William H. Frey

Metropolitan Distribution of the U.S. Elderly: 1960-70, 1970-80, 1980-90

No. 92-246

Research Report
July 1992

William H. Frey is Research Scientist and Associate Director for Training at the Population Studies Center, the University of Michigan, Ann Arbor, Michigan.

Forthcoming in Andrei Rogers (ed.) *Elderly Migration and Population Redistribution*, London: Belhaven.

The data for this analysis were compiled at the Population Studies Center, the University of Michigan, from U.S. Decennial Censuses: 1960, 1970, 1980, 1990. The author acknowledges Cathy Sun for her computing and research assistance, and Kerry Brooks for preparing maps and graphics.

Table of Contents

Tables

Figures

Metropolitan Redistribution of the U.S. Elderly: 1960-70, 1970-80, 1980-90

William H. Frey

INTRODUCTION

The distinct geographic distributions of the U.S. elderly and nonelderly populations are affected by both evolving national urbanization tendencies and "elderly only" demographic shifts. For much of this century, the elderly population was decidedly more rural and Northern, as younger cohorts of migrants flocked to expanding urban economies and to the South and West (Fuguitt, Brown and Beale, 1988). This is why the apparent 1970s decade convergence of *nonelderly* with elderly distribution patterns was so noteworthy (Fuguitt and Tordella, 1980; Heaton, 1983).

During that decade strong population flows among both the elderly and the nonelderly -- out of the industrial heartland and down the metropolitan hierarchy -- prompted predictions of an all-inclusive "rural renaissance" (Frey, 1989). Urban scholars theorized that working aged residents -- like their more "footloose" elderly counterparts -- were finally able to act on preferences for smaller, low-density locations in the Sunbelt. Such preference-based arguments were consistent with the view of an increasingly "high-tech," service driven economy which would facilitate the dispersal of jobs and amenities, and give rise to the practice of telecommuting (Frey, 1987).

However, just as these explanations of 1970s redistribution patterns were gaining acceptance, national dispersal patterns began to reverse (Beale, 1988; Frey, 1990). Analyses from the 1990 U.S. Census show a metropolitan revival in the 1980s, as well as a modest diminution

of Sunbelt growth (Frey and Speare, 1992). Large metropolitan areas on the nation's coasts gained at the expense of smaller and nonmetropolitan areas in its interior. These shifts are linked to a 1980s restructuring of metropolitan economies and to declines in smaller places specializing in less-than-competitive industries. Jobs and hard economic realities appear to be outweighing preferences.

Because working-aged migration patterns tend to dominate national distribution shifts, it is likely that elderly and nonelderly redistribution tendencies are, once again, diverging. Some newly retiring elderly continue to make channelized moves to retirement communities in both rural and urban destinations (Flynn et al., 1985; Rogers and Watkins, 1987; Longino, 1990). Yet elderly gains for most areas are attributable to "aging-in-place" rather than net migration (Rogers and Woodward, 1988). Many of the latter areas will be subjected to sharp increases in their elderly concentrations, if elderly-nonelderly distribution patterns are once again diverging (Glasgow, 1988).

This article examines the extent to which elderly and nonelderly distribution patterns are becoming less alike. It also explores their implications for differential "population aging" across regions and metropolitan areas. It will address the following three questions:

1. What are the recent patterns of growth and distribution of the elderly population across regions and metropolitan areas?
2. Have nonelderly population shifts led to a greater divergence in elderly-nonelderly distribution since the 1970s?
3. What do these redistribution processes imply for geographic differences in population aging?

These questions will be examined through analyses of decennial census trends. The 1980-90 distribution shifts for the elderly and nonelderly populations will be assessed in light of trends observed over the 1960-70 and 1970-80 decades. In all cases, the analyses will employ constant metropolitan area boundaries that are consistent with the definitions of the Office of Management and Budget as of June 30, 1990.[1] The elderly population is defined as persons aged 65 and older.

The next section evaluates distribution shifts for a broad classification of the nation's regions and metropolitan and nonmetropolitan area categories. The subsequent section focuses on individual metropolitan areas. It identifies those areas with the fastest growing elderly populations, those with the greatest elderly concentrations, and broad trends over the past three decades. Finally, the concluding section speculates upon what the current trends imply for projected changes in the geography of the elderly population when the large "baby boom" cohorts graduate into their retirement years.

BROAD REGIONAL AND METROPOLITAN TRENDS

A Snapshot of the 1980s An instant picture of elderly distribution across broad categories of metropolitan status and region can be gleaned from Figure 1. As with the total population, its modal 1990 metropolitan residence category is large metropolitan areas (with greater than one million population) and its modal region is the North (including the Northeast and Midwest census regions). Its 1980-90 growth is greatest in smaller metropolitan areas, and in the South and West. Yet despite recent growth patterns, areal elderly concentration (the percent of an area's population that is elderly) is still higher in

the North than in the South and West, and greatest in the nonmetropolitan portions of each region. This pattern of elderly concentration reflects the cumulative impact of nonelderly movement to large communities and the Sunbelt over many decades.

(Figure 1 about here)

Redistribution Trends, 1960-1990 Recent elderly and nonelderly geographic distribution patterns can be placed in sharper focus when viewed over a three-decade period. These trends indicate that the stereotype of a stagnant, "aging-in-place" elderly population, coupled with an urbanizing, Sunbelt-directed younger population -- is not a totally accurate portrait. One reason is that the elderly became far less stagnant over this period, as public and private pensions enabled larger numbers of them to relocate residences during their retirement years. Second, the redistribution reversals of the 1970s decade, discussed earlier, directed large numbers of working-aged residents away from traditional urban centers, although still toward the Sunbelt.

Impact on Areas The data in Table 1 show how redistribution patterns of the past three decades have impacted upon elderly and nonelderly population growth for broad regions and metropolitan areas. Because relatively large birth cohorts moved into the "65 and older" category during this period, the elderly population in most areas grew appreciably. Yet, inter-area variations in elderly growth, shown for these decades, reveal a redistribution toward the Sunbelt -- with greater elderly gains in smaller metropolitan areas and (to a lesser extent) nonmetropolitan areas. These gains were the sharpest in the

1970s, when the elderly population grew by 28% nationwide. Still, the general pattern continues in the 1980s. Elderly growth remains highest in the Sunbelt, especially outside of the largest metropolitan areas and in the West region's nonmetropolitan territory.

(Table 1 about here)

Changes in the nonelderly population, for most areas, reflect a stronger migration component than do the change figures for the elderly population. This is because the nonelderly population change is not bolstered by the strong "aging-in-place" component that contributes to elderly population growth during this period. It is also because migration rates are higher for the working-aged nonelderly population (Frey, 1986; Long, 1988). Because of the migration factor, nonelderly percent changes can be expected to shift more rapidly in response to changing economic influences on working-aged migrants.

The middle panel of Table 1 shows the expected 1960s to 1970s shift toward a more deconcentrated redistribution of the nonelderly population. This shift is far more dramatic than that shown for the elderly -- characterized by absolute nonelderly decline for large northern metropolitan areas (minus 2.7%) and sharp gains in small metropolitan and nonmetropolitan areas of the South and West. Yet, just as sharply, <u>some</u> of this growth dispersal reversed itself in the 1980s. Although still directed toward the Sunbelt, post-1980 nonelderly growth became more consolidated in large metropolitan areas. Its strong 1970s gains in Sunbelt smaller metropolitan areas and, particularly, nonmetropolitan areas tapered off in the 1980s.

