

2-1995

Golfers and Golf Courses

Donald Nielsen

University of Nebraska at Omaha

Roger P. Sindt

University of Nebraska at Omaha

Follow this and additional works at: <http://digitalcommons.unl.edu/bbrbin>

Nielsen, Donald and Sindt, Roger P., "Golfers and Golf Courses" (1995). *Business in Nebraska*. 147.
<http://digitalcommons.unl.edu/bbrbin/147>

This Article is brought to you for free and open access by the Bureau of Business Research at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Business in Nebraska by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Business in Nebraska



This Issue:

Golf Course Growth/Participation	1
Population Projections	3
County of the Month	8

Prepared by the Bureau of Business Research, College of Business Administration,
University of Nebraska-Lincoln, 114 CBA, Lincoln, NE 68588-0406, 402/472-2334

Golfers and Golf Courses

Donald Nielsen, Ph.D., and Roger P. Sindt, Ph.D.
Department of Economics, University of Nebraska at Omaha

Golf continues to be a popular recreational activity. National Golf Foundation statistics (Table 1) provide a glimpse of this popularity. According to these numbers, 24.5 million persons (11.6 percent of the U.S. population age 12 and above) played golf in the U.S. in 1993. This represents a 1.2 percent decline since the number of U.S. golfers peaked in 1990 at 27.8 million. After falling to 24.8 million in 1991, the U.S. golf population has remained relatively steady.

Table 1
Growth of Golf in the U.S.

	1970	1975	1978	1979	1980	1981	1982	1983	1984
Golfers (millions)	11.2	13.0	14.0	14.6	15.1	15.6	16.0	16.5	17.0
Rounds played (millions)	266	309	337	346	358	368	379	391	403
Golf facilities	10,188	11,370	11,885	11,966	12,005	12,035	12,140	12,197	12,278
Daily fee	4,248	5,014	5,271	5,340	5,372	5,428	5,494	5,528	5,566
Municipal	1,321	1,586	1,742	1,778	1,794	1,818	1,848	1,860	1,881
Private	4,619	4,770	4,872	4,848	4,839	4,789	4,798	4,809	4,831
Golf courses	10,848	12,306	12,684	12,788	12,849	12,894	13,013	13,084	13,181
Daily fee	4,513	5,473	5,622	5,702	5,741	5,802	5,871	5,915	5,961
Municipal	1,461	1,748	1,894	1,940	1,957	1,989	2,019	2,032	2,056
Private	4,874	5,085	5,168	5,146	5,151	5,103	5,123	5,137	5,164
	1985	1986*	1987*	1988*	1989*	1990*	1991*	1992*	1993*
Golfers (millions)	17.5	19.9	21.2	23.0	24.2	27.8	24.8	24.8	24.5
Rounds played (millions)	415	419	431	484	469	502	479	505	499
Golf facilities	12,346	12,384	12,407	12,582	12,658	12,846	**	**	13,439
Daily fee	5,573	5,585	5,583	5,748	5,833	6,024	**	**	6,803
Municipal	1,912	1,912	1,926	1,937	1,963	2,012	**	**	2,144
Private	4,861	4,887	4,898	4,897	4,862	4,810	**	**	4,492
Golf courses	13,254	13,353	13,436	13,626	13,738	13,951	**	**	14,648
Daily fee	5,968	6,004	6,025	6,203	6,296	6,497	**	**	6,803
Municipal	2,090	2,098	2,122	2,135	2,166	2,222	**	**	2,144
Private	5,196	5,251	5,289	5,288	5,276	5,232	**	**	4,915

*The estimated number of golfers and rounds played for 1986 through December 31, 1993, is based on golfers age 12 and over and is not directly comparable to previous estimates that are based on golfers age 5 and over.

**Not provided but available from National Golf Foundation.

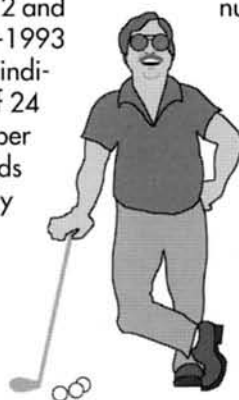
Source: NGF/Golf Participation in the U.S. (1991 and 1994 editions) and NGF/Golf Facilities in the U.S. (1991 and 1994 editions)

Although the number of golfers age 12 and over has more than doubled during the 1970-1993 interval, the number of rounds played per individual golfer has dropped from an average of 24 in the 1970s and 1980s to an average of 20 per year in the 1990s. The total number of rounds played annually also has remained relatively level at nearly a half-billion rounds.

