

# Population Trends in the 1980's



U.S. Department of Commerce  
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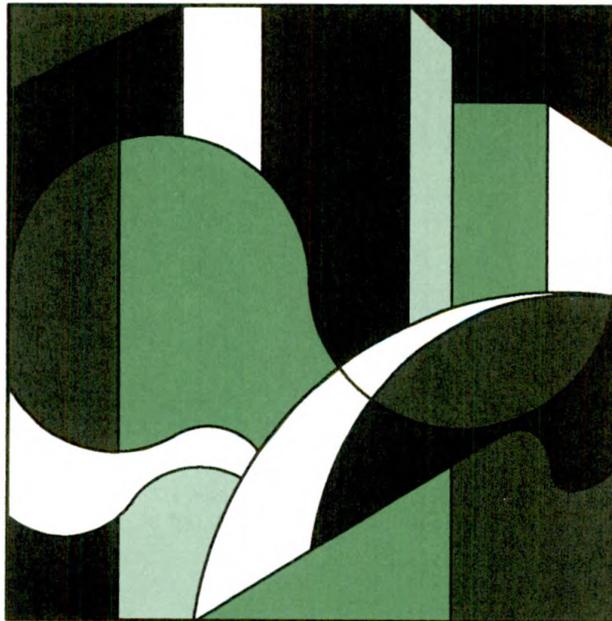
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# Population Trends in the 1980's

National Population Trends  
State Population Trends  
Trends in Internal Migration in the United States: 1980-1988  
Metropolitan and County Population Trends in the 1980's



Issued May 1992



**U.S. Department of Commerce**  
**Barbara Hackman Franklin, Secretary**  
**Rockwell A. Schnabel, Deputy Secretary**

**Economics and Statistics Administration**  
**Mark W. Plant, Acting Under Secretary**  
for Economic Affairs and Administrator

**BUREAU OF THE CENSUS**  
**Barbara Everitt Bryant, Director**



**Economics and Statistics  
Administration**

**Mark W. Plant**, Acting Under Secretary  
for Economic Affairs and Administrator



**BUREAU OF THE CENSUS**

**Barbara Everitt Bryant**, Director

**C.L. Kincannon**, Deputy Director

**William P. Butz**, Associate Director  
for Demographic Programs

**POPULATION DIVISION**

**Paula J. Schneider**, Chief

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# Preface

John F. Long

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- From 1980 to 1990, over one-fourth of the Nation's growth was from immigration.
- The rate of population growth in the Midwest since 1985 is roughly 4 times the rate of growth in the first half of the decade.
- In 1981, the West South Central Division (composed of the states of Arkansas, Louisiana, Oklahoma, and Texas) had the highest rate of net immigration of any of the nine Census Bureau divisions. By 1987, the situation had completely reversed so that the West South Central Division had the highest rate of net outmigration of any Census Bureau division.
- From 1980 to 1984, metropolitan areas grew only about one and a half times as fast as nonmetropolitan areas. However, from 1984 to 1988, metropolitan areas grew almost four times as fast as nonmetropolitan areas.

These population trends of the 1980's do not come from the 1990 decennial census. In fact, the census is not able to provide such data on the timing of population trends during the decade or on the relative effects of changing births, deaths, and immigration during the decade. Such data on trends come from the Census Bureau's population estimates program, which monitors annual changes in the population and tracks the relative effects of the various components of population change.

It is a tantalizing time to measure demographic trends. The 1990 decennial census is just beginning to reveal its results—many expected and others surprising. Once all the results of the decennial census are in, we will have an unrivaled view of the number, geographic distribution, and social, economic, and demographic characteristics of the Nation's population as of spring 1990.

Yet, the census alone is only a snapshot of the Nation as of April 1990. As such it provides only part of the information necessary for analyzing the population trends of the 1980's. For the complete story on the causes and timing of demographic changes during the decade, decennial census data must be combined with data from the Census Bureau's ongoing program of annual population estimates. The estimates program provides annual tracking of estimated population change and of the number of births, deaths, internal and international migrants for the Nation, States, counties, and (biennially) places.

Reconciliation of census counts and our estimates must await completion of target estimates to 1990 and methodological decisions on the best methods for intercensal estimates. Using this information, the Census Bureau produces intercensal estimates that are consistent with both the 1980 and 1990 censuses and preserves the pattern and timing of demographic change as measured by the annual population estimates during the past decade.

Although rough national and State intercensal results have recently been released, county intercensal data are not yet available. In the meantime, this report presents the current results of analysis of the population estimates program since 1980. These data are consistent with the coverage attained in the 1980 census and include no 1990 census results. The reader can use these results together with the data now being released from the 1990 census to gain a picture of the magnitude, timing, and causes of demographic changes in the 1980's.

This report contains four chapters presenting the cumulative results of national estimates, State estimates, annual interstate migration, and substate estimates (counties, places, and metropolitan areas) produced during the decade. Each chapter is written by authors responsible for developing estimates at each level of geography.

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# Chapter 1. National Population Trends

Frederick W. Hollmann

## HIGHLIGHTS

- The population of the United States, including Armed Forces overseas, grew by almost 24 million persons from the beginning of 1980 to the beginning of 1990.
- Although the major source of this growth was natural increase, or the excess of births over deaths, immigration accounted for over a quarter of the decade's growth.
- In the latter part of the decade, population growth was sustained by an increase in rates of childbearing among women in their thirties. In the absence of this increase, the rate of population growth would have diminished as the population of childbearing age grew older.
- Mortality continued to improve during the 1980's, but the rate of improvement was less than for previous decades. Women continued to have higher life expectancy than men—78.3 for women, 71.5 for men in 1988. However, the improvement in mortality for women during the decade was less than for men, so the gap in life expectancy narrowed from 7.4 years in 1980 to 6.8 years in 1987.
- Undocumented immigration, which emerged as a major source of new United States residents during the 1970's, accounted for an estimated 29 percent of net migration to the United States during the 1980's.
- Among legal entrants to the United States, Asia was the most heavily represented region of birth. This was in part a result of a large influx of refugees and immigrants from Southeast Asia following the end of the Vietnam conflict.
- For the first calendar decade since 1910, the male population grew slightly more than the female population in the 1980's. This was mostly the result of a reduction in the excess of male over female deaths.
- The post-war Baby Boomers, born from 1946 to 1964, grew a decade older. As a result, the number of persons 35 to 44 years of age grew dramatically, while the number of persons 14 to 24 declined.
- Driven by high rates of immigration, the Asian and Pacific Islander population grew dramatically during the decade, at a rate of 6.6 percent per year. By July 1, 1989, this group made up 2.8 percent of the U.S. resident population, up from 1.6 percent on April 1, 1980.

- The Black population increased at 1.5 percent per year compared with 1.0 percent for the White population. By mid-1989, Blacks comprised 12.4 percent of the resident population compared with 11.8 percent on April 1, 1980. The major component of this growth was natural increase.
- The American Indian, Eskimo, and Aleut population maintained a steady growth rate of 2.2 percent per year during the same period, almost entirely from natural increase. However, the 1990 census enumerated a larger number of persons in this category than would be implied by this rate of growth.
- The population of Hispanic origin (which can be of any race) increased at a rate of 3.7 percent annually during the same period, a function of immigration (both legal and undocumented) and natural increase in equal measure. On July 1, 1989, 8.3 percent of the U.S. resident population was of Hispanic origin, up from 6.4 percent at the time of the 1980 census. The 1990 census enumeration shows a somewhat larger proportion Hispanic than would be expected from these estimates.

## INTRODUCTION

The United States population is enumerated once every decade in a decennial census. While a decennial census provides a wealth of detail regarding the characteristics and the geographic distribution of the national population, it does not allow an analysis of year-to-year trends, even at the national level. Post-censal estimates provide us with an annual "look" at the population, distributed by various demographic characteristics. For estimates of the national population (defined by residence in the 50 States and the District of Columbia) administrative data on births, deaths, and migration to and from the United States allow an annual update of the population by age and sex; not only for the entire population, but also for racial groups and for the population of Hispanic origin. Through these estimates, it is possible to observe trends in the population by each of these characteristics as well as the trends in births, deaths, and net migration that underlie population changes.

## THE GROWTH OF THE UNITED STATES POPULATION, 1980 TO 1989

The national population (including Armed Forces overseas) grew by 23,670,000 persons from the beginning of 1980 to the beginning of 1990<sup>1</sup>—growth roughly equivalent to the 1980 population of California. This increase was the net result of 37,447,000 live births; 20,646,000 deaths; and 6,749,000 net civilian immigrants from outside the United States. This amounts to an average annual rate of increase of 0.99 percent per year for the 10 years, which is very close to the rate observed for the 1970's. The annual trend in the growth rate shows a peak in 1979 and 1980 (1.16 and 1.14 percent, respectively), caused by a rise in births (and subsequent decline) as well as a peak in refugee immigration from Southeast Asia and Cuba. The trend in births, deaths, and net immigration for the 1970's and 1980's is shown in figure 1-1.

The persistence of a growth rate near one percent per annum through the 1980's has occurred in spite of a population age structure that would tend to force growth downward. The population aged 65 and over has substantially outgrown the population under 65, which tends to increase the death rate. The aging of the post-war Baby Boomers has redistributed the heaviest concentration of childbearing-age women from the early twenties to the early thirties, which would be expected to reduce the birth rate, other things being equal. Three major events have counteracted the anti-growth character of the age structure: (1) a rise in the frequency of childbearing after 1984; (2) a reduction in age-specific death rates from 1980 to 1982 and again from 1988 to 1989; and (3) a sustained flow of immigrants from abroad, announced by unusually heavy flows of refugees from Cuba and Southeast Asia around 1980.

### The Trend in Births: Aging Baby Boomers and Fertility Increase

The number of live births, after showing little increase in the early part of the decade, rose from 3.6 million in 1983 to 4.0 million in 1989. This compares with the Baby Boom peak of 4.3 million in 1961.

This high number of births is not primarily a result of an increase in fertility rates since the low-fertility 1970's. It is mostly a result of the increase in population, especially in the number of men and women of childbearing age. In fact, the 1980's has been a decade of

low fertility compared with most previous United States history: fertility has actually been high only in comparison with the 1970's. The total fertility rate (TFR), which measures the total number of births that would have occurred to a thousand women subject to current age-specific fertility rates, reached a level of 1,977 in 1989. This compares with a post-war high of 3,760 in 1957—nearly double the 1989 figure.<sup>2</sup> The lowest annual TFR for the 1980's was 1,803, reached in 1983; the all-time record low of 1,738 occurred as recently as 1976.

Although fertility rates in the 1980's were low, the last half of the decade saw a noticeable rise. Although this rise did not bring the level anywhere near those observed earlier in the century, it has been adequate to maintain a rise in births against the force of a changing age structure. This is shown in figure 1-2. If fertility rates for each age group of women had remained constant at levels observed in 1980, the number of births would have been higher than actually observed early in the decade but would have peaked close to mid-decade and declined since then. In fact, the number of births has risen substantially since 1983.

