# Population Change in the Ozarks Region 1970-1975

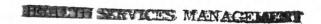
A Report to
The Ozarks Regional Commission

Rex. R. Campbell George H. Dailey, Jr. Robert L. McNamara

Department of Rural Sociology University of Missouri-Columbia

September, 1978

This technical assistance study was accomplished by professional consultants under agreement with the Ozarks Regional Commission, and through partial funding from the Kerr Foundation of Oklahoma City, Oklahoma, and the Agricultural Experiment Station at the University of Missouri-Columbia. The statements, findings conclusions, recommendations, and other data in this report are solely those of the authors and do not necessarily reflect the views of the Ozarks Regional Commission or the Kerr Foundation.



## **Table of Contents**

I. 1	List of Tables and Figures	iv
II.	Acknowledgements	v
III. I	Introduction	1
IV.	Historical Population Changes, 1900 to 1970	1
V.	National Patterns of Change Since 1970	5
VI.	Population Change in the Ozarks Regions Since 1970	7
	A. Population Change in the Sub-State Planning and Development Districts of the Five State Ozarks	
	B. Net Migration Change in the Sub-Regions of the Five State Ozarks	14
	C. Some County Characteristics Affecting Non-Metropolitan Net Migration in the Ozarks Region	26
VII.	Conclusions	27
VIII	Footnotes and References	28

## List of Tables and Figures

Tal	bles	Page
1.	Average Annual Percent Population Change in the United States, the Ozarks Region and the Five Component States, 1900 to 1975	5
2.	Components of Population Change in the United States by Metropolitan Status, 1960 to 1975	6
3.	Components of Population Change in the Ozarks Region by Metropolitan Status, 1970 to 1975	8
4.	Population and Percentage of the Population of the Ozarks Region's SMSA's Residing in Central City and Non-Central City Counties and Parishes, 1970 to 1975	10
5.	Non-Metropolitan Net Migration in the Ozarks Region by Selected County Characteristics	27
Fig	ures	
1.	Development of the Ozarks Region	2
2.	The Ozarks Region Sub-State Planning and Development Districts	3
3.	Population of the Five State Ozarks Region, 1900 to 1975	4
4.	The Classification of the Ozarks Region Counties/Parishes by Metropolitan Status, 1975	9
5	-13. Components of Change in the Sub-State Planning and Development Districts by Metropolitan Status, 1970 to 1975.	15-23
14.	The Six Sub-Regions of the Five State Ozarks With Net Migration Figures and Rates, 1970 to 1975	24

### Acknowledgements

The authors gratefully acknowledge: Mr. Thomas Jokerst for his technical assistance in the preparation and accessing of data, Mr. Osler McCarthy for his work in editing, Mr. John Huffstot and Mrs. Alma Ballard for graphic display of data and Mr. Frank Whelan for assistance in the acquisition and organization of information utilized in this document. All of these persons are currently staff members at the University of Missouri-Columbia.

#### Introduction

Changes in demographic processes are occurring in the Ozarks Region. Some metropolitan areas are experiencing a decrease in growth and, in a few, population decline. In conjunction with this, the reversal of non-metropolitan population loss and out-migration is becoming visible in major portions of the region. The level of natural increase, births minus deaths, is dropping in response to lower birth rates in some areas and to a heavy concentration of older persons in others.

In order to comprehend these changes in the Ozarks Region it must be understood that the region is made up of five diverse states. (For regional boundary definitions, see Figures 1 and 2.) Within each are a variety of physiographic sub-regions with their individual economic distinctions. In constructing any social profile of the states it would become quite obvious that an array of such profiles would be produced. So also is the case in describing demographic change in the region. While an overview of the region provides a total picture, it tends to obscure variations on a state or sub-regional basis. Thus, an overview for all five states is first provided, followed by a description for each state, which incorporates sub-regional information. In exploring these demographic components of change an examination is made of the emergence of new patterns and the continuation of old ones. In addition, an effort is made to point out some of the factors associated with these processes and to place these factors in a national perspective.

(For a complete representation of population changes in the region, the five states, the six subregions and the sub-state planning and development districts see *A Quarter Century of Population Change in the Ozarks Region*, 1950 to 1975. In addition, the provisional 1976 county and SMSA population estimates are now available in the Bureau of the Census' P-26 Series.)

#### Historical Population Changes, 1900 to 1970

The five states that constitute the Ozarks region had a total population of slightly more than eight million at the turn of the century. By 1970, after continuous growth in the region as a whole, the population had almost doubled to more than fifteen million.

On a state-by-state basis, however, only Missouri and Louisiana had successive growth in each of the first seven decades of the century (See Figure 3). These two states escaped the population losses that came with the Great Depression in Kansas and Oklahoma during the 1930s. Although Kansas started its recovery during the 1940s, Oklahoma continued to lose population and was joined during this time by Arkansas,

which had grown despite the Depression. Oklahoma recovered by 1960 but Arkansas did not. Not until the 1960s, then, were all states of the Ozarks region growing—and the pace was destined to continue at a greater rate between 1970 and 1975.

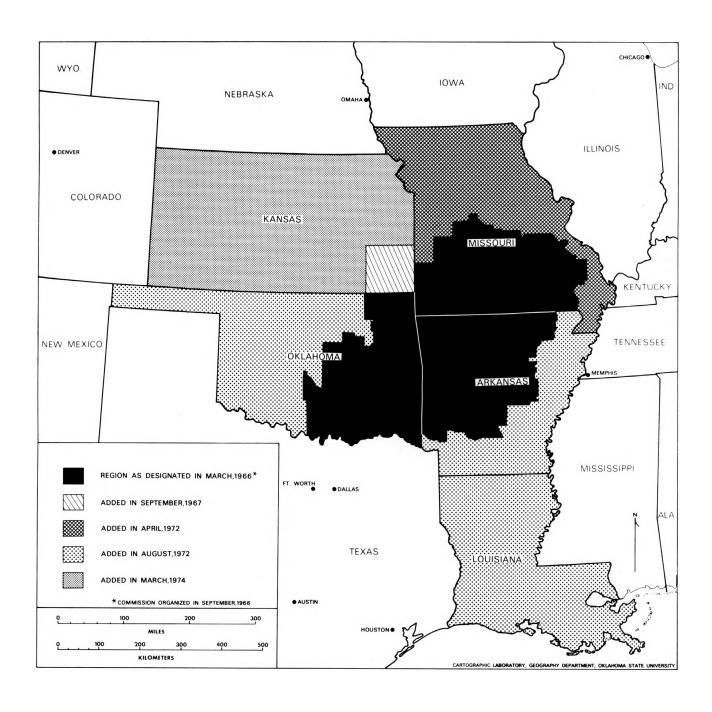
For Arkansas, as for Oklahoma and Kansas before it, population loss largely came from the rural areas, the farms and the small towns that constitute the region outside the metropolitan areas. (Technically, this is referred as the non-metropolitan portion of a state. It includes both rural settings and urban, since the classification urban includes towns of as few as 2,500 residents and some cities as large as 50,000. At the county level, non-metropolitan status is ascribed to those counties which are not classified as portions of Standard Metropolitan Statistical Areas—SMSAs.) Heavy migration out of these states stripped away whatever population gains the metropolitan areas might have boasted.

For the most part, changes in the population of the region and its component states have followed the pattern of the nation as a whole. Relative gains and losses in the five states can be determined by comparing the rates of population changes on an annual basis (See Table 1). Just as the United States population growth slowed between 1910 and 1920—the decade that included World War I—and then again during the Thirties, so was there a slowdown in the Ozarks region. Likewise, the accelerated post-war "Baby Boom" growth in the 1940s and 1950s and its subsequent decline in the Sixties and Seventies corresponds in national and regional rates. But while there is an analogous relationship between national trends and the Ozarks states, the regional growth rates were conspicuously lower than those for the nation as a whole for each decade except the first, from 1900 to 1910. In this decade growth in the Ozarks states was greater than for the rest of the nation because of the dramatic increase in Oklahoma's population following the great land rush that opened the territory in 1889. During the decade 1900 to 1910, Arkansas and Louisiana kept growing almost in step with the nation, thus helping to sustain the high rate of population increase for the region at that time.

In the period between 1950 and 1970, population growth in the Ozarks region's metropolitan areas (as designated in 1975)¹ exceeded national levels. But the growth rate for the region as a whole fell below the nation primarily because of (1) lower birth rates that lowered the natural increase in the population (the difference of births minus deaths) and (2) heavy movement away from the region's small towns and rural areas (the non-metropolitan counties and parishes). Yet this migration stream started to dwindle by the 1960s, when less than half as many non-metropolitan residents were moving out each year as

## OZARKS ECONOMIC DEVELOPMENT REGION

#### **GROWTH OF THE REGION**



#### FIGURE 2

## OZARKS ECONOMIC DEVELOPMENT REGION

#### SUB-STATE PLANNING AND DEVELOPMENT DISTRICTS



#### SUB-STATE PLANNING AND DEVELOPMENT DISTRICTS

#### ARKANSAS

- A-1 NORTHWEST ARKANSAS ECONOMIC DEVELOPMENT DISTRICT

- A-1 NORTHWEST ARKANSAS ECONOMIC DEVELOPMENT DISTRICT
  A-2 WHITE RIVER PLANNING AND DEVELOPMENT DISTRICT
  A-3 EAST ARKANSAS PLANNING AND DEVELOPMENT DISTRICT
  A-4 SOUTHEAST ARKANSAS ECONOMIC DEVELOPMENT DISTRICT
  A-5 CENTRAL ARKANSAS PLANNING AND DEVELOPMENT DISTRICT
  A-6 WEST CENTRAL ARKANSAS PLANNING AND DEVELOPMENT DISTRICT
  A-7 SOUTHWEST ARKANSAS PLANNING AND DEVELOPMENT DISTRICT
  A-8 WESTERN ARKANSAS PLANNING AND DEVELOPMENT DISTRICT
  A-8 WESTERN ARKANSAS PLANNING AND DEVELOPMENT DISTRICT

#### KANSAS \*

- ANSAS \*

  K. 1 EAST CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  K. 2 SOUTHEAST PLANNING AND DEVELOPMENT DISTRICT
  K. 3 FLINT HILLS PLANNING AND DEVELOPMENT DISTRICT
  K. 4 SOUTHEAST CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  K. 5 SOUTHWEST CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  K. 6 NEAR SOUTHWEST PLANNING AND DEVELOPMENT DISTRICT
  K. 7 FAR SOUTHWEST PLANNING AND DEVELOPMENT DISTRICT
  K. 8 FAR NORTHWEST PLANNING AND DEVELOPMENT DISTRICT
  K. 9 NORTHWEST CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  K. 10 NORTH CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  K. 11 NORTHEAST PLANNING AND DEVELOPMENT DISTRICT

- L-1 REGIONAL PLANNING COMMISSION OF JEFFERSON, ORLEANS, ST. BERNARD L-1 REGIONAL PLANNING COMMISSION OF JEFFERSON ORLEANS. ST BERNARD AND ST. TAMMANY
  L-2 CAPITOL ECONOMIC DEVELOPMENT DISTRICT
  L-3 SOUTH-CENTRAL PLANNING AND DEVELOPMENT DISTRICT
  L-4 EVANGELINE ECONOMIC DEVELOPMENT DISTRICT
  L-5 IMPERIAL CALCASIEU PLANNING AND DEVELOPMENT COMMISSION
  L-6 KISATCHIE-DELTA PLANNING AND DEVELOPMENT DISTRICT
  L-7 COORDINATING AND DEVELOPMENT OUTSTRICT
  L-7 COORDINATING AND DEVELOPMENT DISTRICT

#### MISSOURI

- M 1 NORTHEAST MISSOURI REGIONAL PLANNING COMMISSION M-2 MARK TWAIN REGIONAL PLANNING COMMISSION
- M-3 BOONSLICK REGIONAL PLANNING COMMISSION
  M-4 EAST-WEST GATEWAY COORDINATING COUNCIL
- M-5 SOUTHEAST MISSOURI REGIONAL PLANNING COMMISSION M-6 BOOTHEEL REGIONAL PLANNING COMMISSION M-7 OZARK FOOTHILLS REGIONAL PLANNING COMMISSION
- M-8 MERAMEC REGIONAL PLANNING COMMISSION