In 1970, there were 10,848 golf courses in the 48 contiguous states. About 194 courses on average were added annually during the 1970s. Development slowed to an average of 89 new courses per year during the 1980s. During the 1990s, course development has increased to an average of nearly 200 new courses per year.

In contrast to the national data that show a participation rate of about 11.6 percent, 2.4 million persons in 1993 played golf in the west north central region. These persons represent 16.0 percent of the region's population age 12 and over (Table 2). The participation rate in Nebraska was even higher at 17.4 percent. Nebraska's participation rate trails only North Dakota, Minnesota, and Iowa in the west north central region.

The National Golf Foundation reported that 358 new golf courses opened in 1993 nationwide, bringing the total number of courses in the U.S. to 14,648. In addition, golf courses under construction numbered 671 nationwide with 508 new golf courses scheduled to open in 1994. The



number of new courses opening in 1993 in the west north central region and in Nebraska totaled 32 and 7, respectively, with 96 under construction in the region and 14 under construction in the state.

The numbers of courses and holes in 1993 by various categories for Nebraska, the west north central region, and the U.S. are presented in Table 3. The table indicates that the west north central region and Nebraska have more 9-hole courses than 18-hole courses, while the nation has a higher proportion of 18-hole courses than 9-hole courses.

Comparing the number of courses with the 1993 population for each of the three areas shows that Nebraskans have about twice as many golf courses per 10,000 population as the nation as a whole. Likewise, the number of holes per 10,000 residents for Nebraska and the west north central region exceeds the nation as a whole.

In summary, golf continues to be popular in the U.S., the west north central region, and Nebraska. Participation has increased significantly from 1985 through 1993.

Nebraska had a total of 186 courses with 2,178 holes in 1993. National Golf Foundation statistics show that the demand for golf courses in Nebraska is likely to continue favorably through the 1990s as a result of population growth and increasing participation rates.

Table 2
Golfers and Participation Rates in Selected Areas 1985, 1989, & 1993*

Area	1985		1989		1993	
	Golfers	Participation Rate ¹	Golfers	Participation Rate ¹	Golfers	Participation Rate ²
Nebraska	158,804	10.1	177,045	12.0	228,000	17.4
West North Central	1,953,580	11.4	2,152,437	13.2	2,360,000	16.0
Iowa	395,293	14.0	394,752	15.2	407,000	17.5
Kansas	278,240	11.6	276,264	12.1	279,000	13.5
Minnesota	595,235	14.5	694,477	17.6	711,000	19.4
Missouri	388,959	7.9	432,844	9.1	545,000	12.7
North Dakota	67,734	10.1	89,298	14.3	97,000	18.9
South Dakota	69,315	10.0	87,757	13.6	93,000	16.2
United States	20,218,565	9.1	24,700,000	10.8	24,500,000	11.6

*National Golf Association Golf Participation in the U.S., 1986, 1990, and 1994 editions.

¹Percentage of all Americans 5 and older who played golf at least one time within the survey year.

²Percentage of anyone age 12 and above who played at least one round of golf during 1993.

Table 3
Numbers of Golf Courses and Holes by Selected Areas, 1993

	Nebraska		West	North	United States	
	Courses	Holes	Central Courses	Region Holes	Courses	Holes
Totals	186	2,178	1,739	21,051	14,648	214,092
Size:						
9-hole	127	1,143	1,086	9,774	4,800	43,200
18-hole	56	1,008	547	9,846	7,627	137,286
> 18-holes	1	27	106	1,431	2,221	33,606
Length:						
Regulation	163	1,944	1,570	19,323	13,042	195,345
Executive	12	125	99	1,053	864	10,566
Par 3	11	108	70	675	742	8,181
Type:						
Daily fee	85	936	837	9,576	7,370	103,923
Municipal	44	513	362	4,599	2,363	34,542
Private	47	729	540	6,876	4,915	75,627
Total per 10,000 population	1.15	13.50	0.96	11.66	0.57	8.32

Source: National Golf Foundation, *Golf Facilities in the United States*, 1994 edition

