POPULATION CHANGE IN NONMETROPOLITAN CITIES AND TOWNS

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ECONOMIC RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL ECONOMIC REPORT NO. 323

POPULATION CHANGE IN NONMETROPOLITAN CITIES AND TOWNS, by Glenn V. Fuguitt and Calvin L. Beale. Economic Development Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 323.

Abstract

Patterns of population change between 1950-60 and 1960-70 are analyzed for U.S. nonmetropolitan incorporated cities and towns. Ranging in size from less than 100 up to 50,000 population, they included over 30 million people in 1970, or about one-half of the total population living outside metropolitan areas. For this study, a constant geographic boundary is maintained and the research relates to places outside metropolitan areas as defined in 1963. Variations in population growth are examined by size groupings and other variables such as regional location, presence of an interstate highway, distance from a metropolitan central city, and annexation. Results from both the 1950's and 1960's indicate that any general view of small towns as declining or dying is grossly inaccurate. Places in nonmetropolitan areas grew in population 14 percent in 1950-60 and 10 percent in 1960-70; this rate of growth was less rapid than the metropolitan sector, but more rapid than the nonmetropolitan population outside incorporated places. There were growing and declining towns in all size classes, but only the very smallest of village classes witnessed population loss more commonly than growth in the 1960-70 decade.

Key Words: Towns, Nonmetropolitan population, Population growth.

Acknowledgment

This work has been supported in part by the College of Agricultural and Life Sciences, University of Wisconsin-Madison, through a cooperative agreement with the Economic Research Service. Analysis was aided by a grant (No. HD05876) to the Center for Demography and Ecology, University of Wisconsin-Madison, from the Center for Population Research of the National Institute of Child Health and Human Development, Department of Health, Education, and Welfare.

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Washington, D.C. 20250 **February 1976**

Summary

Contrary to the popular impression of the 1950's and 1960's, the majority of U.S. towns of less than 100 up to 50,000 population were not declining in population, let alone dying.

The number of places in counties that were nonmetro as of 1963 increased slightly between 1950 and 1970, with more new places being established than disincorporating. Altogether, they grew in population 14 percent the first decade and 10 percent the second—less rapidly than the metro sector, but more rapidly than the nonmetro population outside incorporated places. Over time, a higher proportion of places are found in larger size classes as a consequence of this growth and 23 places had become metro central cities by 1970. By 1970, the nonmetro incorporated places had over 30 million people, about half the total population living outside metro areas.

In the 1950's, the larger nonmetro places were more likely than smaller places to grow and to have more rapid growth. This pattern lessened, however, in the 1960's with a diminution of rates for larger centers and a growth resurgence of smaller places, particularly in the South away from the Atlantic coast.

A good deal of the growth differential by size of place is due to the very small places under 1,000 in size. When villages are classified by size intervals of 100, there is a regular correspondence between larger size class and higher average growth up to about 700 population for the United States and the North Central States over both decades and for the South in 1950-60. Above this size, differences in growth rates by town size are minimal. In the South over the latest decade, 60 percent or more of the villages grew in all size classes. To get a better understanding of the growth of incorporated centers in their local context, they were subdivided according to size of largest place in the county as of 1960. The resurgence of small town growth in the South away from the Atlantic coast prevailed regardless of size of largest place in the county. In the West North Central States, this was true for two out of three groupings according to size of largest place.

Decentralization of the population was examined by contrasting growth in and out of incorporated centers for the two decades and comparing metro with nonmetro groupings. A decentralization pattern was more evident in metro than nonmetro areas over both time periods, but there was increasing decentralization of people in nonmetro areas into the open country and other unincorporated territory in the 1960's compared with the 1950's. The rate of decentralization in metro areas, on the other hand, appeared to have slowed down.

Classification of counties by distance from a metro center shows that decentralization trends are not limited to nonmetro areas that are near a metro city. Nor is the increased growth of villages attributable only to metro access.

The presence of an interstate highway in a county appears, on the surface, to stimulate growth, but more notably outside rather than inside incorporated centers. For most categories considered, however, this growth effect was found during or even before the early stages of interstate construction in the 1950's as well as in the more recent decade. Instead of growth occurring as a result of highway construction, it appears that interstates have generally been built along traffic corridors corresponding to existing population growth patterns.

Most population growth by nonmetro cities is accomplished through annexation of surrounding unincorporated settlement. Thus, two-thirds of the growth of incorporated places over 2,500 for the 1950-60 period was in territory annexed after 1950. This was true of 90 percent of growth during 1960-70. Population density within pre-existing city limits tends not to increase. Only in the Northeast is annexation not an almost universal means of recapturing population growth today. Although annexation by places over 2,500 was more prevalent in the 1960's than in the 1950's, the average number of people annexed was smaller. This was consistent with the lower levels of urban growth during the latter period.

The structure of small town population change is not simple. It is affected by size of town, location with respect to other towns, regional location, annexation policies, highway developments, and a variety of economic and social factors not considered in this study. There are growing and declining towns in all size classes, but only the very smallest class of villages had population loss more often than growth in the last two decades.

Substantial differences between the population change patterns of towns in the 1960's compared with the 1950's have been noticed only in retrospect. They were not sensed during the time they were occurring. They give evidence that the pattern of population change in nonmetro towns is highly dynamic, both in comparison with national change and in regard to the relation of towns to their hinterlands.

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Introduction

The U.S. population, always growing albeit unevenly over parts of the country, has historically shown most rapid growth in and around metropolitan (metro) cities. Concern over rural-to-urban migration with its corresponding urban crowding and depopulation of rural areas has led to proposals for national and State policies to slow or reverse such trends (*1, 21, 22, 6*).[1] Rural development programs supported by Federal and State governments have been justified in part by the need to alter patterns of population change (see, for example, *2, 24*).

Analysis of current nonmetropolitan (nonmetro) population trends may make a useful contribution to rural development planning and action as well as to efforts to consider overall policies and programs affecting population distribution.

This study explores an important segment of the nonmetro population—its incorporated cities and towns—and extends previous work on the subject (*10, 11, 12*). These places, which serve as employment centers and provide goods and services for vast areas, contain about half of the population living outside metro areas, and include towns varying in size from fewer than 100 up to 50,000 people. The main focus is the pattern of population change for such places between 1950-60 and 1960-70 (data in this report are based on the decennial censuses of 1950, 1960, and 1970).

For 100 years at least, there has been considerable concern about the fate of the declining village or very small town bypassed by trade routes or industry (for example, *18, 8, 13, 19*). Many of the smallest places are unincorporated and not separately identified in the census. For the others, it is important to note recent trends in population size by geographic locations. As a start, this will show that the word "declining" is not a necessary modifier of the words "village" or "small town." In fact, analysis reveals an unexpected upturn of growth in some parts of the country.

To some extent, the widespread reputation of small towns as dying may represent an impression from their business trends. Johansen (*16*) has shown that, from 1950 to 1970, nonmetro towns of fewer than 2,500 people had an average decline of nearly a third in the number of consumer business establishments. Such losses have a visible impact on the physical fabric of towns. Yet, the same places increased in population by an average of one-ninth. Thus, residential functions of smaller nonmetro towns are seen to have taken a contrary overall course from their business functions. Business decline does not preclude population growth in an era when there are more retired people and a greater propensity to live in one place and work in another.

