureka	1,651	16	1,485	16	0
Esmeralda	971	17	1,273	17	0
Urban ¹	1,767,708		2,250,338		
Rural ²	230,549		268,531		
TOTAL	1,998,257		2,518,869		

Source: U.S. Department of Commerce. "Census 2000 Redistricting Data (PL-94-171) Summary File, Table PL1 and 1990 Census." Bureau of Census: Washington D.C. 2000 and 1990.

¹ Urban counties of Nevada are Carson City, Clark and Washoe Counties.

² Rural counties are the remaining fourteen of Nevada's seventeen counties.

Of interest is the growth of Nevada's urban counties (Carson City, Clark, and Washoe) growing from 1,036,569 in 1990 to 2,250,338 in 2005. Growth in these areas was fueled primarily by new employment in the service sectors and by immigrating retired and semi-retired persons. The rural counties of Nevada have also realized population growth, increasing from 165,264 in 1990 to 230,549 in 2000. The rural portion of the population increased to 268,531 in 2005. However, even with the rural Nevada population increase, the proportionate urban share of Nevada's population increased from 86.25 percent in 1990 to 88.46 percent in 2000. Total state population increased 27 percent from 2000 to 2005.

Trends in the Census of Population data from 1990 to 2005 for Lander County can be summarized as follows:

- Lander County's 2005 population of 5,509 ranked the county twelfth among Nevada's seventeen counties.
- Lander County did not change its rank among counties in the state of Nevada from 2000 to 2005.

- Lander County’s population decreased from the 2000 Census to the 2005 state estimate by 285 persons. This means that Lander County realized a population decrease of 5 percent since 2000. However, Lander County experienced its 3rd consecutive year of population increase (See Figure 2-1). This trend is expected to continue in 2006.

Demographic characteristics of an area include age and gender of residents. Demographic composition changes slowly over time as new residents are added through birth and immigration, and as resident population is lost through death and outmigration.

Table 2-3 shows county median age for 1990 and 2000. Even at the state and national levels, the population is aging. Median population age for the nation increased from 32.9 years in 1990 to 35.3 years of age in 2000, while the state of Nevada increased from 33.3 years in 1990 to 35.0 years of age in 2000 (U.S. Department of Commerce, 2000 and 1990). For all counties in the state of Nevada, median age was older in 2000 than in 1990.

Table 2-3 Median Age by County for the State of Nevada
1990 and 2000.

County	1990 years of age	2000 years of age
Carson City	36.6	38.7
Churchill	33.0	34.7
Clark	33.1	34.4
Douglas	36.2	41.7
Elko	29.4	31.2
Esmeralda	35.8	45.1
Eureka	33.3	38.3
Humboldt	30.6	33.4
Lander	28.7	34.1
Lincoln	33.4	38.8
Lyon	36.4	38.2
Mineral	33.9	42.9
Nye	36.5	42.9
Pershing	31.7	34.4
Storey	37.6	44.5
Washoe	33.6	35.6
White Pine	33.8	37.7
State Of Nevada	33.3	35.0
U.S.	32.9	35.3

Source: U.S. Department of Commerce. “Census 2000 Redistricting Data (PL-94-171) Summary File, Table PL1 and 1990 Census.” Bureau of Census: Washington D.C. 2000 and 1990.

For Lander County, the median age increased from 28.7 years of age in 1990 to 34.1 years of age in 2000. Also, compared to the median values for the state and the nation, Lander County has a younger population. The younger population is due to the workforce age

households that are associated with mining. The age-population data for Census 1990 to 2000 for Lander County can be summarized as follows:

- Median age for Lander County has increased to 34.1 years of age in 2000, compared to 28.7 years of age in 1990.
- The aging of the population is a state and national trend; however, Lander County’s aging has been less.
- With overall population for Lander County decreasing from 1990 to 2005, population decreased by –13 percent. Also, this age group’s proportionate share of total population decreased from 1990 to 2000.

Lander County as well as other northeastern counties in Nevada have a strong mining influence and, therefore, elevated levels of working age persons. Fluctuations in age distribution of the population in Lander County is due largely to the extent mining exists and associated support industry.