The regional and metropolitan area patterns of total population growth (Table 1, right panel) are dominated by the nonelderly changes,

since the latter represent a much larger population component. As with the nonelderly population, total changes for the 1980s suggest a return to large metropolitan growth. Hence, nonelderly and total population trends are, again, diverging from the more gradual but consistent "aging-in-place" and deconcentrating patterns of elderly population growth.

Distribution of Elderly/Nonelderly Gains Table 2 shows the distribution of elderly and nonelderly gains across region and metropolitan categories for each of the three decades. This provides a more direct comparison of the two groups' redistribution over each period, since it is not affected by differences in group size or percent change in the national population. Three patterns stand out from this comparison:

First, distribution to the South and West regions became more dominant for the nonelderly population during the 1970s and 1980s. The Sunbelt share of nonelderly gains rose from 61% in the 1960s to over 96% in the 1970s and 1980s. (Elderly Sunbelt shares were 62%, 66%, and 65%.)

Second, the shift to small and nonmetropolitan areas was largely a 1970s phenomenon for the nonelderly population. Its share of gains to such areas increased from 31% in the 1960s to 66% in the 1970s. However, in the 1980s it dropped to 34%.

Third, the shift to small and nonmetropolitan areas was more consistent for elderly population gains. The shares of elderly gains to these areas were 46%, 57%, and 55%, respectively, over the three decades. The share going to "other metropolitan areas" (those with less than one million population) increased with each decade.

(Table 2 about here)

These patterns seem to suggest a "return to the 1960s" with respect to elderly-nonelderly disparities. This is true in the Sunbelt, where nonelderly gains are, once again, more concentrated in large metropolitan areas. However, in the North, the shift away from large metropolitan areas was far more pronounced for the nonelderly population in both the 1970s and 1980s. In this region, gains are now more metropolitan-concentrated for the elderly population.

How have the overall distribution patterns of the elderly and nonelderly populations been affected by the demographic changes just reviewed? Their distribution patterns for the years 1960, 1970, 1980 and 1990 are displayed in Table 3. Both populations are heavily concentrated in North large metropolitan areas and least concentrated in smaller and nonmetropolitan areas in the West, in each of these census years. For the 1960-1980 period, the elderly population is somewhat less well represented in large metropolitan areas of all three regions, and in all Sunbelt categories except one (South nonmetropolitan areas). This is consistent with long-term redistribution trends which propelled younger populations to large urban areas and geographically westward and southward.

(Table 3 about here)

In 1990, however, elderly populations are only underrepresented in three categories: West large metropolitan and other metropolitan areas, and South large metropolitan areas. This shift toward greater

representation in smaller Sunbelt areas is a direct result of elderly dispersal into these areas over the 1960-1990 period, and a 1980s reversal of the nonelderly dispersal pattern of the 1970s. The greater elderly concentration in North large metropolitan areas, on the other hand, is a result of lower levels of nonelderly growth in these areas.

The difference in the distributions of the elderly and nonelderly populations, across these nine geographic categories, is statistically just as strong in 1990 as it was in 1960. (The index of dissimilarity is 10.2 for each year.[2]) However, the pattern of dissimilarity has changed. The greatest elderly-nonelderly dissimilarities in earlier decades occurred between (elderly-dominant) nonmetropolitan areas and (youth-dominant) large metropolitan areas. The sharpest distinction in 1990 is between the (elderly-dominant) North region and (youth-dominant) large metropolitan areas of the Sunbelt. This shift, and its underlying redistribution dynamics, hold consequences for the "aging" of populations in different regions and metropolitan categories.

Geographic Differences in Elderly Concentration The "elderly concentration" of a population (the percent of an area's population that is elderly) is an indicator of the elderly's influence on an area's social service requirements, tax base, and political orientation, as well as other aspects of the community it can change as a result of different combinations of elderly and nonelderly growth rates. Hence, area concentration can result from both increasing growth of the area's elderly population and decreasing growth of an its nonelderly residents.

The former situation tends to characterize retirement communities. Such increases in elderly concentration are often viewed in a positive

light, since the elderly in-migrants tend to be more upwardly selected on socio-demographic characteristics that contribute to the stability and economic growth of the community (Longino, 1990). At the other extreme, one finds high and increasing concentration in declining regions and areas (Frey and Speare, 1988). This is often associated with economically motivated out-migration of the younger population -- leaving behind aging-in-place elderly along with "less select" nonmigrant residents. This more undesirable form of elderly concentration often leaves an increasing dependent elderly population reliant on a declining economy and tax base (Glasgow, 1988).

The potential for increases in both kinds of elderly concentration existed during the 1980s. One reason is that, as in the 1970s, there was a significant rise in the *nation's* elderly concentration. Continuing large cohorts entering into seniorhood increased the size of the elderly population available for both aging-in-place and migration across regions and metropolitan areas. Second, the continued dispersal of migrants to smaller Sunbelt areas leads to greater elderly concentration in retirement communities. However, the most significant feature of 1980s redistribution, for potential elderly concentration, is the renewed disparity between elderly and nonelderly geographic shifts. This lays the groundwork for a greater incidence of elderly concentration in declining and slow-growing regions and metropolitan areas.

The prospects for increased elderly concentration in Sunbelt retirement communities and in slow-growing northern areas are suggested in Table 4. These data show how elderly concentration has evolved over the three decades, 1960-1990. During the 1960s, as in prior decades,

the concentration was most pronounced in the then stagnating small and nonmetropolitan areas of the North and rural South. Elderly concentration was generally lower in other Sunbelt categories. Later, the broad nonelderly shifts out of the North increased the elderly concentration in large Northern metropolises; and the gradual dispersal of elderly population into smaller Sunbelt areas increased their older concentrations as well. Elderly concentration in the latter areas has shown additional increase in the 1980s due to another factor: the reversal of the Sunbelt nonelderly dispersal of the 1970s.

As a consequence, a relatively uneven geographic pattern of elderly concentration has emerged during the 1980s. (See Table 4, last column.) Seven of the nine geographic categories show greater than nation-wide 1980-90 increases in elderly concentration. The three Northern categories have risen because of growth slowdowns in the nonelderly population. Elderly concentration rose in small and nonmetropolitan Sunbelt areas from the continued in-migration of retirees, coupled with declines and growth slowdowns in their younger populations. Only in South and West large metropolitan areas is there a negligible change in elderly concentration over the 1980s. Because of their increased attractiveness to the younger population (including immigrants) and their somewhat diminished appeal for retirees, these large Sunbelt metropolis categories show significantly lower 1990 elderly concentrations than the nation as a whole, and most other kinds of areas.

(Table 4)

INDIVIDUAL METROPOLITAN AREAS

Fastest and Slowest Growing Metropolitan Areas The broad patterns, just reviewed, tend to camouflage the experiences of the nation's 280 individual metropolitan areas. During the 1980s, their elderly growth rates ranged from 1.4% (St. Joseph, MO MSA), to 134.6% (Anchorage, AK MSA). The ten areas (and percent change figures) with fastest-growing elderly populations are:

1.	134.6	Anchorage, AK MSA
2.	121.2	Las Vegas, NV MSA
3.	111.0	Naples, FL MSA
4.	109.0	Fort Walton Beach, FL MSA
5.	106.7	Ocala, FL MSA
6.	94.5	Fort Pierce, FL MSA
7.	91.5	Melbourne, Titusville, Palm Bay, FL MSA
8.	80.9	Fort Myers, Cape Coral, FL MSA
9.	75.6	Yuma, AZ MSA
10.	71.3	Las Cruces, NM MSA

Each of these areas is in the South or West regions, and most also have fast-growing nonelderly populations. Their extremely high rates of elderly growth are not a recent phenomenon, since each was among the twelve fastest-growing elderly metropolitan areas in the previous decade, and eight (all except Fort Walton Beach and Las Cruces) were among the top fifteen in the 1960-70 decade. Although these ten areas show exceptionally high rates of elderly growth, they share two common characteristics with the upper third of all areas (labeled as "fast-growing" in Figure 2) when classed on this measure.[3] These are the overwhelming predominance of a Sunbelt location (96% are located in the South and West regions) and a strong representation of moderate and small-sized metropolitan areas.

