

Business in Nebraska

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Prepared by the Bureau of Business Research, 200 College of Business Administration, University of Nebraska-Lincoln, Lincoln, NE 68588-0406, 402/472-2334

School Spending—How Does Nebraska Compare?

Lisa Valladao

UNL Bureau of Business Research

Nebraska's state government spent \$169 per capita on elementary and secondary education in fiscal year 1987, 11.8 percent of total state government expenditures. In comparison, the 1987 U.S. average state educational expenditure per capita was \$350, 18.6 percent of the total.

Iowa, \$347 per capita (19.4 percent), and Kansas, \$322 per capita (21.9 percent), spent considerably more on elementary and secondary education than did Nebraska. South Dakota spent slightly more in dollar terms (\$183 per capita), but less in percentage terms (10.1 percent).

Per capita expenditure analysis reveals many striking comparisons. This article also will focus on the three traditional revenue sources for elementary and secondary education: local, state, and federal funds.

From 1920 to 1979 local jurisdictions provided most of the revenue for elementary and secondary education in the U.S. In 1979 state funding surpassed local funding. Federal funding was consistently low through 1989, ranging from 6.2 percent to 10.0 percent. Federal funds typically are earmarked for specific programs such as Head Start, Job Corps, USDA's child nutrition program, overseas dependents schools, education for the handicapped, and school improvement programs.

Nebraska relies more heavily on local sources of revenue for education than do neighboring states or the nation. From 1985 to 1989 Nebraska schools received 70.2 percent of total educational revenues from local sources, 23.2 percent from state revenues, and 6.6 percent from federal revenue.

In contrast, the U.S. average for 1985 to 1989 was 44.8 percent local revenues, 48.7 percent state revenues, and 6.4 percent federal revenues. Figure 1 shows the relative mixture of local, state, and federal educational

funding for the U.S., Nebraska, Iowa, Kansas, and South Dakota from 1985 to 1989.

The only state with a higher percentage of educational funding from local sources than Nebraska is New Hampshire. From 1985 to 1989 local sources provided 90.0 percent of New Hampshire's total educational revenue, on average.

The state least reliant on local sources is Hawaii which received only 0.6 percent of its educational revenues from 1985 to 1989 from local sources, on

State Economic Scoreboard

Change from same month one year ago
See Review and Outlook for more details

	State	Metro+	Nonmetro
Motor Vehicle Sales (January) Constant \$	↓ -23.0%	↓ -29.8%	↓ -18.6%
Nonmotor Vehicle Sales (January) Constant \$	↓ -5.7%	↓ -8.2%	↓ -2.9%
Building Activity (January) Constant \$	↓ -7.9%	↓ -12.6%	↓ -1.1%
Employment (March)	↑ 2.6%	↑ 3.0%	↑ 2.2%
Unemployment Rate* (March)	↑ 2.8%	↑ 2.5%	↑ 3.1%

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

average. Most of Hawaii's educational revenues (88.0 percent) were provided by the state.

State government per capita expenditures vary widely. In terms of total per capita educational expenditures from all sources, however, states are more homogeneous. Nebraska's total per capita educational expenditures were \$751, 6.4 percent more than the U.S. average in 1987. Iowa spent \$780, Kansas spent \$759, and South Dakota spent \$695 per capita from all revenue sources in 1987.

Over the last two decades expenditures per pupil (excluding capital expenditures) in public schools have increased substantially more than has the rate of inflation, although the increase in expenditures has varied considerably among the states. From 1970 to 1988 Utah increased its expenditures per pupil only 27.8 percent, while Alaska expanded its per pupil expenditures over 130.0 percent (in constant 1989 dollars).

The U.S. average per pupil bill increased from \$2,609 in 1970 to \$4,653 in 1988, a jump of 78.3 percent. Expenditures per pupil in Nebraska increased 74.7 percent over the period, from \$2,477 to \$4,327. The same pattern was evident in Iowa, Kansas, and South Dakota from 1970 to 1988. The National Center for

Education Statistics forecasts that expenditures per pupil will continue to rise through 1994.

Educational expenditures can be split into two functions or classes: direct instructional expenditures and support services. Direct instructional expenditures cover interaction between students and teachers and include salaries, employee benefits, and purchased instructional services. Support services, or noninstructional expenditures, comprise general and school administration, student and staff support services, improvement of instruction, libraries, business operations, facilities maintenance, food services, student transportation, and interscholastic athletics.

From 1985 to 1989 Nebraska spent an average of 63 percent of its total educational expenditures on instruction, slightly more than the national average of 60.5 percent. Iowa spent 58.6 percent, Kansas spent 58.3 percent, and South Dakota spent 60.2 percent of total educational expenditures on instruction from 1985 to 1989.

Any survey of revenues and expenditures, however helpful to policy makers in tracking the flow of resources, does not address the most vital issue—what impact the resources have on the quality of education and the learning process.

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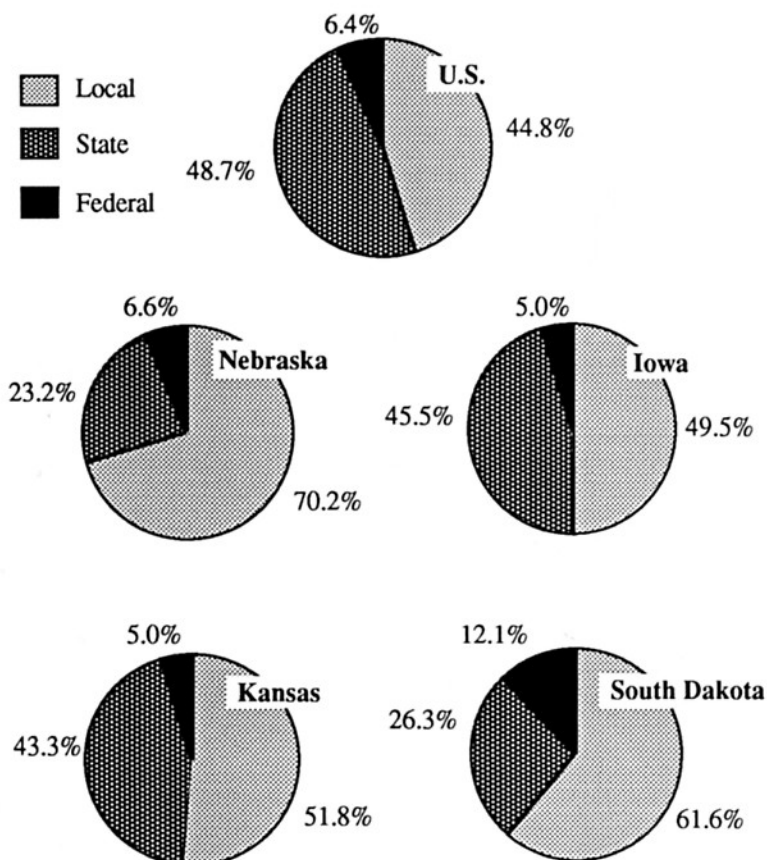
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Figure 1
Educational Revenues by Source
1985 to 1989



Thank You

The Bureau staff appreciates all of you who responded to our mailing list update in the April issue. Not only did we receive address corrections, but we also got a large number of compliments and suggestions for future publications. Thank you.

