# BUSINESS IN NEBRASKA

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### NEBRASKA PER CAPITA PERSONAL INCOME

This article presents and analyzes estimates of per capita personal income for Nebraska and the counties and planning regions of the state. Selected historical data and the most recent per capita personal income estimates are used to make several comparisons of area income. Briefly, total personal income of an area is income received from all sources by residents of the area. Unlike total personal income, per capita income is a measure of area income on a per individual basis. Per capita income permits comparisons of wealth among areas of different sizes and types. In this context, incomes of economically diverse counties and planning regions of Nebraska will be compared.

#### PERSONAL INCOME

The Bureau of Economic Analysis of the U.S. Department of Commerce regularly publishes estimates of personal income for the United States, regions, states, counties, and Standard Metropolitan Statistical Areas. At the national and state levels, the most recent annual income estimates are for 1983; the most recent county income estimates are for 1982. Personal income estimates are available to a host of users whose investigations range from analyzing past and current economic activity to predicting future economic trends. The Bureau of Business Research has constructed econometric models to generate forecasts of Nebraska economic activity. Both U.S. and state personal income are key variables in the structures of the Nebraska forecasting models.

For readers who are unfamiliar with the definition of personal income, the primary component is net earnings by place of residence. Net earnings can be further disaggregated into wages and salaries, other labor income such as fringe benefits, and proprietary income. Generally, net earnings compose the bulk of total personal income of an area. For example, 1983 net earnings for Nebraska accounted for 63 percent of total personal income. Remaining components of personal income are dividends, personal interest income, rental income, and transfer payments.

Per capita personal income of a given area is total personal income of area residents divided by resident population; it measures area wealth on a per person basis. In this format, personal income is often used as an index of the economic well-being of area residents. With per capita income, the economic well-being of residents of different areas can be compared, regardless of differences in levels of absolute income. For example, 1982 personal income estimates for Douglas County and Kearney County were \$4,937 million and \$86 million respectively. On a per capita basis, incomes were \$12,282 for Douglas County and \$12,279 for Kearney County. Clearly, absolute incomes for the

two counties are extremely different in magnitude, while per capita incomes are almost equal. Conversely, 1982 personal incomes for Morrill County and Perkins County were \$52 million and \$55 million respectively. Per capita incomes, however, were quite different--\$8,470 for Morrill County and \$14,922 for Perkins County.

As an indicator of economic well-being, per capita personal income should be used cautiously. In Nebraska, per capita income varies widely from county to county. A very high or very low per capita income is frequently temporary and can result from unusual conditions such as a bumper crop, the presence of a major construction project, or adverse weather conditions. Counties with large institutional populations will frequently show a lower than expected per capita income which is not indicative of the economic well-being of the non-institutional population. Per capita personal income is a less than perfect indicator of economic well-being; estimates presented in this article should be viewed with these constraints in mind.

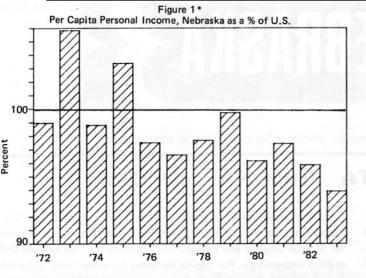
#### U.S. AND NEBRASKA PER CAPITA INCOME

In 1973, Nebraska per capita personal income was 106 percent of U.S. per capita income. This ratio declined to 94 percent in 1983. Figure 1 displays, as a percentage, the ratio of Nebraska per capita income to U.S. per capita income for the years 1972-1983. With the exception of 1973 and 1975, the income ratio has consistently remained below 100 percent, with sharp declines occurring in 1974 and 1976. The ratios of Figure 1 imply that Nebraska residents are not as economically well off as their counterparts in some other regions of the country. Regional differences, however, in important factors such as cost of living, taxes, and environment need to be considered when evaluating economic well-being.