Nebraska Population, 1990-2010

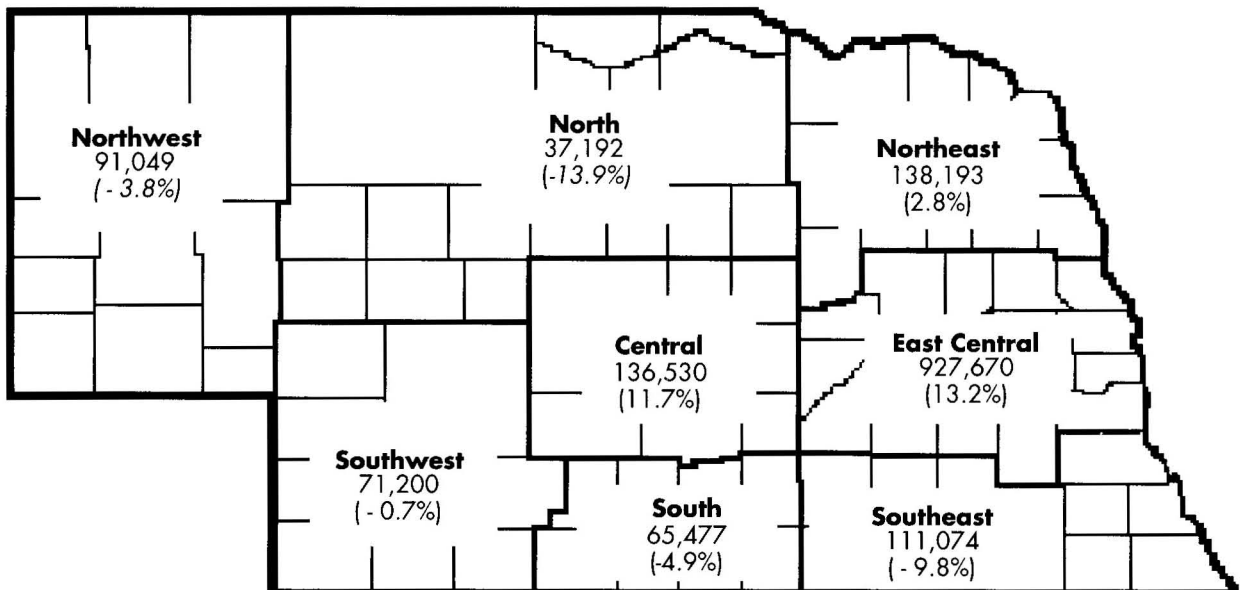
John S. Austin and Teik L. Tan

Introduction

This article presents forecasts of Nebraska's population to the year 2010. Total population will grow more rapidly in the foreseeable future than it has in the recent past, increasing 3.5 percent from 1990 to 2000. In the following decade, the state's population will increase 3.9 percent, resulting in a 7.6 percent gain in population from 1990 to 2010. These future increases contrast to the slow population growth in the 1980s when the state's population increased only 0.5 percent. The implications of a repeat of that pattern were presented in the Bureau of Business Research's *1994 Annual Economic Outlook Report*.

The overall gain in the state's future population masks the dynamics of population changes within the state's 93 counties. Figure 1 presents growth rates from 1990 to 2010 and 1990 populations for the eight regions in the state. The diversity in future growth rates is apparent. Population will decrease 13.9 percent in

Figure 1
Nebraska's 1990 Population and 1990-2010 Growth Rates (percent) by Region



the north region but increase 13.2 percent in the east central region. The east central region contains all but one of the state's six metropolitan counties.

Growth in Rural vs. Metropolitan Counties

For discussion purposes, counties are grouped into four types: rural, small trade center, large trade center, and metropolitan counties. The definitions of county types are contained in the accompanying sidebar. Figure 2 presents a comparison of the growth rates for the four groups. The comparison shows that rural counties will continue to experience the highest rates of outmigration. By the year 2010, Nebraska's total rural county population will have decreased to 180,111 persons, a drop of 13.1 percent from 1990. Only two of the 52 rural counties in Nebraska will experience population increases by 2010.

Population losses will be smaller in the group of counties classified as small trade centers. Population in these counties will drop 2.7 percent over the next 20 years. That decrease contrasts with a decrease of 7.1 percent from 1980 to 1990. Only eight of the 23 small trade center counties in Nebraska will experience increases in population by 2010. Each of these counties is adjacent to larger, growing counties.

Population will increase in counties classified as large trade centers. The population of large trade centers in the state will increase 9.5 percent from 1990 to 2010. Four of the 12 counties classified as large trade center counties in Nebraska are expected to lose population by the year 2010. Three of these four counties will experience only slight decreases in population. The single county with a relatively large decrease in population is isolated from other growing counties.