(Figure 2 about here)

The areas with the slowest-growing elderly populations during the 1980s are

1.	1.4	St. Joseph, MO MSA
2.	4.2	Pine Bluff, AR MSA
3.	6.2	Enid, OK MSA
4.	6.8	Jamestown, Dinkirk, NY MSA
5.	8.4	Sioux City, IA-NE MSA
6.	8.7	Terre Haute, IN MSA
7.	8.8	Atlantic City, NJ MSA
8.	9.3	Poughkeepsie, NY MSA
9.	9.7	Boston, Lawrence, Salem, MA-NH CMSA
10.	10.1	Springfield, IL MSA

Seven of these areas were among the slower growing nonelderly populations during the 1980s (Atlantic City, Poughkeepsie, and Boston the exceptions). They are located primarily in the North, and are mostly (Boston excepted) smaller-sized areas. In these respects, they resemble the lower third of metropolitan areas (labeled as "slow-growing" on Figure 2) when ranked on 1980s elderly growth.

At the extremes, metropolitan areas with the fastest-growing and slowest-growing elderly populations also show high and low rates of growth, respectively, for their nonelderly populations. This is not generally the case, however. While 60.4% (169) of the nation's 280 metropolitan areas show elderly growth rates above the national average, only 40.7% (114) show nonelderly growth rates above national levels. This is due to the more sharply directed nonelderly flows away from the North and the 1980s reversal of the more dispersed nonelderly gains in the 1970s.

More specifically, of the 169 areas with higher than national average elderly growth, 70 show nonelderly growth to be lower than the national norm. Smaller, southern metropolitan areas are disproportionately represented in this group, although one-third of such

areas are located in the North. Of the 99 areas with greater than national growth for their elderly *and* nonelderly populations, 85 are located in the Sunbelt, and 37 of these are moderate sized metropolitan areas (with populations between 250,000 and one million).

At the other extreme are 96 metropolitan areas that lie below the national average on both elderly and nonelderly growth. Among these, 68 are located in the North, but 27 are in the South, with a strong representation among smaller-sized southern areas. Many of these areas are particularly ripe for a continuing "aging-in-place" of their elderly populations.

Metropolitan Areas with Greatest Elderly Concentrations The broad patterns reviewed earlier suggest an increased elderly concentration among areas in most regions of the country. Yet, the percent of population that is aged 65 and older ranges widely among individual metropolitan areas: between 3.6% (Anchorage, AK MSA) and 32.2% (Sarasota, FL MSA). The ten metropolitan areas with the highest 1990 elderly percentages are:

1.	32.2	Sarasota, FL MSA
2.	28.1	Bradenton, FL MSA
3.	24.8	Fort Myers, Cape Coral, FL MSA
4.	24.3	W. Palm Bch, Boca Raton, Delray Bch, FL MSA
5.	23.6	Fort Pierce, FL MSA
6.	22.8	Daytona Beach, FL MSA
7.	22.7	Naples, FL MSA
8.	22.2	Ocala, FL MSA
9.	21.6	Tampa, St. Petersburg, Clearwater, FL MSA
10.	18.6	Lakeland, Winter Haven, Fl MSA

This list of Florida resort and retirement centers shows extremely high levels of elderly concentration. Most of them also rank near the

top of all areas on measures of percent elderly growth, and percent nonelderly growth over the 1980-90 decade. The latter is, generally, not true of other metropolitan areas with high elderly concentrations. Many such areas have increased their elderly concentration as a result of low levels of nonelderly growth coupled with significant "aging-in-place" of the elderly population. Included among the next ten highest ranked metropolitan areas on elderly concentration are Northeast Pennsylvania; Johnstown, PA; Wheeling, WV; Cumberland, MD; Pittsburgh, PA; Sharon, PA; Altoona, PA; and Duluth-Superior, MN. Each of these areas showed negative 1980-90 growth for their nonelderly populations.

Figure 3 shows that the upper third of metropolitan areas, ranked on elderly concentration (labeled as "high"), are disproportionately located in slow-growing northern and interior parts of the country, as well as in retirement centers of Florida, Arizona, and selected parts of the West.[4] The more concentrated pattern of nonelderly population growth in the 1980s has led to a significant number of areas whose elderly concentrations have risen due to "aging-in-place." Of the 121 metropolitan areas with elderly percentages that exceed the national level, 106 increased their elderly percentage at greater than national increase levels over the 1980s, and 75 of these showed a lower than national percentage gain in their "under 65" populations.

These 75 "aging-in-place" areas are disproportionately located in the North, and among moderate and small-sized areas of the South. The former areas are spread among declining industrial metropolitan areas of the Northeast and Rustbelt, and farming areas of the Midwest. The latter areas also border on the Rustbelt regions and are represented, as

well, in southern "Oilpatch" states that suffered economic declines in the 1980s.

(Figure 3)

Trends in Elderly Growth and Concentration The 1980s metropolitan area patterns, just reviewed, indicate a rise in elderly growth but also an increased pervasiveness of "aging-in-place" among metropolitan areas. This is suggested by a rise in the number of "aging-in-place" areas (as defined above) to 75 in the 1980s, compared to 35 and 41, respectively, in the 1960s and 1970s.[5]

The increase in "aging-in-place" metropolitan areas is strongly shaped by the redistribution of the nonelderly population, and its greater concentration into fewer, large Sunbelt metropolitan areas in the 1980s. The number of metropolitan areas that grew at faster than national elderly growth rates increased from 155 in the 1970s to 169 in the 1980s. At the same time, the number of areas which grew at faster than national nonelderly rates became reduced from 162 in the 1970s to 114 in the 1980s. The more concentrated, redirected nonelderly metropolitan gains of the 1980s played a role in the "aging" of many remaining areas.

The increased significance of the nonelderly redistribution pattern for metropolitan "aging" in the 1980s can be demonstrated statistically. The following zero-order correlations show, for three decades, the relationship between a metropolitan area's *increase in elderly percentage* with the *percent change in its elderly population* and the *percent change in its nonelderly population*.

Period:	Correlation with Percent Change in: Elderly Pop.	Nonelderly Pop.
1980-90	+.249	-.423
1970-80	+.480	-.139
1960-70	+.658	-.101

These correlations show that, more so than earlier decades, increases in elderly concentration, across metropolitan areas, have become dependent on nonelderly metropolitan shifts in 1980-90.

This follows from the earlier discussion of broad regional and metropolitan trends, indicating a gradual but consistent deconcentration of elderly growth into the Sunbelt -- coupled with fluctuating patterns of dispersed, then concentrated, nonelderly shifts. These distinct elderly and nonelderly trends are confirmed for individual metropolitan areas as well. There is a consistent pattern of elderly population growth, among metropolitan areas, across decades (zero-order correlations of cross-decade percent elderly change among metropolitan areas are: .843 between 1960-70 and 1970-80; and .888 between 1970-80 and 1980-90). Cross-decade associations are appreciably lower for nonelderly population change (.549 between 1960-70 and 1970-80; and .760 between 1970-80 and 1980-90).