Larger nonmetro incorporated cities are typically the major trade and manufacturing centers in their areas unless they are dominated by a nearby metro city. Some are in the process of becoming metro cities, by growing to exceed the criterion of 50,000 population set by the Federal Government to determine metro status. Other nonmetro cities are declining and many show evidence of decentralization. A number of these cities may play an important role in rural development efforts through the so-called "growth center strategy" of encouraging growth in an area through incentives to larger centers (*4, 7, 9, 14, 15*).

As a proper basis for study of growth over the last decade, towns are studied that were not in Standard Metropolitan Statistical Areas (SMSA) in 1963.[2] This is the date when the Bureau of the Budget completed its revision of SMSA boundaries based on the data of the 1960 census. County equivalents of SMSA's are used for the metro-nonmetro distinction in New England in order to make data for this region consistent with the rest of the country.

Since the 1963 definition is used, cities and towns are treated as nonmetro that subsequently were classified as metro after the 1970 census because of their growth during the prior decade. On the other hand, although we deal also with the 1950-60 decade, places in counties that became metro between 1950 and 1963 are excluded. As a consequence, larger nonmetro places do

[1] Italicized numerals in parentheses refer to references on p. 16.

[2] An SMSA is a county or group of contiguous counties (except in New England) containing at least one central city or other urban nucleus with at least 50,000 people.

not show as rapid a growth in the 1950's as in the 1960's, for many rapidly growing places in the former decade became metro before 1963. The advantage of a constant geographic boundary outweighs disadvantages shown by these problems in our view. In a separate tabulation (table 4), population change patterns are contrasted for incorporated places using the nonmetro designations of 1950, 1963, and 1970.

Change in Number of Places and Population by Size Group

There are well over 13,000 nonmetro incorporated centers in the United States containing nearly a sixth of the total population. These places are classified by size in table 1 for 1950, 1960, and 1970. There is a gradual increase in the number of places over time. This is true for every size group and over every decade with only two exceptions. Similarly, population in these centers has increased except for the under-500 size class in both decades and the 500-999 class over 1950-60. The average population size for the under-500 group (found by dividing the population by the number of places) declined from 263 to 252 to 246 over the 20-year period. The average size of all nonmetro places together, on the other hand, excluding those in 1970 that grew to over 50,000, increased from 1,984 to 2,218 to 2,310. In short, table 1 reveals a process of continuing urbanization, with increasing numbers of centers and population and increasing average size of place. Moreover, 23 places grew to become metro central cities by 1970.

The nature of the changes taking place from decade to decade is shown more clearly in table 2. As a center grows or declines in population, it may shift from one size class to another. Also, new places are added at each census and others are dropped because of consolidation or disincorporation. For both decades, shifts between size classes resulted in a net loss for the two smallest size

Table 1—Number and population of nonmetro incorporated places by size, 1950, 1960, and 1970[1]

Population size class	1950		1960		1970	
	Number of places	Population	Number of places	Population	Number of places	Population
	Number					
All places	13,057	25,903,419	13,486	29,916,675	13,818	33,302,661
50,000 or more	—	—	—	—	23	1,441,083
10,000-49,999	542	10,251,225	662	13,394,599	716	14,513,948
2,500-9,999	1,731	8,347,308	1,879	9,177,374	2,015	9,865,608
1,000-2,499	2,494	3,905,113	2,566	4,024,250	2,638	4,155,693
500-999	2,746	1,942,778	2,608	1,866,288	2,656	1,906,060
Less than 500	5,544	1,456,995	5,771	1,454,164	5,770	1,420,269

[1] Includes dropouts between 1950-60 and 1960-70. Nonmetro status as of 1963.

Table 2—Change in the number of nonmetro places by size, 1950-60 and 1960-70

Decade and population size class	Number at beginning of decade	Net change by interclass shifts	Dropped out[1]	New places	Number at end of decade
			Number		
1950-60					
Total	13,057	—	-114	543	13,486
50,000 or more	—	—	—	—	—
10,000-49,999	542	118	—	2	662
2,500-9,999	1,731	128	-5	25	1,879
1,000-2,499	2,494	20	-9	61	2,566
500-999	2,746	-222	-14	98	2,608
Less than 500	5,544	-44	-86	357	5,771
1960-70					
Total	13,486	—	-194	526	13,818
50,000 or more	—	20	—	3	23
10,000-49,999	662	51	-2	5	716
2,500-9,999	1,879	124	-8	20	2,015
1,000-2,499	2,566	39	-10	43	2,638
500-999	2,608	-20	-14	82	2,656
Less than 500	5,771	-214	-160	373	5,770

[1] Disincorporated or otherwise ceased to exist as a separate municipality.

classes and a net gain for the larger classes (table 2). A breakdown of the net shift (column 2) revealed that most shifts—74 percent over 1960-70 and 70 percent over 1950-60—were due to growth of a place from a smaller to a larger size class. Table 2 also shows that dropouts and new places are predominantly in the smaller size classes, with the latter considerably more numerous than the former, thus contributing to the net growth of centers seen in table 1.

This analysis suggests that there are two ways to look at growth in the context of size classes. Table 1 indicated stability or decline over a decade in several of the smaller size classes, but table 2 revealed this was due in large part to centers growing out of a class and not being replaced. Data on the growth of size classes, then, should be supplemented by data on places classified by initial size and followed over a decade, regardless of their class at the end of the period (see table 3). With one exception, the percentage change of places by initial size is equal to or larger than the percentage change by class, reflecting the net shift of places up the size hierarchy.

In comparing 1950-60 with 1960-70, we see that in both decades larger size groups have larger population change figures, but growth differentials among size groups were much lower in the latter decade. This is due to a decline in the rate of growth of larger places and, perhaps unexpectedly, an increase in the rate of growth for smaller places.

Because the 1963 metro distinction is used here, places in counties that became metro between 1950 and 1963 are excluded. If they are included in the group classed by size in 1950 (table 3, column 2), the percent change figures for the 1950-60 decade are all larger: from the smallest to largest size group, the percentages are 3, 11, 14, 19, and 22. The fact that places 2,500 to 10,000 in 1950 grew 17 percent and places over 10,000 grew less than that (15 percent) in table 3 is thus seen to be due to the fact that some rapidly growing larger places grew to metro status.

Table 3—Change in population of nonmetro towns by size class and initial size, 1950-60 and 1960-70[1]

Population	1950-60		1960-70	
	Size class	Places by initial size	Size class	Places by initial size
	Percent			
10,000-49,999	30	15	9	10
2,500-9,999 ..	10	17	8	10
1,000-2,499 ..	3	12	4	9
500-999	-4	8	3	9
Less than 500 .	1	1	-1	5

[1] Population change by size class is the change in number of persons found to be living within a given size class of towns at two different dates. The towns comprising the class may change. Population change in places by initial size shows the change within a given set of towns grouped by their population at the beginning of the period. The places comprising the group remain identical.

The effect of different metro definitions is shown further in table 4. This table gives the aggregate population change for places classed by initial size according to the nonmetro definitions of 1950, 1963, and 1970. The rate of growth is the same or lowered for each succeeding definition, indicating again that, over time, rapidly growing nonmetro places are successively drawn out of this universe by their shift to metro status.