This rise in fertility rates has produced a large number of additional births, because it has occurred to those age groups of women that have been both large and increasing—women over 30. The fertility rate for women 30 to 34 years of age increased by more than a third from a post-Baby-Boom low of 52.3 per thousand women in 1975 to a high of 73.7 per thousand in 1988 (figure 1-3). A similar percentage increase occurred for women 35 to 39 years old, although at a lower level. Yet the fertility of women in their twenties, the ages at which most childbearing occurs, changed very little during the same period.<sup>3</sup> These trends suggest that the recent rise is a result of delayed fertility; an attempted recovery of childbearing that was "missed" during the low-fertility years of the 1970's.

Information from the June supplements of the Current Population Survey lends support to this proposition. Estimates from these surveys indicate the percent of childless wives aged 30 to 34 who expect a future birth to have risen from 33.5 percent in 1975 to 54.4 percent

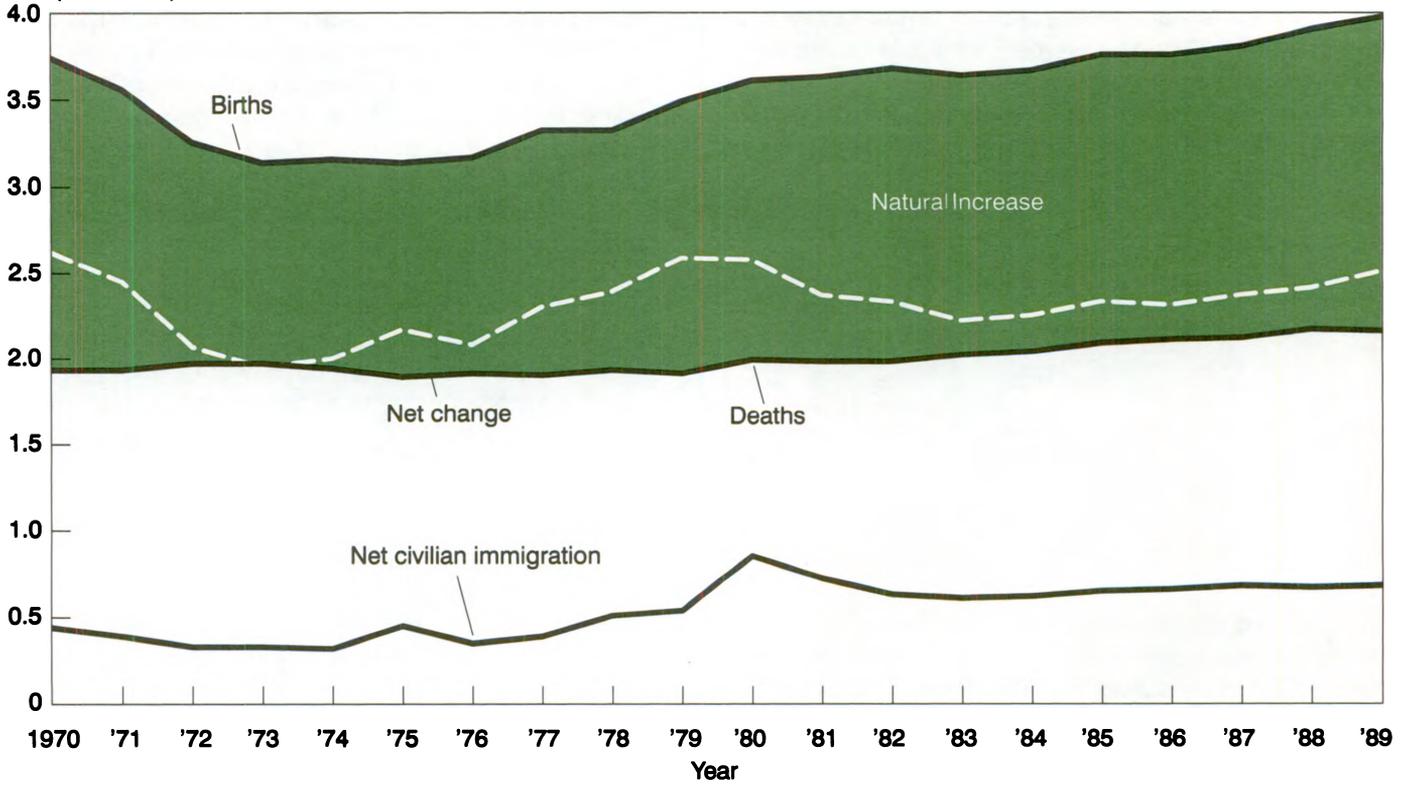
<sup>1</sup>Comparison of the 1990 census, as enumerated, with the 1980 census implies a decade increase of 22.2 million persons, somewhat less than the 23.7 million growth resulting from births, deaths, and migration estimated for the decade. Because the focus of this report is on the explanation of trends, rather than comparison of decennial counts, the analysis will be consistent with the larger increase of 23.7 million.

<sup>2</sup>The total fertility rate is actually the number of births that 1,000 women would have in their lifetime if, at each year of age, they experienced rates of childbearing occurring to women of that age in the specified calendar year. It should be stressed that the total fertility rate is an annual (or period) measure of fertility, even though it is expressed as a lifetime (or cohort) measure. It is affected by the timing as well as the level of childbearing. For example, the total fertility rate of 3,760 in 1957 was partly a result of high fertility rates for both younger and older women occurring in the same year. The highest actual cohort fertility rate among women who were then in the childbearing ages will be about 3,200 for women born in the early 1930's.

<sup>3</sup>National Center for Health Statistics, "Advance report of final natality statistics, 1988", *Monthly Vital Statistics Report*; vol. 39, no. 4 suppl., Hyattsville, Maryland: Public Health Service, 1990.

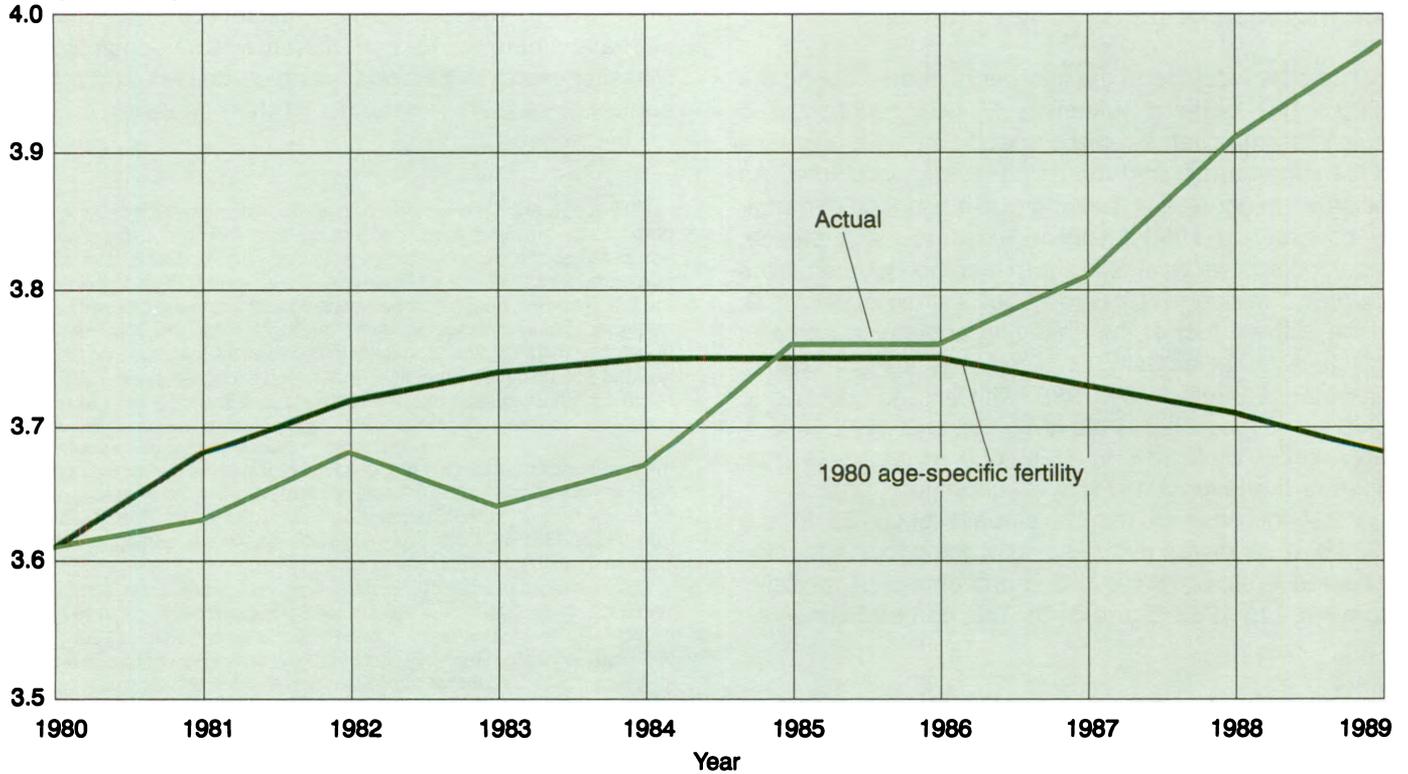
**Figure 1-1.**  
**Components of Population Change, United States: 1970 to 1989**

(In millions)



**Figure 1-2.**  
**Live Births, Actual Versus 1980 Age-Specific Fertility: 1980 to 1989**

(In millions)



in 1988,<sup>4</sup> clearly indicating an increased willingness to initiate childbearing late in the reproductive ages. Yet this tendency is not associated with higher family size expectations for younger women, as would be the case if the fertility rise for older women was part of an overall upward trend in family size. Evidence from the 1988 survey shows the number of lifetime births expected per 1,000 women (births to date plus future births expected) to be nearly invariant (close to 2,100) by age group above age 20.<sup>5</sup>

Age	Births to date	Future births expected	Lifetime births expected
20 and 21 .....	385	1,716	2,102
22 to 24 .....	654	1,415	2,069
25 to 29 .....	1,163	953	2,116
30 to 34 .....	1,674	384	2,057

These two observations, as well as the aging of the fertility pattern previously observed, suggest that the increase in fertility during the 1980's was caused not by changes in expected completed family size but by a recovery of previously postponed childbearing. It appears that the additional births of the late 1980's were born to early Baby Boom couples (born around the early 1950's) who resisted having births when they were younger.

### The Trend in Deaths: Mortality Decline and the Increase of the Elderly Population

The slow increase in the number of deaths during the 1980's has been a reflection of two countervailing factors, an improvement in age-specific mortality (increase in life expectancy) and the aging of the population. As indicated in figure 1-4, holding age-sex-specific mortality constant at 1980 levels would produce a steady, linear increase in deaths for both men and women, from about 2.0 million in 1980 to about 2.4 million in 1989, which is the effect of the changing population and age structure. What actually occurred was an increase to less than 2.2 million by 1988, with a slight decline in 1989—and the increase did not begin until 1982. In fact, the number of deaths in 1982 (2.0 million) was very close to the level of 1973, 9 years earlier.