Of particular interest are those areas which aged dramatically over the 1980s as a result of low or declining levels of nonelderly growth. Twenty-six such areas can be identified as having lower than average elderly percentages in 1980, but being classed as one of the 75 "aging-in-place" metropolitan areas (discussed above) as a result of 1980-90 redistribution. Among these areas, 16 are located in the North, including: the large metropolitan area of Cleveland; the 4 moderate-sized areas, Erie, PA, Canton, OH, Peoria, IL, and Davenport, IA; and 11 smaller metropolitan areas such as Benton Harbor, MI, Kankakee, IL, and

Dubuque, IA. However, because of shifting nonelderly growth patterns, 10 small and moderate-sized Sunbelt areas also fit into this category, including: Knoxville, TN, Beaumont-Port Arthur, TX and Great Falls, MT.

At the other extreme are several large Sunbelt areas with fast-growing nonelderly "under 65" populations that registered negative or negligible 1980-90 gain in elderly concentration. Examples of these are Orlando, FL MSA; Dallas-Ft. Worth CMSA; Atlanta, GA MSA; and Tampa- St. Petersburg, FL MSA. Most of these areas also registered higher than average gains in their elderly populations. However, their ability to draw large numbers of working aged migrants and immigrants kept them from increasing the elderly percentage of their total populations.

FUTURE ELDERLY DISTRIBUTION SHIFTS

This three-decade review pointed up distinctly different redistribution trends for the elderly, and nonelderly populations, respectively. Over this thirty-year period, the elderly population redistributed itself away from the North and nonmetropolitan areas. It grew significantly, in almost all areas, due to a substantial "aging-in-place" of large birth cohorts that graduated into the 65-and-older age category during this time. Yet a rise in retirement migration led to a gradual but consistent redistribution of the nation's older population toward smaller sized metropolitan areas in the Sunbelt and nonmetropolitan areas in the West.

In contrast to elderly redistribution patterns, the nonelderly population is more heavily dominated by the migration component and influenced by changing economic "pushes" and "pulls." The most dominant trend of the nonelderly population, over these thirty years, is the

sharp redistribution away from the industrial North in the 1970s and 1980s. During the first of these decades nonelderly redistribution led to unprecedented gains in Sunbelt smaller and nonmetropolitan settings -- prompting suggestions that a "rural renaissance" had emerged. However, these patterns were abruptly reversed as the 1970s economic "pulls" of small and nonmetropolitan areas turned into 1980s "pushes" (Beale, 1988; Frey, 1990). At the same time, improved job prospects attracted both internal migrants and immigrants, of working age, to some of the larger metropolitan areas of the Sunbelt.

Both elderly and nonelderly redistribution patterns hold indirect consequences on their counterpart populations' economic prospects and service provisions (Heaton, 1983; Longino, 1990). This is clearly the case for the nation's foremost "retirement centers" in Florida, Arizona, and scattered other parts of the country. Here, sharply directed flows of "upwardly selected" elderly in-migrants create employment opportunities for workers of all ages and serve to shape the service provision that will cater to these communities and primary client populations.

Yet as this review has shown, nonelderly population shifts hold severe consequences for the "aging" of communities. Sharply directed nonelderly flows of the 1970s reduced the elderly concentrations in many smaller and nonmetropolitan places of the South and West. However, this population's equally sharp flows to larger Sunbelt areas during the 1980s served to widen the gap in elderly concentrations -- between small and large areas. Further, a continued nonelderly redistribution out of the industrial North over the past two decades has widened the regional

variation in elderly concentration -- leading to an accentuated "aging" of many northeast and midwest metropolitan areas.

These results show that while elderly-only redistribution patterns directly shape the size of communities' "65 and older" population, nonelderly patterns have a large impact on community "aging." Yet, migration patterns do not always affect both populations in similar ways. This is illustrated for the age-specific migration patterns for South and West nonmetropolitan areas, shown in Figure 4. Between the late 1960s and late 1970s, out-migration decreased, and in-migration increased for both the elderly and the nonelderly populations -- leading to increased net migrations for both populations. This elderly-nonelderly similarity does not apply to the early 1980s, however. During this period, younger net migration rates plummet to late 1970s levels, while elderly net in-migration continues to remain high.[6] These divergent age-specific migration patterns, when coupled with significant elderly "aging-in-place," should lead to an immediate rise in these areas' elderly concentrations.

(Figure 4)

Although nonelderly migration exerts an immediate impact on a community's elderly concentration, it exerts a long-term effect on elderly population growth. This is because the strong "aging-in-place" component of elderly population growth can be shaped, quite strongly, by the cumulative lifetime migration of soon-to-be-elderly cohorts. Pre-elderly migration will have a particularly strong impact on elderly growth when the large baby boom cohorts begin to "age-in-place" in the year 2010 (Frey, 1986; Rogers and Woodward, 1988).

This is illustrated by two "hypothetical" projections of elderly growth over the period 2010-2030, where each projection makes a different assumption about the pre-elderly migration patterns of the baby boom cohorts.[7] Under projection A, it is assumed that the baby boom cohorts will follow the age-specific patterns observed in the late 1960s (the 1965-70 pattern shown in Figure 4). These patterns do not assume a severe shift away from large northern metropolitan areas, nor a relocation toward smaller-sized areas. Projection B, on the other hand, assumes that the baby boom cohorts will follow the age-specific patterns of the 1975-80 period that are associated with a sharper shift away from the North and to smaller-sized Sunbelt areas.

The period 2010-2030 constitutes the twenty years when the entire baby boom generation ages into and dominates the nation's "65 and older" population. The alternative projections of elderly growth for large metropolitan areas and South and West nonmetropolitan areas are

	Projections for Elderly Growth, 2010-2030	
	A	B
North Large Met Areas	+117.9%	+71.9%
South Nonmetropolitan	+123.8%	+185.1%
West Nonmetropolitan	+164.5%	+268.1%

These results show that, under both assumptions, there is significant growth in the elderly population for all areas -- due to the strong "aging-in-place" associated with the large sizes of the baby boom cohorts. Yet the differences in magnitudes between projections verify that these cohorts' pre-elderly migration patterns have significant effects on the areas' elderly growth rates.

This article has shown that both elderly and nonelderly redistributions across U.S. regions and metropolitan areas have taken

different paths over the past thirty years. As the elderly population has gained access to pensions and greater private savings, there has been an increasing tendency for its members to relocate in "retirement communities" and other resort and recreation areas as an alternative to "aging-in-place" (Longino, 1990). At the same time, the nonelderly population is much more responsive to the "pushes" and "pulls" of the economy, than is the elderly population (Serrow, 1987). As has been shown, the latter population's redistribution holds important implications for the pace of "community aging" and the concentration of the elderly population. Geographic disparities on these measures have widened during the 1980s as the working-aged population continued their retreat from the North and smaller-sized areas of the Sunbelt. Yet these patterns may well change again with the ebb and flow of the economy.

The findings presented here underscore the importance of monitoring, separately, the redistribution of the elderly and nonelderly populations, in light of their different patterns, determinants, and selectivities. Moreover, in light of the huge size of the baby boom cohorts, special attention should be given to their pre-elderly migration patterns, since they will exert a strong impact on the "aging-in-place" component of elderly distribution after the turn of the Century.

FOOTNOTES

1. Metropolitan areas, throughout this analysis, are defined in terms of Consolidated Metropolitan Statistical Areas (CMSAs), Metropolitan Statistical Areas (MSAs), and, in New England, counterparts based on New England County Metropolitan Areas (NECMAs), all defined according to constant boundaries determined by the Office of Management and Budget as of June 30, 1990. See Starsinic and Forstall (1989) for detailed definitions of these areas.

