

# Recent Nonmetropolitan Demographic Trends in the Midwest

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This research<sup>1</sup> examines demographic trends in nonmetropolitan areas of the United States and the Midwest<sup>2</sup> since the 1990 census using the federal-state series of county population estimates. Review of such timely information is important because nonmetropolitan demographic trends have been extremely fluid during the past 30 years (Long and DeAre, 1988). Historically, nonmetropolitan demographic change, both in the Midwest and the U.S., has been dominated by an excess of births over deaths sufficient to offset the net outmigration of population to the nation's metropolitan areas. This pattern of slow nonmetropolitan population gain through an excess of natural increase over migration loss was so consistent that it came to be taken for granted (Fuguitt et al., 1989). This changed abruptly in the 1970s with the onset of what came to be called the nonmetropolitan population turnaround. Nonmetropolitan areas experienced widespread and substantial population gains and net immigration during the turnaround (Beale, 1975; Johnson and Purdy, 1980; Fuguitt, 1985). In contrast, natural increase contributed much less to the nonmetropolitan population gains of the 1970s than it had in previous decades. Nonmetropolitan population redistribution patterns shifted yet again in the 1980s. Most nonmetropolitan counties lost population during the 1980s because they had a modest net outflow of population combined with low levels of natural increase (Johnson, 1993b). Many researchers regarded the diminished nonmetropolitan growth of the 1980s as evidence that U.S. population redistribution trends had reverted to historical form, with the turnaround of the 1970s just a short term fluctuation. However, there is now evidence of another upturn in population growth rates in nonmetropolitan areas during the late 1980s and early 1990s (Johnson and Beale, 1994a; Beale and Fuguitt, 1990).

This research documents the significant rebound of nonmetropolitan population growth rates since 1990 in the U.S. and in the Midwest. It does so by: 1) summarizing the overall trends of population redistribution in nonmetropolitan areas of the United States; 2) identifying factors associated with these recent nonmetropolitan demographic trends; and 3) examining recent nonmetropolitan demographic change in the Midwest. Because demographic trends are closely linked to shifts in the economy, labor force and social structure of an area, information about such trends provides valuable insights to corporate strategic planners and government policymakers charged with formulating programs to address the needs of the changing nonmetropolitan population.

### **Data and Procedure**

Data on demographic change since 1990 are from the federal-state cooperative population estimates series developed jointly by the U.S. Bureau of the Census and the states. Additional data are from the U.S. decennial censuses of population for 1980 and 1990. Births and deaths for 1980 to 1990 are from special tabulations of the federal-state cooperative series. The typology used to classify counties by economic function was developed by the Economic Research Service of the U. S. Department of Agriculture (Cook and Mizer, 1994). The recreational specialty variable is from Johnson and Beale (1995a). Net migration is calculated by subtracting natural increase from the population change during the appropriate time period.<sup>3</sup>

The estimation procedure used in the 1990s to make the federal-state cooperative estimates differed from that used previously. During the 1980s, population

estimates were based on a combination of the administrative records and ratio-correlation procedures. In contrast, estimates for the 1990s are based on the administrative records approach alone (Byerly, 1994). The validity of conclusions based on this modified estimation procedure is of concern here because of the significant changes in the population redistribution patterns suggested by the 1994 estimates. However, research comparing the federal-state estimates to population estimates developed independently by state demographers in 20 states found overall consistency between the two sets of estimates (Johnson and Beale, 1994b).

Counties are the unit of analysis and are appropriate for this purpose because they have historically stable boundaries and are a basic unit for reporting fertility, mortality, and census data. New England county equivalents are included, as well as independent cities in Virginia and elsewhere. Analysis of the Midwest is limited to Illinois, Indiana, Iowa, Michigan, and Wisconsin.

Metropolitan reclassification complicates efforts to compare the trends of various time periods. The latest (1993) metropolitan definition is used here to classify counties as metropolitan or nonmetropolitan. Because counties are reclassified from time to time as new metropolitan areas are formed or territory is added to existing areas, the demographic implications of using one definition of metropolitan in preference to another are far from trivial (Johnson, 1989). There is no simple resolution to the problem of metropolitan reclassification nor is any one approach clearly superior to all others (Fuguitt et al., 1988). A net of 92 counties nationwide shifted from the nonmetropolitan to metropolitan category as a result of using the 1993 metropolitan definition rather than the 1985 definition used previously. Using the 1993 definition results in greater nonmetropolitan losses during the 1980s and slower nonmetropolitan gains during the early 1990s than would have been the case had the earlier metropolitan definition been used.

### **Recent Nonmetropolitan Demographic Change in the United States**

In a reversal of the trend of the 1980s, there was widespread population growth in nonmetropolitan areas of the United States during the early 1990s. Nearly 74 percent of the 2,304 counties classified as nonmetropolitan in 1993 gained population between 1990 and 1994 (table 1). In all, 660 more nonmetropolitan counties gained population than in the 1980s. The estimated nonmetropolitan population gain between April 1990 and July 1994 was 2,002,000. In contrast, nonmetropolitan areas grew by about 1.3 million during the entire decade of the 1980s. Thus, the nonmetropolitan population gain between 1990 and 1994 has already exceeded that during all of the 1980s by nearly 50 percent. The nonmetropolitan population still grew at a slower pace (3.9 percent) than did the metropolitan population (4.9 percent) between 1990 and 1994, but the gap was much narrower than during the 1980s. Post-1990 population gains occurred in many regions of the country. Gains were most prevalent in the Mountain West, Upper Great Lakes, Ozarks, parts of the South, and in rural areas of the Northeast. Widespread losses occurred only in the Great Plains, western Corn Belt, and Mississippi Delta (figure 1).