This is seen more clearly by comparing columns 3, 4, and 5 of table 4 which represent a mutually exclusive division of the places that have been nonmetro since 1950. Column 3, nonmetro in 1970, is in fact the places that were nonmetro in all three time periods. This

Table 4—Change in population of nonmetro places by initial size, 1950-60 and 1960-70, and nonmetro designations of 1950, 1963, and 1970

Decade and initial size class	Nonmetro designation			Nonmetro 1950, 1963, metro 1970	Nonmetro 1950, metro 1963, 1970
	1950	1963	1970		
	Percent				
1950-60					
50,000 or more	—	—	—	—	—
25,000-49,999	22	11	9	16	54
10,000-24,999	22	19	17	45	48
2,500-9,999	19	17	16	48	41
1,000-2,499	14	12	12	27	42
500-999	11	8	8	25	39
Less than 500	3	1	1	16	31
1960-70					
50,000 or more	31	—	—	—	31
25,000-49,999	14	11	5	34	27
10,000-24,999	12	9	9	24	33
2,500-9,999	13	10	10	24	37
1,000-2,499	12	9	9	31	42
500-999	11	9	8	42	32
Less than 500	7	5	4	30	56

column plus column 4 represents places which were nonmetro in 1963 and thus included in our universe, whereas the last column consists of places that became metro by 1963. Again, there is generally an orderly progression of percent increases from left to right, with places becoming metro earlier showing the highest growth.

Despite the fact that incorporated centers moving out of nonmetro status tend to grow much more rapidly than those that do not show much movement, a comparison of columns 2 and 3 of table 4 indicates that at least with regard to aggregate growth, the results of this study would have been little different had we used the 1970 nonmetro definition.

Growth and Decline of Cities and Towns

In addition to considering the aggregate growth of groups of cities and towns, it is important to compare growth trends with the place as the unit of analysis. For this purpose, the percent of change in population has been computed for every place over each of the two decades. Comparisons are then made either of distribution of places by percentage change or of the proportion of places growing among various size and location groupings.

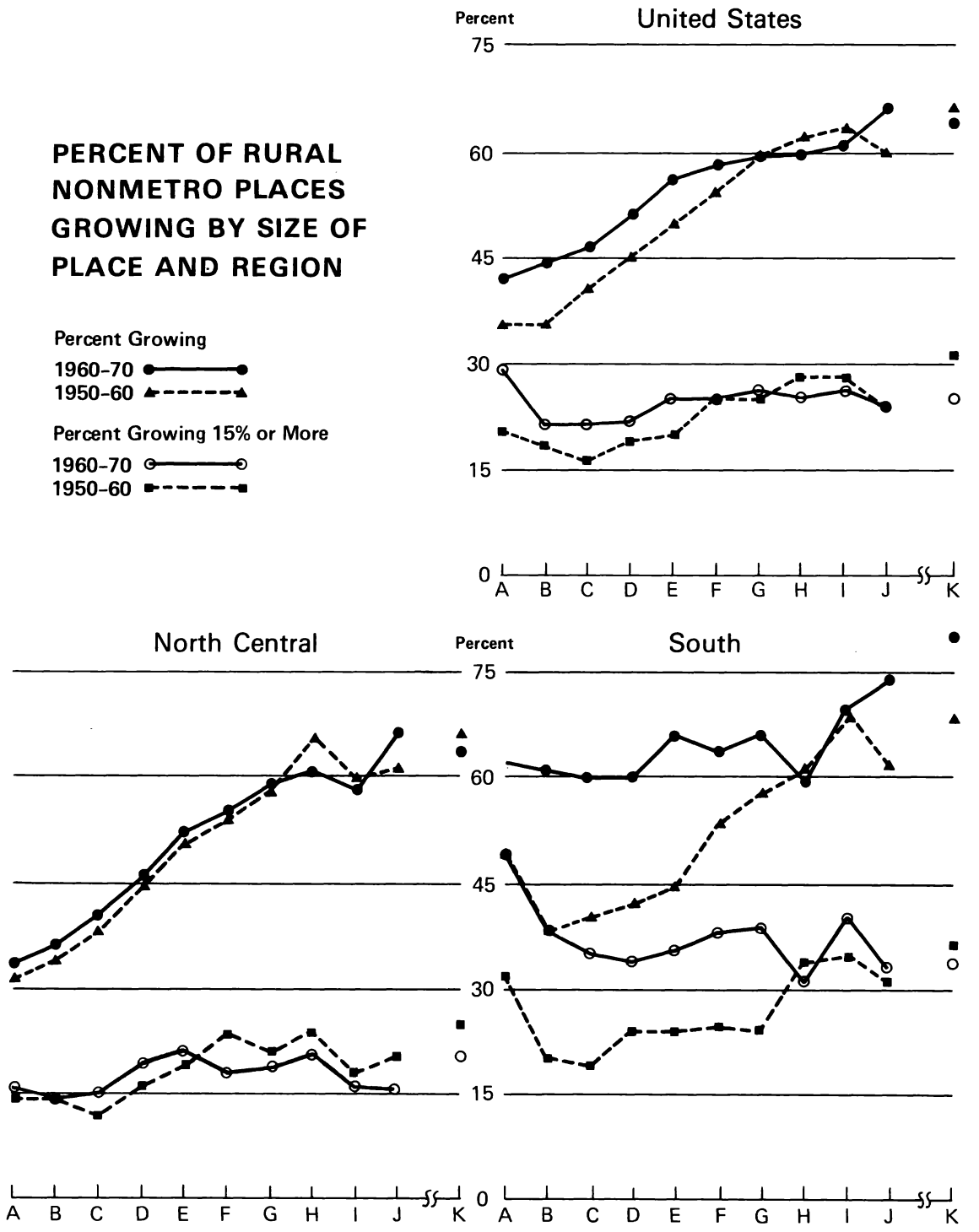
The detailed distribution of places by percentage change in 1950-60 and 1960-70 is given in table 5 for places grouped by size at the beginning of the decade. The results are consistent with the aggregate analysis in table 3. In general, larger places are more likely to be found in the higher percentage change columns. Differences by initial size are less in 1960-70 than in 1950-60, however, with larger places tending to show lower rates of growth in the 1960's than in the 1950's and smaller places showing higher rates of growth in the 1960's.

For both decades, places initially under 500 population are particularly noteworthy in that over one-half declined in population and one-third declined more than 10 percent. Since the difference between the distribution of this group and the next one is the largest of any two adjacent groups for either decade, it is clear that much of the variation of growth by size is found among smaller places under 1,000. To examine this relationship in more detail, we have graphed (fig. 1) the proportion of places growing and the proportion growing 15 percent or more for places of fewer than 1,000 people grouped by intervals of 100 initial population size.

