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## POPULATION ESTIMATES: NEBRASKA COUNTIES AND REGIONS Revised 1971 and Provisional 1972

The Bureau of Business Research and the United States Bureau of the Census have been cooperating in developing methods for making annual population estimates for Nebraska counties. The plan for the present decade is to publish provisional county estimates as of July 1 of each year as soon as possible after that date. A year later, when corrected and more complete data become available, revised estimates will be published for the same year along with provisional estimates for the next year. After review by the Bureau of the Census, these revised county estimates will eventually be published by that agency in its P-26 bulletin series.

The county estimation procedure essentially involves use of the best available indicators as a means of allocating to the counties the estimate of total state population arrived at independently by the Bureau of the Census. This differs from the method used during the decade of the sixties, when the Bureau of Business Research built up a state total from county estimates without reference to the state total estimated in Washington.

Initial results of the new program were the provisional estimates for July 1, 1971, published in the April, 1972, issue of *Business in Nebraska*. The method used for these provisional 1971 estimates was developed by Dr. E. Z. Palmer during the initial test phase of the Federal-State Cooperative Program. The revised 1971 and provisional 1972 estimates presented in this article result from application of the Palmer method (described in the April, 1972, issue of *Business in Nebraska*), as modified to incorporate the findings of subsequent tests and to allow for changes which have occurred in the available data series.

The estimates presented herein are based on five indicators of population change—drivers licenses, school census, school enrollment, food tax credits, and social security beneficiaries. "Food tax credits" means the total number of people in each county shown on individual income tax returns as eligible to receive such credits. Even though such data are available only for a three-year period, tests of this series as a population indicator have been quite favorable, and it has been given the greatest weight (40%) in the revised 1971 estimates, followed by drivers licenses (30%), and school census, school enrollment, and social security beneficiaries (10% each). Because the food tax credit data must be extrapolated to obtain 1972 values, however, the weight attached to this series in the 1972 provisional estimates is reduced to 30%, and the weight for drivers licenses, for which more recent data are available, is increased to 40%.

### REVISED 1971 ESTIMATES

In spite of changes in estimating methodology and data, the revised 1971 population estimates shown in the table on page 3 reveal much the same pattern of change noted in the April, 1971, issue of *Business in Nebraska*. There are, however, some differences worthy of mention. In the first place, the state "control" total provided by the Bureau of the Census has been revised downward from 1,512,132 to 1,507,924. This revised state total, in turn, is reflected in smaller totals for many of the county estimates. Because of changes in methodology and the effects of incorporating more recent data for some indicator series, however, the changes in county estimates are not always proportional to or even in the same direction as the change in the state estimate.

In percentage terms the greatest variations between the provisional and revised 1971 county population estimates tend to be in smaller counties. This is largely because it is more difficult to make reliable population estimates for small than for large counties on the basis of secondary data. A nationwide testing program conducted as a part of the Federal-State Cooperative Program found that the average percentage error in test estimates of 1970 county populations was about three times greater for counties with fewer than 5,000 people than for counties with over 250,000 people. Even the "best" combination of estimating methods yielded an average error of about 7% of total population for counties of less than 5,000 persons.

The small county estimating problem is of special importance in Nebraska because about a third of the counties have populations of less than 5,000 and another third have between 5,000 and 10,000. The method used for Nebraska county estimates yielded more accurate 1970 test estimates for small counties than did other methods, and the Nebraska test results for small counties were better than the national average (about 4% as compared with 7% average error for counties under 5,000); nevertheless, the chance for significant errors in all counties and particularly in small counties is still present.

Estimated population changes for small counties over relatively short periods, such as the two years covered in this article, should be regarded with a certain amount of skepticism. Many of the available indicators of population change can have random year-to-year movements in small counties which could result in a misestimate of not only the size, but even the direction of change. For most counties year-to-year population changes are not large,

so the 1970 census still provides a reasonably good indication of total population. As population change accumulates over the decade, however, the 1970 census will become more obsolete and short-term, random movements in population indicators will tend to cancel out, so that greater reliance can be placed on estimates (as compared with using the previous census) in the latter part of the decade (provided there are no systematic biases in the estimating procedures).

Because it is possible to estimate large populations with greater average reliability than small populations, major attention to the figures in the table on page 3 should be focused on the twenty-six state planning regions rather than on the county constituents of the regions. Even for the regions, however, there is a possibility of considerable error. Emphasis should, therefore, be concentrated on those areas where the indicators consistently show large and significant population changes. In terms of these criteria the revised 1971 population estimates show, just as did the provisional estimates, that most of the population growth in Nebraska is concentrated in the Omaha and Lincoln areas, with smaller concentrations of growth occurring in and near some of the smaller cities in the state, especially those along the interstate highway.