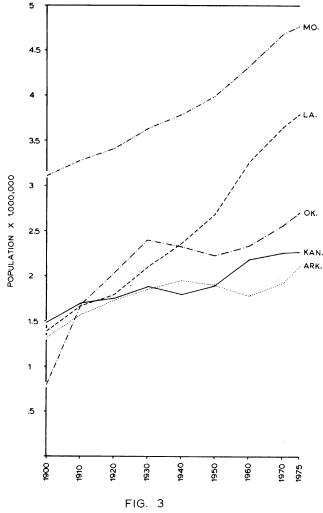
- M-8 MEHAMIC HEGIONAL PLANNING COMMISSION
  M-9 MID MISSOURI COUNCIL OF GOVERNMENTS
  M-10 MISSOURI VALLEY REGIONAL PLANNING COMMISSION
  M-11 GREEN HILLS REGIONAL PLANNING COMMISSION
  M-12 NORTHWEST MISSOURI REGIONAL COUNCIL OF GOVERNMENTS
  M-13 MO KAN BI STATE PLANNING COMMISSION

- M-14 MID-AMERICA REGIONAL COUNCIL
  M-15 SHOW ME REGIONAL PLANNING COMMISSION
  M-16 LAKE OF THE OZARKS COUNCIL OF LOCAL GOVERNMENTS
- M-17 SOUTH CENTRAL OZARKS REGIONAL PLANNING COMMISSION
  M-18 SOUTHWEST MISSOURI LOCAL GOVERNMENT ADVISORY COUNCIL
- M-19 KAYSINGER BASIN REGIONAL PLANNING COMMISSION
- M-20 OZARKS GATEWAY REGIONAL PLANNING COMMISSION

#### OKLAHOMA

- DKLAHOMA

  O I NORTHEASTERN COUNTIES OF OKLAHOMA
  O 2 EASTERN OKLAHOMA DEVELOPMENT DISTRICT
  O 3 KIAMICHI ECONOMIC DEVELOPMENT DISTRICT
  O 4 SOUTHERN OKLAHOMA DEVELOPMENT ASSOCIATION
  O 5 CENTRAL OKLAHOMA ECONOMIC DEVELOPMENT DISTRICT
  O 6 IDDIAN NATIONS COUNCIL OF GOVERNMENTS
  O 7 NORTHERN OKLAHOMA DEVELOPMENT ASSOCIATION
  O 8 ASSOCIATION OF CENTRAL OKLAHOMA GOVERNMENTS
  O 9 ASSOCIATION OF SOUTH CENTRAL OKLAHOMA GOVERNMENTS
  O 10 SOUTH WESTERN OKLAHOMA DEVELOPMENT AUTHORITY
  O 11 OKLAHOMA ECONOMIC DEVELOPMENT ASSOCIATION
- THE DISTRICTS LISTED FOR KANSAS ARE OFFICIALLY DELINEATED SUB-STATE DISTRICTS ORGANIZED REGIONAL PLANNING COMMISSIONS DO NOT NECESSARILY CONFORM TO THESE BOUNDARIES.



POPULATION OF THE FIVE STATE OZARKS REGION , 1900 TO 1975

had been the case in the 1950s. At the same time, the numbers of people migrating into the region's metropolitan areas also dwindled. Together, these two factors were precursors to shifts in the nature of population changes that became apparent between 1970 and 1975.

Despite healthy growth in its metropolitan areas, Arkansas' rate of population increase steadily declined after 1910 and the state suffered losses during the 1940s and 1950s. Not only was this a departure from national trends but it also deviated from the Ozarks region as a whole. The decline in its growth rate and the decades of population losses were understandable results of rural out-migration that was larger than the combined natural increase and migration into the metropolitan areas. Even though non-metropolitan out-migration continued in the 1960s, the state began considerable growth—led primarily by natural increase—and by 1970 Arkansas had recovered what it lost in population after 1940.

In Kansas, on the other hand, growth generally traced the national pattern, with the exception of the

Depression years, when the state lost population. The United States at this time did not lose population, although the growth rate did decline. Following World War II, Kansas showed a strong growth rate boosted mainly by the Baby Boom during the 1950s. The birth rate decreased considerably in the Sixties, but migration that continued to expand the metropolitan areas kept up the state's growth. Still, growth was at a much slower pace than the 1950s, largely because of outmigration from the rural areas.

Along with Oklahoma, Louisiana was one of the only states in the region that at any one time between 1900 and 1970 had an annual rate of increase greater than that of the nation. Between 1920 and 1940 and again in the 1950s, this was the case. The most dramatic example of this rapid growth came during the Thirties when, despite the Depression, there was a sizeable gain in the state's rural population. During the 1950s the same high birth rates that most of the nation felt were coupled in Louisiana with migration into the cities to produce a growth rate higher than the nation as a whole. And in the 1960s, when birth rates generally fell elsewhere, Louisiana maintained a high percentage of natural increase that helped it lead the Ozarks region with its growth rate. But the state's growth at this time was slower than it had been in the previous decade.

Unlike the other states in the region, Missouri did not undergo wide fluctuations in population change from 1900 to 1970. The state, however, did follow the trend of urban expansion and rural decline characteristic in other parts of the region and the country. But its highest growth rate was during the 1950s, corresponding, again, with the post-war Baby Boom. The level of natural increase was highest in the metropolitan areas, several times greater than the net increase that resulted from migration into these urban areas. At the same time, though, lower birth rates and migration out of the non-metropolitan areas caused population to decline in rural Missouri. The same pattern of change in the Fifties existed in the 1960s for the metropolitan areas—continued growth—but migration into counties on the fringes of metropolitan areas resulted in a population increase for non-metropolitan areas in general. However, as these fringe areas began to grow the growth rate of the metropolitan areas themselves began to taper.

Oklahoma's rapid growth in the first years of the century waned by the 1929 stock market crash. Still, the first three decades testified to a growth rate significantly greater than for the rest of the nation. But the expansion was killed in the Depression as the state suffered the plight of so many of its residents—the "Okies" who fled the rural areas in a migration stream away from the Dust Bowl. This migration continued in the 1940s and was so heavy that considerable growth

Table 1

Average Annual Percent Population Change\* in the United States, the Ozarks Region and the Five Component States, 1900 to 1975

	U.S.	Region	Arkansas	Kansas	Louisiana	Missouri	Oklahoma
1900-1910	1.90	2.02	1.82	1.39	1.81	0.58	7.08
1910-1920	1.39	0.85	1.07	0.45	0.82	0.33	2.01
1920-1930	1.50	0.98	0.57	0.61	1.55	0.64	1.66
1930-1940	0.70	0.31	0.50	-0.43	1.17	0.42	-0.25
1940-1950	1.35	0.36	-0.21	0.56	1.27	0.44	-0.45
1950-1960	1.69	0.89	-0.66	1.33	1.93	0.88	0.41
1960-1970	1.25	0.81	0.73	0.31	1.11	0.79	0.94
1970-1975	0.89	0.73	1.81	0.15	0.75	0.34	1.09

<sup>\*</sup> The formula used to generate the average annual percent change (AAPC) is:

$$AAPC = \frac{P_1 - P_0}{i(1/2)(P_1 + P_0)}(100)$$

 $P_0$  and  $P_1$  equal the population at the beginning and end of the time interval, respectively, and i equals the time interval, either 10 or 5.25. (See Shryock, Henry S., Jacob S. Siegel and Associates, *The Methods and Materials of Demography*, Volume 2, Revised Edition, U.S. Bureau of the Census, 1973, pp. 377-380.)

Source: The state and regional figures were produced by using data found in U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 709, "Estimates of the Population of Counties and Metropolitan Areas: July 1, 1974 and 1975," U.S. Government Printing Office, Washington, D.C., 1977, and the national rates were calculated by accessing data from *U.S. Census of Population*: 1970, "Number of Inhabitants," Final Report PC (1)-A1, United States Summary, Table 2.

in urban areas failed to overcome the population loss. Not until the Fifties did Oklahoma begin to recover and gain population. Migration out of the non-metropolitan counties continued to drain the rural areas of the state, but in the 1960s these losses decreased. Rural out-migration had declined and, correspondingly, migration into metropolitan areas increased at a rate higher than during the Fifties.

In general the five states of the Ozarks have had similar patterns of population change to 1970. A slowdown in natural increase since the Baby Boom years was apparent. The pattern of rural to urban migration was also established, especially in the farm states. However, indications from the decade 1960 to 1970 were, in general, that another slowdown was taking shape. Although this does not hold true for all states, the level of net migration out of non-metropolitan areas and into SMSAs declined. Together these variations in the components of change are an indication of the types of shifts which have taken place in the region since 1970.

#### National Patterns of Change Since 1970

To understand population change in the Ozarks region it is necessary to present an overview of demographic changes taking place in the United States since 1970. Prior to this time, in the Fifties and Sixties, metropolitan growth was steady: a little more than six-tenths of the United States population lived in metropolitan areas in 1950; twenty years later, over two-thirds of the nation did. By 1975, the figures included nearly three of every four Americans. However, the rate of this expansion decreased from the 1950s to the 1960s and from the 1960s to the 1970s.<sup>2</sup>

If total change is broken into its two component parts—births and deaths (natural increase) and net migration (the difference between in-migration and out)—the outline of the 1970s followed that of the 1960s: natural growth continued to decline (See Table 2). But in a departure from previous migration trends, the flow into the metropolitan areas slowed consid-

Table 2

Components of Population Change in the United States by Metropolitan Status, 1960 to 1975

						Average	Annual			
		Population		Cha	inge		ural ease		Net Migration	
		Topulation		1970-	1960-	1970-	1960-	1970-	1960-	
	1975	1970	1960	1975	1970	1975	1970	1975	1970	
U.S. Total										
# 1	213,051	203,305	179,311	1,859	2,399	1,387	2,046	472	354	
%				0.89	1.25	0.67	1.07	0.23	0.19	
Metropolitan										
#	156,097	149,827	127,938	1,194	2,189	1,062	1,554	132	635	
%				0.78	1.58	0.69	1.12	0.09	0.46	
Non-Metropo	olitan									
#	56,954	53,478	51,373	665	211	325	492	340	-281	
%				1.20	0.40	0.59	0.94	0.62	-0.54	

<sup>1</sup>All population figures have been rounded to the nearest thousand and are presented in thousands. Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25 No. 709, "Estimates of the Population of Counties and Metropolitan Areas: July 1, 1974 and 1975," Table A, U.S. Government Printing Office, 1977.

erably after the Sixties. This decrease in net migration reflects two related changes occurring in the metropolitan areas. For one, population decline was apparent by 1970 in many large central cities—the result of flight from the city to the suburbs. In addition to the obvious reason, "urban problems," other less salient factors contributed to the outflow: the automobile made it easier to live outside of the city and commute to work; the interstate highway system made transportation simpler; and outward movement of both in turn made industry less dependent on the central cities. But the central cities have not been alone in population losses—entire metropolitan areas have declined to the point that by 1975 nearly one of every six was losing population. This does not necessarily mean widespread abandonment of urban and suburban territory, but slowdown and decline definitely are taking place in metropolitan locations.<sup>3</sup>

In total, migration out of metropolitan counties means growth for non-metropolitan counties. Migration figures for the 1970-1975 period establish as much: the trend of population losses reversed for non-metropolitan counties in the United States, showing migration gains for the first time in several decades. Not only was this a result of in-migration from metropolitan areas but it also showed that people were less inclined to leave non-metropolitan areas, as a combination of opportunities have appeared in these locations.