We are always delighted to receive your letters. Please feel free to let us know how you think *Business in Nebraska* can be improved.

County Income Changes

Merlin W. Erickson and David D. DeFruiiter

UNL Bureau of Business Research

Three counties had an increase greater than 20 percent in personal income from 1988 to 1989. Arthur had the largest increase (23.2 percent), followed by Keya Paha (21.7 percent) and McPherson (20.2 percent). Each of these counties also ranks in the top ten among all county per capita income estimates, according to a recent release by the Bureau of Economic Analysis, U.S. Department of Commerce.

These income growth rates contrast with their population rank. Arthur has the smallest population in the state with 462 residents, according to the 1990 U.S. Census of Population. McPherson had the second smallest population (546 residents), and Keya Paha ranked the tenth smallest with a population of 1,029.

Hamilton is the only county with a decrease in per capita personal income from 1988 to 1989, a decline of only one-tenth of one percent. Chase showed practically no change in income during the period. The average annual growth rates for 1980-1988 also are shown for comparison in the table below. In a subsequent issue of *Business in Nebraska*, we will take a more detailed look at county level income.

Wheeler had the highest per capita income at \$32,706, a rank this county has held each year since 1985. Perkins is ranked in second place at \$23,700 per capita in personal income. Thurston is ranked in last place among the 93 counties with a per capita personal income of \$9,673; however, this was a 13.5 percent increase over 1988.

County income estimates (especially for counties with small populations) should be used with some caution, as these estimates may be rough approximations.

	Average Annual Change in Per Capita Personal Income		Per Capita Personal Income		Population		Average Annual Change in Per Capita Personal Income		Per Capita Personal Income		Population	
	1988-89 (%)	1980-88 (%)	1989 (\$)	1989 (rank)	1990 (no.)	1990 (rank)	1988-89 (%)	1980-88 (%)	1989 (\$)	1989 (rank)	1990 (no.)	1990 (rank)
U.S.	6.6	6.6	17,594		/1		7.5	5.3	15,069	38	32,508	9
Nebraska	6.7	6.0	15,685		/1		7.3	6.9	13,703	77	18,285	15
NE Metro	6.5	5.7	16,755		/1		7.2	6.5	13,856	70	37,447	5
NE Nonmetro	6.9	6.2	14,721		/1		7.0	6.9	12,796	85	6,244	52
Box Butte							7.0	2.1	16,295	18	13,130	21
Lincoln							7.0	6.8	11,037	92	9,534	30
Keya Paha	21.7	12.9	17,830	10	1,029	83	6.9	6.0	14,665	51	29,820	10
McPherson	20.2	7.3	18,082	9	546	92	6.9	5.5	16,067	21	213,641	2
Loup	17.5	5.7	13,725	76	683	90	6.9	4.0	17,127	15	2,237	77
Blaine	16.5	6.5	15,040	39	675	91	6.8	9.3	15,421	35	4,279	62
Grant	16.0	4.3	15,794	27	769	89	6.7	4.3	17,299	14	1,549	81
Thomas	15.7	2.2	13,972	67	851	87	6.7	8.7	14,674	50	3,101	72
Cherry	14.8	2.6	14,378	63	6,307	51	6.6	4.8	15,860	26	8,584	38
Dixon	13.7	7.1	12,887	84	6,143	53	6.5	6.6	14,703	48	22,794	12
Thurston	13.5	5.6	9,673	93	6,936	46	6.4	2.8	14,431	61	36,025	6
Hooker	13.2	1.5	12,190	91	793	88	6.4	8.5	13,781	73	4,275	63
Wayne	13.1	5.5	12,620	87	9,364	32	6.2	5.7	17,674	11	416,444	1
Pawnee	13.0	8.3	13,688	78	3,317	71	6.2	5.7	16,256	19	29,625	11
Rock	12.3	7.6	15,162	37	2,019	79	6.2	4.5	14,159	65	11,705	25
Boyd	11.1	5.4	12,436	89	2,835	74	6.1	4.5	14,394	62	34,500	7
Otoe	11.0	6.4	14,572	55	14,252	20	6.1	9.6	13,902	68	6,667	48
Nemaha	10.5	7.1	14,661	52	7,980	40	6.0	9.4	18,574	7	9,715	29
Cedar	10.4	7.5	12,338	90	10,131	26	6.0	4.6	13,781	72	21,318	13
Dawes	10.3	4.5	13,728	75	9,021	34	5.9	4.4	17,600	12	4,108	64
Brown	10.2	6.0	15,665	30	3,657	69	5.8	5.5	14,847	45	48,925	4
Garden	10.1	5.1	20,054	5	2,460	76	5.8	6.4	15,009	41	102,583	3
Hitchcock	10.1	6.9	15,630	31	3,750	67	5.3	7.5	14,523	57	5,169	59
Sheridan	10.1	5.7	15,554	34	6,750	47	5.3	12.4	20,692	4	1,222	82
Dakota	10.0	4.5	13,880	69	16,742	16	5.0	7.1	14,974	42	7,868	42
Nuckolls	9.9	8.2	13,832	71	5,786	55	4.9	10.4	13,196	82	3,718	68
Cuming	9.7	5.5	14,631	53	10,117	27	4.4	3.8	15,966	24	5,675	56
Custer	9.6	8.0	15,718	28	12,270	24	4.3	8.7	14,810	47	3,938	65
Washington	9.5	6.5	15,686	29	16,607	17	4.1	10.1	19,081	6	7,103	45
Wheeler	9.3	19.6	32,706	1	948	84	3.7	7.9	12,635	86	6,055	54
Holt	9.3	7.8	14,592	54	12,599	23	3.3	2.2	14,906	44	5,423	58
Colfax	8.9	6.1	13,983	66	9,139	33	3.2	9.5	12,502	88	7,965	41
Furnas	8.8	9.0	16,028	23	5,553	57	3.0	12.1	14,473	60	3,006	73
Garfield	8.7	6.3	13,282	81	2,141	78	2.9	-3.6	15,601	32	852	86
Richardson	8.7	6.6	14,225	64	9,937	28	2.8	9.2	16,107	20	6,629	50
Jefferson	8.7	7.1	15,266	36	8,759	36	2.1	7.9	15,598	33	14,428	19
Logan	8.3	5.4	16,590	16	878	85	2.0	8.8	12,983	83	8,042	39
Pierce	8.1	8.7	14,563	56	7,827	43	1.7	9.1	13,455	80	3,810	66
Dawson	8.1	5.5	14,689	49	19,940	14	1.6	12.4	21,196	3	2,582	75
Madison	7.9	5.6	14,492	59	32,655	8	1.5	9.8	16,060	22	7,123	44
Cheyenne	7.9	5.0	16,376	17	9,494	31	1.4	8.6	14,495	58	8,601	37
Johnson	7.9	8.2	13,752	74	4,673	60	1.1	11.7	17,417	13	1,928	80
Thayer	7.8	8.5	15,035	40	6,635	49	0.6	8.2	23,700	2	3,367	70
Saline	7.7	5.8	14,842	46	12,715	22	0.0	7.0	15,860	25	4,381	61
Seward	7.6	7.0	13,522	79	15,450	18	-0.1	10.2	14,972	43	8,862	35
Hamilton												

