

Business in Nebraska

In This Issue

Women and Work in Nebraska	1
NU ONRAMP	5
County of the Month	8

IMPORTANT NOTICE TO OUR READERS

(See *Business in Nebraska* subscription order form—page 8)

Prepared by the Bureau of Business Research, College of Business Administration,
University of Nebraska-Lincoln, 1700 Y St., Lincoln, NE 68588-0406, 402/472-2334

Women and Work in Nebraska—1960 to 1980

Lisa Valladao

This article is the third in a series examining trends in women's labor force participation and employment in Nebraska since 1920.

Labor Force Participation

Women in Nebraska continued to make significant strides in labor force participation after 1960, and the growth in numbers of working women steadily outpaced the growth in total female population. From 1960 to 1980, the labor force participation rate of women age 16 and over increased from 34 to 51 percent (Figure 1). The number of women in the labor force jumped 90 percent over the period. In contrast, the total number of women age 16 and over grew just 26 percent. In 1960, women constituted 30 percent of the total labor force (male and female). By 1980, 42 percent of the labor force was female.

From 1960 to 1980 labor force participation grew among all age groups except women age 65 and over (Table 1). Notable increases over the period occurred among women in almost all age categories. The participation rate of women age 35 to 44, for example, grew from 39 to 67 percent over the period. The growth in numbers of participants in this age group was positive (33 percent increase), while the total population of this age group decreased 4 percent.

Participation by Race and Ethnicity

The labor force participation rate of white women grew from 32 percent in 1960 to 51 percent in 1980 (Figure 2). White women constituted 30 percent of the total white labor force in 1960. By 1980, 41 percent of the white labor force was female. Over the 20 year period, the white female labor force grew 87 percent, substantially outpacing the white female population increase of 18 percent and the 20 percent growth in the total white labor force (male and female).

Figure 1
Female Labor Force Participation Rates and
Proportion of Total Labor Force, 1960 to 1980

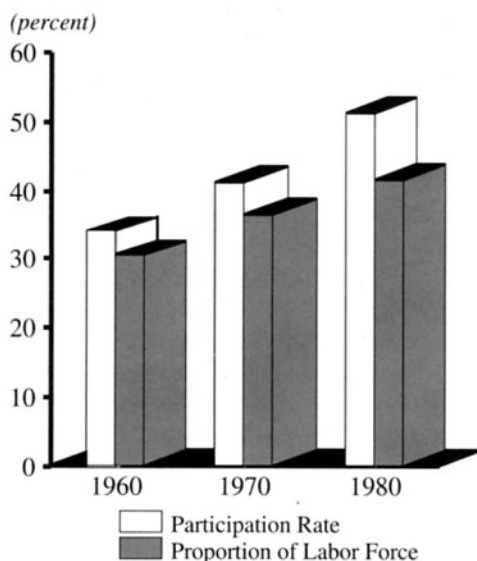


Table 1
Female Participation Rate by Age, 1960 to 1980
(percent)

	1960	1970	1980
16 & 17	29	32	45
18 & 19	53	52	63
20 to 24	44	59	71
25 to 34	30	44	65
35 to 44	39	49	67
45 to 64	41	48	54
65 and over	13	12	9

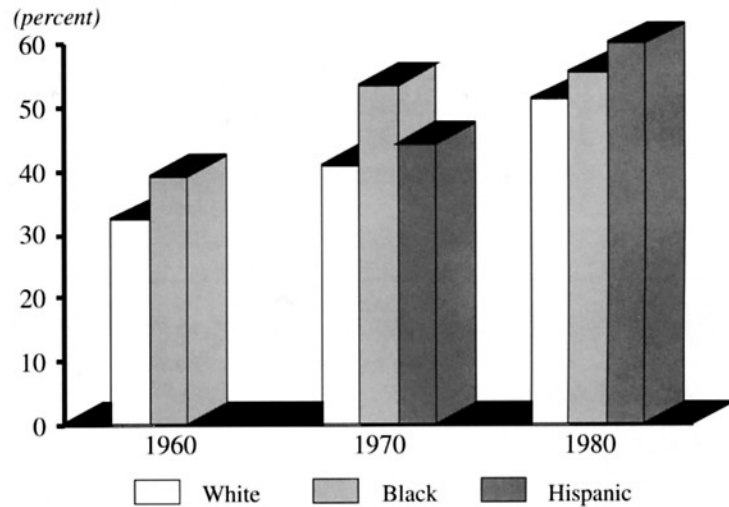
Keeping the Terms Straight...