Since this non-metropolitan growth is a recent phenomenon, it is not yet completely understood. But several factors associated with migration into nonmetropolitan areas have led to a series of classifications for these outlying counties. The most important of these, in terms of the greatest portion of in-migration, is the county on the fringe of a metropolitan area. In the first half of the 1970s, six out of every ten persons who moved into non-metropolitan areas were migrating to these counties next to a metropolitan area. 4 Very likely this indicates a continuation of suburban growth, as service industries and maunfacturing push past the borders of urban areas. This is backed up by studies that show people increasingly want rural or small-town homes that are close enough to take advantage of the benefits of large cities. Important as it is to this migration change, urban spillover does not explain the reversal entirely, as outlying completely rural counties (those with less than 2,500 urban residents) have been growing at a rate slightly greater than all of those next to metropolitan areas.5

Still a second factor in the explanation of nonmetropolitan growth is found in the expansion of the smaller cities and towns. The factors associated with suburban development and urban sprawl also are evident in non-metropolitan areas. Better transportation and advances in communications have made access to the smaller cities much easier and have diminished the traditional sense of isolation, both for residents and for industry. An important factor during the 1960s in non-metropolitan counties was the development of manufacturing, as industries began to locate outside congested cities where manufacturing had been concentrated.<sup>6</sup> Since then the growth in manufacturing industries has dropped in these areas, and population increases have been associated with counties that have less concentrated manufacturing.<sup>7</sup>

In the place of manufacturing in the 1970s has come trade and services. Much of the growth in these types of production has followed migration into counties with large college and retirement populations. Places like Payne County, Oklahoma, location of a major state university or southern Missouri, with its hills and recreation lakes, are benefiting from the fastest growth and the greatest in-migration of any of the other types of non-metropolitan counties. The influx of students and retirees has stimulated service industries, construction and an assortment of trade, recreational or leisure-time businesses.8 In addition, migration of students and retirees has generated still another group of migrants—workers who provide the services. Moreover, some of the counties attractive to retirement migrants also are attractive to industries lured to the location because of its scenery (especially lakes), moderate climate or other enticing environmental factors.9 A principal example of this is the Ozark-Ouachita section of northern Arkansas.

The importance of non-economic factors is obvious in this "amenities" migration. These factors also play a major role in return migration, which figures strongly in the trend toward growth of the rural and non-metropolitan areas. Persons who left rural homes for opportunities in metropolitan areas are moving back in significant numbers. Most of these people tend to be older, but the return migration includes younger persons as well.<sup>10</sup>

Although three primary motives have thus far have been associated with non-metropolitan migration—retirement, attractiveness of the location and the sense of home for persons who want to return—none is mutually exclusive of the others, nor does any preclude economic opportunities as a factor in the decision to move.

A final point of explanation in the shift in growth from metropolitan to the outlying areas of states, which is in part related to the others, is the general conclusion that the reversal reflects different, changing residential preferences. Americans seem no longer to be enchanted with the large cities, as residences, but apparently prefer instead small towns and rural areas within commuting distance of metropolitan areas. <sup>11</sup> Certainly the migration figures for the first half of the 1970s bear this out. But does it mean the beginning of a change or a continuation of existing preferences? Apparently the same factors that were the foundation

of suburbanization in earlier decades are at work promoting non-metropolitan development. Telecommunications brought the world to small-town America and took the sense of isolation away; interstate highways tied the nation's smaller markets with the large commercial and industrial hubs, improving transportation and allowing industry to move out of the big cities without sacrifice. And with these changes have come the non-metropolitan migrants, seeking—and finding—the best of two worlds, urban living without, to some extent, the urban setting.<sup>12</sup>

## Population Change in the Ozarks Region Since 1970

If there has been a change in national population growth patterns, as the figures convincingly show, then how has the Ozarks region compared? By the bare-bones comparison of population change rates, the region did not grow as fast as the nation, but the difference was negligible. To illustrate this, assume two cities of 100,000 residents each, one growing at the national rate each year and the other developing at the pace of the Ozarks states on the whole. Over the period 1970 to 1975, the city growing at the national rate will have increased, on the average in each year, by 890, and the Ozarks city by 730—a difference of only 160 persons. (The actual population figures and rates of change are found in Table 3.)

Most of the population gain in the region resulted from natural growth. The same was true for the United States, although net migration contributed more than was the case for the Ozarks. Even though the smaller growth rate in the region continued the trend prevalent over most of the century, the indication of the Seventies is that the gap is diminishing. This can be attributed to faster growth in Oklahoma and Arkansas, compared with the nation. While Kansas, Missouri, and Louisiana continued to gain population, their growth rates were hampered by migration losses.

The slowdown in metropolitan growth in the United States also was the story in the Ozarks region. Compared with expansion of the large cities during the 1950s, the difference was substantial for the region: a city of 100,000 would have grown by almost 2,200 annually during the Fifties; but the same size city would have only gained 700 each year at the rate of metropolitan growth between 1970 and 1975. The reason was simple: migration away from these SMSAs out-weighed in-migration gains. While this was the general situation for the region's metropolitan areas, it was not distributed evenly across the five states. Arkansas, Louisiana, and Oklahoma had notably high metropolitan growth rates. In Arkansas, rapid growth due largely to migration gains occurred in metropoli-

Table 3

Components of Population Change in the Ozarks Region by Metropolitan Status, 1970 to 1975

	Reg	ion	Arka	nsas	Kaı	nsas	Loui	siana	Mis	souri	Oklal	Oklahoma	
	#1	% <sup>2</sup>	#	%	#	%	#	%	#	%	#	%	
Population 1975	;												
Total Metro Non-Metro	15,648 8,744 6,903		2,116 835 1,281		2,267 973 1,294		3,791 2,389 1,402		4,763 3,045 1,718		2,712 1,503 1,209		
Population 1970	)												
Total Metro Non-Metro	15,052 8,425 6,627		1,923 734 1,189		2,249 977 1,272		3,642 2,260 1,382		4,678 3,042 1,636		2,559 1,412 1,148		
Population Cha	nge										·		
Total Metro Non-Metro	596 320 276	0.73 0.70 0.77	192 101 91	1.81 2.45 1.40	18 -4 22	0.15 -0.08 0.32	148 129 20	0.75 1.05 0.26	86 3 83	0.34 0.01 0.93	152 91 61	1.09 1.19 0.98	
Natural Increase	9												
Total Metro Non-Metro	513 370 143	0.63 0.82 0.40	68 37 31	0.63 0.89 0.47	62 43 19	0.52 0.84 0.27	185 120 64	0.94 0.98 0.87	115 100 15	0.46 0.62 0.17	84 70 14	0.60 0.91 0.23	
Net Migration													
Total Metro Non-Metro	84 -51 135	0.10 -0.11 0.37	127 64 63	1.19 1.56 0.96	-44 -47 3	-0.37 -0.92 0.04	-37 8 -45	-0.18 0.06 -0.61	-30 -97 67	-0.11 -0.60 0.76	68 21 47	0.49 0.27 0.75	

<sup>&</sup>lt;sup>1</sup>All population figures have been rounded to the nearest thousand and are presented in thousands. Since the estimates for 1975 have been totaled from the county to the state, they may not compare exactly with those found in the Census Bureau's *Current Population Reports*.

tan areas located in the Ozark-Ouachita Uplands. Not only were there suburban increases, but central cities grew as well-in contrast to national trends. In Oklahoma, however, counties that contained the core city in metropolitan areas followed the national inclination and suffered from out-migration. Unlike Arkansas and Oklahoma, metropolitan gains in Louisiana were a departure from the 1960s, when out-migration had been the rule. But the metropolitan growth in the Seventies was in the smaller SMSAs and in the suburban parishes of the larger ones. 13 As for the other two states, metropolitan growth virtually stood still in Missouri, and in Kansas the metropolitan counties on the whole lost population. For both, fairly high migration losses in their large urban centers were responsible (See Figure 4).

Of the three largest metropolitan areas in the region—St. Louis, Kansas City and New Orleans—all had central cities that lost population after 1970 (See Table 4). Furthermore, for almost all metropolitan

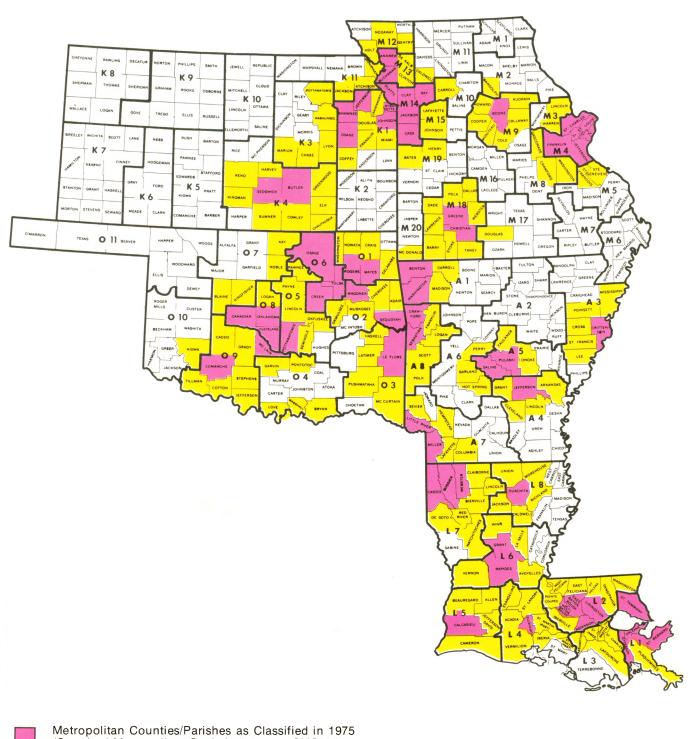
areas in the five states the percentage of the population within the county (or parish) containing the central city declined from 1970 to 1975. In St. Louis, Kansas City and New Orleans, the differences were greatest.

No doubt at least some of the region's metropolitan migration losses meant growth for non-metropolitan areas in other parts of the Ozarks states, since net migration in these locations amounted to an increase of almost 135,000 persons between 1970 and 1975. This, of course, was an encouraging shift away from the pattern of heavy outmigration during the 1950s and Sixties. How much of the migration gain during the Seventies represented movement within the Ozarks region has not yet been determined. But research in one geographic sub-region, the Ozark-Ouachita Uplands, reveals a substantial influx from states outside the region. Two of these, California and Texas, had been traditional destinations for rural migrants leaving the Uplands area. In addition, a noteworthy portion of new settlers in northern Arkansas has come from the Chicago area.14

<sup>&</sup>lt;sup>2</sup>All of the rates shown are calculated on the average annual basis, although the change figures are for the entire period 1970 to 1975.