For the entire Nation, there is a rather steep, regular increase in the proportion of places growing, from initial size of fewer than 100 up to about 700-800. The lines for both decades are approximately parallel up to about 500 in size, with the line for 1960-70 about 6 or 7 percentage points above that for 1950-60. Other sections of this chart show the situation in the North Central and South census regions. There are too few places in the Northeast and West for separate consideration. The North Central States show a slightly steeper slope than the United States as a whole, primarily because the proportion of very small places growing is less in that region. The line for the 1960-70 decade is only slightly above that for 1950-60 though the two are parallel as with the total United States. It is essentially in the North

Table 5—Distribution of nonmetro places by percentage change in population and initial size, 1950-60 and 1960-70

Decade and initial population size class	Places	Change in population	Distribution of places by percent change						
			Total	Population loss		Population gain			Percent of places growing
				10 or more	Less than 10	Less than 10	10-19	20 or more	
	Number		*Percent*						
1950-60									
All places	12,765	14.2	100	24	20	22	15	19	56
25,000 or more	117	10.8	100	4	17	31	26	22	79
10,000-24,999	425	18.9	100	5	13	24	23	35	82
5,000-9,999	669	17.1	100	5	17	25	20	33	78
2,500-4,999	1,048	16.6	100	7	17	27	21	28	76
1,000-2,499	2,478	12.1	100	13	21	26	18	22	66
500-999	2,722	8.4	100	19	22	25	14	20	59
Less than 500	5,306	1.0	100	38	21	17	11	13	41
1960-70									
All places	13,292	9.6	100	21	23	23	14	19	56
25,000 or more	168	11.1	100	15	18	27	15	25	67
10,000-24,999	492	9.3	100	8	28	27	16	21	64
5,000-9,999	730	10.0	100	8	25	29	18	20	67
2,500-4,999	1,141	10.2	100	11	24	28	17	20	65
1,000-2,499	2,556	9.2	100	12	25	27	16	20	63
500-999	2,594	9.0	100	16	23	26	16	19	61
Less than 500	5,611	4.7	100	32	20	19	11	18	48



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NEG. ERS 2037-75 (12)

Figure 1

Central States, where there are hundreds of very small incorporated places, that the notion of "dying" small towns comes closest to reality.

Results for the South are most interesting. For 1950-60, the slope is rather like that for the entire United States except that one-half of the places under 100 grew in the South compared to one-third for the United States. The pattern for 1960-70, however, is quite different. The line is almost horizontal; the proportion growing for groups of places under 700 in 1960 was comparatively high and uniform, ranging from 58 to 67 percent. Most resurgence of growth in very small places appears to have taken place in the South.

According to the bottom lines of figure 1, rapid growth appears to be less associated with initial size for these small places than the percent growing. In each graph, the proportion of places growing more than 15 percent has not shown much variation by initial size. In the South, however, there is a pattern similar to that for the percent growing, with some association by size in the 1950's but essentially none in the 1960's.

Regional variation in growth patterns for all places is shown in figure 2. Here the proportion of places growing is graphed by initial size for both decades separately for the Northeast and West, and two census divisions of the North Central States and the three divisions of the South. (The number of incorporated places is too small to permit separate consideration of the two divisions in the Northeast and the two in the West. For convenience, these census regions will be referred to as "divisions" here along with the others discussing the charts.)

For the entire Nation, the positive association between initial size and percent of places growing is clearly evident for the 1950-60 period and is reduced for 1960-70 with the decline in the proportion of larger places growing and the increase in the proportion of smaller places growing. A similar positive association is found in all divisions except the Northeast in 1950-60, but in the more recent decade only in the West and West North Central States. Among divisions, it is uniformly true that places over 2,500 were less likely to grow in the most recent decade than in the 1950's. Smaller places under 1,000 were slightly more likely to grow in the 1960's in West North Central States and considerably more so in the East South Central and West South Central States (roughly the South away from the Atlantic seaboard). The shift between decades for the West South Central is most dramatic; the line of association between size and growth for 1950-60 is approximately a 45-degree angle and for 1960-70 it is almost horizontal.

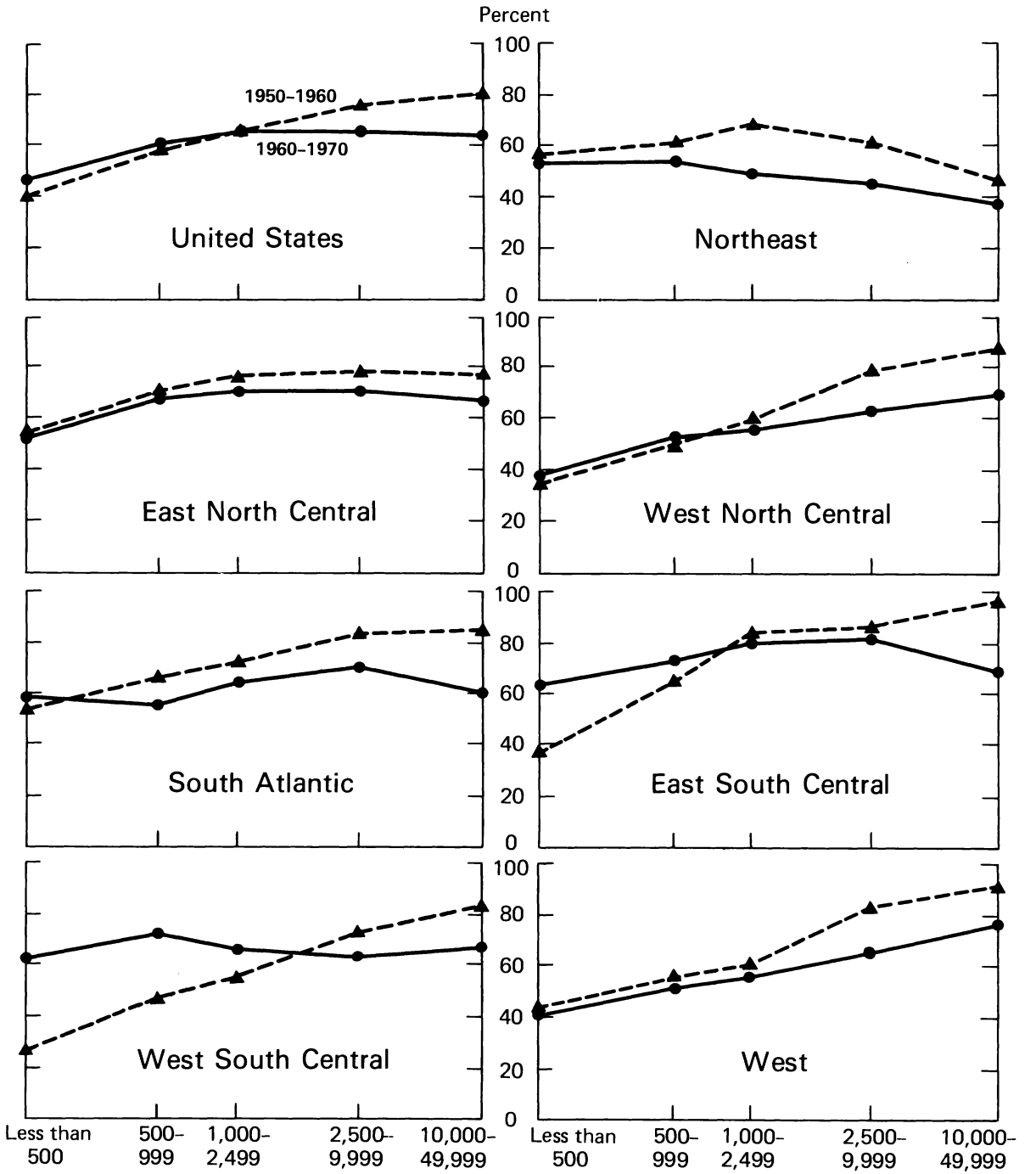
To get a better understanding of the growth of incorporated places in their local context, we classified towns according to the size of the largest place in the county as of 1960. The proportion growing by decade, initial size, and size of largest community (over 10,000, 2,500 to 10,000, and under 2,500) is given in figure 3. The first row of graphs gives results by division for places in counties having a center over 10,000 in 1960. In all divisions, there was a decline in the proportion of places growing in the 1960's compared with the 1950's, not only for centers of 10,000 and up but also for those of 2,500 to 10,000 people. In the West North Central, East South Central, and West South Central divisions, there was an increase in the proportion of places growing in the three classes under 1,000. This pattern of differential growth suggests suburbanization around the larger nonmetro cities. Such suburbanization may not result in increased chances of growth for places of 2,500 to 10,000 people in counties having a center over 10,000 because of the comparatively high density of such places. For example, it can be shown in South Dakota—one of the few States where the area of all towns is available for 1960—that towns of 2,500 to 10,000 people had an average of 2,741 people per square mile. Such density does not permit much further growth without annexation. But smaller towns are comparatively more spacious. Those of 1,000 to 2,500 population had only half as much density (1,346 per square mile) and those of under 1,000 population were only a fifth as densely settled (554 per square mile). Thus more of their growth can occur within existing town boundaries without spilling over into unincorporated territory.