What increase in deaths actually occurred in the 1980's, while driven by the aging of the population, also reflected a slowdown in the improvement of mortality from 1982 to 1988 (figure 1-5). This can be blamed on

a reduction in both of the major cause-specific improvements, heart disease and stroke, principally for the female population. In the period from 1982 to 1988, very little reduction occurred in the age-adjusted death rate<sup>6</sup> due to heart disease for women, while it continued to decline for men. Cancer mortality changed little for either sex; to the extent that there was a change, it was in the direction of a slight rise for females. Mortality due to accidents continued its decline during the period, but the positive effect of the change was principally confined to males, as they have always been more likely victims of accidents than females. In general, what mortality improvements occurred during the period had little effect on women, although women continue to have lower mortality due to all these causes than men.<sup>7</sup>

The trend in mortality by sex can be seen through another age-independent indicator, the life expectation at birth. This stood at 70.0 years for the male population in 1980, and 71.5 years in 1988, an increase of 1.5 years. For females, the indicator improved only 0.9 years, from 77.4 in 1980 to 78.3 in 1988.<sup>8</sup> While women continue to have higher life expectancy than men, the gap narrowed from 7.4 to 6.8 years during this 8-year period.

### Migration to and from the United States

While most of the increase in the United States population during the 1980's was brought about by the excess of births over deaths, net civilian immigration was substantial, at 6.8 million for the 10-year period from 1980 to 1989, inclusive. This source of population increase amounted to more than the 1980 population of Massachusetts and Rhode Island combined, and represented more than one-quarter of the population growth for the decade.

<sup>6</sup>The age-adjusted death rate is an indicator of mortality that purports to be independent of changes in the age structure. It is computed as the weighted average of age-specific death rates for 11 age categories, where each category is weighted by the proportion of the total resident population enumerated in the census of 1940 in that category. Thus, the age-adjusted death rate for the total resident population in 1988 can be roughly interpreted as the crude death rate (deaths per 100,000 population) that would be observed in 1988 as a result of 1988 age-specific mortality rates if the age structure had remained unchanged since 1940. Age-adjusted death rates for a specific cause of death are computed in the same manner, except that the age-specific rates are computed only for deaths due to that cause. For further information, see National Center for Health Statistics: *Vital Statistics of the United States, 1987*. Vol. II, Mortality, Part A. DHHS Pub. No. (PHS) 88-1122. Public Health Service, Washington, 1988, Section 7, p. 19.

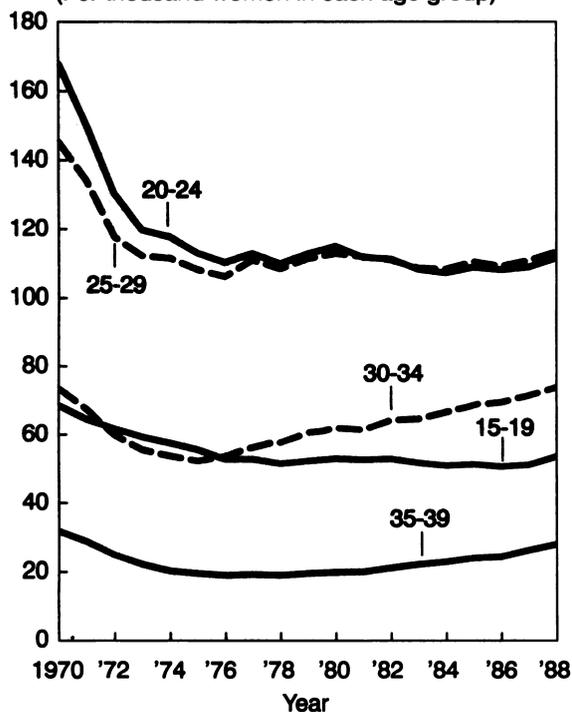
<sup>7</sup>This analysis is based on data from National Center for Health Statistics, *Vital Statistics of the United States, 1975 through 1987*, vol. II, mortality, part A., Washington: Public Health Service, 1990; and National Center for Health Statistics, "Advance report of final mortality statistics, 1988", *Monthly Vital Statistics Report*, vol. 39, no. 7 supp., Hyattsville, Maryland: Public Health Service, 1990.

<sup>8</sup>National Center for Health Statistics, "Advance report of final mortality statistics, 1988", *Monthly Vital Statistics Report*, vol. 39, no. 7 supp., Hyattsville, Maryland, Public Health Service, 1990, p. 16.

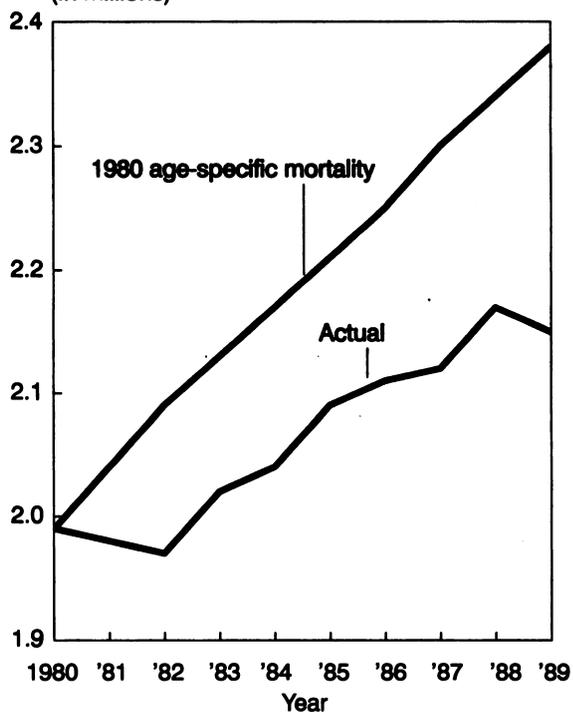
<sup>4</sup>Current Population Reports, Series P-20, No. 436, *Fertility of American Women: June 1988*, U.S. Government Printing Office, Washington, DC 1989, p. 12.

<sup>5</sup>*Ibid.*, p. 33.

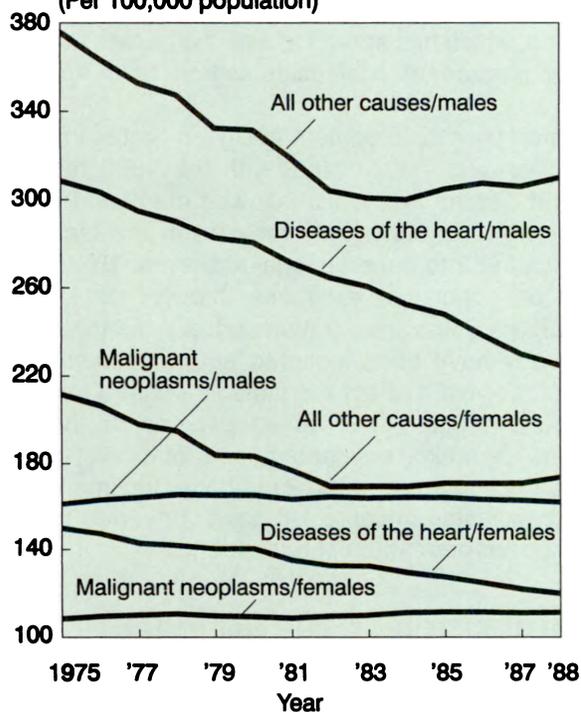
**Figure 1-3.**  
**Age-Specific Fertility**  
**Rates: 1970 to 1988**  
 (Per thousand women in each age group)



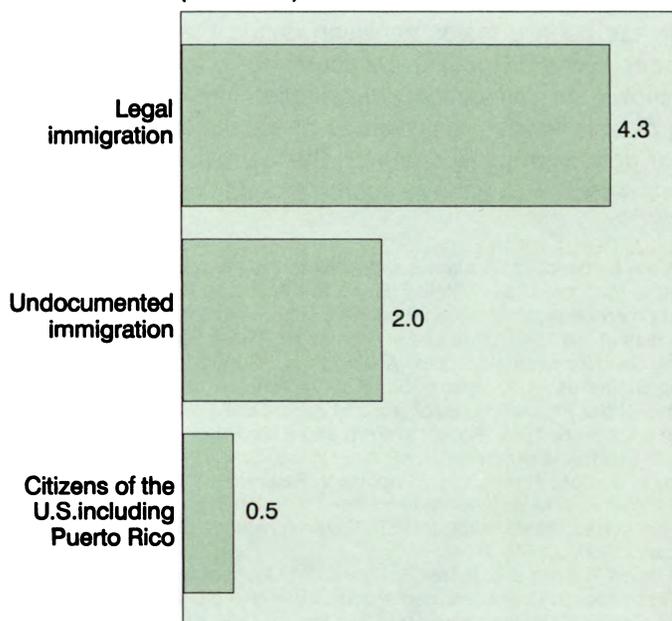
**Figure 1-4.**  
**Resident Deaths, Actual 1980**  
**Age-Specific Mortality: 1980 to 1989**  
 (In millions)



**Figure 1-5.**  
**Age-Adjusted Death Rates, by Cause**  
**of Death and Sex: 1975 to 1988**  
 (Per 100,000 population)



**Figure 1-6.**  
**Net Migration to the United States**  
**by Major Source: 1980 to 1989**  
 (In millions)



Migration as a component of the growth of the national population is not confined to the immigration of non-U.S. citizens from foreign countries, although this is the major source. It also includes the movement of United States citizens between the 50 States plus the District of Columbia and the outlying areas, principally Puerto Rico, as well as abroad. Figure 1-6 compares three major sources of immigration. Net legal immigration is defined here as the difference between the number of aliens establishing legal residence in the United States (either as permanent residents or refugees) and the number of legal residents leaving the country for permanent residence abroad.<sup>9</sup> This category makes up the largest source of net immigration, 4.3 of the total 6.8 million net immigration for the 10-year period. While no current data exist on the number of undocumented immigrants, the population increase from this source has been estimated at 200,000 per year, or 2 million for the decade. Research indicates that undocumented immigration first became a major source of new U.S. residents in the 1970's and continued during the 1980's.<sup>10</sup> It should be emphasized that the term "undocumented" refers to the status of these immigrants at the time of their entry into the United States, not their current legal status. The third category, a residual, consists of net migration from Puerto Rico to the United States, and a small positive migration balance of civilian citizens temporarily residing abroad (primarily Federal employees and dependents of the U.S. military).

Among legal alien immigrants (including refugees), there has been a major transition during the last two decades in the distribution by country of origin. Figure 1-7 shows the distribution of legal alien immigrants by area of birth for five major areas of the world for four 5-year periods, roughly spanning the last two decades. Latin America was a major source of legal immigration

<sup>9</sup>While no direct information is available on the emigration of legal residents from the United States during the 1980's, this analysis is based on an estimate of 160,000 per year. This estimate was based on studies of the 1970's and earlier, with support from surveys in the 1980's. See, for example, Karen A Woodrow, "Emigration from the United States using Multiplicity Surveys," presented at the annual meeting of the Population Association of America, Toronto, Ontario, Canada, May 3-5, 1990; Robert Warren and Ellen Percy Kraly, "The Elusive Exodus: Emigration from the United States," *Population Trends and Public Policy*, No. 8, Population Reference Bureau, 1985; Robert Warren and Jennifer Marks Peck, "Foreign-Born Emigration from the United States: 1960 to 1970", *Demography* Vol. 17, No. 1, February, 1980, pp. 72-84.