When considering the influence of revisions on individual areas, the North Platte region deserves special note. The provisional 1971 estimates showed this area to be growing slightly less rapidly than the state as a whole, while the revised 1971 estimates show it to be the fastest growing region (in percentage terms) in the state. All the indicators rose above their trend rates of growth for this area during 1971, so the use of trends in the provisional estimates last April apparently led to an underestimate of growth. Substitution of actual yearly data for trend values in the revised estimates yields figures which probably present a more accurate picture of the actual change.

In most other regions the revisions were too small, or the pattern of movements in different indicators too erratic, to justify any definite statements about reversals of trends or major deviations from trends in regional population growth. Revised population estimates do show a slightly slower relative growth in the Omaha area than did the provisional estimates, but any slowdown of growth in this area was apparently short-lived, as will be apparent from the provisional 1972 estimates.

**1972 ESTIMATES**

The regional pattern of growth within the state shown by the provisional 1972 estimates indicates an even stronger concentration of growth in metropolitan areas than did the 1971 estimates. Each of the three regions classified as metropolitan (Omaha, Lincoln, and South Sioux City), had an estimated percentage increase of more than twice that of the state for the April 1, 1970,

to July 1, 1972, period. (See table on page 3.) The North Platte region showed the greatest percentage increase of any of the regions over this period (7.7%), but its relative gain from July 1, 1971, to July 1, 1972, was estimated to be only about half of its increase from April 1, 1970, to July 1, 1971, while both the Omaha and Lincoln regions grew faster relative to the state from July 1, 1971, to July 1, 1972, than from April 1, 1970, to July 1, 1971.

Further evidence on the concentration of growth in metropolitan areas can be seen by observing that only one nonmetropolitan region besides North Platte had a 1970 to 1972 percentage increase that exceeded the state average of 2.7%, and only two others had gains exceeding 2%. Of the four nonmetropolitan regions with increases exceeding 2%, three (North Platte, Kearney, and Lexington) have principal towns along the interstate highway and the fourth (Fremont) is adjacent to the Omaha region. Thus the 1972 estimates show that those parts of the state distant from metropolitan areas and the interstate highway system are for the most part still lagging behind both the state and the nation in terms of population growth.

Twelve of the twenty-six planning regions had provisional 1972 population estimates that showed declines from 1970; nine showed gains, but at rates less than that of the state. For the most part, the population changes for regions showing losses or rates of increase below that of the state are not large enough, nor do the various alternative indicators show a sufficiently consistent pattern, to allow definite, meaningful statements about relative changes among different nonmetropolitan parts of the state. The estimates do show clearly, however, that most of the state's growth is still concentrated in Omaha and Lincoln areas.

The United States Bureau of the Census provisional estimate of the Nebraska population as of July 1, 1972, is 1,525,226. This represents an increase of 2.7% from the April, 1970, level of 1,485,333, compared with a national average growth of 2.5% over the same period. The 1972 population estimate indicates an estimated net immigration for Nebraska of 7,984 people from July 1, 1971, to July 1, 1972. The revised 1971 state total estimate mentioned above indicates net immigration for the April 1, 1970, to July 1, 1971, period of 9,138. Thus for the second consecutive year the Bureau of the Census has estimated a small net immigration for the state. Since net outmigration has been a long-established trend in Nebraska and since the recent estimated net immigration is so small, it would seem premature to draw any major conclusions from these figures. The trend of net migration and the causes behind it, however, will bear close watching in the future.

VERNON RENSHAW

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UNIVERSITY OF NEBRASKA-LINCOLN James H. Zumbege, <i>Chancellor</i> C. S. Miller, <i>Dean</i> College of Business Administration As an issue of the University of Nebraska-Lincoln News, <i>Business in Nebraska</i> is prepared monthly by the Bureau of Business Research as a public service and mailed free within the state upon request. Material published herein may be reproduced with proper credit.	BUREAU OF BUSINESS RESEARCH Member, Association for University Business and Economic Research 200 CBA, City Campus Lincoln 68508; Phone (402) 472-2334 E. S. Wallace, <i>Director</i> Edward L. Hauswald, <i>Associate Director</i> Vernon Renshaw, <i>Statistician</i> Duane Hackmann, <i>Research Associate</i> Bert Evans, <i>Economist, Extension Specialist</i> Mrs. Dorothy Switzer, <i>Editorial Assistant</i>
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**INDUSTRIAL DEVELOPMENT HANDBOOK**

A new comprehensive step-by-step guide to industrial development has been published recently by the Nebraska Department of Economic Development. Entitled *Building the Foundations of Industrial Development*, the 150-page manual gives practical information about planning community development and cites numerous sources of assistance and expertise. Single copies of the handbook are available to residents of Nebraska on request to the Division of Industrial Development, Department of Economic Development, Box 94666, State Capitol, Lincoln, Nebraska 68509.