Labor force participation rate—the percentage of working age persons (age 16 and over) participating in the labor force. Labor force participants are either employed or are unemployed and actively seeking work. The female labor force participation rate is the percentage of all working age women participating in the labor force.

Number of participants—specific number of working age person participating in the labor force (employed or unemployed and seeking work).

Proportion of labor force—the percent of the total labor force that comprises one particular groups of persons. For example, women constituted 42 percent of the total labor force (male and female) in 1980.

Figure 2
Female Labor Force Participation Rates
by Race and Ethnicity, 1960 to 1980



The 1960 Census reported labor force participation of non-white women as a single category. Black women constituted 81 percent of all non-white women at that time. The labor force participation rate of non-white women was 39 percent in 1960. In 1970, black women were once again enumerated separately from other non-white women. The participation rate of black women in 1970 was 54 percent, substantially higher than that of white and Hispanic women. From 1970 to 1980, the participation rate of black women only increased 1 percentage point. The black female labor force increased almost 38 percent over the decade, a slightly higher increase than in the working age population. Women constituted 46 and 47 percent of the total black labor force, respectively in 1970 and 1980.

Data on Hispanic women were not enumerated until the 1970 Census. At that time the participation rate of Hispanic women was 44 percent. By 1980, the participation rate had jumped to 60 percent, the highest rate among the three racial/ethnic categories discussed here. (The participation rate of Hispanic females nationwide in 1980 was 56 percent.) The Hispanic female labor force grew 96 percent from 1970 to 1980, in contrast to a 45 percent population increase. The total Hispanic labor force (male and female) grew 69 percent over the decade. Women constituted 41 percent of the Hispanic labor force in 1980.

The growth in participation rates by age category from 1970 to 1980 was especially notable among white women. In 1970, the highest white participation rates were found among women ages 18 to 24. In 1980, white women ages 20 to 24 and 35 to 44 experienced the highest participation rates. The only age category show-

ing declining participation among white women was the 65 and over group.

Hispanic women showed substantial increases in participation rates across age groups. Most notable were the increased participation rates of 20 to 24 and 35 to 44 year old women. The participation rate of Hispanic women age 65 and over was the lowest across the racial/ethnic categories, but showed no change over the decade.

In contrast, participation rates of black women by age exhibited a mixed pattern of growth and decline over the decade. The participation rates of 16 and 17 year olds, 20 to 24 year olds, and women age 45 and over dropped; black women age 65 and over had the highest participation rate across elderly women in both years, but, as indicated above, experienced a declining rate over the decade.

Participation by Marital Status and Family Type

Married women continued to participate in the labor force in increasing numbers from 1960 to 1980. The participation rate of married women jumped from 29 percent in 1960 to 39 percent in 1970. By 1980, over half of the married women in the state were labor force participants and the participation rate of married women exceeded that of single women (including widowed and divorced) for the first time. The number of married female participants grew 85 percent over the entire period, in contrast to a 6 percent jump in the total number of married women. From 1960 to 1970, the number of married participants grew almost one-third while the total number of married women showed a slight (3 percent) decrease.

Women with children (both married and single) experienced substantial gains in labor force participation from 1960 to 1980. The participation rate of women with children under age 6 rose from 19 percent in 1960 to 49 percent in 1980. Women with older children (ages 6 to 17) had a consistently higher participation rate and experienced a substantial increase in that rate from 1970 to 1980. (1960 data for the latter group were not available.)

Table 2 compares the participation rates of women with children by race and ethnicity in 1970 and 1980. Among women with children under age 6, black women had the highest participation rate in both years, but experienced the smallest growth in that rate. Black women with children age 6 to 17 had the highest participation rate (66 percent) in 1970, but dropped behind Hispanic women in 1980. The increase in the participation rate of Hispanic women in this category was remarkable, from 48 to 75 percent. The total number of Hispanic female participants with children age 6 to 17 grew 115 percent over the decade in contrast to a 39 percent increase in their total population.

