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Labor Market Sectors and Economic Development: The Nebraska Panhandle

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In the last 20 years, the nation and Nebraska have experienced broad sweeping changes in employment and earnings patterns for major sectors of the economy. These trends show decreases in agriculture's share and increases in the service sector's share of total employment.

In marked contrast, Nebraska's Panhandle region has shown an increase in the relative importance of agriculture and virtually no change in relative importance of the service sector. In 1988, the Panhandle's per capita personal income was slightly lower than the state overall.

There is cause for concern because growth in Panhandle income has slowed. While real per capita income in the Panhandle increased sharply from 1969 to 1979, it fell from 1980 to 1988.

Thus, future development in the Panhandle becomes an important issue. Will there be a continuation of the stagnation of the '80s, or will growth resume? What are the implications for some of the small communities in the area?

General Trends

To put the Panhandle trends in context, let us first briefly review trends in the national and Nebraska economies. Data in Table 1 (on page 2) show the proportion of employment in major economic sectors.

The downward direction of agricultural employment is reflected for both the U.S. and Nebraska. Although the proportion of farm jobs in Nebraska is higher than the U.S., the trend is still downward. The proportion of farm jobs in Nebraska is currently less than 10 percent.

Manufacturing also shows a strong downward trend for both the nation and the state. The U.S. proportion of manufacturing jobs has decreased 34 percent over the period. Nebraska's manufacturing sector has not dropped as rapidly. Nebraska's share of the labor force in manufacturing is only about half of what it is for the nation.

Transportation, communication, and utilities (TCU) and government (including public schools) have shown decreases in both the U.S. and Nebraska, although the decreases have not been as dramatic as in the case of agriculture and manufacturing.

By definition, decreases in the share of one sector must be offset by increases in another. In this sense, decreases in the relative size of agriculture and manufacturing have been balanced by increases in other sectors. The most notable gains have occurred in the service sector and in fi-

State Economic Scoreboard

Change from same month one year ago

	State	Metro+	Nonmetro
Motor Vehicle Sales (April) Constant $	-0.4%	-5.0%	3.8%
Nonmotor Vehicle Sales (April) Constant $	-1.6%	-5.2%	2.3%
Building Activity (April) Constant $	8.2%	7.6%	9.0%
Employment (August)	6.9%	5.3%	8.5%
Unemployment Rate* (August)	2.0%	2.1%	2.0%

+Omaha and Lincoln. *Unemployment is this month's rate, not a percent change from year ago.

Table 1
Percentage of Employment by Sector

	Agri/Mi	Mfg.	Constr.	TCU	Whole. Trade	Retail Trade	FIRE	Serv.	Govt.
					United States				
1969	5.8	22.9	5.0	5.3	4.6	14.9	5.3	18.2	18.0
1974	5.5	20.7	5.1	5.2	4.7	15.5	6.0	19.6	17.7
1979	5.2	19.3	5.3	5.0	5.1	15.9	6.5	21.1	16.6
1984	5.0	16.8	5.1	4.9	5.0	15.6	7.3	24.5	15.9
1988	4.2	15.0	5.3	4.8	4.9	16.6	7.5	26.3	15.4
% Change									
1969-88	-27.3	-34.4	7.2	-10.6	7.1	10.9	43.4	44.2	-14.5
					Nebraska				
1969	13.6	12.8	5.3	5.9	4.2	17.4	5.2	17.4	18.2
1974	12.4	12.3	5.3	5.9	4.1	17.7	6.0	18.2	18.1
1979	11.3	11.7	5.4	6.2	5.8	16.6	6.6	19.1	17.3
1984	10.7	10.8	4.6	5.9	5.7	16.2	7.3	21.7	17.0
1988	9.2	10.7	4.4	5.6	5.6	16.5	7.5	23.8	16.7
% Change									
1969-88	-32.8	-16.4	-15.7	-4.9	34.8	-5.5	44.1	36.7	-8.2

TCU = Transportation, Communication, and Utilities
FIRE = Finance, Insurance, and Real Estate
Agri/Mi = Agriculture, Fishing, Forestry, and Mining
Percentage changes in shares are approximate due to rounding
Source: U.S. Bureau of Economic Analysis

nance, insurance, and real estate (FIRE). While Nebraska's growth in services has been dramatic, it lags slightly behind the growth for the U.S. as a whole.

In construction and retail trade, Nebraska trends have run counter to those for the U.S. More recent data show a reversal for construction—Nebraska's construction has gained in 1990, while it has dropped for the U.S. Nebraska's gain in wholesale trade outstripped the U.S. gain.

To take the process one step further, we break the largest category, services, into its component parts for the U.S. and for Nebraska in Table 2 on page 2. The percentages reflect total employment in the service sector, rather than total employment for all sectors.

Most service categories are straightforward, such as hotels and lodging. Others need some detailing. Personal services include laundry, beauty shops, funeral services, etc. Business services include advertising, computer services, building maintenance, credit reporting and collection, etc. Membership organizations include unions, business associations, churches, etc. Miscellaneous services include engineers, architects, accountants, and auditors. Other services include miscellaneous repair, museums, private education, and motion pictures.

There is concern that a shift to a service economy will mean lower wages than would characterize a manufacturing-based economy. Within the service sector, however, increases in employment have been greatest where incomes tend to be higher (such as health care and business services). In the categories with lower incomes (such as household services or hotel services), the shares either have decreased or remained the same. Growth in the higher paying service jobs will help mitigate the shift from manufacturing.

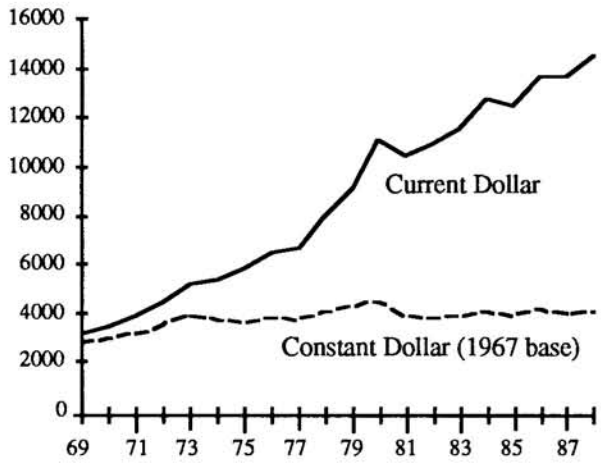
In the areas where tourism should be reflected (such as hotel and lodging and amusement and recreational services), Nebraska has lost ground relative to the United States. Some of those involved in tourism in Nebraska, however, are counted in the government sector.

