

COUNTY POPULATION ESTIMATES FOR 1971

For many years the Bureau of Business Research has been preparing county and city population estimates for years between census dates. This article presents the first county estimates made since the 1970 census. New methodology for city estimates is still being reviewed. If possible, city estimates will be presented next month.

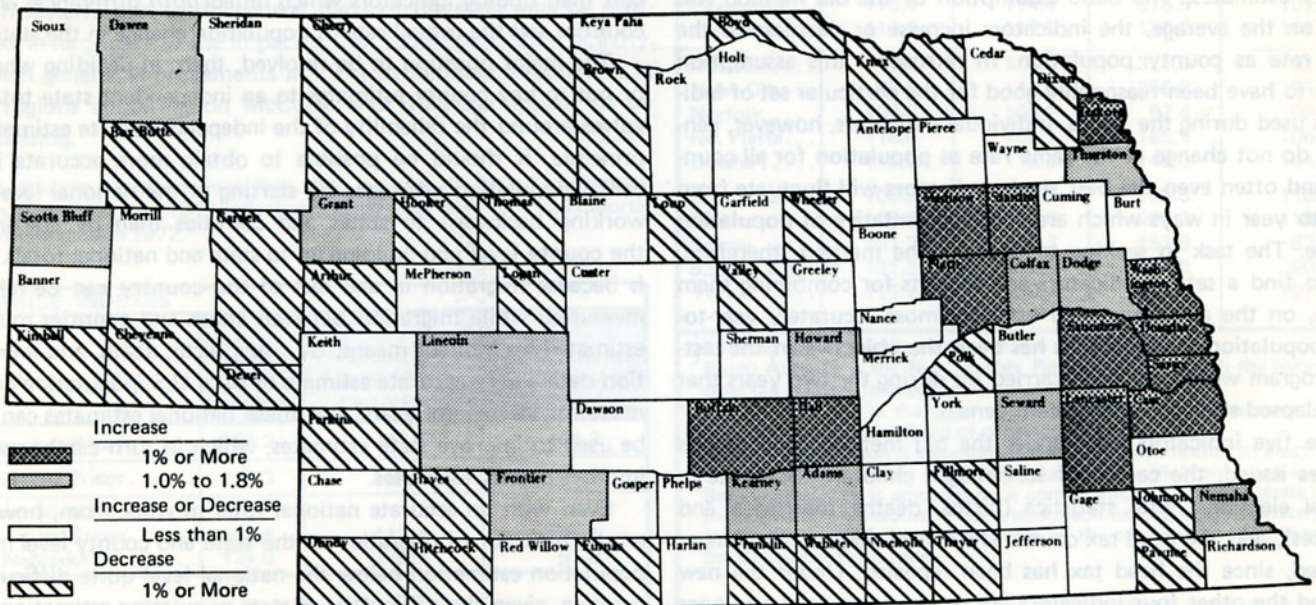
In general our estimates have proved to be quite accurate in recent years. During the 1960s Nebraska was the only state in which a Federal court ordered Congressional reapportionment and approved the use of local estimates rather than Bureau of the Census figures for this purpose. The 1970 census showed that each of the three Congressional districts set up by the Legislature in 1968 on this basis had approximately 33 percent of the state's population. As a result Nebraska was the only state with more than two Congressional districts which did not face the necessity of reapportionment following the 1970 census.

In spite of this past success, efforts to improve the estimating procedure are always appropriate, and the 1970 census has provided the opportunity to test the methods previously in use. As a result the methodology to be used during the seventies will be somewhat different from that used during the previous decade.

The differences are explained below. Some of these changes were inevitable because certain data series previously used as indicators are no longer available and others which tests show should be good indicators have come into existence. Other changes result from our own efforts to develop improved methodology and from participation in the new Federal-State Cooperative Program for Small Area Population Estimates discussed below. Under this program county estimates made locally will be accepted and published as official by the Bureau of the Census in a special series of bulletins.