/1 1990 population for U.S., 249,632,692; Nebraska, 1,578,385; NE Metro, 766,017; NE Nonmetro, 812,368

We're Crazy About Computers

David D. DeFruiter

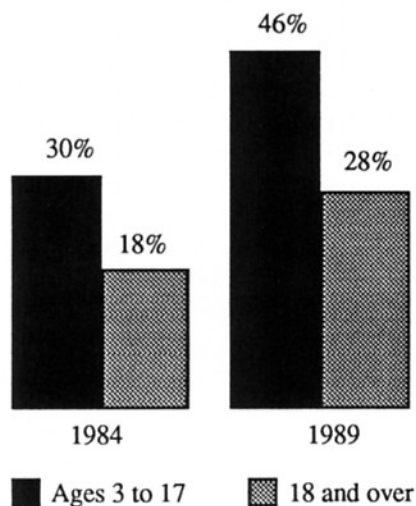
UNL Bureau of Business Research

It's almost a cliché to say that personal computers have become a significant part of our daily lives at home, at work, and at school since their introduction nearly ten years ago. By the fall of 1989, nearly one in three persons age three years and older used a computer, according to a report from the Commerce Department's Census Bureau. The report also concludes that the proportion of households with computers grew from 8 percent in 1984 to 15 percent in 1989.

Computer use was much greater among those under 17 years of age (Figure 1). Nearly one-half (46 percent) of those age 3 to 17 used a computer at home or in school in 1989, up from 30 percent in 1984. Twenty-eight percent of those 18 and over reported using a computer at home, work, or school—up from 18 percent in 1984. Among the 115 million employed adults, 37 percent said that they used a computer at work, compared with 25 percent five years earlier.

The jump in computer use may be attributable to significant price reductions and increased availability of software packages. Programs for desktop publishing,

Figure 1
Computer Use by Age
1984 and 1989



databases, and electronic mail have been key players in stimulating rapid growth.

Games top the list for children as the most common use of home computers (84 percent), whereas word processing (62 percent) is the most popular use of home computers for adults (Figure 2).

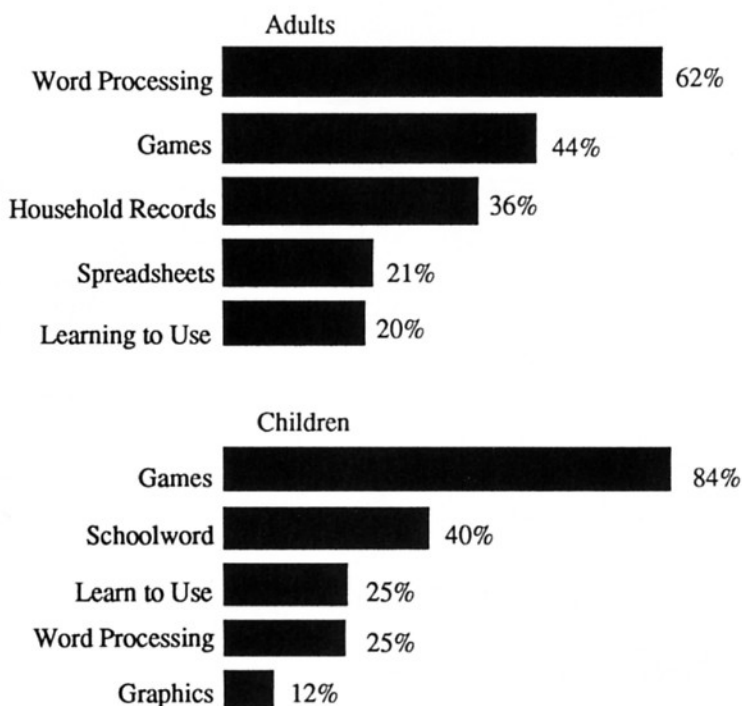
The 1989 report indicates, as did the 1984 report, that two groups represent the leading edge in computer usage. One group consists of persons who became comfortable using computers in their jobs and find uses for them at home. The other consists of parents who are preparing their children for the workforce.

Other highlights of the report include:

- More women (43 percent) than men (32 percent) use computers in the workplace;
- Home access and school use of computers rise with income;
- The highest level of usage is in finance, insurance, and real estate, where 71 percent of workers report using computers;
- Among students, white children are more likely to use a computer at school than are black children (48 percent versus 35 percent);
- There is a strong correlation between education, home ownership, and computer use. Children of householders with four or more years of college report a use rate close to 75 percent, compared with 58 percent for householders with less than a high school diploma.

As in all surveys, the data are subject to sampling error.

Figure 2
Most Popular Applications of Home Computers
1989



State Income Inequality

Lisa Valladao

UNL Bureau of Business Research

State per capita income inequality, which decreased steadily from 1932 to 1979, began to increase rapidly after 1979, according to the Economic Research Service (ERS), U.S. Department of Agriculture. From 1979 to 1989 inequality rose 41 percent. State per capita income inequality is measured in relation to U.S. per capita income.