The second row of graphs gives growth patterns for places in counties with largest centers of 2,500 to 10,000 people in 1960. In comparing 1960-70 to 1950-60, there is generally a decline in the proportion of those 2,500 to 10,000 that are growing and in the proportion of places 1,000 to 2,500 growing as well, except in the East South Central and West South Central States. Within this county group, these two divisions show an increased proportion of places growing in all three size categories under 2,500.

Turning now to incorporated towns in counties with largest place less than 2,500 in 1960 (the third row of fig. 3), we see that in the West North Central, East South Central, and West South Central divisions, all size categories had a higher proportion growing in the 1960-70 period. In contrast, the proportion growing was uniformly lower in the latter decade in the West. In other divisions, the pattern is mixed.

The resurgence of small town growth shown in the earlier figure for the West South Central and the East South Central States thus prevails regardless of the size of largest place in the county. In the West North Central States, this is true for counties with largest places under 2,500 and over 10,000. The growth pattern in counties with larger places suggests suburbanization around major nonmetro centers. But, evidently more than this is going on in these three divisions with the increased growth of small places in more rural counties.

PERCENT OF NONMETRO PLACES GROWING BY SIZE OF PLACE AND DIVISION



SIZE OF PLACE AT BEGINNING OF SPECIFIED DECADE (LOG SCALE).

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NEG. ERS 2039-75 (12)

Figure 2

PERCENT OF NONMETRO PLACES GROWING BY SIZE OF PLACE, SIZE OF LARGEST PLACE IN COUNTY, AND DIVISION

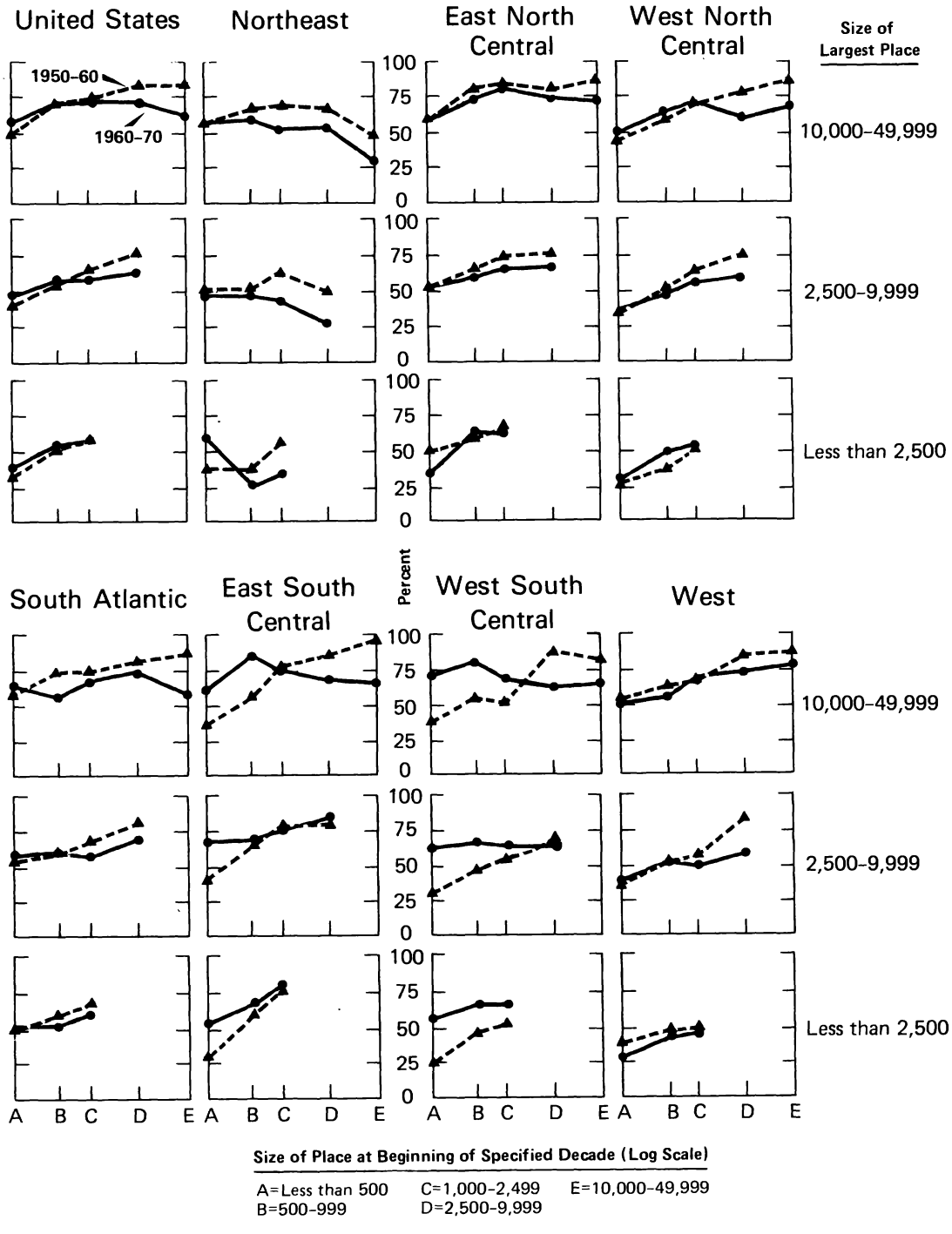

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Figure 3

Growth In and Out of Incorporated Places

Some of the growth patterns reviewed so far suggest a decentralizing trend in many sections of the country. To go one step farther in considering this process, counties were classified by size of largest community and the total and incorporated place populations were obtained. Then, by subtraction, the population living outside incorporated places in 1950, 1960, and 1970 was determined.

Table 6 gives the percent change of population in and out of incorporated places for 1950-60 and 1960-70 by size of largest community in the county and division of the country. For a given category in this table, the number of places is constant over each decade. As a consequence, the population of new places first reported in 1960 is considered to be outside incorporated centers in the 1950-60 computations but is included for 1960-70. Similarly, the population of new places in 1970 is counted outside incorporated places in both the 1950-60 and 1960-70 figures. The centers disincorporated after 1950 have not been considered as part of the place population at any time.