Table 2-4 shows the change in population by race for Lander County, the state of Nevada, and the nation. From 1990 to 2000 in Lander County, White population decreased by –13.67 percent, Black or African-American population increased by 33.33 percent, American Indian or Alaska Native population decreased by –21.69 percent, Pacific Islander population increased by 37.50 percent, and other race population increased by 125.44 percent. Overall, Lander County population from 1990 to 2000 decreased by –7.53 percent. The Hispanic or Latino population in Lander County increased by 284 persons, or 35.99 percent from 1990 to 2000.

Table 2-4 Population by Race for Lander County, 1990 and 2000.

Race	1990		2000		Percentage Increase from 1990 to 2000
	Number	Percent of Total (%)	Number	Percent Total (%)	
White	5,663	90.38	4,891	84.41	-13.67
Black or African-American	9	0.14	12	0.21	33.33
American Indian or Alaska Native	295	4.71	231	3.39	-21.69
Asian & Pacific Islander	16	0.26	22	0.38	37.50
Other Race	283	4.52	638	11.01	125.44
Total	6,266	100.00	5,794	100.00	-7.53
Hispanic or Latino (of any race)	789	12.59	1,073	18.52	35.99

Source: U.S. Department of Commerce. “Table DP-1, Profile of General Demographic Characteristics: 2000.” Bureau of Census: Washington, D.C., 2001.

Trends in the Census of Population by Race from 1990 to 2000 for Lander County can be summarized as follows:

- In Lander County, the proportionate share of total county population that is White decreased from 90.4 percent in 1990 to 86.2 percent in 2000 declining by 13.7 percent from 1990 to 2000.
- From 1990 to 2000, Lander County Hispanic or Latino population increased by 284 persons, or 36.0 percent from 1990 to 2000.
- Proportionate share of total Lander County population that was Hispanic or Latino increased from 12.6 percent in 1990 to 16.4 percent in 2000.
- For the state of Nevada, proportionate share of total state population that is White decreased from 84.3 percent in 1990 to 75.2 percent in 2000 despite growing by 48.3 percent from 1990 to 2000.
- From 1990 to 2000, state of Nevada Hispanic or Latino population increased by 169,551 persons or 216.7 percent from 1990 to 2000.
- Proportionate share of total state of Nevada population that is Hispanic or Latino increased from 10.4 percent in 1990 to 19.7 percent in 2000.
- For the nation, proportionate share of total national population that is White decreased from 80.3 percent in 1990 to 75.1 percent in 2000 despite growing by 5.9 percent from 1990 to 2000.
- Proportionate share of total national population that was Hispanic or Latino increased from 8.99 percent in 1990 to 12.55 percent in 2000.

3.0 ECONOMIC ACTIVITY

3.1 Personal Income

In 2004, Lander County residents received approximately \$142.2 million in personal income. Of this amount, approximately \$70.2 million were total earnings in the County in the form of wages and salaries, other labor income and proprietor's income. This number is adjusted to net earnings of approximately \$106.3 million by taking into account social security contributions and commuting adjustments. Just over \$17.2 million was in the form of unearned income from dividends, interest and rent. Approximately \$18.6 million came from transfer payments, such as social security, food stamps, unemployment payments and veteran's benefits. These income figures are shown in Table 3-1.

Table 3-1 Personal Income of Lander County Residents, 2004.

Income Category	(\$1,000)	(\$1,000)
Wages and Salaries	\$70,217	
Other Labor Income	\$19,895	
Proprietor's Income	\$10,241	
Total Earnings in Lander County		\$100,353
Less Personal Social Security Contributions	\$8,716	
Plus Residence/Commuting Adjustment	\$14,701	
Net Earnings of Lander County Residents		\$106,338
Dividends, Interest and Rent	\$17,201	
Transfer Payment	\$18,619	
Total Personal Income, Lander County Residents		\$142,158
Per Capita Personal Income		\$28,000

Source: U.S. Department of Commerce. "Regional Economic Information System." Bureau of Economic Analysis: Washington, D.C. 2004.

Social Security contributions are subtracted from total earnings in order to better measure income available to Lander County residents before income taxes (a concept called personal income by economists). Approximately \$8.7 million of personal contributions to social insurance programs such as social security, Medicare, unemployment, etc. were paid by residents of Lander County.

