

This Issue:

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Women and Work in Nebraska— Current Realities, 1980 to 1990

Lisa Valladao

The most recent article in this series examined Nebraska women's participation in the labor market from 1960 to 1980. It was noted that women continued to make significant strides in labor force participation after 1960 and that the participation of married women and Hispanic women, in particular, showed considerable increases.

In the final article in the series, changes in the labor market experience of Nebraska women from 1980 to 1990 are examined. In addition, a brief overview of trends in women's participation since 1900 will be provided at the conclusion of the article.

Labor Force Participation

In 1980, slightly more than half of all women age 16 and over in Nebraska participated in the labor force. Recall that participants are either employed or unemployed and actively seeking work.) By 1990, the participation rate had increased to 60 percent. (Removing women age 65 and over from the calculation of female participation yields rates of 62 percent in 1980 and 74 percent in 1990.)

From 1980 to 1990, the number of female labor force participants increased nearly 20 percent while the total number of working age women increased only one percent.

Participation rates varied by age, Figure 1. All age groups except 65 and over experienced increases in participation from 1980 to 1990 despite population decreases in some groups. For example, the total number of women age 20 to 24 decreased almost 30 percent over the period. The number of participants in this group decreased only 20 percent, therefore the participation rate actually increased—moving from 71 percent in 1980 to 80 percent in 1990.

The largest gains both in terms of total population and participants is seen in the 35 to 44 year age group. Population in this group grew almost 40 percent, while participation jumped 70 percent. The participation rate of women age 35 to 44 was the highest across age groups.

As noted in the previous article, growth in the participation rate of black women slowed significantly from 1970 to 1980 while the participation rate of Hispanic women showed a notable increase. In the current period, the participation of black women grew at a higher rate than did the rate of Hispanic women, Figure 2. However, the participation rate of Hispanic women remained slightly higher than that of black women in 1990. The participation of white women continued to increase steadily. Despite a slight loss in total population, the number of working age white women rose 16 percent.

Most notable over the period is the significant change in the labor force participation of American Indian women. While the total working age population increased substantially, the number of participants rose 84 percent. In 1980, slightly fewer than half of

Figure 1
Changes in Labor Force Participation by Age

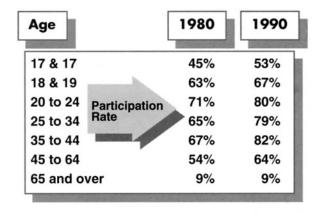


Figure 2 Participation by Race and Ethnicity 1980 to 1990 Change in Participants **Participation** Rate **Population Change** 1990 1980 Hispanic 30% 40% 60% 65% 24% 44% **Black** 55% 64% White -1% 16% 51% 60% Amer. Indian 52% 84% 47% 57%

all working age American Indian women participated in the labor force. By 1990, close to 60 percent were participants.

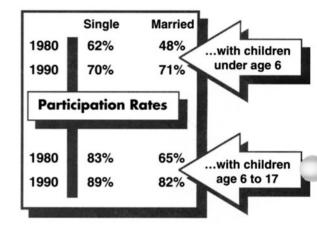
The participation of married women continued to grow steadily, moving from just over half in 1980 to 63 percent in 1990. While the total number of married women fell about 1 percent, the number of married participants increased more than 20 percent. Married women with children showed dramatic gains in participation over the decade, Figure 3. In 1980, slightly fewer than half of all married women with children under age 6 were labor force participants. By 1990, the rate had increased to 71 percent. The total number of married women with young children dropped 6 percent over the decade while the number of participants in this group increased nearly 40 percent. Married women with older children had higher rates of participation, but the increase in participation was less marked than that of their counterparts with young children.

Single women with children of all ages had higher participation rates than their married counterparts in 1980. However, by 1990 married women with young children had a slightly higher participation rate. The number of single mothers with young children increased over 80 percent during the 1980s, while the number in the labor force more than doubled. Single women with older children had the highest participation rate among all groups of mothers—nearly 90 percent.