In the past our county and city estimates have been a matter of considerable statewide interest, but have not been of highly significant practical use except in the case of reapportionment mentioned above. In the future, however, such estimates will become increasingly important and even necessary for certain purposes. Growing emphasis on regional planning and cooperation as a condition for certain Federal grants brings a demand for current population data for local areas. Recent court decisions indicate that it is merely a matter of time until a substitute for the local property tax to support the public schools will have to be found, and population may well be a factor in distribution of any funds

PERCENTAGE CHANGE IN POPULATION OF NEBRASKA COUNTIES
FROM APRIL 1, 1970 TO JULY 1, 1971



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for this purpose that become available from higher levels of government. Likewise population will certainly be a factor in whatever formula is finally adopted for Federal revenue sharing. The increasing importance of reasonably current population figures below the state level makes it imperative that the best possible methods for making such estimates be devised. Recognition of this growing need was undoubtedly a consideration in creation of the new Federal-State Cooperative Program for providing such data.

THE FEDERAL-STATE COOPERATIVE PROGRAM

As the agency designated by the Governor to carry out the technical aspects of the new program, the Bureau of Business Research has supplied data to the Bureau of the Census for use in testing the reliability of several standard Census estimating procedures as applied to Nebraska counties and has concurrently conducted a testing program of its own. Dr. Edgar Z. Palmer, former Director of the Bureau and developer of the procedures used during the sixties, conducted the local tests and developed new methodology which he recommended for use during the seventies.

This new methodology is designed to produce preliminary county estimates for July 1 of a particular year for publication in the early part of the following year. These county estimates are tied to a preliminary state total estimate prepared by the Bureau of the Census. A revised state estimate by Census and local data not available in time for the preliminary estimates will become the basis for revised county estimates made by the Bureau of Business Research in the fall of the year following the estimated year. These revised estimates will then be published by the Bureau of the Census in Series P-26 of its Current Population Reports.

Tests completed last month at the Bureau of the Census show a distinct superiority of the Census method most closely related to the Palmer method over any other method or combination of methods for Nebraska. On the basis of these favorable findings preliminary county estimates based on the new Palmer methodology are presented below.

THE NEW METHOD

Under both the old and new methods a combination of the trends of certain indicators is used as the basis for individual county estimates. The basic assumption of the old method was that, on the average, the indicators increase or decrease at the same rate as county population. In retrospect this assumption seems to have been reasonably good for the particular set of indicators used during the 1960s. Individual indicators, however, generally do not change at the same rate as population for all counties, and often even the best single indicators will fluctuate from year to year in ways which are not representative of population change. The task in seeking to improve the method, therefore, was to find a set of indicators and weights for combining them which, on the average, would estimate most accurately year-to-year population changes. This has been the objective of the testing program which has been carried on during the two years that have elapsed since the most recent census.

The five indicators used under the old method were drivers licenses issued, the census of school-aged children, total vote in general elections, vital statistics (births, deaths, marriages, and divorces), and the head tax count. The last of these can no longer be used, since the head tax has been repealed. Under the new method the other four indicators are retained and four new ones

are added—food tax credits, voter registration, school enrollment, and social security beneficiaries. The first two of these are new data series that became available in the late 1960s. From the tests that we have conducted it appears that the other two series have improved sufficiently as population indicators to warrant their inclusion in the new method.

During the 1960s our estimate of the state's total population each year was built up from individual county estimates. The other major change in the new methodology is incorporation into the estimating procedure of a state control total developed independently and not based on the county estimates. The considerations taken into account in deciding on this change require some explanation.

If county population estimates are keyed to an accurate, independently determined state total, it is no longer necessary to make the assumption mentioned above that the combination of county indicators used changes at the same rate as population for each county. Indicators that move either too fast or too slowly in relation to actual population change can yield reliable county estimates, provided only that they accurately reflect *differences* among counties in population change. It is not easy to find good indicators of such differences that are available promptly enough and for a long enough period of time, but it is certainly less difficult than finding indicators which reflect *both* differences among counties and the overall rate of population change in the state.

The major question to be resolved, then, in deciding whether or not to key county estimates to an independent state total revolves around the reliability of the independent state estimate. In principle, it should be possible to obtain more accurate intercensal population estimates by starting at the national level and working backward to states and counties than by starting at the county level and building up to state and national totals. This is because migration in and out of the country can be reliably measured, while migration between states and counties must be estimated by indirect means. By using birth, death, and immigration data a very accurate estimate of total U.S. population can be made for intercensal years, and these national estimates can then be used to improve state estimates, which in turn can be used to improve county estimates.