FIGURE 4

The Classification of the Ozarks Region Counties/Parishes by Metropolitan Status, 1975



(Standard Metropolitan Statistical Areas - SMSA's)

Non-Metropolitan Counties/Parishes Which are Adjacent to SMSA's

Non-Metropolitan Counties/Parishes Which are not Adjacent to SMSA's

Table 4

Population and Percentage of the Population of the Ozarks Region's SMSA's¹ Residing in Central City and Non-Central City Counties and Parishes, 1970 and 1975

		Cent	ral City		Non-Central City					
	197	5	1970	1970			1970			
	#	<u>%</u>	#	<u>%</u>	#	<u>%</u>	#	<u>%</u>		
St. Louis, MO-IL <sup>2</sup>	534,100	29.8	622,236	34.1	1,260,200	70.2	1,205,000	65.9		
Kansas City, MO-KN	816,300	63.4	841,023	66.0	470,900	36.6	432,903	34.0		
New Orleans, LA	564,300	51.6	593,471	56.7	530,000	48.4	452,999	43.3		
Oklahoma City, OK	538,100	71.5	527,717	<i>7</i> 5.5	214,800	28.5	171,375	24.5		
Tulsa, OK	417,200	71.2	399,982	72.8	168,600	28.8	149,172	27.2		
Baton Rouge, LA	311,400	<i>7</i> 5. <i>7</i>	285,167	75.9	100,000	24.3	90,461	24.1		
Wichita, KN	343,100	89.7	350,694	90.1	39,300	10.3	38,658	9.9		
Little Rock - No. Little Rock, AR	324,200	88.3	287,189	88.8	43,000	11.7	36,107	11.2		
Shreveport, LA	238,400	69.0	230,184	69.0	107,300	31.0	103,642	31.0		
Ft. Smith, AR-OK <sup>3</sup>	109,500	54.4	79,237	49.4	91,800	45.6	81,184	50.6		
Springfield, MO	168,100	89.8	152,929	91.0	19,200	10.2	15,124	9.0		
Topeka, KS	151,600	85.0	155,322	86.0	26,700	15.0	25,297	14.0		
Lake Charles, LA4	150,500		145,415							
Fayetteville- Springdale, AR	89,400	60.0	77,370	60.5	59,700	40.0	50,476	39.5		
Alexandria, LA	121,500	89.5	118,078	89.6	14,300	10.5	13,671	10.4		
Monroe, LA <sup>4</sup>	125,600	07.0	115,387	07.0	14,500	10.5	15,071	10.4		
Lafayette, LA <sup>4</sup>	125,300		111,643							
Lawton, OK4	102,900		108,144							
St. Joseph, MO	86,500	86.8	86,915	88.0	13,200	13.2	11,913	12.0		
Columbia, MO⁴	88,200		80,935				11,710	12.0		
Pine Bluff, AR4	83,700		85,329							
Memphis, TN-AR-MS <sup>2,4</sup>	50,400		48,106							
Texarkana, TX-AR <sup>2</sup>	33,400	74.1	33,385	74.9	11,700	25.9	11,194	25.1		
,	-,		,0		11,. 30	-0.7	11,171			

<sup>&</sup>lt;sup>1</sup>The 1975 SMSA definitions were used for both time periods.

Source: U.S. Bureau of the Census, *U.S. Census of Population*, 1970, "Number of Inhabitants," Final Report PC(1)-A5, 18, 20, 27 and 38, Arkansas, Kansas, Louisiana, Missouri and Oklahoma, Table 1, U.S. Government Printing Office, 1971, and U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 709, "Estimates of the Population of Counties and Metropolitan Areas: July 1, 1974 and 1975," U.S. Government Printing Office, 1977.

Although natural increase was a slightly larger factor in the growth of non-metropolitan areas than migration, the highest rates of natural growth were in the SMSAs. This reflected higher median ages in

non-metropolitan locations, which are indicative of the recent influx of retired migrants but also are a reminder of the heavy out-migration of the young seen in earlier days. No better evidence of the region's

<sup>&</sup>lt;sup>2</sup>Only Missouri or Arkansas portions.

<sup>&</sup>lt;sup>3</sup>Includes 24,178 Vietnamese refugees housed at Ft. Chaffee.

<sup>&</sup>lt;sup>4</sup>One county/parish SMSA or SMSA portion.

high concentration of older persons can be found than in the rankings of four of the five states at the top of the nation among states with the highest proportions of persons 65 and over: Arkansas (second); Missouri and Kansas (tied for fourth); and Oklahoma (eighth).<sup>15</sup>

Together, natural increase and net migration amounted to a growth rate only slightly higher for non-metropolitan counties and parishes than for the metropolitan areas. The difference between them was that the residual change in the SMSAs resulted from natural growth, but in the non-metropolitan areas growth was a product of almost equal contributions of natural increase and net migration.

Compared with the national growth rate of non-metropolitan areas, for these counties in the region growth was slower. Only Arkansas had non-metropolitan increase that was faster than the national rate. Unlike the region, too, growth was more pronounced in Arkansas counties that are not adjacent to metropolitan areas, even though natural increase was greater in those counties next to SMSAs. The essence of this higher growth rate was the significant proportion of in-migration, which can be explained in part by the influx of older persons.

In Oklahoma and Missouri, the opposite situation from Arkansas was the case. Non-metropolitan growth in these states ran below the national rate because of low levels of natural increase rather than net migration. Also, the non-metropolitan counties on the fringe of urban areas grew faster and drew a greater proportion of migrants than outlying counties. Part of this was because of urban spillover, but it should be noted that many of the counties surrounding some metropolitan areas in Oklahoma and one in Missouri also had as drawing cards lakes that would attract migrants looking for non-economic amenities.

Non-metropolitan counties in Kansas grew only slightly. The high proportion of older persons was reflected in a small natural gain, much like the retirement sections of Arkansas. The small, but positive, net migration rate seemed to be associated with the heavily agricultural economy in the state. One explanation for this is that areas with stable farming economies, especially in the Great Plains and Corn Belt, have not drawn much new industry and generally do not possess the recreation or environmental attractions that lure great numbers of new migrants. <sup>16</sup>

Only in Louisiana has the non-metropolitan reversal failed to take hold. If natural increase had been as slight in Louisiana as in other states, the parishes there no doubt would have shown population decline. This was not the case, but growth still was scant. While the greatest rate of out-migration continued to be from the outlying parishes, the actual bulk of the migration loss was from the parishes just outside the metropolitan fringe—the same areas that in most

states were benefiting from growth because of urban sprawl. Despite the fact that out-migration in all non-metropolitan parishes had continued into the Seventies, the level was less than what it had been during the previous twenty years.

The revival of non-metropolitan population growth and migration is apparent in the Ozarks region. Though the rate of change lagged behind the nation, the importance of the reversal, especially the in-migration factor, cannot be underestimated. In the non-metropolitan counties of Arkansas, Missouri and Oklahoma, in-migration accounted for respectively, 68.5, 81.2 and 76.5 percent of the total population increase from 1970 to 1975. Forty-six per cent of the region's total population increase was in nonmetropolitan areas and these received over 1.6 times the total net migration of the total region. Because this turnaround, for the region as well as the nation, is too recent to be understood fully, it is impossible to predict if this movement pattern will continue. Recent energy concerns guarantee the difficulty of an assessment. However, it appears that the potential of continuation is great, given the increasing desire of people for non-metropolitan living, their greater ability to act upon that desire, the availability of "urban services," the relocation of industries, and the emergence of new ones in response to in-migration.

This regional overview has provided the general picture of population change in the five Ozark states. But to add clarity to the population shifts additional information on each state has been presented in a series of individual descriptions. These are intended to note some of the changes and factors associated within the individual states and their component planning and development districts.

## Population Change in the Sub-state Planning and Development Districts

Arkansas. The high level of population increase in Arkansas was not evenly distributed across the state. Most notable of the growth areas was in the five development districts of the northwest and central portions of the state. (See Figures 5 through 13 at the end of this section for a graphic display of change in all 58 development districts.) In all of these the level of annual change from 1970 to 1975 was at least two per cent or better—or more than ten percent over the five-year period. <sup>17</sup>

Three of these five development districts—the Northwest (A-1), the Central (A-5) and the Western (A-8) districts—contain metropolitan areas that contributed most to the state's high rate of metropolitan increase. Symbolic of this urban expansion was the creation of a new Standard Metropolitan Statistical Area (the Fayetteville-Springdale SMSA) in 1973. But

equally important in this part of the state was nonmetropolitan growth. For all five districts, migration gains were, for the most part, responsible for growth above the regional and national rates. In the nonmetropolitan portions of these districts, in-migration primarily because of lakes and especially by retirees seemed crucial to overall growth. An indication of this retirement migration was the low rate of natural increase in the White River (A-2) and West Central (A-6) development districts. Great numbers of retirement-age persons usually will raise the median age of an area and, in doing so, lower the birth rate. It should be pointed out that the vast majority of the counties in these five districts fall into the Ozark-Ouachita Uplands, a sub-region that has had migration gains in its non-metropolitan locations for at least fifteen years.

The three remaining development districts—the East (A-3), the Southeast (A-4) and the Southwest (A-7)—were marked by small population increases. These are primarily a part of the Mississippi Delta and Coastal Plain sub-regions, which are areas traditionally subject to heavy rural out-migration. Metropolitan counties in each of these districts did not contribute to the overall growth of the districts, as was the case in the other portion of the state. The Pine Bluff SMSA in the Southeast planning district was the only metropolitan area to have undergone population decline. But all metropolitan counties in this part of the state suffered migration losses.

In terms of net migration, non-metropolitan areas of these districts did only slightly better than the metropolitan. Most important in these areas, however, was that all showed dramatic reductions in out-migration rates of the two previous decades. Moreover, the East and Southwest districts reversed earlier patterns with small migration gains in non-metropolitan portions.

Kansas. Total population increase in Kansas was the lowest of the five states in the Ozarks region between 1970 and 1975. The growth rate illustrated population losses from metropolitan counties and a small, though encouraging, increase in nonmetropolitan areas. Nearly one-half of the state's districts were marked by total population loss—the Southeast (K-2), the Southeast Central (K-4), the Southwest Central (K-5), the Northwest Central (K-9) and the Northeast (K-11). Within these districts losses resulted primarily from out-migration, the rates of which were lower than those in the 1960s. Contributing to these overall population losses were annual rates of natural decrease in which deaths exceeded births in three districts—the Southeast, the Southwest Central and the Northeast. These decreases came as a consequence of decades of out-migration by younger people, which left behind a disproportionately large number of older people.

Of the five districts that were left with population losses, only one—the Southeast Central—contains a metropolitan area (Wichita SMSA). The impact of changes in the Wichita area upon the rest of the district was apparent, as nearly all out-migration was from the metropolitan counties. While the non-metropolitan counties had as a group only a very low out-migration rate, the rate of natural increase was so small that it produced only minimal growth. In other words, the losses from the Wichita area dictated the direction of change in the total Southeast Central planning district.

Only one other planning district in Kansas contains metropolitan areas—the East Central (K-1), with Topeka and Kansas City, Kansas. Unlike the Southeast Central district, this planning area gained population. Yet like the Southeast Central area, it had migration losses from its metropolitan counties. This outmigration was from the central-city counties of Wyandotte and Shawnee and not the suburban counties. The non-metropolitan areas of the district, on the other hand, not only boasted substantial growth, but most of this was from migration primarily into those counties adjacent to the metropolitan areas.

The remaining five Kansas planning districts grew, but, for the most part, at relatively small rates. Only one district, the Far Northwest (K-8), continued to have out-migration losses, and gains in the others were small—to the point that migration into and out of the North Central district (K-10) was even. The highest level of change in these five districts—in the state, for that matter—was in the Far Southwest district (K-7). The majority of this growth was explained by natural increase, not migration. Still, the district's pattern of out-migration in the past clearly was reversed.

Louisiana. Of the five Ozarks states, Louisiana was third in its rate of population increase and had the second lowest rate of net migration. The state's ability to offset migration losses was attributed to a consistently high level of natural increase—the highest in the region. But even this natural growth rate in the Seventies, as elsewhere in the region, was a drop from the rates of the 1960s.

Just one of the state's development districts, the Kisatchie-Delta planning district (L-6), lost population. As with most of the other districts, out-migration was evident, but the high rates of natural increase characteristic in the rest of the state did not occur there. Distinguishing the district's metropolitan from non-metropolitan areas, the parishes outside of the Alexandria SMSA obviously produced the loss. The non-metropolitan portion of this district had the highest rate of out-migration and the lowest level of natural increase of all districts.

The other Louisiana development districts showed various degrees of growth for a variety of reasons. The greatest increase was in the Capitol district (L-2),

followed by the South Central (L-3). In the Capitol development district, growth was a combination of a small migration gain and a much higher rate of natural increase. The positive migration rate, though, survived the difference between net migration into the Baton Rouge SMSA and migration losses from the district's non-metropolitan portion. In keeping with the pattern of out-migration from non-metropolitan areas of all other districts, the South Central district—the only one in the state without a metropolitan population—registered a migration loss. <sup>18</sup> In other words, the district's high growth rate was explained by an extremely large level of natural increase.

