

**TARGETED ECONOMIC DEVELOPMENT
FOR HUMBOLDT COUNTY**

PART I

ANALYSIS OF SOCIO-ECONOMIC DATA AND TRENDS



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Thomas R. Harris

Tim Darden

Jered MacDonald

Kevin Verre

and

Ryan Blood

Thomas R. Harris is a Professor in the Department of Applied Economics and Statistics and Director of the University Center for Economic Development at the University of Nevada, Reno.

Tim Darden is a Research Analyst in the Department of Applied Economics and Statistics at the University of Nevada, Reno.

Jered M. McDonald is a Research Analyst in the Department of Applied Economics and Statistics at the University of Nevada, Reno.

Kevin Verre is a Graduate Student in the Department of Applied Economics and Statistics at the University of Nevada, Reno.

Ryan Blood is a Graduate Student in the Department of Applied Economics and Statistics at the University of Nevada, Reno.

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Thomas R. Harris, Director
University Center for Economic Development
University of Nevada, Reno
Department of Applied Economics and Statistics
Mail Stop 204
Reno, Nevada 89557-0105
Phone: 775/784-6499



UCED
University of Nevada, Reno
Nevada Cooperative Extension
Department of Applied Economics and Statistics

TARGETED ECONOMIC DEVELOPMENT FOR HUMBOLDT COUNTY

PART I

ANALYSIS OF SOCIO-ECONOMIC DATA AND TRENDS

EXECUTIVE SUMMARY

This study was commissioned by the U.S. Forest Service, the U.S. Department of Commerce and the proposed Great Basin Development District. This publication provides the socio-economic data and analysis background for the economic targeting study for Humboldt County.

ANALYSIS OF POPULATION TRENDS

- Humboldt County's population from the 2000 Census was 16,106 which ranked Humboldt County 9th among Nevada's seventeen counties.
- Between Census 1990 and Census 2000, Humboldt County's population increased by 3,262 people.
- The Nevada State Demographer projects county population each year. From 1970 to 2000, the average annual growth rate of Humboldt County population has been 3.58 percent, which ranks Humboldt County 9th among Nevada's seventeen counties.
- During the last two years, Humboldt County has realized a decline in annual growth rates. Population growth rate for Humboldt County declined from 0.67 percent in 1999 to 0.33 percent in 2000.
- In 1999, only two Nevada counties realized negative population growth rates (Lander and Mineral Counties.) However, by 2000, six of Nevada's seventeen counties had negative growth rates. Three of these six counties are within the proposed Great Basin Development District. These are Eureka, Lander and White Pine Counties with 2000 population growth rates of -4.30 percent, -2.68 percent and -4.47 percent, respectively.
- Overall population for Humboldt County increased from 1990 to 2000, however, population decreased by 12.38 percent for age group 20 to 34 years of age. This is of some concern

because this age group is the basis for future economic and entrepreneurial growth in Humboldt County.

ANALYSIS OF PERSONAL AND PER CAPITA INCOME

- Total 1999 place of work earnings for Humboldt County were \$335,575,000. Place of work earnings were adjusted by adding the net residence adjustment to derive residential earnings. For Humboldt County the net adjustment for 1999 was -\$10,583,000. This means \$10,583,000 more was earned by people living outside Humboldt County and working in Humboldt County than people living in Humboldt County and working outside Humboldt County.
- Proportionate share of total earnings for dividends, interest and rents; and transfer payments are 26.14% in Humboldt County. This proportionate share is lower than the state value of 32.47% and the national value of 32.02%.
- Per capita income for Humboldt County in 1999 was \$23,332, which was 24.75% less than the state's average of \$31,004 and 18.27% less than the national average of \$28,546.

ANALYSIS OF EDUCATIONAL DATA AND NATIVE BIRTH DATA

- From the 1990 Census, Humboldt County's proportionate share of people 25 years and older with a high school diploma or higher education was 75.5 percent. This is lower than the state value of 78.8 percent but slightly higher than the national value of 75.2 percent.
- For the new economy (high-tech industries) the pool of college educated people is important. In 1990, Humboldt County's proportionate share of people 25 years and older with a bachelor's degree of 12.2 percent. This is lower than the state value of 15.3 percent and the national value of 20.3 percent.
- In 1990, the state of Nevada was the fastest growing state in the nation, but had the lowest percentage of native-born population. In 1990, only 21.8 percent of the state's population had been born in Nevada. For the U.S., the percentage of native-born population in 1990 was 61.8 percent.

- Humboldt County had the fifth highest percentage of native-born population in 1990. In 1990, 33.3 percent of Humboldt County's population were born in Nevada. In contrast, only 19.3 percent of Clark County's 1990 population were born in Nevada.

ANALYSIS OF LABOR DATA

- For Humboldt County, the unemployment rate increased from from 4.3% in 1995 to 6.6% in 1998, but subsequently declined to 5.1% by 2000. The number of unemployed increased from 350 in 1995 to 550 in 1998, but declined to 380 by 2000. During this same time period, the county's labor force increased from 8,030 in 1995 to 8,760 in 1997 and subsequently decreased to 7,350 in 2000. The industrial employment for Humboldt County increased from 7,770 in 1995 to 8,554 in 1997 and has subsequently declined to 7,568 in 1999.
- These statistics show the fallacy in using a singular economic statistic, such as unemployment rate to judge a county's economic activity or viability. Humboldt County's unemployment rate and number of unemployed declined from 1995 to 2000. However, the county's labor force, resident employment and industrial employment declined, which would indicate a county in trouble.
- An alternate statistic used to estimate county economic vitality is the out-migration/population loss statistic. This statistic was developed from an EDA funded research publication by Feser and Sweeney (1998).

ANALYSIS OF LAND OWNERSHIP

- Humboldt County ranks fourth largest among Nevada's seventeen counties with 6,210,560 acres.
- Approximately 80 percent of Humboldt County acreage is administered by the federal government.
- Only 20 percent of total Humboldt County acreage is owned by local government and the private sector.

ANALYSIS OF EMPLOYMENT AND INCOME DATA

- A six-year analysis of sectoral employment and income changes were made from 1992 to 1998. To derive sectoral employment and income values, the IMPLAN microcomputer input-output model and data package were used.
- The Metal Mining Sector was responsible for approximately 24 percent of total county employment in 1992, and decreased to 20 percent in 1998.
- The Metal Mining Sector had the largest employment base of the county in 1992 and 1999 and also paid the highest employee compensation per job.
- Some commercial sectors realized employment increases due to tourism expansion and entrepreneurial efforts.
- The economic sectors that make up the economic base for Humboldt County were derived through location quotient procedures.
- The location quotient results indicate that Humboldt County is highly dependent on the natural resource industries (agriculture and mining) for its export base and export activity.
- There were some commercial sectors that showed potential for export development.
- Shift-share analysis was used to examine the cause of employment change in Humboldt County from 1992 to 1998.
- From 1992 to 1998, Humboldt County realized an employment increase of 1,959 jobs.
- This gain was due to the overall growth in the national economy. Humboldt County realized negative competitive advantage. Officials should find reasons for this competitive decline and attempt to slow or correct it.
- The Metal Mining Sector showed large positive competitive efforts which means the local industry is more competitive than the average national industry.
- For commercial sectors which show competitive advantage, the enhancement of local entrepreneurial skills may be beneficial.

ANALYSIS OF NATIONAL, STATE AND COUNTY ENTREPRENEURIAL ACTIVITY

- County economies that are dependent on extractive industries and branch plants frequently have capital flows or profits going outside their local economies.
- Renewed interest in the advantages of a strong entrepreneurial base to local economies has been generated.
- Entrepreneurs are likely to be innovative and adaptive to the new economy and their capital flows and profits are often retained locally.
- Humboldt County is classified as an “Strong Growth and Strong Entrepreneurship” county. This means that Humboldt County had employment growth greater than the U.S. average and ratio of entrepreneurs to workers was greater than the national ratio.
- A policy issue is whether Humboldt County is being well served by both public and private providers of entrepreneurial assistance.

CURRENT AND FUTURE ECONOMIC AND OCCUPATIONAL FORECASTS FOR THE NATION, STATE AND HUMBOLDT COUNTY

- Nationally, the rate of economic growth is projected to be slower through 2008 than during the 1970’s and 1980’s.
- Industrial output to 2008 is projected to grow faster than the labor force and employment because of increased labor productivity.
- Overall national employment is expected to increase by 20.3 million from 1998 to 2008, which is slightly less than the 20.5 million increase from 1988 to 1998.
- Nationally employment is projected to increase by 14.4 percent from 1998 to 2008, with most employment occurring in the Service Sector and Retail Sector.
- Nationally employment in the Manufacturing Sector is projected to decline by 89,000 jobs, but value of Manufacturing Sector output is forecast to increase by 46.32 percent.
- By 2008, the Manufacturing Sector will have the highest value of output of all national economic sectors. This increase is due to technological advances in the Manufacturing Sector.

- Over half of the occupations forecast to be the fastest growing require post-secondary education.
- For the State of Nevada, employment is forecast to increase by 38,760 jobs from 1998 to 2008.
- The Clark County SMSA is forecast to realize an employment increase of 61.9 percent; the Washoe SMSA is forecast to increase by 27.7 percent and the Balance of State is forecast to increase by 28.0 percent from 1998 to 2008.
- Similar to national forecasts, occupations forecast to grow the fastest require post-secondary education or technical apprenticeship.
- Barkley (1998) states that economic sectors selected on past economic growth may be at the end of their growth stage. Past economic performance may be a poor predictor of future employment growth.
- Two-digit Standard Industrial Classification employment growth for Humboldt County was estimated from 4th quarter 2000 to 3rd quarter 2002 by the State of Nevada Department of Employment, Training and Rehabilitation.
- Humboldt County was forecast to realize a 340 job decline by 3rd quarter 2002.
- The Metal Mining Sector in Humboldt County was forecast to realize a 21 percent decrease in employment by 3rd Quarter 2002.
- The 2-digit SIC sectoral employment growth rates will be employed in the targeting analysis. Using these forecasts should alleviate the criticism of Barkley et al (1998) that future sectoral employment forecasts should be used for a targeting strategy rather than past sectoral growth rates.

TABLE OF CONTENTS

Section I: Analysis of Population Trends	14
Section II: Analysis of Personal and Per Capita Income	27
Section III: Analysis of Educational Data and Native Birth Data.....	32
Section IV: Analysis of Labor Data	36
Section V: Analysis of Land Ownership.....	45
Section VI: Analysis of Employment and Income Data	47
Section VII: Analysis of National, State and County Entrepreneurial Activity	71
Section VIII: Current and Future Economic and Occupational Forecasts for the Nation, State and Humboldt County	78

LIST OF TABLES

Table 1. County Population, Rank of Population and Change in Population Rank, State of Nevada, 1990 to 2000.....	16
Table 2. Change in County Population, Percentage Change in County Population and Percentage of State Change in Population by County, State of Nevada, 1990 to 2000	18
Table 3. Median Age by County for the State of Nevada, 1990 and 2000.....	20
Table 4. Population by Age and Proportionate Share of Population by Age for Humboldt County, 1990 and 2000	21
Table 5. Nevada County Population Growth Rate and Stability Index, 1970-2000	23
Table 6. Nevada Population by County Average Annual Growth Rates, 1970-2000, by Decade, 1999 and 2000	25
Table 7. Personal Income of Humboldt County Residents, 1999	28
Table 8. Comparison of Personal Income Sources, Humboldt County, State of Nevada and the U.S. 1999.....	29
Table 9. Nevada County Per Capita Income and Rank, 1999.....	31
Table 10. Educational Attainment for Humboldt County, State of Nevada and the Nation, 1990	33
Table 11. Nevada Counties Ranked by Percentage of County Population Born in the State of Nevada, 1990.....	35
Table 12. Labor Force Trends for Humboldt County, Nevada, State of Nevada and U.S. 1995-2000.....	37
Table 13. Unemployment Rate Trends for Humboldt County, State of Nevada and U.S., 1995-2000.....	38
Table 14. Number of Unemployed Trends for Humboldt County, State of Nevada and U.S., 1995-2000	39
Table 15. Resident Number Employed for Humboldt County, State of Nevada and U.S., 1995-2000.....	40
Table 16. Industrial Employment for Humboldt County, State of Nevada and U.S., 1995-2000	41
Table 17. Third Quarter 2000 Average Weekly Wage for Humboldt County and State of Nevada.....	44
Table 18. Federal, State, Local Government and Private Sector Lands in Humboldt County, 2000	46
Table 19. Sectoral Employment, Shares of Employment and Percentage Change in Sectoral Employment for Humboldt County, 1992-1998	50
Table 20. Sectoral Real Employee Compensation, Real Employee Compensation Per Job and Percentage Change in Real Employee Compensation per Job from 1992 to 1998 and National Comparison of Sectoral Average Employee Compensation per Job in 1998 for Humboldt County, Nevada.....	54
Table 21. Sectoral Location Quotient Values and Percentage Change in Location Quotient Values for Humboldt County, 1992 and 1998.....	60
Table 22. Sectoral Shift-Share Analysis for Humboldt County, 1992 to 1998	68

Table 23. Overall Economic and Entrepreneurship Activity Indicators for Nevada Counties	75
Table 24. Classification of County Entrepreneurship Activity.....	76
Table 25. Employment by Major Industry Division, 1988, 1998 and projected 2008.....	81
Table 26. Output by Major Industry Division (Gross Duplicated Output), 1988, 1998 and projected 2008.....	83
Table 27. Fastest Growing Occupations, 1998-2008	84
Table 28. Top Twenty National Occupations with Largest Numerical Increase 1998-2008.....	85
Table 29. Top Twenty Fastest Growing National Occupations, 1998 to 2008.....	86
Table 30. Top Twenty National Occupations Forecast with Greatest Declines, 1998 to 2008.....	87
Table 31. Top Twenty Balance of State of Nevada Occupations by Numeric Increase from 1998-2008.....	90
Table 32. Top Twenty Fastest Growing Balance of State of Nevada Occupations from 1998 to 2008.....	91
Table 33. Top Nine Balance of State of Nevada Occupations Projected with Largest Numeric Decline from 1998 to 2008.....	92
Table 34. Quarterly Employment Growth Rates from 4th Quarter 1998 to 3rd Quarter 2000 and Forecast 4th Quarter 2000 to 3rd Quarter 2002, Humboldt County.....	95

Introduction

The University Center for Economic Development conducted a study for targeted economic development for the four Nevada counties within the proposed new Economic Development District. This proposed district will be called the Great Basin Development District (GBDD) which is comprised of Eureka, Humboldt, Lander and White Pine Counties.

Before developing sectoral targets for economic development, collection and analysis of Humboldt County socio-economic data is required. By understanding past and future socio-economic trends, a more informal economic development targeting program can be developed. This publication is divided into eight sections.

Section I analyzes trends in U.S., state and Humboldt County population. Data from the U.S. Census and the State Demographer for the state of Nevada are used.

Section II provides an analysis of 1999 personal per capita income for the nation, state and Humboldt County.

Section III analyzes national, state and Humboldt County educational attainment and proportion of the population that is native-born.

Section IV provides an analysis of labor force, number of unemployed, resident employed and industrial employment for the nation, state and Humboldt County.

Section V analyzed the ownership of land in Humboldt County between the federal government, state government and local government and private sector ownership.

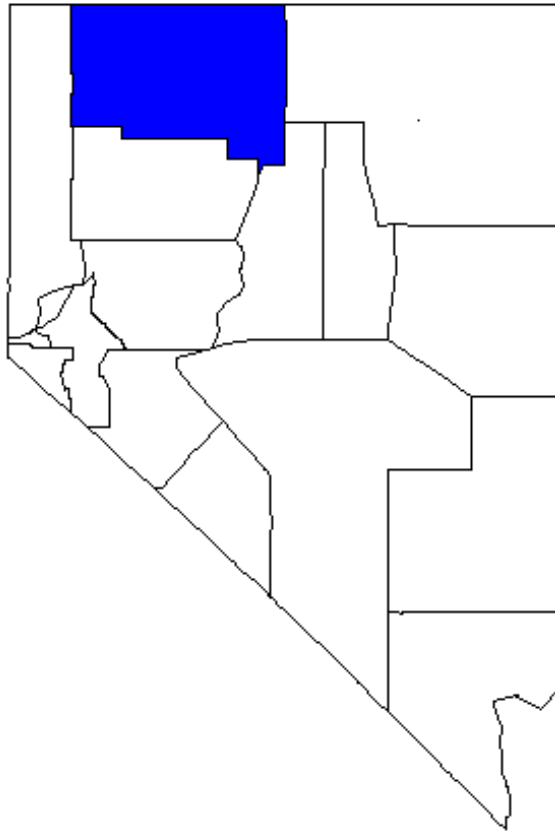
Section VI employs regional economic analysis techniques to derive export-base and service employment and income by sector in Humboldt County.

Section VII provides an analysis of entrepreneurial activity in the nation, state and Humboldt County.

Finally Section VIII provides economic and occupational projections for the nation, state and Humboldt County.

SECTION I:

ANALYSIS OF POPULATION TRENDS



Population Trends

Humboldt County is located in the northwestern part of the state. The county is bordered by Elko and Lander Counties to the east, Washoe County to the West, and Lander and Pershing Counties to the south. Its northern edge borders Oregon's Harney and Malheur Counties. The community of Winnemucca is the county seat and population center. Population and rates of population growth provide vital information to federal, state and local government employees as well as to the private sector personnel regarding areas of economic growth. Population estimates provide information used under several programs to allocate federal and state funds and sales taxes to counties and to allocate justices of the peace for townships. In addition, population estimates are used to determine various vital statistics, such as poverty, mortality, fertility, per capita income and others for use in official grant requests.

Census Population Trends

Every ten years, the U.S. Bureau of Census conducts a population census of the United States. Results of the 2000 Census are just becoming available but even limited information of the 2000 Census may be helpful to Humboldt County decision-makers.

Table 1 shows the 2000 and 1990 county populations, population rankings and changes in ranking for Nevada's seventeen counties. Population for Humboldt County increased from 12,844 in 1990 to 16,106 in 2000. Humboldt County maintained its population rank as ninth among Nevada's seventeen counties in 1990 and 2000. It is also of interest that two counties in the Great Basin Development District (Lander and White Pine Counties) saw their population numbers decline. White Pine County's population declined from 9,264 in 1990 to 9,181 in 2000, but White Pine County was able to retain its rank as the tenth most populated county in 2000. Lander County's population declined from 6,266 in 1990 to 5,794 in 2000. However, Lander County's rank remained at twelfth in 2000.