Finally, population in the metropolitan counties of the state will grow more rapidly than in any of the other groups. The metropolitan counties in Nebraska as a whole will grow 15.3 percent from 1990 to 2010. Each metropolitan county in Nebraska will gain population over the next 20 years.

County Types Defined

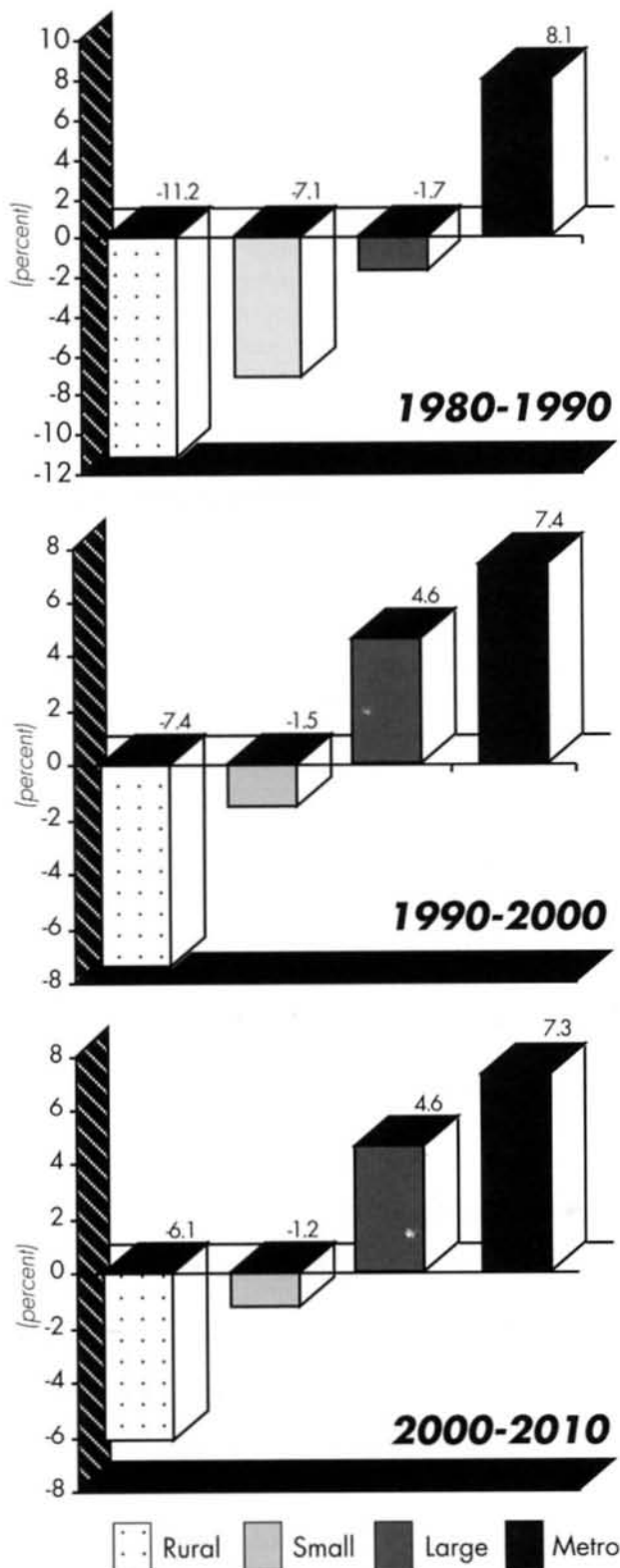
*A *rural county* is defined as one containing no city, town, or village with a population above 2,500.

**Small trade center counties* contain a city, town, or village with a population greater than 2,500 but less than 7,500.

**Large trade center counties* are those not in metropolitan areas, which contain a town or city with population above 7,500.

*A *metropolitan county* is one classified by the U. S. Department of Commerce as being in a metropolitan statistical area.