POPULATION OF NEBRASKA REGIONS AND COUNTIES  
REVISED 1971 AND PROVISIONAL 1972 COMPARED WITH 1970 CENSUS

	Number of Persons				Percent Change 1970-72		Number of Persons				Percent Change 1970-72
	April 1, 1970	July 1, 1971	July 1, 1972				April 1, 1970	July 1, 1971	July 1, 1972		
<b>Region 1</b>	455,655	469,430	482,477	+ 5.9		<b>Region 16</b>	25,931	26,584	26,579	+ 2.5	
Douglas	389,455	398,032	407,818	+ 4.7		Dawson	19,771	20,364	20,426	+ 3.3	
Sarpy	66,200	71,398	74,659	+12.8		Frontier	3,982	3,997	3,919	- 1.6	
						Gosper	2,178	2,223	2,234	+ 2.6	
<b>Region 2</b>	167,972	172,399	177,906	+ 5.9		<b>Region 17</b>	25,373	24,956	24,915	- 1.8	
Lancaster	167,972	172,399	177,906	+ 5.9		Franklin	4,566	4,423	4,466	- 2.2	
						Furnas	6,897	6,710	6,720	- 2.6	
<b>Region 3</b>	13,137	13,724	13,926	+ 6.0		Harlan	4,357	4,386	4,337	- 0.5	
Dakota	13,137	13,724	13,926	+ 6.0		Phelps	9,553	9,437	9,392	- 1.7	
						<b>Region 18</b>	33,045	34,941	35,594	+ 7.7	
<b>Region 4</b>	50,670	51,262	50,853	+ 0.4		Hooker	939	930	897	- 4.5	
Cass	18,076	18,452	18,221	+ 0.8		Lincoln	29,538	31,472	32,152	+ 8.9	
Otoe	15,576	15,657	15,386	- 1.2		Logan	991	979	954	- 3.8	
Saunders	17,018	17,153	17,246	+ 1.3		McPherson	623	621	656	+ 5.3	
						Thomas	954	939	935	- 2.0	
<b>Region 5</b>	48,092	48,901	49,120	+ 2.1		<b>Region 19</b>	17,664	17,564	17,740	+ 0.4	
Dodge	34,782	35,087	35,330	+ 1.6		Arthur	606	612	593	- 2.2	
Washington	13,310	13,814	13,790	+ 3.6		Chase	4,129	4,215	4,234	+ 2.6	
						Grant	1,019	1,032	1,083	+ 6.3	
<b>Region 6</b>	28,223	28,516	28,044	- 0.6		Kaith	8,487	8,457	8,576	+ 1.1	
Burt	9,247	9,366	9,118	- 1.4		Perkins	3,423	3,248	3,254	- 4.9	
Cuming	12,034	12,077	12,016	- 0.2		<b>Region 20</b>	20,698	21,054	20,951	+ 1.2	
Thurston	6,942	7,073	6,910	- 0.5		Dundy	2,926	2,938	2,948	+ 0.8	
						Hayes	1,530	1,586	1,593	+ 4.1	
<b>Region 7</b>	31,469	31,277	31,119	- 1.1		Hitchcock	4,051	4,030	4,009	- 1.0	
Johnson	5,743	5,748	5,823	+ 1.4		Red Willow	12,191	12,500	12,401	+ 1.7	
Nemaha	8,976	8,759	8,899	- 0.9		<b>Region 21</b>	19,504	19,062	18,709	- 4.1	
Pawnee	4,473	4,632	4,570	+ 2.2		Cheyenne	10,778	10,811	10,579	- 1.9	
Richardson	12,277	12,138	11,827	- 3.7		Deuel	2,717	2,676	2,735	+ 0.7	
						Kimball	6,009	5,575	5,395	-10.2	
<b>Region 8</b>	36,730	37,004	37,310	+ 1.6		<b>Region 22</b>	46,208	46,263	45,328	- 1.9	
Butler	9,461	9,341	9,248	- 2.3		Banner	1,034	1,008	1,018	- 1.5	
Seward	14,460	14,832	15,008	+ 3.8		Garden	2,929	2,948	2,847	- 2.8	
Saline	12,809	12,831	13,054	+ 1.9		Morrill	5,813	5,586	5,580	- 4.0	
						Scotts Bluff	36,432	36,721	35,883	- 1.5	
<b>Region 9</b>	28,290	28,213	27,828	- 1.6		<b>Region 23</b>	29,174	28,976	29,018	- 0.5	
Fillmore	8,137	8,229	7,806	- 4.1		Box Butte	10,094	9,833	10,036	- 0.6	
Polk	6,468	6,516	6,403	- 1.0		Dawes	9,761	9,980	9,984	+ 2.3	
