



**An Analysis of Carson City  
Socio-Economic Trends,  
Labor Force, Economic Base,  
and Retail Trade**

Report Prepared by

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**Table 1. County Population, Rank of Populatio**

The state of Nevada's first and only 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 1,715,151 in 2000. The rural counties of Nevada have also realized population growth, increasing from 205,707 in 1990 to 283,106 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. Carson City realized a population increase of 12,014 people from 1990 to 2000, which ranked the county sixth among Nevada's seventeen counties in population growth. This was a 29.71 percent increase in county census population from 1990 to 2000.

The Western Nevada Development District (WNDD), of which Carson City is a member, realized population growth of 48,006 or a growth rate of 40.22 percent. Carson City ranked sixth among the 17 counties in population growth.



**Table 2. Change in County Population, Percentage Change in County Population and Percentage of State Change in Populatio**













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

<b>County</b>	<b>1970 - 2000 Growth Rate (%)</b>	<b>Ran k</b>	<b>1970 to 1979 Growth Rate (%)</b>	<b>Ran k</b>	<b>1980 to 1989 Growth Rate (%)</b>	<b>Ran k</b>	<b>1990 to 1999 Growth Rate (%)</b>	<b>Ran k</b>	<b>1999 Growth Rate</b>	<b>Ran k</b>	<b>2000 Growth Rate</b>	<b>Ran k</b>
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



The trend in Carson City population can be summarized as follows:

- Carson City's 2000 population of 52,457 amounted to 5.63 percent of the state's total population and ranked Carson City 3<sup>rd</sup> among Nevada's seventeen counties.
- From 1970 to 2000 Carson City realized average annual population growth rate of 4.89 percent which ranked it 6<sup>th</sup> among Nevada's seventeen counties.
- Carson City's average annual rate of population growth in the 1980's (2.50 percent) was



Table 8 gives the percentage breakdown of Carson City's income by source, and presents similar data for the state and nation. Net earnings by Carson City residents are approximately 63.38 percent of total personal income compared to 67.55 percent and 67.98 percent for the state and nation, respectively. Dividends, interest and rents and transfer payments in Carson City account for a higher percentage of total personal income than in the state or nation. The last line of Table 8 shows that Carson City's per capita income is higher than that of the state and nation. At \$32,206, Carson City's 1999 per capita income was approximately 3.88 percent more than the state's \$31,004 and approximately 12.82 percent more than the nation's average of \$28,546.

**Table 8. Comparison of Personal Income Sources, Carson City, State of Nevada and the U.S., 1999.**

Personal Income Source (%)	Carson City	Nevada	U.S.
Wages and Salaries	59.66	58.19	57.41
Other Labor Income	8.78	6.10	6.38
Proprietor's	6.38		







Trends in Carson City for educational attainment can be summarized as follows:

- In 1990, Carson City's proportionate share of people 25 years or older with a high school





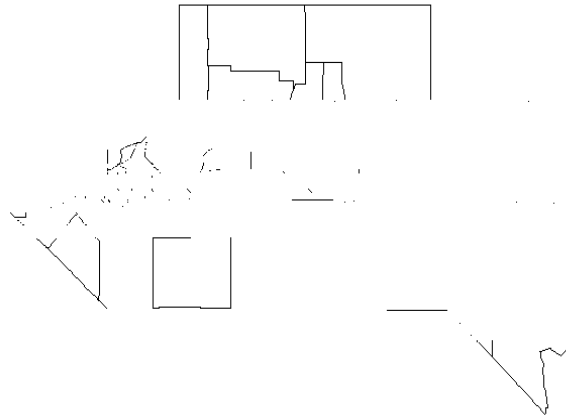
## **SECTION II:**

### **AN ANALYSIS OF CARSON CITY LABOR FORCE**

## **Introduction**

The analysis of Carson City labor force is presented in two sections that will be available soon on the University Center web page. An analysis of labor force gives Carson City decision-makers information as to the ability of Carson City to meet a new industrial development. Will the new industrial development hire from the Carson City labor force or will there be a potential in-migration of population to meet employment demands?