Even with an accurate national total to work from, however, erratic behavior of migration at the state and county level makes population estimation below the national level quite difficult. In practice, given the difficulties of state population estimation by a

uniform national method, it is entirely possible that, with judicious use of indicators specific to the particular state and not easily incorporated in a standard national method, individual states may be able to make state estimates without reference to the national total that are superior to the estimates made by the Bureau of the Census, which are keyed to the national total. It was the inaccuracy of Bureau of the Census annual estimates of Nebraska's total population, proved by the 1960 census, which prompted the Bureau of Business Research to abandon reference to the state control total, which had been used as the basis for county estimates during the decade of the fifties, and build up its own state total estimate from county estimates during the sixties.

Again in 1970 the census proved that Bureau of the Census annual state estimates subsequent to the 1960 census had accumulated unacceptably large errors for some states, particularly in the South. These errors have prompted the U.S. Bureau to conduct a thorough review of its estimating procedures. The results of this review have not been incorporated in the preliminary estimates for 1971, but in the future intercensal state estimates made by the Bureau of the Census should be greatly improved over those of the past.

On the basis of this expected improvement, and in the interest of promoting a single consistent set of state and county population estimates throughout the country, the most appropriate course of action for us clearly seems to be to key our county estimates to the state total provided by the Bureau of the Census. It is expected that further coordination of testing and estimation procedures through the Federal-State Cooperative Program will lead to significantly improved state and county population

estimates during the 1970s.

THE STATE ESTIMATE

The provisional Bureau of the Census estimate of Nebraska's population for July 1, 1971, is 1,512,132. This figure represents a 1.8% increase over the final April 1, 1970, census count of 1,485,321. Nebraska's population growth for the entire decade of the sixties was only 5.2%, so the 1971 estimate indicates that the pattern of declining net out-migration which became apparent from our estimates in the late sixties has continued and, in fact, (as noted in these pages in the October, 1971, issue) has become one of net in-migration for 1970-71. The 1971 state estimate, however, is still preliminary and does not take into account important data series (such as school enrollments) which, when used, will improve migration estimates. As noted above, moreover, the 1971 provisional estimate does not incorporate improvements in methodology soon to be implemented by the Bureau of the Census.

On the basis of an independent method devised by Dr. Palmer for estimating Nebraska's total population it appears that the provisional Bureau of the Census estimate may be somewhat high. If this proves to be the case, our revisions later in the year will result in reduced estimates for many of Nebraska's counties.

On the other hand, there has been a significant increase in U.S. resident population in 1970 and 1971 resulting from reductions in overseas military strength. Most state population estimating techniques (including the Palmer technique) do not have any good means of determining the number of veterans returning to a particular state. The Bureau of the Census allocates returning

(Continued on page 6)