Table 1. County Population, Rank of Population and Change in Population Rank, State of Nevada, 1990 to 2000.

County	2000		1990		Change in Rank
	Population	Rank	Population	Rank	
Clark	1,375,765	1	741,459	1	0
Washoe	339,486	2	254,667	2	0
Carson City	52,457	3	40,443	3	0
Elko	45,291	4	33,530	4	0
Douglas	41,259	5	27,637	5	0
Lyon	34,501	6	20,001	6	0
Nye	32,485	7	17,781	8	1
Churchill	23,982	8	17,938	7	-1
Humboldt	16,106	9	12,844	9	0
White Pine	9,181	10	9,264	10	0
Pershing	6,693	11	4,334	13	2
Lander	5,794	12	6,266	12	0
Mineral	5,071	13	6,475	11	-2
Lincoln	4,165	14	3,775	14	0
Storey	3,399	15	2,526	15	0
Eureka	1,651	16	1,547	16	0
Esmeralda	971	17	1,344	17	0
GBDD ¹	32,732		29,921		
WNDD ²	167,362		119,354		
Urban ³	1,715,251		996,126		
Rural ⁴	283,006		205,707		
TOTAL	1,998,257		1,201,833		

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

¹ GBDD is the proposed Great Basin Development District composed of White Pine, Humboldt, Lander and Eureka Counties

² WNDD is the Western Nevada Development District comprised of Carson City, Churchill, Douglas, Lyon, Mineral, Pershing and Storey Counties

³ Urban counties of Nevada are Clark and Washoe

⁴ Rural counties are the remaining fifteen of Nevada's seventeen counties.

Population for the proposed Great Basin Development District increased from 29,921 in 1990 to 32,732 in 2000. The state of Nevada's other development district, the Western Nevada Development District (WNDD) realized a population increase from 119,354 in 1990 to 167,362 in 2000. Being adjacent to the metropolitan Washoe County enhances population growth for WNDD. Also of interest is the growth of Nevada's urban counties (Clark and Washoe) growing from 996,126 in 1990 to 1,715,251 in 2000. The rural counties of Nevada have also realized population growth, increasing from 205,707 in 1990 to 283,006 in 2000. However, even with the rural Nevada population increase, the proportionate urban share of Nevada's population increased from 82.88 percent in 1990 to 85.83 percent in 2000.

Table 2 details population growth, county population growth rates and county proportionate share of total state of Nevada population growth from 1990 to 2000. Humboldt County realized population increase of 3,262 people from 1990 to 2000, which ranked the county ninth among Nevada's seventeen counties in population growth from 1990 to 2000. This is a 25.40 percent increase in county census population from 1990 to 2000.

The proposed Great Basin Development District realized population increase of 2,811 people from 1990 to 2000 primarily from growth in Humboldt County. The growth amounted to a 9.39 percent increase and accounted for only 0.35 percent of total state population growth. WNDD realized population growth of 48,006 or a growth rate of 40.22 percent. WNDD contributed a little over 6 percent of total state population growth from 1990 to 2000.

Even though rural Nevada realized a 37.63 percent growth rate in population from 1990 to 2000, this growth was less than the urban Nevada counties. As seen in Table 2, the state of Nevada realized a growth rate of 66.3 percent from 1990 to 2000, which was the largest of any state in the nation. However this growth was not evenly distributed throughout the state. In fact, four of Nevada's seventeen counties realized population decreases during the state's rapid population increase. Unfortunately, two of these counties, Lander and White Pine are located in the Great Basin Development District.

From Table 2, Clark County had the largest population growth with 634,306 people, which is a county population growth rate of 85.55 percent. Also Clark County accounted for approximately 80 percent of the state's population growth. Nevada's two urban counties, Clark and Washoe, realized a population growth of approximately 72 percent from 1990 to 2000.

Table 2. Change in County Population, Percentage Change in County Population and Percentage of State Change in Population by County, State of Nevada, 1990 to 2000.

County	Population Change from 1990 to 2000			
	Number	Rank	Percentage	Percentage of State Change
Clark	634,306	1	85.55	79.64
Washoe	84,819	2	33.31	10.65
Nye	14,704	3	82.70	1.85
Lyon	14,500	4	72.50	1.82
Douglas	13,622	5	49.29	1.71
Carson City	12,014	6	29.71	1.51
Elko	11,761	7	35.08	1.48
Churchill	6,044	8	33.69	0.76
Humboldt	3,262	9	25.40	0.41
Pershing	2,357	10	54.36	0.30
Storey	873	11	34.56	0.11
Lincoln	390	12	10.33	0.05
Eureka	104	13	6.72	0.01
White Pine	-83	14	-0.90	-0.01
Esmeralda	-373	15	-27.75	-0.05
Lander	-472	16	-7.53	-0.06
Mineral	-1,404	17	-21.68	-0.18
GBDD ¹	2,811		9.39	0.35
WNDD ²	48,006		40.22	6.03
Urban ³	719,125		72.19	90.29
Rural ⁴	77,299		37.63	9.72
State	796,424		66.3	100.0

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

¹ GBDD is the proposed Great Basin Development District composed of White Pine, Humboldt, Lander and Eureka Counties

² WNDD is the Western Nevada Development District comprised of Carson City, Churchill, Douglas, Lyon, Mineral, Pershing and Storey Counties

³ Urban counties of Nevada are Clark and Washoe

⁴ Rural counties are the remaining fifteen of Nevada's seventeen counties.

Also, these two urban counties accounted for approximately 90 percent of total state population growth from 1990 to 2000. This indicates that the urban counties of Nevada, especially Clark County, will gain in political strength during the next decade.

Trends in the Census of Population data from 1990 to 2000 for Humboldt County can be summarized as follows:

- Humboldt County's 2000 population of 16,106 ranked the county ninth among Nevada's seventeen counties.
- Humboldt County did not change its rank among counties in the state of Nevada from 1990 to 2000.
- Humboldt County's population increased from 1990 Census to 2000 Census by 3,262 persons. This means that Humboldt County realized a population growth rate of 25.40 percent during the past decade.
- From 1990 to 2000, the county with the largest population growth was Clark with 634,306 additional people.
- The population growth rate for Clark County was 85.55 percent accounting for 79.64 percent of total state population growth.
- In contrast, Humboldt County contributed 0.41 percent to overall state population growth from 1990 to 2000.
- Given one-man, one-vote, the population growth which occurred in Clark County will only increase the county's political importance.

Census Population by Age

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

Table 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 of age in 1990 to 35.3 years of age in 2000, while the state of Nevada increased from 33.3 years of age in 1990 to 35.0 years of age in 2000 (U.S. Census, 2000 and 1990). For all counties in the state of Nevada, median age was older in 2000 than in 1990.

For Humboldt County, the median age increased from 30.6 years of age in 1990 to 33.4 years of age in 2000. This aging of the population should be of interest to policymakers in Humboldt County. Also, compared to the median values for the state and the nation, Humboldt County has a younger population.

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

County	1990	2000
	years of age	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. Census Bureau. Census 2000 Redistricting Data (PL-94-171) Summary File, Table PL1 and 1990 Census, Washington D.C. 2000 and 1990.

Table 4. Population by Age and Proportionate Share of Population by Age for Humboldt County, 1990 and 2000.

Age Group	1990		2000	
	Number	Proportionate share	Number	Proportionate share
		(%)		(%)
Under 5	1,099	8.56	1,294	8.03
5 to 9	1,177	9.16	1,403	8.71
10 to 14	1,042	8.11	1,490	9.25
15 to 19	853	6.64	1,279	7.94
20 to 24	932	7.26	812	5.04
25 to 34	2,445	19.04	2,147	13.33
35 to 44	2,074	16.15	2,873	17.84
45 to 54	1,336	10.40	2,293	14.24
55 to 59	538	4.19	743	4.61
60 to 64	412	3.21	559	3.47
65 to 74	628	4.89	708	4.40
75 to 84	257	2.00	402	2.50
85 and above	50	0.39	103	0.64
TOTAL	12,844	100.00	16,106	100.00

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

Table 4 sheds some light on the aging of the population in Humboldt County. When analyzing the age grouping in Humboldt County it should be noted that overall county population increased from 1990 to 2000. For the 20 to 24 years of age group and the 25 to 34 years of age group, their proportionate share declined by 8 percent and their absolute numbers decreased by 418 persons from 1990 to 2000. For these two age groups, population numbers declined by 12.38 percent from 1990 to 2000.

The demographics for Humboldt County are similar to many rural counties in the nation. Often rural counties lose population in age groups 20 to 24 years and 25 to 34 years of age because the young people with the best education and health and the most marketable skills and abilities leave the rural areas to realize their potential. With their departure, the county area loses future leaders, innovators and entrepreneurs. Taxes collected in the county to invest in local education will now earn dividends for the people and economies of other counties and states. Encouraging this age group to remain in the county is always a goal of rural economic development.

The age-population data for Census 1990 to 2000 for Humboldt County can be summarized as follows:

- Median age for Humboldt County has increased to 33.4 years of age in 2000, compared to 30.6 years of age in 1990.
- The aging of the population is a state and national trend, however, Humboldt County's aging has been less.
- With overall population for Humboldt County increasing from 1990 to 2000, population decreased by 12.38 percent for age groups 20 to 24 years of age and 25 to 34 years of age.
- The decrease in these two population groups should be of concern to Humboldt County's decision makers because these young people are the basis for future economic and entrepreneurial growth for the county.

State Demographer Population Growth and Stability, 1970 to 2000

The State of Nevada Demographer derives annual population estimates for the State of Nevada Department of Taxation (2001). Using these annual estimates, county average annual population growth rates and stability from 1970 to 2000 were developed and shown in Table 5. Humboldt County's average annual population growth rate was estimated to be 3.58 percent, which ranks Humboldt County ninth among Nevada's seventeen counties. Humboldt County also ranked eleventh highest or seventh lowest in instability of population growth rates. Results from Table 5 show Humboldt County population growth to be somewhat unstable and somewhat lower than the half the other counties of Nevada. This instability is linked to the "boom-bust" nature of Humboldt County's primary economic sector, which is mining.

The average annual percentage growth of population is the summation of annual percentage change from 1970 to 2000 divided by the number of years. The instability index is the coefficient of variation, or the standard deviation divided by the mean. A high instability index indicates that the annual percentage population growth varies considerably over time. Such instability may be characteristic of a one sector county economy and may signify the need for local economic diversification.

Table 5. Nevada County Population Growth Rate and Stability Index, 1970 - 2000

County	Average Annual Percentage Growth (%)	County Rank	Instability Index	County Rank
Nye	6.70	1	1.04	8
Douglas	6.29	2	0.68	13
Storey	6.03	3	0.86	9
Clark	5.62	4	0.26	16
Lyon	5.12	5	0.48	14
Carson City	4.89	6	0.23	17
Elko	4.47	7	0.85	10
Pershing	3.61	8	1.36	7
Humboldt	3.58	9	0.79	11
Esmeralda	3.56	10	3.33	3
Washoe	3.40	11	0.40	15
Lander	3.38	12	1.91	6
Churchill	3.08	13	0.74	12
Eureka	2.53	14	2.83	4
Lincoln	1.96	15	2.05	5
White Pine	0.24	16	16.57	1
Mineral	-0.31	17	8.37	2
Nevada	4.87		0.23	
GBDD ¹	2.13		1.25	
WNDD ²	4.16		0.44	

¹ GBDD stands for the Great Basin Development District

² WNDD stands for the Western Nevada Development District

State Demographer Population Growth by Different Time Periods

Table 6 shows average annual percentage change in population and county ranks for Nevada's seventeen counties from 1970 to 2000. Also annual average growth rates and ranks are derived by decades, that is 1970 to 1979, 1980 to 1989 and 1990 to 1999. In addition the two latest county growth rates and ranks were derived for 1999 and 2000.

It is interesting to look at the variability of Humboldt County and the proposed Great Basin Development District through time. From 1970 to 1979, Humboldt County grew at an average annual rate of 4.05 percent. From 1980 to 1989, the average annual growth rate declined to 3.30 percent and from 1990 to 1999, the average annual growth rate for Humboldt County population increased to 3.74 percent. However, population growth has declined the last two years from 0.67 percent in 1999 to 0.33 percent in 2000.

For the proposed GBDD, from 1970 to 1979, the district's average annual rate of growth was 1.34 percent, which rose to 2.90 percent in 1980 to 1989. However, the average annual growth rate declined to 2.60 percent from 1990 to 1999. The last two years yield interesting information. In 1999, the growth rate for GBDD was 1.52 percent, which increased in 2000 to 1.86 percent. The increase in 2000 should be of interest to Humboldt County and GBDD decision-makers.

The last two years provided interesting information about economic growth in rural Nevada. In 1999, only two of Nevada's seventeen counties realized declines in population growth. These counties, Lander and Mineral, had population rate declines of 0.43 percent and 2.57 percent, respectively. However, in 2000, the number of counties realizing decreases in population increased from two in 1999 to six in 2000. These six counties are Pershing, Esmeralda, Lander, Eureka, White Pine and Mineral. It is of interest that three of the proposed GBDD's counties realized population losses during 2000. The population growth rates in 2000 for Lander, Eureka and White Pine Counties declined by 2.68 percent, 4.30 percent and 4.47 percent, respectively.

Table 6. Nevada Population by County Average Annual Growth Rates, 1970 - 2000, by Decade, 1999 and 2000.

County	1970 - 2000 Growth Rate (%)	Rank	1970 to 1979 Growth Rate (%)	Rank	1980 to 1989 Growth Rate (%)	Rank	1990 to 1999 Growth Rate (%)	Rank	1999 Growth Rate	Rank	2000 Growth Rate	Rank
Nye	6.70	1	5.53	4	7.46	1	7.11	1	12.85	2	7.08	2
Douglas	6.29	2	10.67	1	3.76	9	4.79	5	2.82	8	1.20	8
Storey	6.03	3	8.23	2	5.55	4	4.33	7	1.91	11	4.20	4
Clark	5.62	4	5.27	5	5.24	5	6.38	2	7.04	3	6.12	3
Lyon	5.12	5	4.94	6	4.25	8	5.79	4	6.06	5	9.50	1
Carson City	4.89	6	7.22	3	2.50	15	2.83	10	1.47	13	0.90	9
Elko	4.47	7	2.21	15	7.01	2	4.61	6	2.82	8	0.27	11
Pershing	3.61	8	2.60	13	2.97	11	5.84	3	2.61	10	-0.03	12
Humboldt	3.58	9	4.05	10	3.30	10	3.74	9	0.67	15	0.33	10
Esmeralda	3.56	10	2.44	14	6.86	3	1.60	14	7.04	3	-0.46	13
Washoe	3.40	11	4.68	7	2.88	12	2.60	12	3.96	7	3.06	7
Lander	3.38	12	4.46	8	4.93	6	1.14	16	-0.43	16	-2.68	14
Churchill	3.08	13	2.74	12	2.69	13	3.81	8	5.37	6	3.70	6
Eureka	2.53	14	2.98	11	2.66	14	2.64	11	17.68	1	-4.30	16
Lincoln	1.96	15	4.13	9	4.93	6	1.27	15	1.43	14	4.00	5
White Pine	0.24	16	-2.04	17	1.48	16	1.94	13	1.73	12	-4.47	17
Mineral	-0.31	17	-1.06	16	0.40	17	-0.01	17	-2.57	17	-2.79	15
Nevada	4.87		4.93		4.45		5.31		6.03		5.04	
GBDD ¹	2.13		1.34		2.90		2.60		1.52		1.86	
WNDD ²	4.16		5.56		3.02		3.99		3.15		2.98	

1 GBDD stands for the proposed Great Basin Development District

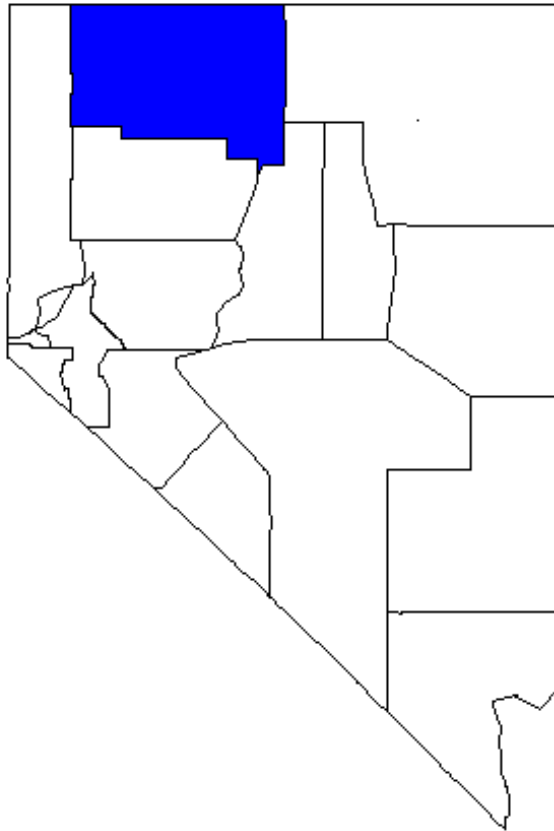
2 WNDD stands for the Western Nevada Development District

The trend in Humboldt County population may be summarized below:

- Humboldt County's 2000 population of 16,106 amounted to 0.81 percent of the state's total and ranked Humboldt County 9th among Nevada's seventeen counties.
- From 1970 to 2000, Humboldt County realized average annual population growth rates of 3.58 percent which ranked Humboldt County 9th among Nevada's seventeen counties.
- From 1970 to 2000, Humboldt County had the 11th highest instability index of Nevada's seventeen counties.
- Humboldt County's average annual rate of population growth in the 1980's (3.30 percent) was approximately 81.5 percent of the 1970's average (4.05) percent. In the 1990's Humboldt County's average annual rate of population growth (3.74) percent was approximately 113 percent of the 1980 value.
- It is interesting to see the decrease in population growth in Humboldt County during the last two years. Population growth rates for Humboldt County declined from 0.67 percent in 1999 to 0.33 percent in 2000.
- In 1999, only two of Nevada's seventeen counties had negative population growth rates. These counties were Lander and Mineral with population growth rates of -0.43 percent and -2.57 percent, respectively. By 2000, six of Nevada's seventeen counties had negative growth rates. Three of the six counties are within the proposed GBDD. These counties are Eureka, Lander and White Pine with 2000 population growth rates of -4.30 percent, -2.68 percent and -4.47 percent, respectively.
- The variability of county population growth rates from 1970 to 2000 indicates the dependency on a single economic sector such as mining. Especially the growth rates in 2000, which saw negative population growth for two counties in 1999 to six in 2000. This indicates the need for economic diversification efforts in Humboldt County.