Indexing Nebraska's 1989 per capita income to the national mean can be illustrated in the following manner:

$$\frac{\text{Nebraska 1989 Per Capita Income}}{\text{U.S. 1989 Per Capita Income}} = \frac{92 \text{ (Indexed Nebraska PCI)}}{100 \text{ (Indexed U.S. Mean PCI)}}$$

Per capita income in Nebraska decreased significantly in relation to the national mean from 1979 to 1989, largely as a result of widely fluctuating farm income levels.

Income comprises three major components—earnings; dividends, interest, and rent (DIR); and transfer payments. Earnings, the largest component of total per capita income (69 percent), was responsible for the rapid increase in state per capita income inequality. Changes in transfer payments (which accounted for 14 percent of total income) tempered the effect of earnings on state per capita income inequality.

State Groupings

States can be categorized by their 1979-1989 change in per capita income relative to the national mean as convergent, moving toward the mean, or divergent, moving from the mean. Divergence upward (states with above average state per capita income whose per capita income rose) and downward (states with below average state per capita income whose per capita income fell) contributes to per capita income inequality. Convergence upward (states with below average state per capita income whose per capita income increased) and downward (states with above average state per capita income whose per capita income dropped) contributes to per capita income equality.

All upwardly moving states are located along the Atlantic coast or in New England. The largest increase in state per capita income inequality from 1979 to 1989 was caused by the upwardly divergent states (states with higher than average per capita incomes in 1979 that rose further above the mean after 1979).

Per capita income relative to the national mean among these upwardly divergent states increased an average of 16 percentage points. Among the upwardly

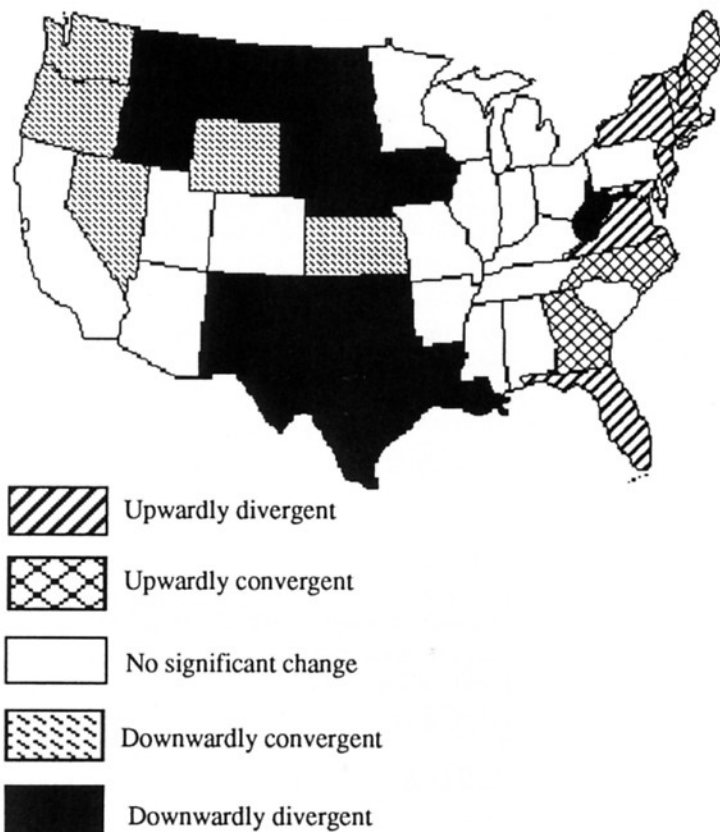
convergent states (states with lower than average per capita income in 1979 that rose toward the U.S. mean after 1979), the average increase in per capita income was 9.5 percentage points.

All downwardly moving states (a group that includes Nebraska, Iowa, South Dakota, North Dakota, Kansas, and Wyoming) except West Virginia are located west of the Mississippi. Per capita income among the downwardly moving states decreased an average of 11 percentage points, with diverging states declining an average of 10 points and converging states falling an average of 14 points.

Per capita income decreased 10 points in Nebraska, 12 points in Iowa, 13 points in South Dakota, 16 points in North Dakota, 10 points in Kansas and 32 points in Wyoming. Minnesota showed no significant change in per capita income. Figure 1 illustrates the movement for individual states. Due to potential margins of error in estimating state per capita income, states that diverged or converged less than five percentage points are considered to have experienced no significant change.

Since 1929 Nebraska's per capita income averaged approximately 92 percent of the national mean. In 1979 the state's relative per capita income was higher than the

Figure 1
State Per Capita Income Movement
1979-1989



Percent Change? Or Percentage Point Change?

A common mistake is to interchange the terms *percentage point change* and *percent change*. They are different. Confusion occurs when the original unit of measurement is in percentage terms, as is the case with the Consumer Price Index (CPI).

To illustrate, the CPI for all items in December 1989 was 377.6 percent (1967 base period). The CPI for all items increased to 400.9 percent in December 1990. The actual change in the CPI for 1989-1990 was 23.3 (400.9 - 377.6 = 23.3). Because the unit of measurement is in percentage terms, the change is a percentage point change.

The percent change in the CPI, in contrast, would be calculated by dividing the change (the percentage point change) by the initial value (the CPI for 1989) and multiplying by 100. The percent change in the CPI for 1989-1990 was 6.2 percent ($23.3 \div 377.6 \times 100 = 6.2$ percent).

State per capita incomes are indexed relative to national per capita income; hence, the unit of measurement is percent. The index for Nebraska per capita income in 1979 was 102; that is, Nebraska's per capita income in 1979 was 102 percent of the national average per capita income. In 1989, the index for Nebraska per capita income was 92, a 10 percentage point decrease from 1979 to 1989. The percent change was -10.9 percent ($-10 \div 102 \times 100 = -10.87$ percent).

norm due to exceptionally high farm income. Because farm income causes most of the variance in Nebraska's per capita income, the decrease in Nebraska's relative per capita income from 1979 to 1989 reflects a return to its normal position rather than a significant overall change.

Industrial Groupings

States also can be grouped according to percent of earnings from major industries. States classified as traditional manufacturing states (Connecticut, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and Wisconsin), farming states (Arkansas, Idaho, Iowa, Kansas, Kentucky, Minnesota, Montana, North Dakota, Nebraska, South Dakota, Vermont, and Wisconsin), or energy states (Colorado, Kentucky, Louisiana, Montana, New Mexico, North Dakota, Oklahoma, Utah, Texas, West Virginia, and Wyoming) had severe economic problems during the 1980s. States classified as high technology manufacturing states (Connecticut, Delaware, Massachusetts, New Hampshire, New Jersey, and Vermont) or producer services states (California, Colorado, Connecticut, District of Columbia, Florida, Illinois, Maryland, Massachusetts, New Jersey, and New York) enjoyed substantial economic growth during the decade.