Some interesting contrasts emerge in a comparison of the participation of women with children by race and ethnicity, Figure 4. Among married women with young children, American Indian women have a considerably higher participation rate than

do women in other racial and ethnic groups. However, among single women with young children, American Indian women have the lowest participation rate—less than 50 percent in 1990. Over 90 percent of married black women with older children are labor force participants—the highest rate in the category. On the other hand, the 82 percent participation rate of single black women with older children is the lowest among racial and ethnic groups. In both the married and single categories, women with older children have higher participation rates than their counterparts with younger children. The only exception is seen among married American Indian women—those with young chil-

Figure 3
Participation of Women with Children



dren have a substantially higher participation rate than those with older children.

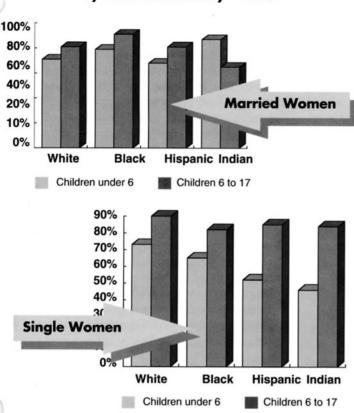
Occupations

The number of employed women in 1990 is almost 20 percent higher than in 1980. More than half of all employed women work in administrative support or managerial/professional specialty occupations, Figure 5. Twenty percent work in service occupations.

The occupational category with the largest influx of women is the managerial and professional specialty group which encompasses such occupations as systems analysts, teachers, physicians, and lawyers. The number of women employed in this group of occupations jumped 37 percent from 1980 to 1990. Continuing trends established in the 1970s the number of female physicians and computer systems analysts in Nebraska more than doubled over the decade of the 1980s; attorneys showed a 50 percent gain.

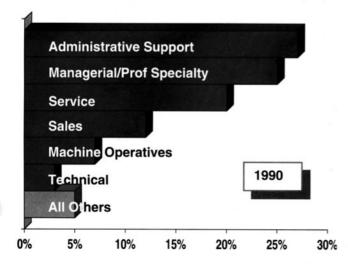
The number of women employed in administrative support occupations grew nearly 15 percent from 1980 to 1990. More than one-quarter of all em-

Figure 4
Participation of Women with Children
by Race and Ethnicity—1990



ployed women in Nebraska work in this category which encompasses occupations such as computer operators, insurance adjusters, stenographers, and telephone operators. The number of women employed as insurance adjusters more than doubled over the decade. Continuing the trends established in the previous decade the number of computer operators grew 90 percent while the number of

Figure 5
Occupational Distribution—1990



telephone operators, stenographers and typists decreased.

In the service occupations continued positive growth occurred in the number of female police officers and detectives, security guards, child care providers, and cleaning service workers from 1980 to 1990. Child care workers employed in private homes decreased almost 40 percent from 1980 to 1990. The number of female firefighters in Nebraska had decreased from 13 in 1970 to 2 in 1980 as reported by the Census of Population. In 1990, no female firefighters were reported in the Census. However, a check of the Lincoln and Omaha Fire Departments revealed that there are currently 20 women employed as firefighters in these departments alone.

A comparison of the occupational distribution of women by race and ethnicity shows that black women and white women are most concentrated in the administrative support occupational category. Hispanic and Indian women, on the other hand, are most commonly found in service occupations. Notable changes from 1980 to 1990 include large increases in the number of black women and Indian women employed in sales occupations,

and an 89 percent increase in the number of Hispanic women in managerial and professional specialty occupations.

Employment Class

Slightly more than 70 percent of employed females are classified as private wage and salary workers. Local governments employ 10 percent. Nine percent of employed women are self-employed.

American Indian women are employed as private wage and salary workers in a substantially larger proportion (85 percent) than are women of other

races and ethnicities. This represents a major shift from 1980 when only slightly more than half of employed Indian women worked in the private sector. This shift is largely the result of the movement of Indian women out of government employment over the period. For example, the proportion of Indian women working for local governments fell from 21 percent in 1980 to 6 percent in 1990.