This table gives some evidence of decentralization, particularly around centers of more than 10,000 population. For the United States as a whole, in counties with largest place over 10,000, the population outside incorporated places is growing more rapidly than the population living in incorporated centers over the 1960-70 decade, though this was not true in 1950-60. Among divisions, a similar transition was found in the South Atlantic States, whereas in the Northeast and East North Central divisions outside areas were growing more rapidly than cities over both decades. In the Northeast, where little annexation of new territory by cities is possible, the population outside of places grew more rapidly than the population in places over both decades in the other two county groupings as well.

Further indication of growth changes consistent with decentralization is found by comparing the rates of growth outside incorporated centers for the two decades and similarly the rates of growth inside incorporated centers. For the three groupings by size of largest community, within divisions, there are only two segments in which the rate of population growth outside incorporated centers did not increase (or the rate of decline slacken) in the 1970's than in the 1960's. In contrast, for all divisions, the rate of growth was less in the second decade for the population in incorporated centers located in counties with the largest place over 10,000. Most divisions showed an increase in the rate of growth (or less decline), however, for the incorporated place population in counties with largest place under 2,500. This was also true in two southern divisions for counties with largest places 2,500 to 10,000. But for all these segments, the difference in place growth between 1950-60 and 1960-70 was less than the corresponding difference for the population outside incorporated centers.

Metro figures are included for comparison in table 6. Metro growth outside incorporated places is considerably above that for nonmetro segments over both decades in the Nation. Growth outside places is only one-half as large in the 1960's as in the 1950's in metro areas, however, whereas for nonmetro areas, the population outside incorporated places did not change in the 1950's but grew 6 percent in the 1960's. Among the divisions, only in the West South Central was growth outside incorporated centers in metro areas higher in the 1960's than the 1950's. No divisions had an increase in percent change of population inside incorporated centers in the later decade. Yet, for the nonmetro sector, only in the West was growth outside incorporated places *not* higher (or decline less) in the second decade. To summarize, a decentralizing pattern of population change is more evident in metro than nonmetro areas over both time periods. But, there is increasing decentralization in nonmetro areas when the 1960 decade, characterized by slower national growth, is compared with the 1950's. In contrast, the rate of decentralization in metro areas appears to have slowed.

Distance from a Metro Center

Nonmetro America is not an isolated entity. Rather, it is integrated with the system of large urban centers spread over the land. There is a long tradition of research showing a variety of social and economic variables to be associated with distance from a metro center. Certainly, the spread of population out from the metropolis suggests that nonmetro growth differentials might be explained in part by nearness to a large city. In table 7, the growth of population in and out of incorporated places is given by size of largest place in the county cross-classified by distance from the center of the county to the nearest metro central city. In the 1950's, the most rapid place growth was found in counties with places over 10,000 and more than 100 miles from a metro central city. This suggests competitive advantage for middle-size cities if they are remote from metro centers. By the 1960's, however, places in counties with cities over 10,000 were growing less rapidly everywhere—about 10 percent in all three distance zones.

The evidence of decentralization, discussed in connection with previous tables, is strongest here within 50 miles of metro centers, but is not limited to this distance category. Within 50 miles, growth outside of places is greater than incorporated center growth in the 1960-70 period. Elsewhere, growth outside centers is greater or decline is less in the 1960's than in the 1950's, except for counties with largest place over 10,000 and more than 100 miles away from a metro center.

Table 6—Change of population in and out of incorporated places by metro status of county and initial size of largest nonmetro place, United States and divisions, 1950-60 and 1960-70

Area, metro status, and initial size of largest nonmetro place in county	1950-60			1960-70		
	Total	Inside incorporated places	Outside incorporated places	Total	Inside incorporated places	Outside incorporated places
	Percent					
United States						
Metro counties	26	18	52	16	13	26
Nonmetro counties	6	14	---	8	10	6
Size of largest place						
10,000 or more	16	18	12	12	11	14
2,500-9,999	---	10	-7	4	8	1
Less than 2,500	-6	8	-9	1	6	-1
Northeast						
Metro counties	13	2	55	9	1	30
Nonmetro counties	12	5	18	12	1	21
Size of largest place						
10,000 or more	15	6	25	13	2	25
2,500-9,999	4	2	6	7	1	11
Less than 2,500	8	1	8	15	1	17
North Central						
Metro counties	24	18	53	13	11	20
Nonmetro counties	5	9	---	4	7	1
Size of largest place						
10,000 or more	13	14	11	9	9	8
2,500-9,999	2	7	-4	2	-5	-2
Less than 2,500	-6	---	-10	-3	1	-6
East North Central						
Metro counties	24	17	53	13	11	20
Nonmetro counties	9	10	8	8	8	9
Size of largest place						
10,000 or more	14	12	17	10	9	11
2,500-9,999	5	7	3	6	6	6
Less than 2,500	-2	2	-4	6	3	8
West North Central						
Metro counties	24	18	56	14	13	20
Nonmetro counties	---	9	-9	---	6	-8
Size of largest place						
10,000 or more	10	15	-1	7	10	1
2,500-9,999	-2	6	-10	-3	4	-11
Less than 2,500	-8	-4	-12	-6	5	-10
South						
Metro counties	36	34	40	22	21	24
Nonmetro counties	3	19	-7	7	12	3
Size of largest place						
10,000 or more	14	25	3	11	12	11
2,500-9,999	-3	14	-11	5	13	---
Less than 2,500	-8	7	-11	2	13	-1
South Atlantic						
Metro counties	40	29	60	26	21	32
Nonmetro counties	9	20	3	11	11	10
Size of largest place						
10,000 or more	20	24	16	16	12	19
2,500-9,999	3	17	-3	7	20	6
Less than 2,500	-3	8	-6	2	10	2

Continued

Table 6—Change of population in and out of incorporated places by metro status of county and initial size of largest nonmetro place, United States and divisions, 1950-60 and 1960-70—continued

Area, metro status, and initial size of largest nonmetro place in county	1950-60			1960-70		
	Total	Inside incorporated places	Outside incorporated places	Total	Inside incorporated places	Outside incorporated places
	Percent					
East South Central						
Metro counties	21	20	24	11	20	-8
Nonmetro counties	-3	20	-13	3	16	-4
Size of largest place						
10,000 or more	8	25	-6	8	13	2
2,500-9,999	-7	17	-15	2	20	-7
Less than 2,500	-11	12	-15	-1	18	-6
West South Central						
Metro counties	37	46	6	21	21	25
Nonmetro counties	-1	17	-16	5	12	-2
Size of largest place						
10,000 or more	9	25	-12	7	12	-2
2,500-9,999	-7	11	-19	4	11	-3
Less than 2,500	-11	2	-15	3	13	-2
West						
Metro counties	49	42	65	28	28	28
Nonmetro counties	19	24	14	14	17	12
Size of largest place						
10,000 or more	28	32	23	19	22	15
2,500-9,999	10	15	6	8	8	8
Less than 2,500	-1	2	-3	5	2	6

Table 7—Change of population in and out of incorporated nonmetro places, by distance from a metro central city and initial size of largest place in county, 1950-60 and 1960-70

Distance and initial size of largest place	1950-60			1960-70		
	Total	Inside incorporated places	Outside incorporated places	Total	Inside incorporated places	Outside incorporated places
	Percent					
Less than 50 miles from a central city						
Total	11	15	7	13	11	15
10,000 or more	17	17	18	15	10	21
2,500-9,999	6	14	1	11	12	10
Less than 2,500	---	9	-3	9	14	7
50-99 miles from a central city						
Total	3	13	-4	6	10	3
10,000 or more	13	17	7	11	11	11
2,500-9,999	-3	8	-10	1	8	-3
Less than 2,500	-7	3	-10	---	7	-2
100 miles or more from a central city						
Total	8	15	1	5	8	1
10,000 or more	21	23	18	10	11	9
2,500-9,999	1	10	-7	---	5	-4
Less than 2,500	-8	---	-12	-2	1	-4

Table 7 also shows that the increase in growth of smaller centers in rural counties is not limited to the 50-mile band. Places in counties with largest place under 2,500 grew more rapidly in the 1960's than in the 1950's in all three distance categories.