POPULATION OF NEBRASKA COUNTIES, APRIL 1, 1970, AND PRELIMINARY ESTIMATES FOR JULY 1, 1971

County	Number of Persons		Percent Change	County	Number of Persons		Percent Change	County	Number of Persons		Percent Change
	1970*	1971			1970*	1971			1970*	1971	
Adams	30,553	30,873	+1.0	Frontier	3,982	4,043	+1.5	Nance	5,142	5,172	+0.6
Antelope	9,047	9,001	-0.5	Furnas	6,897	6,800	-1.4	Nemaha	8,976	9,127	+1.7
Arthur	606	588	-3.0	Gage	25,719	25,668	-0.2	Nuckolls	7,404	7,330	-1.0
Banner	1,034	1,040	+0.6	Garden	2,929	2,893	-1.2	Otoe	15,576	15,551	-0.2
Blaine	847	840	-0.8	Garfield	2,411	2,420	+0.4	Pawnee	4,473	4,423	-1.1
Boone	8,190	8,210	+0.2	Gosper	2,178	2,174	-0.2	Perkins	3,423	3,377	-1.3
Box Butte	10,094	9,995	-1.0	Grant	1,019	1,031	+1.2	Phelps	9,553	9,573	+0.2
Boyd	3,752	3,686	-1.8	Greeley	4,000	4,000	+0.0	Pierce	8,493	8,471	-0.3
Brown	4,021	3,940	-2.0	Hall	42,851	43,719	+2.0	Platte	26,544	27,161	+2.3
Buffalo	31,222	31,796	+1.8	Hamilton	8,867	8,949	+0.9	Polk	6,468	6,383	-1.3
Burt	9,247	9,281	+0.4	Harlan	4,357	4,327	-0.7	Red Willow	12,191	12,086	-0.9
Butler	9,461	9,415	-0.5	Hayes	1,530	1,507	-1.5	Richardson	12,277	12,308	+0.2
Cass	18,076	18,419	+1.9	Hitchcock	4,051	3,973	-1.9	Rock	2,231	2,222	-0.4
Cedar	12,192	12,295	+0.8	Holt	12,933	12,965	+0.2	Saline	12,809	12,779	-0.2
Chase	4,129	4,094	-0.8	Hooker	939	903	-3.8	Sarpy	66,200	70,390	+6.3
Cherry	6,846	6,752	-1.4	Howard	6,807	6,879	+1.1	Saunders	17,018	17,363	+2.0
Cheyenne	10,778	10,633	-1.3	Jefferson	10,436	10,392	-0.4	Scotts Bluff	36,432	36,791	+1.0
Clay	8,266	8,294	+0.3	Johnson	5,743	5,652	-1.6	Seward	14,460	14,605	+1.0
Colfax	9,498	9,604	+1.1	Kearney	6,707	6,780	+1.1	Sheridan	7,285	7,244	-0.6
Cuming	12,034	12,023	-0.1	Keith	8,487	8,522	+0.4	Sherman	4,725	4,687	-0.8
Custer	14,092	14,027	-0.5	Keya Paha	1,340	1,333	-0.5	Sioux	2,034	2,021	-0.6
Dakota	13,137	13,437	+2.3	Kimball	6,009	5,919	-1.5	Stanton	5,758	5,886	+2.2
Dawes	9,761	9,867	+1.1	Knox	11,723	11,551	-1.5	Taylor	7,779	7,702	-1.0
Dawson	19,771	19,940	+0.9	Lancaster	167,972	172,616	+2.8	Thomas	954	941	-1.3
Deuel	2,717	2,619	-3.6	Lincoln	29,538	30,021	+1.6	Thurston	6,942	7,063	+1.7
Dixon	7,453	7,374	-1.1	Logan	991	956	-3.5	Valley	5,783	5,693	-1.6
Dodge	34,782	35,167	+1.1	Loup	854	830	-2.8	Washington	13,310	13,741	+3.2
Douglas	389,455	403,132	+3.5	Madison	27,402	27,901	+1.8	Wayne	10,400	10,304	-0.9
Dundy	2,926	2,876	-1.7	McPherson	623	621	-0.3	Webster	5,396	5,295	-1.9
Fillmore	8,137	8,052	-1.0	Merrick	8,751	8,785	+0.4	Wheeler	1,051	1,029	-2.1
Franklin	4,566	4,474	-2.0	Morrill	5,813	5,786	-0.5	York	13,685	13,754	+0.5
								State Total	1,485,321	1,512,132	+1.8

*As corrected by Bureau of the Census.

Source: Calculated by Bureau of Business Research from data furnished by state and county governmental agencies.

Review and Outlook

Data in the left hand column below constitute the first monthly publication of our new index, described in last month's issue. To the casual reader the most obvious difference is in the chart at the bottom of the page, where the lines for Nebraska and the nation are brought much closer together.

This is due in part merely to shifting the base from 1948 to 1967. With 1967 taken as the base for both indexes, the lines are bound to come together in that year. The chart in last month's issue, however, based on the old index, showed a widening gap between state and nation since 1967, but the new index, which we consider more representative of true economic activity,

indicates (in the last two columns of Table 1) that from 1967 through 1971 physical volume grew a bit more rapidly in Nebraska than in the nation.

This relative growth pattern did not continue in January, with the state falling a bit behind U.S. figures, as shown in Table 2. Nevertheless, Nebraska's economic activity remained well above that of the previous year, with dollar and physical volume indexes 9.6 and 3.8 percent, respectively, above January, 1971.