<sup>10</sup>Robert Warren and Jeffrey S. Passel, "A Count of the Uncountable: Estimates of Undocumented Aliens Counted in the 1980 United States Census," *Demography*, Vol. 24, No. 3 (August 1987), pp. 375-393. Jeffrey S. Passel and Karen A. Woodrow, "Change in the Undocumented Alien Population in the United States, 1979-1983," *International Migration Review*, Vol. 21 (No. 4, Winter), pp. 1304-1334. Karen A. Woodrow, Jeffrey S. Passel, and Robert Warren, "Preliminary Estimates of the Undocumented Immigration to the United States, 1980-1986: Analysis of the June, 1986 Current Population Survey," *Proceedings of the Social Statistics Section of the American Statistical Association*, August, 1987.

to the United States for all time periods, the primary country of birth being Mexico. However, the distribution of the remaining legal immigrants has seen a major transition from Europe to Asia. In the period from mid-1969 to mid-1974, immigrants of Asian and European birth were evenly balanced. Whereas, by the late 1980's, the European total had diminished substantially, and the number of Asians had increased sufficiently even to exceed the number of Latin Americans. Immigration in the years around 1980 was especially dominated by Asians and Latin Americans because of two exceptional developments. The first was an unusually large flow of persons from refugee camps in Southeast Asia, principally "boat people," who came over a roughly 3-year period from 1979 to 1981. The second was the Mariel boatlift from Cuba in the spring of 1980.

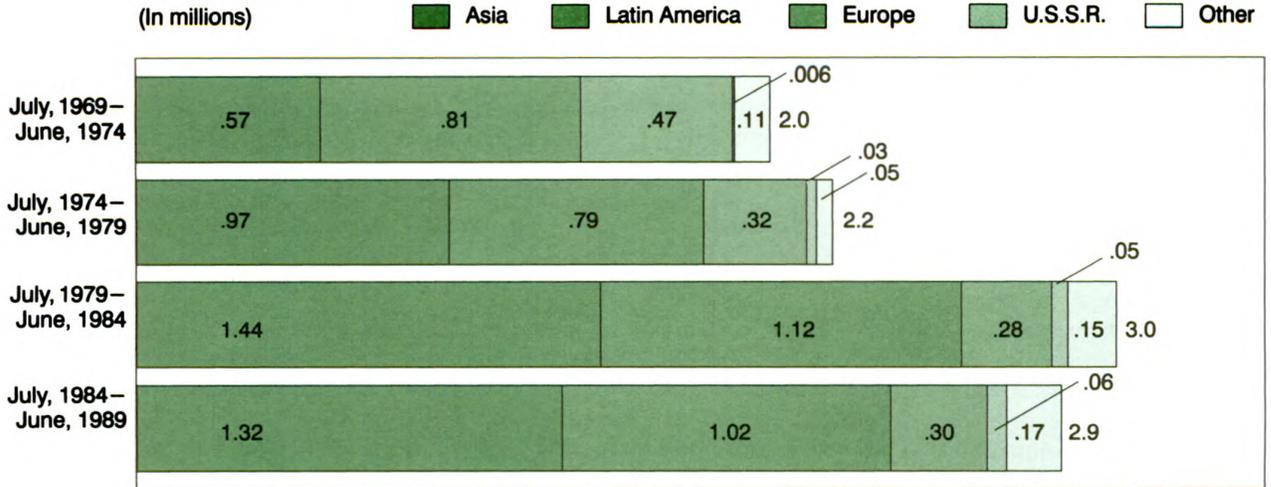
The long-term explanation for the emergence of Asia as a major source of immigrants to the United States lies in a major shift in U.S. immigration policy that occurred in the 1960's. In 1965, the Immigration and Nationality Act was amended to abolish the national origin of the U.S. population as a basis for defining immigration quotas. This meant that the distribution of legal immigrants by national origin no longer needed to resemble the distribution of the resident population. Countries with little historical representation in the United States, primarily in Asia, could become major suppliers of immigrants. This shift has been reinforced by legal emphasis on family reunification, which has favored the relatives of recent immigrants. Limits to immigration from the Western Hemisphere were also imposed for the first time, which has served to limit the growth in the flow of new permanent legal residents from Latin America.

A second major development in United States immigration policy occurred in 1986 with the Immigration Reform and Control Act, which allowed many undocumented immigrants continually resident in the United States since 1982 to become legal residents. This had no effect on population estimates through 1989, as persons adjusting their immigration status under this law would already have been included as undocumented immigrants. Nor did it affect the national origin distributions shown in figure 1-7, as all persons in these distributions were legal residents at time of entry. However, it means that many of the 2 million undocumented immigrants indicated in figure 1-6 have converted their status to that of permanent U.S. resident.

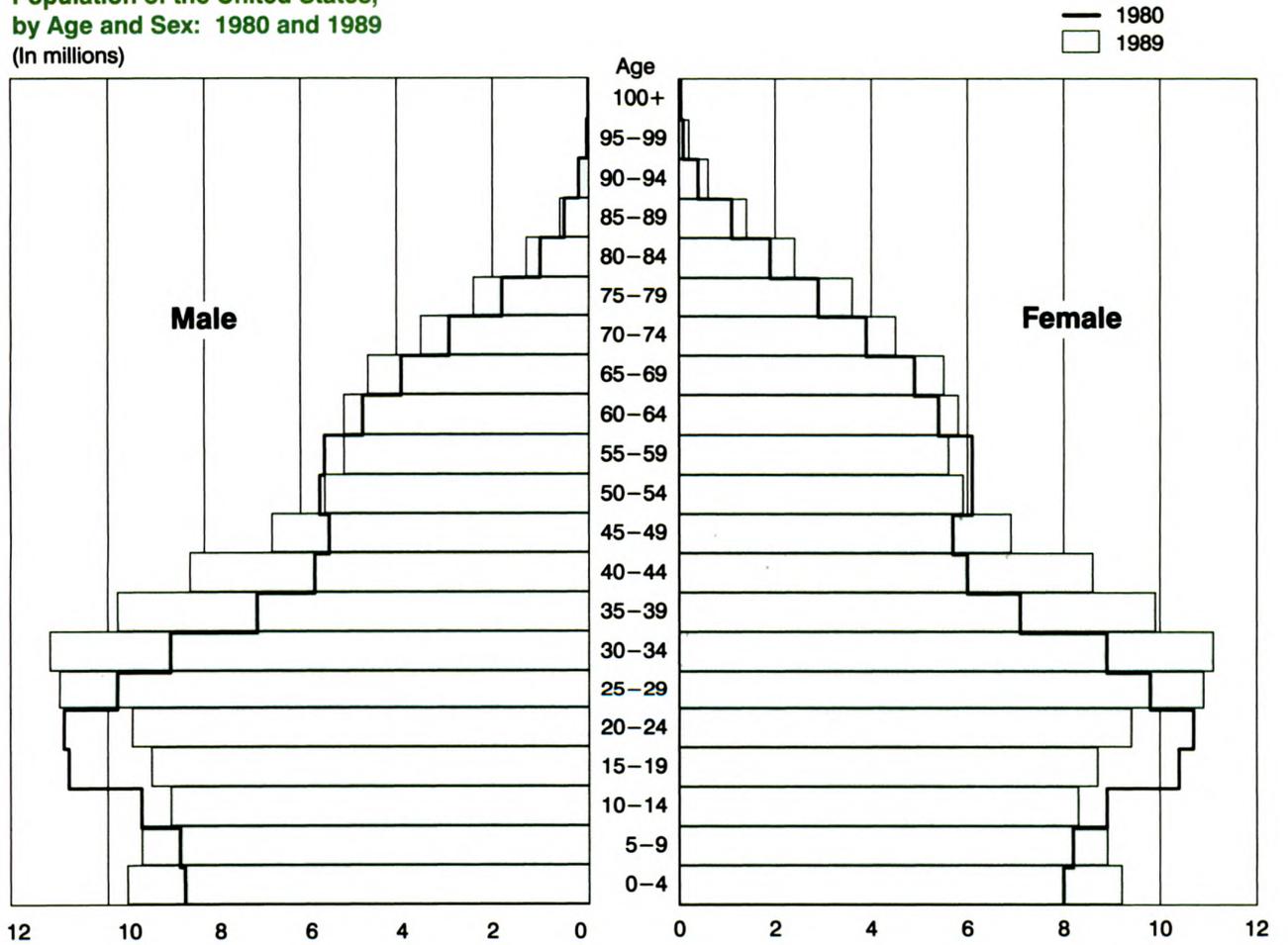
## THE DISTRIBUTION OF THE NATIONAL POPULATION BY MAJOR DEMOGRAPHIC CHARACTERISTICS

The distribution of a population by major demographic characteristics is an outgrowth of the historical trend in births, deaths, and immigration. The clearest

**Figure 1-7.**  
**Legal Immigration to the United States,**  
**by Country of Birth**  
 (In millions)



**Figure 1-8.**  
**Population of the United States,**  
**by Age and Sex: 1980 and 1989**  
 (In millions)



indication of this in the United States population of the 1980's is the impact of the aging Baby Boomers on the age distribution; itself the result of a past trend in fertility. The ongoing decline in mortality has been a factor in the aging of the population through the increase in the proportion who are elderly. The impact of immigration is most apparent through the changing racial and ethnic distribution of the population.

### The Trend in the Population by Age and Sex

While the interaction of population change components with the age and sex distribution is complex, four major developments can be identified with the 1980's: (1) a rapid increase in the population 35 to 44 years of age; (2) a decline in the population 14 to 24 years of age; (3) an increase in the elderly proportion of the population, especially the oldest segment, 85 years and over; and (4) an end to the near century-long trend of higher growth of the female population relative to the male population.

The first two developments are the result of the well-known trend in births from 1946 to the mid-1970's and can be seen in the 1980 and 1989 age pyramids overlaid in figure 1- 8. The skyrocketing of births from 1946 to 1954 meant a similarly dramatic rise in the number of 35th birthdays from 1981 to 1989. As a result, the 10-year age group above age 35 gained far more persons than it lost, resulting in a 41.4 percent increase in the number of 35- to 44-year-olds from mid-1980 to mid-1989. While immigration during the 1980's helped to strengthen this trend, the major cause was clearly the Baby Boom. Similarly, the drop in births from 1965 to 1973 began to take its toll on the high-school-age population, 14 to 17 years of age, in 1979, and continued to do so throughout the decade. By 1983, it began to affect the young adult population aged 18 to 24. (Gradual declines in these age groups were apparent a few years earlier, as births actually peaked in 1957, 7 years before the decline became rapid). From mid-1980 to mid-1989, the 14- to 17-year group dropped by 16.4 percent, the 18- to 24-year group by 12.5 percent.

A further development of the 1980's, which had characterized previous decades as well, was an increase in the elderly population (here defined as the population 65 and over) relative to the population as a whole. On July 1, 1970, this group made up 9.8 percent of the total population; by mid-1980, this percentage had risen to 11.3, and by mid-1989, to 12.5. The elderly population increased by 20.5 percent from 1980 to 1989, a rate of 2.1 percent per year, or double the rate of the population as a whole. While the elderly population was outgrowing the nation as a whole, it was itself also aging. Persons aged 85 and over increased by 34.0 percent, or 3.3 percent annually from mid-1980 to mid-1989. This category made up 8.8 percent of the population 65 and over in mid-1980 and increased to 9.8 percent by mid-1989.