York	13,685	13,468	13,619	- 0.5		Sharidan	7,285	7,019	6,852	- 5.9	
						Sioux	2,034	2,144	2,146	+ 5.5	
<b>Region 10</b>	49,374	49,569	49,281	- 0.2		<b>Region 24</b>	31,123	30,797	30,673	- 1.5	
Boone	8,190	8,073	8,189	0.0		Boyd	3,752	3,778	3,624	- 3.4	
Colfax	9,498	9,524	9,624	+ 1.3		Brown	4,021	3,937	4,074	+ 1.3	
Nance	5,142	5,037	4,870	- 5.3		Cherry	6,846	6,722	6,723	- 1.8	
Platte	26,544	26,935	26,598	+ 0.2		Holt	12,933	12,845	12,692	- 1.9	
						Keya Paha	1,340	1,316	1,286	- 4.1	
<b>Region 11</b>	61,100	61,633	61,212	+ 0.2		Rock	2,231	2,199	2,274	+ 1.9	
Antelope	9,047	8,916	8,878	- 1.9		<b>Region 25</b>	31,368	30,862	30,689	- 2.2	
Madison	27,402	27,826	27,520	+ 0.4		Cedar	12,192	12,180	12,063	- 1.1	
Pierce	8,493	8,497	8,391	- 1.2		Dixon	7,453	7,335	7,163	- 3.9	
Stanton	5,758	5,999	6,007	+ 4.3		Knox	11,723	11,347	11,463	- 2.2	
Wayne	10,400	10,395	10,416	+ 0.2		<b>Region 26</b>	33,763	33,491	33,087	- 2.0	
						Blaine	847	812	805	- 5.0	
<b>Region 12</b>	67,276	67,769	68,364	+ 1.6		Custer	14,092	14,273	14,236	+ 1.0	
Hall	42,851	43,218	43,579	+ 1.7		Garfield	2,411	2,429	2,369	- 1.7	
Hamilton	8,867	8,851	8,718	- 1.7		Greeley	4,000	3,889	3,680	- 8.0	
Howard	6,807	6,746	6,978	+ 2.5		Loup	854	796	804	- 5.9	
Merrick	8,751	8,954	9,089	+ 3.9		Sherman	4,725	4,433	4,322	- 8.5	
						Valley	5,783	5,686	5,697	- 1.5	
<b>Region 13</b>	51,619	51,483	52,162	+ 1.1		Wheeler	1,051	1,173	1,174	+11.7	
Adams	30,553	30,536	31,308	+ 2.5		<b>State's Total</b>	1,485,333	1,507,924	1,525,226	+ 2.7	
Clay	8,266	8,449	8,658	+ 4.7							
Nuckolls	7,404	7,322	7,131	- 3.7							
Webster	5,396	5,176	5,065	- 6.1							
<b>Region 14</b>	43,946	43,346	42,961	- 2.2							
Gage	25,731	25,131	24,919	- 3.2							
Jefferson	10,436	10,516	10,374	- 0.6							
Thayer	7,779	7,699	7,668	- 1.4							
<b>Region 15</b>	37,929	38,848	39,380	+ 3.8							
Buffalo	31,222	32,208	32,752	+ 4.9							
Kearney	6,707	6,640	6,628	- 1.2							

## Review and Outlook

Economic growth continued at a rapid pace during November. As shown in Table 2, the Nebraska dollar-volume index stood at 155.7% of the 1967 average in November. This compares with 153.5% in October (which represents a downward revision from the 154.2% published last month). The U.S. dollar volume was at 153.1% of the 1967 average in November compared with 152.1% in October (the latter figure representing an upward revision from the previously published 151.9%). All sector dollar-volume indexes for the national economy showed increases from October to November, and all dollar-volume indexes for Nebraska showed increases except for the construction index, which dropped slightly for the third straight month. Construction activity, however,

remains at a very high level (204.7% of the 1967 average).