Renewed nonmetropolitan growth is due, in large part, to a recent migration gain. In contrast, most nonmetropolitan areas suffered a net outflow of population during the 1980s. Such migration gains accounted for 56 percent of the total estimated population increase between April 1990 and July 1994. Nonmetropolitan areas had an estimated net inflow of 1,127,000 people during the period. This compares to

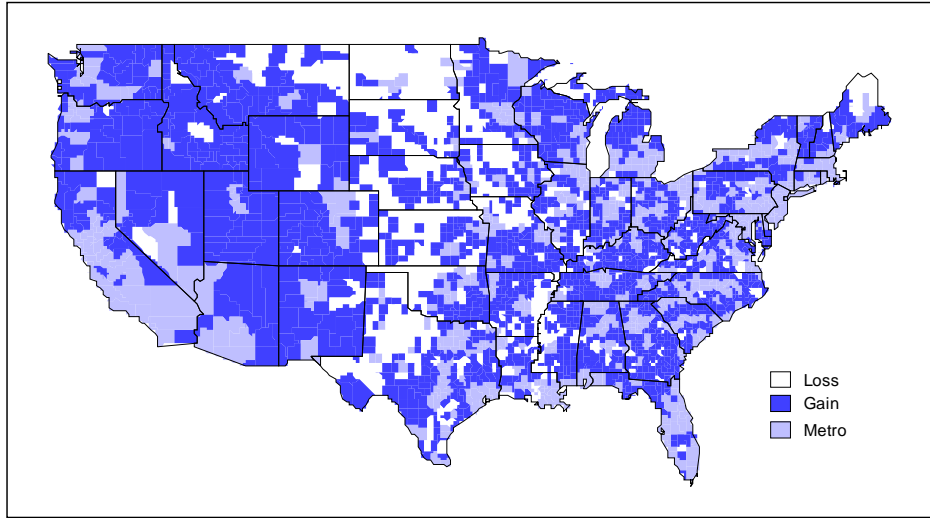
**Table 1** Aggregate Population Change, Net Migration, and Natural Increase by Adjacency and Metropolitan Status, 1980 to 1990 and 1990 to 1994

	Number of cases	Initial population	Population change			
			Absolute change	Percent change	Percent growing	
1980 to 1990:						
All nonmetropolitan	2,305	49,578	1,320	2.7	45.1	
Nonadjacent	1,298	22,612	134	0.6	36.4	
Adjacent	1,007	26,966	1,186	4.4	56.3	
Metropolitan	836	176,965	20,848	11.8	81.0	
Total	3,141	226,543	22,168	9.8	54.7	
1990 to 1994:						
All nonmetropolitan	2,304	50,850	2,002	3.9	73.8	
Nonadjacent	1,297	22,699	772	3.4	66.0	
Adjacent	1,007	28,151	1,230	4.4	83.9	
Metropolitan	837	197,893	9,621	4.9	91.0	
Total	3,141	248,718	11,623	4.7	78.4	
	Net migration			Natural increase		
	Absolute change	Percent change	Percent growing	Absolute change	Percent change	Percent growing
1980 to 1990:						
All nonmetropolitan	-1,370	-2.8	27.3	2,690	5.4	89.6
Nonadjacent	-1,175	-5.2	20.7	1,309	5.8	87.0
Adjacent	-194	-0.7	35.8	1,382	5.1	92.9
Metropolitan	6,575	3.7	57.7	14,271	8.1	97.7
Total	5,206	2.3	35.4	16,962	7.5	91.8
1990 to 1994:						
All nonmetropolitan	1,127	2.2	63.4	875	1.7	75.9
Nonadjacent	383	1.7	56.1	389	1.7	69.2
Adjacent	744	2.6	72.8	486	1.7	84.4
Metropolitan	2,550	1.3	74.9	7,071	3.6	96.5
Total	3,677	1.5	66.5	7,946	3.2	81.4

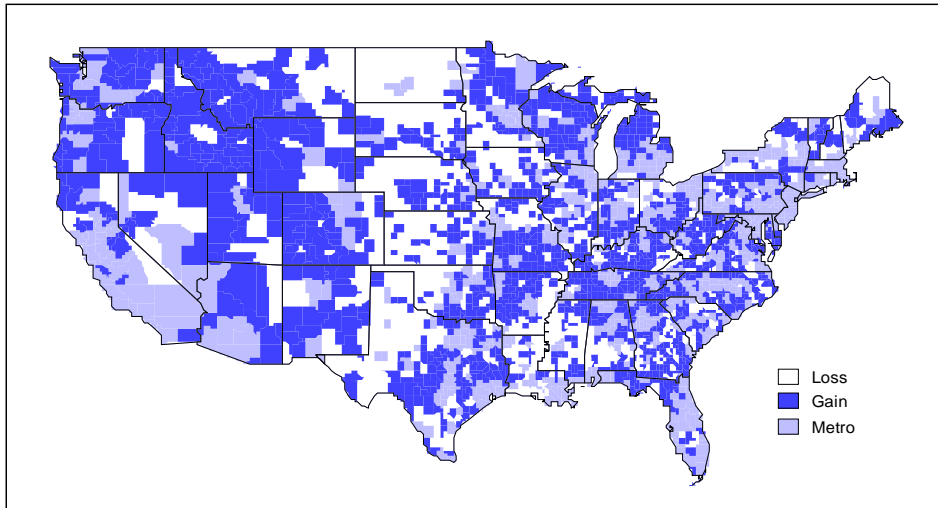
Notes: 1993 metropolitan status used for 1980 to 1990 and 1990 to 1994. Initial population and absolute change values reported in thousands.

a net outflow of 1,370,000 during the 1980s. In fact, the net migration percentage gain (2.2 percent) in nonmetropolitan areas between 1990 and 1994 was greater than the migration gain in metropolitan areas (1.3 percent). This is a sharp contrast to the pattern during the 1980s when metropolitan areas had net immigration of 3.7 percent, whereas nonmetropolitan areas had a net outmigration of 2.8 percent. The only other recent period during which nonmetropolitan migration gains exceeded those in metropolitan areas was during the population turnaround of the 1970s. Such migration gains were widely distributed geographically though they were least prevalent in the Great Plains, west Texas, and the Mississippi Delta (figure 2).

**Figure 1** Nonmetropolitan Population Change, 1990 to 1994



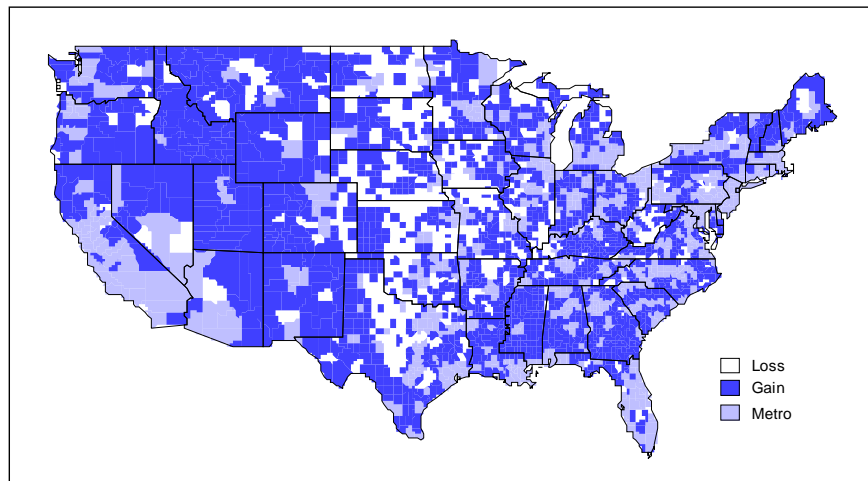
**Figure 2** Nonmetropolitan Net Migration, 1990 to 1994