The rapid growth and aging of the elderly population is traceable to all three population change components, in varying degrees. The most obvious is the previously cited decline in mortality that has persisted throughout most of the century. In the last few decades, the increase in life expectancy has increased the number of years that the average 65-year-old would remain in the population, thus sustaining the growth in the elderly population.<sup>11</sup> Another factor pertinent to the increase in the population 85 and over was the increase in births during the last two decades of the nineteenth century, when most of this group was born.

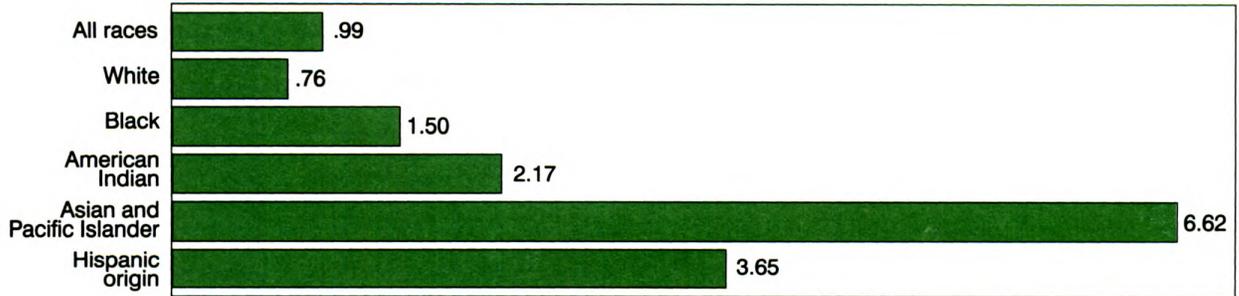
Finally, we have observed an apparent end (or at least a pause) to the more rapid growth of the female than the male population. The resident male population outgrew the female population by 164,000 persons from April 1, 1980, to July 1, 1989. The last decade to see more growth for males than females was the 1900-1910 period. In the 1970's (from April 1, 1970, to April 1, 1980), the female population gained 1,056,000 more than the male population.

Most of the explanation for the shift from the 1970's to the 1980's in the relative population growth of the two sexes was a result of a shift in the number of deaths. During the 1970's, there were roughly 2.1 million more male deaths than female deaths, while in the 1980's, male deaths exceeded female deaths by only 1.2 million. There were two reasons for this narrowing of the gap in the absolute number of deaths. First, as previously noted, age-specific mortality fell more for males than for females during the 1980's. During the 1970's, the reverse was true. Secondly, because the population during the 1980's had a higher proportion elderly, a larger proportion of deaths occurred among the elderly. Because females far outnumber males among the elderly (especially among the persons 85 and over who increased the most), female deaths also outnumber male deaths in this category in spite of higher age-specific death rates among males. The result of the increasing representation of elderly deaths among total deaths was, thus, a further reduction in the excess of male over female deaths.

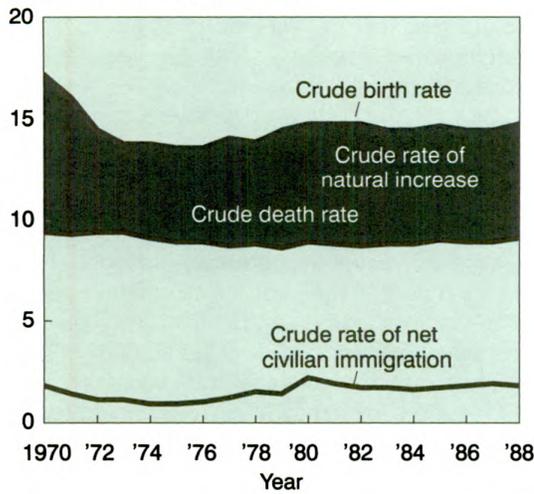
Two other explanations for the relative increase in the male with respect to the female population are a male excess among net immigrants and an increase in the number of births. Female net immigration exceeded male net immigration for every year during the 1970's; the reverse was true in the 1980's. The previously cited increase in births late in the decade caused the male population to grow relatively faster because of a universal, biologically determined excess of male over female births: 51.3 percent of all births were male.

<sup>11</sup>Reduction in mortality can make a population younger if it is focused primarily on infant and child mortality. This has not been the case in the United States during this period, however.

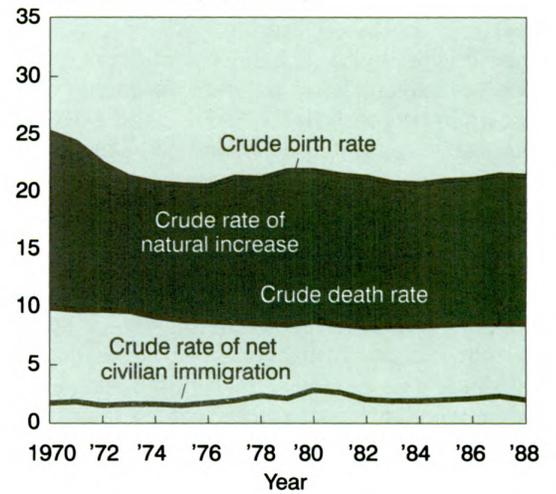
**Figure 1-9.**  
**Average Annual Percent Change in Population,**  
**by Race and Hispanic Origin: 1980 to 1989**



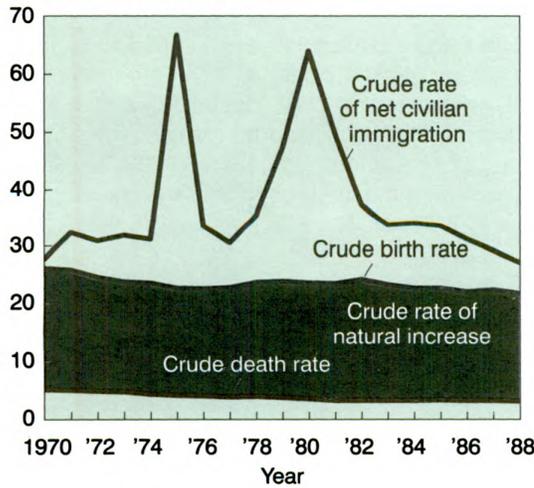
**Figure 1-10.**  
**Rates of White Population**  
**Change: 1970 to 1989**  
 (Per thousand population)



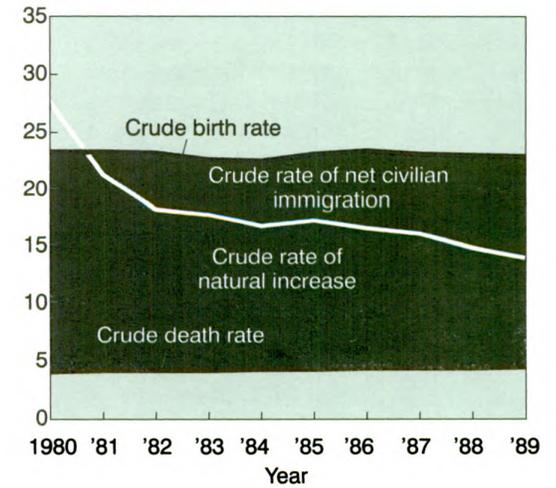
**Figure 1-11.**  
**Rates of Black Population**  
**Change: 1970 to 1989**  
 (Per thousand population)



**Figure 1-12.**  
**Rates of Other Races**  
**Population Change: 1970 to 1989**  
 (Per thousand population)



**Figure 1-13.**  
**Rates of Hispanic-Origin**  
**Population Change: 1980 to 1989**  
 (Per thousand population)



## The Trend in the Population by Race and Hispanic Origin

The 1980's saw major shifts in the distribution of the national population by race as well as a substantial increase in the proportion of Hispanic origin. From the census of April 1, 1980, to July 1, 1989, the Black population increased from 11.8 to 12.4 percent of the total resident population; the percent Asian and Pacific Islander increased from 1.6 to 2.8; the percent American Indian, Eskimo, and Aleut from 0.6 to 0.7. At the same time, the White percentage of the resident population declined from 85.9 to 84.2. The Hispanic population, which can be of any race, increased from 6.4 to 8.3 percent of the population. The growth rates for these population groups are shown in figure 1-9.

The shifting racial balance and the increase in the Hispanic population, like the age-sex distribution, have their origins in the components of population change, and the explanation is different for each group. This is shown in figures 1-10, 1-11, 1-12, and 1-13. The Black population exceeded the White population in both natural increase and net immigration. Natural increase, the major source of increase for both populations, accounted for most of the difference in the growth rate between Blacks and Whites (figures 1-10 and 1-11). The higher natural increase in the Black relative to the White population was the result of (a) a younger age structure of the population, placing a larger percentage in the childbearing ages and a smaller percentage in the ages of high mortality risk, and (b) higher age-specific fertility rates for women under 25. The slightly higher rate of net civilian immigration for Blacks relative to Whites was primarily a result of migration from the Caribbean, principally Jamaica and Haiti. In the period from mid-1980 to mid-1989, the Black population increased by 14.4 percent, more than double the percent increase for Whites (7.0 percent).

A dramatically different population growth scenario exists for the population of other races (including Asians, Pacific Islanders, American Indians, Eskimos, and Aleuts), shown in figure 1-12. Natural increase was substantially higher than for Whites, yet the rate of net civilian immigration dominated the rate of population growth. Heavy immigration of permanent residents, mainly from the Philippines and Southeast Asia, as well as a sustained flow of refugees from Southeast Asia, combined to produce a rate of net immigration consistently higher than the birth rate. A major peak in this rate was observed in 1980, due to the absorption of a large number of "boat people" from refugee camps in Southeast Asia. A similar, but short-lived rise occurred in 1975, associated with the end of the Vietnam conflict. This immigration was mostly confined to the Asian and Pacific Islander population; the estimates, in fact, assume that net immigration for the American Indian, Eskimo,

and Aleut population was zero.<sup>12</sup> The result of immigration and natural increase combined during the 1980's was an increase of 63.7 percent in the other races population from mid-1980 to mid-1989. The Asian and Pacific Islander population grew by 79.5 percent during this period; the American Indian, Eskimo, and Aleut population grew by 21.6 percent.

The population of Hispanic origin (which can be of any race) also increased rapidly, but the increase was evenly divided between natural increase and net civilian immigration. Immigration received a thrust in 1980 with the Mariel boatlift from Cuba, which brought about 120,000 persons of Hispanic origin into the United States. The rate of immigration per thousand population declined gradually during the 1980's. However, most of the decline was not caused by a reduction in the number of immigrants, but by an increase in the total Hispanic population, which is the denominator of the rate. The absolute net flow of Hispanic migrants to the United States hovered close to 300,000 per year for the entire decade, nearly half the net migratory gain for the entire U.S. population. A detailed analysis of the birth and death rate trends for the Hispanic population during the decade is not possible because of limitations of the data on births and deaths; many States did not include Hispanic origin on birth or death certificates until 1989. However, estimates indicate rates of natural increase more than double those of the population as a whole. Explanations include (1) a youthful population sustained by a heavy migratory influx of persons of childbearing age, (2) higher than average age-specific fertility rates, and (3) a life expectancy at birth estimated to be equal to or slightly higher than the population as a whole.<sup>13</sup> Taking these factors and the high rate of net immigration together, the Hispanic population increased by 38.7 percent from mid-1980 to mid-1989, four times the percentage increase of the population as a whole.