In terms of growth from 1971 to 1972, year-to-date growth through November showed the Nebraska dollar-volume index to be 11.4% ahead of 1971 while the national index was 9.7% ahead of 1971 (see Table 1). Thus, although national growth has been accelerating, the Nebraska economy was growing slightly faster than the national economy both from October to November in 1972 and for the year 1972 compared with the year 1971 (through November). For the month of November, 1972, compared with November, 1971, however, the growth of the national dollar-volume index exceeded the state growth (11.3% vs. 10.7%, as is shown in Table 1). The November-to-November growth for

(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.

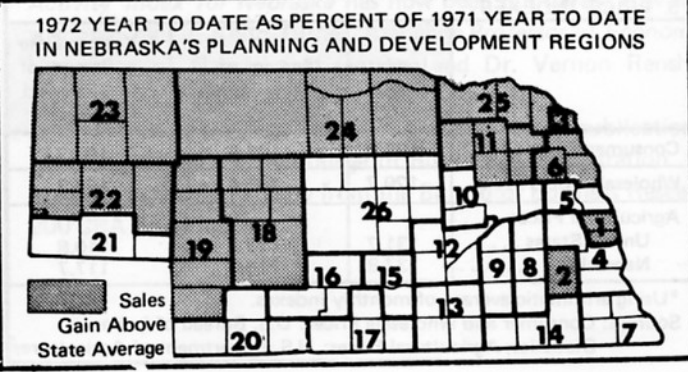
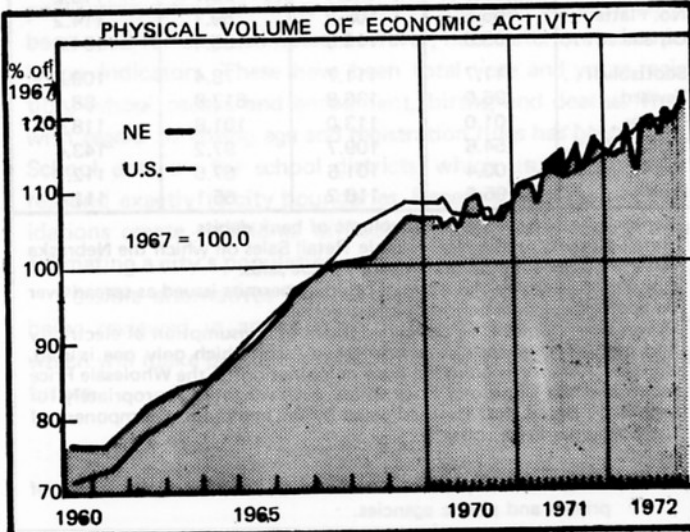
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES				
1. CHANGE FROM PREVIOUS YEAR				
November, 1972	Current Month as Percent of Same Month Previous Year		1972 Year to Date as Percent of 1971 Year to Date	
	Nebraska	U.S.	Nebraska	U.S.
<b>Indicator</b>	<b>Nebraska</b>	<b>U.S.</b>	<b>Nebraska</b>	<b>U.S.</b>
Dollar Volume . . . . .	110.7	111.3	111.4	109.7
Agricultural . . . . .	109.3	110.7	111.0	110.1
Nonagricultural . . . . .	110.9	111.3	111.5	109.7
Construction . . . . .	135.5	112.7	148.1	114.1
Manufacturing . . . . .	108.5	113.6	107.8	109.1
Distributive . . . . .	109.4	110.3	109.6	109.7
Government . . . . .	110.9	110.8	112.1	109.1
Physical Volume . . . . .	103.8	106.5	104.8	105.5
Agricultural . . . . .	92.5	97.2	94.2	99.4
Nonagricultural . . . . .	105.9	106.8	106.8	105.7
Construction . . . . .	128.8	107.1	140.6	108.2
Manufacturing . . . . .	103.4	109.1	104.0	105.4
Distributive . . . . .	105.7	106.5	106.1	106.2
Government . . . . .	102.1	103.4	103.1	103.3
2. CHANGE FROM 1967				
November, 1972	Percent of 1967 Average			
	Nebraska	U.S.		
<b>Indicator</b>	<b>Nebraska</b>	<b>U.S.</b>		
Dollar Volume . . . . .	155.7	153.1		
Agricultural . . . . .	141.0	148.9		
Nonagricultural . . . . .	158.7	153.2		
Construction . . . . .	204.7	168.5		
Manufacturing . . . . .	147.4	134.4		
Distributive . . . . .	155.3	159.2		
Government . . . . .	172.0	165.1		
Physical Volume . . . . .	119.3	120.7		
Agricultural . . . . .	102.3	113.1		
Nonagricultural . . . . .	122.7	120.9		
Construction . . . . .	145.2	119.5		
Manufacturing . . . . .	122.0	112.7		
Distributive . . . . .	122.4	125.5		
Government . . . . .	116.5	120.7		