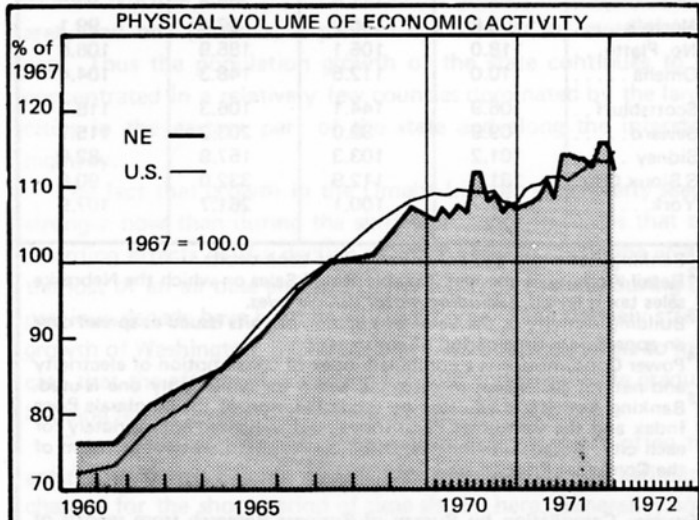
In dollar volume the agricultural and nonagricultural sectors were about equally ahead of the previous year. In physical volume, however, the nonagricultural sector was 5.5%

(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. E. L. HAUSWALD

ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES				
1. CHANGE FROM PREVIOUS YEAR				
January, 1972	Current Month as Percent of Same Month Previous Year		1971 Average as Percent of 1970 Average	
	Nebraska	U.S.	Nebraska	U.S.
Indicator				
Dollar Volume	109.6	108.5	107.8	107.2
Agricultural	108.4	110.4	105.3	108.1
Nonagricultural	109.8	108.5	108.2	107.2
Construction	141.2	117.6	108.1	115.2
Manufacturing	105.3	106.1	103.0	101.6
Distributive	109.2	108.6	109.0	108.9
Government	108.3	109.0	111.7	108.6
Physical Volume	103.8	104.6	103.8	102.3
Agricultural	91.3	98.2	107.5	106.2
Nonagricultural	105.5	104.2	103.3	102.5
Construction	129.8	108.1	99.6	106.6
Manufacturing	101.4	102.5	99.9	98.4
Distributive	105.7	105.1	104.5	104.3
Government	102.8	102.7	104.3	102.0
2. CHANGE FROM 1967				
January, 1972	Percent of 1967 Average			
Indicator	Nebraska	U.S.		
Dollar Volume	137.1	139.8		
Agricultural	115.1	128.4		
Nonagricultural	141.5	140.2		
Construction	160.6	161.0		
Manufacturing	128.9	120.2		
Distributive	138.8	145.9		
Government	163.2	154.3		
Physical Volume	111.5	114.1		
Agricultural	92.1	106.4		
Nonagricultural	112.8	114.0		
Construction	118.1	118.4		
Manufacturing	110.9	103.9		
Distributive	112.7	118.4		
Government	113.9	116.2		

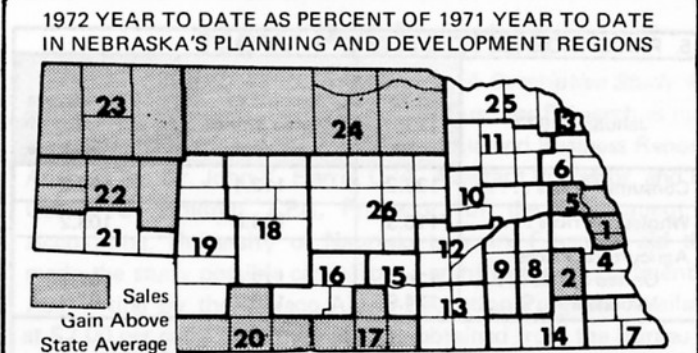
3. NET TAXABLE RETAIL SALES ¹ OF NEBRASKA REGIONS (Unadjusted for Price Changes)		
Region ² and Principal Retail Trade Center	January, 1972 as Percent of January, 1972	1972 Year to Date as Percent of 1971 Year to Date
<i>The State</i>	117.3	117.3
1 (Omaha)	118.4	118.4
2 (Lincoln)	123.2	123.2
3 (So. Sioux City)	114.2	114.2
4 (Nebraska City)	116.6	116.6
5 (Fremont)	121.2	121.2
6 (West Point)	105.7	105.7
7 (Falls City)	110.0	110.0
8 (Seward)	108.2	108.2
9 (York)	106.5	106.5
10 (Columbus)	110.0	110.0
11 (Norfolk)	111.4	111.4
12 (Grand Island)	113.1	113.1
13 (Hastings)	112.7	112.7
14 (Beatrice)	108.6	108.6
15 (Kearney)	117.2	117.2
16 (Lexington)	117.3	117.3
17 (Holdrege)	121.5	121.5
18 (North Platte)	113.4	113.4
19 (Ogallala)	109.2	109.2
20 (McCook)	120.6	120.6
21 (Sidney, Kimball)	109.8	109.8
22 (Scottsbluff)	139.2	139.2
23 (Alliance, Chadron)	117.8	117.8
24 (O'Neill)	129.0	129.0
25 (Hartington)	107.7	107.7
26 (Broken Bow)	113.8	113.8