## CONCLUSION

The 1980's have seen a sustained national rate of population growth close to 1.0 percent per year, a continued aging of the population, and a continued increase in the racial and ethnic diversity of the population; all characteristics of the 1970's as well. Three major developments distinguish the population trends of the 1980's from those of previous decades. First, the

<sup>12</sup>This assumption does not take account of an unmeasured, but presumably small exchange of migrants in this category with Canada and Latin America.

<sup>13</sup>The lower mortality of the Hispanic population than the non-Hispanic population is based primarily on evidence from California around 1980, and is mostly a result of differential mortality above age 50 (males and females), which favors Hispanics substantially. For information on the derivation of the Hispanic life table, see Current Population Reports, Series P-25, No. 995, *Projections of the Hispanic Population: 1983 to 2080* by Gregory Spencer, U.S. Government Printing Office, Washington, DC, 1986, pp. 26-27.

female "edge" in the population increment ended as the male excess in the number of deaths was reduced, net immigration brought in more males than females, and the proportion of small children (in which males are more numerous than females) increased with a rise in births. Second, the population of childbearing age (15 to 44) shifted from a dominance of Baby Boomers in their twenties to a dominance of Baby Boomers in their thirties. Third, the population continued to grow in spite of itself, as "catch-up" childbearing among women in their thirties brought about an increase in births late in the decade, and a heavy movement of refugees around 1980 announced the beginning of a decade of continued immigration from abroad.

Whether these trends will continue into the next decade remains to be seen. One observation can be made with certainty; the bulk of the Baby Boomers over 30 in 1989 will be over 40 by the end of the next decade. This would predict an end to the increase in births, but such a development also depends on the decisions of

potential young parents, some of whom are still in their early teens. The entrance of the birth cohorts of the late 1920's and early 1930's into the population 65 and over should bring a reduction in the growth rate of the elderly population, as births declined during this period—but this is also influenced by the future course in life expectancy, which is harder to predict.<sup>14</sup> The future course of migration into the national population represents the area in which demographic science is most at a loss, as it ultimately depends on a combination of world events and the development of national policy. The national population will undoubtedly continue to grow at a rate that is high in comparison with the nations of the industrialized world, but low compared with the growth of the world population as a whole.

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<sup>14</sup>For more information on projected population and components of change, see Current Population Reports, Series P-25, No. 1018, *Projections of the Population of the United States, by Age, Sex, and Race: 1988 to 2080*, by Gregory Spencer, U.S. Government Printing Office, Washington, DC, 1989.

## Chapter 2. State Population Trends

Edwin Byerly

### HIGHLIGHTS

The South is the Nation's most populous region with just over 34 percent of our Nation's inhabitants. The Northeast region has the smallest share, with 20 percent of our Nation's population.

The South also had the largest population gain (10.2 million) of any region this decade; however, the trends in its two component divisions differed. Average annual growth rates increased in the South Atlantic division between the first and second halves of the decade, but rates decreased in the West South Central division.

The West was the most rapidly growing region in the 1980's, increasing by 20 percent between 1980 and 1989. Within the region, average annual growth rates decreased in the Mountain division and increased in the Pacific division between the first and second halves of the decade. The Pacific is the Nation's fastest growing division this decade.

California accounts for three-quarters of the Pacific division's population and 12 percent of the national population. A quarter of America's growth in the 1980's occurred in California. Fifty-four percent of California's growth this decade is attributed to net immigration.

Every State showed growth in its 25-to-44 population this decade. Nevada led the States, increasing its Baby Boom population by 56.3 percent, while the District of Columbia's 7.7-percent increase was smaller than any state.

Florida had the highest median age in 1989 at 36.6 years, and Utah had the lowest at 25.7 years.

### INTRODUCTION

While the Nation's average annual rate of population growth remained stable (about 1.0 percent) in the 1980's, there has been much variation in rates of population change within and between our regions, divisions, and States. As population levels of some sections of the country ascended on a wave of immigration in the 1980's, the growth of others diminished with the outflow of migrants. In some States, the population dropped below the 1980 level early in the decade but later recovered and exceeded the 1980 level. In other States, high rates of population growth in the early 1980's were later replaced with reduced rates of growth. There were also States that experienced population losses every, or nearly every year in the decade.

Differences in rates of natural increase (births minus deaths) and net migration have accounted for the differences in rates of population change in regions, divisions, and States. Although natural increase was the dominant force in population change in most States, net migration was more variable among States and sometimes the component that determined whether a State had a net gain or loss in population for the decade.<sup>1</sup> Between 1980 and 1989, about half our States had more people moving into than out of the State (net immigration), while for the remaining States, the opposite was true (net outmigration).

States also vary in age and sex composition. The spread in median age among States is nearly 11 years. Nationally there are 105 females for every 100 males, but further reading will reveal that five States have more males than females.

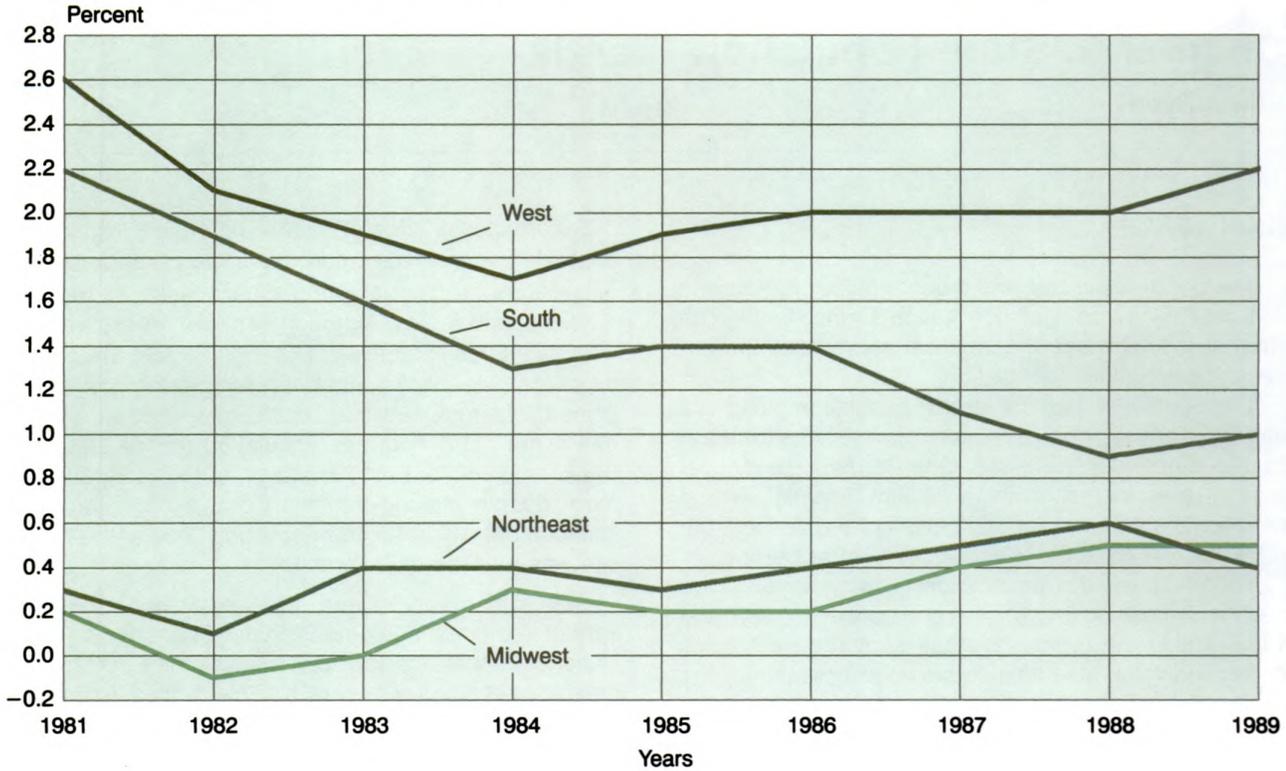
The population trends discussed in this chapter are based on July 1, 1981 to 1989, resident State population estimates published in Current Population Reports, Series P-25, No. 1058, released in March 1990.

### NATIONAL AND REGIONAL POPULATION TRENDS

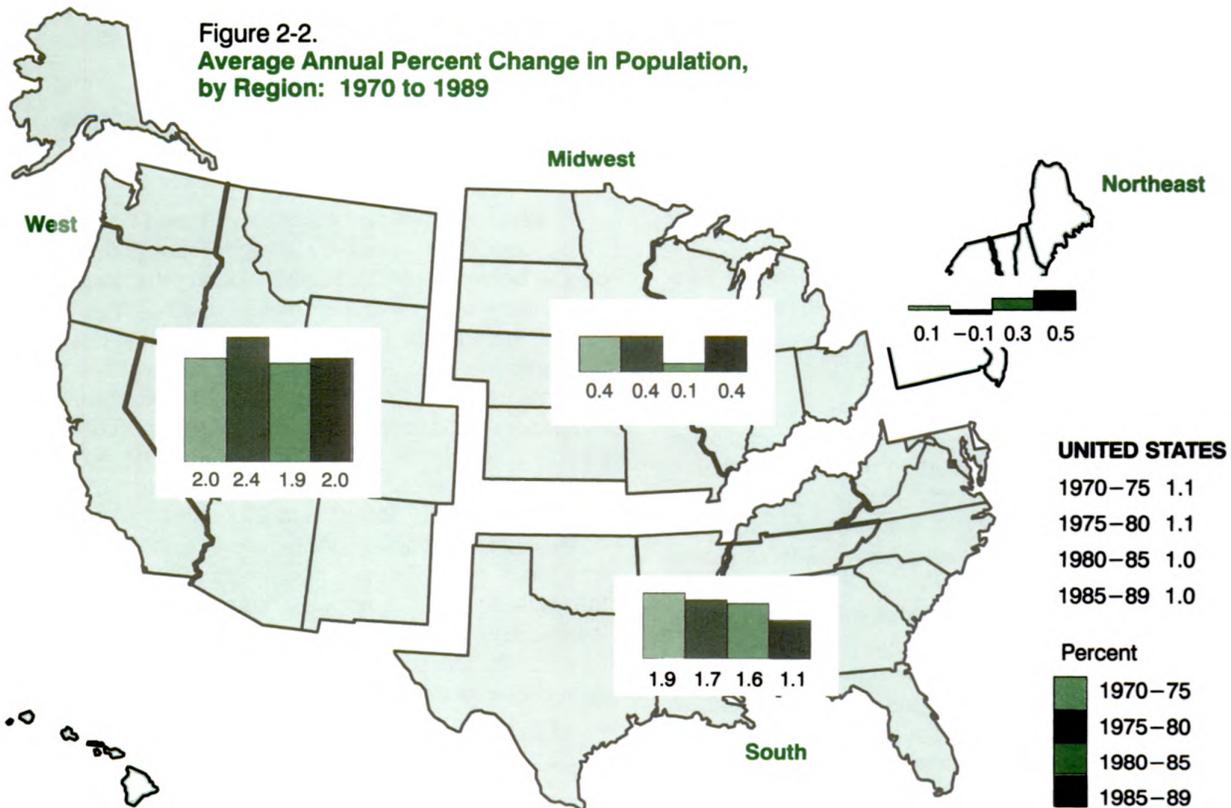
The Nation's resident (excluding Armed Forces overseas) population grew by 21.7 million (9.6 percent) people between 1980 and 1989. During the decade, the 34.5 million births and 19.1 million deaths allowed for a natural increase of 15.5 million. International net migration amounted to 6.2 million or 28.6 percent of the national growth. In 1989, the South was the most populous region, containing just over 34 percent of our Nation's population. The Midwest was the next most populous (24 percent), followed by the West and Northeast, which comprised 21 and 20 percent, respectively, of the Nation's population. Figure 2-1 shows the West was the region with the highest annual rate of growth in the 1980's, and the Midwest was the region with the lowest. The paragraphs that follow will discuss population distribution and trends in regions and their component divisions and States.