The analysis also shows how the Carson City labor force reacted during past economic recessions. It also provides analysis of the Carson City labor force in relation to national averages. The result of these two analyses is to give Carson City decision-makers an



### **Introduction**

The following report contains data, graphical representation and analysis of quarterly labor force, unemployment, unemployment rates and total employment pertaining to Carson City from 1970 to 2000.

### **Definition of Terms:**

#### **Labor Force**





**Table 1. Quarterly Labor Force & Employment Data for Carson City, 1970 Quarter 1 to 2000 Quarter 4**

<b>YEAR:QUARTER</b>	<b>TOTAL LABOR FORCE</b>	<b>PERCENT CHANGE</b>	<b>TOTAL UNEMPLOYMENT</b>	<b>PERCENT CHANGE</b>
<b>70:01</b>		6,833		747

**Table 1. Quarterly Labor Force & Employment Data for Carson City, 1970 Quarter 1 to 2000  
Quarter 4**

<b>YEAR:QUARTER</b>	<b>TOTAL LABOR FORCE</b>	<b>PERCENT CHANGE</b>	<b>TOTAL UNEMPLOYMENT</b>	<b>PERCENT CHANGE</b>
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80:01





**Table 1. Quarterly Labor Force & Employment Data for Carson City, 1970 Quarter 1 to 2000  
Quarter 4**

**Table 2. Quarterly Labor Force Data in Unemployment Rate and Total Employment for Carson City 1970 First Quarter Through 2000 Fourth Quarter**

Dividing the number of individuals by total labor force derives the unemployment rate. In a number of quarters the unemployment rate rose above 10%. The highest unemployment rates were experienced in the 1970's and early 1980's. The unemployment rate reached a high in the first quarter of 1975 at 15.8%, and a low of 3.0% in the fourth quarter of 1998 and the third quarter of 2000.

Unemployment rate percentage changes varied greatly from year to year. Large percentage changes occurred throughout the study period. The largest decrease occurred in the fourth quarter of 1998, where the unemployment rate dropped by 47.4%. The largest increase occurred in the third quarter of 1982, where the unemployment rate increased from 6.4% to 10.4% for a 62.5% increase.

Total employment increased significantly over the length of the study period. In the first quarter

**Table 2. Quarterly Labor Force & Employment Data for Carson City, 1970 Quarter 1 to 2000 Quarter 4**

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**Table 2. Quarterly Labor Force & Employment Data for Carson City, 1970 Quarter 1 to 2000  
Quarter 4**

<b>UNEMPLOYMENT</b>	<b>PERCENT</b>	<b>TOTAL</b>	<b>PERCENT</b>
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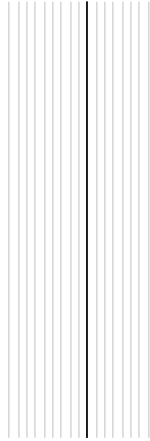


Figure 1 displays the graphical representation of total labor force for Carson City from the first quarter of 1970 to the fourth quarter of 2000. Labor force for Carson City increased rapidly throughout the 1970's and early 1980's. Growth throughout the rest of the 1980's and 1990's was erratic: fluctuating between 20,000 and 22,000 in most quarters. In 1970 labor force equaled 6,833; in the fourth quarter of 2000 labor force totaled 22,723; accounting for a 233% increase. Total labor force reached a high of 23,290 in the third quarter of 1998.