Table 2
Service Employment Shares

	Hotel	Amuse. Rec.	Personal Services	House-hold	Business Services	Auto Repair	Health Services	Legal Services	Social Services	Member. Org.	Misc. Services	Other Services
						United States						
1969	5.9	3.9	10.1	14.3	11.9	3.5	19.1	2.6	0.0	10.9	6.1	11.7
1974	5.7	4.5	8.1	9.9	13.6	3.6	22.7	2.9	0.0	9.8	7.7	11.4
1979	5.1	4.5	7.4	7.4	16.3	3.8	23.6	3.1	4.5	6.7	7.9	9.6
1984	4.9	4.3	7.4	5.6	20.1	3.8	23.5	3.5	4.3	5.3	8.0	9.2
1988	4.8	4.0	7.7	4.3	22.1	3.8	24.8	3.5	4.6	4.6	7.4	8.4
% Change												
1969-88	-18.9	2.6	-23.6	-70.2	85.6	9.4	29.6	37.3	1.1*	-57.6	20.4	-27.7
						Nebraska						
1969	6.8	4.5	10.0	13.6	9.4	4.3	22.8	2.5	0.0	10.9	4.8	10.5
1974	6.8	4.8	8.9	9.0	10.4	4.2	25.0	2.8	0.0	10.3	7.3	10.4
1979	5.1	4.8	9.1	6.5	13.7	4.3	26.2	2.8	4.3	7.0	7.2	9.1
1984	4.6	4.6	9.2	5.0	17.3	4.5	26.1	2.9	4.1	6.0	6.8	9.0
1988	3.8	4.3	10.4	3.8	21.7	4.5	25.1	2.8	4.3	5.2	6.0	8.1
% Change												
1969-88	-43.4	-3.7	3.7	-72.0	130.0	4.3	10.0	12.6	0.6*	-52.4	25.3	-22.7

*Percent changes for Social Services are calculated from 1979-1988; changes are approximate due to rounding
Source: U.S. Bureau of Economic Analysis

Figure 1
Panhandle Per Capita Personal Income



Source: U.S. Bureau of Economic Analysis

Analysis of Panhandle Trends

Major concern in Nebraska has centered on the economic future of rural parts of the state. The analysis in the previous section can be helpful in understanding the trends in rural Nebraska. The Panhandle region contains some of the least populated counties in the state. The counties included in the Panhandle region are Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux. Useful comparisons can be made between the Panhandle and other rural areas of the state.

Figure 1 shows what has happened to per capita income in the Panhandle. The solid line shows growth in current dollar (nominal) per capita personal income in the area.

Current dollar personal income is the actual money paid to individuals (before taxes) in the form of wages, interest, rents, and profits plus any forms of transfer payments, such as pensions or farm support payments.

The dotted line is perhaps more instructive—it shows real per capita income; that is, income after the effects of inflation have been removed. Real per capita income reflects the buying power of that income.

While income has risen in the Panhandle, the increase has not been as dramatic as nominal income would indicate. Real income rose over the first ten years, peaked in about 1980, and then fell with the recession of the early '80s. It has remained stagnant for the last few years.

Table 3 on page 3 compares trends in nominal and real personal income for the U.S. and Nebraska with the Panhandle. Real personal income has continued to grow over the 20 year period for both the U.S. and Nebraska, while Panhandle real income has decreased in the last ten years.

Because there is much interest in the development of towns and communities in the area, another indication of trends in economic conditions for the area is the level of retail trade. Table 4 (on page 4) shows retail trade figures for Nebraska and the Panhandle for the last ten years. Again, these figures are stated in real terms (1982 dollars).

The table shows that real (constant dollar) retail sales in 1989 for the Panhandle fell 35 percent from what they were in 1980, an average decrease of 4.6 percent annually. Although Nebraska sales figures fell during the same time period, the drop was only about 1.3 percent.

The decreases in retail sales are overstated, as data collected by the state are for taxable sales only. Prior to 1983, food was included in the figure. To eliminate this problem, ratios are made between Nebraska and the Panhandle. As both experienced the tax change at the same time, the ratios represented will not be affected.

The third line of Table 4 shows the ratio of the Panhandle to Nebraska in terms of retail sales. For example, in 1989 Panhandle retail sales were 4.59 percent of the total retail sales in Nebraska. In 1980, they were 6.24 percent.

There are two possible reasons why the Panhandle's percentage of the state's retail sales may have fallen. The number of persons may have decreased, or there may have been more fundamental changes. To determine the effect of population changes on retail changes, Table 4 shows the relative populations of the state and the Panhandle. By dividing the retail sales by the population, we can see if the loss was due to population change.

As shown in the third part of the table, this was not the case. Although the Panhandle region lost population from 1980 to 1988, so did Nebraska; the ratio shows some decline, but not as much as the decline in retail sales. In 1980, per capita retail sales nearly equalled the state level. By 1988, they were less than 80 percent of the state level.

One may ask how real per capita personal income was virtually flat from 1980 to 1988 while real per capita retail sales fell over 32 percent. A plausible answer is that individuals are shopping outside the

Table 3
Per Capita Personal Income
U.S., Nebraska, and the Panhandle

	Current Dollars			Constant Dollars (1982-1984)		
	U.S.	Nebraska	Panhandle	U.S.	Nebraska	Panhandle
1969	3,808	3,543	3,106	10,377	9,655	8,464
1974	5,648	5,405	5,375	11,456	10,963	10,902
1979	9,033	8,854	9,163	12,443	12,196	12,622
1984	13,114	12,324	12,699	12,621	11,861	12,222
1988	16,489	14,774	14,482	13,939	12,489	12,242
Average Annual % Growth 1969-88	8.01	7.80	8.44	1.56	1.36	1.96

Source: U.S. Bureau of Economic Analysis

Table 4
Net Taxable Retail Sales
Nebraska and the Panhandle

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					Retail Sales (Constant dollars, thousands)					
State	10,935,921	10,462,562	9,714,897	9,445,396	8,912,704	8,564,322	9,106,676	9,026,978	9,593,244	9,701,476
Panhandle	682,735	650,242	569,179	537,808	472,697	450,694	447,803	432,896	450,380	445,658
PH/NE	6.24%	6.21%	5.86%	5.69%	5.30%	5.26%	4.92%	4.80%	4.69%	4.59%
					Population (thousands)					
State	1,573	1,583	1,590	1,597	1,605	1,605	1,598	1,594	1,602	NA
Panhandle	98.6	99.4	99.3	98.8	98.5	98.1	97.7	96.6	95.4	
PH/NE	6.27%	6.28%	6.25%	6.19%	6.14%	6.11%	6.11%	6.06%	5.96%	
					Retail Sales Per Capita (Constant dollars)					
State	6,952	6,609	6,110	5,914	5,553	5,336	5,699	5,663	5,988	NA
Panhandle	6,924	6,542	5,732	5,443	4,799	4,594	4,583	4,481	4,721	
PH/NE	99.60%	98.98%	93.81%	92.04%	86.42%	86.10%	80.43%	79.13%	78.84%	

Source: Nebraska Department of Revenue

area or they are engaged in more catalogue buying. The downward direction in retail sales, particularly in comparison to the rest of the state, should be a concern for the area and should be taken into account in any plans for economic development.