The number of counties in some distance bands is very small in particular regions and divisions. For example, most counties more than 100 miles from a metro central city are in the North Central and Mountain States, but almost none are in the Northeast. Similarly, because of larger county sizes, there are very few counties less than 50 miles from a central city in the West. For this reason, we have not reported a distance by size of largest place classification separately for regions or divisions.

The Interstate Highway System and Population Growth

Development, particularly in rural areas, requires adequate transportation to provide linkages with other segments of the economy. Many have argued that our interstate highway system can have important positive consequences for population and economic growth (*20, 5*). To take advantage of such an effect, construction of new highways to complement the interstate system has been an explicit part of the development program in Appalachia (*17, 3*). We would expect growth of nonmetro cities and towns to be associated with proximity to interstate highways.

To measure this possible association, nonmetro counties were classified, using the 1965 *Rand McNally Road Atlas*, as to whether or not they contained segments of interstate highway at the midpoint of the 1960-70 decade. Much of the system was incomplete in 1965 so counties were included only if the road was finished over more than one-half of the length of the county, and was connected with a substantial intercounty segment.

The population inside and outside incorporated centers is classified in table 8 by whether or not the county of location had an interstate in 1965 and by size of largest place in the county. Because only 301 counties were classified as having an interstate highway, and these were unevenly distributed over the country, the United States was divided into south and nonsouth segments instead of the usual regions and divisions. For the whole United States, the South, and the balance of the country, we see that the total nonmetro population grew at least twice as rapidly in counties on the interstate as in other counties. But, by size of largest community, this difference is somewhat less for counties with largest place over 10,000, indicating that the effect of the interstate may be more important for more rural counties.

Inside incorporated places there is little difference in growth by whether a county is on or off the interstate for counties with largest place over 10,000. Observed

Table 8–Change of population in and out of nonmetro incorporated places, on and off an interstate highway and initial size of largest place in county, United States, South, and nonSouth, 1950-60 and 1960-70

Initial size of largest place in county	1950-60						1960-70					
	Total		Inside incorporated places		Outside incorporated places		Total		Inside incorporated places		Outside incorporated places	
	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway
	Percent											
United States												
Total	12	5	15	14	10	-2	13	7	10	10	15	4
10,000 or more	18	15	16	19	17	10	14	12	10	11	19	12
2,500-9,999	4	-1	12	10	-1	-8	10	3	10	8	10	-1
Less than 2,500	-1	-6	9	3	-4	-9	8	1	11	6	6	-1
South												
Total	16	8	12	11	21	4	12	7	8	8	17	7
10,000 or more	20	16	13	16	30	15	14	13	9	11	21	14
2,500-9,999	7	3	9	7	5	-1	8	3	6	5	10	1
Less than 2,500	-2	-4	4	---	-4	-6	-1	1	3	1	-3	1
Nonsouth												
Total	7	2	22	19	-2	-8	13	6	14	12	13	1
10,000 or more	13	14	24	25	2	3	14	11	13	12	15	9
2,500-9,999	1	-4	17	14	-5	-12	12	4	16	12	10	-2
Less than 2,500	-1	-8	13	6	-5	-11	12	1	18	13	10	-2

differences, moreover, generally favor places in counties not having interstate highways. Note that in this analysis, it is the county and not the place that has the interstate. In an earlier study, places over 10,000 were classed according to whether or not they were very near such a highway; a slight positive association with growth was found (*12*). In the present work with county units, most of the growth effect is found outside incorporated places where there are differences for most size of largest place groupings for both decades. In the more rural counties throughout the Nation, small centers also share in the aggregate growth.

If one compares the population inside and outside incorporated centers, as was done in the preceding section, a conclusion is that decentralization around cities over 10,000 is largely a phenomenon of the interstate highway counties. In the United States and the South in the 1950's, growth outside incorporated places was larger than that inside for counties with largest place over 10,000 on the interstate. But, the reverse was true for counties off the interstate. In the 1960's, the growth advantage for population outside incorporated centers was larger on the interstate than off for the United States and the South, as well as outside the South. Note the rates of growth inside incorporated places declined in the 1960's compared to the 1950's for counties with largest place over 2,500, regardless of whether or not there was an interstate highway in the county in 1965.

However, general conclusions about the growth-inducing effect of interstate highways are greatly modified when one examines data for the 1950's. The interstate highway program did not result in significant road mileage until the late 1950's.[3] Yet, we have found in most cases that the growth advantage of counties located on an interstate was similar in both the 1950's and the 1960's. This suggests that growth differentials cannot be viewed as solely an effect of the interstate, but that perhaps the reverse is true. That is, interstates have been built along major traffic corridors that correspond with development and population growth. The tendency for highway planning to lag, rather than lead, growth and development has also been noted in the press (*23*).

Some evidence of a change in growth processes over time is obtained, however, as in table 8 for counties outside the South with largest place over 10,000. The same tendency appears in table 9 where counties are grouped according to distance to a metro center. (The small number of counties in some cells makes it impossible to present this table for different sections of the country.) In the 1950's, counties that had cities of more than 10,000 in population and that were more than 100 miles from an SMSA central city were growing more rapidly both inside and outside incorporated centers if they were not on an interstate than if they were. In the

[3] In 1960, 7,400 miles of the interstate system were complete, including toll roads. The mileage increased to 18,300 in 1965 and 28,600 in 1970.

Table 9—Change of population in and out of nonmetro incorporated places, on and off an interstate highway, size of largest place in county, and distance from a metro central city, 1950-60 and 1960-70

Distance and initial size of largest place in county	1950-60						1960-70					
	Total		Inside incorporated places		Outside incorporated places		Total		Inside incorporated places		Outside incorporated places	
	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway	On highway	Off highway
	Percent											
Less than 50 miles from a central city												
Total	16	8	17	15	15	8	16	11	11	11	21	11
10,000 or more	20	14	18	16	22	13	16	14	11	10	23	20
2,500-9,999	9	5	14	14	6	-1	15	9	11	13	17	7
Less than 2,500	6	-1	19	8	3	-3	20	7	21	13	20	5
50-99 miles from a central city												
Total	9	2	12	13	6	-6	9	6	9	10	10	2
10,000 or more	16	12	14	19	17	5	11	11	8	12	15	10
2,500-9,999	-1	-4	9	8	-7	-11	6	1	9	8	3	-3
Less than 2,500	-7	-7	4	3	-10	-10	---	1	9	7	-3	-2
100 miles or more from a central city												
Total	8	-7	14	15	1	1	10	4	11	7	8	1
10,000 or more	13	22	16	25	8	19	14	10	13	11	16	8
2,500-9,999	2	1	12	10	-5	-7	5	---	9	4	1	-4
Less than 2,500	-3	-8	5	---	-6	-12	-5	-3	-3	1	-6	-4

1960's, the reverse was true, with the growth advantage going to counties on interstate highways. At this distance from large cities, there was also an increased growth advantage in the most recent decade for counties having interstate highways with largest place 2,500 to 10,000, but not for counties with largest place under 2,500.