3. NET TAXABLE RETAIL SALES <sup>1</sup> OF NEBRASKA REGIONS (Unadjusted for Price Changes)		
Region <sup>2</sup> and Principal Retail Trade Center	November, 1972 as Percent of November, 1971	1972 Year to Date as Percent of 1971 Year to Date
<i>The State</i>	111.0	112.1
1 (Omaha) . . . . .	112.9	112.8
2 (Lincoln) . . . . .	113.6	113.5
3 (So. Sioux City) . . . . .	118.1	118.1
4 (Nebraska City) . . . . .	105.4	109.8
5 (Fremont) . . . . .	110.0	111.8
6 (West Point) . . . . .	107.0	114.1
7 (Falls City) . . . . .	111.1	107.9
8 (Seward) . . . . .	112.2	108.5
9 (York) . . . . .	105.9	108.9
10 (Columbus) . . . . .	105.6	109.2
11 (Norfolk) . . . . .	115.6	115.6
12 (Grand Island) . . . . .	116.5	111.7
13 (Hastings) . . . . .	102.6	109.7
14 (Beatrice) . . . . .	102.6	107.0
15 (Kearney) . . . . .	107.1	111.7
16 (Lexington) . . . . .	99.9	109.8
17 (Holdrege) . . . . .	104.9	110.5
18 (North Platte) . . . . .	109.1	113.3
19 (Ogallala) . . . . .	101.2	112.9
20 (McCook) . . . . .	101.7	111.8
21 (Sidney, Kimball) . . . . .	108.3	109.9
22 (Scottsbluff) . . . . .	114.4	114.5
23 (Alliance, Chadron) . . . . .	121.5	113.4
24 (O'Neill) . . . . .	109.7	112.3
25 (Hartington) . . . . .	119.7	112.9
26 (Broken Bow) . . . . .	101.6	107.2

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

<sup>2</sup>"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)

the state lagged behind the nation, primarily because business activity in Nebraska during November, 1971, was well above the average for 1971.

In comparing individual sectors of the economy perhaps the most striking feature of the 1972 expansion of business activity is the extent to which all sectors have contributed to the expansion. As noted above, the year-to-date growth of the national dollar-volume index through November was 9.7%, which compares with a year-to-date growth of 9.1% for the "slowest-growing" sectors from 1971 to 1972 (manufacturing and government). The range of growth rates among the sectors of the Nebraska economy is greater than that for the nation, but even for the state the "slowest-growing sector" from 1971 to 1972 (manufacturing) had increased by 7.8% through November.

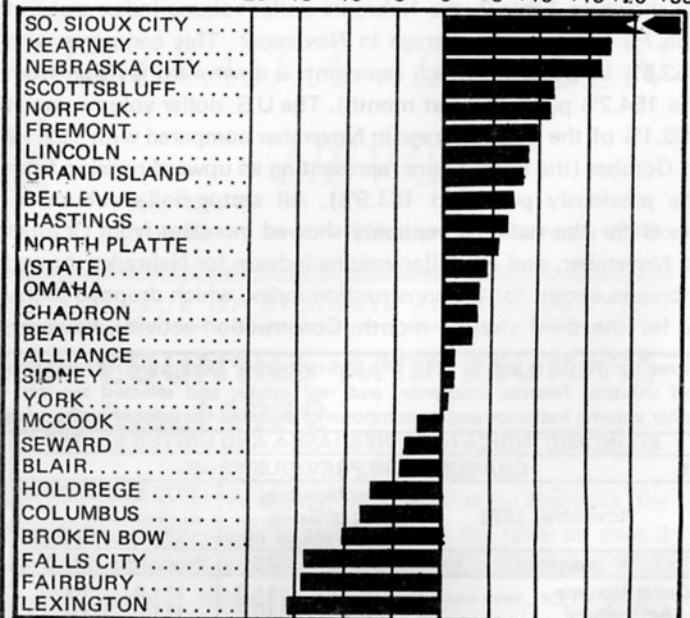
As should be expected the growth of the physical-volume indexes (adjusted for price changes) has lagged behind dollar-volume growth. The national physical-volume index increased 5.5% from the first eleven months of 1971 to the first eleven months of 1972 (compared with 9.7% for the dollar-volume index) while the state physical-volume index increased 4.8% over the same period (compared with the dollar-volume increase of 11.4%). Increases in agricultural prices received (see Table 5) from 1971 to 1972 continued to be a major factor in the relatively slow growth of the Nebraska physical-volume index. Although agricultural prices received in the state dipped slightly from October to November, they remained well above 1971 levels, and the indications are that they have been increasing since November.