An examination of the components of total personal income reveals why the per capita income ratio is subject to extreme fluctuation. Below, total personal income is disaggregated into farm and nonfarm income for the years 1972-1976, a time frame selected since the greatest fluctuations in the income ratio occurred during this period:

Nebraska	Total	Personal	Income

		(million	ns of \$)		
	1972	1973	1974	1975	1976
Farm	808	1,332	793	1,183	579
Nonfarm	5,977	6,773	7,485	8,127	9,039
				(continued o	n page 2)



(continued from page 1)

It is evident from the above data that wide swings in the income ratio are primarily the result of instability of farm income. While nonfarm income has increased at a steady rate, farm income is up one year, down the next year. The instability of farm income is caused by the volatility of the agricultural sector. Commodity and livestock prices, world market demand, interest rates, and variations in weather are factors that affect farm income. From a different perspective, Nebraska farm income ranged from 16 percent of total personal income in 1973 to 3 percent in 1980. Nationally, farm income ranged from 1 percent to 4 percent of total personal income during the same period. Based on these observations, it is clear why the per capita income ratio lacks stability.

#### NOMINAL AND REAL PER CAPITA INCOME

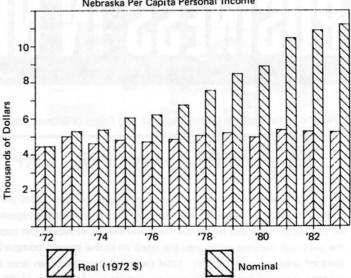
To present an accurate picture of the growth of Nebraska per capita personal income, it is necessary to discuss changes in both nominal and real income over an extended time period. Nominal income, the current dollar value of income, is not adjusted for price changes that occur over time. Real income, on the other hand, is adjusted for inflation and expressed in base year dollars. The base year depends on which deflator is selected to change nominal income to real income. In this article, the personal consumption expenditures deflator was used to change nominal per capita income to 1972 dollars.

The bar graph of Figure 2 presents levels of both nominal and real Nebraska per capita income for the years 1972-1983. Nominal per capita income grew from \$4,469 in 1972 to \$11,212 in 1983, a 151 percent absolute increase and an annual growth rate of 8.7 percent. The impressive increase in Nebraska per capita income is illusionary when the effects of inflation are taken into account. Over the same period, real per capita income grew from \$4,469 to \$5,249, an absolute increase of only 17 percent and a 1.5 percent annual growth rate. As indicated in Figure 2, growth of real per capita income differs significantly from that of its nominal counterpart.

The rather flat growth of real per capita income is punctuated with a listing of the top ten Nebraska by several periods of decline. Since nonfarm income has increased capita income:

\*U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 1984 and other sources.

Figure 2 \* Nebraska Per Capita Personal Income



uniformly, declines in real per capita income are the result of an increase in inflation, a decline in farm income, or a combination of both factors. More recently, Nebraska real per capita income declined during 1982 and 1983, years in which inflation remained in check. It is likely that real per capita income for Nebraska will continue to decline in 1984 if farm income remains down and inflation holds it current course.

#### COUNTY PER CAPITA INCOME

The counties and regions of Nebraska are both physically and economically diverse. As a result, per capita income can vary widely from area to area. Also, any area of the state can experience a wide range of economic conditions over time. Table 1 presents 1972 and 1982 estimates of per capita personal income for the 93 counties and 25 planning regions of Nebraska. Also included in the table are county and regional rankings of per capita income and 1972-1982 percent changes in nominal and real per capita income.

Per capita income is an index of the economic well-being of area residents. One must keep in mind the shortcomings of this indicator. Rankings are assigned to county and region per capita incomes. Simplistically, 1972 and 1982 rankings can be compared to measure improvement. In 1972, county per capita income ranged from \$2,979 for Blaine County to \$6,414 for Perkins County. In 1982, the low and high incomes were \$5,504 for Loup County and \$14,922 for Perkins County. Levels of county per capita income have increased dramatically from 1972 to 1982. If inflation is considered, increases in real per capita income are less marked. The greatest percent increases in nominal per capita income were 177 percent for Logan County, 175 percent for Cheyenne County, and 166 percent for Blaine County. In real terms, this translates into per capita income increases of 34 percent or less. Some counties suffered declines in real per capita income. From 1972 to 1982, per capita income declined by as much as 30 percent in eleven Nebraska counties.