Another part of the reason for the downward trend may be how retail sales are counted. In some cases, retail sales are reported as sales from the community where the books are kept, rather than in the place of sale for stores that are part of a chain or are owned by an individual in a different area. Any acquisitions of retail businesses by those outside the Panhandle would tend to exaggerate the trend.

Another trend to examine is the share of labor in each of the sectors. Unfortunately, neither jobs nor labor force participation figures are available on a community by community basis. Figures for earnings by county and by sector from the personal income reports are available, however. Summing these figures for the Panhandle and dividing by total earnings for the region yields the figures in Table 5 (page 4).

Using earnings figures will produce slightly different total sector numbers, but the percentages of the total will be similar to the percentages of total jobs in each sector. Because transfer payments such as farm subsidies are included in the data, the use of earnings shares is likely to exaggerate the relative size of the sectors in which there are large transfer payments. Thus, the agricultural sector may be overstated.

There is one caution about placing too much emphasis on the specific figures in Table 5. Because these numbers are aggregated from county numbers, there may be some anomalies. On data reported by county, confidentiality is preserved. Therefore, when there is only one firm, for example, data are not reported so that an individual's income cannot be traced. This will tend to make the percentages not total 100 percent. Regardless of these differences, when viewed over a period of 20 years, the trends can be interpreted.

Table 5 shows the percentages of personal income earned in each sector for the 20 years ending in 1988. As one may expect in the Panhandle, the agricultural sector numbers are much higher than for the United States as a whole or for Nebraska. Annual percentages in farm income vary more in the Panhandle and even show an increase in their proportion.

The changing proportion may be due to the widely fluctuating farm commodity

Table 5
Earnings Shares by Sector
U.S., Nebraska, and the Panhandle

	Agri/Mi	Constr.	Mfg.	TCU	Whole. Trade	Retail Trade	FIRE	Serv.	Govt.
					United States				
1969	4.3	6.6	28.1	7.0	5.9	10.8	5.5	15.4	16.2
1974	5.3	6.6	25.4	7.4	6.3	10.6	5.3	16.2	16.9
1979	4.6	7.0	24.9	7.5	6.6	10.2	6.1	17.6	15.4
1984	3.9	6.3	22.6	7.3	6.5	9.8	6.3	21.5	15.9
1988	3.2	6.4	20.3	6.7	6.5	9.5	7.3	24.4	15.6
					Nebraska				
1969	15.2	7.1	15.5	8.4	5.8	12.5	5.4	13.8	16.2
1974	13.5	7.4	14.9	9.3	6.3	12.5	5.4	13.8	16.7
1979	11.7	7.5	14.9	10.3	7.9	10.9	6.1	14.7	16.0
1984	10.4	5.9	14.2	10.7	7.3	9.6	6.5	17.8	17.6
1988	11.4	5.2	13.6	9.2	7.1	9.0	6.9	20.2	17.5
					Panhandle				
1969	22.8	6.1	8.4	8.3	4.7	17.3	3.2	14.2	13.9
1974	22.5	7.7	10.1	12.0	4.8	15.0	2.7	11.4	13.2
1979	23.8	6.1	8.8	15.6	6.3	11.8	3.1	11.9	11.7
1984	26.7	4.5	6.5	16.0	5.3	10.7	3.1	12.9	13.1
1988	27.6	3.9	6.5	15.1	4.7	9.8	3.0	15.3	13.5
% Change									
1969-88	21.0	-35.5	-22.5	82.7	0.0	-43.4	-6.7	8.1	-2.4

TCU = Transportation, Communication, and Utilities
FIRE = Finance, Insurance, and Real Estate
Agri/Mi = Agriculture, Fishing, Forestry, and Mining
Source: U.S. Bureau of Economic Analysis

prices and quantities or to changes in farm subsidies. Because of the fluctuations, it is difficult to say much about trends in the agricultural sector except that such trends indicate a decidedly different pattern than for the state and the nation.

For the Panhandle, some of the sectors (such as wholesale trade, the financial sector, and government) show fluctuations but few trends. Services show little change, in stark contrast to the U.S. and the rest of Nebraska. That lack of change could reflect the lack of development in the region.

The transportation, communication, and utilities sector has shown a substantially increasing trend, while construction and manufacturing have fallen moderately. These changes seem to reflect general economic decline in the area. The reasons for the retail trade decline also would explain this drop in sector proportions.

Using Trend Information to Plan for Economic Development

The information contained in the tables will not be thrilling news to residents of the Panhandle. The situation in the region is not good, and the trends seem to be going in the wrong direction.

The important question to be answered is "Can something be done about it, and, if so, what?" The answer to the first part is "yes." I will try to address the second part in the remainder of this article.

What has preceded in the article is fact; what follows is opinion. The first bit of advice I offer is that fighting the trends is usually self-defeating; trying to use the trends to your advantage makes good sense.

John Naisbitt in his book *Megatrends* observes that as large inner cities have decayed and lost importance to the suburbs, so will metropolitan areas in time decrease as more businesses look for locations with the good life. He predicts that there will be continued growth in smaller towns. I would add that these towns must be big enough to sustain growth.

There is every indication that population in the Panhandle will continue to decrease. The Bureau of the Census has predicted that by 2010 (only 20 years from now), there will be 50,000 to 60,000 fewer Nebraskans. With continued growth in the urban areas of Nebraska, this means that population will decrease at an even greater rate in rural areas than it will in the state as a whole. Hardest hit likely will be the smallest towns.

We learn from observing the trends in population and in the numbers of persons who make their living from agriculture something that should be obvious. Not every town in the Panhandle is going to survive--perhaps some of those towns should not survive, in an economic sense.

To survive, towns must be big enough; they must reach a critical mass. Economic efficiency dictates that the changes that have occurred in transportation, communication, and merchandising mean a realignment of where persons live and work.

No matter what the sentimental attachment we may have with our hometown, the fact is that it may be more efficient to let the change occur. This conclusion will be a bitter pill for many residents of the Panhandle to swallow. But let us not kill the messenger, let's look at the message.

The trends in retail trade may give us some clues about what and what not to do. Encouragement of additional retail trade in the area may not be a good idea. As demand falls, the number of retailers should fall. Nothing is so discouraging to a town than working hard to bring in a new business and watching an established business falter and fail shortly thereafter.