¹Sales on which sales taxes are collected by retailers located in the state, including motor vehicle sales.

²"Planning and development" regions as established by the Nebraska Office of Planning and Programming and shown in the map below.

Source: Compilations by Bureau of Business Research from data provided by the Nebraska Tax Commissioner.



(Continued from page 4)

above January, 1971, while the agricultural sector was 8.7% below. Thus higher agricultural prices in January (see Table 5 below) more than offset a decline in the real flow of agricultural products.

This jump in agricultural prices in January, which contributed most of the gain recorded in the dollar volume index for the state as a whole, presents a sharp contrast to the situation throughout most of the preceding year. As shown in the last column of Table 5, agricultural prices received in Nebraska for the year 1971 as a whole were below 1970. The drop in physical volume for agriculture in January also represents a contrast with the preceding year, during which, as shown in the third column of Table 1, Nebraska agriculture showed the strongest physical volume activity of any sector.

The principal factor contributing to the strength of Nebraska nonagricultural activity in January was the strong, consistent upward movement in the construction sector. Distributive activities, as defined in the notes for Tables 1 and 2 on page 4, also held up well, reflecting significant year-to-year gains in the level of retail activity. Manufacturing, which, except in December, showed a slow, steady growth during the previous year, was at a January level about 1.5% above January, 1971. The government sector, after moving in spurts during 1971, stood at a physical volume level in January about 3% above that of the previous year.

As usual the reader's attention is directed to regional changes in net taxable retail sales (in Table 3). State-wise, the dollar level, unadjusted for price changes, continues to rise at an accelerating rate. In January, this activity was nearly 18 percent above that of the same month of last year.¹ The unusually high relative gains for regions centering on Scottsbluff and O'Neill are not due solely to high levels of agricultural activity, yet the strength of this sector has most certainly had an impact upon the retail activity of these regions.

Year-to-year gains in taxable sales greater than the state average were recorded in eight of the state's twenty-six regions. As shown on the map on page 4, these concentrate in three areas of the state. As implied previously, the strength in the north central, northwestern, and south central parts of the state may be attributed in large part to the impact of favorable agricultural activity. Known general improvements in 1971 in commercial activities in the regions centering on McCook and Holdrege appear to be continuing.

E. L. H.

¹The gain was actually greater than this, because the State Tax Commission used a January, 1972 collection period that was four days shorter than that used in 1972.