SECTION II:

ANALYSIS OF PERSONAL AND PER CAPITA INCOME



Personal Income

In 1999, Humboldt County residents received approximately \$417 million in personal income. Of this amount, approximately \$335.6 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 \$308.1 million by taking into account social security contributions and commuting adjustments. Almost \$72.6 million was in the form of unearned income from dividends, interest and rent. Approximately \$36.4 million came from transfer payments, such as social security, food stamps, unemployment payments and veteran's benefits. These income figures are shown in Table 7.

Table 7. Personal Income of Humboldt County Residents, 1999.

Income Category	(\$1,000)	(\$1,000)
Wages and Salaries	\$262,354	
Other Labor Income	\$33,049	
Proprietor's Income	\$40,172	
Total Earnings in Humboldt County		\$335,575
Less Personal Social Security Contributions	\$16,938	
Plus Residence/Commuting Adjustment	-\$10,583	
Net Earnings of Humboldt County Residents		\$308,054
Dividends, Interest and Rent	\$72,628	
Transfer Payment	\$36,396	
Total Personal Income, Humboldt County Residents		\$417,078
Per Capita Personal Income		\$23,332

Source: U.S. Department of Commerce. "Regional Economic Information System." Bureau of Economic Analysis: Washington, D.C. 2001.

Social Security contributions are subtracted from total earnings in order to better measure income available to Humboldt County residents before income taxes (a concept called personal income by economists). Approximately \$16.9 million of personal contributions to social insurance programs such as social security, Medicare, unemployment, etc. were paid by residents of Humboldt County.

A commuting adjustment is made to total earnings since some people who earn income in Humboldt County are not county residents. These people commute into the county to work and take their paycheck back to their county of residence. Humboldt County residents do the same; work outside the county and bring income back to Humboldt County. Approximately \$10.6 million more in income is earned by workers who live outside Humboldt County, but work in Humboldt County, than by Humboldt County residents who work outside the county. This value is subtracted from Total Earnings in Humboldt County to derive net earnings of Humboldt County residents.

Table 8 gives the percentage breakdown of Humboldt County's income by source, and presents similar data for the state and nation. Net earnings by Humboldt County residents are approximately 73.86% of total personal income compared to 67.53% and 67.98% for the state and nation, respectively. Dividends, interest and rents and transfer payments in Humboldt County account for a smaller percentage of total personal income than in the state or nation. The last line of Table 8 shows that Humboldt County's per capita income is lower than that of the state and nation. At \$23,332 Humboldt County's 1999 income per capita was approximately 24.75% less than the state's \$31,004 and approximately 18.27% less than the nation's average of \$28,546.

Table 8. Comparison of Personal Income Sources, Humboldt County, State of Nevada and the U.S., 1999.

Personal Income Source	Humboldt County	Nevada	U.S.
	(%)	(%)	(%)
Wages and Salaries	62.90	58.19	57.41
Other Labor Income	7.93	6.10	6.38
Proprietor's Income	9.63	8.60	8.54
Less Personal Social Insurance Contributions	4.06	4.01	4.34
Plus Residence/Commuting Adjustments	-2.54	-1.36	-0.01
Net Earnings of Residents	73.86	67.53	67.98
Dividends, Interest and Rents	17.41	22.48	18.97
Transfer payments	8.73	9.99	13.05
TOTAL	100.0	100.0	100.0
Per Capita Personal Income	\$23,332	\$31,004	\$28,546

Source: U.S. Department of Commerce, "Regional Economic Information System." Bureau of Economic Analysis, Washington, D.C. 2001.

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

- Per capita income for Humboldt County in 1999 was \$23,332, which was 24.75% less than the state's average (\$31,004) and approximately 18.27% less than the nation's average (\$28,546).
- Total 1998 place of work earnings for Humboldt County were \$335,575,000. Place of work earnings are adjusted by adding the net resident adjustment to derive resident earnings. For Humboldt County, the net residence adjustment for 1999 was -\$10,583,000. This means \$10,583,000 more was earned by people living outside Humboldt County but working in Humboldt County than by people living in Humboldt County and working outside the county. This may constitute a leakage of potential spending from Humboldt County.
- Proportionate share of total earnings from dividends, interest and rents; and transfer payments are 26.14% in Humboldt County. This proportionate share is lower than the state value of 32.47% and the national value of 32.02%. This might mean a lower retiree population base for Humboldt County.

Per Capita Income

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 Humboldt County lags behind that of many Nevada counties. In Table 9 the 1999 per capita income for each county is shown, and in comparison, Humboldt County has the tenth highest 1999 Nevada county per capita income level at \$23,332. In comparison, the 1999 per capita income level for the state of Nevada was \$31,004 while the national average was \$28,546.

Table 9. Nevada County Per Capita Income and Rank, 1999.

County	Per Capita Income	Rank
Douglas	\$40,972	1
Washoe	\$35,343	2
Carson City	\$32,206	3
Clark	\$30,628	4
Storey	\$28,403	5
Mineral	\$25,327	6
Nye	\$24,668	7
Elko	\$24,189	8
Pershing	\$23,363	9
Humboldt	\$23,332	10
Churchill	\$23,262	11
Lyon	\$23,071	12
Lander	\$22,155	13
White Pine	\$21,771	14
Lincoln	\$21,358	15
Eureka	\$20,885	16
Esmeralda	\$17,503	17
State of Nevada	\$31,004	
GBDD ¹	\$22,566	
WNDD ²	\$30,556	
U.S.	\$28,546	

1 GBDD stands for the Great Basin Development District

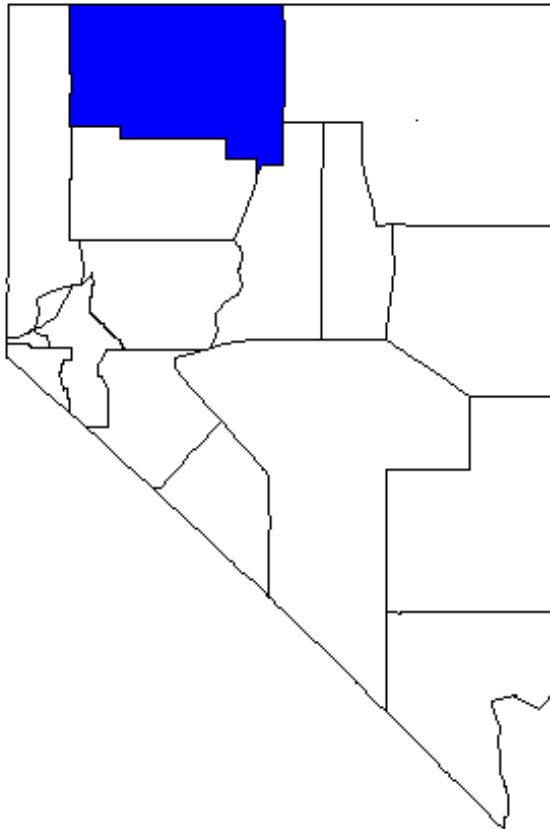
2 WNDD stands for the Western Nevada Development District

Source: U.S. Department of Commerce. "Regional Economic Information System." Bureau of Economic Analysis, Washington, D.C. 2001.

The trend in Humboldt County 1999 per capita income can be summarized as follows:

- In 1999, the per capita income value for Humboldt County was \$23,332, which ranked Humboldt County tenth highest among Nevada's seventeen counties.
- In comparison, Douglas County had the highest per capita income value of the seventeen Nevada counties at \$40,972, which is approximately 75.6 percent above Humboldt County's value.
- The state of Nevada per capita income is \$31,004 while the national average is \$28,546. Humboldt County's per capita income value of \$23,332 is 24.75 percent and 18.27 percent lower than the state and national average respectively, in 1999.

SECTION III:
ANALYSIS OF EDUCATIONAL DATA
AND NATIVE BORN DATA



Educational Attainment

High levels of educational attainment imply a skilled county workforce. Skilled workers add more value because of higher productivity and tend to be more adaptive to the changing demands of an economy. According to the 1990 census data, 75.5 percent of all adults 25 years of age or older in Humboldt County graduated from high school and higher as compared to all adults statewide (78.8%) and nationally (75.2%). Approximately 12.2 percent of all adults 25 years and older in Humboldt County graduated with bachelor's degrees or higher compared to the state value of 15.3 percent and the nation's value at 20.3 percent.

Table 10. Educational Attainment for Humboldt County, State of Nevada and the Nation, 1990.

Location	Percentage 25 years and older with high school degree or better (%)	Percentage 25 years and older with Bachelor's degree or better (%)
Humboldt	75.5	12.2
Nevada	78.8	15.3
U.S.	75.2	20.3

Source: U.S. Department of Commerce, Census.

The trend in Humboldt County for educational attainment can be summarized as follows:

- In 1990, Humboldt County's proportionate share of people 25 years or older with a high school diploma or higher was 75.5 percent. This is lower than the state value of 78.8 percent and slightly higher than the national value of 75.2 percent.
- For the new economy (high-tech industries) the pool of college educated people is important. In 1990, Humboldt County's proportionate share of people 25 years or older with a bachelor's degree or higher was 12.2 percent. This is lower than the state of Nevada value of 15.3 percent and the national value of 20.3 percent.
- When Census 2000 information becomes available, these values will be updated.

LENGTH OF RESIDENCE

During the 1980's and 1990's, the state of Nevada was the fastest growing state in the nation. A unique feature of this rapid growth is that the state of Nevada has the lowest percentage of native-born Nevadans in their population. In 1990, only 21.8 percent of Nevada's population was native-born. The second lowest state was Florida was a native-born percentage of 30.5 percent. In contrast, the native-born percentage for the nation was 61.8 percent. This low number of native-born reflects a rapidly changing population, which might make it difficult to focus on state economic development issues.

Table 11 ranks the counties of the state of Nevada by percentage of native-born residents. In 1990, Humboldt County had the fifth largest proportionate share of native-born population at 33.3 percent. Compared to Clark County, the fastest growing county in the state had only 19.3 percent of total county population born in the state of Nevada.

In comparing the two development districts in the state of Nevada, the proposed Great Basin Development District has a higher percentage of native-born population. This means that for Humboldt County and the proposed district, the population has not changed as rapidly as other areas and the local populace has a sense of history of the area. This might mean that for economic targeting, less effort may be needed to provide an understanding of the unique characteristics of the state of Nevada and Humboldt County to the populace.

The trend in Humboldt County for residence can be summarized as follows:

- In 1990, the state of Nevada was the fastest growing state in the union, but also had the lowest percentage of population born in the state. The percentage of native-born in the state of Nevada in 1990 was 21.8 percent, compared to 30.5 percent for the state of Florida, which was second lowest.
- In 1990, the percentage of native-born in the nation was 61.8 percent.
- The percentage of native-born population in Humboldt County in 1990 was 33.3 percent, which ranked Humboldt County as the fifth highest of Nevada's seventeen counties.
- For comparison, Clark County, which was the state's most populace county in 1990, had only 19.3 percent of total county population born in the state of Nevada.
- Humboldt County is unique in its percentage of native-born, which may reflect a populace with a better understanding of Nevada's unique "boom-bust" economic cycles.

- When the Census 2000 information becomes available, these values will be updated.

Table 11. Nevada Counties Ranked by Percentage of Population Born in the State of Nevada, 1990.

County	Proportionate Share of County Population
Lincoln	41.3
White Pine	40.6
Mineral	37.9
Pershing	34.6
Humboldt	33.3
Churchill	32.3
Elko	27.8
Lyon	26.9
Eureka	26.1
Washoe	25.7
Lander	25.5
Carson City	21.5
Storey	19.6
Clark	19.3
Nye	18.7
Douglas	18.5
Esmeralda	16.7
State	21.8
Urban ¹	20.9
Rural ²	26.0
GBDD ³	33.6
WNDD ⁴	24.6

1 Urban counties of Nevada are Clark and Washoe Counties

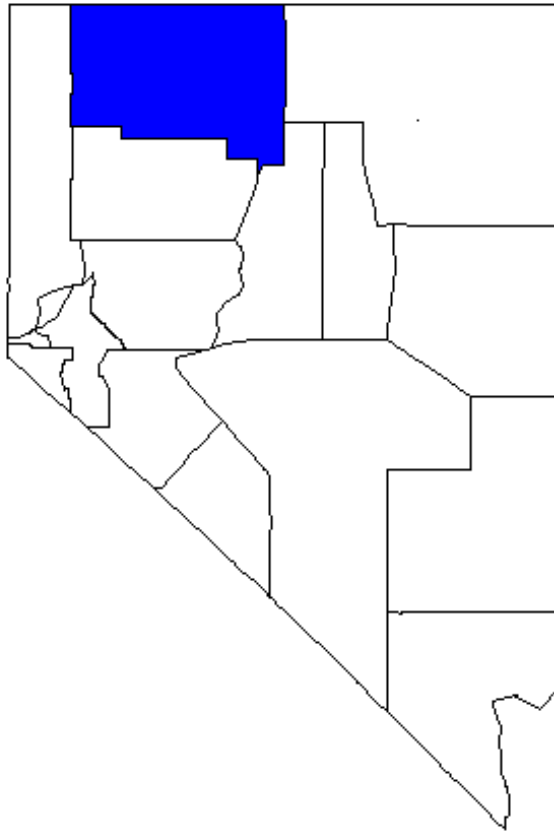
2 Rural counties of Nevada are the remaining 15 counties

3 GBDD is the proposed Great Basin Development District composed of Eureka, Humboldt, Lander and White Pine Counties

4 WNDD is the Western Nevada Development District composed of Carson City, Churchill, Douglas, Lyon, Mineral, Pershing and Storey Counties.

SECTION IV:

ANALYSIS OF LABOR DATA



**Labor Force, Unemployment Rate, Number Unemployed, Resident Employed
and Industrial Employment**

Labor force is an economic statistic that shows the number of persons looking for employment. In the Mountain States when a mine closes, the unemployment rate may not increase, as in other areas of the nation. This occurs because people leave the area and as a consequence, the labor force declines. Table 12 compares labor force for Humboldt County, state of Nevada and the United States from 1995 to 2000. The annual change in labor force is calculated as well as average annual change and the coefficient of variation for Humboldt County, state of Nevada and the nation. The average annual percentage change in labor force is the average annual change over the last five years of data. The coefficient of variation derives the variability of average annual change over the five-year period. The coefficient of variation is calculated by dividing the standard deviation of annual labor force changes by the average annual change in labor force.

Table 12. Labor Force Trends for Humboldt County, Nevada, State of Nevada and U.S., 1995-2000.

Year	Labor Force			Annual Percentage Change		
	Humboldt	Nevada	U.S.	Humboldt	Nevada	U.S.
	Number	(1,000)	(1,000)	(%)	(%)	(%)
1995	8,030	802.3	132,304			
1996	8,390	839.9	133,943	4.48	4.69	1.24
1997	8,760	882.5	136,297	4.41	5.07	1.76
1998	8,400	919.9	137,673	-4.11	4.24	1.01
1999	7,770	941.6	139,368	-8.33	2.36	1.23
2000	7,350	986.1	140,863	-4.55	4.73	1.26
Average Annual Growth Rate				-1.62	4.22	1.26
Coefficient of Variation				5.78	0.26	0.23

From Table 12, Humboldt County has seen greater variability in annual change in labor force peaking at 8,760 in 1997 and subsequently falling to 7,350 in 2000. When compared to the state of Nevada and the U.S., labor force from 1995 to 2000 has been growing while it has an average annual decline by 1.62 percent during this same time period in Humboldt County. This reflects the slowdown in the local mining sector activity.

Table 13 shows the problem that many Mountain State counties, like Humboldt County in Nevada, face. With declining labor force values the unemployment rate does not reflect downturns in the mining economy. For Humboldt County, unemployment rate was at its highest at 6.6 percent in 1998 but has dropped to a low of 5.1 percent in 2000. The unemployment rate for 2000 screens the effects of the mining sector slowdowns and closures because the labor force has dropped.

Table 13. Unemployment Rate Trends for Humboldt County, State of Nevada and U.S., 1995-2000

Year	Unemployment Rate			Annual Percentage Change		
	Humboldt (%)	Nevada (%)	U.S. (%)	Humboldt (%)	Nevada (%)	U.S. (%)
1995	4.3	5.4	5.6			
1996	4.1	5.4	5.4	-4.65	0.0	-3.57
1997	4.0	4.1	5.0	-2.44	-24.07	-7.41
1998	6.6	4.3	4.5	65.00	4.88	-10.00
1999	6.5	4.4	4.2	-1.52	2.33	-6.67
2000	5.1	4.1	4.0	-21.54	-6.82	-4.76
Average Annual Growth Rate				6.97	-4.74	2.48
Coefficient of Variation				33.45	2.46	0.38

If only Tables 13 and 14 are examined, Humboldt County seems to be rather well off. From Table 14, the county's number of unemployed was quite volatile, rising from 350 in 1995 to 550 in 1998 and subsequently declining to 380 in 2000. In comparison to the state of Nevada and the nation, the rate of decrease in the number of unemployed in Humboldt County is quite exceptional. The problem with this analysis is that it fails to recognize that people leave the area's labor force, which artificially lowers the county's unemployment rate and number of unemployed.

Table 14. Number of Unemployed Trends for Humboldt County, State of Nevada and U.S., 1995-2000.

Year	Unemployed			Annual Percentage Change		
	Humboldt Number	Nevada (1,000)	U.S. (1,000,000)	Humboldt (%)	Nevada (%)	U.S. (%)
1995	350	43.3	7,404.0			
1996	340	45.4	7,236.0	-2.86	4.85	-2.27
1997	350	36.2	6,739.0	2.94	-20.26	-6.87
1998	550	39.6	6,210.0	57.14	9.39	-7.85
1999	510	41.9	5,880.0	-7.27	5.81	-5.31
2000	380	40.0	5,665.0	-25.49	-4.83	-3.83
Average Annual Growth Rate				4.89	-0.95	-5.23
Coefficient of Variation				31.08	12.59	0.43

A more reflective picture of the Humboldt County economy is shown in Table 15. Table 15 shows the number of persons employed who live in Humboldt County, or employment by place of residence. This value is derived as:

$$1. \text{LF}_r = \text{EMP}_r - \text{INC}_r + \text{OUTC}_r + \text{UE}_r$$

Where:

LF_r is labor force in county r;

EMP_r is employment by place of work in county r;

INC_r is the number of incommuters in county r. That is, the number of workers who live outside county r, but work in county r.