Natural increase accounted for 44 percent of the nonmetropolitan population increase between April 1990 and July 1994. In all, births exceeded deaths by 875,000 in nonmetropolitan areas. The annualized gain through natural increase in nonmetropolitan areas was somewhat lower between 1990 and 1994 than it had been during the 1980s. In contrast, the annualized rate of natural increase accelerated in metropolitan areas during the early 1990s. This represents a significant change in the demographic trends of the United States. Through most of this century, nonmetropolitan population growth has been fueled by natural increase. Net migration has traditionally diminished the nonmetropolitan growth rate because more people left such areas than migrated to them. In contrast, the rapid growth of metropolitan areas during the twentieth century has been fueled by natural increase, a significant influx of migrants from rural areas and immigration. However, during the 1970s and again during the 1990s, the bulk of metropolitan growth came from natural increase, whereas, the majority of the nonmetropolitan gain was from net immigration.

The extent of the slowdown in natural increase in nonmetropolitan areas is reflected in the sharp increase in the incidence of natural decrease there during the early 1990s. This continues a trend first noted in the 1980s (Johnson, 1993a; Johnson and Beale, 1992). Between 1990 and 1994, an estimated 556 nonmetropolitan counties experienced natural decrease (figure 3). The incidence of natural decrease in American counties is now higher than at any point in history. Preliminary birth and death estimates (data not presented) for 1993 and 1994 suggest that the incidence of natural decrease continues to rise at an unprecedented rate. A number of factors contributed to the rising incidence of natural decrease, but the most important was age structure distortion resulting from decades of outmigration by young adults coupled with the aging of older adults in rural areas (Johnson, 1993b; Johnson and Beale, 1992). If this trend continues, as appears likely, it may represent a fundamental turning

**Figure 3** Nonmetropolitan Natural Population Change, 1990 to 1994



point in the demographic processes underlying population growth in nonmetropolitan areas of the United States.

### Factors Influencing U.S. Nonmetropolitan Demographic Trends

Nonmetropolitan population gains were more likely in counties near metropolitan centers. Nearly 84 percent of these adjacent counties gained population in the early 1990s, and 73 percent had net immigration (table 1). In fact, the net migration gain in adjacent nonmetropolitan counties (2.6 percent) exceeded that in metropolitan areas (1.3 percent) by a substantial margin. Even among more remote nonmetropolitan counties, recent population gains were significantly greater than during the 1980s. Growth occurred in 66 percent of counties not adjacent to metropolitan areas in the early 1990s, compared to 36 percent during the 1980s. Such nonadjacent counties had net immigration (1.7 percent) during the early 1990s, compared to a net loss (-5.2 percent) in the 1980s.

Nonmetropolitan counties that were destinations for retirement age migrants or centers of recreation<sup>4</sup> were the fastest growing counties during the early 1990s. Of the 190 nonmetropolitan retirement destination counties, 99 percent gained population and 97 percent had net immigration between 1990 and 1994 (table 2). Such areas are located in the Sun Belt, coastal regions, parts of the West, and in the Upper Great Lakes (Cook and Mizer, 1994). They were attracting retirees while retaining their existing population (Fuguitt and Heaton, 1993). Population gains also occurred in 92 percent of the 285 nonmetropolitan recreational counties during the early 1990s with a large majority (85 percent) receiving net immigration. Such counties were prominent growth nodes during the 1970s and 1980s and this trend persisted in the early 1990s. There is significant overlap between the recreational and retirement destination counties because the amenities, temperate climate, and scenic advantages

**Table 2** Population Change, Net Migration, and Natural Increase in Nonmetropolitan Counties by Selected Variables, 1990 to 1994

County Type	Number of cases	Population change		Net migration		Natural increase	
		Percent change	Percent growing	Percent change	Percent growing	Percent change	Percent growing
Retirement	190	10.7	99	9.4	97	1.4	69
Federal lands	269	9.6	94	6.9	86	2.7	87
Recreational	285	7.8	92	6.0	85	1.9	81
Manufacturing	506	3.6	88	1.8	70	1.7	91
Commuting	381	5.0	86	3.4	80	1.6	83
Government	242	4.3	87	1.3	73	3.0	82
Service	323	5.8	84	4.3	74	1.5	77
Nonspecialized	484	3.9	80	2.6	72	1.3	77
Transfer	381	3.6	75	2.5	66	1.1	67
Poverty	535	3.2	71	0.8	53	2.4	84
Mining	146	2.1	63	0.1	47	2.0	79
Low density	407	4.3	55	1.8	45	2.5	65
Farming	556	2.3	47	1.0	44	1.3	56
Total nonmetropolitan	2,304	3.9	74	2.2	63	1.7	76

Notes: 1993 metropolitan definition; 14 previously metropolitan counties excluded from type analysis. Percent change is aggregate change for all cases in category. Recreational counties defined by Johnson and Beale (1995). Low density counties contain fewer than six persons per square mile in 1990. All other types defined as in Cook and Mizer (1994). Counties are classified into one economic type (farming, mining, manufacturing, government, service and nonspecialized). Other types are not mutually exclusive.

which attract vacationers and seasonal residents also appeal to retirees. In all, 101 counties fell into both the recreational and retirement destination categories. Growth rates in these counties were the highest of any identified group. Such counties grew by 11.7 percent between 1990 and 1994 with the vast majority of the growth attributable to net immigration.

Nonmetropolitan population gains were also widespread in manufacturing and government dependent counties, though the gains were smaller than those in recreational and retirement counties. Growth in such counties was more evenly balanced between natural increase and net migration. Counties where much of the land is federally owned also had widespread growth in the early 1990s. Most of these counties were concentrated in the West and many experienced significant net immigration in recent years with migrants attracted by the scenic and recreational amenities. Other county types with high growth rates fueled by net migration included those with a large proportion of their work force commuting to jobs in other counties and those with economies dominated by service sector jobs.

Counties dependent on farming were the least likely to gain population during the early 1990s. Only 47 percent of the farming dependent counties gained population and only 44 percent had net immigration. Natural decrease was also more common in farm dependent counties than elsewhere. Population gains were slightly more widespread in mining counties, but the magnitude of the gains was quite small. A majority of the mining counties experienced outmigration as well. The smaller than average population gains and widespread outmigration from mining and farming dependent counties during the early 1990s represented a continuation of the trends of the 1980s. However, even among these counties the population and migration trends in the early 1990s moderated compared to the 1980s when population decline and migration losses were much more prevalent. Counties with histories of persistent poverty also had low growth rates during the early 1990s and, as in the case of the mining and farming counties, what growth there was came from natural increase.