Although traditional manufacturing states (those with at least 12 percent of total earnings derived from manufacturing in 1979) were hit hard by increased foreign competition in the 1980s, the traditional manufacturing states had little significant impact on the overall increase in state per capita income inequality. Per capita income in the manufacturing states increased an average of 1.3 percentage points.

The farm crisis depressed income growth rates in the 12 states with at least 4 percent of total earnings from farming, but one-third of these states were able to maintain their relative per capita income positions (Table 1). Per capita income in the farm states declined an average of 6.3 percentage points.

Falling energy prices contributed significantly to the rise in state per capita income inequality. The average decline in per capita income in the 11 states with at least 3 percent of total earnings from energy was 10.6 percentage points.

Advances in high technology generated new investment and employment opportunities in some states. The 19 point average increase in per capita income in states with 9 percent or more of total earnings from high tech industries affected growing income inequality significantly. All six of the states classified as high tech are on the Atlantic coast or in New England.

Producer services industries grew rapidly in the 1980s. Per capita income in the producer services states (more than 9 percent of total earnings) increased an average of 10.8 percentage points. Seven of the producer services states are on the Atlantic coast. The other three states in this group (California, Colorado, and Illinois) experienced no significant change in income.

Table 1
Farm State Per Capita Income Change 1979-1989

	1979	1989	% Point Change
Arkansas*	80	78	-2.0
Idaho	90	83	-7.0
Iowa	105	93	-12.0
Kansas	107	97	-10.0
Kentucky*	85	83	-2.0
Minnesota*	106	107	1.0
Montana	94	83	-11.0
Nebraska	102	92	-10.0
North Dakota	96	80	-16.0
South Dakota	93	80	-13.0
Vermont	90	99	9.0
Wisconsin*	104	101	-3.0

* change not statistically significant

Conclusion

Will the present trend in state per capita income inequality continue? Three scenarios have been projected by the Economic Research Service.

Scenario one assumes that per capita income growth in each state will continue according to the 1969-1989 trend. The gap in per capita income inequality will widen 56 percent from 1989 to 1995, 14 percent more than the 1979-1989 increase.

Scenario two assumes that per capita income will grow at the average 1983-1989 rate, reflecting the economic expansion that occurred during those years. Under this scenario, state per capita income inequality will grow 31 percent from 1989 to 1995.

Scenario three is based on Bureau of Economic Analysis projections of state per capita income through the year 2000. BEA views the 1979 to 1989 increase in income inequality as an aberration and projects a slowdown in the national growth rate of real per capita income to 1.23 percent per year from 1988-2000, down from the 1.53 percent growth rate during 1979-1988.

According to these projections, per capita income will grow slower than average in high income regions (those regions above the mean in 1988) and faster than average in low income regions. Even under these conditions, however, the level of inequality in 1995 will be 28 percentage points above the 1979 level.

References

The Rapid Rise in State Per Capita Income Inequality in the 1980s, Sources and Prospects, January 1991, Thomas D. Rowley, John M. Redman, John Angle, U.S. Department of Agriculture, Economic Research Service.

BEA projections do not include 1989 figures; in order for the projections to be accurate, income will have to converge even more quickly than projected.

Recent events can combine to change the circumstances of state per capita income inequality. The current slowdowns in the northeast and mid-Atlantic regions easily could reduce the levels of inequality. State per capita income data from 1990 and 1991 are needed to indicate the scope and longevity of such changes.

Over time, the inequality in state per capita income can cause divergence in regional living standards, human resources, infrastructure development, and general economic vitality. If regional per capita income equality is to become an important national issue, the burden of boosting conditions in the poorer regions undoubtedly will fall on federal policy makers.

Veterans Living in Nebraska and the Nation

Merlin W. Erickson

UNL Bureau of Business Research

The number of veterans living in the United States was estimated at 27 million as of March 31, 1990. The U.S. Department of Veterans Affairs provided this national estimate along with comparable estimates for each of the 50 states and estimates for various subgroups. World War II veterans, about 8.9 million persons, were the largest of the subgroups identified.

Nebraska veterans were estimated at 176,000. Of this total, 135,000 gained this distinction during wartime. World War II veterans were again the largest subgroup, followed by a close second—veterans of the Vietnam era. Peacetime veterans account for nearly one-fourth of all veterans in this state (see below).

Veterans comprise 15 percent of the adult population and approximately 11 percent of the total population of the Cornhusker State. They are an important part of the business and economic network throughout the state, including farm and nonfarm activities. Many Nebraska families identify with one or more subgroups due to the various time periods that members served in active duty.

Another subgroup of veterans likely will be added to those shown below. The more than one-half million military personnel assigned to the Desert Storm operation in the Persian Gulf included regular military, reserves, and National Guard men and women from Nebraska. Among this group will be those veterans

Item	U.S. and Nebraska Veterans	
	U.S.	Nebraska
	—Thousands—	
Total Veterans	27,001	176
Wartime Veterans:		
Total ¹	20,754	135
Vietnam Era	8,301	53
Korean Conflict	4,854	33
World War II	8,892	55
World War I	90	1
Peacetime Veterans		
Total	6,247	41
Post-Vietnam Era	2,976	21
Service Between Korean Conflict and Vietnam Era Only	2,943	19
Other Peacetime	328	1
Veterans per 1,000 Civilian Population Over 18 Years of Age	147.3	150.0

¹ Totals include some overlapping among subgroups

who will return to this state and who again will generate economic activity through expenditures for durable and nondurable goods and services.

Review and Outlook

John S. Austin

UNL Bureau of Business Research

National Outlook

From Glee to Hand Wringing

Years ago Nancy Wilson of Omaha had a hit tune entitled "What a Difference a Day Makes." Today's economists may be singing a song called "What a Difference a Month Makes."

A month ago, the general atmosphere was elated—the end of the recession appeared imminent. But this month the gloom and doomers prevail. What has changed? The answer is very little. There lies the problem. We needed to see more positive changes in the last month in order to justify continued optimism.

The biggest disappointment is automobile sales. Production plans for the second quarter are extremely low. Production cuts first were publicized in March.

Where do we stand at present? Consumer confidence has slipped marginally, but is still high compared to two or three months ago. Automobile sales have yet to recover, remaining below their year ago levels. Housing starts are advancing, although the increase in new house sales in March was a modest 1 percent.

Perhaps the biggest change on the economic scene over the last month is the recent Federal Reserve decision to cut the discount rate and the federal funds rate. Let's focus on that story for a moment.