Table 3 shows changes in retail trade activity from 1971 for Nebraska and its 26 planning regions. For the state retail sales were 11% greater in November, 1972, than in November, 1971, while sales for the first eleven months of 1972 were 12.1% above the comparable period in 1971. All the state's planning regions have shared in the 1972 expansion of retail activity, with a range in year-to-date growth rates from 7% (Beatrice) to 18.1% (South Sioux City).

Table 4 shows the change in city indicators from November, 1971, to November, 1972. The figures for October published last month in this table showed very strong increases in banking activity in nearly all cities. For November the general pattern was one of more modest increases. There was, however, considerable variation from city to city in the rate of change of banking activity from November, 1971, to November, 1972, and several cities showed declines. There was also considerable variation from city to city in the change in retail activity from November, 1971, to November, 1972, although the month-to-month pattern of change has generally been more stable for this series than for the banking series.

V. R.

CITY BANKING ACTIVITY  
Percent Change, Nov. 1971 to Nov. 1972  
-20 -15 -10 -5 0 +5 +10 +15 +20 +25



4. NOVEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago			
	Banking Activity <sup>1</sup>	Retail Activity <sup>2</sup>	Building Activity <sup>3</sup>	Power Consumption <sup>4</sup>
	(Adjusted for Price Change) <sup>5</sup>			
<i>The State</i>	104.6	107.1	126.0	109.9
Alliance . . . .	101.0	123.6	296.1	118.1
Beatrice . . . .	102.6	97.4	86.0	117.0
Bellevue . . . .	107.0	113.2	34.6	126.0
Broken Bow . . .	89.9	105.3	232.6	117.2
Chadron . . . .	103.3	122.7	258.8	141.6
Columbus . . . .	91.7	106.7	152.2	114.1
Fairbury . . . .	85.3	108.9	56.3	109.5*
Falls City . . . .	85.5	107.9	137.0	122.2
Fremont . . . .	109.9	109.0	171.8	88.9*
Grand Island . .	108.0	118.2	171.3	119.8
Hastings . . . .	105.7	100.4	64.5	117.1
Holdrege . . . .	92.7	101.0	92.0	122.3
Kearney . . . .	117.4	102.1	156.3	119.9
Lexington . . . .	84.6	99.9	144.4	116.0
Lincoln . . . .	108.3	113.6	167.8	108.0
McCook . . . .	97.5	100.1	969.9	114.3
Nebr. City . . . .	116.3	95.6	89.1	126.0
Norfolk . . . .	111.4	113.1	98.7	110.2
No. Platte . . . .	105.5	108.2	59.1	114.2
Omaha . . . .	103.5	112.3	155.4	104.8
Scottsbluff . . .	111.7	111.7	78.4	109.8
Seward . . . .	96.0	136.8	617.8	88.1*
Sidney . . . .	101.0	113.0	101.8	118.6
S.Sioux City . . .	154.6	109.7	97.2	143.4
York . . . .	100.4	101.6	67.5	112.7
Blair . . . .	95.6	116.2	65.1	111.4

<sup>1</sup> Banking Activity is the dollar volume of bank debits.  
<sup>2</sup> Retail Activity is the Net Taxable Retail Sales on which the Nebraska sales tax is levied, *excluding motor vehicle sales*.  
<sup>3</sup> Building Activity is the value of building permits issued as spread over an appropriate time period of construction.  
<sup>4</sup> Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked \* for which only one is used.  
<sup>5</sup> Banking 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.