OUTC_r is the number of outcommuters in county r. That is, the number of workers who live in county r, but work outside of county r; and

UE_r is the number of unemployed in county r.

Re-arranging equation 1:

$$2. \text{LF}_r - \text{UE}_r = \text{EMP}_r - \text{INC}_r + \text{OUTC}_r$$

$$3. \text{REMP}_r = \text{LF}_r - \text{UE}_r = \text{EMP}_r - \text{INC}_r + \text{OUTC}_r$$

Where REMP_r is the number of resident employed who live in county r.

The outcommuter and incommuter values are derived from journey to work data estimated from census relationships. It should be noted that the incommuter and outcommuter values and relationships are adjusted every ten years.

From Table 15, the number employed who reside in Humboldt County has increased from 1995 to 1997, but has subsequently decreased each year since 1997. The average annual growth rate for residence employed for Humboldt County is -1.61 percent. The State of Nevada and national resident employment growth rate have grown 4.52 percent and 1.75 percent, respectively. In comparison, the economy of Humboldt County shows stress. If only the county unemployment rate and number of unemployed are used to indicate stress, one comes to a different conclusion.

Table 15. Resident Number Employed for Humboldt County, State of Nevada and U.S., 1995 to 2000

Year	Employed			Annual Percentage Change		
	Humboldt Number	Nevada (1,000)	U.S. (1,000,000)	Humboldt (%)	Nevada (%)	U.S. (%)
1995	7,680	759.0	124,900			
1996	8,050	794.5	126,708	4.82	4.68	1.45
1997	8,760	846.3	129,558	8.82	6.52	2.25
1998	8,400	880.3	131,463	-4.11	4.02	1.47
1999	7,260	899.7	133,488	-13.57	2.20	1.54
2000	6,970	946.1	136,208	-3.99	5.16	2.04
Average Annual Growth Rate				-1.61	4.52	1.75
Coefficient of Variation				8.73	1.58	0.37

Table 16 shows industrial employment for Humboldt County, state of Nevada and the U.S. Industrial employment is place of work employment. Currently only 1995 to 1999 industrial employment data are available. The 2000 data will become available in August 2001. Table 16 shows that industrial employment for the state of Nevada and the U.S. from 1995 to 1999 has increased by an annual average of 5.62 and 2.39 percent respectively. Industrial employment in Humboldt County declined by an average of 0.50 percent.

Table 16. Industrial Employment for Humboldt County, State of Nevada and U.S., 1995 to 1999.

Year	Employed			Annual Percentage Change		
	Humboldt Number	Nevada (1,000)	U.S. (1,000,000)	Humboldt (%)	Nevada (%)	U.S. (%)
1995	7,770	784,486	117,191.0			
1996	8,292	840,798	119,608.0	6.72	7.18	2.06
1997	8,554	888,574	122,690.0	3.16	5.68	2.58
1998	7,962	923,199	125,865.0	-6.92	3.90	2.59
1999	7,568	975,908	128,786.0	-4.95	5.71	2.32
Average Annual Growth Rate				-0.50	5.62	2.39
Coefficient of Variation				6.49	1.34	0.25

Therefore when comparing activity levels of mining counties such as Humboldt County with others in the nation, the number of unemployed, or the unemployment rate, should not be the sole statistic used for evaluation. Since people are free to move, labor force, resident employed and industrial employment values are important to detect loss of workforce, which can artificially lower the unemployment rate. By not including the labor force or industrial employment trends, an incorrect picture could be drawn for the economy of Humboldt County.

The trend in Humboldt County for labor force, unemployment rate, number of unemployed, resident employed and industrial employment can be summarized as follows:

- A county's unemployment rate is often used as the singular statistic for county economic activity and government assistance. Unfortunately for many Mountain States which are resource industry dependent, the unemployment rate hides true economic viability. This

occurs because as county economic activity declines, people leave the county in pursuit of employment in other areas of the state and nation.

- For Humboldt County, the unemployment rate declined from 4.3 percent in 1995 to 4.0 percent in 1997 but subsequently increased to 6.6 percent in 1998. It has continued to decline after 1998 to 5.1 percent in 2000. The number of unemployed in Humboldt County increased from 350 in 1995 to 550 in 1998 and subsequently declined to 380 in 2000. During the same time period, Humboldt County's labor force increased from 8,030 in 1995 to 8,760 in 1997 and subsequently declined to 7,350 in 2000. The number of Humboldt county residents who were employed increased from 7,680 in 1995 to 8,760 in 1997 and subsequently declined to 6,970 in 2000. As for industrial employment or place of work employment for Humboldt County, the county realized gains in industrial employment from 1995 to 1997. Industrial employment grew from 7,770 in 1995 to 8,554 in 1997 but subsequently declined to 7,568 in 1999.
- These statistics show the fallacy in using a singular economic statistic such as unemployment rate to judge a county's economic activity or viability. As discussed earlier, Humboldt County's unemployment rate and number employed has declined which often reflects a robust county economy. However, the labor force, resident employment and industrial employment have declined, which reflects an economy in decline. This example shows that judgement of a county's vitality is quite complex and requires more than a singular economic statistic.
- An alternative statistic to estimate county economic vitality is the out-migration/population loss statistic. This statistic was developed from an EDA funded research publication by Feser and Sweeney (1998). Usually low income and high unemployment express tangible forms of economic stress, whereas population loss or stagnation and high out-migration may reflect either positive or negative economic outcomes. Out-migration may act as a positive force for a declining area as idle workers seek job opportunities in other regions, thereby reducing unemployment and demand for social services for declining areas. Out-migration and population loss (stagnation) exert an adverse impact on county economies by depleting critical human capital (encouraging "brain-drain") placing increased rather than decreased fiscal pressure on local governments and limiting subsequent development potential. For many "boom-bust" economies rapid population adjustments can damage fiscal positions of

local governments as maintenance of infrastructure and services expanded during the boom must be financed by a smaller population with fewer financial resources following the bust.

- To estimate out-migration/population loss statistics, the employment data from the State of Nevada Department of Employment, Training and Rehabilitation needs to be augmented with annual county-level migration data from the U.S. Internal Revenue Service. Also the out-migration/population loss statistics developed by Feser and Sweeney (1998) may need to be adjusted to account for population stagnation.

Weekly Wage

Additional statistics that can be employed to judge the vitality of the local economy is the weekly wage analysis. Table 17 shows the latest comparison of sectoral weekly wages (Third Quarter 2000) for Humboldt County and the State of Nevada.

Average wages for Humboldt County are above the state average for third quarter 2000. The average weekly wage paid across all industries for the county was \$627 compared to the average wage of \$614 for workers across the state. Humboldt County workers earned approximately \$13 more than their counterparts statewide. Weekly wages for Humboldt County workers in two economic sectors (Mining and Transportation, Communication and Public Utilities) were higher than their state counterparts during the third quarter 2000. Mining Sector workers in Humboldt County earned nearly \$73 per week more than the state average (\$1,126 versus \$1,053) while Trade Sector workers earn \$98 less than the state average (\$374 versus \$472). It should be noted, however, that some portion of this differential may be attributed to county differences in cost of living.

Trends in the third quarter 2000 sectoral weekly wages can be summarized as follows:

- The average weekly wage for Humboldt County during the third quarter 2000 was \$13 more than the state average (\$627 versus \$614).
- Weekly wages for Humboldt County workers in the Mining Sector were \$73 greater than the state average. However, Humboldt County workers in the Trade Sector were \$98 less than the state average.
- Figures in Table 17 also show that caution should be used in economic diversification. By diversifying away from mining, an economy may be diversifying from less variability to

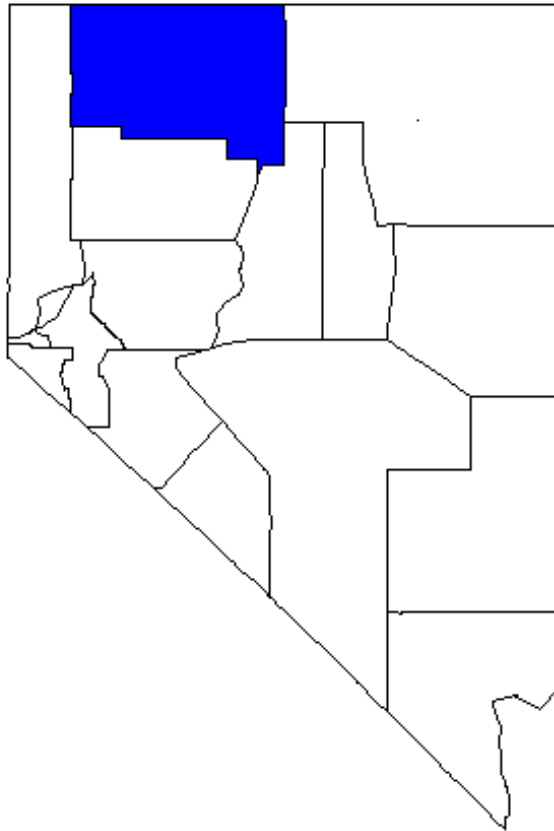
lower economic growth strategy. All economic sectors must be considered and evaluated for an economic development strategy.

Table 17. Third Quarter 2000 Average Weekly Wage for Humboldt County and State of Nevada

Sector	Humboldt County	State of Nevada
Mining	\$1,126	\$1,053
Construction	\$592	\$745
Manufacturing	\$644	\$702
Transportation, Communication and Public Utilities	\$863	\$722
Trade	\$374	\$472
Finance, Insurance and Real Estate	\$482	\$741
Services	\$318	\$567
Government	\$683	\$781
All Industries	\$627	\$614

SECTION V:

ANALYSIS OF LAND OWNERSHIP



Land Ownership

In terms of land area, Humboldt County ranks fourth largest in the state with 6,210,560 acres. Approximately 80 percent of the land in Humboldt County is administered by the federal government with Bureau of Land Management managing approximately 70 percent of total Humboldt County acreage. Table 18 shows the proportionate share of total Humboldt County acreage by federal and state government administration and local government and private sector ownership. Only 19.53 percent of total Humboldt County acreage is owned by local government and the private sector.

Table 18. Federal, State and Local Government and Private Sector Lands in Humboldt County, 2000.

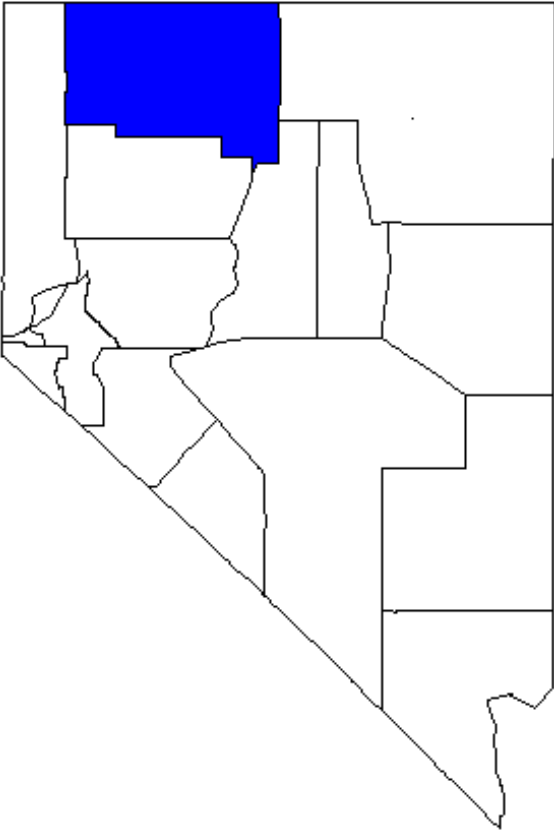
Categories	Acreage	Share of Total (%)
Federal Agencies:		
Bureau of Land Management	4,321,308	69.58
Forest Service	268,296	4.32
Other Federal Agencies	372,012	5.99
Total Federal Lands	4,961,616	79.89
Native American Reservations	27,948	0.45
State Government Lands	8,074	0.13
Local Government and Private Sector Lands	1,212,922	19.53
TOTAL	6,210,560	100.00

Trends in ownership and administration of land can be summarized as follows:

- Humboldt County ranks fourth largest among Nevada’s seventeen counties with 6,210,560 acres. See Appendix for land area acreage by county.
- Approximately 80 percent of the Humboldt County acreage is administered by the federal government with the Bureau of Land Management managing approximately 69.6 percent of total county acreage.
- Only 19.53 percent of total Humboldt County acreage is owned by local government and the private sector.

SECIION VI:

ANALYSIS OF EMPLOYMENT AND INCOME DATA



Analysis of Employment and Income Data

A review of employment data is an essential first step in identifying and understanding Humboldt County's key industries. Employment data will provide information to the county about whose income depends directly on a particular industry. Employment data can be used to help determine: 1) which industries are growing and which are declining; 2) the importance of an industry to Humboldt County's economy relative to its importance nationally; 3) how competitive are the county's industries with national counterparts.

The development of the employment and income data base for Humboldt County was formulated by using the IMPLAN microcomputer input-output model and database system. IMPLAN stands for Impact Planning and Analysis and has been used for numerous impact analyses. IMPLAN (Minnesota IMPLAN Group Inc., 2000) is a microcomputer modeling and data base program. The latest data available in 1998 and the IMPLAN data can be formulated by county or zip code area.

Following research by Bartik (1991) who states that a six-year period is necessary to allow for equilibrium to be restored after an initial change and given the earliest IMPLAN data set is from 1992, a six-year time frame was used for the employment and income analysis. In addition, IMPLAN data sets for 1992 and 1998 were verified and validated by employing procedures outlined by Holland et al (1997).

Humboldt County Employment Analysis

For each economic sector, total employment, share of total county employment and percentage change in sectoral employment from 1992 to 1998 were derived. Table 19 shows sectoral employment, shares of employment and percentage changes in employment for Humboldt County from 1992 to 1999. The Metal Mining Sector continues to play an important part in the county's economy, even with the downsizing of some mineral operations. In 1992, approximately 24 percent of total county employment was in the Metal Mining Sector, which has decreased to approximately 20 percent in 1998.

Given the downturn in Metal Mining Sector, other Humboldt County economic sectors have been affected. In the Construction Sector, employment increased from 501 jobs in 1992 to 592 jobs in 1998. However, the sector's proportionate share of total county employment

declined slightly from approximately 5.95 percent in 1992 to 5.71 percent in 1998. This shows the linkages and impacts that the Metal Mining Sector has on other sectors in the local economy.

Commercial sectors (retail and service sectors) realized increased employment with increased employment shares. The Personal Services Sector increased its share of total county employment increasing from 0.53 percent in 1992 to 0.96 percent in 1998. The Hotel Sector and the Amusement and Recreation Sectors are often aligned with the casino industry. However, these sectors have realized decreased employment from 1992 to 1998. Employment in these two combined sectors declined from 1,306 in 1992 or 15.51 percent of total county 1992 employment to 1,199 in 1998 or 11.56 percent of total county 1998 employment.

Table 19. Sectoral Employment, Shares of Employment and Percentage Change in Sectoral Employment for Humboldt County, 1992 to 1998.

SECTOR	1992		1999		Percentage change in employment (%)
	Employment number	Employment share (%)	Employment number	Employment share (%)	
Agriculture					
Production	423	5.03%	588	5.67%	39.01%
Services	222	2.64%	226	2.18%	1.80%
Mining					
Metal	2,039	24.23%	2,052	19.78%	0.64%
Coal	0	0.00%	0	0.00%	0
Oil and Gas Extraction	0	0.00%	0	0.00%	0
Mining and Quarrying of Non- Metal Mineral, except	8	0.10%	24	0.23%	200.00%
Construction					
Construction	501	5.95%	592	5.71%	18.16%
Manufacturing					
Food and Kindred Products	14	0.17%	0	0.00%	-100.00%
Tobacco Products Mfg.	0	0.00%	0	0.00%	0
Apparel MFG.	3	0.04%	0	0.00%	-100.00%
Lumber and Wood Products	0	0.00%	0	0.00%	0
Furniture and Fixtures	0	0.00%	0	0.00%	0
Paper and Allied Products	0	0.00%	0	0.00%	0
Printing and Publishing	34	0.40%	75	0.72%	120.59%
Chemicals and Allied Products	17	0.20%	50	0.48%	194.12%
Petroleum Products	0	0.00%	0	0.00%	0
Rubber Products	0	0.00%	24	0.23%	0
Leather	0	0.00%	0	0.00%	0
Stone Clay and Glass	27	0.32%	17	0.16%	-37.04%
Primary Metal	0	0.00%	0	0.00%	0
Fabricated Metal	3	0.04%	10	0.10%	233.33%
Industrial Machines	30	0.36%	29	0.28%	-3.33%

Table 19. Continued

SECTOR	1992		1999		Percentage change in employment (%)
	Employment number	Employment share (%)	Employment number	Employment share (%)	
Electronics	0	0.00%	0	0.00%	0
Transportation Equipment	0	0.00%	0	0.00%	0
Measuring and Mechanical Devices	0	0.00%	10	0.10%	INF
Miscellaneous Mfg.	0	0.00%	0	0.00%	0
T.C and P.U.					
Transportation	262	3.11%	322	3.10%	22.90%
Communications	41	0.49%	40	0.39%	-2.44%
Public Utilities	127	1.51%	142	1.37%	11.81%
Wholesale Trade					
Wholesale Trade	167	1.98%	280	2.70%	67.66%
Retail Trade					
Building Materials & Gardening	97	1.15%	88	0.85%	-9.28%
General Merchandise Stores	31	0.37%	293	2.82%	845.16%
Food Stores	247	2.93%	312	3.01%	26.32%
Automotive Dealers & Service Stations	230	2.73%	323	3.11%	40.43%
Apparel & Accessory Stores	41	0.49%	42	0.40%	2.44%
Furniture & Home Furnishings Stores	20	0.24%	27	0.26%	35.00%
Eating & Drinking	397	4.72%	446	4.30%	12.34%
Miscellaneous Retail	79	0.94%	284	2.74%	259.49%
F.I.R.E.					
Finance	99	1.18%	182	1.75%	83.84%
Insurance	53	0.63%	74	0.71%	39.62%
Services					
Real Estate	67	0.80%	121	1.17%	80.60%
Hotels and Lodging Places	981	11.66%	799	7.70%	-18.55%
Personal Services	45	0.53%	100	0.96%	122.22%

Table 19. Continued

SECTOR	1992		1999		Percentage change in employment (%)
	Employment number	Employment share (%)	Employment number	Employment share (%)	
Business Services	281	3.34%	284	2.74%	1.07%
Auto Repair and Service	27	0.32%	135	1.30%	400.00%
Miscellaneous Repair	14	0.17%	47	0.45%	235.71%
Motion Picture	32	0.38%	25	0.24%	-21.88%
Amusement and Recreation	325	3.86%	400	3.86%	23.08%
Health Services	103	1.22%	238	2.29%	131.07%
Legal Services	9	0.11%	13	0.13%	44.44%
Educational Services	4	0.05%	4	0.04%	0.00%
Social Services	8	0.10%	38	0.37%	375.00%
Other Services	97	1.15%	198	1.91%	104.12%
Engineering and Accounting Services	67	0.80%	102	0.98%	52.24%
Government					
Federal Government - Military	42	0.50%	38	0.37%	-9.52%
Federal Government - Non- Military	158	1.88%	139	1.34%	-12.03%
State & Local Government - Education	500	5.94%	441	4.25%	-11.80%
State & Local Government - Non- Education	444	5.28%	701	6.76%	57.88%
TOTAL	8,416	100.00%	10,375	100.00%	23.28%

INF stands for Infinity. Employment in the given sector was zero in 1992

Humboldt County Income Analysis

Income or employee compensation data is another useful tool to help identify key industries in Humboldt County and complements the employment analysis. Although an industry may employ a high percentage of workers, it may not offer those workers high compensation or it may only hire on a seasonal, part-time or temporary basis.