Table 1 contains a great deal of information that can be used selectively. Information in the table is summarized below with a listing of the top ten Nebraska counties in terms of per capita income:

						Tal	ole 1 *	
					Per Capit		ncome, 1972 and 1	982
							me, \$	
					_		ank	
					%	Change, No	minal and Real	
					% Ch	ange		
	Per (	Capita			Per Capit	a Income		
		ome	Ra	ink	Real	Nominal		
Area	1972	1982	1972	1982	1972-82	1972-82	Area	•
Region 1	4810	11,586	4	3	141	17	Region 16	
Douglas	5009	12,282	10	4	145	19	Dawson	
Sarpy	3746	8714	75	73	133	13	Frontier	
Washington	4475	10,441	22	27	133	13	Furnas	
							Gosper	
Region 2	4549	10,898	6	6	140	16		
Lancaster	4549	10,898	19	16	140	16	Region 17	
*							Franklin	
Region 3	4191	8701	16	22	108	1	Harlan	
Dakota	4191	8701	48	74	108	1	Phelps	
Region 4	4318	9947	11	16	130	12	Region 18	
Cass	4266	10,142	41	36	138	15	Hooker	
Otoe	4446	9528	24	47	114	4	Lincoln	
Saunders	4262	10,067	42	39	136	15	Logan	
5-0-10C N		-					McPherson	
Region 6	4546	10,833	7	7	138	16	Thomas	
Burt	4740	10,414	15	28	120	7		
Cuming	4450	11,454	23	11	157	25	Region 19	

\*U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, April 1984 and other sources,

-1

-2

Arthur

Chase

Grant

Keith

Region 20

Region 21

Region 22

Region 23

Deuel

Kimball

Banner

Garden

Morrill

Scotts Bluff

**Box Butte** 

Dawes

Sioux

Region 24

Boyd

Brown

Cherry

Keya Paha

Holt

Rock

Cedar

Dixon

Knox

Blaine

Custer

Garfield

Greeley

Sherman

Loup

Valley

STATE

Nonmetro

Metro

Wheeler

Region 26

Region 25

Sheridan

**Perkins** 

Dundy

Hayes

Hitchcock

Cheyenne

**Red Willow** 

4627 11,252

10,710

11,094

11,694

10,973

10,828

10,562

10.017

10,138

11,188

10,066

10,555

10,860

10,192

10,599

10,174

10,402

10,773

10,743

10,215

10,305

10,329

5400 12,279

Dodge

Region 7

Region 8

Region 9

Polk

York

Boone

Colfax

Nance

Platte

Antelope

Madison

Stanton

Wayne

Region 12

Hall

Region 13

Clay

Region 14

Region 15

Gage

Jefferson

Thayer

Buffalo

Kearney

Hamilton

Howard

Merrick

Adams

Nuckolls

Webster

Pierce

Region 11

Region 10

Thurston

Johnson

Nemaha

Pawnee

Butler

Saline

Seward

Fillmore

Richardson

ome	Ra	nk
1982	1972	1
9929	13	
10,228	26	
9052	54	
9487	64	
9669	44	

--

Per Capita

Income

4688 11,005

4369 10.151

4297 10,003

11,795

10,366

0.526

11,863

11,707

10.404

14,922

11,789

10,684

11,996

14,574

13,287

10,002

10,698

10,072

10,225

11,329

10,065

4676 11,070

4272 10,406

4859 12,725

4469 10,641

 $\bar{3}$ 

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Real

1972-82

% Change Per Capita Income

Nomina

1972-83

-17

-4

-15

-17

-4

-30

#### **Review and Outlook**

Nebraska's economy slowed in the third quarter, a reflection in part of national trends. All sectors with the exception of government recorded declines.