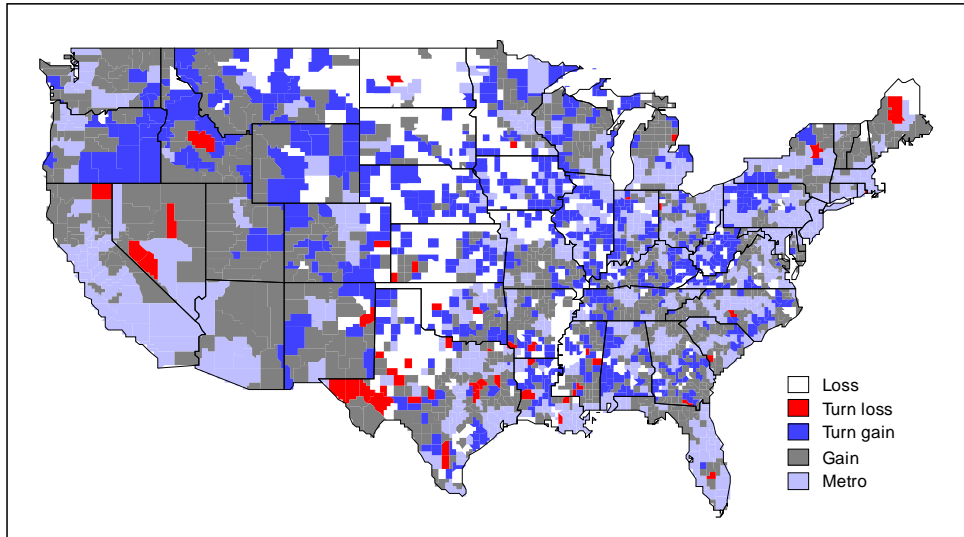
#### Longitudinal Patterns of Population Change

Comparing growth patterns in nonmetropolitan areas in the 1980s to those during the 1990s underscores two important points. First, the renewal of nonmetropolitan growth was extremely widespread geographically. Counties shifting from loss in the 1980s to growth in the 1990s (turn gain) were prevalent in all regions (figure 4). Many were on the periphery of existing concentrations of counties that grew consistently through the 1980s and early 1990s (gain). Second, counties that lost population during the 1980s and continued to do so during the 1990s were concentrated in areas of the country with long histories of population decline.

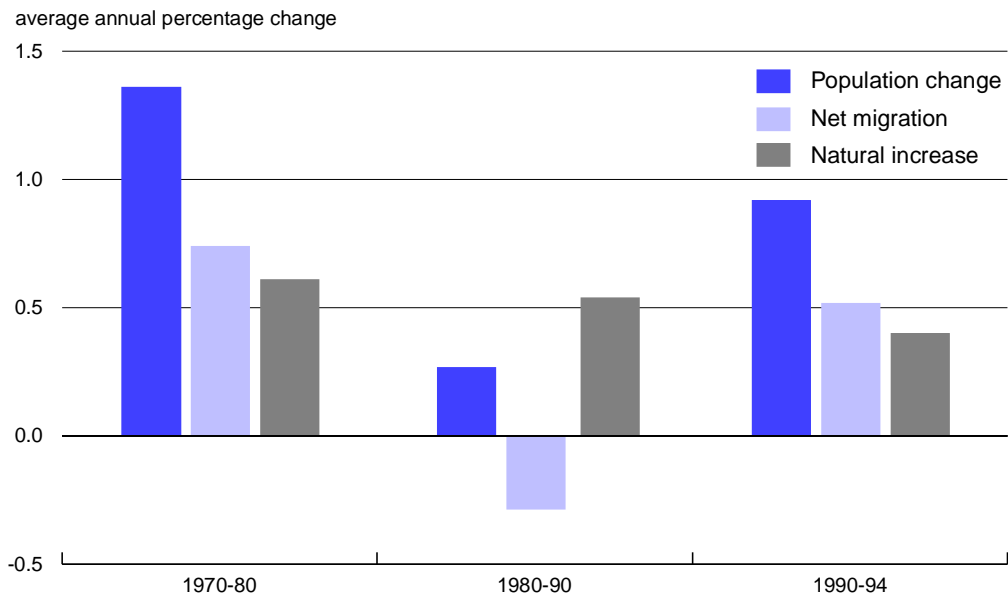
Comparing nonmetropolitan demographic trends between 1990 and 1994 to those during the 1970s and 1980s also underscores important similarities and differences. Growth in nonmetropolitan areas during the early 1990s was similar in pattern to that during the turnaround decade of the 1970s, though it was smaller in magnitude (figure 5). During both periods, net migration and natural increase made significant contributions to the growth of the nonmetropolitan population. In contrast, during the 1980s the minimal population gains in nonmetropolitan areas occurred because natural increase was sufficient to offset net outmigration. This raises



**Figure 4** Nonmetropolitan Population Change, the Early 1990s Versus the 1980s



**Figure 5** Nonmetropolitan Demographic Change During the 1970s, 1980s, and Early 1990s

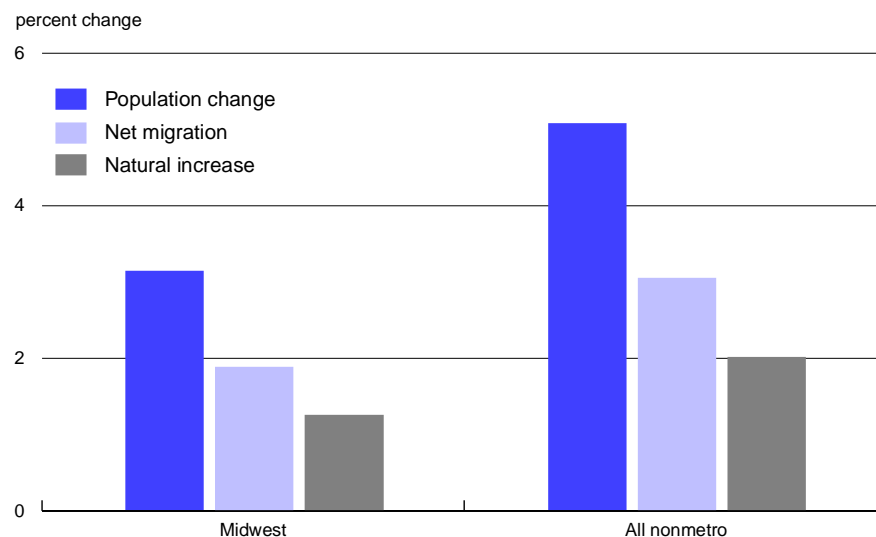


important questions about the nonmetropolitan population redistribution trends of the 1980s. It is quite possible that the widespread declines of the 1980s were due to “period effects” resulting from the difficult economic situation experienced by nonmetropolitan areas during that decade (Elo and Beale, 1988; Henry et al. 1986). If this is indeed the case, then the widespread loss of population during the 1980s may have been a temporary interruption in a general growth trend that began in nonmetropolitan areas by 1970.