In sum, the interstate highway appears to have a positive association with growth, particularly outside incorporated centers. In most segments considered, however, this is found in the 1950's before and during early stages of interstate construction as well as in the 1960's. Local effects of interstate highways on population are often very obvious in the most casual travel. But, further work is required using more elaborate analytical techniques before more definitive conclusions can be reached concerning the effect of this variable on growth of nonmetro towns.

Annexation and Growth

Cities grow in population not only by filling in their territory but also by adding to their corporate limits through annexation. This adds to the complexity of the study of growth, for annexation is a legal process and cities differ in the extent to which they are able to annex because of variations in State law and opportunity. As a consequence, there is not always a close correspondence between the thickly settled territory of a city in the geographic sense and the territory encompassed by the municipal limits.

This does not mean that growth due to annexation is "spurious" and should be eliminated from consideration. It usually reflects genuine growth with real consequences for the functioning community. But it is important to know the extent to which observed growth is due to annexation and to identify areas where annexation is either highly prevalent or very infrequent. Decentralization, measured by comparing growth in and out of incorporated centers, also is affected by annexation possibilities and accomplishments.

Beginning with the 1960 census, it is possible to obtain the current population within what was the incorporated limits of an urban place at the time of the preceding census. Using these data, one may determine, for nonmetro incorporated centers over 2,500, whether or not an annexation of territory occurred which involves population and what the importance of annexation was in population growth over 1950-60 and 1960-70.

Table 10 gives the percent of places annexing over both decades by initial size for the regions of the country. The striking difference in this table is between the Northeast and the other regions. Only one quarter of the places in the Northeast annexed over each decade whereas over two-thirds of the centers located in other regions did so. Among the other regions, the West shows the highest proportion of places annexing, with over 80 percent doing so in both 1950-60 and 1960-70. In general, larger places are more likely to annex. With the exception of the Northeast, 78 percent or more of the places in size groups over 10,000 annexed over both decades. Outside the Northeast then, annexation is a common means of keeping population expansion within municipal limits, particularly for larger nonmetro cities. In general, in the 1960's, the rate of annexation was at

Table 10–Percent of nonmetro places annexing by initial size, United States and regions, 1950-60 and 1960-70

Decade and initial size	United States	North-east	North Central	South	West
	Percent				
1950-60					
Total	65	23	65	73	82
25,000 or more	77	25	96	80	78
10,000-24,999	77	27	81	91	92
5,000-9,999	69	25	70	77	84
2,500-4,999	56	18	51	64	77
1960-70					
Total	67	23	70	73	84
25,000 or more	82	14	93	92	92
10,000-24,999	75	22	81	84	94
5,000-9,999	70	25	70	79	84
2,500-4,999	60	24	63	61	78

the same level or slightly higher than in the 1950's. Thus, the lower national levels of population growth in small cities in the more recent decade were not due to failure to annex suburbs.

The importance of annexation in population growth is indicated in the first two columns of table 11. These results show clearly that most growth of urban places is associated with annexation and that the importance of annexation to growth has increased. Thus, 65 percent of the population growth of urban incorporated places over 1950-60 was in territory annexed to these cities after 1950. This was true of 89 percent of the growth over 1960-70. Just as larger places are more likely to annex, the proportion of growth due to annexation increases with size of place. In fact, for places over 25,000, the 1960-70 proportion is 110, indicating a population decline and reduced density in the urban territory of 1960.

Columns three, four, and five of table 11 compare the growth of places annexing with those not annexing. Places not annexing had very low rates of growth, 6 percent all together in the 1950's and 1 percent in the 1960's. Note that smaller places not annexing had higher rates of growth than larger ones, the reverse of the usual pattern. This is consistent with the fact that small places

Table 11—Nonmetro population change and annexation by initial size, 1950-60 and 1960-70

Decade and initial size	Population growth due to annexation		Change over decade			Total places annexing
	All places	Places annexing	All places	Places annexing	Places not annexing	
	Percent					
1950-60						
Total	65	72	16	22	6	65
25,000-49,999	72	75	11	14	2	77
10,000-24,999	71	76	18	22	5	77
5,000-9,999	63	70	17	22	6	69
2,500-4,999	50	63	18	24	9	56
1960-70						
Total	89	97	10	13	1	67
25,000-49,999	110	106	11	14	-2	82
10,000-24,999	88	87	9	12	-3	75
5,000-9,999	83	91	10	13	3	70
2,500-4,999	68	77	10	15	3	60

average fewer people per square mile than do larger places and thus may have more room for growth without adding additional territory. Although the proportion of growth due to annexation was found to be larger in the 1960's than in the 1950's, the fourth column indicates that the aggregate growth of places annexing was less. This is illustrated also by some summary figures. In all, during the 1950's, 1,440 nonmetro urban places annexed an average of 1,342 people each. Over the 1960's, 1,701 places annexed an average of 1,186 persons.

This analysis has shown that annexation is an important aspect of population change. The absence of much annexation in the Northeast helps to explain the low rates of city growth and the strong indication of decentralization in that region. Many of the Northeastern towns are simply full. Their growth can only occur outside the corporate limits. In the remainder of the country, annexation is widely prevalent and most (up to 90 percent) of the population growth of places is in territory newly acquired during the decade. Although nonmetro cities showed lower rates of growth in the 1960's than the 1950's, the contribution of annexation to this growth increased in importance.

Trend Implications Since 1970

Reliable figures on the population of towns are obtained only every 10 years in the census of population. Current data indicative of population change are not available for towns in the same manner as for counties. However, for larger nonmetro places, the Bureau of the Census prepares estimates that almost certainly give a reasonable picture of post-1970 trends. These figures show that nonmetro places of 10,000 or more people in April 1970 grew by an average of 2.6 percent from 1970 to 1973, using current metro-nonmetro definitions. On the other hand, the rest of the nonmetro population—in places of less than 10,000 people and in the open country—grew by an average of 4.9 percent. Thus, the trend of decentralization and dispersal of the nonmetro population into smaller places and open country that was foreshadowed in the 1960-70 data has continued to the point that the major nonmetro urban centers are no longer increasing in population faster than the rest of the nonmetro sector. This is quite contrary to the pattern of earlier decades.

There is a growing analogy between the pattern of change in nonmetro cities and that in the metro areas. Like their larger metro counterparts, the nonmetro cities of 10,000 or more people continue to serve as primary employment, trade, and service centers for their hinterlands. However, residential population increase within these places is reduced from its former rate, while smaller places and open country areas, as a class, show a revival of population increase whether they are satellitic to the larger towns or basically independent of them.

The extent to which this trend will continue is uncertain, as are its ramifications. The Northeastern States have for a number of years seen a trend for greater population growth outside of incorporated places than within them. But the functions of local nonmunicipal units in this region are strong, such as the New England "towns." The stress on provision of services in other regions where there is no effective subcounty unit of government may be different. In any event, it is clear from the patterns of town growth in the 1950's and 1960's, and the further inflection of these trends evident from our skimpy but revealing data since 1970, that nonmetro towns are not vanishing into insignificance as a residential class, but may now be ceasing to acquire further increase at the expense of the countryside. The picture of population distribution in rural and small town America is anything but static.

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