A commuting adjustment is made to total earnings since some people who earn income in Lander County are not county residents. These people commute into the county to work and take their paycheck back to their county of residence. Lander County residents do the same; work outside the county and bring income back to Lander County. Approximately \$14.7 million more in income is earned by workers who live in Lander County, but work outside of Lander County. This value is added to total earnings in Lander County to derive net earnings for Lander County residents.

Table 3-2 gives the percentage breakdown of Lander County's income by source, and presents similar data for the state and nation. Net earnings by Lander County residents are approximately 73.45 percent of total personal income compared to 73.66 percent, and 71.93 percent for the state and nation, respectively. Dividends, interest, rents, and transfer payments in Lander County account for a smaller percentage of total personal income than in the state or nation. The last line of Table 3-2 shows Lander County's per capita income is lower than that of the state and nation. At \$28,000, Lander County's 2004 income per capita was approximately 17 percent less than the state's \$33,787 and approximately 15 percent less than the nation's average of \$33,050.

Table 3-2 Comparison of Personal Income Sources
Lander County, State of Nevada and the U.S., 2003.

Personal Income Source	Lander County	Nevada	U.S.
	(%)	(%)	(%)
Wages and Salaries	57.88	58.59	57.02
Other Labor Income	8.86	6.90	6.52
Proprietor's Income	6.17	8.18	8.40
Less Personal Social Insurance Contributions	3.31	4.00	4.28
Plus Residence/Commuting Adjustments	3.86	-1.37	-0.01
Net Earnings of Residents	73.45	73.66	71.93
Dividends, Interest and Rents	14.65	21.29	18.87
Transfer payments	11.90	10.41	13.50
TOTAL	100.0	100.0	100.0
Per Capita Personal Income	\$28,000	\$33,787	\$33,050

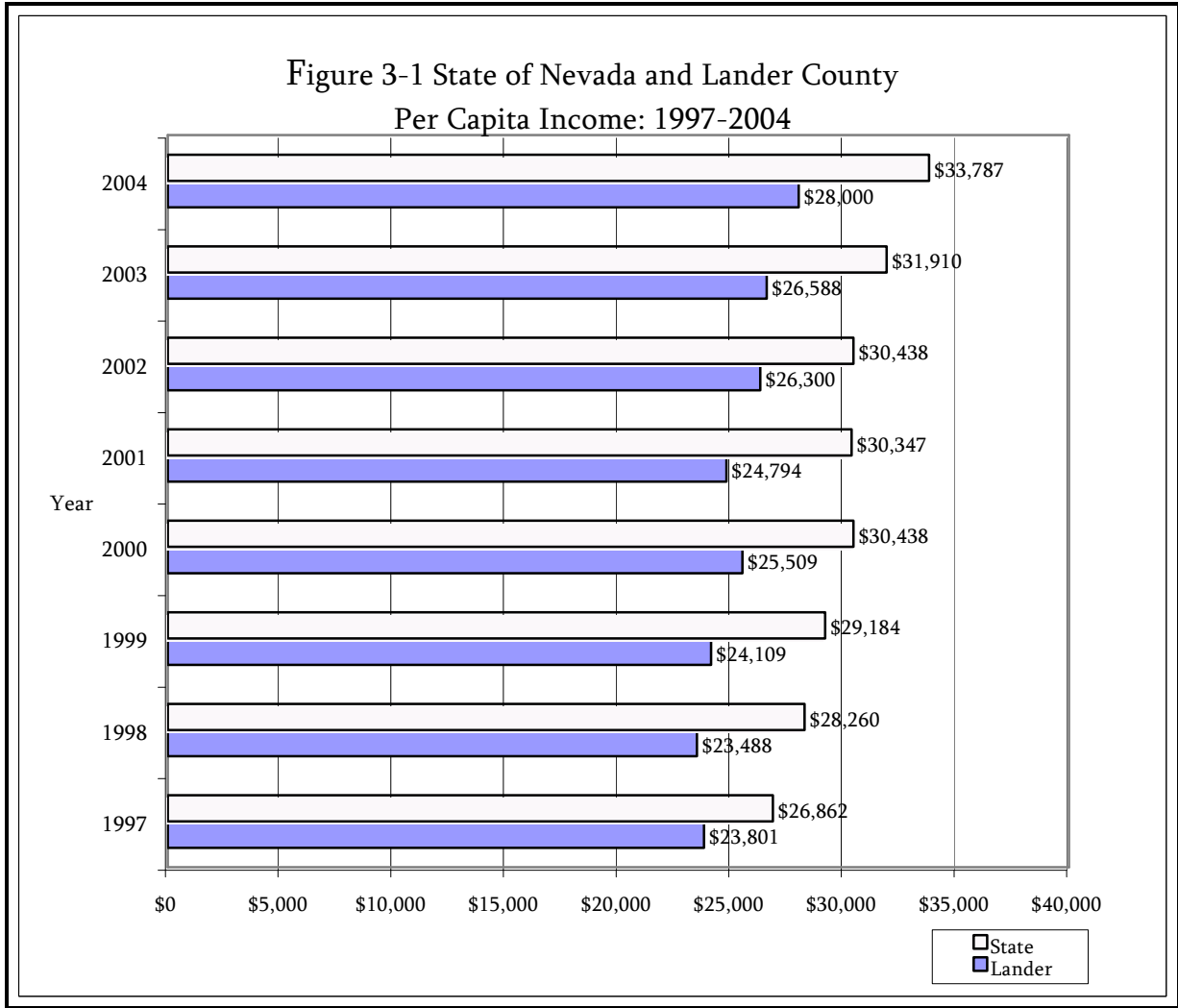
Source: U.S. Department of Commerce, "Regional Economic Information System." Bureau of Economic Analysis, Washington, D.C. 2003.