### Recent Midwestern Demographic Trends

Population growth patterns in nonmetropolitan areas of the Midwest rebounded during the early 1990s, just as they did at the national level. Gains in the Midwest were smaller than in nonmetropolitan areas of the U.S. overall (figure 6). However, the pattern of growth in the Midwest was similar to that in the U.S. with net migration contributing somewhat more to the overall population gain than did natural increase. Between 1990 and 1994, more than 74 percent of the 328 nonmetropolitan counties in the Midwest gained population (table 3). In contrast fewer than 30 percent gained population between 1980 and 1990. In all, 146 more midwestern nonmetropolitan counties gained population during the early 1990s. Between April 1990 and July 1994, the nonmetropolitan population grew by an estimated 200,000 in the five midwestern states considered here. In contrast, these areas declined by more than 187,000 between 1980 and 1990. The nonmetropolitan population in the Midwest still grew at a slower pace (2.4 percent) than did the metropolitan population (3.0 percent) between 1990 and 1994, but the gap became quite narrow. In contrast, during the 1980s the metropolitan population in the Midwest grew slowly, while the nonmetropolitan population declined significantly. Population gains were extremely widespread in Wisconsin, the lower peninsula of Michigan, and in most of Indiana. In Illinois and

**Figure 6** Nonmetro Demographic Change 1990 to 1994, Midwest Compared to all Nonmetro



**Table 3**

Aggregate Population Change, Net Migration, and Natural Increase by Adjacency and Metropolitan Status for Midwestern Counties, 1980 to 1990 and 1990 to 1994

	Number of cases	Initial population	Population change			
			Absolute change	Percent change	Percent growing	
1980 to 1990:						
All nonmetropolitan	328	8,360,877	-187,253	-2.2	29.9	
Nonadjacent	169	3,471,565	-101,680	-2.9	27.8	
Adjacent	159	4,889,312	-85,573	-1.8	32.1	
Metropolitan	120	25,438,240	326,718	1.3	66.7	
Total	448	33,799,117	139,465	0.4	39.7	
1990 to 1994:						
All nonmetropolitan	328	8,173,686	199,983	2.4	74.4	
Nonadjacent	169	3,369,902	67,803	2.0	67.5	
Adjacent	159	4,803,784	132,180	2.8	81.8	
Metropolitan	120	25,764,949	772,286	3.0	92.5	
Total	448	33,938,635	972,269	2.9	79.2	
	Net migration			Natural increase		
	Absolute change	Percent change	Percent growing	Absolute change	Percent change	Percent growing
1980 to 1990:						
All nonmetropolitan	-517,144	-6.2	15.5	329,891	3.9	89.3
Nonadjacent	-212,850	-6.1	18.9	111,170	3.2	83.4
Adjacent	-304,294	-6.2	11.9	218,721	4.5	95.6
Metropolitan	-1,565,186	-6.2	27.5	1,891,904	7.4	99.2
Total	-2,082,330	-6.2	18.8	2,221,795	6.6	92.0
1990 to 1994:						
All nonmetropolitan	112,194	1.4	68.0	87,789	1.1	70.1
Nonadjacent	47,065	1.4	64.5	20,738	0.6	57.4
Adjacent	65,129	1.4	71.7	67,051	1.4	83.6
Metropolitan	-91,218	-0.4	74.2	863,504	3.4	99.2
Total	20,976	0.1	69.6	951,293	2.8	77.9

Notes: 1993 metropolitan status used throughout.

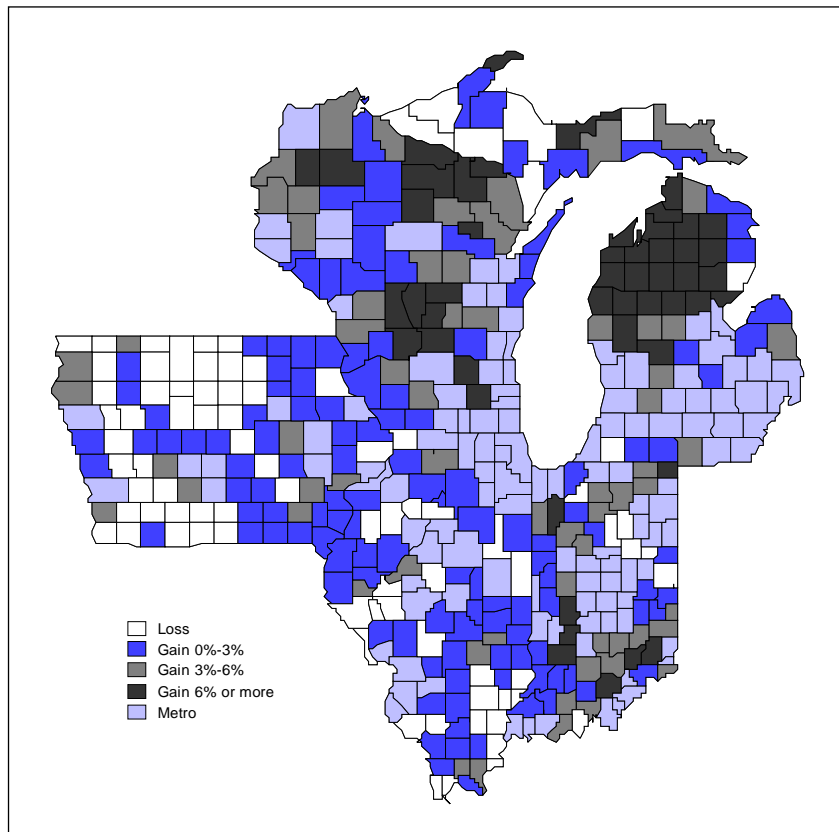
Iowa, nonmetropolitan gains were also common, though they tended to cluster on the periphery of metropolitan areas (figure 7). Evidence of the population rebound is strongest in south and central Indiana and Illinois, eastern Iowa, and northern Wisconsin and Michigan (figure 8). In each of these regions, a considerable number of counties shifted from loss in the 1980s to gain in the early 1990s (turn gain).