Table 2 also presents participation rates for female heads of household and married women with children. Particularly notable in these data are the participation rates of heads of household with children age 6 to 17—83 percent of these women were in the labor force in 1980. White heads of household had the highest participation rate in 1980. The Hispanic participation rate was only slightly lower and registered a 23 percentage point jump over the decade. Participation among black female heads of household dropped from 73 percent in 1970 to 70 percent in 1980.

All categories of married women with children recorded increases in participation from 1970 to 1980. Hispanic women with older children again recorded the biggest jump in participation, moving from a 47 percent to a 72 percent participation rate, the highest rate among the three racial/ethnic groups.

Occupations and Industries

The occupational distribution of women did not undergo substantial shifts from 1960 to 1980 (Figure 3). As in previous decades, women were most commonly employed in administrative support occupations (including clerical). Women did make slight gains, however, in managerial, technical, and professional specialty occupations, particularly from 1970 to 1980. Sales occupations employed 11 percent in 1980, up from 8 percent in 1960. Service occupations (excluding private household work) employed approximately 20 percent of women over the period. The proportion of women employed as private household workers continued a trend of decline over the period. By 1980, only 1 percent of employed women worked in domestic service (outside their own homes!). The proportion of women

Table 2
Participation Rates of Women with Children,
by Race and Ethnicity, 1970 to 1980
(percent)

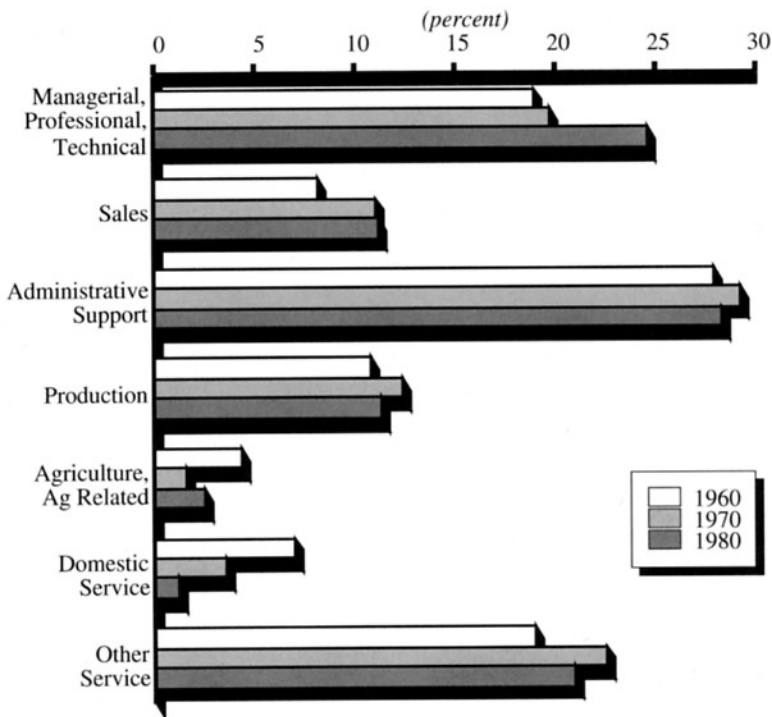
	1970	1980
<i>All Women</i>		
<i>With child(ren) <6</i>		
All	33	49
White	32	49
Black	50	53
Hispanic	39	51
<i>Child(ren) 6-17 only</i>		
All	50	67
White	50	67
Black	66	70
Hispanic	48	75
<i>Heads of Household</i>		
<i>With child(ren) <6</i>		
All	58	62
White	62	68
Black	46	43
Hispanic	54	42
<i>Child(ren) 6-17 only</i>		
All	76	83
White	76	85
Black	73	70
Hispanic	60	83
<i>Married Women</i>		
<i>With child(ren) <6</i>		
All	31	48
White	30	48
Black	53	68
Hispanic	38	52
<i>Child(ren) 6-17 only</i>		
All	47	65
White	47	64
Black	62	71
Hispanic	47	72

employed in production (craft, operative, repair, etc.) occupations held at slightly more than 10 percent over the period.