Figure 5 represents the quarterly unemployment rate for Carson City from the first quarter of

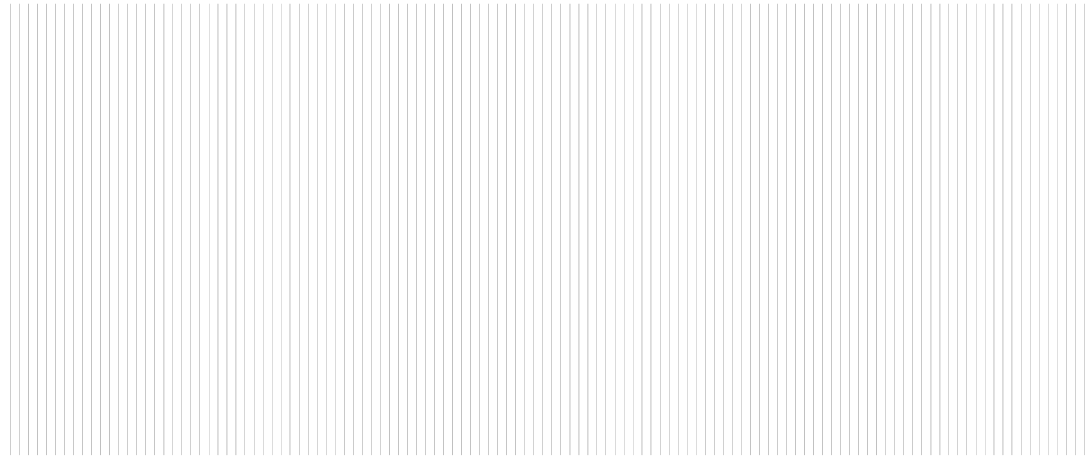


Figure 6 shows the year-to-year percentage change by quarter for unemployment rate for Carson City from the first quarter of 1970 to the fourth quarter of 2000. Each decade witnessed times of great variation in the unemployment rate percentage change. The largest quarter-to-quarter change occurred from the fourth quarter of 1976 to 1977 where the unemployment rate increased from 12,353 to 15,113 for a 22.3% increase. The largest drop occurred from the fourth quarter of 1997 to 1998 where the unemployment rate decreased from 5.7% to 3.0% for a 47.4% decrease.











unemployment trends. Unemployment increased further in the quarter following the national recession increasing by an addition 4%. Again, there appears to be a delayed response between the Carson City and national economies.

The third recession took place in the first two quarters of 1980. During this time Carson City unemployment decreased slightly falling from 7.7%

**Table 2. Quarterly Unemployment Data for Carson City, as well as Unemployment Ratios for Carson City/US and Carson City/Nevada, 1970 Quarter 1 to 2000 Quarter 4**

Table 2 shows quarterly unemployment rates from 1970 first quarter to 1998 fourth quarter for Carson City. Year over year percentage change is derived for Carson City. Also included are unemployment ratios for Carson City/Nevada and Carson City/United States.

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Table 1. Continued

<u>YEAR:QUARTER</u>	<u>UNEMPLOYMENT RATE FOR UNITED STATES</u>	<u>PERCENT CHANGE</u>	<u>UNEMPLOYMENT RATE FOR NEVADA</u>	<u>PERCENT CHANGE</u>
95:01	5.9%	-16.9%	5.8%	7.4%
95:02	5.6%	-8.2%	5.5%	0.0%
95:03				





**Table 2. Continued.**

<b>YEAR:QUARTER</b>	<b>UNEMPLOYMENT RATE</b>	<b>PERCENT CHANGE</b>	<b>CARSON/ UNITED STATES RATE</b>	<b>CARSON/ NEVADA RATE</b>
<b>94:04</b>	7.2%	-17.2%	135.8%	126.3%









**SECTION III:**

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**Table 1. Sector Employment, Shares of Employment and Percent**

SECTOR	1994		1999		Percentage Change in Employment (%)
	Employment Number	Employment Share (%)	Employment Number	Employment Share (%)	
Wholesale Trade					







Sector	\$Change (\$1,006)Seal 1994 Real Employee (\$1,006)Seal	from	1999	
--------	--	------	------	--

**Sector**

**Real Employee**

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 Sector vary according to price cycles. Regarding commercial sectors (retail and service), ten sectors realized employment compensation per employee above the 1999 national average.