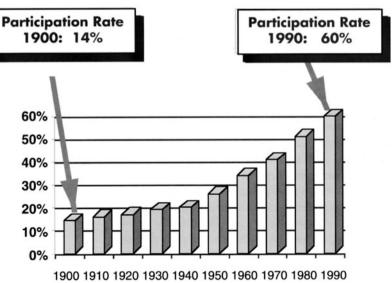
In contrast to the experience of American Indian women, the proportions of white, Hispanic and black women employed as private wage and salary workers declined slightly over the period. From 1970 to 1980, a notable shift occurred in

the movement of black women out of private wage and salary employment and into local government employment. From 1980 to 1990, the most notable shift among black women was a movement out of local government employment and into federal and state jobs.

Looking Back

Women's labor force participation in Nebraska has grown steadily and substantially since the turn of the century, Figure 6. In 1900, 14 percent of working age women (at that time, age 10 and over) participated in the labor force. By 1950, the participation rate had jumped to 26 percent. In 1980, half of all working age women were labor force participants. And as noted earlier, the participation rate in 1990 reached 60 percent. It is not surprising that the participation rate of men has always been higher than that of women. However, participation among men dropped from a high of 80 percent midcentury to 77 percent in 1990.

Figure 6 Labor Force Participation 1900 to 1990



Women have come to make up an increasing proportion of the total labor force as well. At the turn of the century, 13 percent of the state's labor force was female. By 1950, women made up one-quarter of the labor force. Today, close to half of the labor force in Nebraska is female.

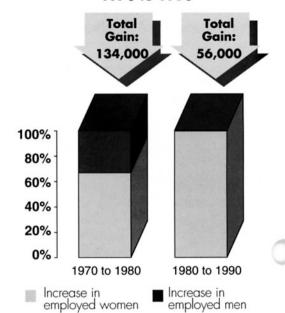
Major shifts in the distribution of women's employment by occupational categories have not occurred. For example, in 1920 as is the case presently, women were most commonly employed in professional, clerical and service occupations. Within these occupational categories, however, as

a result of changing technologies, expanded opportunities, and altered expectations, a wider variety of iobs are held by women.

Much of Nebraska's job growth over the past two decades was made possible by the increasing participation of women in the labor force, Figure 7. From 1970 to 1980, the total number of employed persons in the state (based on Census data) increased over 130,000. Of that total number of persons, 67 percent were women. Even more striking is the period from 1980 to 1990 when the total number of employed increased at a much slower rate, but practically all of the increase was accounted for by women. The number of men in the labor force decreased slightly during this period, and the number of employed men increased minutely.

In the March 1994 issue of Business in Nebraska, John Austin pointed out that we may fast be approaching the upper limit on the labor force participation of our existing working age population. Austin estimates this upper limit to be approximately 85 percent due to practical limits such as physical disabilities, school enrollment, and child care issues that all serve to keep participation rates perpetually below 100 percent among both women and men of working age. According to projections, this upper limit will be reached by the end of the century. The existing female working age population will continue to fill new jobs in the coming years. Ultimately, however, future job growth in Nebraska will depend upon the availability of new qualified workers, and therefore will require a reversal of the outmigration of young adults, particularly those with postsecondary education.

Figure 7
Employment Gains by Sex
1970 to 1990



Nebraska's Gross State Product: Strong Growth but Weak Returns Charles Lamphear

Gross state product (GSP) and gross domestic product (GDP) are barometers of business conditions and overall economic performance. The focus of this article is economic performance.

The Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce defines GSP as the gross market value of goods and services attributable to labor and property located in a state. GSP is the state counterpart of GDP. Both GSP and GDP refer to where output is produced, not to where ownership of the factors of production reside. GSP is the total output produced in a state and is the state's contribution to U.S. GDP (or total national GSP).

The earliest year for which revised GSP estimates are available is 1977; 1991—a recession year—is the most recent year for which GSP statistics are available.