<sup>1</sup>This net migration came from both internal migration (to and from other States) and international migration (legal immigration, undocumented immigration, and emigration).

**Figure 2-1.**  
**Annual Percent Change in Population by Regions:**  
**Years ending July 1981 to July 1989**



**Figure 2-2.**  
**Average Annual Percent Change in Population,**  
**by Region: 1970 to 1989**



## THE NORTHEAST

The Northeast region grew by a modest 1.6 million or 3.3 percent between 1980 and 1989 despite net outmigration of just over 400,000. Growth was strongest in the second half of the 1980's with the average annual growth rate of 0.3 percent in 1980 to 1985 increasing to 0.5 percent between 1985 and 1989. This was because of the average annual rate of net migration rising from -0.1 percent to zero percent (figure 2- 2). In its strongest year of growth (1987 to 88), the Northeast added nearly 290,000 to its population.

The Northeast region is divided into two divisions, New England and the Middle Atlantic division. Of the two, the Middle Atlantic division is the more populous. It showed the larger amount of growth (939,000) between 1980 and 1989. Its 1.5 million in natural increase allowed the Northeast to overcome the 544,000 in net outmigration. However, its average annual rates of population change were the second lowest of any division in the Nation, 0.2 percent in 1980 to 1985, and 0.4 percent in 1985 to 1989.

New York, the most populous of the three Middle Atlantic States (and the second most populous State in the Nation), had slow population growth in the 1980's. Net outmigration nearly every year in the decade limited New York's 1980-to-1985 average annual growth rate to 0.2 percent (figure 2- 3) and its 1985-to-1989 rate to 0.3 percent (figure 2- 4). Pennsylvania began the decade with a zero-percent average annual rate of change, then during the second half of the decade net outmigration lessened enough to allow a 0.4-percent average annual rate of increase. New Jersey fared somewhat better with slight net immigration supporting a 0.5-percent average annual rate of population increase during the first half of the decade, then nudging up to 0.6 percent during the second half.

Although the Middle Atlantic division showed a larger amount of population growth this decade, New England was the faster growing of the two divisions. Its 698,000 population increase added 5.7 percent to its 1980 population. Like the Northeast as a whole, New England grew faster in the second part of the decade, as its average annual rate of change increased from 0.5 percent in 1980 to 1985 to 0.7 percent in 1985 to 1989.

New Hampshire has led New England in both overall rate (20 percent) and amount (187,000) of population growth in the 1980's. Net immigration was a greater share of New Hampshire's growth than natural increase. Although every State in New England registered population increases between 1980 and 1989, Massachusetts experienced an average annual rate of net outmigration (-0.1 percent) in both halves of the decade. Connecticut also experienced a -0.1-percent average annual rate of net outmigration in the second half of the decade.

## THE MIDWEST

The Midwest, our second most populous region, began the 1980's in the population doldrums. Between 1981 and 1983, the Midwest's population dropped by 77,000. Between 1980 and 1985, its average annual rate of net outmigration (-0.6 percent) had reduced its average annual rate of population change to 0.1 percent. Its loss from net outmigration during the 1980-to-1985 period totaled 1.8 million persons.

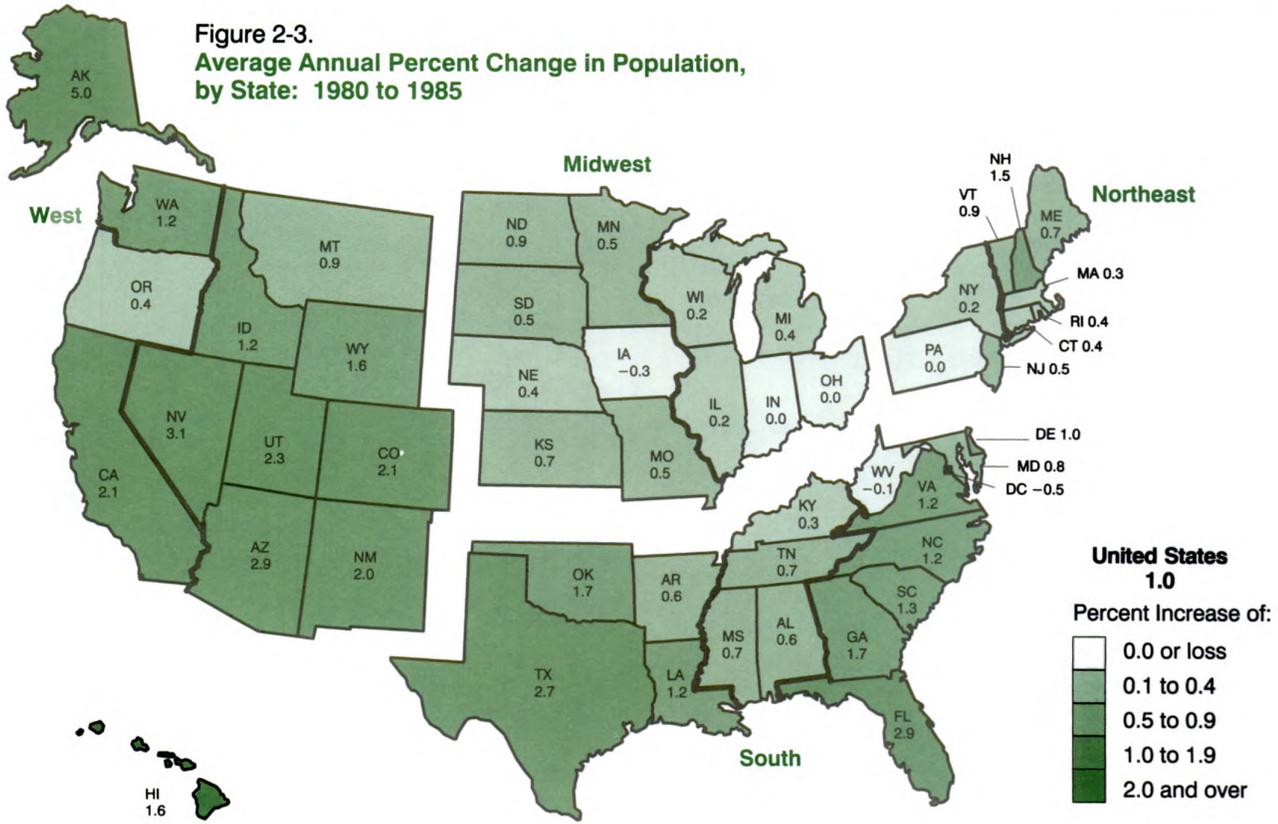
The East North Central division was hardest hit during the 1980-to-1985 period with zero-percent average annual population change and nearly 1.5 million in net outmigration. Three industrial States (where manufacturing is 33 percent or more of State earnings) in this division were especially affected.<sup>2</sup> Michigan suffered most, with net outmigration in the first half of the decade totaling 498,000 and a 1980-to-1985 population drop of 173,000 persons. Ohio's 369,000 net outmigration led to a 1980-to-1985 loss of 23,000 persons, and Indiana's net outmigration summed to 177,000 and caused a 10,000 drop between 1980 and 1985. In the second half of the decade, the net outmigration in these three States had slowed enough to allow modest annual population growth for the remainder of the decade. The 1985-to-1989 average annual population change figure for the East North Central division climbed to 0.4 percent.

Although the average annual rate of population change in the West North Central division held at 0.4 percent in both halves of the decade, population change in several of the States within this division was uneven. There were periods of slow growth or population losses in States where agriculture plays an important role in the economy (5 percent or more of State earnings; see footnote 2). Iowa experienced the largest loss of any State, dropping by 44,000 persons between 1980 and 1985 and 30,000 persons between 1985 and 1989. Iowa's annual net outmigration accumulated to -208,000 for the 1980-to-1989 period, although its average annual rate of net outmigration dropped slightly from -0.9 percent during 1980 to 1985 to -0.7 percent in 1985 to 1989.

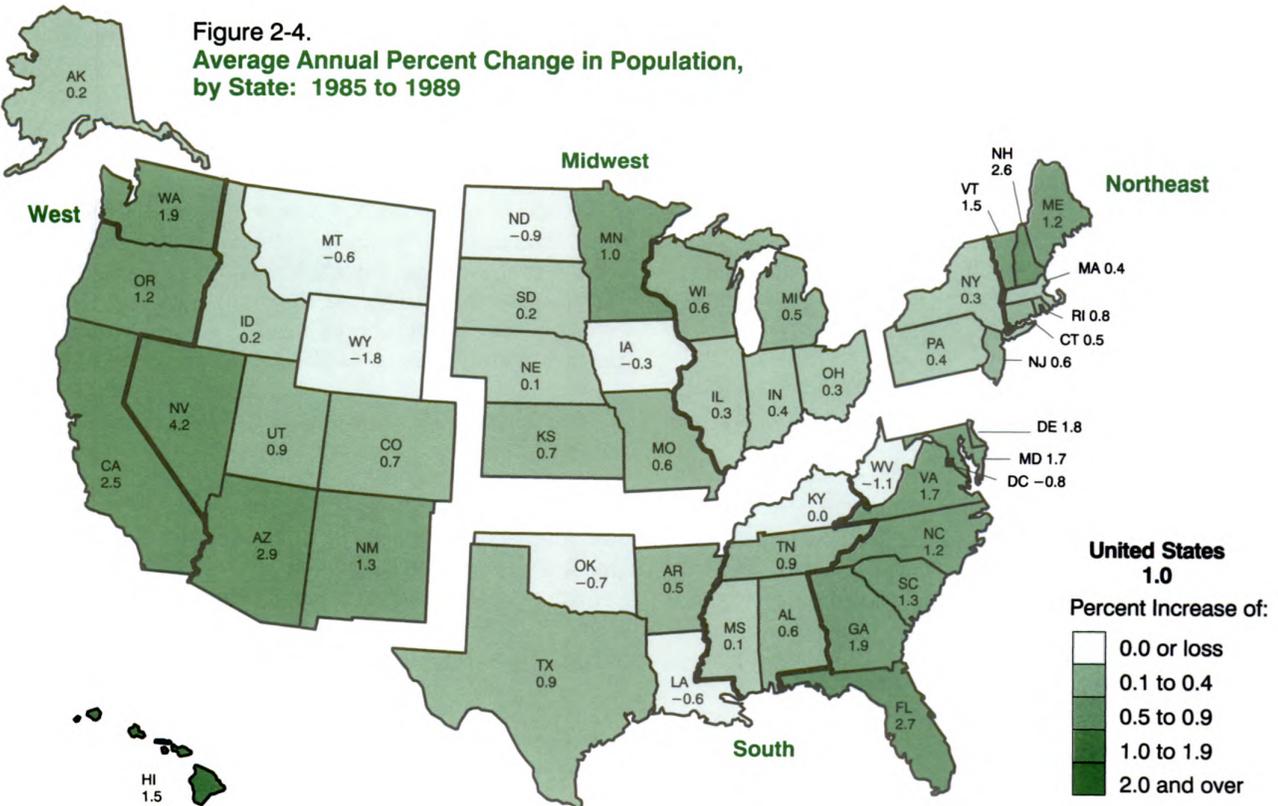
Nebraska, North Dakota, and South Dakota also experienced lulls in population growth during periods of the 1980's, with the second half of the decade the most affected. Nebraska's average annual net outmigration rate became large enough during 1985 to 1989 (-0.5 percent) to cause its 1980-to-1985 average annual growth rate of 0.4 percent to drop to 0.1 percent in the 1985-to-1989 period. South Dakota also incurred enough net outmigration from 1985 to 1989 to cause its average