Migration accounted for most (56 percent) of the recent population gain in nonmetropolitan areas of the Midwest. There was an estimated net inflow of 112,000 people to the nonmetropolitan areas of the five midwestern states considered here between 1990 and 1994. This contrasts sharply with a net migration loss of 517,000 between 1980 and 1990 in these areas. In fact, only the nonmetropolitan regions of the Midwest grew by net immigration during the 1990s. Metropolitan areas continued

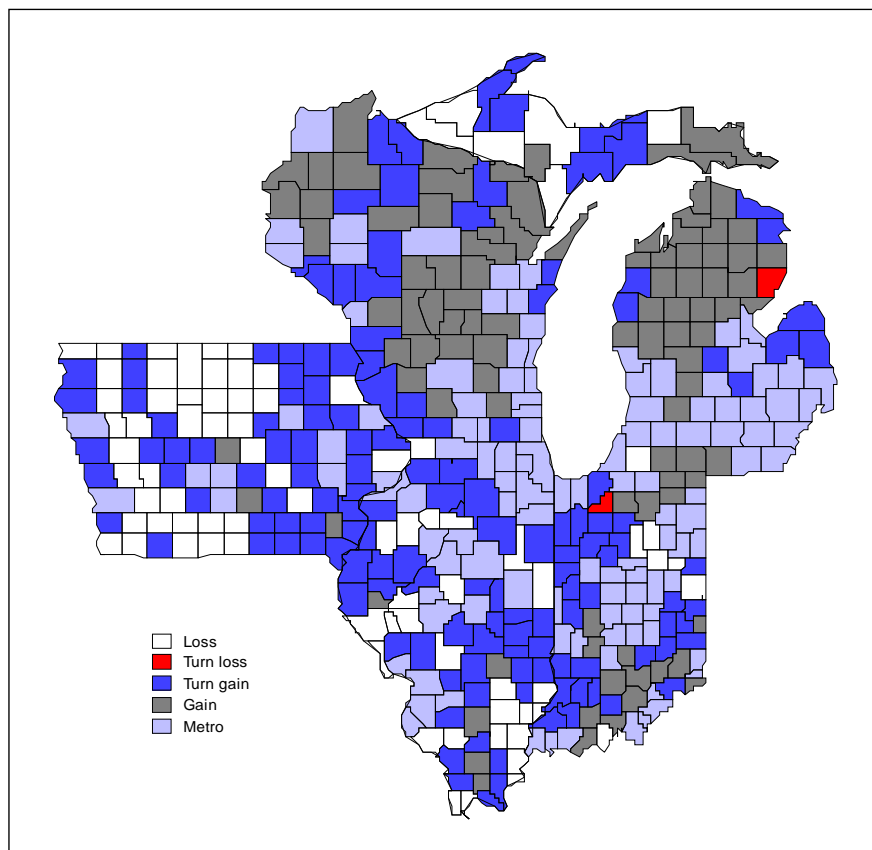
to experience net outmigration, although the rate of outmigration from such areas slowed during the 1990s. Migration gains were widespread in the nonmetropolitan Midwest. They were more common in Michigan and Wisconsin and on the fringes of metropolitan areas elsewhere in the region (figure 9). Part of the nonmetropolitan migration gain was attributable to urban spillover into the surrounding nonmetropolitan areas, but widespread migration gains in nonadjacent areas underscores the point that more than urban spillover was involved.

Through most of this century, nonmetropolitan areas in the Midwest grew primarily through natural increase. Yet, between 1990 and 1994, natural increase accounted for only 44 percent of the total nonmetropolitan population gain. The annualized rate of natural increase in nonmetropolitan areas of the Midwest was also somewhat smaller in the early 1990s (.25 percent) than it had been during the 1980s (.39 percent). In contrast, the annual rate of natural increase accelerated in the metropolitan areas of the Midwest during the 1990s, just as it did nationally. The decelerating rate of natural increase in the nonmetropolitan Midwest is reflected in the rising incidence of natural decrease there. Natural decrease is more common in the Midwest than in most other parts of the nation, particularly in nonadjacent counties (figure 10). In such areas, the age structure distortions resulting from protracted outmigration of young adults coupled with diminishing fertility has resulted in fewer births and

**Figure 7** Midwest Population Change, 1990 to 1994



**Figure 8** Midwest Population Change, the Early 1990s Versus the 1980s

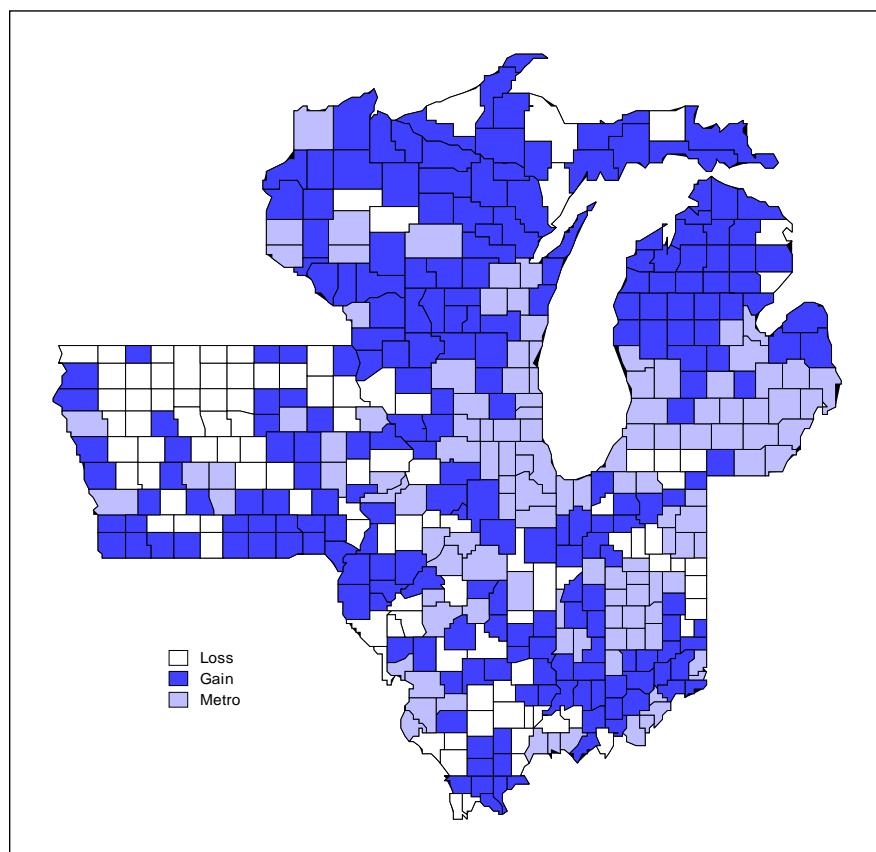


more deaths. In all, 98 of the 328 nonmetropolitan counties in the Midwest experienced natural decrease between 1990 and 1994. Annual figures for 1993 and 1994 suggested that the pace of natural decrease was accelerating in the Midwest.