Of the remaining five districts, only the North Delta (L-8) and Evangeline (L-4) development areas exhibited migration gains in their metropolitan portions, the Monroe and Lafayette SMSAs. By coupling the migration rate for the Lafayette SMSA with its rate of natural growth, the result was the highest degree of population change of any metropolitan area in the state. In the other metropolitan areas—New Orleans, Shreveport and Lake Charles—net migration losses were manifest. Unlike the others, though, in the New Orleans area only Orleans parish had migration losses. But these were large enough to override the gains in Jefferson, St. Bernard and St. Tammany parishes.

Even though the non-metropolitan segments of the eight Louisiana development districts displayed migration losses, only two districts—the Kisatchie-Delta and North Delta planning areas—lost population in their non-metropolitan parishes. As for the other six districts, natural increase offset the migration losses. In spite of the fact that the non-metropolitan migration reversals in other parts of the Ozarks region did not occur in the Louisiana districts, in general, the 1970-1975 rates were lower than they previously had been.

*Missouri.* In Missouri, meager growth between 1970 and 1975 obviously was the result of net outmigration combined with the lowest level of natural increase in the five-state region.

The picture of population change according to planning districts is one of the most complex outlines of growth and decline in the entire Ozarks region. In terms of total change, two Missouri planning districts had substantial population losses. One, the Missouri Valley district (M-10), displayed a combination of out-migration and natural decrease. However, the other, the Lake of the Ozarks area (M-16), had natural growth, but also the most extreme rate of out-migration of any planning district in the state, metropolitan and non-metropolitan alike. This appears mysterious, since this district includes a major lake resort area and falls within the Ozark-Ouachita Uplands and the change does not fit patterns of other areas with similar characteristics. But the problem can

be explained because of military cutbacks at Ft. Leonard Wood as the Vietnam era came to a close between 1970 and 1975; in Pulaski County, where the fort is located, 16,600 persons moved out in those five years. In comparison, the other four counties in the district had notable migration gains.

Missouri had two other districts with population declines, the East-West Gateway (M-4) and Northwest Missouri (M-12) planning areas. Much like the Missouri Valley district, the Northwest was subject to losses according to both out-migration and natural decrease. The East-West Gateway, comprising the Missouri portion of the St. Louis SMSA and one of three entirely metropolitan districts in the Ozarks region, had the most substantial migration loss of any planning district in the five states, although it did not have the highest rate of net out-migration. Of the components in the East-West Gateway area—four counties and the city of St. Louis—both the city and county of St. Louis were responsible for the migration loss. Together they lost well over 100,000 residents because of out-migration.

Two of the other four planning areas containing metropolitan areas gained population, but in each migration losses had to be overcome—the Missouri-Kansas Bi-State district (M-13, the St. Joseph SMSA) and the Mid-American district (M-14, the Missouri portion of the Kansas City SMSA). Even though the migration loss in the St. Joseph area was slight, and two non-metropolitan counties in the district had rapid growth, the amount of this growth was not large enough to make a substantial overall change in the planning area. On the other hand, the Mid-American district counties, all within the Kansas City SMSA, had small growth because of a rate of natural increase only slightly higher than their degree of outmigration. As for the other two districts with metropolitan counties, Mid-Missouri (M-10, the Columbia SMSA) and Southwest (M-18, the Springfield SMSA), there was considerable growth in their metropolitan portions. The Columbia area had almost equal inmigration and natural increase rates, but in the Springfield SMSA there was a disproportionately large migration gain in comparison to natural growth. Non-metropolitan populations in both planning districts increased, but a greater rate of change in the Southwest could be traced to the fact that the counties surrounding the Springfield area are part of the Ozark-Ouachita Uplands and characteristically received substantial in-migration.

The several other planning districts (or parts of them) included within the Ozark-Ouachita subregion—Southeast Missouri (M-5), Ozark Foothills (M-7), Meramec (M-8), South Central Ozarks (M-17), Kaysinger Basin (M-19) and Ozarks Gateway (M-20)—have had, for the most part, high degrees of

change reflecting the presence of retirement and recreational settlements. One other planning area, the Boonslick district (M-3) outside St. Louis, had exceptionally fast growth, largely as a result of urban expansion in Warren County.

In northern Missouri, the planning districts were marked by relatively low rates of increase produced by small migration gains and, in some cases, slight natural growth. But it is important to note that these planning areas, as well as the Bootheel area (M-6), reversed previous patterns of out-migration. This was especially encouraging in the Bootheel, where migration losses had been heavy.

Oklahoma. Second only to neighboring Arkansas, Oklahoma had the next highest level of population change in the Ozarks region from 1970 to 1975. This growth was the outcome of a moderate degree of natural increase and the only other net in-migration rate outside Arkansas. Oklahoma had substantial expansion of its metropolitan population, yet unlike Arkansas, which had similar metropolitan growth, the increase was outside the central cities of the two major SMSAs—Tulsa and Oklahoma City. The core counties of these SMSAs, as in some other large metropolitan areas in the Ozarks region, experienced migration losses. All of the metropolitan portions of the districts in the state registered migration gains, with one exception-the Association of South Central Oklahoma Governments (O-9), which contains a metropolitan fringe county of the Oklahoma City SMSA (McClain) and the Lawton SMSA (Comanche). Although McClain County claimed the greatest rate of net migration in the state, it could not counteract the tremendous loss in Comanche County, due mostly to cutbacks at Ft. Sill.

The districts containing the counties with Oklahoma City and Tulsa grew with small migration rates in their metropolitan segments, but the largest migration gains were in the districts only containing suburban counties—the Northeastern Counties (O-1), the Eastern (O-2), the Kiamichi (O-3) and the Central (O-5) planning areas. For non-metropolitan counties in these districts the picture was different. In all six districts (all counties in the Indian Nations Council of Government (O-6) are part of the Tulsa SMSA) natural growth was low. Non-metropolitan migration was not so uniform: all the districts showed gains that ranged widely, and with the exceptions of the Kiamichi and Association of Central Oklahoma (O-8) planning areas, this net in-migration represented a turnabout from the 1960s.

The four remaining planning districts in Oklahoma have only non-metropolitan populations. Besides the Southern Oklahoma development district, none of the others had annual growth rates above one per cent and all were subject to migration losses. However, these

losses were substantially smaller than in previous decades—the pattern in several of the planning districts in the Great Plains sub-region in Kansas.

## Net Migration Change in Sub-Regions of the Five-State Ozarks

An additional way to examine data for the components of change in the region is by utilizing a subregional organization. This method of grouping is based upon U.S. Economic Sub-regions and State Economic Areas, and, in a limited sense, tends to represent major geographic sub-regions that share similar physical attributes. 19 The application of these groupings to the five-state Ozarks region results in six such sub-regions: the Gulf Coast, the Mississippi Delta, the Coastal Plain, the Ozark-Ouachita Uplands, the Southern Corn Belt and the Great Plains. The Great Plains actually is divided into Northern and Southern sections, but only seven counties fall in the north, so they have been combined with the Southern group (See Figure 14). Grouping counties according to this method only allows examination of one complete sub-region—the Ozark-Ouachita Uplands. But as will be shown, the patterns of change in other partial sub-regions generally follow those in the sub-region as a whole and may provide a comprehensive description of change in the five-state Ozarks.

Gulf Coast. As far as the Ozarks region is concerned, this sub-region runs only into Louisiana in its spread from South Carolina to South Texas. In terms of total change, the portion of the sub-region in Louisiana grew from 1970 to 1975, although at a slower rate than during the previous decade. This resulted from a reduction in natural increase at the same time that out-migration also seemed to be slowing because of a small in-migration rate for metropolitan parishes. The degree of in-migration was slightly higher than that of the 1960s, a factor that also has been noted for the entire Gulf Coast. 20 But unlike the Gulf Coast as a whole, there was out-migration from nonmetropolitan parishes—a departure attributed in part to accelerated movement away from parishes that are not adjacent to metropolitan areas.

Mississippi Delta. This sub-region cuts across three states in the region: Louisiana, Arkansas and Missouri. In addition, part of the state of Mississippi is the only portion outside the Ozarks region.

Traditionally, out-migration has characterized this sub-region. It was still apparent from 1970 to 1975, with small losses in the metropolitan counties and parishes. The outlying non-metropolitan areas had a rate nearly equal that of the SMSAs, but the areas next to urban centers actually produced the bulk of the out-migration.

FIGURE 5

The Annual Percent of Population Change in the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

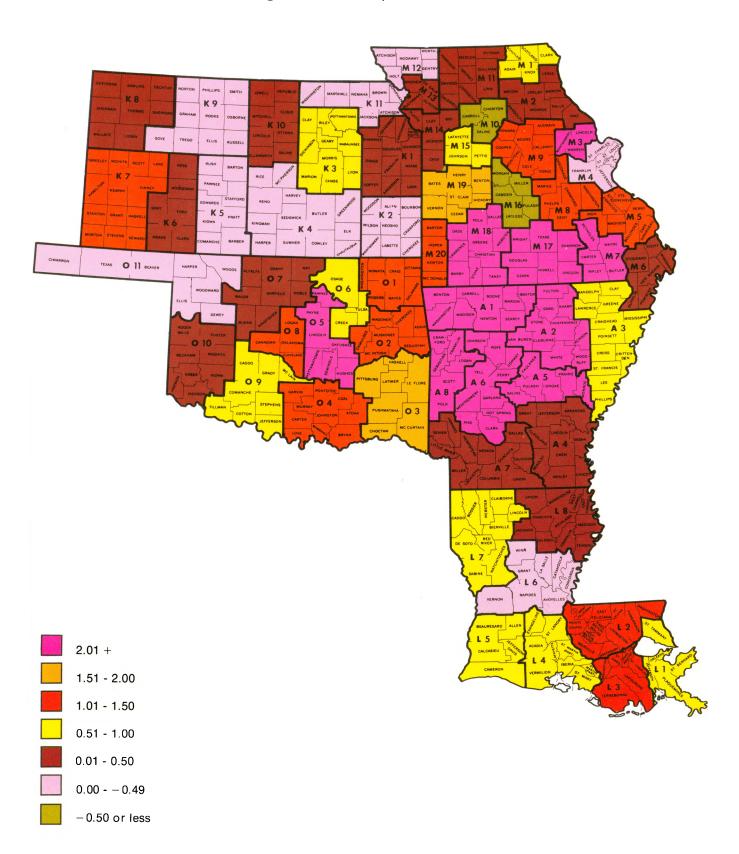


FIGURE 6

The Annual Percent of Population Change in the Metropolitan Portion of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