I can remember when I lived in a small town in Illinois that had three supermarkets. In an effort to increase economic development, a new supermarket chain was courted to increase business. Within three months of its arrival, one of the existing supermarkets had closed. The point is that additional retail outlets need a market to survive. Making existing stores better to attract existing customers is a better strategy than bringing in more stores.

Markets for services depend on individuals to buy the services. Services that serve manufacturing industries can survive and prosper as long as the basic industry survives. Services that serve only individuals will survive only if there are enough persons to be served.

Recently in eastern Nebraska, it seemed that gambling endeavors would be profitable forever. The horse tracks were doing good business and the dog track in Council Bluffs, Iowa was filled with eager bettors. Many towns, seeing a bonanza, wanted a piece of the action—local lotteries appeared to be the answer to local financing problems. Iowa recently passed a law allowing riverboat gambling.

Yet all is not well in the gambling industry (a service). Receipts are down and are projected to worsen. Kansas City has built new horse and dog tracks, and attendance at Ak Sar Ben and Bluffs Run has decreased substantially. Why has the turnaround in the gambling business occurred? Simply because there are not enough gamblers to use all the services.

The observation about the increasing importance of medium size town development should help the Panhandle and other areas of the state. In areas that are mostly rural, reaching the critical mass can be achieved best by regional cooperation. Although it may go against our competitive nature, cooperative endeavors by groups of towns will have a better chance than the go-it-alone, get-ours-first strategies that many towns have adopted in the past.

There are many innovative ways that communities can work together. Imagine a farmer having an essential part malfunction on his combine that he normally would have to get from the factory because no local parts store carries it. The farmer goes to his computer, checks the part number on the inventory list, and orders and pays for it by computer. One hour later, the regional part center delivers the part to the farmer's field. The part is replaced and the farmer is back in business. This kind of scenario is possible in the not too distant future.

The future of the Panhandle can preserve the good life, but that life most assuredly will be different from what it was a generation or more ago. Examining the trends can help one understand what is happening and can be instructive in preparing for the future. In most cases, the trends are irreversible. We will do better to attempt to understand and use the trends rather than try to reverse them. The best generals in history had a knack for turning retreats into victory. It is time to focus on the advantages that new approaches offer in developing our state's rural areas.

This article was presented previously as part of a community revitalization workshop at Chadron State College in June 1990. Opinions expressed are those of the author, 402/472-2333.

1988 Personal Income Estimates for Nebraska and Nebraska Counties

Total and per capita personal income estimates for all states and counties for 1988 recently were released by the U.S. Department of Commerce, Bureau of Economic Analysis. Personal income is defined as the income received by, or on behalf of, all residents of an area. It is the total income received from wages and salaries, other labor income, proprietors income, investment income, and transfer payments. Personal contributions for social insurance are deducted. Per capita personal income is the result of dividing total personal income by population estimates provided by the Bureau of Census.

Total and per capita personal income for Nebraska and its counties are shown below. Also shown are the percentages of total personal income originating from farm and nonfarm sources and county rankings of per capita personal income estimates.

County income estimates should be used with some caution. Especially in counties with small populations, per capita personal income figures are rough approximations. Further, although it would be desirable to have median (midpoint) personal income data, only mean (average) values are available. Nevertheless, these estimates are useful to the business and economic community. They are the result of disaggregating more comprehensive data for the nation as a whole. Fracturing national data sets to regions, to states, and finally to counties can diminish the accuracy of the final product.

	Total Personal Income			Per Capita Personal Income	
	($ million)	Farm (%)	Nonfarm (%)	Amount ($)	Rank (No.)
United States	4,053,282.0	1.1	98.9	16,490	-
Nebraska	23,700.7	7.8	92.2	14,793	-
NE-Nonmetro	14,833.4	12.1	87.9	13,866	-
NE-Metro	8,867.3	0.5	99.5	15,815	-
Adams	464.8	9.2	90.8	15,294	23
Antelope	100.0	23.3	76.7	11,934	85
Arthur	8.3	40.3	59.7	17,597	7
Banner	15.0	56.0	44.0	15,398	20
Blaine	9.1	36.1	63.9	12,553	79
Boone	89.0	22.1	77.9	12,801	72
Box Butte	217.4	21.0	79.0	15,496	19
Boyd	35.3	14.6	85.4	11,343	88
Brown	55.0	26.6	73.4	14,095	45
Buffalo	485.8	7.6	92.4	13,128	68
Burt	121.0	26.7	73.3	14,570	32
Butler	132.1	20.3	79.7	14,592	31
Cass	291.0	5.5	94.5	13,141	67
Cedar	118.6	15.5	84.5	11,087	90
Chase	73.1	35.8	64.2	15,969	14
Cherry	83.0	22.7	77.3	12,777	74
Cheyenne	155.8	17.6	82.4	15,530	18
Clay	119.2	28.5	71.5	15,763	16
Colfax	116.5	6.6	93.4	12,690	75
Cuming	148.7	14.2	85.8	13,577	55
Custer	183.4	21.5	78.5	14,313	40
Dakota	220.0	3.7	96.3	12,789	73
Dawes	116.2	11.0	89.0	12,672	76
Dawson	275.2	13.3	86.7	13,290	62
Deuel	38.6	28.0	72.0	16,835	11
Dixon	78.4	13.8	86.2	11,833	86
Dodge	478.3	4.5	95.5	13,512	56
Douglas	7,010.3	0.1	99.9	16,716	13
Dundy	58.0	43.6	56.4	21,671	3
Fillmore	135.8	26.1	73.9	18,435	5
Franklin	57.1	26.1	73.9	14,365	37
Frontier	48.1	27.0	73.0	14,318	39
Furnas	88.1	17.3	82.7	14,997	28
Gage	317.8	7.7	92.3	13,720	52
Garden	49.4	42.7	57.3	18,233	6
Garfield	25.9	15.7	84.3	12,080	83
Gosper	34.8	39.8	60.2	16,806	12
Grant	11.4	21.8	78.2	14,072	47
Greeley	45.2	36.1	63.9	14,263	41
Hall	683.6	5.5	94.5	14,074	46
Hamilton	137.5	27.8	72.2	15,196	25
Harlan	52.6	23.3	76.7	13,151	66
Hayes	24.3	62.8	37.2	19,521	4
Hitchcock	55.2	21.7	78.3	14,223	42
Holt	171.7	24.7	75.3	13,099	69
Hooker	11.0	15.2	84.8	10,852	91
Howard	77.5	17.8	82.2	12,109	82
Jefferson	132.3	15.2	84.8	14,469	36
Johnson	62.1	13.8	86.2	12,847	71
Kearney	105.9	28.2	71.8	15,845	15
Keith	132.9	20.5	79.5	15,248	24
Keya Paha	16.7	53.0	47.0	14,784	30
Kimball	77.2	26.4	73.6	17,155	10
Knox	111.4	12.0	88.0	10,480	92
Lancaster	2,509.2	0.5	99.5	15,078	26
Lincoln	470.3	9.3	90.7	13,963	48
Logan	15.3	44.6	55.4	15,564	17
Loup	9.2	42.4	57.6	11,465	87
McPherson	8.5	52.2	47.8	15,355	21
Madison	433.0	5.2	94.8	13,396	58
Merrick	112.1	21.6	78.4	13,205	65
Morrill	81.9	30.9	69.1	14,329	38
Nance	57.0	20.6	79.4	12,998	70
Nemaha	115.8	12.5	87.5	13,889	49
Nuckolls	82.4	16.8	83.2	13,208	64
Otoe	192.5	9.3	90.7	13,269	63
Pawnee	44.3	16.0	84.0	12,487	80
Perkins	85.6	50.1	49.9	23,978	2
Phelps	170.9	21.5	78.5	17,376	9
Pierce	113.6	22.9	77.1	13,502	57
Platte	414.7	7.7	92.3	13,654	53
Polk	89.1	26.9	73.1	15,040	27
Red Willow	168.9	9.1	90.9	13,395	59
Richardson	138.9	14.9	85.1	13,625	54
Rock	30.1	33.8	66.2	13,823	50
Saline	183.6	12.7	87.3	14,193	44
Sarpy	1,396.9	0.2	99.8	14,221	43
Saunders	248.5	13.6	86.4	13,293	61
Scotts Bluff	495.1	8.0	92.0	13,334	60
Seward	201.7	8.5	91.5	12,659	77
Sheridan	106.5	27.6	72.4	14,566	34
Sherman	47.8	32.8	67.2	12,387	81
Sioux	28.5	47.0	53.0	17,567	8
Stanton	79.4	11.7	88.3	12,036	84
Thayer	102.7	22.0	78.0	14,568	33
Thomas	11.7	18.6	81.4	12,579	78
Thurston	62.8	7.1	92.9	8,902	93
Valley	77.3	22.9	77.1	13,785	51
Washington	240.1	10.2	89.8	14,986	29
Wayne	109.9	8.5	91.5	11,251	89
Webster	65.5	30.6	69.4	14,478	35
Wheeler	28.3	76.7	23.3	28,917	1
York	227.4	15.5	84.5	15,300	22