A synopsis of sectoral employment and employee compensation data for Carson City is presented below:

- Sectoral employment and employee compensation data were analyzed for 1994 and 1999.
- The State and Local Non-Education Government Sector made up approximately 22 percent of total Carson City employment in 1992 and increased its proportionate share to approximately 25 percent in 1999.
- Twelve of Carson City's manufacturing sectors realized employment growth showing the increased importance of the manufacturing sector to the local economy.
- Some commercial sectors have realized employment increases that may be due to local entrepreneurship effort and expanded manufacturing and tourism activities.
- Sectoral income analysis augments employment data because industries that hire a high

The economic base analysis also provides information on economic sectors that Carson City has been relatively successful in attracting and nurturing. These sectors often provide a basis for an economic targeting activity for a local community.

### **Location Quotient Analysis**

The degree of concentration of Carson City's industries is determined by calculated 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:

$$\frac{\quad}{N}$$

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 Carson City**

Location quotients were derived for 1994 and 1999, 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 Carson City.

Table 3. Sectoral Location Quotient Values and Percentage Change in Location Quotient Values for Carson City, 1994.

<b>Sector</b>	<b>Location Quotient 1994</b>	<b>Location Quotient 1999</b>
---------------	---------------------------------------	---------------------------------------







rate of change in national output or  $NO = \frac{NO_{1999} - NO_{1994}}{NO_{1994}}$

$o_{ij}$  = county j output in economic sector i

$NO_{1994}$  is national total real value of output in 1994, and

$NO_{1999}$  is national total real value of output in 1999.

### ***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 indicates the expected growth in local industries if they grow at the same rate as their national counterparts. The expected local share

The competitive share component is measured as follows:

$$\text{Competitive Share } i = (\text{rate of change in } r_i - \text{rate of change in } n_i) * O_{i1994}$$

Where

$O_{ij}$  = county j value of output in economic sector i

$$\text{Rate of change in } r_i = \frac{O_{ij1999} - O_{ij1994}}{O_{ij1994}}$$

$$\text{Rate of change in } NO_i = \frac{NO_{i1999} - NO_{i1994}}{NO_{i1994}}$$

### **Results of Shift-Share Analysis**

Carson City's overall output and individual local economic sectors realize output growth and

reasons, such as national output growth, changes in output

county j values in output

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business structures or homes. Increased value of output in the Construction Sector usually signifies an increase or stronger local economy. In Carson City, overall Construction Sector

Table 4. Sectoral Output Shift-Share Analysis for Carson City, 1994 to 1999.

Sector	National Effect	Industry Mix	Competitive Effect	Total Change
	-----\$1,000's-----			
<b>Agricultural</b>				
Production	1407.293	-858.612	-3050.958	-2502.277
Services	482.625	305.667	2000.135	2788.427
<b>Mining</b>				
Metal	559.863	-737.673	7802.210	7624.400
Coal	0.000	0.000	0.000	0.000
Oil and Gas Extraction	270.549	66.862	-556.549	-219.138
Mining & Quarrying of Non-Metal Mineral	1441.330	-273 re9	-3658.146	-2590.205
<b>Construction</b>				

Table 4. Continued.