The agriculture sector recorded a 5.1 percent drop, according to the Bureau of Business Research's net physical volume index. Cash farm marketings were \$448 million in July, down from June, but up from one year ago. Prices received by Nebraska's agriculture producers were unchanged in July, but are 5.8 percent above year ago levels. Despite this increase, a considerable amount of stress exists in Nebraska's agriculture sector. The problem is associated with low prices resulting from substantial worldwide production of grains and high interest

rates. Any business, agricultural or nonagricultural, that is highly leveraged is damaged by current high interest rates.

Nebraska's nonagricultural sector also declined in July, recording a 0.3 percent decrease. Construction dropped 2.2 percent on a month-to-month basis. Interest rates in June and July were rising, which has a negative impact upon the construction sector.

Nebraska's manufacturing sector recorded a 1.0 percent decrease on a month-to-month basis. The index is still well below peak levels reached in 1981. Employment in Nebraska's manufacturing sector now stands at 90,000, down from a peak of 100,000.

(continued on page 5)

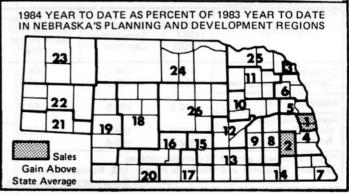
Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

1. CHANGE	FROM PREV	IOUS YE	AR		
July 1984	Current Mo Percent of S Month Prev	Same	1984 to date as percent of 1983 to date		
Indicator	Nebraska	U.S.	Nebraska	U.S.	
Dollar Volume		109.4 96.4	105.1 87.4	110.7 96.0	
Nonagricultural	108.6	109.7 114.4	107.9 133.0	111.1 120.0	
Construction	115.6	112.0	116.3	115.1	
Distributive	111.6	106.8	102.8 113.4	110.0 106.7	
Physical Volume	101.6	105.1 88.1	100.3 83.5	106.1 88.6	
Nonagricultural	104.3		103.4 129.9	106.7 117.2	
Manufacturing	112.1	109.0	112.7 98.5	111.8	
Government	103.4	100.7	104.5	100.3	
2. CH	ANGE FROM			440153	
Indicator		Percent of 1967 Average Nebraska U.S			
				25.1	
Dollar Volume	371			25.1 15.8	
Nonagricultural				28.7	
Construction				14.6	
Manufacturing				27.7	
Distributive	373			36.1	
Government	428			29.5	
Physical Volume	129			44.6	
Agricultural	13			22.9	
Nonagricultural				45.3	
Construction				23.0	
Manufacturing				28.5	
Distributive	119			55.9	
Government	153	153.8 148.2			

6 OF 1967	PHY	SICAL	VOLUME OF	ECONOMIC	ACTIVITY	
170 — NEBRAS	ska –	5 30	r mune	byell.	or Salvago of Salvago	riferio -
160 -UNITED	D STATES ↔	•••		1,00.7 9.80		Seward
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130			~	~	my.	
110			100 -000 (00-000)	4 102 7 7		edjunt con Rower Co
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ETC.			J F MA MJ	JASONDJ	FMAMJJASONO	JFMAMJJASON
1970	1975	1980	198	12	1983	1984