Data generally does not distinguish among industries that pay low wages, those that require seasonal or temporary work, and those that do both. However, you can conclude that those industries with large numbers of employees, large payrolls and therefore, higher compensation per employee are more important to the region than industries that don't have large numbers of employees or large payrolls.

By looking at total employee compensation and employee compensation per employee, the quality of jobs that various industries offer in Humboldt County can be derived. Although determining job quality is a subjective exercise, most economic development practitioners would agree that high-wage jobs are important.

Table 20 shows sectoral total real employee compensation and employment compensation per job for 1992 and 1999. The employee compensation value has been deflated for inflation, so their values are 1996 = 100.0. The percentage change in real employee compensation per job from 1992 to 1999 and the employee per job comparison of Humboldt County to the nation in 1999 are also shown in Table 20.

Table 20. Sectoral Real Employee Compensation, Real Employee Compensation Per Job and Percentage Change in Real Employee Compensation per Job from 1992 to 1999 and National Comparison of Sectoral Average Employee Compensation Per Job in 1999 for Humboldt County, Nevada.

SECTOR	1992		1999		Percent Change from 92 to 99 (%)	1999 National Comparison (%)
	Real Employee Compensation (\$1,000)	Real Employee Compensation per job (\$)	Real Employee Compensation (\$1,000)	Real Employee Compensation per job (\$)		
Agriculture						
Production	3104.715	6741	5805.779	10192	51.19%	189.13%
Services	2662.132	11013	1872.772	8553	-22.33%	79.08%
Mining						
Metal	109905.3	49503	123159.9	61952	25.15%	115.49%
Coal	0	0	0	0	0	0
Oil and Gas Extraction	0	0	0	0	0	0
Mining and Quarrying of Non-Metal Mineral, except	150.4331	17270	887.0468	38150	120.91%	85.99%
Construction						
Construction	16751.58	30708	18172.1	31685	3.18%	112.04%
Manufacturing						
Food and Kindred Products	494.1553	32417	0	INF	INF	INF
Tobacco Products Mfg.	0	0	0	0	0	0
Apparel MFG.	47.25346	14466	0	INF	INF	INF
Lumber and Wood Products	0	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0	0
Paper and Allied Products	0	0	0	0	0	0
Printing and Publishing	888.0257	23987	1526.779	21013	-12.40%	53.38%
Chemicals and Allied Products	863.3543	46641	2218.576	45800	-1.80%	64.98%
Petroleum Products	0	0	0	0	0	0
Rubber Products	0	0	555.7817	23903	INF	61.35%
Leather	0	0	0	0	0	0
Stone Clay and Glass	732.044	24900	565.9304	34362	38.00%	82.31%
Primary Metal	0	0	0	0	0	0
Fabricated Metal	100.7748	30851	220.0768	22716	-26.37%	53.52%

Table 20. Continued

SECTOR	1992		1999		Percent Change from 92 to 99 (%)	1999 National Comparison (%)
	Real Employee Compensation (\$1,000)	Real Employee Compensation per job (\$)	Real Employee Compensation (\$1,000)	Real Employee Compensation per job (\$)		
Industrial Machines and computer equipment	983.5798	30111	870.0973	30969	2.85%	59.24%
Electronics	0	0	0	0	0	0
Transportation Equipment	0	0	0	0	0	0
Measuring and Mechanical Devices	0	0	283.9768	29312	0	49.39%
Miscellaneous Mfg.	0	0	0	0	0	0
T.C. and P.U.						
Transportation	12284.66	43062	13249.83	42474	-1.37%	126.87%
Communications	1515.528	33948	1643.781	42418	24.95%	75.18%
Public Utilities	8014.319	57956	9176.976	66708	15.10%	106.51%
Wholesale Trade						
Wholesale Trade	4844.821	26644	9972.047	36761	37.97%	81.61%
Retail Trade						
Building Materials & Gardening	2379.726	22531	2065.708	24230	7.54%	97.04%
General Merchandise Stores	452.7224	13412	4469.748	15746	17.40%	92.77%
Food Stores	5284.991	19651	6731.079	22269	13.32%	119.22%
Automotive Dealers & Service Stations	4998.577	19960	6551.895	20938	4.90%	71.18%
Apparel & Accessory Stores	445.3933	9977	397.0476	9758	-2.19%	60.86%
Furniture & Home Furnishings Stores	322.5026	14809	366.0967	13996	-5.49%	59.24%
Eating & Drinking	4168.997	9644	4340.46	10045	4.16%	78.31%
Miscellaneous Retail	19965.19	232102	272165.3	989187	326.19%	6638.12%
F.I.R.E.						
Finance	2341.6	21722	2673.858	15165	-30.19%	30.13%
Insurance	977.7788	16943	1181.462	16480	-2.74%	40.25%
Real Estate	487.4352	6682	999.1551	8523	27.57%	69.89%

Table 20. Continued

SECTOR	Real Employee Compensation (\$1,000)	1992 Real Employee Compensation per job (\$)	Real Employee Compensation (\$1,000)	Real Employee Compensation per job (\$)	1999 Percent Change from 92 to 99 (%)	1999 National Comparison (%)
Services						
Hotels and Lodging Places	17197.38	16100	12925.69	16698	3.72%	78.25%
Personal Services	337.8304	6895	448.2132	4626	-32.90%	51.91%
Business Services	3875.516	12666	4438.597	16132	27.36%	59.88%
Auto Repair and Service	441.4552	15016	2365.046	18083	20.42%	88.65%
Miscellaneous Repair	178.4136	11704	702.4736	15428	31.81%	88.02%
Motion Picture	183.7194	5273	137.0694	5659	7.33%	18.25%
Amusement and Recreation	4600.078	12999	4930.237	12722	-2.13%	88.88%
Health Services	1705.055	15203	5366.353	23274	53.09%	67.22%
Legal Services	124.46	12700	265.4492	21077	65.95%	47.39%
Educational Services	38.94159	8941	34.92102	9011	0.79%	41.56%
Social Services	72.11847	8279	321.2711	8727	5.41%	44.15%
Other Services	2619.671	24803	4106.952	21410	-13.68%	70.06%
Engineering and Accounting Services	2006.281	27501	3068.968	31057	12.93%	93.04%
Government						
Federal Government - Military	489.6115	10706	555.5558	15091	40.95%	37.25%
Federal Government - Non-Military	7641.578	44418	5623.104	41757	-5.99%	90.50%
State & Local Government - Education	14239.09	26154	15701.9	36752	40.52%	101.54%
State & Local Government - Non-Education	15036.99	31104	24703.35	36375	16.95%	94.79%
TOTAL	275955.8		577818.4			

INF stands for Infinity. Employment in the given sector was zero in 1992

The sector with the highest employee compensation per job is the Metal Mining Sector. Even though this sector is volatile, it is recognized as a sector paying excellent wages. Wages in the agricultural vary according to price cycles. Regarding commercial sectors, every sector except “Food Retail” and “Miscellaneous Retail” realized employment compensation per employee below the 1999 national average.

A synopsis of sectoral employment and employee compensation data for Humboldt County is presented below:

- Sectoral employment and employee compensation data were analyzed for 1992 and 1998.
- The Metal Mining Sector made up 24 percent of total Humboldt County employment in 1992, and decreased to 20 percent in 1998.
- Some commercial sectors have realized employment increases that may be due to local entrepreneurship efforts and tourism expansion.
- Sectoral income analysis augments employment analysis because industries that hire a high percentage of workers may not offer high employee compensation and may hire only seasonal or part-time workers.
- The Metal Mining Sector in Humboldt County has the largest employment base in the county and also has the highest employee compensation per job of all economic sectors.
- Even though the Metal Mining Sector is cyclical, this sector is important to the viability of Humboldt County.

Economic Base Analysis for Humboldt County

The economic base of a county refers to the relative size of its industries. A county is said to have a diversified economic base if several industries are relatively large. Conversely, if one or a few industries dominate a local economy, the economy is said to have a concentrated economic base. There are two techniques used to measure economic base and changes in economic base. These are location quotients and shift-share analysis.

Location Quotient Analysis

The degree of concentration of Humboldt County industries is determined by calculating location quotients for individual economic sectors. Location quotients indicate the economic importance of each regional industry relative to the same industry at the national level. Location quotients usually use employment as an indicator of an industry's size and importance. The primary focus of location quotients is to identify the industries that are either more important or less important statewide, or locally than nationally. The broader the economic base, that is, the higher the location quotients, the more stable the economy of a community. On the other hand, very low location quotients represent industries that are largely underdeveloped and may offer an opportunity for future development.

An industry's location quotient is the ratio of the industry's share of employment in the county to the industry's share of employment in the nation. It is calculated as follows:

$$LQ_i = \frac{e_i / E}{n_i / N}$$

where:

i = Economic Sector

LQ_i = Location quotient for economic sector i

e_i = County employment in economic sector i

E = Total county employment

n_i = National employment in economic sector i

N = Total national employment

The interpretation of location quotients are as follows:

1. Every industry's output can be divided into two uses: export and local consumption (use).
2. The amount consumed (used) by an community is proportionate to the amount consumed locally.
3. If the location quotient for an economic sector is less than one, goods and services must be imported to satisfy local demands.
4. If the location quotient for an economic sector is equal to one, then the economy is approximately fulfilling the requirements of the local household and firms.
5. Finally, if the location quotient is greater than 1.25 for a particular sector, the county is an exporting sector. A self-sufficient economic sector is designated by a location quotient between 0.75 and 1.25 for a selected county. Finally an importing economic sector is designated by a location quotient less than 0.75 for a selected state or county.

Results of Location Quotients for Humboldt County

Location quotients were derived for 1992 and 1998, as well as the percentage change in location quotients. The percentage change in location quotient values may yield information as to possible changes in economic base for Humboldt County.

Table 21 shows the primary export sectors for Humboldt County. An economic development effort would seek to maintain the natural resource industries (agriculture and mining) that play an important part for county economic viability and export sales. However in 1999, there were some commercial sectors that showed export potential, such as the General Merchandise Sector, the Auto Dealers and Service Station Sector, the Amusement Sector and the Hotel Sector (gaming). The Wal-Mart store is included in the General Merchandising Sector, which explains the 698 percent growth in that sector's location quotient. Also, there were some commercial sectors that are classified as importing, but showed promise because their computed location quotient values are increasing. These are usually entrepreneurial activities in which increasing small business expertise may be an economic development target.

Trends in location quotient values for Humboldt County can be summarized as follows:

- Humboldt County's economy is highly dependent on the natural resource industries of mining and agriculture for export.
- The Hotel Sector and the Amusement Sector, which includes gaming, play an important role in future tourism development and export potential.
- The General Merchandise Retail Sector realized a 698 percent increase in its location quotient value. This sector was an importing sector in 1992, but became an exporting sector in 1998. The reason for this dramatic increase is the opening of the Wal-Mart store in Winnemucca.
- There were some commercial sectors that showed potential export development and their activities should be investigated for enhancement. The local private health sector is still an importing sector, but has realized an 86 percent increase in its location quotient value. When the private health sector employment is combined with the public sector health employment (hospital employment) the combined private and public Humboldt County Health Sector could well be an exporting sector. Also, the Health Sector is an economic agent that promotes and supports industrial location and retiree populations to Humboldt County.

Table 21. Sectoral Location Quotient Values and Percentage Change in Location Quotient Values for Humboldt County, 1992 and 1998.

SECTOR	Location Quotient 1992	Location Quotient 1999	Percentage Change in Location Quotient (%)
Agriculture			
Production	2.23	2.82	26.29%
Services	3.30	2.33	-29.37%
Mining			
Metal	629.92	607.82	-3.51%
Coal	0.00	0.00	0.00%
Oil and Gas Extraction	0.00	0.00	0.00%
Mining and Quarrying of Non-Metal Mineral, except	1.16	3.17	174.68%
Construction			
Construction	0.94	0.87	-8.08%
Manufacturing			
Food and Kindred Products	0.14	0.00	-100.00%
Tobacco Products Mfg.	0.00	0.00	0.00%
Apparel MFG.	0.03	0.00	-100.00%
Lumber and Wood Products	0.00	0.00	0.00%
Furniture and Fixtures	0.00	0.00	0.00%
Paper and Allied Products	0.00	0.00	0.00%
Printing and Publishing	0.34	0.68	98.22%
Chemicals and Allied Products	0.26	0.74	183.30%
Petroleum Products	0.00	0.00	0.00%
Rubber Products	0.00	0.37	0.00%
Leather	0.00	0.00	0.00%
Stone Clay and Glass	0.73	0.44	-39.27%
Primary Metal	0.00	0.00	0.00%
Fabricated Metal	0.03	0.08	171.26%

Table 21. Continued

SECTOR	Location Quotient 1992	Location Quotient 1999	Percentage Change in Location Quotient (%)
Industrial Machines and computer equipment	0.25	0.20	-21.00%
Electronics	0.00	0.00	0.00%
Transportation Equipment	0.00	0.00	0.00%
Measuring and Mechanical Devices	0.00	0.18	0.00%
Miscellaneous Mfg.	0.00	0.00	0.00%
T.C. and P.U.			
Transportation	1.06	0.98	-7.18%
Communications	0.59	0.44	-24.36%
Public Utilities	2.71	3.18	17.33%
Wholesale Trade			
Wholesale Trade	0.42	0.59	39.82%
Retail Trade			
Building Materials & Gardening	1.91	1.31	-31.64%
General Merchandise Stores	0.20	1.59	698.07%
Food Stores	1.16	1.29	11.49%
Automotive Dealers & Service Stations	1.68	1.92	13.95%
Apparel & Accessory Stores	0.53	0.50	-5.96%
Furniture & Home Furnishings Stores	0.34	0.35	2.44%
Eating & Drinking	0.92	0.83	-10.29%
Miscellaneous Retail	0.32	0.86	170.89%
F.I.R.E.			
Finance	0.43	0.58	35.44%
Insurance	0.32	0.39	22.07%
Real Estate	0.35	0.51	44.80%

Table 21. Continued

SECTOR	Location Quotient 1992	Location Quotient 1999	Percentage Change in Location Quotient (%)
Services			
Hotels and Lodging Places	9.33	6.24	-33.20%
Personal Services	0.31	0.51	65.07%
Business Services	0.56	0.39	-30.18%
Auto Repair and Service	0.32	1.26	291.85%
Miscellaneous Repair	0.35	0.96	172.00%
Motion Picture	0.78	0.41	-47.78%
Amusement and Recreation	3.53	2.52	-28.55%
Health Services	0.17	0.32	86.33%
Legal Services	0.11	0.13	20.34%
Educational Services	0.03	0.02	-31.99%
Social Services	0.09	0.30	241.42%
Other Services	0.36	0.59	66.17%
Engineering and Accounting Services	0.26	0.27	7.03%
Government			
Federal Government - Military	0.24	0.28	16.84%
Federal Government - Non-Military	1.19	0.77	-35.57%
State & Local Government - Education	0.96	0.77	-20.20%
State & Local Government - Non-Education	1.09	1.49	36.38%

Shift-Share Analysis

The location quotient results indicate the nature of the state's or area's economy for a specific time period. The change occurring the state's or county's economic base is of additional interest. Shift-share analysis is performed to measure these changes.

Shift-share analysis, like location quotients, is a measure of a state's or county's economic condition relative to other communities and to the nation as a whole. The data used in this analysis are the same as that used for the location quotient analysis. For this study, the shift in economic base was studied from 1992 to 1998.

The purpose of shift-share analysis is to determine the state's or county's competitiveness and changing employment patterns in the industrial market place. Shift-share analysis assumes that there is a national component, an industrial mix component and a competitive share component to changes in employment.

National Growth Component

The sum of employment in all industries in all communities makes up national employment. One would expect that if a community's economy was maintaining its relative competitiveness, changes in the level of national employment would be reflected in proportionately equal changes in the local employment. The calculation of the national growth component, therefore, measures how much of the local employment change is due to the national growth trend. The calculation is as follows:

$$\text{National Growth Component} = (\text{rate of change in } N * e_i)$$

where:

$$\text{rate of change in nation or } N = \frac{(N_{1990} - N_{1980})}{N_{1980}}$$

e_i = county employment in economic sector i

Industrial Mix Component

On a national level, each industry grows or declines at some rate, at least partially independent of the rate of growth in the national economy. A local economy's performance will depend, on its mix of industries, that is, on whether its economic base is concentrated in faster or slower growing industries. The industrial mix calculation indicate the expected growth in local

industries if they grow at the same rate as their national counterparts. The expected local share of the particular industry is determined using the following equation:

$$\text{Industrial Mix Component} = (\text{rate of change in } n_i - \text{rate of change N}) * e_i$$

n_i = national employment in economic sector i

N = total national employment

e_i = county employment in economic sector i

$$\text{rate of change in } n_i = \frac{(n_{i1990} - n_{i1980})}{n_{i1980}}$$

Competitive Share Component

A local industry's employment grows or declines for a number of reasons, including changes in the national employment level, changes in employment by the same industry at the national level, and changes in local conditions. After the first two components have been calculated, the residual change, if any, is attributed to changes in the competitiveness of the local industry. The competitive share component measures this latter factor in employment change.