The changes in numbers of females employed in certain occupations reflect societal and technological trends from 1970 to 1980. What formerly were private household tasks increasingly became professionalized in the form of service sector occupations. The number of women employed as child care workers (outside private homes), for example, rose from 1,200 in 1970 to 6,300 in 1980, a somewhat ironic reflection of the increasing need for child care outside the home resulting from increased female labor force participation. The number of private household cleaners and servants declined substantially while the number of cleaning service workers showed substantial increase.

The number of stenographers and typists and the number of telephone operators declined 27 percent,

Figure 3
Occupational Distribution of Employed Women,
1960 to 1980



while the number of computer equipment operators jumped from less than 500 in 1970 to almost 1,300 in 1980. These changes represent technological advances in office and communications equipment that we expect to see magnified in an upcoming examination of the trends from 1980 to 1990.

The number of women employed in protective service occupations more than tripled from 1970 to 1980. Female police officers and detectives more than doubled in number, and the number of women employed as security guards jumped from under 100 in 1970 to over 450 in 1980. Surprisingly, there were 13 women employed as firefighters in 1970 but only two women were employed as firefighters in 1980. The number of men employed as firefighters grew almost 200 over the same period.

The number of female physicians was slightly below 100 in 1970. By 1980 over 300 women were practicing physicians. Female attorneys increased from fewer than 50 to over 500. Female computer systems analysts grew from under 50 to over 250. The number of female production supervisors more than doubled and the number of female construction supervisors almost tripled.

Occupations by Race and Ethnicity

The total number of employed women grew at divergent rates across racial/ethnic categories from 1970 to 1980. Hispanic women experienced a 94 percent growth in employment overall. The highest numerical growth among employed Hispanic women occurred in service, administrative support and clerical, and operatives occupations. The number of Hispanic women employed as private household workers declined.

Employment among black women increased 35 percent overall. The largest numerical increases among employed black women occurred in the administrative support and clerical and the managerial and professional specialty occupational categories—both showing increases of 800 or more black women. The number of black women employed as private household workers, agricultural workers, and operatives declined from 1970 to 1980.

White women experienced a 41 percent increase in total numbers employed. The largest numerical gains were in managerial and professional specialty, sales, and administrative support and clerical occupations. The number of white women employed as private household workers declined more than 3,500.

Comparison of the occupational distribution of employed women by occupation and race in 1980 shows that black and white women were most commonly employed in administrative support and clerical occupations while Hispanic women were most commonly found in service occupations.

Government Employment

In 1980, over 20 percent of employed women in Nebraska were government workers, up from 17 percent in 1960. The majority of female public sector employees—60 percent—were employed by local governments. Comparison of the distribution of government employment by race and ethnicity shows that black women were most highly concentrated in the public sector—28 percent in 1980—and Hispanic women were the least concentrated at 18 percent. In all three racial/ethnic categories, local government employment accounted for the highest proportion of women employed in the public sector. A notable shift occurred from 1970 to 1980 in the movement of black women from private wage and salary employment to local government employment.

The final article in this series will examine the changes in women's labor force participation and employment from 1980 to 1990. Included in that article will be an examination of the experience of American Indian women.

NU ONRAMP

A Super Highway for Accessing, Merging
& Presenting a Wide Range of Data

Down the Road...
 Graphics
 Forecasting
 Report Writing
 Maps/GIS
 Point & Click Interface
 CDROM Applications

Training:
 Video
 On-site by request

Current Services:
 Search by Subject
 Search by Area
 Keyword Search
 Expert Search
 File Subset Creation
 Charting

Data Series:
 Population
 Employment
 Income
 Agriculture
 Construction
 Manufacturing
 Trade
 Finance
 Vital Statistics
 1990 Census...

Access:
 Modem
 (402) 472-5201
 Internet
 UNL Libraries

Nebraska Economic Information Program
 (NEIP) has outgrown it's name!
 BBR Presents: NU ONRAMP!
 David DeFruter

Daily news reports about the emerging
 superhighway conjure images of an electronic
 frontier where "being wired" and "information
 surfing" are part of a mind-altering journey.
 "Online" travelers are greeted with ever
 expanding informational horizons and the
 opportunity to become more successful
 decisionmakers and more productive citizens.

(continued on page 6)

(continued from page 5)

Because of the growing need to deliver vast amounts of information at near lightning speed to any place and at any time, the Bureau of Business Research (BBR) has constructed NU ONRAMP, a unique segment of the information superhighway.