#### Factors Influencing Midwestern Demographic Trends

Nonmetropolitan population gains were more likely near metropolitan centers in the Midwest, as was the case elsewhere in the nation. Nearly 82 percent of the adjacent Midwestern counties gained population in the early 1990s. Such growth was fueled by a balance of natural increase and net migration. There was a net influx of more than 65,000 migrants to adjacent counties in the early 1990s, this contrasted sharply with the net loss of more than 304,000 migrants during the 1980s. Growth also occurred in nearly 68 percent of the midwestern counties that were not adjacent to metropolitan centers in the 1990s. Net immigration accounted for most of this gain. It occurred in 64 percent of the nonadjacent counties, causing the population in such counties to grow by 1.4 percent. This was a remarkable rebound from the 1980s, when net outmigration reduced the population of midwestern nonadjacent counties by 6.1 percent.

**Figure 9** Midwest Net Migration, 1990 to 1994



Nonmetropolitan counties in the Midwest that attract retirees or are recreational centers grew the most between 1990 and 1994 (table 4). This trend was consistent with that in the nation as a whole. In both retirement and recreational counties, net immigration fueled most of the growth. There is considerable overlap between these two types of counties because many recreational centers also attract retirees. Large concentrations of both types of counties exist in northern Wisconsin and the northern half of the lower peninsula of Michigan.

Growth was also above the regional average in commuting, manufacturing and service counties. Growth in such areas is due to a balance of natural increase and net migration. Many of these counties lay just beyond the periphery of metropolitan areas and benefit from the proximity of such places. This pattern of moderate growth among service, manufacturing and commuting counties in the Midwest is consistent with national trends.

Slow growth among midwestern counties dependent on agriculture and mining was also consistent with national trends. Only about 50 percent of these counties had population increases. What growth there was came primarily through net immigration because the majority of the mining and agriculture counties experienced natural decrease during the early 1990s. Agricultural and mining counties were among

the slowest growing counties in the Midwest during the early 1990s. However, the fact that they were growing at all reflects a considerable improvement over the 1980s, when population loss and outmigration was much more widespread.

Growth patterns in the Midwest are generally consistent with those in nonmetropolitan areas of the U.S. as a whole. However, both federal lands and government counties grew less rapidly in the Midwest than they did nationally. The slow growth or curtailment of government programs contributed to this slowdown. In addition, a major military base closing in Michigan produced substantial losses in one county, which offset small gains elsewhere. In addition, relatively few federal lands counties in the Midwest are in prime recreational areas, whereas, in other regions they contain many more recreational nodes.

## Discussion

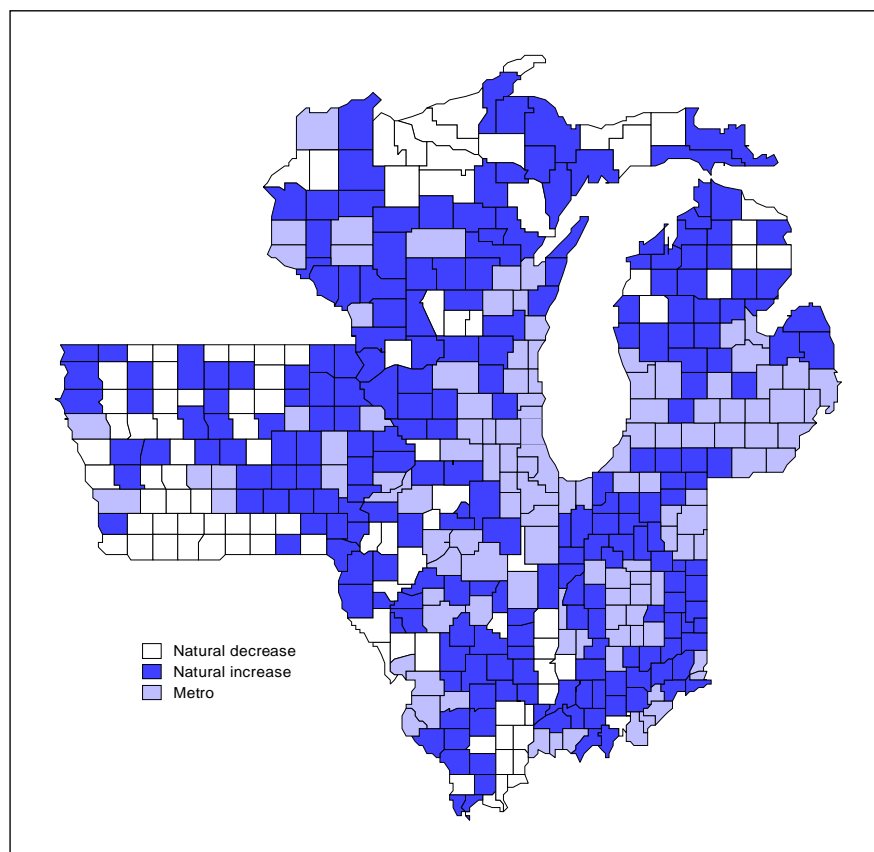
Since 1990, growth rates in nonmetropolitan areas of the United States have rebounded from the minimal levels of the 1980s. In all, 74 percent of nonmetropolitan counties began to grow again and nearly 64 percent experienced net immigration. Although these growth rates were slightly lower than those in metropolitan areas, the gap between the relative growth rates was quite small. The higher growth rates in metropolitan areas stemmed from higher rates of natural increase there. In contrast, nonmetropolitan natural increase was lagging far below historical levels. Overall, the growth patterns in nonmetropolitan America during the early 1990s resembled the patterns of the nonmetropolitan turnaround of the 1970s more than those of any other period. At the very least, these findings offer persuasive evidence that the renewed growth in nonmetropolitan areas that was first evident in the 1970s was not just a short-term phenomenon.<sup>5</sup>

**Table 4** Population Change, Net Migration, and Natural Increase in Nonmetropolitan Counties by Selected Characteristics for Midwestern States, 1990 to 1994