2. The index of dissimilarity measures the differences in two populations' distributions across a set of geographic areas. It ranges from a value of zero (complete similarity in distributions) to 100 (complete dissimilarity). The index value can be interpreted as the percent of one population's members that would have to change categories in order to be distributed like the other population. (The index is calculated as one-half the sum of the absolute differences in the two populations' percentage distributions across the areas.)

   The indices of dissimilarity between the elderly and nonelderly populations, across the nine areas, were: 10.2 (in 1960), 10.0 (in 1970), 8.8 (in 1980), and 10.2 (in 1990). The decline in the index for 1980 resulted primarily from the increased 1970-80 dispersal of the nonelderly population. The rise of the index, again, in 1990 can be attributed, largely, to the 1980-1990 nonelderly concentration in large South and West metropolitan areas.

3. "Fast-growing" metropolitan areas, identified in Figure 2, increased their elderly populations by greater than 31% over the 1980-90 period. Areas classed as "slow-growing" increased their elderly populations by 20.5% or less.

4. Metropolitan areas classed as "high" in Figure 3 registered 1990 percent elderly populations (ages 65 and above) of 13.4% or greater. Those classed as "low" registered percent elderly populations of 10.8% or below.

5. Metropolitan areas classed as "aging-in-place" areas over a decade are areas with: elderly percentages that exceed the end-of-decade U.S. elderly percentage, a decade decline in elderly percentage that exceeds the U.S. decade decline, and a percent change in nonelderly population that is lower than the U.S. nonelderly percent change for the decade.

6. The 1980-85 age-specific net migration rates in Figure 4 were derived by using an indirect survival methodology with age-disaggregated population data from the 1980 decennial census and 1985 experimental county population estimates by age, sex, and race, produced by the population division, U.S. Bureau of the Census. Comparable age-specific in-migration ratios and out-migration rates are not available for the 1980-85 period.

7. For a more extensive discussion of the methodology and results of these alternative projections, see Frey (1986).

REFERENCES

Beale, Calvin L. 1988. "Americans Heading for the Cities, Once Again." Rural Development Perspectives. Vol. 4 (3).

Flynn, Cynthia B., Charles F. Longino, Jr., Robert F. Wiseman and Jeanne C. Biggar. 1985. "The Redistribution of America's Older Population: Major National Migration Patterns for Three Census Decades, 1960-1980." The Gerontologist. Vol. 25 (3), pp. 292-296.

Frey, William H. 1986. "Lifecourse Migration and Redistribution of the Elderly across U.S. Regions and Metropolitan Areas." Economic Outlook USA. Vol. 13 (2), pp. 10-16.

Frey, William H. 1987. "Migration and Depopulation of the Metropolis: Regional Restructuring or Rural Renaissance?" American Sociological Review. Vol. 52 (April) pp. 240-257.

Frey, William H. 1989. "United States: Counterurbanization and Metropolis Depopulation." In A.G. Champion (ed.), Counterurbanization: The Changing Pace and Nature of Population Deconcentration. (London: Edward Arnold), pp. 34-61.

Frey, William H. 1990. Metropolitan America: Beyond the Transition. *Population Bulletin.* (Washington, DC: Population Reference Bureau).

Frey, William H. and Alden Speare, Jr. 1988. Regional and Metropolitan Growth and Decline in the United States. A 1980 Census Monograph. (New York: Russell Sage).

Frey, William H. and Alden Speare, Jr. 1992. "Metropolitan Revival in the U.S.: An Assessment of 1990 Census Findings." Population and Development Review. Vol. 18 (1).

Fuguitt, Glenn V., David L. Brown, and Calvin L. Beale. 1989. Rural and Small Town America. A 1980 Census Monograph. (New York: Russell Sage).

Fuguitt, Glenn V., and Stephen J. Tordella. 1980. "Elderly Net Migration: The New Trend of Nonmetropolitan Population Change." Research on Aging. Vol. 2 (2), pp. 191-204.

Glasgow, Nina. 1988. The Nonmetro Elderly: Economic and Demographic Status. Rural Development Research Report No. 70. (Washington DC: Economic Research Service, USDA).

Heaton, Tim B. 1983. "Recent Trends in the Geographical Distribution of the Elderly Population." In Matilda White Riley, Beth B. Hess, and Kathleen Bond (eds.) Aging in Society. (Hillsdale, NJ: Lawrence Erlbaum Associates), pp. 95-113.

Long, Larry. 1988. Migration and Residential Mobility in the United States. A 1980 Census Monograph. (New York: Russell Sage).

Longino, Charles F., Jr. 1990. "Geographical Distribution and Migration." In Robert Binstock and Linda K. George (eds.) Handbook of Aging and the Social Sciences, third edition. (San Diego: Academic Press)

Rogers, Andrei and John F. Watkins. 1987. "General versus Elderly Interstate Migration and Population Redistribution in the United States." Research on Aging. Vol. 9 (4), pp. 483-529.

Rogers, Andrei and Jennifer A. Woodward. 1988. "The Sources of Regional Elderly Population Growth: Migration and Aging-In-Place." The Professional Geographer. Vol. 40 (4), pp. 450-59.

Serow, William J. 1987. "Determinants of Interstate Migration: Differences between Elderly and Non-elderly Movers." Journal of Gerontology. Vol. 42 (1), pp. 95-100.

Starsinic, Donald E. and Richard L. Forstall. 1989. "Patterns of Metropolitan Area and County Population Growth: 1980-1987." Current Population Reports, Series P-25, No. 1039. (Washington, DC: U.S. Bureau of the Census).

Table 1. Percent Change in Elderly and Nonelderly Population Across Region and Metropolitan Categories, 1960-1990.

Region and Metropolitan Categories	Elderly			Nonelderly			Total		
	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90
North									
Large Metro	17.3	15.7	15.8	11.3	-2.7	1.2	11.9	-0.9	2.8
Other Metro	12.2	20.4	19.8	11.2	3.7	1.5	11.3	5.4	3.5
Non Metro	7.4	18.3	11.3	1.9	6.5	-2.0	2.5	8.0	-0.2
South									
Large Metro	48.0	46.0	28.2	29.6	21.5	21.6	31.0	23.6	22.3
Other Metro	34.7	45.2	33.9	14.0	18.3	11.0	15.5	20.7	13.4
Non Metro	19.3	34.1	17.6	-0.9	14.1	2.7	1.1	16.3	4.6
West									
Large Metro	29.2	34.8	30.2	29.0	18.5	23.5	29.1	20.0	24.2
Other Metro	34.6	52.1	44.3	26.1	30.4	20.7	26.7	32.2	22.9
Non Metro	20.3	44.1	38.0	8.1	29.6	11.3	9.2	31.0	14.2
Total	20.7	27.9	22.3	12.8	9.7	8.2	13.5	11.5	9.8

Source: Compiled at the University of Michigan Population Studies Center from Decennial Censuses.

Table 2. Distribution of Elderly and Nonelderly Gains Across Region and Metropolitan Categories, 1960-70, 1970-80, 1980-90.