NU ONRAMP began five years ago as the Nebraska Economic Information Program (NEIP)—a user friendly electronic data system for business, economic, and demographic data specific to Nebraska.

NEIP was an immediate success. Many requests were made to expand NEIP to include data for the U.S. and neighboring states. In response to further requests the system was expanded to include other data series, such as vital statistics. Because of the expanding coverage of the system, NEIP as a name has become obsolete.

New Data Online

NU ONRAMP is one of the largest and most user-friendly microcomputer database systems in the nation. Quite possibly, it is second to none.

New data series are constantly being added to NU ONRAMP. The largest recent addition is the 1990 Census of Population and Housing for all 50 states. This addition was made possible through a joint agreement with UNL Libraries, a primary depository of census data. The agreement establishes BBR as a member of the branch library system for UNL Libraries.

Another large data series recently brought aboard NU ONRAMP is the "Current Business Statistics" for the U.S. This vital set of time-series data, compiled from many different sources by the Bureau of Economic Analysis, has been traditionally compiled in the "S-pages: of the *Survey of Current Business*. Included in the series are general business indicators, information on commodity prices, construction, real estate, trade, finance, transportation, food products, and manufactured goods.

The 1992 Economic and Agriculture Censuses will soon be online, pending release by the U.S. Census Bureau. Preliminary reports for several neighboring states are online and the Nebraska file is expected in the near future.

New Services Online

NU ONRAMP has been expanded to include the latest features in information technology. Users can now create charts from online data files in order to take a "quick look" at the latest trends in retail sales, employment, or the cost of living index, for example.

Table I
Employment in Nebraska

	Revised January 1994	Preliminary February 1994	% Change vs. Year Ago
Place of Work			
Nonfarm	756,382	759,211	2.5
Manufacturing	103,531	103,538	2.1
Durables	49,654	49,668	4.8
Nondurables	53,877	53,870	-0.2
Mining	1,309	1,227	2.3
Construction	28,331	27,517	11.7
TCU*	47,031	47,164	0.8
Trade	192,103	191,392	3.2
Wholesale	51,195	51,480	1.5
Retail	140,908	139,912	3.8
FIRE**	50,365	50,516	2.2
Services	185,209	186,660	1.6
Government	148,423	151,197	1.8
Place of Residence			
Civilian Labor Force	890,734	899,952	NA
Unemployment Rate	2.5	2.8	

NA=Not available due to rebenchmarking

* Transportation, Communication, and Utilities

** Finance, Insurance, and Real Estate

Source: Nebraska Department of Labor

The ONRAMP search capabilities have been strengthened and enhanced. NU ONRAMP allows the user to create a unique electronic file by tagging as many data variables and geographic areas as desired from a series such as the 1990 Census of Population.

Down the Road

The next phase of the ONRAMP construction will be to integrate charts, data, and text into a report document. This publishable document could then be delivered to a printer, downloaded to a computer, or sent to a facsimile machine.

Another ONRAMP construction phase involves putting time-series data into motion. This "data in motion" report service, known as *ComView Analysis*, is already available through BBR on a contract basis.

Construction is also scheduled to begin soon on a forecasting module for NU ONRAMP. Users will be able to select a variable or variables for forecasting purposes. For example, the user will be able to base an employment forecast on employment trends alone, or combine employment with income and sales trends.

Table II
City Business Indicators
December 1993 Percent Change from Year Ago

The State and Its Trading Centers	Employment (1)	Building Activity (2)
NEBRASKA		35.7
Alliance		241.1
Beatrice		-0.5
Bellevue		11.5
Blair		726.9
Broken Bow		-6.7
Chadron		69.6
Columbus		27.9
Fairbury		21.4
Falls City		-12.1
Fremont		60.1
Grand Island		-5.9
Hastings		-4.0
Holdrege		-4.0
Kearney		35.9
Lexington		91.0
Lincoln		-15.3
McCook		-4.0
Nebraska City		298.6
Norfolk		159.7
North Platte		177.3
Ogallala		18.5
Omaha		62.5
Scottsbluff/Gering		-54.7
Seward		-40.1
Sidney		2.1
South Sioux City		-11.6
York		120.2

Not available due to rebenchmarking

(1) As a proxy for city employment, total employment (labor force basis) for the county in which a city is located is used

(2) Building activity is the value of building permits issued as a spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Cost Index is used to adjust construction activity for price changes

Sources: Nebraska Department of Labor and reports from private and public agencies

Access to NU ONRAMP

NU ONRAMP is now available by direct-dial at a compression speed of 38,400 bits per second.