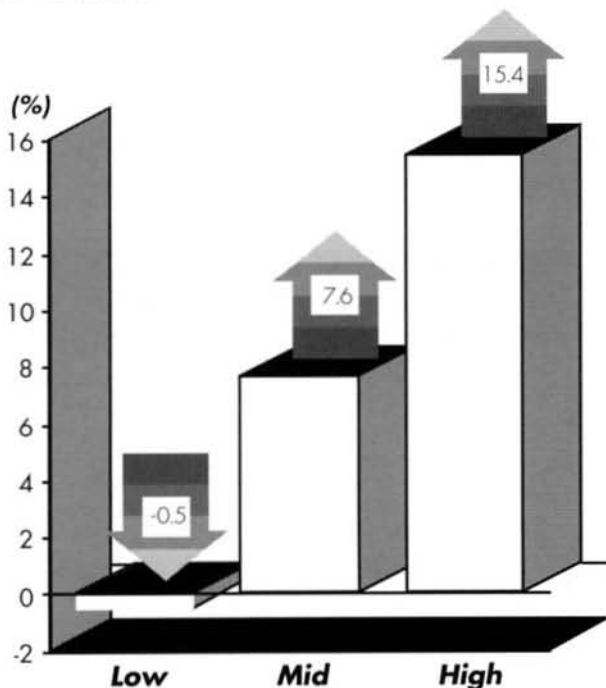
Figure 2
Population Change by County Type
(percent)



Alternative Scenarios

Low and high scenarios were developed for each county in order to compare a range of possible future population outcomes. The low scenarios assumed low projected birth rates, high projected mortality rates, and the most pessimistic outlook on migration by county from our forecast panel. The high scenarios reversed these assumptions. Figure 3 displays the results. Under the low scenario the state would lose population from 1990 to 2010. Under the high scenario the population gain would be 15.4 percent.

Figure 3
Alternative Scenarios
Population Growth Rates for State Totals
1990-2010



Summary

By the end of the forecast period (the year 2010), 17 of the state's 93 counties will have populations below 2,000. Twelve counties will have populations below 1,000.

Rural population loss can be viewed in terms of the decrease in the rural share of the state's population. In 1980, 14.9 percent of the state's population resided in rural counties. By 1990, the share had dropped to 13.1 percent. According to our projections, the proportion of Nebraskans living in rural counties will drop to 10.6 percent by the year 2010.

Past outmigration limits future growth possibilities. The largest numbers of those who migrate from counties tend to be of prime childbearing age. Some of Nebraska's counties had such large outmigrations of these key age groups in the 1980s that the ability of those counties to grow—even if future outmigration came to a halt—has been impaired severely.

Demographic forecasts are estimates of what will happen if matters proceed as expected. Circumstances can be altered by internal or external forces. It is clear, however, that if unchecked, rural Nebraska counties will continue to experience decreasing populations.

The details behind the forecasts in this article are contained in a BBR monograph by the authors. The monograph presents county forecasts by five year age groups to age 84 in the years 2000 and 2010. It also contains a summary of the alternative forecast scenarios by county as well as a set of forecasts classified by county size. To order the monograph, see page 8.

Acknowledgments

We would like to thank the following persons who made valuable contributions to the development of the net migration projections: John Allen, Department of Rural Sociology, UNL; Jerry Deichert, Center for Public Affairs Research, UNO; Bruce Johnson, Department of Agricultural Economics, UNL; Don Macke, Nebraska Department of Economic Development; Tom Moloney, Nebraska Department of Labor; Donis Petersan, Nebraska Public Power District; Garth Taylor, Department of Agricultural Economics and Business Economics, UNL Panhandle Research and Extension Center, Scottsbluff.