Merlin W. Erickson

Review and Outlook

John S. Austin, Research Associate, UNL Bureau of Business Research

National Outlook

Recent events in the Middle East have caused great concern about future shortages of world oil supplies. Incidents such as these are unstable and make long-term speculation difficult. Although we are on pins and needles awaiting possible future military actions, we should be similarly uncomfortable with the long-term economic consequences of the Iraqi actions.

The U.S. depends on imports for 45 percent of its petroleum products. Iraq and Kuwait account for 9 percent of these imports. The important focus is the world market for oil rather than the particular supplier of oil. Price impacts would be the same if we never imported another barrel of Iraqi crude. The critical question is whether the interruptions will be long term or short term.

Following the invasion, there has been a short-term jump of crude oil prices. At this writing, crude prices still are skyrocketing. Gasoline prices at the pump in the U.S. also have increased sharply. Those increases occurred even though current supplies of gasoline for most of the nation are adequate.

It is everyone's hope that the interruption will be short term. It is possible that the Saudis and a few other OPEC members could make up the difference in supply by pumping more oil.

It is also possible that the interruption could be long term. Long-term interruptions have different policy implications. Even prior to the Iraqi invasion, the U.S. economy was in a fragile condition. We had described it as a plateau economy. In such a state, an external shock to the system could bring a recession.

The dilemma faced by the Federal Reserve is whether to increase the money supply and drive down interest rates to keep the economy from a recession or to cut the money supply and drive up interest rates in order to curb the impact of inflation from an oil shortage.

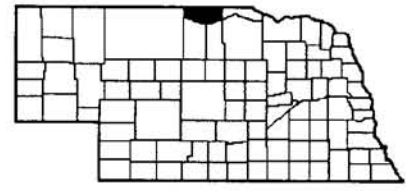
The policy that should be pursued depends on whether the interruption is short term or long term. If the interruption is short term, then an increase in the money supply followed by a decrease in interest rates would allow a price bubble to occur as the impact of a short-term oil interruption worked its way through the system. A short-term interruption would correct itself in a few months. But the Federal Reserve by increasing the money supply could ward off the real impact of a temporary oil shortage on the nation's economy.

If the interruption were long term, then an increase in money supply and a decrease in interest rates would validate the inflation brought by an energy shortage. Such a policy temporarily may solve real growth problems, only to be followed by runaway inflation and a deep recession.

What policy should be pursued over the next few months? For now, perhaps the best attitude is to wait and see what happens. This prescription implies that interest rates should be kept steady and some inflation would be allowed. An all-out fight against inflation would be unaccept-

County of the Month

Keya Paha



County Seat--Springview

License plate prefix number: 82
Size of county: 774 square miles, ranks 28th in the state
Population: 1,100 (estimated) in 1988, a change of -13.0 percent from 1980
Median age: 33.3 years in Keya Paha County, 29.7 years in Nebraska in 1980
Per capita personal income: $14,784 in 1988, ranks 30th in the state
Net taxable retail sales ($000): $2,832 in 1989, a change of +3.5 percent from 1988; $1,023 during January-April 1990, a change of +21.4 percent from the same period one year ago
Number of business and service establishments: 18 in 1987; 83.3 percent had less than five employees
Unemployment rate: 1.6 percent in Keya Paha County, 3.1 percent in Nebraska for 1989
Nonfarm employment (1989):

	State	Keya Paha County
Wage & salary workers	705,672	126
	(percent of total)	
Manufacturing	13.4%	--
Construction and Mining	3.6	*
TCU	6.5	*
Retail Trade	18.5	33.3 %
Wholesale Trade	7.6	0.8
FIRE	6.8	*
Services	23.7	*
Government	19.9	53.2
Total	100.0%	100.0%

Agriculture:

Number of farms: 259 in 1987, 269 in 1982
Average farm size: 1,833 acres in 1987
Market value of farm products sold: $18.6 million in 1987 ($71,772 average per farm)

*Data not available because of disclosure suppression

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

Merlin W. Erickson

able, as would be an all-out fight against recession. The probable policy would be to allow some deterioration in the real sector in order to moderate inflation rates and stave off a long-term problem.