Region and Metropolitan Categories	Distribution of Population Gain					
	1960 -70		1970 -80		1980 -90	
	Elderly	Non Elderly	Elderly	Non Elderly	Elderly	Non Elderly
North						
Large Metro	25.6	27.4	16.8	-8.6	19.1	3.9
Other Metro	7.4	10.2	8.4	4.5	9.7	1.9
Non Metro	5.3	1.6	8.7	6.7	6.2	-2.4
South						
Large Metro	15.4	18.7	13.4	20.7	11.7	27.1
Other Metro	15.5	12.5	16.7	22.0	17.8	16.8
Non Metro	10.9	-0.8	14.1	14.4	9.6	3.3
West						
Large Metro	13.3	22.5	12.5	21.7	14.4	35.0
Other Metro	4.1	6.1	5.1	10.5	6.5	10.0
Non Metro	2.6	1.8	4.2	8.2	5.1	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gain (1000s)*	3,421	20,753	5,571	17,705	5,692	16,472
Percent Change**	20.7	12.8	27.9	9.7	22.3	8.2

*U.S. End of decade (elderly or nonelderly) population minus beginning of decade (elderly or nonelderly) population.

**(Elderly or nonelderly) gain as percent of beginning of decade (elderly or nonelderly) population.

Source: Compiled at the University of Michigan Population Studies Center from Decennial Censuses.

Table 3. Change in Distribution of Elderly and Nonelderly Population Across Region and Metropolitan Categories, 1960-70, 1970-80, 1980-90.

Region and Metropolitan Categories	Distribution				Change in Distribution		
	1960	1970	1980	1990	1960-70	1970-80	1980-90
Elderly Population							
North							
Large Metro	30.6	29.8	26.9	25.5	-0.8	-2.9	-1.4
Other Metro	12.4	11.6	10.9	10.7	-0.8	-0.7	-0.2
Non Metro	14.9	13.3	12.3	11.2	-1.6	-1.0	-1.1
South							
Large Metro	6.6	8.1	9.3	9.7	1.5	1.2	0.4
Other Metro	9.2	10.3	11.7	12.8	1.1	1.4	1.1
Non Metro	11.7	11.5	12.1	11.6	-0.2	0.6	-0.5
West							
Large Metro	9.4	10.0	10.6	11.3	0.6	0.6	0.7
Other Metro	2.5	2.7	3.3	3.8	0.2	0.6	0.5
Non Metro	2.6	2.6	3.0	3.4	0.0	0.3	0.4
Total	100.0	100.0	100.0	100.0			
Nonelderly Population							
North							
Large Metro	30.8	30.4	27.0	25.3	-0.4	-3.4	-1.7
Other Metro	11.7	11.5	10.9	10.3	-0.2	-0.6	-0.6
Non Metro	11.0	10.0	9.7	9.1	-1.0	-0.3	-0.6
South							
Large Metro	8.1	9.3	10.3	11.3	1.2	1.0	1.0
Other Metro	11.5	11.6	12.5	12.8	0.1	0.9	0.3
Non Metro	11.2	9.9	10.3	10.0	-1.3	0.4	-0.3
West							
Large Metro	9.9	11.3	12.2	13.6	1.4	0.9	1.4
Other Metro	3.0	3.3	4.0	4.4	0.3	0.7	0.4
Non Metro	2.8	2.7	3.2	3.3	-0.1	0.5	0.1
Total	100.0	100.0	100.0	100.0			

Source: Compiled at the University of Michigan Population Studies Center from Decennial Censuses.

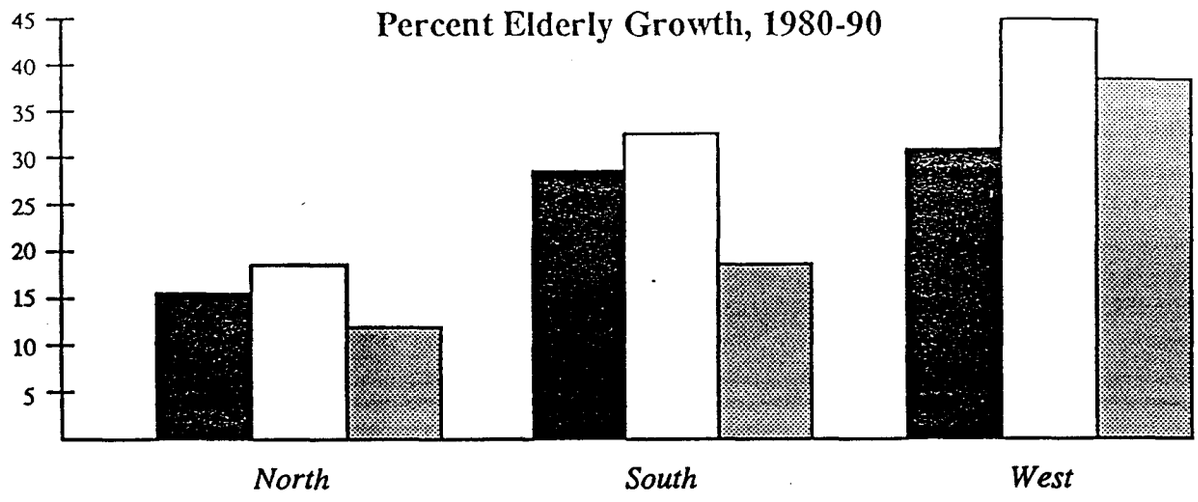
Table 4. Change in Percent Elderly for Regions and Metropolitan Categories, 1960, 1970, 1980, 1990.

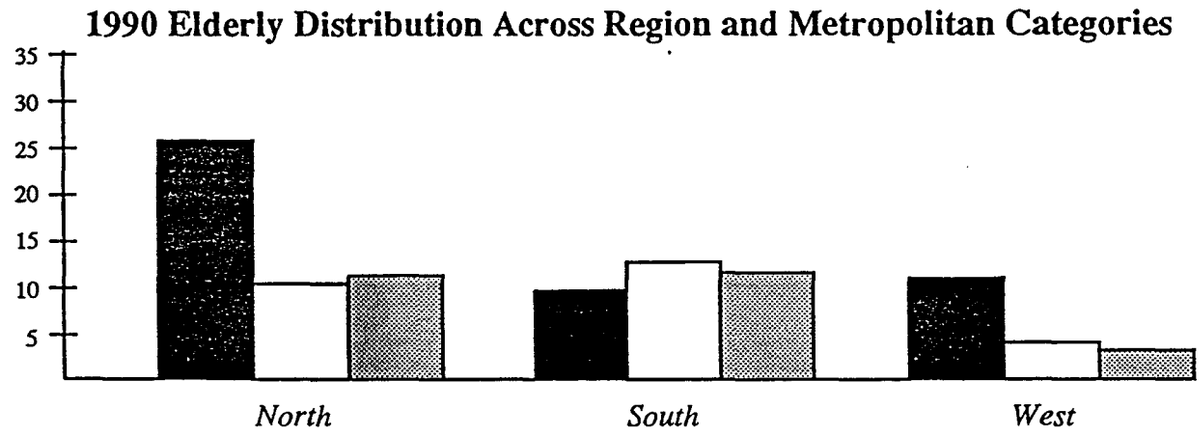
Region and Metropolitan Categories	Percent Elderly*				Change		
	1960	1970	1980	1990	1960-70	1970-80	1980-90
North							
Large Metro	9.2	9.6	11.3	12.7	0.4	1.7	1.4
Other Metro	9.8	9.9	11.3	13.0	0.1	1.4	1.7
Non Metro	12.1	12.7	13.9	15.5	0.6	1.2	1.6
South							
Large Metro	7.7	8.7	10.3	10.8	1.0	1.6	0.5
Other Metro	7.6	8.8	10.6	12.5	1.2	1.8	1.9
Non Metro	9.6	11.3	13.0	14.6	1.7	1.7	1.6
West							
Large Metro	8.8	8.8	9.9	10.4	0.0	1.1	0.5
Other Metro	7.7	8.2	9.5	11.1	0.5	1.3	1.6
Non Metro	8.8	9.7	10.7	12.9	0.9	1.0	2.2
Total	9.2	9.8	11.3	12.6	0.6	1.5	1.3