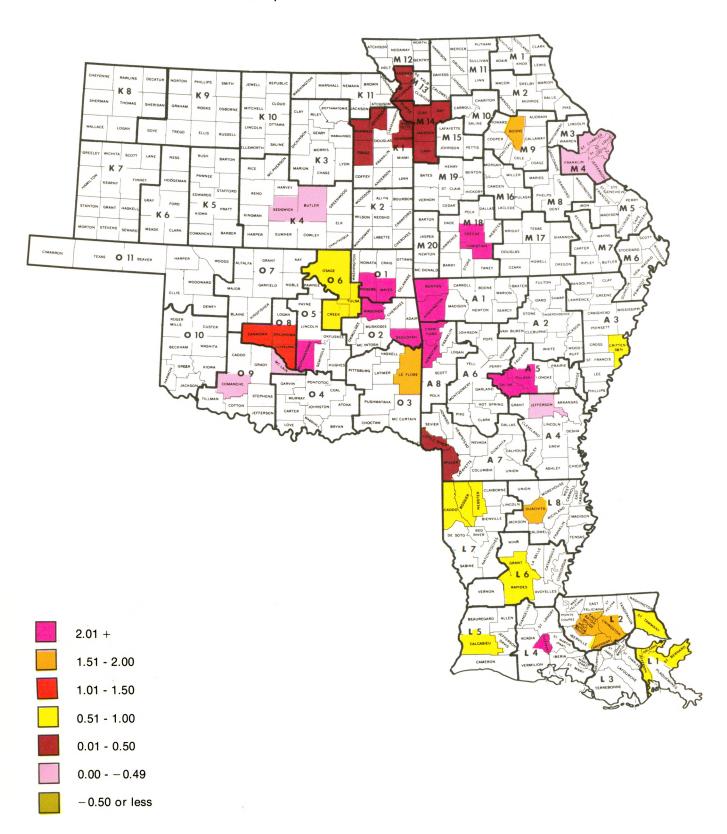
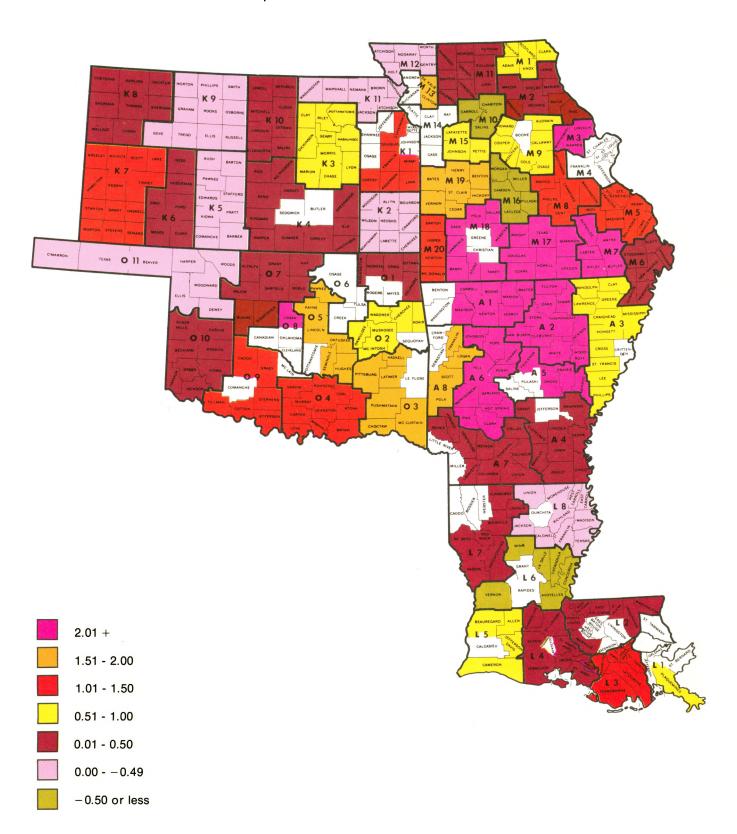


FIGURE 7

The Annual Percent of Population Change in the Non-Metropolitan Portions of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975



The Annual Rate of Natural Increase in the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

FIGURE 8

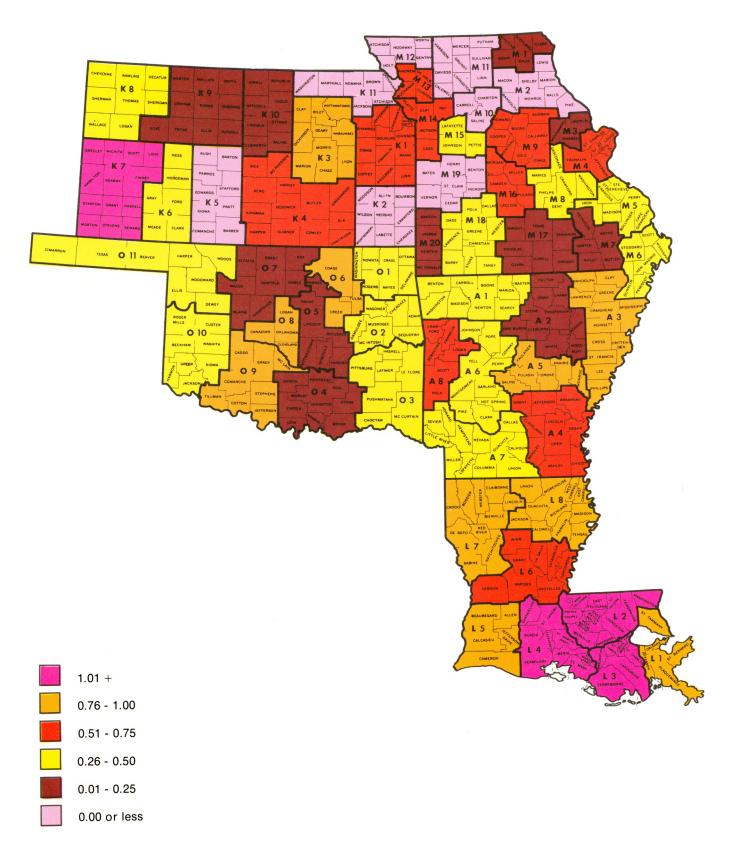


FIGURE 9

The Annual Rate of Natural Increase in the Metropolitan Portions of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

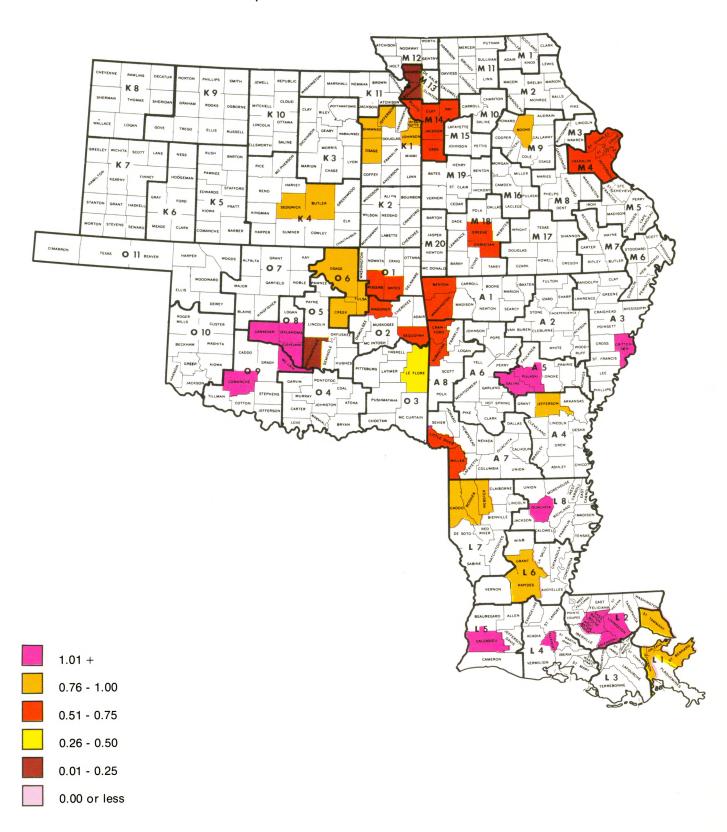


FIGURE 10

The Annual Rate of Natural Increase in the Non-Metropolitan Portions of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

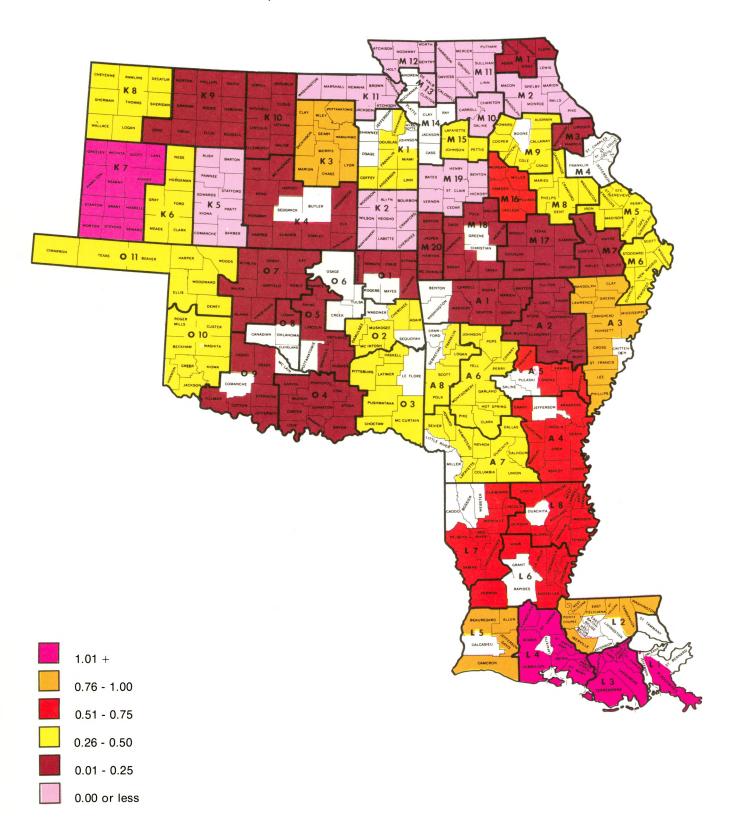


FIGURE 11

The Annual Rate of Net Migration in the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

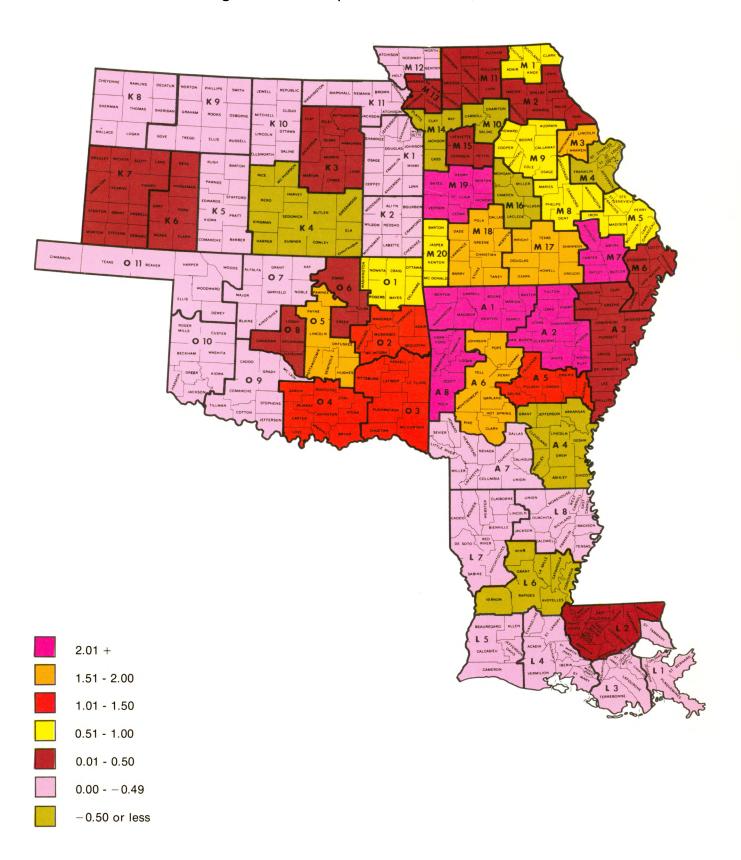


FIGURE 12

The Annual Rate of Net Migration in the Metropolitan Portions of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975