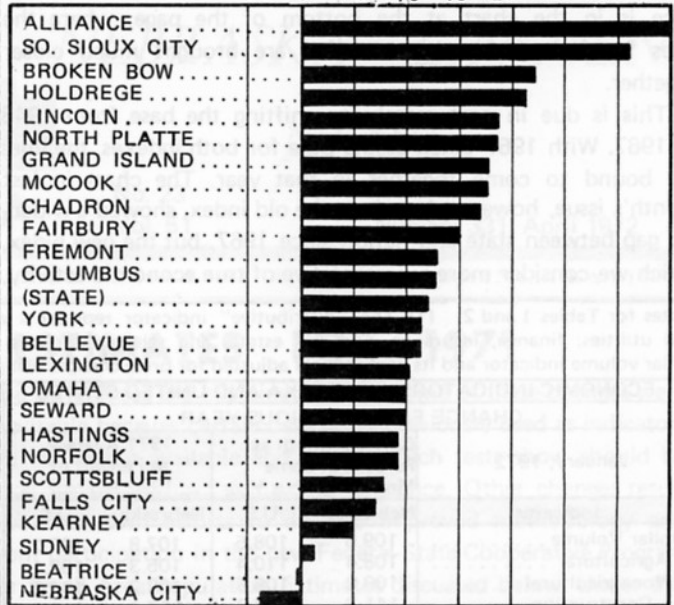
5. PRICE INDEXES

January, 1972	Index* (1967 = 100)	Percent of Same Month Last Year	1971 Average as Percent of 1970 Average
Consumer Prices	123.2	113.4	104.3
Wholesale Prices	116.3	104.0	103.2
Agricultural Prices			
United States	120.6	112.4	101.7
Nebraska	124.9	118.7	97.8

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BANKING ACTIVITY

Percent Change, Jan. 1971 to Jan. 1972
-5 0 +5 +10 +15 +20 +25 +30 +35.5



4. JANUARY, 1972, CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago			
	Banking Activity ¹	Retail Activity ²	Building Activity ³	Power Consumption ⁴
	(Adjusted for Price Change) ⁵			
<i>The State</i>	112.7	110.8	146.6	101.9
Alliance	135.5	116.2	96.8	101.8
Beatrice	99.2	102.7	316.9	95.1
Bellevue	111.5	118.1	172.3	NA
Broken Bow . . .	122.1	107.2	30.6	94.4
Chadron	116.2	106.0	90.7	94.6
Columbus	113.3	109.7	132.6	100.8
Fairbury	115.1	94.6	121.7	101.2*
Falls City	106.1	99.6	314.5	101.3
Fremont	113.4	118.0	45.2	101.1*
Grand Island . .	117.4	108.1	116.0	104.3
Hastings	109.6	107.4	314.0	101.6
Holdrege	120.9	130.4	82.3	99.8
Kearney	105.1	110.5	202.1	100.8
Lexington	110.4	114.4	378.5	109.0*
Lincoln	118.2	117.9	135.2	104.2
McCook	117.2	114.4	321.0	97.2
Nebr. City	96.0	141.6	356.8	93.8
Norfolk	109.6	105.2	97.4	99.1
No. Platte	118.0	105.1	185.9	106.6
Omaha	110.0	112.5	148.3	104.4
Scottsbluff . . .	106.9	144.1	106.3	116.3
Seward	109.9	89.0	203.2	115.7
Sidney	101.2	103.3	157.9	82.0
S.Sioux City . .	131.3	112.9	332.0	90.8
York	111.7	100.1	261.7	107.9

¹Banking Activity is the dollar volume of bank debits.
²Retail Activity is the Net Taxable Retail Sales on which the Nebraska sales tax is levied, excluding motor vehicle sales.
³Building Activity is the value of building permits issued as spread over an appropriate time period of construction.
⁴Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.
⁵Banking Activity is adjusted by a combination of the Wholesale Price Index and the Consumer Price Index, each weighted appropriately for each city; Retail Activity is adjusted by the commodity component of the Consumer Price Index.

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

(Continued from page 3)

veterans largely on the basis of their state of origin. If it is true that Nebraska veterans are returning to Nebraska, the 1971 Bureau of the Census preliminary estimate for Nebraska may be reasonably accurate.

In any event, population increases based on returning veterans can continue only as long as overseas military strength continues to decline, and unless returning veterans find suitable jobs in Nebraska they are likely to leave, which would make net in-migration a purely short-run phenomenon for the state. At this point, with only a preliminary estimate for the first year of the decade, it would certainly be premature to make any judgment on the probable growth of Nebraska's total population during the 1970s or on the pattern of in-migration or out-migration that may prevail.

THE COUNTY ESTIMATES

The 1971 county population estimates are shown in the table on page 3, and the geographical pattern of change is depicted in the map on page 1. The table also shows the final official census count for April 1, 1970. Some of these 1970 figures are different from those previously published in these pages in February, 1971, and from those appearing in the official Census publications for Nebraska. These differences in a few counties result from errors discovered by the Bureau of the Census after the state reports were issued.