	City Sales <sup>2</sup>	Sales in Region <sup>2</sup>		
Region Number <sup>1</sup> and City	July 1984 as percent of July 1983	July 1984 as percent of July 1983	1984 to date as percent of 1983 to date	
The State	114.5	115.6	108.2	
1 Omaha	119.3	119.9	114.3	
Bellevue	122.4		Simon vaternia	
2 Lincoln	109.8			
3 So. Sioux City	117.6	121.2	111.0	
4 Nebraska City	105.9	106.1	105.7	
5 Fremont	107.0	107.6	99.1	
Blair	109.2	102.2	99.1	
6 West Point	90.7	O discount to	00.1	
7 Falls City	89.7	98.9	94.5	
8 Seward	107.3	105.4	100.7	
9 York	109.7	114.0	101.3	
10 Columbus	116.7	112.7	99.3	
11 Norfolk	100.7	102.7	97.0	
Wayne	105.1	102.7	37.0	
12 Grand Island	107.8	109.3	102.9	
13 Hastings	123.2	112.9	101.8	
14 Beatrice	103.3	100.7	94.7	
Fairbury	93.9	100.7	34.7	
15 Kearney	113.2	109.5	102.7	
16 Lexington	97.3	99.1	96.4	
17 Holdrege	121.7	112.7	97.3	
18 North Platte	101.9	104.5	100.0	
19 Ogallala	102.4	107.9	104.0	
20 McCook	117.2	115.6	98.5	
21 Sidney	110.5	112.8	104.4	
Kimball	100.6	112.0	104.4	
22 Scottsbluff/Gering	98.7	101.9	101.4	
23 Alliance	113.6	103.9	98.3	
Chadron	99.8	103.9	30.3	
24 O'Neill	108.2	97.6	94.5	
25 Hartington	103.8	91.5	89.6	
26 Broken Bow	90.3	96.0	93.2	

State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.



(continued from page 4)

Output from Nebraska's government sector recorded a 2.9 percent increase on a month-to-month basis. Nebraska's distributive trade sector recorded a decrease of 0.8 percent June-July 1984.

Despite the slowdown in the state's economy, retail sales were up 15.6 percent in July on a dollar volume basis (unadjusted for price changes). When adjustments for price changes are made, the increase was 11.0 percent. Nonmotor vehicle sales were up 14.5 percent on a dollar volume basis, 11.3 percent when adjusted for price changes. Motor vehicle sales were up a substantial 23.7 percent unadjusted for price changes, 9.4 percent when adjusted for price changes.

The boom in motor vehicle sales in Nebraska is concentrated in the metropolitan area. Motor vehicle sales in July 1984 were \$19.5 million above year previous levels. The metropolitan Omaha area recorded an increase of \$8.1 million, nearly half of the dollar volume increase. Lincoln recorded an increase of \$4.9 million. Combined, Omaha and Lincoln automobile sales gains accounted for two-thirds of the state increase.

Hastings led all Nebraska cities with a 13.4 percent jump in its city business index. Bellevue and Omaha followed, with Kearney ranking fourth in terms of growth in its city business index. Fremont, Lincoln, Columbus, and Holdrege all ranked above the state average.

Nebraska's economy seems to be following national trends of slower economic growth. Overall, Nebraska's economy is expanding at a real rate of 2 to 3 percent a year, but this increase is unevenly distributed. The metropolitan Omaha area is far out-distancing other parts of the state in economic growth; retail sales, employment, personal income, and output are far stronger in Omaha than in other areas. Nearly 40 percent of all employment gains over the past year were in the metropolitan Omaha area, and, as noted above, automobile sales are far stronger than in the rest of the state.

The reason for Omaha's stronger economy appears to be related to its diversity. The economic base of Omaha is far more diversified than other areas in Nebraska. It is less dependent upon the agriculture sector. Omaha processes less grain and livestock than ten or twenty years ago. The economic base of Omaha has shifted toward services and away from agriculture and manufacturing. The rise of firms associated with telecommunications and telemarketing is important in broadening Omaha's base and in explaining its current prosperity in a regional economy impacted by a lagging agriculture sector.

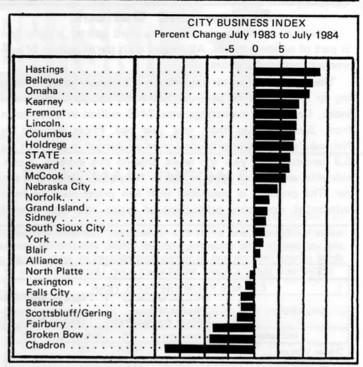
DONALD E. PURSELL

5. PRICE-INDEXES			
July 1984	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	311.7	104.1	104.3
Commodity component	280.6	103.0	103.8
Wholesale Prices	310.9	102.5	103.0
Agricultural Prices	057.0	100.4	100.4
United States	257.0	109.4	108.4
Nebraska	254.0	105.8	105.0

\*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor

Statistics; Agricultural Prices: U.S. Department of Agriculture.