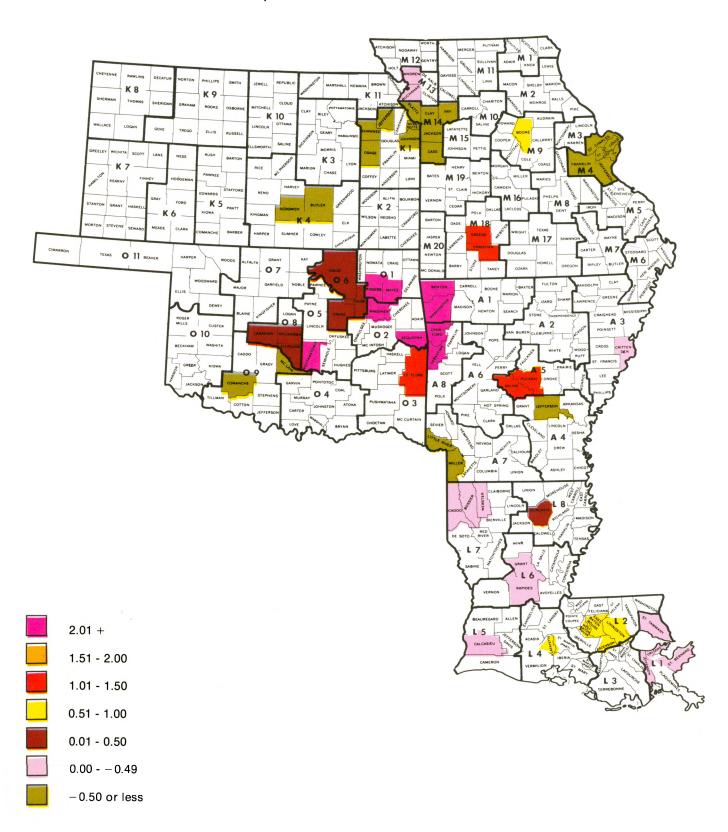
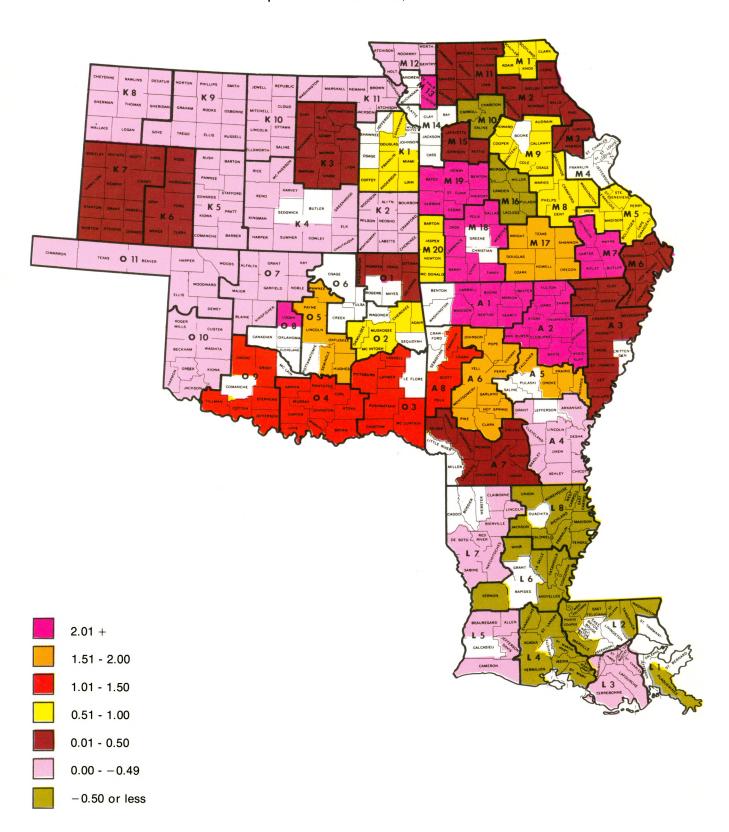


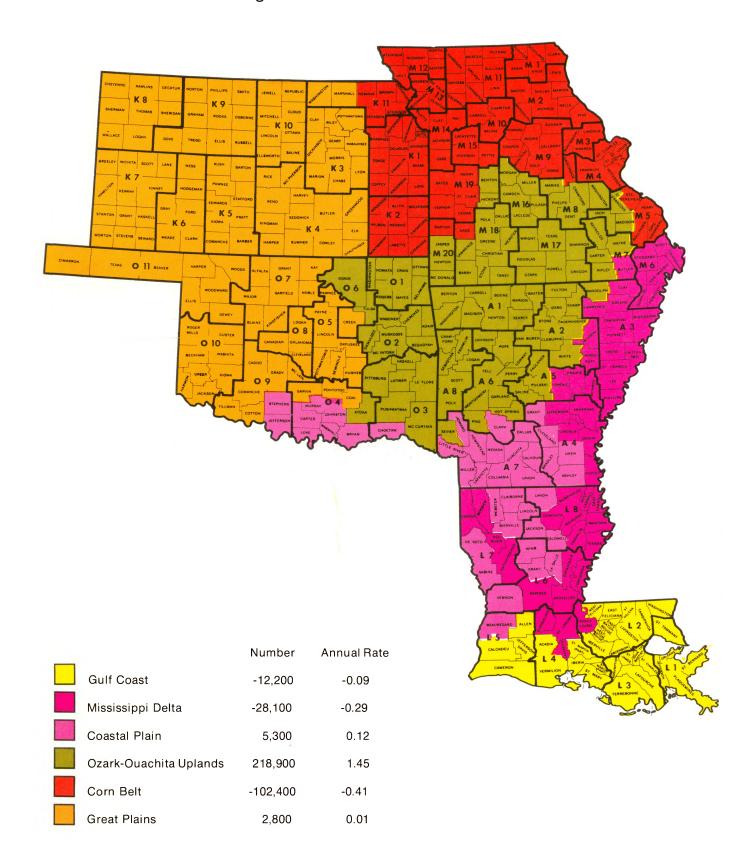
FIGURE 13

The Annual Rate of Net Migration in the Non-Metropolitan Portions of the Ozarks Region's Sub-State Planning and Development Districts, 1970 to 1975



The Six Sub-Regions of the Five State Ozarks with Net Migration Figures and Rates, 1970 to 1975

FIGURE 14



An array of changes was evident on a state-by-state basis. For delta parishes in Louisiana, the metropolitan areas were distinguished by a small migration gain. But, on the other hand, non-metropolitan locations were subject to substantial losses. Yet the reverse was true in Arkansas: declines in metropolitan counties and those next to metropolitan areas. The remaining non-metropolitan locations made a turnaround. This reversal also was distinct in the bootheel counties of Missouri, all of which are non-metropolitan.

For the entire delta sub-region, there was a nominal migration gain in the metropolitan locations, with the same or continued out-migration from rural areas.<sup>21</sup> As in the Gulf Coast area, the most important feature in the Mississippi Delta was the substantial decline in out-migration rates.

Coastal Plain. Like the Mississippi Delta, the Coastal Plain also extends into three Ozarks states: Louisiana, Arkansas and Oklahoma. Outside the region it includes part of East Texas.

Overall, the pattern of migration losses was reversed in the Ozarks region's portion of the Coastal Plain—a change that was a result of migration gains in non-metropolitan areas.

The states within this sub-region grew very differently in those segments that were included in the Coastal Plain. With the exception of an outlying non-metropolitan parish, Sabine, the parishes in Louisiana exhibited out-migration, both metropolitan and non-metropolitan. Interestingly, the parishes next to metropolitan areas lost population through out-migration, which was a reversal after the gains in the 1960s. Arkansas, too, had out-migration decline in the two metropolitan counties in this sub-region— Little River and Miller. Contrary to the experience in Louisiana, however, counties in Arkansas adjacent to metropolitan areas grew while the outlying ones did not. In general, rural counties in Arkansas showed a slowdown in the out-migration levels of the previous twenty years. Oklahoma, without any SMSAs in the Coastal Plain area, underwent the most dramatic migration change of the three states in the sub-region. A very strong reversal was noted in these nonmetropolitan counties, with rates well above those of the entire state and of the Ozarks region.

Ozark-Ouachita Uplands: Recently the Ozark-Ouachita Uplands have become one of the most important areas of non-metropolitan growth in the nation. As has been noted about this subregion, it "embraces the largest and most noticeable area of non-metropolitan revival in the United States."<sup>22</sup> Not only did these non-metropolitan counties show this reversal during the 1960s but the metropolitan areas, unlike those in some other sub-regions, have experienced accelerated levels of in-migration in the 1970-1975 period. In Arkansas, the migration rates were

higher for metropolitan and non-metropolitan areas than in the entire sub-region. The highest level of gain was in the non-metropolitan counties in outlying parts of the state. The corresponding area in Missouri also received a substantial influx of migrants. Oklahoma's Ozark-Ouachita portion ranked third among the three states with relatively low migration rates from 1970 to 1975.

Overall, this sub-region and the segments in each of the three states had migration rates well in excess of the five-state region as a whole and the three individual states. Thus, the importance of this area to the entire Ozarks region must not be underestimated, since it may be the most dynamic section of the five-state region. From the standpoint of migration, the Ozark-Ouachita Uplands seems to be drawing a variety of migrants, attracted by both economic opportunities and non-economic amenities.

Com Belt. The Southern Corn Belt that includes parts of Indiana, Illinois and Iowa also takes in northern Missouri and eastern Kansas. In total, the Corn Belt area of the Ozarks region was undergoing out-migration from 1970 to 1975. This decline, however, was not in the non-metropolitan counties as had been the case in the 1950s and the 1960s, since these counties had slight migration gains. Instead, migration losses were occuring in the major urban centers. With the inclusion of St. Louis and Kansas City, it is not difficult to imagine the direction of migration change in all metropolitan counties.

The non-metropolitan turnaround was illustrated in the northern counties of Missouri as they began to recover some of the losses of the two previous decades. The reversal was also evident in the non-metropolitan areas of eastern Kansas, but the gains were small.

In general, an area with a traditional pattern of out-migration from non-metropolitan locations, especially its young population, appeared to have brought an end to this trend. Yet, countering these gains was the slowdown and decline of heavy metropolitan expansion, especially in major urban centers.

Great Plains. Similar to most other sub-regions in the five states, the Great Plains area encompasses major portions of Kansas and Oklahoma. As mentioned earlier, two Great Plains sub-regions exist, Northern and Southern. In part, the northern Kansas border divides the one from the other, although seven Kansas counties are included in the Northern Great Plains. The Southern sub-region includes eastern Colorado and the Texas panhandle. For the purpose of this study, the seven counties of Kansas in the Northern plains have been joined with the Southern area to produce one Great Plains subregion in the Ozarks. Although rates of change are somewhat different, the overall pattern in the two are consistent.

The data for the entire sub-region have shown a turn in the direction of population growth and net migration—from losses in the 1950s and 1960s to gains in the 1970s in non-metropolitan locations. In addition, metropolitan areas have registered migration gains.

Unlike the previous finding for the total subregion, the urban centers of the Ozark Great Plains sustained a loss from 1970 to 1975, a decline from the previous two decades. The non-metropolitan counties achieved a gain, but nearly all was in the counties next to metropolitan areas.

It was in the Wichita SMSA counties of Kansas that out-migration was observed from 1970 to 1975. The Oklahoma metropolitan areas, in comparison, had a migration increase, but this was a decrease from the rate in the 1960s.

The non-metropolitan counties of the Kansas Great Plains generally continued the trend of outmigration but at a slight rate that showed a definite slowdown. The counties next to metropolitan areas registered very small in-migration, but the outlying areas lost. In Oklahoma, the non-metropolitan locations exhibited a sizeable turnaround in the figures and rates for the 1970s. As seen elsewhere in the Ozarks region, counties adjacent to urban centers had the highest rate of migration increase while the outlying counties were characterized by a slight gain.

#### Some County Characteristics Affecting Non-Metropolitan Net Migration in the Ozarks Region

A number of characteristics have been found to affect migration in non-metropolitan counties. Some act as positive influences, others as negatives. Variables that have been examined in this regional study as well as at the national level include senior state colleges, controlled access highways, military installations, labor force in manufacturing and farming, in-migration in the older age groups and some amenities factors, such as lakes.<sup>23</sup>

Of the variables examined, retirement counties and combination lake and retirement areas were the most important in affecting non-metropolitan migration in the Ozarks region<sup>24</sup> (See Table 5). These characteristics appeared as primary factors influencing growth in the Ozark-Ouachita Uplands. An equally important finding for both of these characteristics was the level and direction of migration in the 1960s. Although reversals occurred in most of other types of counties in the1970s, these counties recorded sizeable gains in both the 1960s and 1970s.

When the five states were examined separately, it was found that the in-migration pattern of the 1960s noted above did not emerge. However, by using the six sub-regions, the importance of the location of these

lakes within the Ozark-Ouachita area once again appeared. In other words, lakes as a factor did not operate independent of other elements. No doubt more desired types of topography, climate and other items combined to produce high levels of migration gain in the Ozark-Ouachita area.