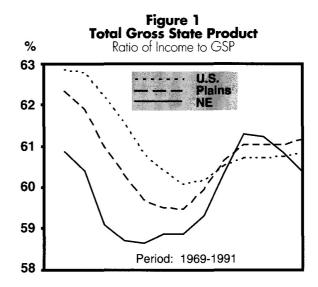
Nebraska's GSP grew at an average annual rate of 2.0 percent in constant dollar terms for the period 1977 to 1991. The rate for the Plains region, comprising lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota, was '.8 percent. Minnesota led with a 2.7 percent rate, tollowed by South Dakota at 2.2 percent. Nebraska's growth rate was third highest in the region. North Dakota's growth rate of 1.1 percent placed it last in the region. The national growth rate was nearly 2.5 percent per year. Ending the study period in a recession year (i.e., 1991) likely underestimates long-term growth.

In constant dollar terms, the nation's total GSP for service-producing sectors (trade; finance, insurance and real estate; transportation, communications, and public utilities; services; and government) increased an average of 2.9 percent per year, while the nation's total GSP for goods-producing sectors (agriculture, mining, construction, and manufacturing) increased 1.3 percent per year. Nebraska's GSP for service-producing sectors increased an average of 1.9 percent per year, and the state's GSP for goods-producing sectors increased 2.3 percent per year. The average annual rates for the Plains region were 2.1 percent for service-producing sectors and 1.3 percent for goods-producing sectors.

Nebraska's recent economic performance as indicated by GSP is certainly *creditable* (defined as reputable or praiseworthy). Many times, however, a more complete picture of economic performance is found in the components of aggregate statistics. GSP is no exception. What follows is a brief analysis of the earnings component of GSP. Earnings is the primary source of personal income for most Nebraskans. Earnings includes proprietors' income and wages and salary income.

Earnings will be expressed as a ratio of GSP. A ratio of 0.63, for example, means that, on average, 63 cents of every dollar of GSP represents earnings. In other words, the 63 cents is a payment for labor's contribution to GSP. The remainder (34 cents) mainly is a payment to property.

Figure 1 shows the ratio of earnings to GSP in constant dollar terms for Nebraska, the Plains region, and the U.S. A three year moving average highlights the trends. The ratio for the group declined in the early years (1977 to 1983). Throughout the early years the U.S. ratio stayed at nearly a constant level above the Plains' ratio. Nebraska's ratio trailed at nearly a constant level below the Plains' ratio. The gap between the U.S. and Nebraska ratios averaged 7 cents per dollar of GSP, meaning



at the national level. The / cent difference flowed to other components of GSP, such as returns to capital and retained earnings. The spread between the Nebraska and Plains ratios averaged nearly 4 cents per dollar of GSP.

The turning point in the ratio of earnings to GSP occurred in 1984 when Nebraska's earnings-to-GSP ratio increased sharply, moving ahead of the U.S. and Plains. Nebraska remained ahead of the U.S. and Plains from 1986 through 1989. By the end of the study period, however, Nebraska fell below levels for both the U.S. and Plains. The ratio of earnings to GSP in Nebraska was pulled down by the state's service-producing sectors. Figure 2 provides individual ratios for goodsproducing sectors and service-producing sectors in Nebraska for the 1977 to 1991 period. The cross-

moved ahead of that for service-producing sectors. From 1984 through the end of the study period, the gap averaged slightly over 8 cents per dollar of GSP in favor of Nebraska's goods-producing sectors. The 8 cent difference reflects the fact that the state's service-producing sectors returned 8 cents less to Nebraska's employees and proprietors than that generated by the state's goods-producing sectors. (continued, page 7)

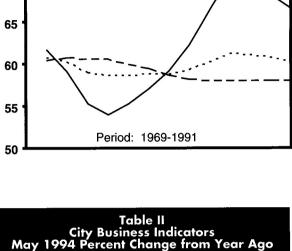
over point for the two ratios occurred in 1984 when the ratio for the state's goods-producing sectors

% 75 Services 70 65 60 55 Period: 1969-1991 50

Figure 2

Nebraska Gross State Product

Ratio of Income to GSP



NEBRASKA	3.5	31./
Alliance	1.4	147.6
Beatrice	5.0	29.5
Bellevue	2.8	-28.3
Blair	2.8	583.6
Broken Bow	4.2	-43.5