The competitive share component is measured as follows:

$$\text{Competitive Share} = (\text{rate of change in } e_i - \text{rate of change in } n_i) * e_i$$

where:

e_i = county employment in economic sector i

$$\text{rate of change in } e_i = \frac{e_{i1990} - e_{i1980}}{e_{i1980}}$$

$$\text{rate of change in } n_i = \frac{n_{i1990} - n_{i1980}}{n_{i1980}}$$

Results of Shift-Share Analysis

Humboldt County's overall employment and individual local economic sectors realize employment growth and declines that are due to a number of reasons, such as national employment growth, changes in employment by a similar national industry, and/or changes in local conditions. After the national component and industrial mix component have been calculated, the residual change, if any, is attributed to changes in competitiveness of the local economy and its industries. Table 22 shows the results of the shift-share analysis for Humboldt County.

For overall Humboldt County employment, the county realized an employment increase of 1,959 jobs from 1992 to 1998. The overall national component was a positive 1,300 job increase, or the overall national economy grew at 15.45 percent from 1992 to 1999. However, Humboldt County's overall industrial mix growth rate was a negative 243 jobs. This means that from a national perspective, Humboldt County had proportionately more economic sectors in the slower growth industries than the faster growing national industries. The overall national effect on Humboldt County's employment growth was 1,057 jobs or the combination of the overall national growth and industrial mix.

Humboldt County's overall competitive growth rate is of interest. Humboldt County realized an overall positive competitive growth rate of 901 jobs. This means that the overall Humboldt County economy is more competitive and the reasons for this competitive advantage should be investigated.

As for individual economic sectors, the Metal Mining Sector showed a positive competitive effect. The sector realized an employment increase of 13 jobs from 1992 to 1998. However, if competitive effect was not positive, the loss of Metal Mining jobs might have been greater. This means the Humboldt County Metal Mining Sector is more competitive than similar companies nationwide.

An industry obviously linked to the Metal Mining Sector that has been adversely impacted by reduced metal mining activities is construction. From 1992 to 1998, the Construction Sector realized a slight gain of 91 jobs. Its competitive effect of -11 contributed greatly to reducing overall Humboldt County competitive effect.

The slight increase in overall Construction Sector employment and its large negative competitive effect should be of concern to Humboldt County economic development officials. Construction usually reflects increased spending by investors or homebuilders in land, materials and other items needed to build business structures or homes. Slow increases in Construction Sector employment with the accompanying negative competitive effect, usually signify a slowdown or weakening in the local economy. In Humboldt County's example, the recent reductions in Metal Mining Sector activities have reduced overall viability of the Humboldt County economy.

It is interesting that some commercial sectors (retail and service) realized some positive competitive advantage in employment growth from 1992 to 1998. Local economic development

officials may want to investigate reasons for these positive competitive impacts and if these sectors could need assistance to maintain or even expand their positive competitive advantage.

Trends in shift-share analysis for Humboldt County can be summarized as follows:

- Humboldt County realized an increase of 1,959 jobs from 1992 to 1998.
- The gain in total county employment was due primarily to overall national economy effects. Overall industry mix was negative, but the overall Humboldt County economy realized a positive competitive effect. Local economic development officials may want to investigate reasons for a positive competitive effect.
- The Metal Mining Sector had a job increase of 13 from 1992 to 1998 and realized an increase in its competitive advantage. This indicates that the Metal Mining Sector of Humboldt County economy is more competitive than the national Metal Mining industry.
- The Construction Sector whose activity is related to the viability of the Metal Mining Sector had a competitive effect of -11. Decreased competitive Construction Sector activity should be of concern to Humboldt County economic development officials because construction usually reflects increased or decreased spending by investors and homebuilders in industrial site and home construction.
- The General Merchandise Retail Sector realized the largest positive competitive effect. This may be due to the location of the Wal-Mart Store in Winnemucca. The loss of employment in the Hotel Sector is of concern. The Hotel Sector had the largest competitive advantage decline of all sectors in the county economy. This sector, along with the Amusement Sector are critical ingredients for local tourism promotion.
- Results of the shift-share analysis indicate that some local commercial sectors had positive competitive effects. It may be advantageous for Humboldt County economic development officials to analyze reasons why positive competitive advantage occurred for those economic sectors.
- Because of the Metal Mining Sector's instability, Humboldt County economic development officials may want to explore economic diversification potentials. However, these officials should be aware that sometime overall economic diversification may come with reduced overall economic growth.

- Also, Humboldt County economic development officials may investigate reasons for positive competitive advantage for some of the local commercial sectors. This may mean focusing on tourism development and enhancing local entrepreneurial skills.

Table 22. Sectoral Shift-Share Analysis for Humboldt County, 1992 to 1999.

Sector	National Effect	Industry Mix	Competitive Effect	Total Change
Agriculture				
Agricultural Production	65	-52	152	165
Agricultural Services	34	43	(74)	4
Mining				
Metal	315	-362	60	13
Coal	0	0	0	0
Oil and Gas Extraction	0	0	0	0
Mining and Quarrying of Non-Metal Mineral, except	1	-1	16	16
Construction				
Construction	77	25	(11)	91
Manufacturing				
Food and Kindred Products	2	-2	(14)	-14
Tobacco Products Mfg.	0	0	0	0
Apparel MFG.	0	-1	(2)	-3
Lumber and Wood Products	0	0	0	0
Furniture and Fixtures	0	0	0	0
Paper and Allied Products	0	0	0	0
Printing and Publishing	5	-4	40	41
Chemicals and Allied Products	3	-3	33	33
Petroleum Products	0	0	0	0
Rubber Products	0	0	24	24
Leather	0	0	0	0
Stone Clay and Glass	4	-5	(9)	-10
Primary Metal	0	0	0	0
Fabricated Metal	0	0	7	7
Industrial Machines	5	0	(5)	-1
Electronics	0	0	0	0
Transportation Equipment	0	0	0	0

Table 22. Continued

Sector	National Effect	Industry Mix	Competitive Effect	Total Change
Measuring and Mechanical Devices	0	0	10	10
Miscellaneous Mfg.	0	0	0	0
T.C.and P.U.				
Transportation	40	22	(3)	60
Communications	6	2	(10)	-1
Public Utilities	20	-33	29	15
Wholesale Trade				
Wholesale Trade	26	-5	92	113
Retail Trade				
Building Materials & Gardening	15	9	(33)	-9
General Merchandise Stores	5	-1	259	262
Food Stores	38	-23	50	65
Automotive Dealers & Service Stations	36	0	58	93
Apparel & Accessory Stores	6	-6	0	1
Furniture & Home Furnishings Stores	3	2	2	7
Eating & Drinking	61	7	(20)	49
Miscellaneous Retail	12	7	186	205
F.I.R.E.				
Finance	15	12	56	83
Insurance	8	-4	17	21
Real Estate	10	1	43	54

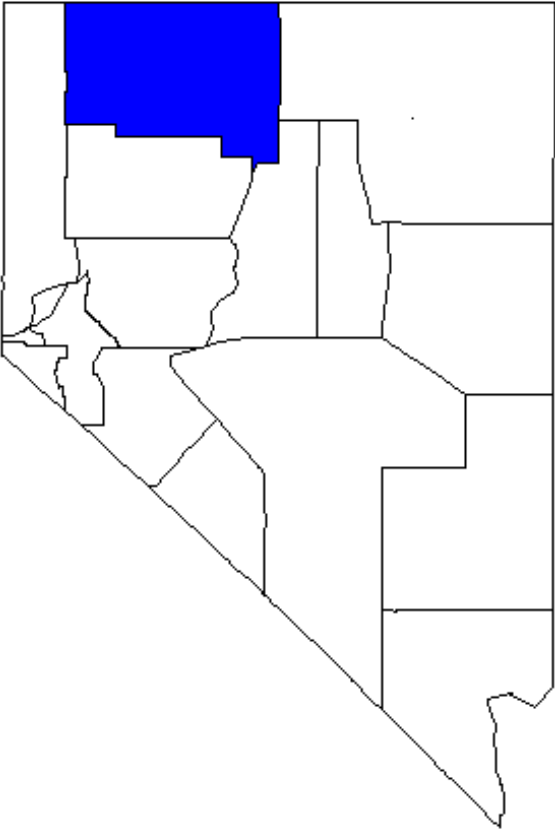
Table 22. Continued

Sector	National Effect	Industry Mix	Competitive Effect	Total Change
Services				
Hotels and Lodging Places	152	-12	(321)	-182
Personal Services	7	5	43	55
Business Services	43	57	(97)	3
Auto Repair and Service	4	1	103	108
Miscellaneous Repair	2	0	31	33
Motion Picture	5	8	(20)	-7
Amusement and Recreation	50	149	(124)	75
Health Services	16	1	118	135
Legal Services	1	0	3	4
Educational Services	1	1	(2)	0
Social Services	1	1	28	30
Other Services	15	0	86	101
Engineering and Accounting Services	10	12	13	35
Government				
Federal Government - Military	6	-18	8	-4
Federal Government - Non-Military	24	20	(63)	-19
State & Local Government - Education	77	-60	(77)	-59
State & Local Government - Non-Education	69	-31	220	257
Total	1300	-243	901	1959

SECTION VII:

ANALYSIS OF NATIONAL, STATE

AND COUNTY ENTREPRENEURIAL ACTIVITY



ENTREPRENEURIAL ACTIVITY

One of the most prevalent programs for economic development in rural areas is the location or relocation of industries. However, an alternative economic development plan would be development of local entrepreneurial talent.

Areas such as Humboldt County are rich in natural resources but are often faced with cyclical economic activity. Counties such as Humboldt are dependent on extractive industries and branch plants that frequently have capital flows or profits going outside their local economy. Meanwhile, structural forces are changing the nature of the national economy, bolstering more service centered, high-technology and knowledge-based industries.

This new economic climate has generated renewed interest in the advantages of a strong entrepreneurial base to local economies, since entrepreneurs are likely to be innovative and adaptive, while also retaining their profits locally. Thus one area for consideration for economic development in Humboldt County is better understanding of and enhancing of local entrepreneurial talent. To estimate the local economy and entrepreneurial base, the following eight indicators are derived. Three indicators of overall economic activity are analyzed from 1969 to 1999 and compared to five measures of entrepreneurial strength and vitality:

- **Employment Growth (%), 1969-1999**

This figure is calculated using the number of residents who are gainfully employed and is a key indicator of local economic growth. Unlike measure of economic output (how much in goods and services were sold) this measure tracks economic growth from the perspective of a community's residents and workforce.

- **Average Earnings Per Job (\$), 1999**

This figure indicates how much people are earning in the work force. This is a good indicator of the quality of jobs and economic opportunity in a county.

- **Per Capita Income (\$), 1999**

This figure is one of the most common measures of economic well-being. This figure shows how much money people have to buy goods and services and how much they can save. This figure is lower than average earnings per job, because it includes children and others not in the labor force.

- **Ratio of Number of Proprietors to Number of Wage and Salary Workers, 1999.**

Dividing the number of proprietors by the number of wage and salary workers shows how many entrepreneurs live in an area per wage employee. Almost always less than one, the larger this measure, the greater the entrepreneurial activity in place. This ratio may somewhat exaggerate the strength of entrepreneurial activity.

- **Ratio of Proprietor's Income to Wages and Salaries, 1999.**

Similar to the above measure, this number shows the amount of money coming into a community from proprietors earnings divided by the amount of money coming from wages. The closer this number is to one, the more important proprietors' income in sustaining local residents.

- **Percentage Growth in Number of Proprietors, 1969 to 1999**

This measure shows how the base of entrepreneurs is growing. A significant increase in number of proprietors can be interpreted as a response to either a strong or weak economy. In a strong economy, an increasing number of proprietors indicates a strengthening in the entrepreneurial base. In a weak economy, an increasing number of business owners may reflect "entrepreneurship of necessity" in which people supplement low income with small home-based enterprises. Either case is an opportunity for development with appropriate strategy.

- **Average Income Per Proprietor, 1999**

This measure helps to illustrate the financial success of a county's entrepreneurs. This value is usually lower than earnings per job.

- **Percentage Growth in Average Income for Proprietor, 1969 to 1999**

This measure indicates how well a county's entrepreneurs have been doing over time. The more local business-owners income increases, the more attractive it is for others to become entrepreneurs. In addition, a county with a very low average income that experiences a Medicare dollar increase will post a much larger percentage increase when compared to its neighbors that had a similar dollar increase, but higher beginning average income.

Table 23 shows the entrepreneurial factors for the seventeen counties of Nevada. The state of Nevada in response to its overall dynamic growth shows exceptional entrepreneurship activity. As for Humboldt County, the county has realized rapid, but cyclical employment growth. The ratio of proprietors to wage and salary workers is greater than the state or national average. However, the earnings of proprietors has been somewhat less, which could discourage further entrepreneurship growth.

Certain patterns of entrepreneurship activity emerge when reviewing Table 23. In comparing and contrasting entrepreneurship activity, one could look at employment growth and ratio of proprietors to wage and salary workers. Employment growth gives an overall indication of local job creation while the ratio of proprietors to wage and salary workers provides an indicator of a county's degree of dependence on proprietors for employment

Table 23 Overall Economic and Entrepreneurship Activity Indicators for Nevada Counties, 1969-1999.

Nevada	Overall Economic Indicators			Entrepreneurship Indicators				
County	Employment Growth (%) 1969-1999	Avg. Earnings Per Job (\$) 1999	Per Capita Income (\$) 1999	Ratio of Propreitors/ W&S Wrkrs 1999	Ratio Prop Income/Wages 1999	Avg. Ann. Growth Proprietors 1969-1999	Avg. Inc Per Proprietor 1999	Ann. Avg. Growth Prop. Income 1969-1999
Churchill	225.80%	\$28,553	\$23,262	33.69%	18.43%	3.82%	\$15,241	8.53%
Clark	546.76%	\$34,383	\$30,628	12.41%	14.24%	12.41%	\$30,087	13.61%
Douglas	294.75%	\$27,388	\$40,972	19.40%	23.89%	8.11%	\$18,005	11.96%
Elko	263.18%	\$28,818	\$24,189	17.92%	11.04%	3.98%	\$16,928	7.88%
Esmeralda	52.96%	\$28,909	\$17,563	21.31%	0.92%	4.35%	\$1,025	-11.53%
Eureka	614.88%	\$54,665	\$20,885	18.21%	1.33%	2.13%	\$11,406	8.49%
Humboldt	210.52%	\$32,948	\$23,332	22.42%	15.31%	3.72%	\$20,643	11.05%
Lander	153.34%	\$35,369	\$22,155	21.39%	13.43%	3.56%	\$17,831	16.09%
Lincoln	109.42%	\$29,308	\$21,358	24.66%	7.62%	1.93%	\$8,270	6.42%
Lyon	343.80%	\$23,293	\$23,071	38.67%	13.23%	5.23%	\$9,489	14.90%
Mineral	-17.83%	\$28,838	\$25,327	15.11%	12.33%	2.75%	\$13,565	8.30%
Nye	44.20%	\$31,341	\$24,668	12.80%	13.40%	7.93%	\$14,644	9.65%
Pershing	125.47%	\$30,248	\$23,363	29.57%	2.88%	1.25%	\$4,403	10.58%
Storey	274.52%	\$28,608	\$28,403	28.41%	17.30%	5.23%	\$13,724	7.92%
Washoe	262.56%	\$33,854	\$35,343	15.54%	16.91%	5.38%	\$27,632	10.59%
White Pine	10.06%	\$32,248	\$21,771	19.61%	12.71%	1.64%	\$16,081	5.19%
Carson City	408.42%	\$32,156	\$32,206	19.91%	15.10%	6.76%	\$20,105	10.11%
WNDD ¹	275.52%	\$28,968	\$30,556	22.89%	17.26%	5.78%	\$16,589	9.18%
GBDD ²	140.58%	\$37,574	\$22,566	19.53%	10.10%	2.86%	\$18,410	7.56%
Nevada	397.48%	\$33,730	\$31,004	14.53%	14.78%	6.60%	\$26,947	11.55%
USA	79.84%	\$34,384	\$28,546	17.87%	14.88%	2.68%	\$24,504	7.51%

¹ WNDD - Western Nevada Development District includes Carson City, Churchill, Douglas, Lyon, Mineral, Pershing, and Storey counties.

² GBDD - Great Basin Development District includes Humboldt, Eureka, Lander, and White Pine Counties

These two indicators provide a measure of relative contribution of entrepreneurship to job creation within a given county, however, it does not show overall county economic health. Table 24 shows classifications of county entrepreneurship activity.

Table 24 Classification of County Entrepreneurship Activity

Classification	Description
Entrepreneurship of Necessity	Counties with employment growth <u>less</u> than the U.S. average and ratio of entrepreneurs to workers <u>greater</u> than U.S.
Strong Job Growth and Strong Entrepreneurship	County’s employment growth <u>greater</u> than U.S. average and ratio of entrepreneurs to workers <u>greater</u> than U.S.
Strong Job Growth and Weak Entrepreneurship	County’s employment growth <u>greater</u> than U.S. average and ratio of entrepreneurs to workers <u>less</u> than U.S.
Weak Job Growth and Weak Entrepreneurship	Counties with employment growth <u>less</u> than U.S. average and ratio of entrepreneurs to workers <u>less</u> than U.S.

Source: Daphane Clones Corporation for Enterprise Development. “An Assessment of Entrepreneurship in Local Appalachian Economies, 1989-1994.” Appalachian Regional Commission, Washington, D.C. 1998.