5. PRICE INDEXES

	Index* (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices . . . . .	126.9	103.5	103.3
Wholesale Prices . . . . .	120.7	105.4	104.3
Agricultural Prices . . . . .			
United States . . . . .	131.7	113.9	110.8
Nebraska . . . . .	137.8	118.2	117.7

\*Using arithmetic average of monthly indexes.  
 Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

# Review Report: Rural Zoning in the United States

Because the past two decades have brought major changes in rural America and changes in state enabling statutes which authorize zoning in rural and unincorporated areas, the Economic Research Service of the U.S. Department of Agriculture has made a study of rural zoning and enabling legislation.<sup>1</sup>

The authors point out that zoning is one of several measures employed to attain community objectives and that it relates primarily to land use planning. The study shows how laws are being reshaped, sometimes belatedly, to permit more suitable and effective zoning in today's changing environment.

In a discussion of problems of changes in rural America, it is stated:

Good roads and automobiles have made it possible and convenient for people to live in the country and work in the city. At the same time, people have moved from farms to work and live in and near urban centers. Finally, industrial decentralization has brought new jobs to many villages and rural areas.

. . . Certain questions arise as a result of such migration. What kind of communities will people find? Will the areas be efficient and pleasant enough . . . ? Or will the communities grow haphazardly without planning-zoning guidance and become harmful mixtures of conflicting land uses—stores, factories, homes, and farms?

The study stresses the fact that zoning can help guide community growth in accordance with a regional land-use plan and in this way avoid urban sprawl, with its waste of land, water, and tax resources. Additionally, zoning can be used to protect areas that are most desirable for homes, to reserve space for business and industry, to protect agriculture and related processing and service trades, and to foster and protect forestry, recreation, and water resources.

<sup>1</sup>*Rural Zoning in the United States: Analysis of Enabling Legislation*, Economic Research Service, USDA. Available from U.S. Government Printing Office, Washington, D.C. 20402. Paperbound, 170 pp. Price \$1.50.

Zoning is, of course, only one technique available to local governments for influencing land use; another way is through the taxing power. The authors found that as of January 1, 1971, nearly half of the states had enacted enabling statutes which direct their counties to provide for additional assessments and taxation of certain classes of rural land.

Summarized in the publication are the main rural zoning powers now conferred on counties, towns and townships, and miscellaneous local governments by rural zoning enabling statutes of the 50 states. Emphasis throughout is on grants of zoning powers that are adapted to open-country areas. The analysis of zoning enabling laws is comparative; planning is treated only incidentally.

Major amendments and zoning innovations adopted in 1969-70 are analyzed, including innovations that foreshadow future types of zoning districts and regulations at nonlocal levels of government, especially in rural areas. The authority to apply zoning regulations in the urban fringe and open country is also examined. Of major concern are zoning powers that have been granted for protection of rural values—agriculture, soil and water, forests, fish and wildlife, recreational and scenic attractions, and related sources. The study shows that an increasing number of nonrural governmental agencies—state, municipal, intrastate, and interstate—are empowered to zone rural problem areas.

The eleven-chapter book also contains a number of tables which give state data, a complete legal bibliography, and a list of all literature cited in the text.

There are many Nebraskans who will find this study helpful in connection with the challenging new land-use problems and goals for local government that have been created by recent explosive changes in rural America.<sup>2</sup>

DOROTHY SWITZER

<sup>2</sup>The subject has become more urgent since a recent ruling by the Nebraska Supreme Court that unless a county has a comprehensive development plan it lacks authority to make zoning changes.

## City Population Estimates

In the past the Bureau of Business Research has made population estimates for cities of 2,500 or more along with the county population estimates. Most of the key indicator series which have been used for city estimates, however, have deteriorated as population indicators. These have been total vote and voter registration, school census and enrollment, births, and deaths. The law with regard to voting age and registration rules has been changed. School data are for school districts, which usually do not correspond exactly to city boundaries. Recent school district consolidations create additional difficulties when using school data in estimating a city's population.

Possible alternatives for making city population estimates are being reviewed in an attempt to devise a satisfactory method which will make possible publication of such estimates in the near future.

## New Publication

It was announced in an article on "The New Nebraska Business Index" in the March, 1972, issue of *Business in Nebraska* that a bulletin was being prepared describing the technical aspects of devising and compiling the new index to measure business and economic activity of the state which we have been publishing since April.

Business Research Bulletin No. 73 entitled *A New Business Activity Index for Nebraska* has now been published. It was co-authored by Dr. Keith Turner, Associate Professor of Economics, University of Nebraska at Omaha, and Dr. Vernon Renshaw, Chief Statistician, Bureau of Business Research.

The 192-page bulletin is a fiftieth anniversary publication of research activity of the College of Business Administration. It is available at \$4.00 per copy from the Bureau of Business Research, 200 CBA Building.