Figure 3-1 compares growth in per capita income between Lander County and the State of Nevada. In 2004, the per capita income in Lander County was approximately \$5,787 less than the State of Nevada.

The trend in Lander County personal income can be summarized as follows:

- Per capita income for Lander County in 2004 was \$28,000, which was 21.0 percent less than the state's average (\$33,787) and approximately 20.5 percent less than the nation's average (\$33,050).
- Total 2004 place of work earnings for Lander County were \$100.4 million. Place of work earnings are adjusted by adding the net resident adjustment to derive resident earnings. For Lander County, the net residence adjustment for 2004 was \$14.7 million. This means \$14.7 million more was earned by people living inside Lander County but working outside Lander County than as compared to people living outside Lander County and working in Lander County. This may constitute an

injection of potential spending to Lander County. This amount is likely to grow as mining employment increases and gains in local population is realized.



- Proportionate share of total earnings from dividends, interest and rents; and transfer payments are 26.6 percent in Lander County. This proportionate share is lower than the state value of 31.70 percent and the national value of 32.4 percent. This might mean a lower retiree population base for Lander County.

Economic quality of life is difficult to measure because of differences in cost of living and non-monetary income between locations. However, per capita income is still an important basis for comparing economic quality of life, especially among geographically similar areas. On this basis, the quality of life in Lander County lags behind that of many Nevada counties. Table 2-3 lists the 2004 per capita income for each county shown, and in comparison, Lander County had the eleventh highest 2004 Nevada county per capita income level at \$28,000. In comparison, the 2004 per capita income level for the state of Nevada was \$33,787 while the national average was \$33,050.

Table 3-3 Nevada County
Per Capita Income and Rank, 2004.

County	Per Capita Income	Rank
Douglas	\$42,772	1
Washoe	\$39,513	2
Carson City	\$36,055	3
Esmeralda	\$33,620	4
Clark	\$32,963	5
Churchill	\$32,171	6
Storey	\$30,890	7
White Pine	\$30,306	8
Eureka	\$28,827	9
Elko	\$28,385	10
Lander	\$28,000	11
Nye	\$27,093	12
Humboldt	\$25,709	13
Mineral	\$25,341	14
Lyon	\$24,071	15
Lincoln	\$21,542	16
Pershing	\$18,320	17
State of Nevada	\$33,787	
U.S.	\$30,547	

Source: U.S. Department of Commerce. "Regional Economic Information System." Bureau of Economic Analysis, Washington, D.C. 2004.

3.2 Employment and Wages

This section provides an overview of Lander County employment and wages. Table 3-4 shows employment by industry and average annual wages for 2005. The total average wage in Lander County is slightly higher than the State of Nevada. The higher total wage level in Lander County is primarily due to mining industry wages. Approximately 30 percent of the employment in Lander County is in the mineral industry whereas about the same percentage of the employment in the State of Nevada is associated with gambling. Improving economic conditions are resulting from an increase in the labor force, population growth and lower unemployment rates.