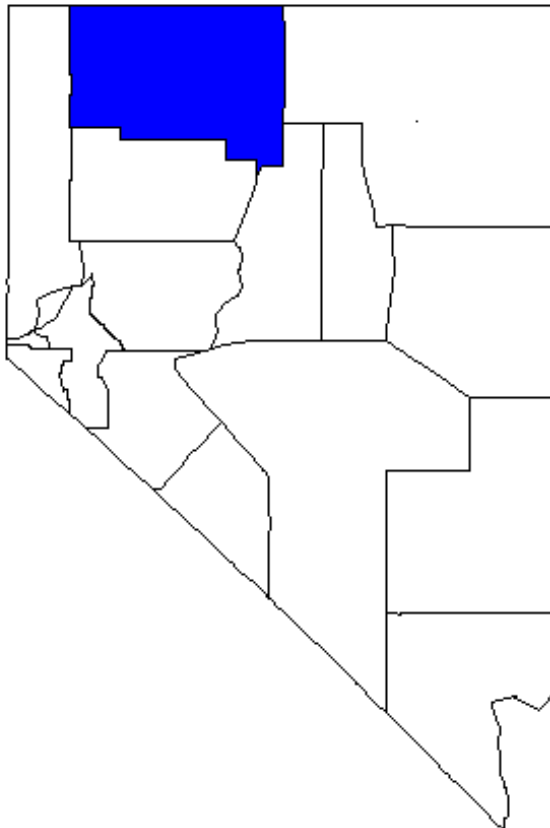
Using the classification system, two counties exhibit “Entrepreneurship of Necessity”. Ten counties are classified in the largest category of “Strong Job Growth and Strong Entrepreneurship.” Three counties are categorized as “Strong job Growth and Weak Entrepreneurship. Two counties are categorized as “Weak Economies and Weak Entrepreneurship.”

Humboldt County is one of ten Nevada counties classified as “Strong Job Growth and Strong Entrepreneurship.” A policy issue to consider is whether Humboldt County has benefited from private and public support services for small businesses. Given that income per proprietor is lower than the national average, public assistance such as the Small Business Development Center is needed to develop more efficient and successful local entrepreneurs.

The results of Table 24 help to identify counties with weak or strong entrepreneurial sectors. Table 24 does not tell us why. Further research is required for dynamic entrepreneurship analysis. Additional geographic factors need to be examined, such as access to interstate highways or proximity to metropolitan areas. Finally, and most importantly, one must identify areas of need or assistance where none is currently available.

SECTION VIII:

**CURRENT AND FUTURE ECONOMIC AND OCCUPATIONAL
FORECASTS FOR THE NATION, STATE AND HUMBOLDT COUNTY**



CURRENT AND FUTURE OCCUPATION ANALYSIS AND FORECASTS

The U.S. Department of Labor (Thomson, 1999; Braddock, 1999; Sanders and Su, 1999) and the State of Nevada Department of Employment, Training and Rehabilitation (2001) project employment and occupations every two years. Results of this outlook could provide useful information regarding business, industrial and employment opportunities for Humboldt County.

National Trends

Nationally, the rate of economic growth is projected to be slower through 2008 than during the 1970's and 1980's. U.S. Bureau of Labor Statistics (Saunders and Su, 1999; Allison, 1999) project that from 1998 to 2008, total industrial output will increase by approximately \$4.9 trillion to \$18.2 trillion in 2008. Output growth is projected to be slower because of slower growth in the labor force. However, industrial output will grow faster than the labor force and employment due to increased labor productivity. Technological advances are an important agent for growth in the national economy.

Overall employment is expected to increase by 20.3 million from 1998 to 2008, which is slightly lower than the 20.5 million increase from 1988 to 1998. Labor force is projected to increase by 17 million persons between 1998 to 2008, a rate of growth of approximately 1.2 percent annually which is roughly the same annual growth rates between 1988 to 1998. Underlying this trend is a projected growth rate of 1.1 percent in the working-age population and a slight increase in overall labor force participation rates.

Significant changes in demographic composition will accompany the relatively slower growth of the labor force over the next ten years. Growth in the labor force by women will continue to outpace that of men, primarily due to differences in labor force participation rates. The share of the labor force by women is projected to increase from 46.5 percent in 1998 to 47.5 percent in 2008.

Immigration will continue to play a major role in the growth of the U.S. labor force. The Hispanic labor force will expand four times faster than the rest of the labor force, accounting for 12.7 percent of the 2008 labor force as compared to 10.4 percent in 1998. The black labor force

is expected to grow by 20 percent, twice as fast as the 10 percent growth rate for the white labor force.

Between 1998 and 2008, the Bureau of Labor Statistics (Allison, 1999) projects 42 million workers will enter the labor force and 25 million will leave. These figures compare with 35 million entrants and 19 million leavers during the 1988 to 1998 period. Between 1998 and 2008, entrants were more likely to be men. Leavers were also more likely to be men given that the male labor force is older than the female.

The age of the labor force can be measured in various ways, one being median age. As the baby-boomer generation entered the labor force, the median age of the labor force decreased. The median age steadily declined until 1980. However, since 1980, the labor force median age has begun to increase. With the population projected to continue aging as rapidly as in the past, the median age of the labor force by 2008 is expected to exceed the 1962 level. The highest median age level attained before the entrance of the baby boomers was 40.5 years, which occurred in 1962.

Table 25 shows that employment is forecast to continue its shift from goods-producing to service-producing sectors. In the goods-producing sectors, employment in the Construction Sector is projected to increase and offset the employment declines in the Mining Sector and the Manufacturing Sector. All employment in the service-producing industries is forecast to increase with most of the growth occurring in the Service Sector and the Retail Sector.

Table 25. Employment by major industry division, 1988, 1998 and projected 2008.

Industry	Thousands of Jobs			Average annual rate of change	
	1988	1998	2008	1988-98	1998-2008
Total*	120,010	140,514	160,795	1.6	1.4
Nonfarm wage and salary	104,570	124,887	144,526	1.8	1.5
Goods producing	25,125	25,347	25,694	.1	.1
Mining	713	590	475	-1.9	-2.1
Construction	5,098	5,985	6,535	1.6	.9
Manufacturing	19,314	18,772	18,684	-.3	.0
Durable	11,363	11,170	11,277	-.2	.1
Nondurable	7,951	7,602	7,406	-.4	-.3
Service producing	79,445	99,540	118,832	2.3	1.8
Transportation, Communication and Public Utilities	5,512	6,600	7,541	1.8	1.3
Wholesale Trade	6,030	6,831	7,330	1.3	.7
Retail Trade	19,023	22,296	25,363	1.6	1.3
Finance, Insurance and Real Estate	6,629	7,408	8,367	1.1	1.2
Services	24,866	36,586	48,543	3.9	2.9
Government	17,386	19,819	21,688	1.3	.9
Federal Gov't	2,971	2,686	2,550	-1.0	-.5
State and Local Gov't	14,415	17,133	19,138	1.7	1.1
Agriculture	3,355	3,576	3,526	.6	-.1
Private household wage and salary	1,153	962	759	-1.8	-2.3
Nonagricultural self-employed and unpaid family workers	8,731	9,029	9,925	.3	1.0
Secondary wage and salary jobs in agriculture (except ag services, forestry, fishing, hunting and trapping)	211	163	158	-2.5	-.3
Secondary jobs as a self-employed or unpaid family worker	1,990	1,897	1,901	-.5	.0

*Employment data for wage and salary workers are from the BLS Current Employment Statistics (payroll) survey, which counts jobs, whereas self-employed, unpaid family worker, agricultural and private household data are from the Current Population Survey (household survey), which counts workers.

Source: Thomson, Allison. "Industry Output and Employment Projections to 2008." *Monthly Labor Review* 122 (November 1999):33-50.

National Output Trends

However, just focusing on employment may produce an incorrect view of sectoral growth and importance in the national economy. Labor is only one input factor in production. Capital and technology also influence economic sectoral output. Table 25 shows projections of national sectoral output to the year 2008.

Table 25 shows a somewhat counterfactual view of economic sectoral importance when only employment is analyzed. Even though the Manufacturing Sector is projected to realize decreased employment from 1998 to 2003, the value of output for the Manufacturing Sector is forecast to increase from 1998 to 2008. Additionally in absolute values, the Manufacturing Sector leads all sectors in value of production in 2008. This is also true for the Agricultural Sector where employment is forecast to realize a modest 1.4 percent decline but output is forecast to increase by 15.3 percent from 1998 to 2008.

The rapid growth by sectors in the goods-producing sector is due to technological advances that increase sectoral output even with limited employment increases. The service-producing sector is forecast to increase by 36.9 percent from 1998 to 2008. Results of Table 26 indicate that despite the lower employment in the goods-producing sectors, they remain an important sector to the national economy based on value of output.

National Occupation Trends

Nationally, professionals, managers, technicians, and service, marketing and sales workers are expected to increase their share of total employment between 1998 and 2008. Professional specialty occupations and service occupations combined (occupational groups on the opposite end of the educational spectrum) are expected to provide 44 percent of total job growth from 1998 to 2008 (Table 27).

Table 26. Output by major industry division (gross duplicated output), 1988, 1998 and projected 2008.

Industry	Billions of chained 1992 dollars			Average annual rate of change	
	1988	1998	2008	1988-98	1998-2008
Total*	10,204.4	13,321.9	18,241.5	2.7	3.2
Goods producing	3,746.5	4,731.1	6,609.6	2.4	3.4
Mining	182.7	175.1	197.0	-.4	1.2
Construction	661.0	696.7	791.8	.5	1.3
Manufacturing	2,904.0	3,861.4	5,650.2	2.9	3.9
Durable	1,506.0	2,240.6	3,813.0	4.1	5.5
Nondurable	1,398.1	1,628.6	1,909.2	1.5	1.6
Service producing	5,797.2	7,690.9	10,526.7	2.9	3.2
Transportation, Communication and Public Utilities	836.7	1,115.3	1,502.3	2.9	3.0
Wholesale Trade	496.9	820.2	1,178.3	5.1	3.7
Retail Trade	793.3	1,064.5	1,393.4	3.0	2.7
Finance, Insurance and Real Estate	1,079.0	1,306.3	1,787.8	1.9	3.2
Services	1,701.7	2,412.7	3,556.3	3.6	4.0
Government	890.5	978.0	1,109.6	.9	1.3
Federal Gov't	332.6	305.4	309.0	-.9	.1
State and Local Gov't	557.9	672.6	800.5	1.9	1.8
Agriculture	212.5	267.4	308.2	2.3	1.4
Private households	10.2	11.1	10.3	.9	-.8
Special Industries*	424.3	623.5	780.5	3.9	2.3
Residual	13.7	-2.2	6.2	-	-

* Consists of nonproducing accounting categories to reconcile input-output system with NIPA accounts.
Sources: Historical data are from the Bureau of Economic Analysis, U.S. Department of Commerce; projections are from the Bureau of Labor Statistics.

Source: Thomson, Allison. "Industry Output and Employment Projections to 2008." *Monthly Labor Review* 122(November 1999):33-50.

Table 27. Fastest Growing Occupations, 1998-2008

Occupation	Employment Change		Education and Training Category
	Number	Percent	
Computer engineers	323	108	Bachelor's degree
Computer support specialists	439	102	Associate degree
Systems analysts	577	94	Bachelor's degree
Database administrators	67	77	Bachelor's degree
Desktop publishing specialists	19	73	Long-term on-the-job training
Paralegals and legal assistants	84	62	Associate degree
Personal care and home health aides	433	58	Short-term on-the-job training
Medical assistants	146	58	Moderate-term on-the-job training
Social and human service assistants	141	53	Moderate-term on-the-job training
Physician assistants	32	48	Bachelor's degree
Data processing equipment repairers	37	47	Postsecondary vocational training
Residential counselors	88	46	Bachelor's degree
Electronic semiconductor processors	29	45	Moderate-term on-the-job training
Medical records and health information technicians	41	44	Associate degree
Physical therapy assistants and aides	36	44	Associate degree
Engineering, natural science and computer and information systems managers	142	43	Work experience plus bachelor's or higher degree
Respiratory therapists	37	43	Associate degree
Dental assistants	97	42	Moderate-term on-the-job training
Surgical technologists	23	42	Postsecondary vocational training
Securities, commodities and financial services sales agents	124	41	Bachelor's degree
Dental hygienists	58	41	Associate degree
Occupational therapy assistants and aides	7	40	Associate degree
Cardiovascular technologists and technicians	8	39	Associate degree
Correctional officers	148	39	Long-term on-the-job training
Speech-language pathologists and audiologists	40	38	Master's degree
Social workers	218	36	Bachelor's degree
Bill and account collectors	110	35	Short-term on-the-job training
Ambulance drivers and attendants (except EMT's)	7	35	Short-term on-the-job
Biological scientists	28	35	Doctoral degree
Occupational therapists	25	34	Bachelor's degree

Source: Braddock, D. "Occupation Employment Projections to 2008." *Monthly Labor Review* 122 (November 1999):51-77.

Table 28 shows the twenty occupations forecast to have the largest numerical increase from 1998 to 2008. Among the 500 occupations used for projections, the top twenty numerical leaders account for 39.25 percent of total occupational employment change nationally between 1998 and 2008. Also these top twenty national occupations with the largest numerical increase between 1998 and 2008 account for 28.90 percent of total 2008 national occupational employment.

Table 28. Top Twenty National Occupations with Largest Numerical Increase 1998-2008

Occupation	Change (1,000)
Systems Analysts	577
Retail Salespeople	563
Cashiers	556
General Managers and Top Executives	551
Truck Drivers, Light and Heavy	493
Office Clerks, General	463
Registered Nurses	451
Computer Support Specialists	439
Personal Care and Home Health Aides	433
Teacher Assistants	375
Janitors and Cleaners	365
Nursing Aides and Orderlies	325
Computer Engineers	323
Teachers, Secondary School	322
Office and Administrative Support Supervisors	313
Receptionists	305
Waiters and Waitresses	303
Guards	294
Marketing and Sales Supervisors	263
Food Counter Workers	247

Source: Braddock, D. "Occupation Employment Projections to 2008." *Monthly Labor Review* 122 (November 1999):51-77.

Table 29 shows the twenty national occupations forecast to have the largest percentage growth. Half of the fastest growing occupations are professional and technical occupations, which require post secondary education. Among the 500 occupations used for projections, the top twenty fastest growing occupations by percentage increase account for 14.37 percent of total employment changes nationally between 1998 and 2008. Also, these top twenty fastest growing occupations by percentage increase account for 4.57 percent of total 2008 national occupational employment.

Table 29. Top Twenty Fastest Growing National Occupations, 1998 to 2008

Occupation	Change (1,000)
Computer Engineers	108
Computer Support Specialists	102
System Analysts	94
Database Administrators	77
Desktop Publishing Specialists	73
Paralegals and Legal Assistants	62
Personal Care and Home Health Aids	58
Medical Assistants	58
Social and Human Service Assistants	53
Physician Assistants	48
Data Processing Equipment Repairers	47
Residential Counselors	46
Electronic Semiconductor Processors	45
Medical Records Technicians	44
Physical Therapy Assistants	44
Engineering and Information System Managers	43
Respiratory Therapists	43
Dental Assistants	42
Surgical Technologists	42
Securities Sales Agents	41

Source: Braddock, D. "Occupation Employment Projections to 2008." *Monthly Labor Review* 122 (November 1999):51-77.

Table 30 shows occupations forecast for largest numerical declines from 1998 to 2008. There are two major reasons for occupational employment declines. Either the industries that employ these occupations are projected to decline, or technology or business practices will reduce the demand for these occupations in most industries. The top twenty national occupations forecast for largest employment decline from 1998 to 2008 make up only 4.76 percent of total national employment. These twenty occupations which are less than 5 percent of national 2008 occupational employment and these employment declines are small, which means these employment declines will have very little impact on the national economy.

Table 30. Top Twenty National Occupations Forecast with Greatest Declines, 1998 to 2008.

Occupation	Change (1,000)
Farmers	-173
Sewing Machine Operators, Garment	-112
Child Care Workers, Private Households	-97
Word Processor and Typists	-93
Bookkeeping, Accounting and Auditing Clerks	-81
Cleaner and Servants, Private Households	-71
Farm Workers	-57
Computer Operators, except Peripheral Equipment	-54
Textile Draw-Out and Winding Machine Operators and Tenders	-50
Bank Tellers	-31
Switchboard Operators	-30
Inspectors, Testers and Graders, Precision	-22
Machine Tool Cutting Operators and Tenders, Metal and Plastic	-22
Butchers and Meatcutters	-15
Payroll and Timekeeping Clerks	-11
Peripheral Equipment Operators	-10
Woodworking Machine Operators and Tenders, Sellers and Set-up Operators	-10
Offset lithographic press operators	-9
Fishers	-9
Procurement Clerks	-9

Source: Braddock, D. "Occupation Employment Projections to 2008." *Monthly Labor Review* 122 (November 1999):51-77.

Synopsis of National Economic, Employment and Occupational Trends

The following trends will be useful for Humboldt County's targeting program.

- The national economy is projected to grow slower through 2008 than in the 70's and 80's.
- Overall national employment is expected to increase by 20.3 million from 1998 to 2008 which is slightly lower than the 20.5 million increase from 1988 to 1998.
- The demographic picture of the labor force is projected to change by 2008.
- Hispanics are projected to have the largest increase in the national labor force and will be larger than the black labor force.
- Female participation rate in the labor force in nearly all age groups is projected to increase. This means that the female share of the labor force is forecast to increase from 46 percent in 1998 to 48 percent in 2008.
- Nationally employment is projected to increase by 14.4 percent from 1998 to 2008, with most employment increases occurring in the Service Sector and the Retail Sector.
- Nationally employment in the Manufacturing Sector forecast to decline by 89,000 jobs but value of output is forecast to increase by 46.32 percent. In 2008, the national Manufacturing Sector value of output will be the leading national economic sector. Because of technological advances, the Manufacturing Sector can produce more with fewer people. That is the reason for the dichotomy of losing sectoral employment with increasing sector value of output.
- Among the 500 national occupations forecast by the Bureau of Labor Statistics, the top twenty national occupations by numerical growth account for approximately 40 percent of total national occupational employment change from 1998 to 2008 and are forecast to be approximately 30 percent of total national 2008 occupational employment.
- Over half of the fastest growing occupations are forecast as professional or technical occupations which require post-secondary education.
- Of the twenty occupations forecast for largest numeric employment declines from 1998 to 2008, these occupations are forecast to make up less than 5 percent of total national 2008 occupational employment so their impact on the national economy is forecast to be minimal.

Balance of State of Nevada Trends

The State of Nevada Department of Employment, Training and Rehabilitation (2001) projects occupation for the state of Nevada. Occupational projections presented are from 1998 to 2008. Projections are made for the state; Clark County SMSA (Clark and Nye Counties in Nevada and Mohave County in Arizona); Washoe County SMSA; and Balance of State. Since Humboldt County is part of the Balance of State projections, the text will focus on occupational projections by Balance of State.