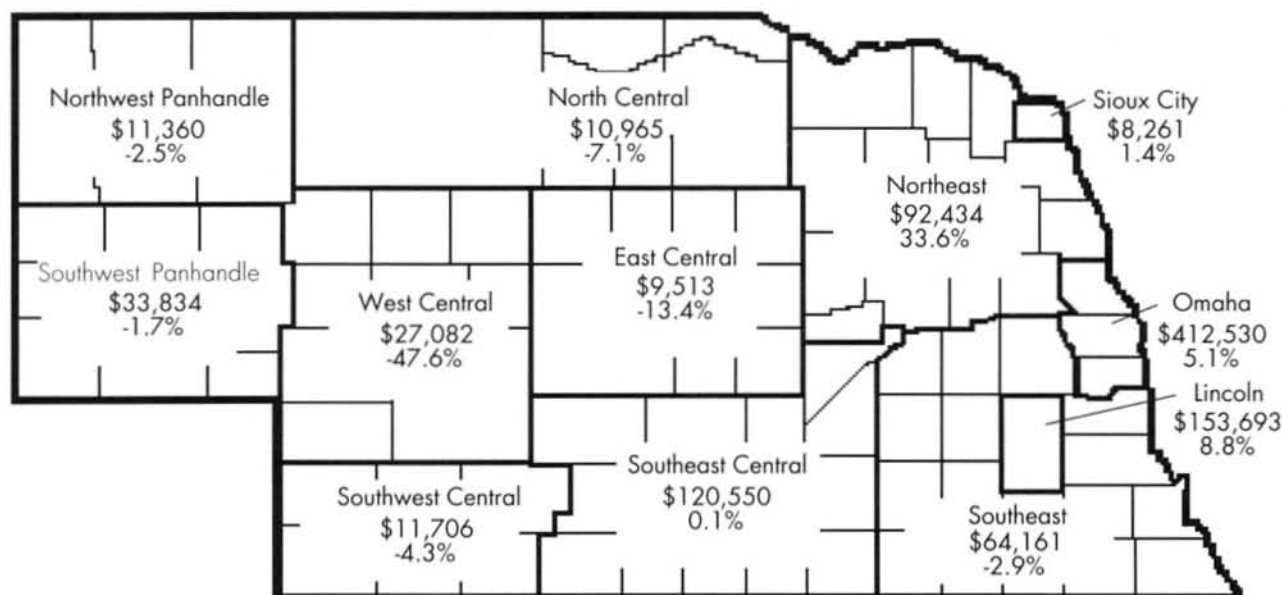
Methodology

Our population forecasts are generated by standard demographic methods. We first developed projections of the underlying natural growth by standard tables for projected birth and mortality rates. We modified these results to fit the Nebraska experience. For example, we found that rural counties had higher birth rates than were indicated by the standard tables. We developed special techniques to handle eight counties that had large proportions of college age persons.

Critical to the projections are the migration forecasts. We developed county migration forecasts by assembling a panel of experts familiar with the demographics and economics of Nebraska. The migration forecasts were developed in light of historical migration patterns over the decades of the 1960s, 1970s, and 1980s and in consideration of changes in the state and in local areas that would influence migration patterns at the county level. Average estimates for each county were used for the migration rates employed in these projections.



October 1994 Regional Retail Sales and Percent Change from Year Ago
(\$000)



Price Indices

	December 1994	% Change vs. Year Ago	YTD % Change vs. Year Ago
Consumer Price Index - U* (1982-84 = 100)			
All Items	149.7	2.7	2.6
Commodities	135.1	2.3	1.7
Services	164.7	2.9	3.3

U* = All urban consumers
Source: U.S. Bureau of Labor Statistics

City Business Indicators
September 1994 Percent Change from Year Ago

The State and Its Trading Centers	Employment (1)
NEBRASKA	2.4
Alliance	2.1
Beatrice	4.1
Bellevue	1.4
Blair	1.4
Broken Bow	4.3
Chadron	3.2
Columbus	3.7
Fairbury	2.6
Falls City	2.8
Fremont	3.4
Grand Island	2.7
Hastings	2.8
Holdrege	4.9
Kearney	3.9
Lexington	3.1
Lincoln	0.8
McCook	2.9
Nebraska City	4.0
Norfolk	3.6
North Platte	2.9
Ogallala	4.8
Omaha	1.4
Scottsbluff/Gering	4.1
Seward	3.5
Sidney	3.2
South Sioux City	-0.4
York	4.5

(1) As a proxy for city employment, total employment (labor force basis) for the county in which a city is located is used.
Source: Nebraska Department of Labor

Employment in Nebraska

	Revised October 1994	Preliminary November 1994	% Change vs. Year Ago
Place of Work			
Nonfarm	795,335	803,140	3.5
Manufacturing	107,002	108,315	3.6
Durables	52,033	52,600	6.3
Nondurables	54,969	55,715	1.3
Mining & Construction	36,175	35,743	3.7
TCU*	48,429	48,564	2.9
Trade	199,658	201,348	2.5
Retail	54,798	54,626	5.0
Wholesale	144,860	146,722	1.5
FIRE**	50,284	50,491	-0.3
Services	198,723	198,460	4.4
Government	155,064	160,219	5.3
Place of Residence			
Civilian Labor Force	875,539	873,835	1.5
Unemployment Rate	2.2	2.1	