We need to distinguish the discount rate and the federal funds rate. The discount rate is the rate at which banks may borrow from the Fed. Little borrowing is done at this rate—the discount rate is essentially a symbol. Thus, the drop in the discount rate of a half a percent does not imply that we will see decreases in consumer interest rates of the same magnitude.

The federal funds rate dropped a quarter of a percent at the same time as the fall in the discount rate. The federal funds rate is an interest rate charged among banks for extremely short-term borrowing. This rate is controlled closely by Federal Reserve monetary policy.

The change in the federal funds rate is more important than the discount rate change, because the federal funds rate is an actively used interest rate. Other short-term interest rates are linked to the federal funds rate. Several banks lowered their prime rates within a few days of the Fed's actions. The prime rate is the rate charged by banks to their best customers.

Nevertheless, one can question the importance of short-term interest rates. Although they may impact financial markets, such rates have little impact on long-term investment decisions. We need to look at longer-term interest rates, such as the mortgage rate. Long-term rates tend to be tied to changes in inflation.

Thus, the mortgage rate and the federal funds rate may be only loosely tied. If we wish to stimulate the economy, the Federal Reserve's actions should be linked to a reduction of overall levels of inflation. This reduction

Table I
Income and Earnings in Nebraska*
(\$ millions)

	Fourth Quarter 1988	First Quarter 1989	Second Quarter 1989	Third Quarter 1989	Fourth Quarter 1989	First Quarter 1990	Second Quarter 1990	Third Quarter 1990	Fourth Quarter 1990	% Change 1990:IV vs. Year Ago
Income										
Total Personal Income	23,994	25,201	25,253	24,951	25,682	27,298	27,218	26,817	27,395	6.7
Nonfarm	22,271	22,815	23,228	23,615	24,040	24,487	24,970	25,245	25,606	6.5
Farm	1,723	2,387	2,025	1,336	1,641	2,811	2,248	1,572	1,789	9.0
Earnings by Industry**										
Ag. Services,										
Forestry & Fisheries	139	135	143	150	147	155	153	159	156	6.1
Mining	58	56	54	54	55	56	56	60	64	16.4
Construction	950	912	931	919	930	981	976	988	987	6.1
Manufacturing	2,443	2,472	2,472	2,503	2,500	2,568	2,634	2,605	2,676	7.0
Nondurable	1,206	1,218	1,228	1,241	1,238	1,218	1,287	1,264	1,286	3.9
Durable	1,237	1,254	1,244	1,262	1,263	1,350	1,347	1,341	1,390	10.1
TCU***	1,673	1,733	1,733	1,723	1,737	1,749	1,784	1,806	1,800	3.6
Wholesale Trade	1,300	1,307	1,327	1,336	1,351	1,426	1,412	1,486	1,471	8.9
Retail Trade	1,674	1,693	1,703	1,734	1,743	1,775	1,781	1,809	1,829	4.9
FIRE****	1,210	1,262	1,258	1,255	1,297	1,310	1,346	1,372	1,381	6.5
Services	3,784	3,890	3,956	4,067	4,160	4,219	4,379	4,482	4,611	10.8
Government	3,134	3,185	3,239	3,270	3,360	3,421	3,594	3,546	3,633	8.1
Federal, Civilian	486	500	505	510	515	537	572	548	548	6.4
Military	406	420	417	414	411	421	420	422	425	3.4
State & Local	2,242	2,265	2,317	2,345	2,434	2,463	2,602	2,576	2,660	9.3

* 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

in turn will work its way through to a reduction in long-term interest rates, thereby stimulating investment.

One of the current difficulties is that U.S. interest rates are out of line with international rates. American investors can tap into higher international interest rates; there may be a tendency for American funds to flow from the country to more attractive interest rate areas. Thus, lowering domestic rates alone is not always a solution to money availability problems. Considering how low short-term rates were before the Fed's actions, one has to question how important the drop was.

In other economic news, the GNP release of late April verified what we already knew—the first quarter was one of continued downturn. GNP in the first quarter dropped 2.8 percent at annual rates compared to the fourth quarter. In the fourth quarter, the drop was 1.6 percent. The largest decrease in GNP was in the investment block. We should not be surprised, as nonresidential investment tends to be a lagging or, at best, coincident indicator. Investment in this area is cooling, as is expected at this point in the business cycle.

Housing, on the other hand, is a leading indicator. Housing rebounded in February and March. The big rebound was in February, when new house sales increased 18.6 percent. March sales advanced 1.0 percent.

Consumer spending rose 0.6 percent in March following a 1.0 percent increase in February. These increases are surprising, as personal income increased only 0.2 percent in both February and March. These two moderate increases followed a moderate decrease of 0.4 percent in January.

Consumer confidence, according to the Conference Board, fell approximately two points, from 81.1 in March to 79.2 in April. This small regression was dwarfed by February's gain of 21.6 percent. The Conference Board described the April numbers as "showing sustained consumer confidence."

The unemployment rate dropped 0.2 percent in March, surprising many analysts who had expected an increase.

How does all this news affect our forecast for the economy? Basically, the date anticipated for start of the recovery may have slipped somewhat, given recent economic news. Many economists currently believe that the recovery will begin this summer.

It is now less likely that the second quarter 1991 GNP will show a positive advance.

Nebraska Outlook

The regional nature of the recession was revealed in the personal income data for the fourth quarter recently released by the U.S. Bureau of Economic Analysis. Personal income growth in Nebraska, the Plains, and Rocky Mountain states far outstripped U.S. growth. Table I gives details of Nebraska's recent track record.

Data from an additional source show that Nebraska personal income grew 2.2 percent from the third quarter

Table II
Employment in Nebraska

	Revised February 1991	Preliminary March 1991	March % Change vs. Year Ago
Place of Work			
Nonfarm	743,728	750,964	4.7
Manufacturing	100,562	100,368	4.1
Durables	49,135	48,985	1.8
Nondurables	51,427	51,383	6.5
Mining	1,447	1,637	11.0
Construction	25,676	27,349	14.6
TCU*	45,751	45,552	0.5
Trade	186,328	188,141	2.9
Wholesale	50,879	51,313	-2.3
Retail	135,449	136,828	4.9
FIRE**	49,131	49,401	2.4
Services	186,488	188,758	8.2
Government	148,345	149,758	3.7
Place of Residence			
Civilian Labor Force	852,250	857,366	2.9
Unemployment Rate	2.8	2.8	