The state of Nevada is forecast to realize occupational employment increase of 500,842 or a 50.4 percent increase in occupational employment from 1998 to 2008. For comparison, Las Vegas SMSA is forecast to realize an occupational employment increase of 407,790 jobs from 1998 to 2008 or a projected occupational employment increase of 61.9 percent while Washoe County is forecast to realize an occupational increase of 54,300 jobs from 1998 to 2008 or a projected employment increase of 27.7 percent. Most occupational increases in both SMSA's are forecast to be in the casino and retail industries.

Balance of State Occupational Trends

The Department of Employment, Training and Rehabilitation for the State of Nevada (2001) forecasts that Balance of State occupational employment will increase by 38,760 jobs from 1998 to 2008 or a 28.0 percent increase in occupational employment. From Table 30, the top twenty Balance of State occupations by numeric increase are forecast to account for 31.01 percent of total Balance of State occupational employment increase from 1998 to 2008. Also, these top twenty numeric increase occupations are forecast to account for 28.25 percent of total 2008 Balance of State occupational employment. For the Balance of State, the economic sectors where these occupations are located are primarily in the retail, service and public school industries.

Table 31. Top Twenty Balance of State of Nevada Occupations by Numeric Increase from 1998-2008.

Occupation	Numeric Increase actual number
Cashiers	1,340
General Managers and Top Executives	1,140
Retail Salespeople	1,030
General Office Clerks	860
Carpenters	830
Teachers, Secondary School	800
Truck Drives, Heavy or Tractor/Trailer	770
Sales Representatives (Except scientific, retail)	600
Supervisors, Sales	570
General Laborers	560
Fast Food Workers	550
Teachers, Elementary Schools	540
Truck Drivers, Light (including delivery)	540
Correction Officers and Jailers	530
Supervisors, Clerical Workers	510
Janitors	460
Child Care Workers	370
Registered Nurses	360
Receptionists and Information Clerks	350
Maintenance Repairers (general)	340

Source: State of Nevada Department of Employment, Training and Rehabilitation. "State Occupation Projections: 1998-2008." Research and Analysis Bureau, Carson City, Nevada, 2001.

Table 32 shows the Balance of State occupations forecast to have the largest percentage increases in employment from 1998 to 2008. Some of these occupations will require post-secondary education and/or apprenticeships in a trade. Among the 500 occupations forecast, the twenty fastest growing occupations by percentage growth account for 4.15 percent of total Balance of State occupational employment growth. Also, these top twenty fastest growing occupations by percentage increase are forecast to account for 2.08 percent of total Balance of State occupational employment in 2008.

Table 32. Top Twenty Fastest Growing Balance of State of Nevada Occupations from 1998 to 2008

Occupation	Percentage Increase
	(%)
Surgical Technologists	150.0
Cleaners and Servants, Private Households	100.0
Transportation Agent	100.0
Soldering and Brazing Machine Setters	100.0
Systems Analysts	88.0
Sheet Metal Duct Installers	87.5
Interior Designers	83.3
Paving and Surfacing Equipment Operators	80.0
Metal Molding and Casting Machine Setters	80.0
Computer Support Specialists	79.3
Photographers	77.8
Combination Tool Operator-Metal/Plastic	75.0
Electrical and Electronic Assemblers	71.4
Brickmasons	70.0
Plasterers and Stucco masons	69.2
Home Health Aides	66.7
Brick and Stonemasons and Hard Tile Setter Helper	66.7
Music Directors, Singers and Composers	66.7
Office Machine Repair	66.7

Source: State of Nevada Department of Employment, Training and Rehabilitation. "State Occupation Projections: 1998-2008." Research and Analysis Bureau, Carson City, November 2001.

Table 33 shows occupations projected to realize the largest numeric declines in occupational employment from 1998 to 2008. Only nine occupations in the Balance of State are forecast for occupational employment decline. The total occupational employment decline in the Balance of State is forecast to be 240 jobs. The Appendix shows the number of occupations forecast to have no change in Balance of State from 1998 to 2008 is 52. The nine occupations projected to realize an occupational employment decrease from 1998 to 2008 account for only 2.26 percent of total projected Balance of State occupational employment in 2008. In addition, the 52 occupations that are forecast for no employment change from 1998 to 2008 account for 1.48 percent of Total Balance of State 2008 occupational employment. As seen, the declining occupations make up only a small proportion of total Balance of State 2008 occupational employment, so their impacts will be minimal.

Table 33. Top Nine Balance of State of Nevada Occupations Projected with Largest Numeric Declines from 1998 to 2008.

Occupation	Change actual number
Separating and Filtering Machine Operators	-80
Farm Workers	-50
Computer Operators (Except peripheral equipment)	-40
Telephone Installer and Repairers	-20
Typists (including word processors)	-10
Supervisors, Farm Workers	-10
Dancers and choreographers	-10
Railroad Brake, Signal and Switch Operators	-10
Motorcycle Repairs	-10

Source: State of Nevada Department of Employment, Training and Rehabilitation. "State Occupation Projections: 1998-2008." Research and Analysis Bureau, Carson City, November 2001.

Synopsis of Balance of State Employment and Occupational Trends

The following synopsis will be useful for the industrial targeting plan for Humboldt County:

- Employment for the State of Nevada is projected to increase by 38,760 jobs from 1998 to 2008 or a 28.0 percent increase in occupational employment.

- Clark County SMSA is forecast to realize a 61.9 percent growth in occupational employment from 1998 to 2008 while Washoe County SMSA is forecast to increase by 27.7 percent.
- For the Balance of State of Nevada, which includes all Nevada counties except Clark, Nye and Washoe Counties, occupational employment is forecast to increase by 38,760 jobs or a 28.0 percent increase in occupational employment from 1998 to 2008.
- Among the 500 state occupations forecast by the Nevada Department of Employment, Training and Rehabilitation, the top twenty Balance of State occupations by numeric growth account for approximately 31 percent of total Balance of State occupational employment change from 1998 to 2008 and are forecast to be approximately 28 percent of total 2008 Balance of State occupational employment.
- Similar to the national forecasts, occupations forecast for largest percentage increases require post-secondary education or technical apprenticeships.
- Of the top twenty occupations projected for the fastest growth in the Balance of State, these occupations account for less than 5 percent of total occupational-employment growth from 1998 to 2008 and are forecast to be approximately 2 percent of total 2008 Balance of State occupational employment.
- Only nine occupations in the Balance of State are forecast for job declines from 1998 to 2008. These employment declines are forecast to be 240 jobs. Also 52 occupations are forecast for no employment declines from 1998 to 2008. In 2008, the nine occupations which experienced a decline in occupational employment account for only 2 percent of total 2008 forecast employment while occupations projected for no employment change account for only 2 percent of 2008 projected employment. Given these small shares, the impacts will be minimal on occupational employment change in the Balance of State.

Projections for Humboldt County

A criticism of targeted economic development by Barkley et al (1998) was that a selected economic sector based on past economic growth may be at the end of a growth phase. Past sectoral employment growth may be a poor predictor of future sectoral employment growth. Therefore for this analysis, sectoral projected employment growth must be incorporated into a targeted economic development analysis.

Table 34. Quarterly Employment Growth Rates from 4th Quarter 1998 to 3rd Quarter 2000 and Forecast 4th Quarter 2000 to 3rd Quarter 2002, Humboldt County

Sector	4th Qtr 1998 to 3rd Qtr 2000 Employment	Forecast 4th Qtr 2000 to 3rd Qtr 2002 Employment	Percent Change in Unemployment
Agriculture	368	372	0.86%
Agricultural Production-Crops	298	290	-2.49%
Agricultural Production-Livestock	30	36	22.23%
Agricultural Services	41	45	9.76%
Mining	1,567	1,238	-21.01%
Metal Mining	1,567	1,238	-21.01%
Construction	327	300	-8.28%
General Building Contractors	94	44	-53.54%
Heavy Construction, ex. Building	81	68	-16.24%
Special Trade Contractors	151	188	24.06%
Manufacturing	155	173	11.69%
Food & Kindred Products			
Printing and Publishing	42	50	19.70%
Chemicals and Allied Products	35	35	0.68%
Rubber and Misc. Plastics Products	78	88	12.34%
TCPU	506	599	18.41%
Trucking and Warehousing	268	349	30.26%
U.S. Postal Service	32	34	5.54%
Communications	45	50	10.30%
Electric, Gas, and Sanitary Services	160	165	3.43%
Wholesale Trade	211	195	-7.67%
Wholesale Trade-Durable Goods	101	95	-6.04%
Wholesale Trade-Nondurable Goods	110	100	-9.16%
Retail Trade	1,324	1,256	-5.17%
Building Materials & Garden Supplies	48	32	-33.39%
General Merchandise Stores	230	222	-3.48%
Food Stores	258	246	-4.63%
Automotive Dealers & Service Stations	307	304	-0.90%
Apparel and Accessory Stores	35	19	-44.99%
Furniture and Home Furnishings Stores	18	19	8.96%
Eating and Drinking Places	380	370	-2.82%
Miscellaneous Retail	49	44	-9.85%

Table 34. Continued

Sector	4th Qtr 1998 to 3rd Qtr 2000 Employment	Forecast 4th Qtr 2000 to 3rd Qtr 2002 Employment	Percent Change in Unemployment
FIRE	99	103	4.52%
Depository Institutions	39	34	-12.00%
Insurance Agents, Brokers, & Service	22	20	-10.68%
Real Estate	38	49	30.37%
Services	1,436	1,395	-2.88%
Hotels and Other Lodging Places	734	734	-0.11%
Personal Services	22	13	-40.38%
Business Services	241	249	3.32%
Auto Repair, Services, and Parking	53	56	5.41%
Miscellaneous Repair Shops	19	18	-7.35%
Amusement & Recreation Services	139	102	-26.65%
Health Services	112	119	5.92%
Social Services	31	34	9.71%
Membership Organizations	45	39	-14.38%
Engineering & Management Services	39	32	-18.45%
Government	1,307	1,304	-0.25%
Federal Government	121	134	10.75%
State Government	187	182	-2.98%
Local Government	999	988	-1.07%
TOTAL	6,974	6,634	-4.87%

Source: State of Nevada Department of Employment, Training and Rehabilitation. Research and Analysis Bureau, Carson City, November 2001.

From the State of Nevada Department of Employment, Training and Rehabilitation (2001) estimates of 2-digit Standard Industrial Classification employment growth for Humboldt County from the 1st quarter of 2001 to the 4th quarter of 2002 can be estimated. Historical sectoral employment data for Humboldt County from the 4th quarter of 1998 to the 4th quarter of 2000 can be estimated.

Table 34 shows the average sectoral and forecast average sectoral employment for Humboldt County. The overall Humboldt County employment is forecast to decrease slightly. Average Humboldt County employment for 4th Quarter 1998 to 4th Quarter 2000 is 6,974, which is forecast to decrease to 6,634 during the 4th Quarter 2000 to the 4th Quarter 2002. The Mining Sector is forecast to decrease slightly from 1,567 employees to 1,238 employees or a 21 percent decrease. Retail Trade is forecast to decline by 5.2 percent, and Humboldt County's Service Sector is forecast to decrease by 2.9 percent. Average quarterly employment growth rates by sector from 4th Quarter 2000 to 3rd Quarter 2002 could be used in the targeting process.

Synopsis of Employment Projections for Humboldt County

The following synopsis may be useful for industrial targeting plans in Humboldt County:

- Average quarterly employment for Humboldt County from 4th quarter 1998 to 4th quarter 2000 was estimated to be 6,974, while average quarterly employment for Humboldt County from 1st quarter 2001 to 4th qtr 2002 was estimated to be 6,634. This means employment in Humboldt County is forecast to decrease by 340 jobs.
- For Humboldt County, the Metal Mining Sector is forecast to decrease in employment by 21 percent, or a decrease of 329 jobs on average from 4th Quarter 1998 to 4th Quarter 2000 compared to the forecast average for 1st Quarter 2001 to 4th Quarter 2002.
- The average annual sectoral growth rates calculated in Table 33 for 1st quarter 2001 to 4th quarter 2002 could be used in the targeting analysis. By using these forecasts, the criticism of Barkley et al (1998) that future employment growth rates should be used for economic forecasting rather than past employment growth rates will be addressed.

CONCLUSION

The primary objective of Part I of the Humboldt County targeting study was to provide base and forecasted socio-economic data of Humboldt County. Using this data, Humboldt County economic development officials can get an understanding of underlying socio-economic trends in Humboldt County and develop programs to enhance or retard these trends. The socio-economic data provides a foundation to develop economic targeting goals for Humboldt County.

APPENDIX

Federal and State Lands in Nevada

County	Bureau of Land Management		U. S. Forest Service		Other Federal *		Total Federal		Native American		State Government		Local Government and Private Property *		Total Acreage
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres
Carson City	47,354	48.36%	12,220	12.48%	0	0.00%	59,574	60.84%	676	0.69%	5,591	5.71%	32,079	32.76%	97,920
Storey	14,957	8.92%	0	0.00%	1,358	0.81%	16,315	9.73%	0	0	0	0	151,365	90.27%	167,680
Douglas	163,850	34.09%	83,391	17.35%	625	0.13%	247,818	51.56%	60,705	12.63%	1,634	0.34%	170,435	35.46%	480,640
Lyon	562,445	43.42%	276,689	21.36%	55,441	4.28%	894,446	69.05%	52,462	4.05%	21,762	1.68%	326,560	25.21%	1,295,360
Esmeralda	2,209,630	96.71%	44,325	1.94%	3,199	0.14%	2,257,154	98.79%	0	0	4,341	0.19%	23,076	1.01%	2,284,800
Mineral	1,472,917	59.98%	360,739	14.69%	138,746	5.65%	1,972,402	80.32%	219,783	8.95%	29,714	1.21%	233,781	9.52%	2,455,680
Eureka	1,958,380	73.17%	147,742	5.52%	20,341	0.76%	2,126,463	79.45%	0	0	6,423	0.24%	543,593	20.31%	2,676,480
Churchill	2,600,353	82.70%	0	0.00%	32,701	1.04%	2,633,053	83.74%	50,309	1.60%	8,175	0.26%	452,782	14.40%	3,144,320
Lander	2,945,944	81.89%	289,594	8.05%	29,139	0.81%	3,265,396	90.77%	719	0.02%	360	0.01%	331,324	9.21%	3,597,440
Pershing	2,937,338	76.10%	0	0.00%	0	0.00%	2,937,338	76.10%	0	0	1,930	0.05%	920,572	23.85%	3,859,840
Washoe	2,677,033	63.30%	0	0.00%	24,529	0.58%	2,701,562	63.88%	345,942	8.18%	19,031	0.45%	116,258	27.49%	4,229,120
Clark	27,421	0.53%	229,198	4.43%	4,355,271	84.18%	4,611,372	89.13%	79,676	1.54%	63,637	1.23%	418,557	8.09%	5,173,760
White Pine	4,416,880	77.50%	826,384	14.50%	87,198	1.53%	5,330,462	93.53%	70,670	1.24%	9,119	0.16%	288,949	5.07%	5,699,200
Humboldt	4,321,308	69.58%	268,296	4.32%	372,012	5.99%	4,961,616	79.89%	27,948	0.45%	8,074	0.13%	1,212,922	19.53%	6,210,560
Lincoln	5,660,006	83.04%	30,672	0.45%	1,008,768	14.80%	6,699,446	98.29%	0	0	19,085	0.28%	97,469	1.43%	6,816,000
Elko	6,786,632	61.72%	1,069,895	9.73%	5,498	0.05%	7,862,026	71.50%	164,938	1.50%	26,390	0.24%	2,942,487	26.76%	10,995,840
Nye	6,697,264	57.93%	1,750,329	15.14%	2,264,792	19.59%	10,712,385	92.66%	9,249	0.08%	20,810	0.18%	818,516	7.08%	11,560,960
State Total	45,499,712	64.31%	5,389,474	7.62%	8,399,618	11.87%	59,288,828	83.80%	1,083,077	1.53%	246,076	.35%	9,080,725	12.83%	70,745,600

*Other Federal includes Department of Defense, Department of Energy, US Fish and Wildlife Service. Private property interests include corporations, partnerships, and individuals.

Federal Lands by County in Order of Total Acreage

County	Total Federal		Indian Res.		State Government		Local Government and Private		Total Acreage
	Acres	%	Acres	%	Acres	%	Acres	%	
Carson City	59,574	60.84%	676	.69%	5,591	5.71%	32,079	32.76%	97,920
Storey	16,315	9.73%	0	0%	0	0.00%	151,362	90.27%	167,680
Douglas	247,818	51.56%	60,705	12.63%	1,634	.34%	170,435	35.46%	480,640
Lyon	894,446	69.05%	52,452	4.05%	21,672	1.68%	326,560	25.21%	1,295,360
Esmeralda	2,257,154	98.79%	0	0.00%	4,341	0.19%	23,076	1.01%	2,284,800
Mineral	1,972,402	80.32%	219,783	8.95%	29,714	1.21%	233,781	9.52%	2,455,680
Eureka	2,126,463	79.45%	0	0.00%	6,423	0.24%	543,593	20.31%	2,676,480
Churchill	2,663,053	83.74%	50,309	1.60%	8,175	0.26%	452,782	14.40%	3,144,320
Lander	3,265,396	90.77%	719	0.02%	360	0.01%	331,324	9.21%	3,597,440
Pershing	2,937,338	76.10%	0	0%	1,930	.05%	920,572	23.85%	3,859,840
Washoe	2,701,562	63.88%	345,942	8.18%	19,031	0.45%	116,258	27.49%	4,229,120
Clark	4,611,372	89.13%	79,676	1.54%	63,637	1.23%	170,435	8.09%	5,173,760
White Pine	5,330,462	93.53%	70,670	1.24%	9,119	0.16%	288,949	5.07%	5,699,200
Humboldt	4,961,616	79.89%	27,948	0.45%	8,074	0.13%	1,212,922	19.53%	6,210,560
Lincoln	6,699,446	98.29%	0	0.00%	19,805	0.28%	97,469	1.43%	6,816,000
Elko	7,862,026	71.5%	164,938	1.5%	26,390	.24%	2,942,487	26.76%	10,995,840
Nye	10,712,385	92.66%	9,249	0.08%	20,810	0.18%	818,516	7.08%	11,560,960
State Total	59,288,828	83.81%	1,083,077	1.53%	246,076	0.35%	9,080,725	12.84%	70,754,600

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