* Transportation, Communication, and Utilities

** Finance, Insurance, and Real Estate

Source: Nebraska Department of Labor

Nonmotor Vehicle Net Taxable Retail Sales in Selected Nebraska Cities

	October 1994 (\$000)	% Change vs Year Ago		October 1994 (\$000)	% Change vs Year Ago
Omaha	371,951	5.1	Waverly	603	6.7
Lincoln	152,227	9.0	Pender	599	-14.2
Grand Island	42,344	3.6	Alma	590	-3.4
Kearney	25,230	1.7	Pierce	590	-11.7
Norfolk	24,788	6.7	Henderson	574	19.6
Fremont	20,015	2.7	Battle Creek	573	-91.4
North Platte	19,764	6.7	Bloomfield	565	-20.8
Hastings	18,190	3.0	Oakland	556	-2.3
Columbus	17,923	0.4	Lyons	550	-0.2
Scottsbluff	17,497	-2.0	Wisner	530	-24.0
Beatrice	8,654	1.7	Cambridge	529	11.8
York	8,334	10.1	Friend	513	13.2
McCook	8,208	-1.2	Stanton	511	0.4
South Sioux City	7,194	0.2	Rushville	489	-12.8
Sidney	6,754	3.9	Dakota City	484	47.1
Lexington	6,626	-2.8	Benkelman	473	-11.8
La Vista	6,290	5.1	Clarkson	464	-2.5
Alliance	4,998	-0.7	Franklin	456	-11.6
Nebraska City	4,722	4.5	Oshkosh	456	16.6
Ogallala	4,670	3.1	Osmond	442	-14.7
Seward	4,532	2.3	Fullerton	440	-18.8
Holdrege	4,241	-6.0	Chappell	434	6.9
Broken Bow	3,589	-5.9	Humboldt	428	-12.1
O'Neill	3,495	-7.5	Scribner	418	-13.6
Gering	3,431	-9.6	Tilden	417	-6.5
Crete	3,396	-9.3	Bayard	399	10.5
Gretna	3,298	7.9	Morrill	395	9.4
Papillion	3,283	7.7	Ponca	394	-1.3
Valentine	3,098	3.1	Crofton	390	-5.1
Chadron	3,019	3.5	Wilber	388	-11.8
West Point	3,008	-4.2	Elgin	384	-17.4
Fairbury	2,857	-6.3	North Bend	373	-10.8
Wayne	2,757	-17.4	Oxford	372	5.4
Plattsmouth	2,736	3.8	Laurel	366	-20.1
Cozad	2,699	-4.5	Hershey	364	-14.4
Ralston	2,470	5.7	Louisville	357	-15.6
Wahoo	2,376	2.2	Wymore	351	-4.9
Aurora	2,301	7.1	Spalding	350	-14.6
Auburn	2,231	-1.3	Bassett	346	-21.9
Falls City	2,165	-8.6	Hay Springs	327	-3.8
Gothenburg	1,790	-9.8	Newman Grove	326	-20.3
Ainsworth	1,780	-6.6	Bennington	324	7.6
Schuyler	1,689	-23.7	Crawford	320	-26.6
Ord	1,660	-4.2	Beemer	294	7.7
Hartington	1,613	-14.3	Wakefield	294	-35.9
Gordon	1,595	-8.0	Randolph	293	-15.6
Hebron	1,520	-5.6	Elwood	292	7.4
Albion	1,466	-11.4	Pawnee City	292	-3.0
Kimball	1,451	-12.1	Alda	288	4.3
Central City	1,419	-23.3	Wauneta	287	-4.3
Imperial	1,399	-0.2	Stuart	269	6.3
Minden	1,388	-17.4	Curtis	263	-16.8
David City	1,359	-20.4	Exeter	261	0.4
Superior	1,331	-0.1	Elm Creek	260	-4.8
Elkhorn	1,261	3.4	Minatare	258	34.4
Neligh	1,208	-5.6	Nelson	248	0.8
Bridgeport	1,096	12.0	Genoa	247	-8.5
St. Paul	1,044	-19.9	Overton	246	-50.5
Syracuse	1,028	2.1	Utica	246	9.3
Creighton	1,010	-8.1	Sutherland	240	-6.6
Tecumseh	1,003	-2.6	Clay Center	237	-21.8
Tekamah	942	-3.3	Mullen	230	8.0
Ceresco	890	-5.2	St. Edward	219	-4.8
Stromsburg	883	-8.3	Greenwood	218	-15.2
Sutton	853	-5.3	Arnold	218	-22.7
Mitchell	815	4.0	Spencer	217	-23.0
Ashland	794	-25.2	Dodge	216	-89.5
Valley	789	-43.7	Eagle	211	19.2
Milford	781	-1.1	Hemingford	198	3.1
Atkinson	745	-14.5	Edgar	198	-20.2
Gibbon	728	-6.2	Paxton	198	-18.9
Doniphan	659	33.7	Hickman	198	-1.5
Madison	646	-20.8	Deshler	188	-1.1
Humphrey	638	-21.5	Verdigre	187	-12.6
Weeping Water	627	-52.6	Sargent	185	-17.0
Plainview	620	-8.3	Howells	180	-42.5
Burwell	618	-27.2	Indianola	177	-4.3
Shelton	614	-19.2	Mead	175	1.2
Arapahoe	604	-12.2	Decatur	166	7.8
Ravenna	603	-14.2	Bennet	161	-8.5