Sector	National Effect	Industry Mix	Competitive Effect	Total Change
	-----\$1,000's-----			
<b>Wholesale Trade</b>				
Wholesale Trade	16632.239	191.755	43965.510	60789.504
<b>Retail Trade</b>				
Building Materials and Gardening	6229.180	1004.781	-1258.344	5975.617
General Merchandise Stores	11260.525	-2360.711	3497.202	12397.016
Food Stor60.	12716.691	-2785.912	5117.977	15048.757
Automotive Dealers and Service Station0.	21775.731	2196.739	9812.075	33784.545
Apparel and Accessory Stor60.	1059.506	-156.645	-396.812	506.049
Furniture and Home Furnishings Stor60.	5044.872	-420.889	-326.700	4297.283
Eating and Drinking	23371.972	-9524.927	-4350.437	9496.608
Miscellaneous Retail	9116.203	5107.034	415.995	14639.232
<b>F.I.R.E.</b>				







**SECTION IV:**

**ANALYSIS OF RETAIL TRADE IN  
CARSON CITY**

## **Introduction**

Communities in Nevada have been concerned with all aspects of economic development for the past several years. Creating new jobs and additional income is of concern to rural



As shown in Table 2 and Figure 2, when retail taxable sales are adjusted for both inflation and population, real per capita taxable sales in Carson City have increased from 1996 to 2001. Real per capita retail taxable sales in Carson City have increased from \$9,765 in 1996 to \$10,653 in 2001 or an increase of 9.1 percent in Carson City per capita real taxable retail sales in six years. When per capita retail taxable sales for Carson City are compared to neighboring counties, Carson City has higher per capita retail taxable sales than Churchill, Douglas, Lyon,

## **Evaluation of Local Retail Sector Activity**

For this paper, three different analytical procedures will be employed to estimate



## **Pull Factor Analysis for Carson City**

### ***Overall Retail Sales***

In 2001, the overall retail taxable sale pull factor for Carson City was 1.10 indicating that





### ***Food Stores***

Table 6 shows the pull factor values for the Food Stores Sector for Carson City, Churchill County, Douglas County, Lyon County, and Storey County from 1996 to 2001. From Table 5, Carson City is meeting not only local demands, but capturing demands outside the county. Of interest is the increased food store capture by Douglas County and Lyon County. The increase in Lyon County's pull factor for food stores can be attributed to the new Smith's grocery store in Dayton.

If the new Super Wal-Mart in Douglas County incorporates a grocery store, the pull factor for this retail sector in Douglas County might increase while Carson City may realize a lowering of pull factor values in the Grocery Store Sector. Therefore, Carson City decision-







Table 11 shows the pull factor values for the Miscellaneous Retail Sector for Carson City, Churchill County, Douglas County, Lyon County, and Storey County from 1996 to 2001. From Table 11, Carson City has been losing retail trade in this category from 1996 to 2001. Also from Table 11, four of the study area counties have pull factor values less than one from 1996 to 2001 in this retail category. Only Storey County has pull factor values greater than one from 1996 to 2001. This may be due to the tourism trade in Virginia City and the number of general retail trade stores.

From Table 11, Carson City has a pull factor of 0.80 in 2001 in the retail category. This means that Carson City is losing 20 percent of potential taxable miscellaneous retail trade sales or a gap of 11,080 customers. Local economic development officials might investigate the potential for expansion in this retail category. Given the competition with metropolitan counties, the expansion possibilities may be somewhat limited.

**Table 11. Pull Factors for Taxable Retail Sales in the Miscellaneous Retail Sector for**



export by these three retail sectors has declined. Carson City decision-makers may want to investigate reasons for this export decline and if their export activities can be enhanced or stabilized.





### **Additional Research Required**

Pull Factors, location quotients, and employment-population ratios are only the first step in retail development. Following this section are some suggestions for retail development in Carson City. Analysis of the Carson City populace questionnaire will be helpful in targeting retail development and formulating strategies for Carson City retail development.

### **Business Development Strategies**

Retail trade trends reflect the overall health of a local economy. Retail outshopping or sales leakage cannot be stopped. Often, existing shopping patterns have allowed a neighboring community to attract major retail stores that require a large population to support them.



business development program can identify public loan programs (such as Industrial Development Bonds) and package them with private loans to make projects feasible.

Provide assistance in undertaking joint projects for the business district

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[REDACTED]

[REDACTED]

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