When I wrote the original draft of this Review and Outlook section, I thought the probability of a recession was moderate. At this point, I have to revise my estimate of the odds of a recession as being 50-50 or even higher. The task of steering a proper policy course through the morass of conflicting information and political pressures will be a difficult one indeed.

To monitor the direction the Federal Reserve chooses, keep a close eye on the federal funds rate. The Federal Reserve does not have to wait for the next formal Federal Open Market Committee (FOMC) meeting to change its policy. Policies can be changed by the simple expedient of a conference call among members.

If there is a sustained (in this case I would say three day) change in the federal funds rate, that should signal that the Federal Reserve has changed its policy. It is our hope that no radical solution will be taken, but that the Federal Reserve will continue to practice its gradualistic approach. American economic history is full of events when the Federal Reserve slammed on the brakes to curb inflation only to precipitate a recession. Moderate action is appropriate.

Turning to other economic news, the GNP in the second quarter of this year is estimated to have grown 1.2 percent. Just a few weeks prior to the announcement, a poll of a group of economists showed that they expected growth around 1.8 percent. While we know that the 1.2 percent figure will be revised several times in the next few months, it is still disappointing.

Weaknesses in the GNP were in the consumption of goods (both durable and nondurable), exports, and investment levels. The softness in consumer durables was expected, as second quarter auto sales were below year ago levels for virtually the entire quarter. The decrease in nondurables came as something of a surprise to many. That decrease came on the heels of a strong first quarter--the second quarter may have been an adjustment to more normal levels.

The consumption of services advanced rapidly in the second quarter, but that advance was not large enough to offset weaknesses in the consumption of goods. Consequently, real consumption as a whole fell marginally in the second quarter. The weakness reported in exports likely will be revised substantially in the near future. Unfortunately, it is difficult to say which direction the revisions may take.

Investment dropped in the second quarter for all major sectors except the inventories sector. The drop in consumer durables was accompanied by an increase in inventory accumulation. That strange pattern mirrored one found in the fourth quarter of last year. Then, as now, auto sales were weak, and auto inventories rose substantially. Those increased auto inventories helped to keep the fourth quarter numbers from becoming a disaster. The buildup of inventories in the fourth quarter was reduced in the first quarter.

Therein lies a potential difference with the figures we might see for the second quarter. The second quarter buildup has been related to an anticipated auto strike in October. Thus, the second quarter accumulation of inventories may not be sold until the fourth quarter. Unfortunately the auto industry has a history of building strike inventories and being hurt by such

Table I
Income and Earnings in Nebraska*
($ Millions)

	Second Quarter 1988	Third Quarter 1988	Fourth Quarter 1988	First Quarter 1989	Second Quarter 1989	Third Quarter 1989	Fourth Quarter 1989	First Quarter 1990	% Change 1989:IV versus Year Ago
Income									
Total Personal Income	24,320	23,057	24,055	24,822	24,769	24,278	25,049	26,165	5.4
Nonfarm	21,723	21,966	22,377	22,726	23,069	23,264	23,697	24,165	6.3
Farm	2,598	1,091	1,679	2,096	1,699	1,014	1,352	2,000	-4.6
Earnings by Industry**									
Ag. Services, Forestry & Fisheries	146	143	145	143	148	156	151	155	8.4
Mining	50	49	46	44	45	45	46	47	6.8
Construction	919	887	930	900	902	879	906	1,045	16.1
Manufacturing	2,377	2,407	2,425	2,475	2,485	2,488	2,488	2,523	1.9
Nondurable	1,180	1,196	1,199	1,207	1,233	1,245	1,236	1,225	1.5
Durable	1,197	1,212	1,226	1,268	1,252	1,243	1,252	1,298	2.4
TCU***	1,625	1,627	1,601	1,652	1,639	1,627	1,649	1,706	3.3
Wholesale Trade	1,240	1,269	1,287	1,298	1,316	1,330	1,350	1,374	5.9
Retail Trade	1,583	1,607	1,633	1,666	1,677	1,703	1,727	1,773	6.4
FIRE****	1,206	1,219	1,242	1,236	1,259	1,283	1,318	1,253	1.4
Services	3,520	3,603	3,692	3,781	3,874	3,994	4,102	4,224	11.7
Government	3,068	3,050	3,169	3,224	3,312	3,282	3,399	3,458	7.3
Federal, Civilian	476	480	492	509	513	522	524	539	5.9
Military	402	401	403	417	415	412	410	422	1.2
State and Local	2,190	2,170	2,274	2,298	2,384	2,348	2,465	2,497	8.7

* All data are seasonally adjusted at annual rates
** Earnings is the sum of wages and salaries, other labor income, and income earned by sole proprietors
*** Transportation, Communication, Utilities
**** Finance, Insurance, Real Estate
Source: Bureau of Economic Analysis, U.S. Department of Commerce

actions. If there is no strike in October, auto manufacturers may be stuck with inventories well beyond desired levels.

The second quarter report also shows an increase in government purchases of goods and services. These expenditures are related to the bailout of savings and loans. Estimates of the ultimate costs of the bailout keep changing. The most shocking number, the half trillion dollar estimate, is a gross figure before any recovery of asset value by the government.

Oil inventories hit an eight year high in June. Consequently, OPEC members agreed to raise prices in July. Their solution has been a unique one—they raised production quotas at the same time they attempted to raise prices. Their argument is that they are raising quotas so that everyone will stick to them. If observed by all members, the new production quotas would be below previous actual production. Unfortunately for OPEC, it has not been able to hold together on production quotas for a long time.

Recent hostilities in the Middle East will bring a short-term price increase. Wholesale oil prices already have increased. West Texas crude approached $18 per barrel earlier this year. After the OPEC announcements in July and before the invasion of Kuwait, prices had advanced to $20 per barrel. At this writing, prices are in the $24.50 per barrel area. Whether this increase is long term is problematical.

Similarly, gasoline prices had shot up in July due to shortages in the Northeast. Europeans normally are a big supplier to that market, but have cut sales due to increases in demand on the continent. August gasoline prices likely will be fairly high compared to the first half of the year.

These changes in energy prices will cause some future price problems. But they did not cause problems with the data in June. In June the Producer Price Index increased only 0.2 percent. Consumer prices increased 0.5 percent. The relatively moderate increases in prices coupled with low rates of economic growth have allowed the Federal Reserve to make a minor adjustment to monetary policy.

In mid-July the Fed dropped the key federal funds rate from 8.25 percent to 8.0 percent. It has held steady since that time. A lower nominal interest rate can stimulate the economy. Interest sensitive areas such as housing and the consumption of durables are likely to benefit from a sustained low interest rate policy. New home sales rebounded in June.