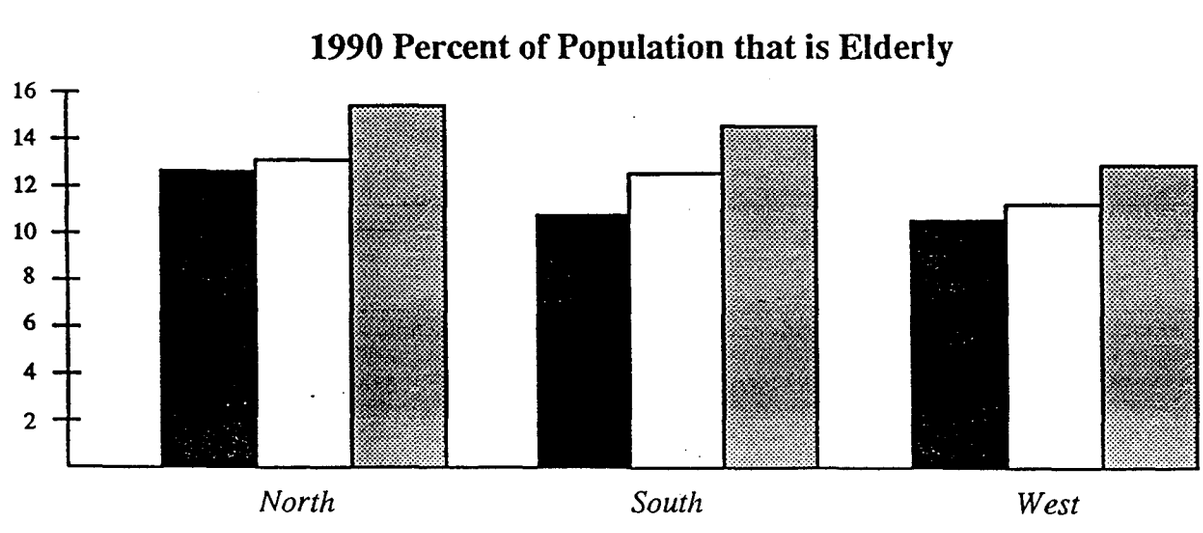
*(Elderly Population/Total Population) x 100.

Source: Compiled at the University of Michigan Population Studies Center from Decennial Censuses.

Fig. 1


Percent Elderly Growth, 1980-90
45
40
35
30
25
20
15
10
5
North
South
West


1990 Elderly Distribution Across Region and Metropolitan Categories
35
30
25
20
15
10
5
North
South
West


1990 Percent of Population that is Elderly
16
14
12
10
8
6
4
2
North
South
West

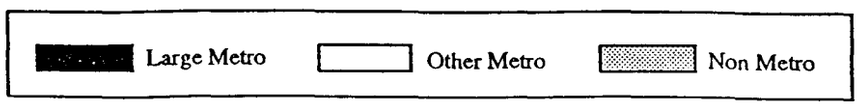

Large Metro
Other Metro
Non Metro

Fig. 2. Percent Change in Elderly Population 1980-90
US Metropolitan Areas

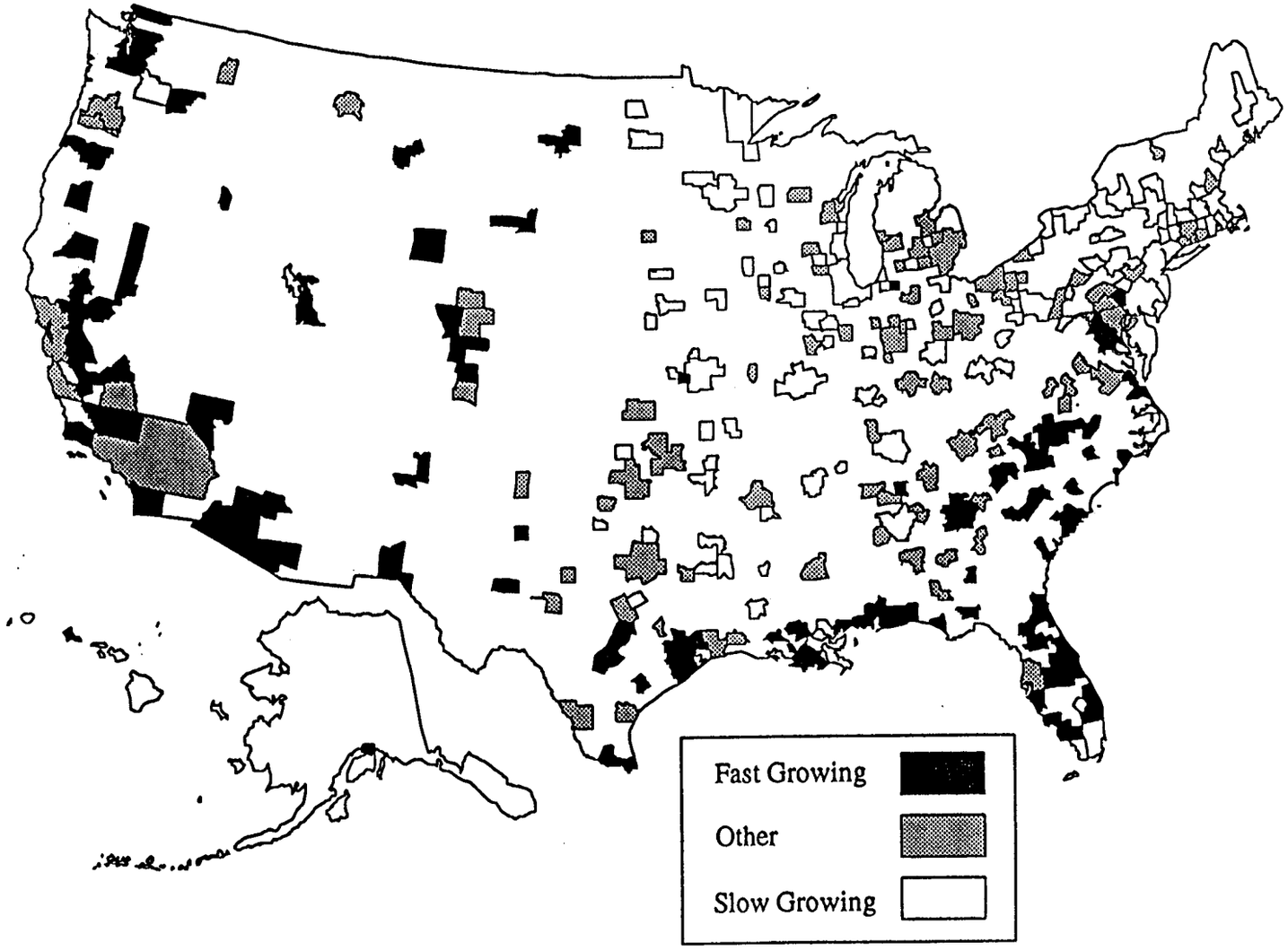
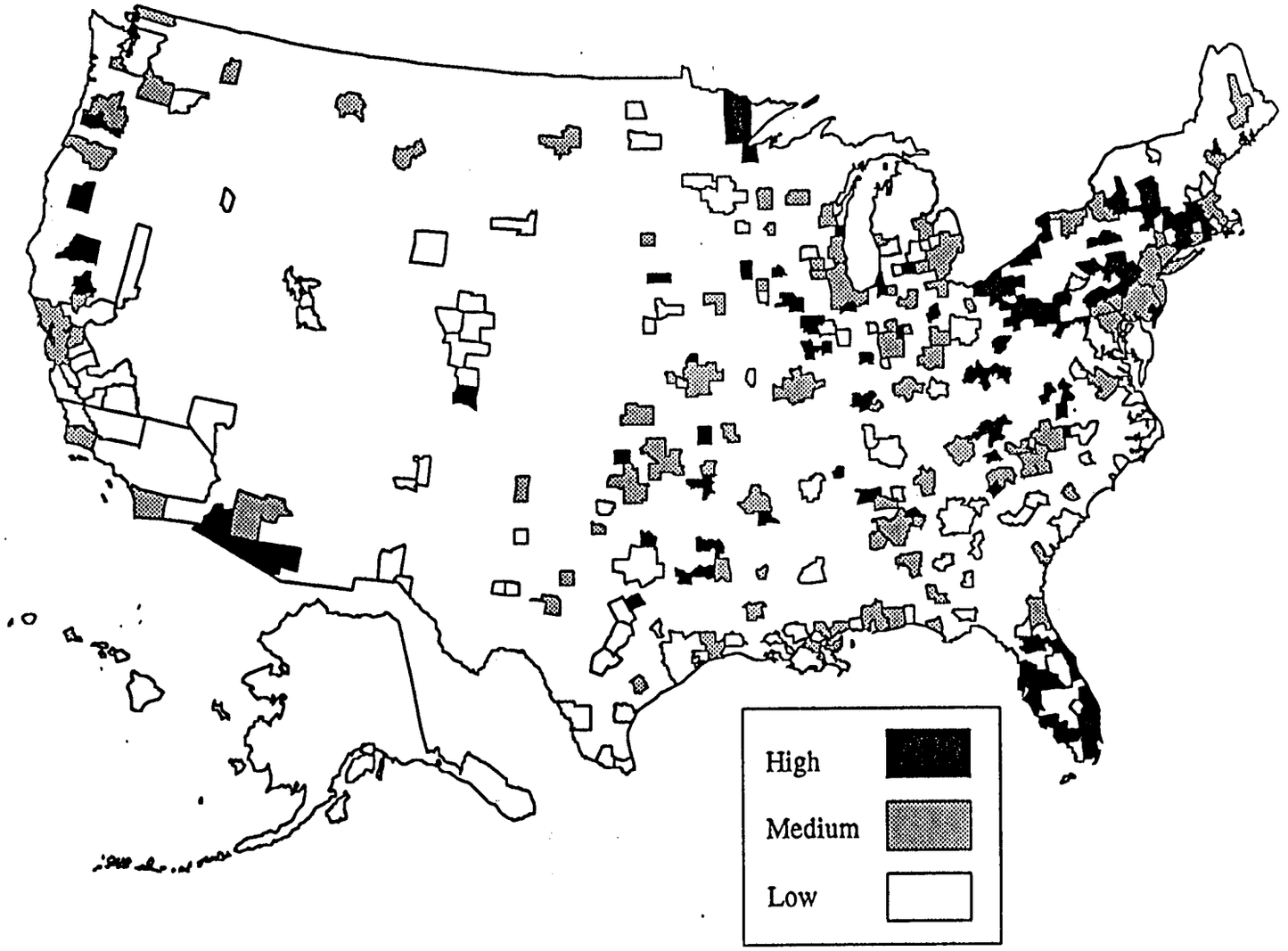