Alliance	1.4	14/.0
Beatrice	5.0	29.5
Bellevue	2.8	-28.3
Blair	2.8	583.6
Broken Bow	4.2	-43.5
Chadron	4.9	2.2
Columbus	5.3	-10.1
Fairbury	27	30.0
1 411 201 /		

4.9

4.5

2.8

4.2

4.2

2.6

3.6

Employment (1)

	Revised May 1994	Preliminary June 1994	% Change vs. Year Ago
lace of Work Nonfarm Manufacturing	779,120 103,697	<i>777</i> ,958 104,881	0. <i>7</i> 1.5

Table I

Employment in Nebraska

	1994	1994	vs. Year Ago
lace of Work	770 100	<i>777.</i> 958	0.7
Nonfarm Manufacturing	<i>77</i> 9,120 103 <i>.</i> 697	7/7,936 104,881	1.5
Durables	50,694	51,420	5.1

47,194

194,726

142,118

52,608

51,074

192,494

150,565

Ple 53,461 37,024 Nondurables 53,003

35,766

47,400

194,009

141,484

52,525

50,381

191,508 156,359

Cons't & Mining

Wholesale

TCU*

Trade

FIRF**

Retail

Government Place of Residence

Services

-1.8 1.7

0.3

-0.6

0.6 -0.7

1.6 0.0

0.3

(2) Building activity is the value of building permits issued as

The State and Its

Trading Centers

Falls City

Fremont Grand Island

Hastings

Holdrege

Kearney

Lincoln

Lexington

McCook

Norfolk

Omaha

Seward

Sidney

York

Nebraska City

Scottsbluff/Gering

South'Sioux City

North Platte

Ogalla 1 la

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

104.5

Building

Activity (2)

62.1

6.1

29.3

4.4

-34.8

51.7

-10.4

109.7

279.9

16.6

17.2

-25.4

4.8

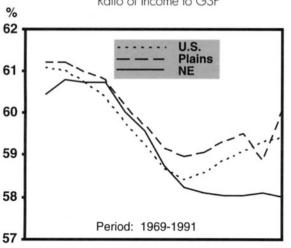
55.9 173.7

228.1

1,568.3

Most of the state's employment growth during the 1984 to 1991 period occurred in the service sector. In recent years business services, particularly in the orm of telemarketing operations, has been

> Figure 3 **Services Producing Sectors** Ratio of Income to GSP



Nebraska's fastest growing subsector. Business services arew from 33,138 full-and part-time employees in 1984 to 54,066 in 1991, an average annual increase of 7.3 percent per year.

Figure 3 compares the ratio for Nebraska's service-producing sectors with comparable ratios for the Plains and the U.S. Nebraska's ratio fell below ratios for both the Plains and U.S. in the early 1980s. By 1991 the gap between U.S. and Nebraska ratios had increased to nearly 2 cents per dollar of GSP.

(continued, page 8)

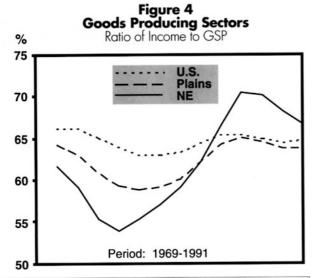
Table III Price Indices			
Consumer Price Index - U*	July 1994	% Change vs. Year Ago	YTD % Change vs. Year Ago
(1982-84 = 100) All Items Commodities Services	148.4 133.7 163.4	2.8 2.1 3.2	2.5 1.3 3.4