The estimates for 1971 show generally much the same pattern of population change as that experienced during the decade of the sixties. If anything, the Omaha-Lincoln area appears to dominate the state's population growth to an even greater extent than in the sixties. Sarpy County continues as the fastest growing county with a 6.3% increase in the 15-month period. A further indication of the relatively strong growth of the Omaha area is the fact that Douglas County (up 3.5%) and Washington County (up 3.2%) are the only other counties showing a growth rate exceeding 3% for this period.

The fourth fastest growing county was Lancaster (up 2.8%), and two other counties in the Omaha-Lincoln area (Saunders, up 2%, and Cass, up 1.9%) were among the twelve counties with growth rates exceeding the 1.8% average for the state. Of the other six counties growing faster than the state average, two (Buffalo and Hall) reflect continuing growth in the Grand Island-Kearney-Hastings area, two others (Madison and Stanton) reflect growth around Norfolk, one (Platte) indicates growth of the Columbus area, and one (Dakota) is part of the Sioux City metropolitan area. Thus the population growth of the state continues to be concentrated in a relatively few counties dominated by the larger cities in the eastern part of the state and along the interstate highway.

The fact that growth in the Omaha-Lincoln area clearly seems stronger now than during the sixties probably indicates that the retarding effects of the decline of meat packing in Omaha and of the loss of an air base and Job Corps center in Lincoln during the previous decade have been largely overcome. The relatively strong growth of Washington, Saunders, and Cass Counties seems to indicate that the effects of growth in Lincoln and Omaha are gradually being felt at greater distances from the central cities.

For smaller counties the population indicators are often too erratic to justify placing a great deal of confidence in estimated changes for the short period of time shown here. Generally, however, it appears that most of the smaller counties in the state are

continuing a trend of population decline.* It is true that our estimates show more small counties with population gains for 1970-71 than was the case during the sixties, but this may simply reflect the higher growth rate of the state (which is yet to be confirmed) or in some cases the existence of special short-run circumstances, such as the construction of a nuclear power plant now under way in Nemaha County.

Both the state and county estimates appearing in this article will be revised later in the year. These revised estimates will doubtless show a somewhat different overall growth rate, as well as changes in rates in individual counties. It is unlikely, however, that the general pattern of relative growth in the different parts of the state will be substantially altered. VERNON RENSHAW

*In order to lessen the influence of large random year-to-year fluctuations for small counties, trends of the indicator series, rather than absolute values, are used in making the county estimates. While this procedure lessens substantially the average error in estimating the populations of small counties, it also involves the risk that sharp changes in population in some counties will be understated in a particular year. Between now and the time the data become available for revised estimates further tests of the use of trends in data will be made with the expectation that such tests will show the extent to which this procedure does tend to misstate actual population change.

Review

Rural-Urban Population, Income, and Employment: A Simulation of Alternative Futures, Agricultural Economic Report No. 218, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20250. Single copies free.

According to this study, if basic trends continue rural out-migration would probably stop or reverse itself shortly after the year 2000, primarily because the gap between the incomes of rural and urban workers would have gradually closed. But the employment-population ratio in rural areas would still be below that in urban areas; hence overall rural economic growth would still be lower.

Policies to increase job opportunities and labor productivity in rural areas were judged to show more promise as development strategies than policies to reduce the natural rate of population increase or limit out-migration. It was estimated that for per capita incomes and employment-population ratios in rural and urban America to be equal in the year 2000 about 8.8 million more new jobs than are expected from current trends would be needed in rural areas. Of these, 3.7 million would be transfers of jobs that would have been located in urban areas under present trends; the remaining 5.1 million jobs would have to be created to utilize more fully the under-employed rural labor force.

Findings of this study merit close examination by those interested in achieving a more equitable rural-urban balance in population, income, and employment.

D. S.

New Publication

The CPA and CPA Firm in Nebraska: A Descriptive Study was published this month by the Bureau of Business Research as number five in the series of Nebraska Economic and Business Reports. Authors are Dr. John K. Harris, CPA, Assistant Professor, and Dr. George C. Holdren, CPA, Professor, of the Department of Accounting, University of Nebraska-Lincoln. Financial aid that made the study possible came from a grant to the Department of Accounting by the Texaco Aid-to-Education Program. Available at \$2.00 per copy, the study may be obtained from the Bureau of Business Research, 200 CBA Building.