Fig. 3. Percent of Population Ages 65+ 1990
US Metropolitan Areas



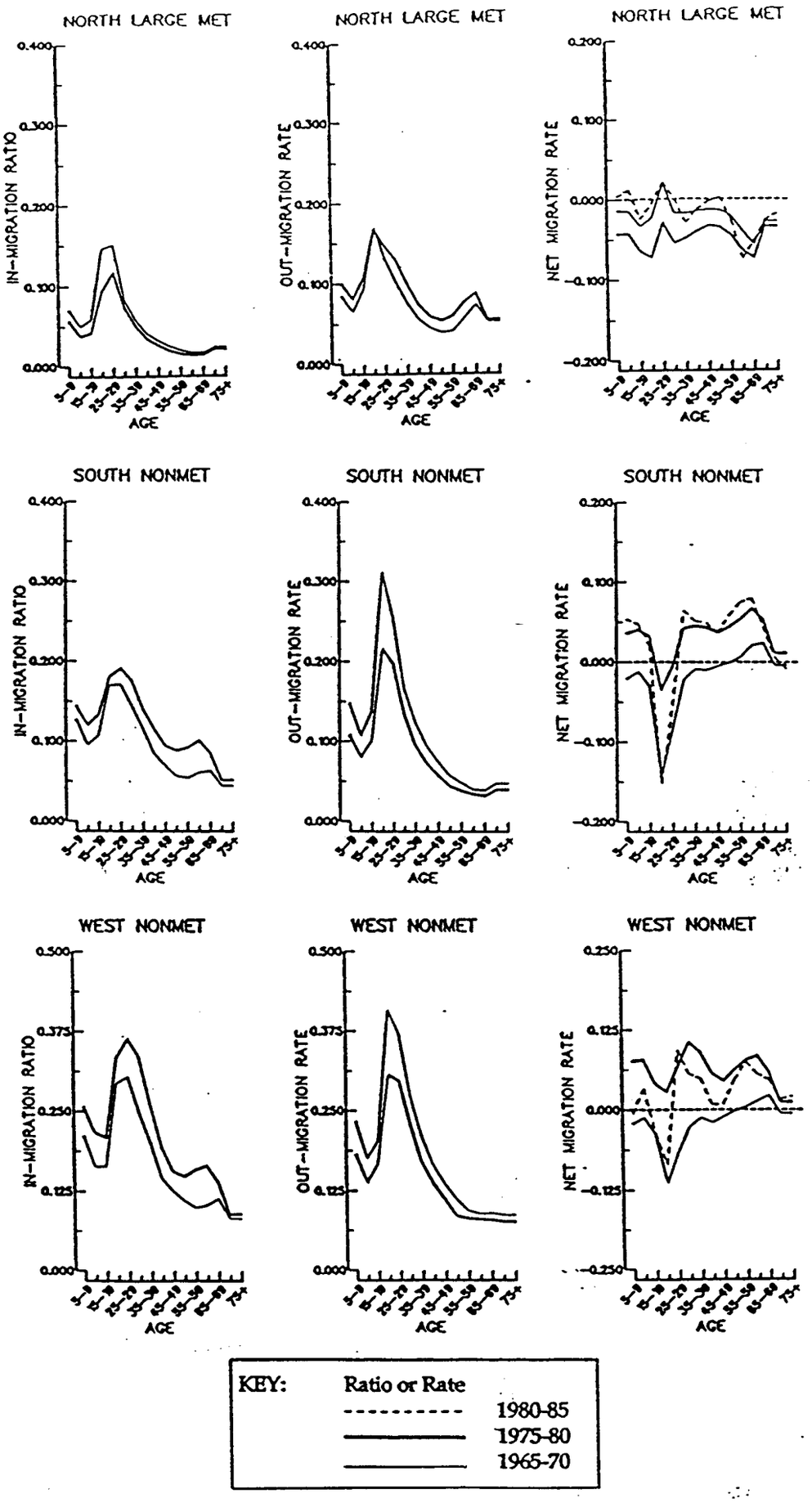


Figure 4. In-migration Ratios, Out-migration Rates and Net Migration Rates for Selected Region and Metropolitan Categories, 1965-70, 1975-80, 1980-85