4. July 1984	CITY BUSINESS INDICATORS					
	Percent of Same Month a Year Ago					
The State and Its Trading Centers	Employment <sup>1</sup>	Building Activity <sup>2</sup>	Power Consumption <sup>3</sup>			
The State	100.7	126.9	98.9			
	98.2	46.9	86.2*			
	100.0	55.3	98.9			
	102.0	146.2	93.3			
	99.3	70.3	89.8*			
Broken Bow	100.3	47.2	90.9			
Chadron	97.2	4.3	150.9			
	100.7	116.4	103.2			
	100.3	38.8	104.4			
	99.0	208.1	93.2			
	100.0	247.1	135.4*			
Grand Island Hastings Holdrege Kearney Lexington	100.4	92.9	101.9			
	100.3	253.2	N/A			
	99.4	82.3	102.5			
	100.4	193.8	104.9			
	100.3	101.0	92.5			
Lincoln	101.4	102.2	99.3			
	98.3	107.7	98.0			
	99.7	168.4	90.8			
	100.3	193.8	94.3			
	102.8	70.0	98.3			
Omaha	102.0	166.4	98.4			
	99.9	70.7	103.5			
	100.7	240.4	92.9			
	98.8	82.6	95.4			
	99.2	117.8	89.1			
	100.5	74.4	88.4			

<sup>1</sup> As a proxy for city employment, total employment for the county in which a city is located is used.

<sup>2</sup>Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

<sup>3</sup>Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked \* for which only

one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

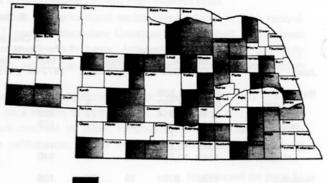
1972 and 1982 County Per Capita Income, \$

Rank	1972		1982		
1	Perkins	6,414	Perkins	14,922	
2	Deuel	6,291	Deuel	14,574	
3	Banner	6,266	Kimball	13,287	
4	Chase	5,700	Douglas	12,282	
5	Kearney	5,400	Kearney	12,279	
6	Fillmore	5,191	Cheyenne	11,996	
7	Kimball	5,101	Phelps	11,795	
8	Phelps	5,016	Dundy	11,789	
9	Platte	5,011	Chase	11,707	
10	Douglas	5,009	Fillmore	11,694	

This exercise highlights shifts in per capita income that have occurred from 1972 to 1982. During this time, eight counties repeated in the top ten ranks of per capita income. Cheyenne County and Dundy County did not appear in the 1972 rankings, but were ranked sixth and eighth in 1982. Banner County and Platte County disappeared from the top ten ranks of 1982. In 1982, statewide per capita personal income was \$10,641\*, a 138 percent increase from 1972 income and a 16 percent increase in real terms. From 1972 to 1982, 36 of Nebraska's 93 counties experienced increases in nominal per capita income equal to or greater than the statewide increase. These counties are identified in Figure 3. In 1982, only 23 Nebraska counties reported per capita incomes at or above the state average. The location of these counties is presented in Figure 4.

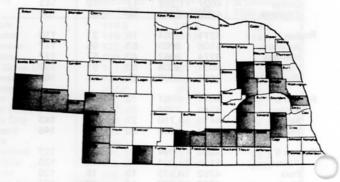
CHARLES L. BARE

Figure 3
1972-82 Percent Increase in County Per Capita Personal Income



equal to or greater than State increase

Figure 4 1982 County Per Capita Personal Income



equal to or greater than 1982 State per capita personal income (\$10,641)

less than 1982 State per capita personal income

6

## BUSINESS IN NEBRASKA PREPARED BY BUREAU OF BUSINESS RESEARCH

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<sup>\*</sup>This income figure was recently revised upward. The \$10,641 per capita income must be used, however, when comparing county per capita incomes to state per capita income.