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

Source: Nebraska Department of Labor

Table III
Price Indices

	March 1991	% Change vs. Year Ago	YTD % Change vs. Year Ago
Consumer Price Index - U* (1982-84 = 100)			
All Items	135.0	4.9	5.3
Commodities	125.7	3.8	4.4
Services	144.8	5.8	6.1
Producer Price Index (1982 = 100)			
Finished Goods	120.6	2.9	3.3
Intermediate Materials	114.3	1.7	2.3
Crude Materials	101.6	-3.8	0.2
Ag Index of Prices Received (1977 = 100)			
Nebraska	162	-0.6	-2.3
Crops	115	-10.9	-11.5
Livestock	192	4.3	2.2
United States	149	-0.7	-3.5
Crops	128	-0.8	-6.0
Livestock	169	-1.2	-2.1

U* = All urban consumers

Source: U.S. Bureau of Labor Statistics, Nebraska Department of Agriculture

to the fourth quarter of 1990, nearly a dead match to the Plains growth rate of 2.3 percent. The U.S. expanded only 0.8 percent. The Rocky Mountain states grew an overall 2.9 percent, led by Montana's increase of 10.0 percent. North Dakota led the Plains and the U.S. with an increase of 19.9 percent.

Much of the growth in personal income was in the farm sector. The BEA notes that the farm income increases in the fourth quarter followed a decrease in the

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

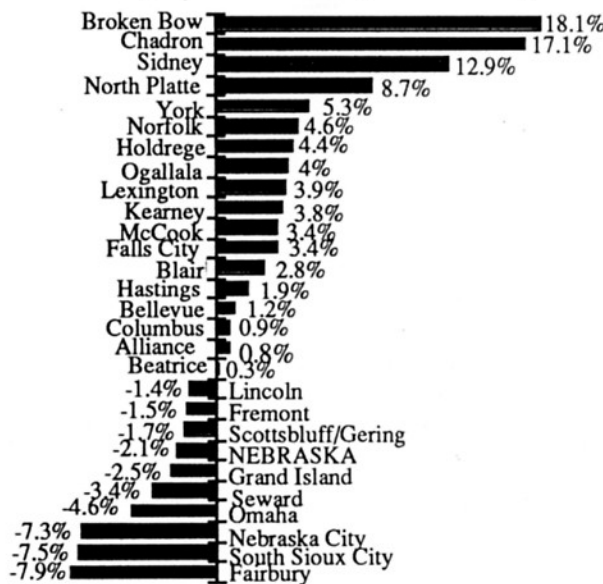
The State and Its Trading Centers	Employment (1)	Building Activity (2)
NEBRASKA	2.0	-7.9
Alliance	-0.2	86.5
Beatrice	-1.0	-10.5
Bellevue	2.7	-46.3
Blair	2.7	80.0
Broken Bow	-0.6	1501.1
Chadron	1.7	389.6
Columbus	3.3	-2.9
Fairbury	1.3	-83.0
Falls City	3.6	-14.7
Fremont	1.1	-26.2
Grand Island	1.6	1.3
Hastings	1.3	-15.7
Holdrege	3.0	59.0
Kearney	2.8	10.8
Lexington	2.5	67.2
Lincoln	1.9	8.6
McCook	1.7	11.4
Nebraska City	-4.6	-62.7
Norfolk	5.3	-38.1
North Platte	4.2	179.8
Ogallala	0.6	29.1
Omaha	2.7	-22.6
Scottsbluff/Gering	2.3	-51.9
Seward	1.5	-27.8
Sidney	4.9	856.7
South Sioux City	0.4	-63.9
York	1.6	101.9

(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
January 1991 Percent Change From Year Ago



third quarter. The upswing was due to farm subsidy payments.

To abstract the distortion of farm subsidy payments, we can look at nonfarm personal income. Even here, Nebraska showed relative strength. Nebraska's nonfarm personal income increase of 1.4 percent from third to fourth quarter was the highest of all Plains states and twice the rate of increase for the nation. Nebraska's rate of increase was the eighth fastest of all states.

Nebraska's nonfarm income gains, however, did not keep pace with inflation. Inflation (as measured by the Consumer Price Index) increased 1.6 percent over the period. Only four states had nonfarm personal income growth at a rate faster than inflation. Nevada led these states with a 2.1 percent increase.

Although a one quarter change may be of interest as we try to decipher the regional impacts of the recession, longer-term trends are perhaps of greater interest. From 1980 to 1990, Nebraska total personal income grew 6.4 percent annually, compared to an increase of 7.5 percent for the United States. Nebraska's population showed little growth over the period, whereas the U.S. population increased nearly 1 percent per year, which suggests near parity between Nebraska and the nation.

We can explore this parity in the per capita personal income data. Nebraska's per capita personal income grew at an average annual rate of 6.4 percent from 1980 to 1990, versus 6.5 percent for the U.S. Both increases outstripped the overall annualized rate of inflation of 4.7 percent for the decade. After adjusting for inflation, real per capita personal income in Nebraska grew 1.6 percent annually—a respectable rate for real growth.

Overall, Nebraska's per capita income remains at 92 percent of the national average. This figure is in line with historical averages for the ratio. The relative cost of living for Nebraska's major cities compared to the U.S. also roughly centers on the 92 percent figure. Thus, the purchasing power of the average Nebraskan is on par with that of the average U.S. citizen

Spring rains were welcomed across the state, as subsoil moisture levels are below normal in many areas. Severe storms accompanied the rain, however, causing damage to farmsteads, businesses, and houses. The rains provide a positive outlook for the planting season.

Nationally, farm income is expected to be down somewhat in 1991. Nevertheless, we are less pessimistic about Nebraska's farm income than we have been in the past. To track where Nebraska's farm income is going, we should keep a watchful eye on the cattle industry. Currently, prices for cattle remain relatively high.