Another gateway to the NU ONRAMP, will soon be available to the public via our own ONRAMP Internet server. This service will allow anyone on the Internet access to the system.

On UNL campuses, NU ONRAMP is available on Huskernet via IRIS, as well as from the Special Database Network (SDN) library workstations.

If access to a specific data set is desired, consider that on the construction horizon, NU ONRAMP will offer custom data subscriptions on CDROM. The database will be customized to your specifications and accessed by a user-licensed copy of NU ONRAMP.

However you choose to go online, the NU ONRAMP has **data-on-demand** from a wide range of sources. For a ride on the information superhighway, warm up your PC, and follow the signs to NU ONRAMP!

1994 Annual Economic Outlook Report

Please send me _____ copies of the 1994 Annual Economic Outlook Report at \$15.00 per copy (plus \$1.00 postage and handling). Make checks payable to the Bureau of Business Research. Amount enclosed \$ _____

Name: _____

Company: _____

Address: _____

Phone: _____ CO/CTR(UN use only) _____

**Table III
Price Indices**

	February 1994	% Change vs. Year Ago	YTD % Change vs. Year Ago
Consumer Price Index - U* (1982-84 = 100)			
All Items	146.7	2.5	2.5
Commodities	132.2	1.0	1.1
Services	161.5	3.7	3.6

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

**Table IV
Net Taxable Retail Sales of Nebraska Regions and Cities**

Region Number and City (1)	City Sales (2)		Region Sales (2)		Year to Date % Change vs. Year Ago
	December 1993 (000s)	% Change vs. Year Ago	December 1993 (000s)	% Change vs. Year Ago	
NEBRASKA	1,400,212	8.8	1,533,882	9.6	8.9
1 Omaha	482,460	3.5	580,330	5.3	8.2
Bellevue	18,568	3.3	*	*	*
Blair	6,579	19.6	*	*	*
2 Lincoln	186,970	16.4	206,120	16.0	13.6
3 South Sioux City	8,585	4.5	11,059	5.0	7.8
4 Nebraska City	5,542	5.2	24,671	10.5	9.9
6 Fremont	24,192	8.4	40,102	5.9	4.7
West Point	3,942	-11.7	*	*	*
7 Falls City	3,197	11.0	12,027	1.5	1.6
8 Seward	8,369	36.1	21,289	17.5	9.9
9 York	9,166	3.7	18,363	4.1	5.5
10 Columbus	24,871	24.9	38,514	13.8	5.6
11 Norfolk	31,569	10.2	50,184	10.9	7.7
Wayne	4,106	-1.3	*	*	*
12 Grand Island	55,181	15.7	71,481	14.7	10.5
13 Hastings	24,588	7.7	35,696	7.8	7.2
14 Beatrice	12,230	-8.0	25,140	-0.5	2.6
Fairbury	4,195	10.8	*	*	*
15 Kearney	30,824	10.4	40,330	11.0	10.2
16 Lexington	8,869	3.7	21,505	5.4	4.2
17 Holdrege	6,108	1.1	10,036	2.5	1.5
18 North Platte	25,568	12.4	31,043	13.5	8.6
19 Ogallala	5,467	2.3	11,595	3.7	0.2
20 McCook	11,266	4.0	15,271	6.3	6.4
21 Sidney	7,327	15.0	12,320	11.5	12.8
Kimball	2,028	-7.8	*	*	*
22 Scottsbluff/Gering	28,853	10.0	37,175	10.4	8.4
23 Alliance	6,825	4.3	18,514	5.6	3.4
Chadron	3,909	9.0	*	*	*
24 O'Neill	5,303	0.4	17,817	1.3	4.5
Valentine	4,022	4.4	*	*	*
25 Hartington	2,158	-5.8	10,376	-1.8	3.6
26 Broken Bow	4,646	4.2	14,546	6.3	4.5

(1) See Figure II of previous *Business in Nebraska* issues for regional composition

(2) Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales

*Within an already designated region

Compiled from data provided by the Nebraska Department of Revenue

IMPORTANT NOTICE TO OUR READERS

For over 50 years, BBR has been dedicated to filling each issue of *Business in Nebraska* with informative features on the state's economy and timely data that is a staple of the publication. We look forward to expanding our coverage of business conditions in the state in the near future.