Source: Nebraska Department of Revenue

Population Projections Report



A report on Nebraska population projections to 2010 is currently available from the Bureau of Business Research (BBR). The report contains county level projections by age category.

The cost is \$12.50 per copy, including postage and handling.

To order Nebraska County Population, 1990-2010, return this form with a check or money order to:

Bureau of Business Research
114 CBA
University of Nebraska-Lincoln
Lincoln, NE 68588-0406

Please send _____ copies of Nebraska County Population, 1990-2010 to:

Name _____

Company _____

Address _____

Phone: _____

Amount Enclosed \$ _____

CO/CTR (UN use only) _____

Nebraska County Population, 1990-2010 may also be ordered by:

Fax: (402) 472-3878 or
E-mail: cboyd@unlinfo.unl.edu

Copyright 1995 by Bureau of Business Research, University of Nebraska-Lincoln. ISSN 0007-683X. *Business in Nebraska* is published in ten issues per year by the Bureau of Business Research. Subscription orders and inquiries should be directed to Bureau of Business Research, 114 CBA, University of Nebraska-Lincoln 68588-0406. Annual subscription rate is \$10.

FEBRUARY 1995, VOLUME 50 No. 597

University of Nebraska-Lincoln—Graham Spanier, Chancellor
College of Business Administration—John W. Goebel, Dean

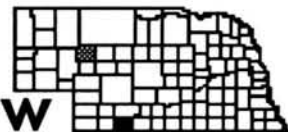
Bureau of Business Research

John S. Austin, *Research Associate*
David Bennett, *Programming Assistant*
Carol Boyd, *Secretary*
Clayton Buss, *Undergraduate Assistant*
Charlie Curran, *Undergraduate Assistant*
David DeFruiter, *Information Systems Manager*
Meghan Eary, *Graduate Assistant*
F. Charles Lamphear, *Director*
Jan Laney, *Project Assistant*
Hak Hong Soo, *Graduate Assistant*
Kyle Steffan, *Undergraduate Assistant*
Teik L. Tan, *Graduate Assistant*
Lisa Valladao, *Information Specialist*

Business in Nebraska February 1995

County of the Month

Red Willow



McCook—County Seat

Next County of Month

License plate prefix number: 48

Size of county: 718 square miles, ranks 35th in the state
Population: 11,705 in 1990, a change of -7.2 percent from 1980

Median age: 35 years in Red Willow County, 33.0 years in Nebraska in 1990

Per capita personal income: \$16,977 in 1992, ranks 63rd in the state

Net taxable retail sales (\$000): \$118,467 in 1993, a change of 1.4 percent from 1992; \$86,882 during January-October 1994, a change of 1.7 percent from the same period one year ago

Number of business and service establishments: 453 in 1991; 56.5 percent had less than five employees

Unemployment rate: 2.4 percent in Red Willow County, 2.9 percent in Nebraska for 1993

Nonfarm employment (1993):

	State	Red Willow County
Wage and salary workers	762,703	4,837
	(percent of total)	
Manufacturing	13.5%	9.9%
Construction and Mining	4.3	5.2
TCU	6.2	5.9
Retail Trade	18.4	25.6
Wholesale Trade	6.8	10.7
FIRE	6.6	4.0
Services	24.6	16.8
Government	19.6	22.0
Total	100.0%	100.0%

Agriculture:

Number of farms: 425 in 1992, 489 in 1987

Average farm size: 1,034 acres in 1992

Market value of farm products sold: \$81.1 million in 1992 (\$190,819 average per farm)

Sources: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis, Nebraska Department of Labor, Nebraska Department of Revenue



Nonprofit Org.
U.S. Postage
PAID
Lincoln, Nebraska
Permit No. 46