County Type	Number of cases	Population change		Net migration		Natural increase	
		Percent change	Percent growing	Percent change	Percent growing	Percent change	Percent growing
Retirement	21	8.1	100	7.4	100	0.7	57
Federal lands	11	-1.7	73	-2.0	82	0.4	36
Recreational	37	6.5	97	5.7	97	0.8	65
Manufacturing	81	2.9	85	1.3	69	1.5	86
Commuting	62	3.6	84	2.3	79	1.2	71
Government	33	1.7	76	0.2	76	1.5	67
Service	52	2.8	77	2.0	75	0.8	73
Nonspecialized	85	2.5	78	1.7	69	0.8	72
Transfer	40	5.0	80	5.2	90	-0.2	43
Poverty	5	1.6	60	0.4	40	1.2	60
Mining	10	0.8	50	1.3	60	-0.5	40
Farming	59	0.8	54	0.5	54	0.3	49
Total nonmetropolitan	328	2.4	74	1.4	68	1.1	70

Notes: 1993 metropolitan definition. Midwest includes MI, IN, IL, IA and WI. Percent change is aggregate change for all cases in category. Recreational counties defined by Johnson and Beale (1995). All other types defined as in Cook and Mizer (1994). Counties are classified into one economic type (farming, mining, manufacturing, government, service and nonspecialized). Other types are not mutually exclusive.

**Figure 10** Midwest Natural Population Change, 1990 to 1994



The Midwest has shared in the rural demographic rebound. Many more mid-western counties grew than was the case during the 1980s. Migration has played a prominent role in this renewed growth. More than two-thirds of the nonmetropolitan counties in the Midwest gained population through migration in the 1990s, compared to only 16 percent during the 1980s. In contrast, natural increase, which traditionally fueled the growth of nonmetropolitan areas of the Midwest, continued to diminish.

These findings on the post-1990 period cast doubt on the argument that the turnaround of the 1970s was a function of unique demographic and economic period effects, whereas the redistributive patterns of the 1980s represented a reversion to more consistent historical patterns (Frey and Speare, 1992). The nonmetropolitan demographic trends of the 1980s were neither a repeat of the nonmetropolitan turnaround of the 1970s nor a reversion to the patterns of the 1950s. Rather, the trends of the 1980s straddled the patterns of the previous two decades (Johnson, 1993b). It is still possible that the trend of the 1980s represented the first stage of a reversion to the historical pattern of slow nonmetropolitan growth through an excess of natural increase over net migration. However, it is more likely that the diminished nonmetropolitan gains of the 1980s were just a pause—due to period effects—in the growth of nonmetropolitan areas through the combination of net immigration and modest natural increase which began during the 1970s. Multivariate models presented elsewhere (Johnson and Beale, 1995b) showed no evidence of fundamental structural shifts in



the determinants of migration and natural increase between the 1980s and 1990s. Thus, the pattern of population change in nonmetropolitan areas between 1970 and 1994 appeared most consistent with the deconcentration perspective. In this regard, the deconcentration slowdown during the 1980s underscored the fact that such trends seldom proceed at an even pace—witness the slowdown in the long-term flow of population to urban areas during the 1930s, for example. It is also possible that nonmetropolitan and metropolitan areas have entered a period of equilibrium where short-term demographic shifts are acutely sensitive to “period effects” resulting from changes in the economic, political, and social climate (Wardwell, 1977).

The protracted economic recession of the 1980s hurt nonmetropolitan areas more severely than urban areas. The effects of these economic problems were particularly pronounced in the Midwest. Agricultural areas were hit hard by the long farm crisis of 1980–86. In addition, nonmetropolitan manufacturing—which employs many more nonmetropolitan people than farming—came under increased competitive pressure from offshore firms during the 1980s with much loss of jobs (Elo and Beale, 1988; Henry et al., 1986). All these factors contributed to the slower overall nonmetropolitan growth in the 1980s both in the Midwest and elsewhere in the country. Only in the late 1980s, as the differential impact of these periodic factors began to subside, did nonmetropolitan growth rates begin to rise again (Beale and Fuguitt, 1990). The rate of nonmetropolitan job growth exceeded that in urban areas annually since 1990 (Economic Research Service, 1994). As a result, nonmetropolitan workers had less economic reason to migrate to urban areas recently.

Speculation about future nonmetropolitan population redistribution is perilous given the fluidity of the demographic shifts in nonmetropolitan areas of the U.S. during the past several decades. This reflects the complexity of the forces causing population redistribution. Whatever the future course of nonmetropolitan demographic trends, they are likely to be more volatile than in the past. Recent changes in nonmetropolitan fertility rates and age structures are sure to diminish the substantial contribution that natural increase has traditionally made to nonmetropolitan population gains. Thus, future nonmetropolitan growth or decline is increasingly dependent on net migration. And, as the integration of nonmetropolitan areas into the national economy continues, nonmetropolitan migration trends are likely to become increasingly sensitive to national and global economic, political and social forces. Careful monitoring of future nonmetropolitan demographic trends is necessary to provide corporate planners and government policymakers with the information required to develop programs to meet the changing needs of the people and institutions of rural America.

## Footnotes

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- <sup>2</sup> The Midwest is here defined as Indiana, Illinois, Iowa, Michigan, and Wisconsin. These states roughly represent the Chicago region of the Federal Reserve Bank.
- <sup>3</sup> The Bureau of the Census now refers to the difference between population change and natural increase as residual change. This underscores the point that it includes differential census coverage error and coverage error in reporting vital events. I shall continue to use net migration to refer to the difference between population change and natural increase. However, I am cognizant of the limitations of the measure.
- <sup>4</sup> Indicators of recreational activity are not easy to derive directly from available data; as a result, researchers have used a variety of proxies. The measure used here is derived from analysis of a number of indicators of recreational activity. A detailed discussion of the development of the recreation variable is presented elsewhere (Johnson and Beale, 1995a).
- <sup>5</sup> Further evidence of an upturn in nonmetropolitan growth is forthcoming from recent *Current Population Survey* (CPS) data. Following minimal nonmetropolitan migration gains in the 1991 and 1992 CPS, analysis of the 1993 CPS indicates a net inflow of approximately 300,000 migrants to nonmetropolitan areas between 1992 and 1993. This is the first significant net immigration to nonmetropolitan areas reported by the CPS in more than a decade. Differences in metropolitan definition and time period preclude direct comparisons of CPS and federal-state results. However, the substantial net immigration reflected in the 1993 CPS represents additional independent evidence of the growth of the nonmetropolitan population after 1990.

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