Beginning with the July/August issue, a \$10 annual subscription fee for *Business in Nebraska* will be instituted to offset mounting production costs.

For the low annual fee of \$10—just \$1 per issue—you can continue to be informed of the most current trends affecting the state's economy: trends in population, employment, business information, rural economic development, and a host of other issues.

To continue your subscription to *Business in Nebraska*, please complete and return the subscription form to us with a check for \$10. We appreciate your continued support.

Business in Nebraska Subscription Order

\$10 annual subscription

Please continue my subscription to *Business in Nebraska*.

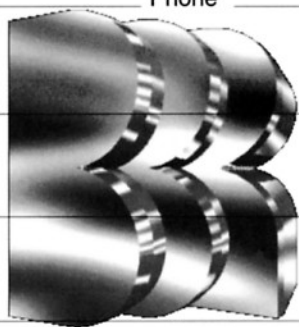
Name _____ Phone _____

Title _____

Organization _____

Address _____

City _____ State _____ Zip _____



Business in Nebraska is issued as a public service and mailed free of charge upon request to Bureau of Business Research, CBA, University of Nebraska-Lincoln, Lincoln, NE 68588-0406. Copyright 1994 by Bureau of Business Research, University of Nebraska-Lincoln. ISSN 0007-683X.

April 1994, Volume 49 No. 589

University of Nebraska-Lincoln—Graham Spanier, *Chancellor*
College of Business Administration—Gary Schwendiman, *Dean*

Bureau of Business Research

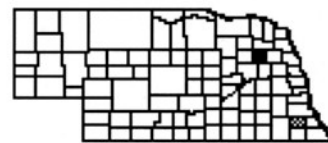
John S. Austin, *Research Associate*
David Bennett, *Programming Assistant*
Carol Boyd, *Secretary*
Clayton Buss, *Undergraduate Assistant*
David DeFruter, *Information Systems Manager*
Meghan Eary, *Graduate Assistant*
Merlin W. Erickson, *Research Associate*
F. Charles Lamphear, *Director*
Jan Laney, *Project Assistant*
Heath Peters, *Undergraduate Assistant*
Tiek L. Tan, *Graduate Assistant*
Lisa Valladao, *Information Specialist*

It is the policy of the University of Nebraska—Lincoln not to discriminate on the basis of sex, age, handicap, race, color, or religion in its educational programs, activities, or services.

County of the Month

Stanton

Stanton—County Seat



Next County of Month

License plate prefix number: 53

Size of county: 431 square miles, ranks 85th in the state

Population: 6,244 in 1990, a change of -4.7 percent from 1980

Median age: 31.6 years in Stanton County, 33.0 years in Nebraska in 1990

Per capita personal income: \$16,336 in 1991, ranks 49th in the state

Net taxable retail sales (\$000): \$14,252 in 1993, a change of +7.8 percent from 1992;

Number of business and service establishments: 76 in 1990; 67 percent had less than five employees

Unemployment rate: 3.4 percent in Stanton County, 2.9 percent in Nebraska for 1992

Nonfarm employment (1992):

	State	Stanton County
Wage and salary workers	746,985	1,162
	(percent of total)	
Manufacturing	13.4 %	* %
Construction and Mining	3.9	3.6
TCU	6.3	6.1
Retail Trade	18.2	7.5
Wholesale Trade	7.0	5.5
FIRE	6.6	*
Services	24.8	3.0
Government	<u>19.8</u>	<u>27.5</u>
Total	100.0%	100.0%

*Data not available because of disclosure suppression

Agriculture:

Number of farms: 695 in 1987, 712 in 1982

Average farm size: 348 acres in 1987

Market value of farm products sold: \$95 million in 1987
(\$136,685 average per farm)

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

Merlin W. Erickson