As shown in Table V, Nebraska retail sales remain poor and even show a deterioration in January compared to a year ago. Most of the deterioration is in exceptionally poor motor vehicle sales. Retail sales have been the one consistent source of a national recession impact on the Nebraska economy. The downturn in retail sales is

Table V
Net Taxable Retail Sales of Nebraska Regions and Cities

Region Number and City (1)	City Sales (2)		January 1990 (000s)	Region Sales (2)		YTD % Change vs. Year Ago
	January 1990 (000s)	% Change vs. Year Ago		% Change vs. Year Ago		
NEBRASKA	\$825,982	-1.0	\$922,914	-3.6	-3.6	
1 Omaha	283,694	-5.7	335,821	-6.6	-6.6	
Bellevue	10,866	12.3	*	*	*	
Blair	4,397	2.1	*	*	*	
2 Lincoln	110,520	-1.2	123,246	-4.9	-4.9	
3 South Sioux City	5,258	-1.6	6,889	-3.9	-3.9	
4 Nebraska City	3,640	3.9	16,933	-1.1	-1.1	
6 Fremont	15,347	3.8	28,172	2.0	2.0	
West Point	3,185	15.1	*	*	*	
7 Falls City	2,071	11.2	8,564	2.2	2.2	
8 Seward	4,261	-0.9	14,012	-8.5	-8.5	
9 York	5,880	7.8	14,052	3.7	3.7	
10 Columbus	14,926	5.0	25,849	-0.3	-0.3	
11 Norfolk	18,866	15.9	32,500	5.1	5.1	
Wayne	3,136	16.2	*	*	*	
12 Grand Island	29,576	-2.7	42,409	-2.4	-2.4	
13 Hastings	15,064	10.2	23,497	1.2	1.2	
14 Beatrice	7,641	8.0	16,853	-3.0	-3.0	
Fairbury	2,683	5.3	*	*	*	
15 Kearney	18,705	10.0	27,032	11.4	11.4	
16 Lexington	5,370	5.9	15,081	2.8	2.8	
17 Holdrege	4,411	7.0	8,023	2.6	2.6	
18 North Platte	15,019	9.6	19,028	7.1	7.1	
19 Ogallala	4,738	11.0	9,578	-4.1	-4.1	
20 McCook	7,386	10.1	10,655	5.4	5.4	
21 Sidney	3,488	4.6	7,625	7.1	7.1	
Kimball	1,828	17.0	*	*	*	
22 Scottsbluff/Gering	16,817	7.0	24,097	6.7	6.7	
23 Alliance	4,712	0.2	13,618	5.5	5.5	
Chadron	2,858	25.6	*	*	*	
24 O'Neill	3,970	11.5	13,798	9.0	9.0	
Valentine	2,434	12.9	*	*	*	
25 Hartington	1,800	10.8	8,039	3.1	3.1	
26 Broken Bow	3,586	17.0	10,939	-0.9	-0.9	

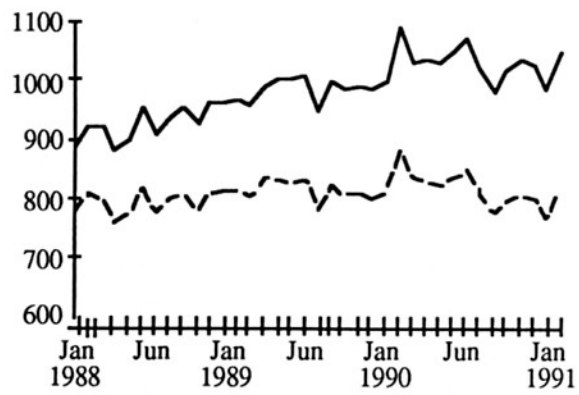
(1) See region map

(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

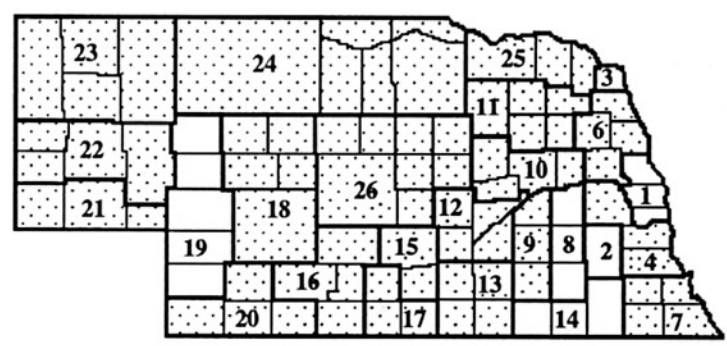
Compiled from data provided by the Nebraska Department of Revenue

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

reflected in the overall decrease in consumer confidence. It will take some time before recovery in these numbers will be displayed in our table due to reporting lags.

Recent data indicate that Nebraska has not kept pace with last year's construction activity in the first quarter. According to the F.W. Dodge survey, the value of total construction contracts through March has decreased 23.0 percent versus a year ago. Total building construction is off 41.0 percent, while nonbuilding construction (roads, bridges, sewers, etc.) with a gain of 12 percent is the only area showing any strength. Housing starts are off due to a dearth of apartment construction started in the first quarter.

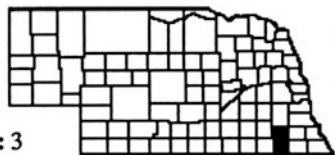
To gain some perspective, a year ago first quarter total value of construction contracts had gained 42 percent over 1989 levels. Building construction was up 46.0 percent, and nonbuilding construction was up 34.0 percent. This year's value of construction activity is still ahead of 1989 levels in nominal terms.

Employment gains in Nebraska continue at the torrid pace set in January and February. Recent data indicate that job gains in March advanced 4.7 percent (Table II) over a year ago. This increase followed a like gain in January and a 4.8 percent jump in February. These rates of expansion are unlikely to be maintained.

The job gains contrast to the rate of increase in the number of persons employed. The latter increased 2.6 percent in March versus its year ago level. Jobs can and do increase faster than the number of persons employed. Individuals can hold multiple jobs. Not all new Nebraska jobs are necessarily held by Nebraskans.

County of the Month

Gage



Beatrice—County Seat

License plate prefix number: 3

Size of county: 858 square miles, ranks 24th in the state

Population: 22,794 in 1990 a change of -6.8 percent from 1980

Median age: 37.2 years in Gage County, 33.0 years in Nebraska in 1990

Per capita personal income: \$14,703 in 1989, ranks 48th in the state

Net taxable retail sales (\$000): \$128,922 in 1990, a change of +8.6 percent from 1989; \$9,837 during January, 1991, a change of +1.7 percent from the same period one year ago

Number of business and service establishments: 614 in 1988; 57.5 percent had less than five employees

Unemployment rate: 2.7 percent in Gage County, 3.1 percent in Nebraska for 1989

Nonfarm employment (1989):

	State	Gage County
Wage & salary workers	705,672	8,476
	(percent of total)	
Manufacturing	13.4%	15.0%
Construction and Mining	3.6	2.3
TCU	6.5	4.9
Retail Trade	18.5	19.8
Wholesale Trade	7.6	4.7
FIRE	6.8	3.2
Services	23.7	22.3
Government	19.9	27.8
Total	100.0%	100.0%

Agriculture:

Number of farms: 1,347 in 1987, 1,339 in 1982

Average farm size: 394 acres in 1987

Market value of farm products sold: \$88.3 million in 1987
(\$65,560 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

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