The elements of a plateau economy continue. Industrial production increased four-tenths of a percent in June, but second quarter GNP was weak. Unemployment remains healthy at a 5.2 percent level, and inflation is relatively low.

Nebraska Outlook

First quarter data for personal income in the state of Nebraska have been released by the Bureau of Economic Analysis (BEA) and are presented in Table I. Their data show a 5.4 percent gain overall for the state in its first quarter versus a year ago. That gain is well behind that of the United States as a whole which showed an increase of 6.9 percent.

Nor did Nebraska's gain meet that of some of the leading Plains states. Both Kansas and Minnesota had increases above 8 percent. Missouri's gain was a full percentage point above Nebraska's. Iowa matched our gain, and the Dakotas lagged behind the other Plains states.

Farm income was a retarding factor in the Nebraska income report. Farm income data still were showing gains from the 1988 drought that affected neighboring states more than it did our state. Consequently, 1988 and early 1989 farm income data for Nebraska were at fairly healthy levels. First quarter 1990 showed a decrease of 4.6 percent in farm income.

Nonfarm personal income increased 6.4 percent, only a half percentage point off the national average. Two of the strongest sectors in our state were construction and services. These sectors showed gains of 16.1 percent and 11.7 percent versus year ago levels. The gains in services are following long-term trends.

Table II
Employment in Nebraska

	Revised May 1990	Preliminary June 1990	June % Change vs. Year Ago
Place of Work			
Nonfarm	729,563	730,829	2.7
Manufacturing	95,875	96,725	1.8
Durables	46,850	47,013	0.0
Nondurables	49,025	49,712	3.6
Mining	1,629	1,713	6.3
Construction	25,565	26,428	4.6
TCU*	46,785	47,067	2.6
Trade	186,516	186,617	1.1
Wholesale	55,490	55,589	2.8
Retail	131,026	131,028	0.4
FIRE**	48,338	48,616	0.9
Services	174,422	174,651	3.7
Government	150,433	149,012	4.9
Place of Residence			
Civilian Labor Force	846,012	858,155	5.2
Unemployment Rate	2.0%	2.0%	

* Transportation, Communication, and Utilities
**Finance, Insurance, and Real Estate

Source: Nebraska Department of Labor

Table III
Price Indices

	June 1990	% Change vs. Year Ago	YTD % Change vs. Year Ago
Consumer Price Index - U* (1982-84 = 100)			
All Items	129.9	4.7	4.9
Commodities	121.6	3.8	4.5
Services	138.8	5.5	5.2
Producer Price Index (1982 = 100)			
Finished Goods	117.9	3.3	4.2
Intermediate Materials	112.9	0.3	0.9
Crude Materials	101.0	-2.8	1.2
Ag Prices Received (1977 = 100)			
Nebraska	166	6.4	3.3
Crops	133	-3.6	-7.6
Livestock	187	12.0	8.7
United States	152	3.4	2.7
Crops	130	-5.8	-4.9
Livestock	172	9.6	8.8

U* = All urban consumers
Sources: U.S. Bureau of Labor Statistics, Nebraska Department of Agriculture

The construction numbers are not a surprise, given what we have been reporting from the F.W. Dodge data. The gains in the first quarter data could have been even stronger than those shown in Table I had they fully reflected the Dodge data. Employment numbers have not caught up with the gains in the construction area.

It is frustrating that there are so many different sources of information on construction, but that none of them seem to parallel one another. Anecdotal evidence indicates that the metro areas of the state are doing well in the construction activity. Given the geographic dispersion of the nonmetro part of the state, it is difficult to make generalizations.

There are pockets of progress in construction, such as the Lexington area where a major plant is being renovated. Furthermore, in some of our smaller communities, an addition to a high school or hospital will appear as a major leap in construction activity.

The growth in the first quarter has been reinforced by our own retail sales data. The gain in Nebraska net taxable retail sales was 8.2 percent versus a year ago. That would translate to approximately a 2.8 percent gain in real retail sales—a healthy gain by today's standards.

Although the nation had substantial improvement in first quarter auto sales, Nebraska's motor vehicle sales advanced 7.2 percent over last year, slightly behind the overall retail sales gain.

In more recent data, the rapid advance in retail sales slowed in April. Before we say that the sky is falling, note that the 1989 second quarter sales level was the high point of last year, both in current and real dollar increases (Figure II). Any gain

(continued on page 12)

Correction for Broken Bow

The extremely large building activity numbers reported for Broken Bow in the July issue were suspicious at the time. After some further checking, a mistake was discovered in our recording of the data. The data have been corrected for this issue. Broken Bow's building activity still is at high levels, but not the astronomical levels reported in the July issue.

We apologize for the mistake, especially to our readers from the Broken Bow area.

JSA

Table IV
City Business Indicators
April 1990 Percent Change from Year Ago

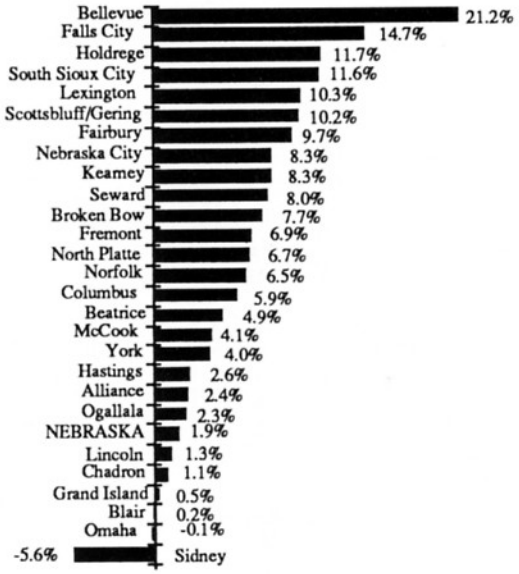
The State and Its Trading Centers	Employment (1)	Building Activity (2)
NEBRASKA	4.0	12.0
Alliance	1.9	-38.0
Beatrice	2.6	31.7
Bellevue	2.3	8.1
Blair	2.3	-68.4
Broken Bow	1.8	415.3
Chadron	8.1	-70.4
Columbus	5.4	14.6
Fairbury	0.4	242.1
Falls City	6.6	17.9
Fremont	5.3	100.0
Grand Island	3.7	6.0
Hastings	4.7	14.5
Holdrege	1.9	31.3
Kearney	4.8	297.2
Lexington	7.3	-15.9
Lincoln	4.0	5.8
McCook	1.6	73.4
Nebraska City	-2.1	199.6
Norfolk	7.9	20.8
North Platte	8.8	28.7
Ogallala	7.5	84.7
Omaha	2.3	15.0
Scottsbluff/Gering	2.4	-12.1
Seward	5.1	57.1
Sidney	4.2	-71.9
South Sioux City	2.0	-44.7
York	8.9	-2.2