Only one other group of counties had migration gains in both time periods, the 1960s and 1970-1975. These were counties containing a senior college. Although the annual level of increase was greater in the 1970s than in the 1960s, these counties may have been experiencing a slowdown "since 1973 with the end of the military draft and the general peaking out of college enrollment rates."<sup>25</sup>

The end of the draft also appeared to have brought about a population decline in counties in which military installations are located. Although the migration represented the change in less than ten non-metropolitan counties in the entire region, it might be expected that the loss would have been greater. Once again the problem is that a county can fall into more than one category of county type, as in the case of Riley County, Kansas, which contains Ft. Riley and Kansas State University. In this case the county registered a migration gain in the five-year period.

A factor that has been associated with the concepts of "urban spill-over" and growth in urban centers in non-metropolitan counties is improved transportation, such as the presence of an interstate highway through a community or county. While it appeared that these counties as a whole underwent a dramatic turnaround from the 1960s and 1970s, an additional factor needs to be included—proximity to a metropolitan center. To substitute for this, counties immediately surrounding metropolitan areas can be used as a category. As such, the proportion of this migration increase for those counties adjacent to SMSAs was almost 90 percent. However, the outlying counties through which these highways run also showed migration gains. Thus, a controlled access highway seemed to facilitate growth in the county no matter what the location, although other factors must be taken into account.26

Two other county classifications were utilized to track migration change in the region, both of which are based upon employment factors. Research has found that as the demand for farm labor has decreased, so has the population of counties with very high proportions of their labor force involved in agriculture. So it is in the counties with low or intermediate levels of agriculture where substantial in-migration is occurring. Likewise, it has been discovered that although high proportions of manufacturing employment stimulated growth in the 1950s and the 1960s, this has not been the case in the 1970s. Once again, in the counties with intermediate percentages of the labor

Table 5

Non-Metropolitan Net Migration in the Ozarks Region by Slected County Characteristics

County		Population		Net Migration					
Classification	1975	1970	1960	1970-1	975	1960-1970			
				_#_	<del>%</del> 1	<u>#</u>	<del>%</del> 1		
Retirement <sup>2</sup>	1,045,500	919,173	825,542	114,400	2.21	48,355	0.55		
Lake <sup>3</sup>	3,167,400	3,030,543	2,895,585	58,700	0.36	-148,407	-0.50		
Retirement/ Lake	611,600	530,566	460,839	75,500	2.51	45,268	0.91		
Senior College⁴	1,001,500	937,149	817,467	33,500	0.65	37,570	0.42		
Military Base <sup>5</sup>	429,800	438,887	317,532	-27,800	-1.21	23,550	0.58		
Controlled Access Highway <sup>6</sup>	2,960,900	2,829,683	2,736,196	51,200	0.33	-164,178	-0.58		
High Level of Agriculture <sup>7</sup>	117,000	118,837	135,397	-1,000	-0.16	-20,190	-1.58		
Low Level of Agriculture <sup>7</sup>	2,624,300	2,485,882	2,365,207	76,200	0.56	-82,836	-0.34		
High Level of Manufacturing <sup>8</sup>	673,200	642,945	628,953	16,200	0.46	-39,794	-0.62		
Intermediate Level of Manufacturing <sup>8</sup>	2,125,000	2,007,968	1,993,673	79,400	0.73	-138,804	-0.69		
Low Level of Manufacturing <sup>8</sup>	214,900	213,679	211,949	-3,300	-0.29	-13,887	-0.65		

<sup>1</sup>Net migration is expressed as an average annual rate.

<sup>2</sup>Retirement county refers to a county with a net migration rate of 10% or more for persons 60 years of age and over, 1960 to 1970, as classified by Beale.

<sup>3</sup>A lake county is one containing a lake, man-made or natural, of 1,000 surface acres or more and/or a major portion of a lake of 1,000 surface acres or more.

<sup>4</sup>A senior college county is one containing a four-year institution and the college population is 5% or more of the county's 1975 population.

Military county refers to a county with an installation as delineated by the Department of Defense, Distribution of Personnel by State-By Installation, September, 1975.

<sup>6</sup>This refers to a county containing a highway of four or more lanes, such as an interstate or turnpike as shown on official state highway maps for 1975.

<sup>7</sup>These are counties with 30.00% or more and 4.00% to 9.99% of their employed labor force in agriculture, 1970.

These are counties with 30.00% or more, 20.00%-29.99% and 0.00% to 3.99% of their employed labor force in manufacturing, 1970.

force in manufacturing, growth is highest.<sup>27</sup> In comparison to these findings, the data for the Ozarks region showed a quite similar pattern. In spite of the expected losses, all categories of the employment variables either displayed a reversal of migration losses or a slowdown in out-migration from the 1960s into the 1970s.

Although this brief examination has not shown conclusively the impact of each of these elements on migration change in the region, it has demonstrated that these are very important to the modification of migration patterns within the non-metropolitan

areas. At the same time, it has illustrated that there is a need for closer examination of the factors influencing migration in the region and the relationship of these to one another.

#### **Conclusions**

This examination of population change in the Ozarks region and in its component states has shown that the region, while growing, is doing so at a variety of levels. There exists a whole continuum of increases and decreases between and within the states. In

general, the region is following the United States pattern of metropolitan slowdown. However, neither slowdown nor decline are the rule. To some extent, it appears that size of metropolitan area and status as central city or fringe county need to be taken into account in explaining differences, but should not be limited to these. Also at the regional level, the reversal of the pattern of non-metropolitan out-migration is apparent. This turnaround is distinct in Arkansas, Missouri and Oklahoma, just emerging in Kansas, and seemingly far from occuring in Louisiana. However, even in areas of continued out-migration, the rates of loss are lower than those in previous decades. A variety of county characteristics have been associated with migration change in non-metropolitan areas across the country, and these factors show the same types and levels of influence on the modification of migration patterns in the Ozarks Region.<sup>28</sup>

In addition to an examination of change by states, it is possible to view growth and decline on the basis of geographic sub-regions. On the whole, the expected patterns are present, with the Ozark-Ouachita Uplands displaying the most significant increases of any of the six sub-regions, for both metropolitan and non-metropolitan locations.

Although this report has described the current population changes in the region, a host of factors affecting growth and decline—and the interrelationship of these elements—remains unexplored. These factors, in turn, must be analyzed for complete understanding of demographic changes in the Ozarks region.

#### Footnotes and References

- 1. The Statistical Policy Division, Executive Office of the President, Office of Management and Budget, Standard Metropolitan Statistical Areas, 1975, Revised Edition, Washington: U.S. Government Printing Office.
- 2. The percentages noted for 1950, 1970 and 1975 reflect the metropolitan population of the country at those times and have not been adjusted to the number and size of SMSAs as defined in 1975. This, however, does not change the importance of the decreasing rates of growth found from 1950 to 1975.
- 3. Morrison, Peter A. and Judith P. Wheeler, "Rural Renaissance in America?", *Population Bulletin*, Vol. 31, No. 3, October, 1976, pp. 5-6.
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- 5. Ibid.

- 6. Morrison and Wheeler, op. cit., p. 21.
- Beale, Calvin L. and Glen V. Fuguitt, "The New Pattern of Nonmetropolitan Population Change," CDE Working Paper 75-22, Madison: Center for Demography and Ecology, University of Wisconsin, Revised July, 1976.
- 8. Morrison and Wheeler, op. cit., p. 21-22.
- 9. Roseman, Curtis C., "Changing Migration Patterns Within the United States," *Resource Papers for College Geography*, No. 77-2, Washington: Association of American Geographers, 1977, p. 21.
- Campbell, Rex R. and Daniel M. Johnson, "Propositions on Counterstream Migration," Rural Sociology, Vol. 41, (Spring), 1976, pp. 127-145, and Campbell, Rex R., Gary J. Stangler, George H. Dailey, Jr., and Robert L. McNamara, Population Change, Migration, and Displacement Along the McClellan-Kerr Arkansas River Navigation System, Army Engineer Institute for Water Resources, April, 1978.
- 11. See especially, Fuguitt, Glen V. and James J. Zuiches, "Residential Preferences and Population Distribution," *Demography*, August, 1975, pp. 491-504, and Dillman, Don A. and Russell P. Dobash, "Preferences for Community Living and Their Implications for Population Redistribution," *Washington Agricultural Experiment Station Bulletin 764*, Washington State University, November, 1972.
- 12. For a further discussion of factors involved in non-metropolitan population change, see Wardwell, John M., "Equilibrium and Change in Non-metropolitan Growth," Rural Sociology, Vol. 42, (Summer), 1977, pp. 156-179 and McCarthy, Kevin F. and Peter A. Morrison, "The Changing Demographic and Economic Structure of Nonmetropolitan Areas in the 1970's," The Rand Paper Series, P-6062, January 1978.
- For an in-depth discussion of population change in Louisiana, see Perez, Lisandro and Maisy L. Cheng, "Population Change in Louisiana, 1970-1975," Agricultural Experiment Station Bulletin No. 705, Louisiana State University, October, 1977.
- 14. Campbell, Stangler, Dailey and McNamara, op. cit., and Roseman, op. cit., p. 24-26.
- According to the estimates, Missouri and Kansas have equal percentages of their population age 65 and over - 12.6%. Administration on Aging, Facts about Older Americans, 1976 DHEW Publication No. (OHD) 77-20006, National Clearinghouse on Aging.
- 16. Roseman, op. cit., p. 21.
- 17. It should be noted that the population change figures and percents for the Western Arkansas Planning and Development District include 24,187 Vietnamese refugees housed at Ft. Chaffee

- in Sebastian County. If these persons were excluded, the exclusion would have decreased the population and net migration gains in the district, yet not enough to reduce the rate of change and net migration below 1.00% per year for this district in total or in its metropolitan portion.
- 18. This must not be construed to mean that all non-metropolitan parishes experienced net out-migration. On the contrary, 25% of the state's non-metropolitan parishes registered migration gains. However, when these parishes are examined at the planning district level these positive rates become hidden.
- 19. These sub-regional groupings were developed by Calvin Beale and Glenn Fuguitt. In total, there are 26 sub-regions for the entire United States. See Beale and Fuguitt, op. cit., p. 27.
- 20. Morrison, Peter A., "Current Demographic Change in Regions of the United States," *The Rand Paper Series*, P-6000, November 1977.
- 21. Ibid and Beale and Fuguitt, op. cit., p. 29.
- 22. Morrison and Wheeler, op. cit., p. 16.
- 23. Morrison and Wheeler, op. cit., Beale and Fuguitt, op. cit., Beale, Calvin L., "A Further Look at Non-metropolitan Population Growth Since 1970," American Journal of Agricultural Economics, Vol. 58, No. 5 December, 1976, pp. 953-958, Humphrey, Craig R. and Sell, Ralph R., "The Impact of Controlled Access Highways on Population Growth in Pennsylvania Non-metropolitan Communities, 1940-1970," Rural Sociology, Vol.

- 40, Fall, 1975, pp. 332-343, and Dailey, George H., Jr., Gary J. Stangler, and Rex R. Campbell, "Migration to the Ozarks: The Aging Migrant," Paper presented at the Annual Rural Sociological Society meeting in Madison, Wisconsin, September 1-4, 1977.
- 24. With the exception of counties classified as both lake and retirement areas, all variables have been examined separately. Therefore, possible interaction between factors is obscured. However, a search for these interactions is not the purpose intended, rather this section is attempting to show, at least, the potental importance of several variables on changes in net migration patterns of the non-metropolitan areas of the five states.
- 25. Beale, op. cit., p. 955.
- 26. Humphrey and Sell, op. cit., p. 341.
- 27. Beale and Fuguitt, op. cit., pp. 15-16 and 25-26.
- 28. This report has examined population and net migration change at a variety of geo-political levels, yet county level data was explored only for example and clarification purposes. As such, many patterns remain obscured. Therefore, the reader is cautioned not to assume that demographic patterns are consistent throughout a given areal breakdown, since totals represent a composite picture. Also, it should not be assumed that present trends in an individual locality will continue, as there is no way to predict future change with certainty.





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