	Net Taxable Ret	ail Sales of Nebras	ka Regions and Ci	ties	
	City S	ales (2)		Region Sales (2)	V . D .
Region Number and City (1)	May 1994 (000s)	% Change vs. Year Ago	May 1994 (000s)	% Change vs. Year Ago	Year to Date % Change vs. Year Ago
NEBRASKA 1 Omaha Bellevue Blair 2 Lincoln 3 South Sioux City 4 Nebraska City 6 Fremont West Point 7 Falls City 8 Seward 9 York 10 Columbus 11 Norfolk Wayne 12 Grand Island 13 Hastings 14 Beatrice Fairbury 15 Kearney 16 Lexington 17 Holdrege 18 North Platte 19 Ogallala 20 McCook 21 Sidney Kimball 22 Scottsbluff/Gering 23 Alliance Chadron 24 O'Neill	1,066,359 374,677 14,314 6,122 142,065 7,789 4,029 20,438 3,049 2,263 5,066 7,685 19,107 23,373 3,316 43,129 19,379 8,8242 2,818 26,191 7,124 4,336 20,289 5,189 8,627 5,457 1,697 20,752 5,391 3,038 4,154	6.8 5.5 2.1 17.1 4.8 8.4 -6.5 7.7 0.4 -6.4 19.5 15.9 -1.5 11.8 4.0 0.7 -41.4 4.9 -18.9 5.8 -2.1 6.4 0.4 0.5 5.3	1,231,636 473,196 * 166,838 10,933 21,178 34,889 * 9,498 15,694 15,806 30,467 39,751 • 58,288 30,425 18,821 * 35,504 18,817 7,888 25,419 10,787 11,940 10.162 29,044 14,993 * 14,996	7.0 6.9 * * 5.0 6.7 -3.0 4.6 * -1.2 2.8 8.4 6.2 * 8.9 6.8 8-10.8 * 12.1 5.4 -17.9 7.3 -0.7 7.0 * 2.9 0.0 * 5.2	9.0 9.5 * 9.5 12.7 4.3 7.9 * 3.8 0.9 3.5 8.1 * 12.0 5.6 -2.2 10.1 5.4 -1.4 10.4 5.3 3.8 7.2 4.9 3.5 3.8 7.9 3.8 7.9 3.8 7.9 3.8 7.9 3.8 7.9 8.9 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9
Valentine 25 Hartington 26 Broken Bow	3,180 1,505 3,985	5.5 -9.4 1.1	8,451 12,532	-1.4 5.7	2.4

See Figure II of previous Business in Nebraska issues for regional composition
 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

Figure 4 compares the ratio for Nebraska's goods-producing sectors with comparable ratios for the Plains and the U.S. In the early 1980s Nebraska's ratio moved ahead of the Plains and U.S. ratios and remained ahead throughout the remainder of the study period. In 1991 the gap between the U.S. and Nebraska ratios was slightly over 3 cents per dollar of GSP, helping offset some of the loss created by service-producing sectors.

Nebraska's goods-producing sectors employ less than 25 percent of the state's total workforce. Goods-producing industries, however, bring more to the "bottom line" in terms of labor income. Figure 4 shows that the trend in the Plains supports a long-held belief by many economists and developers that strong growth in goods-producing sectors is vital to a healthy and growing economy.



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County of the Month

Arthur

Arthur—County Seat



License plate prefix number: 91

Size of county: 710 square miles, ranks 39th in the state Population: 462 in 1990, a change of -9.9 percent from 1980

Median age: 37.8 years in Arthur County, 33.0 years in Nebraska in 1990

Per capita personal income: \$15,864 in 1992, ranks 81st in the state

Net taxable retail sales (\$000): \$1,144 in 1993, a change of -13.0 percent from 1992; \$423 during January-May 1994, a change of 3.2 percent from the same period one year ago

Number of business and service establishments:: 12 in 1991; 60 percent had less than five employees

Unemployment rate: 1.0 percent in Arthur County, 2.9 percent in Nebraska for 1993

Nonfarm employment (19	Arthur		
•	State	County	
Wage and salary workers	762,703	70	
,	(percent	ent of total)	
Manufacturing	13.5%	(D)	
Construction and Mining	4.3	10.0%	
TCU	6.2	(D)	
Retail Trade	18.4	(D)	
Wholesale Trade	6.8	(D)	
FIRE	6.6	(D)	
Services	24.6	(D)	
Government	<u>19.6</u>	<u>54.3</u>	
Total	100.0%	100.0%	

(D) Data not available because of disclosure suppression

Agriculture:

Number of farms: 93 in 1992, 90 in 1987 Average farm size: 4,948 acres in 1992

Market value of farm products sold: \$11.6 million in

1992 (\$125,187 average per farm)

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



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