(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

Figure I
City Business Index
April 1990 Percent Change from Year Ago



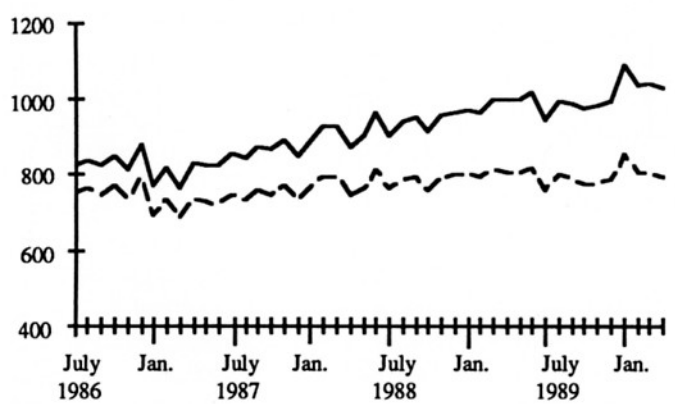
The index is a composite of employment, building activity, and real estate sales

Table V
Net Taxable Retail Sales of Nebraska Regions and Cities

Region Number and City (1)	City Sales (2) April 1990 (000s)	City Sales (2) % Change vs. Year Ago	Region Sales (2) April 1990 (000s)	Region Sales (2) % Change vs. Year Ago	Region Sales (2) YTD % Change vs. Year Ago
NEBRASKA	$876,547	3.0	$1,008,015	3.2	6.7
1 Omaha	301,656	-0.3	369,802	-1.6	5.7
Bellevue	18,840	50.4	*	*	*
Blair	5,020	15.1	*	*	*
2 Lincoln	120,820	2.4	140,234	2.2	5.8
3 South Sioux City	5,978	35.9	8,162	24.9	28.7
4 Nebraska City	3,661	13.3	18,326	6.5	8.3
6 Fremont	16,628	7.0	30,403	5.6	8.3
West Point	3,047	4.9	*	*	*
7 Falls City	2,236	29.8	9,277	12.9	6.2
8 Seward	4,563	12.5	14,662	7.8	8.0
9 York	6,625	4.4	15,824	3.7	0.9
10 Columbus	15,475	10.6	28,563	8.8	7.2
11 Norfolk	19,195	9.0	35,549	8.1	5.6
Wayne	2,934	25.3	*	*	*
12 Grand Island	33,674	0.6	47,248	-0.1	5.3
13 Hastings	15,848	3.8	25,452	5.5	2.5
14 Beatrice	7,827	9.6	17,847	8.5	9.3
Fairbury	2,836	12.5	*	*	*
15 Kearney	19,470	3.0	28,417	5.2	2.6
16 Lexington	5,903	22.5	16,039	7.4	1.2
17 Holdrege	5,168	26.4	8,921	18.6	8.3
18 North Platte	15,853	7.7	20,065	8.2	9.0
19 Ogallala	5,233	-5.4	12,341	3.0	5.1
20 McCook	7,893	5.7	11,211	6.0	1.7
21 Sidney	3,695	0.8	7,532	2.4	2.1
Kimball	1,511	5.3	*	*	*
22 Scottsbluff/Gering	18,205	26.8	25,850	8.3	5.3
23 Alliance	5,594	13.1	13,542	9.9	2.5
Chadron	2,550	11.8	*	*	*
24 O'Neill	4,763	12.9	14,414	12.4	7.5
Valentine	2,407	13.1	*	*	*
25 Hartington	1,685	5.3	8,430	1.9	2.3
26 Broken Bow	3,624	1.6	12,196	0.5	1.2

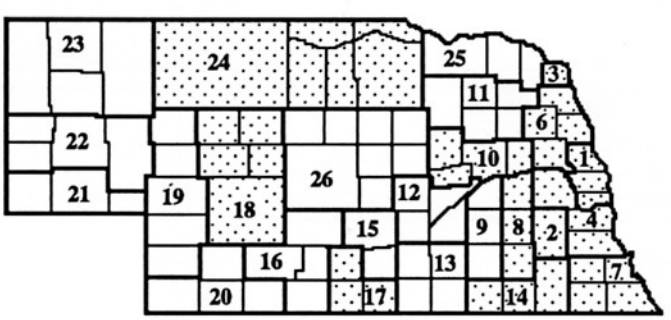
(1) See region map
(2) Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales
* Within an already designated region
Compiled from data provided by the Nebraska Department of Revenue

Figure II
Nebraska Net Taxable Retail Sales
(Seasonally Adjusted, $ Millions)



(1) The Consumer Price Index (1982-84 = 100) is used to deflate current dollars into constant dollars. Solid line indicates current dollars; broken line indicates constant dollars

Figure III
Region Sales Pattern
YTD as Percent Change from Year Ago



Shaded areas are those with sales gains above the state average. See Table V for corresponding regions and cities

(continued from page 10)

above those levels is doing quite well.

We are showing an advance of 3.2 percent for April on a statewide basis (see Table V). On an accumulated basis, the gains this year have been 6.7 percent overall. In the first four months of the year, the Consumer Price Index advanced 4.7 percent versus its year ago level, implying that the gain so far this year in real net taxable retail sales has been about 2.0 percent.

Construction activity in the state has eased from its rapid pace in the first half of this year according to data from F.W. Dodge. In June there was a drop of 41 percent in the total value of contracts let. On a year-to-date basis, however, an 18 percent gain was shown for the first half of this year over last year. Residential construction is the slowest in the state.

Nevertheless, Nebraska is running counter to the United States, showing gains in new housing activity. We have shown a turnaround in apartment building construction that has not characterized any of the U.S. construction data so far.

Once again the problem in these comparisons goes back to the base year. June 1989 was an exceptional month for construction in the state, far ahead of its year ago values in June 1988. June 1990 shows a dip from the strength of previous months so far this year, but it certainly cannot be classified as a disaster. More data are needed to establish whether a trend has started. Year-to-date data still show positive increases and a relatively strong construction sector.

Nebraska continues to show exceptionally low unemployment rates. The 2.0 percent rate for the month of June was a low for the nation and contrasts to the U.S. number of 5.2 percent. Workforce data show an increase in jobs (not persons) of 2.7 percent versus a year ago. Nebraska continues to add jobs at a rapid pace, helping to keep unemployment at low levels.

If the national economy continues on its plateau, or worse, goes into an oil shock recession, then we can expect a leveling in Nebraska's job growth. If such a recession occurs, then it will be difficult to sustain the state's low unemployment rate.

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