<sup>2</sup>Percentages of manufacturing and agriculture earnings based on 1984 Bureau of Economic Analysis (BEA) data. Percentages of earnings from oil, gas, and coal industries are based on 1987 BEA data.

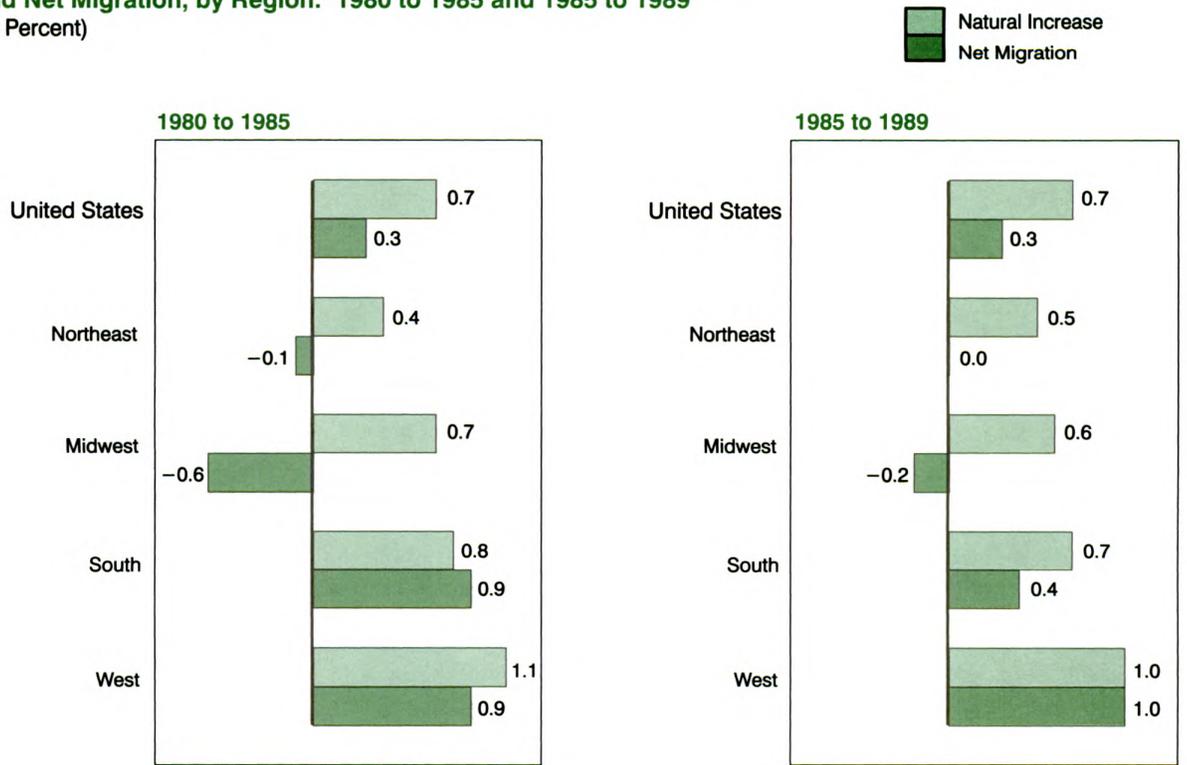
**Figure 2-3.**  
Average Annual Percent Change in Population,  
by State: 1980 to 1985



**Figure 2-4.**  
Average Annual Percent Change in Population,  
by State: 1985 to 1989



**Figure 2-5.**  
**Average Annual Change in the Population Due to Natural Increase and Net Migration, by Region: 1980 to 1985 and 1985 to 1989**  
 (In Percent)



annual growth rate to decline from 0.5 percent during 1980-to-1985 to 0.2 percent during the 1985-to-1989 period. North Dakota's average annual rate of change actually turned negative when it went from 0.9 percent in the first half of the decade to -0.9 percent in the second. Only natural increase kept North Dakota from marking a 1980-to-1989 population loss.

**THE SOUTH**

During the 1980's, the South added 10.2 million (13.5 percent) to its 1980 population, the largest numerical gain of any region. Nearly 4.8 million (47 percent) of that was from net immigration, also the most of any region. One may note from figure 2-5, however, that the average annual rate of net immigration declined from 0.9 percent during the first half of the 1980's, to 0.4 percent between 1985 and 1989, with a corresponding drop in the average annual rate of population change from 1.6 to 1.1 percent. What is not revealed is that while the South Atlantic division experienced a slight increase in its average annual growth rate between the first and second halves of the decade, the West South Central division experienced a dramatic drop in its average annual growth rate, from 2.1 to 0.4 percent.

In the South Atlantic division, all the States along the Atlantic coast from Delaware to Florida experienced 1980-to-1989 growth rates of 11 percent or more.

Florida was the fastest growing (30 percent) Southern coastal State, and North Carolina was the slowest (11 percent) during the 1980-to-1989 period. In Florida, net immigration rather than natural increase played a dominant role (87 percent) in the State's population growth. Of the 2.5 million in net immigration, approximately 16 percent was from international net migration. The South Atlantic division's average annual growth rate increased slightly from 1.6 percent during 1980 to 1985, to 1.7 percent in the 1985-to-1989 period.

Though the East South Central division experienced slight net outmigration this decade, it maintained nearly even average annual growth rates at 0.6 and 0.5 during the first and second halves of the 1980's. Tennessee was the 1980's fastest growing State in this division (8 percent) in the 1980's, with just over a third of this growth coming from net immigration.

A dramatic downturn in population growth occurred during the 1980's in the West South Central division. The 1980-to-1985 rate of 2.1 percent was the second highest of any division in the country, but the rate nosedived to 0.4 percent during the 1985-to-1989 period. This drop was triggered by a shift in the 1980-to-1985 average annual rate of net immigration from 1.1 percent to a net outmigration rate of -0.5 percent during the 1985-to-1989 period. The population slowdown was

evident in the three energy-producing States of Louisiana, Oklahoma, and Texas (where earnings from the oil, gas, and coal industries are 4 percent or more of State earnings; see footnote 2) in this division.

Oklahoma's 1980-to-1985 average annual net immigration rate (0.9 percent) turned to a net outmigration rate (-1.3 percent) in the second half of the decade, causing its average annual rate of population change to drop from 1.7 to -0.7 percent. A similar situation occurred in Louisiana when the 1980-to-1985 average annual net migration rate (0.2 percent) turned negative (-1.5 percent) during the 1985-to-1989 period, inducing the average annual rate of population change to switch from positive (1.2 percent) to negative (-0.6 percent).

Even the average annual rate of population growth in Texas (the State with the third largest amount of growth this decade) dropped off in the second half of the decade, going from 2.7 percent in 1980 to 1985 to 0.9 percent in 1985 to 1989. Here too, the cause was the average annual rate of net migration turning from net immigration (1.6 percent) in the first half of the decade to net outmigration (-0.2 percent) in the second half. Texas' overall net migration amount for the decade is 1.1 million (third largest of any State), of which just about half is from international net migration.

## THE WEST

The West has been the most rapidly growing region throughout the twentieth century, with growth rates consistently higher than the Nation as a whole. The West's average annual growth rates have ranged from 2.4 percent between 1975 and 1980 to 1.9 percent during the 1985-to-1989 period. Average annual rates of population change and of net migration have remained nearly unchanged in both halves of the 1980's. Between 1980 and 1989, the West grew by 20 percent, adding nearly 8.6 million to its 1980 population level. About 48 percent (4.1 million) of that growth came from net immigration.

The average annual population change rates for the West contain some interesting divisional contrasts. Growth rates in the West as a whole remained nearly unchanged between the 1980-to-1985 and 1985-to-1989 periods. However, average annual growth rates in the Mountain division dropped by one-third from 2.2 to 1.4 percent. In the Pacific division, the opposite trend occurred. The rate for 1980 to 1985 started at 1.8 percent and increased to 2.2 percent in the latter part of the decade.

A close inspection of the States in the Mountain division shows that although all the States increased in population over the decade, the net migration in five of the eight Mountain States shifted from positive (or zero) in the first half of the decade to negative in the second half. Wyoming's shift was the most dramatic. Its annual average net migration rate went from 0.1 percent (net

immigration) in 1980 to 1985 to -2.8 percent (net outmigration) in 1985 to 1989. Colorado had the next largest reversal. Its rate went from 1.1 percent to -0.4 percent. Montana, Idaho, and Utah also experienced similar shifts in their annual average net migration rates. The net outmigration was large enough to cause population declines in Wyoming and Montana between 1985 and 1989.

As shown in figure 2-6, Nevada and Arizona were among the top five States in overall rate of population growth this decade. In both States, net immigration was the dominant force behind the growth. Their net migration rates rank first (29.1 percent) and third (19.5 percent) highest of any State's this decade (figure 2-7). Both States have grown faster in the second half of the decade than in the first.

The Pacific is the Nation's fastest growing division with a 20 percent increase from 1980 to 1989. Over half (51 percent) of the 6.5 million population added since 1980 is from net immigration.

Over three-fourths of the Pacific's population is in California, and, in fact, about 12 percent of America's population now lives in this State. California overwhelms all other States in size, amount of growth, and amount of immigration. Nearly 25 percent of the Nation's growth in the 1980's occurred in California. This State added 5.4 million people to its 1980 population with 2.9 million (54 percent) from net immigration. Nearly three-fourths (2.2 million) of the net immigration was from international net migration.

Alaska is the decade's second fastest growing State with a 1980-to-1989 rate of population change of 31.3 percent. However, Alaska's pattern of population change in the 1980's is opposite to the Pacific division as a whole. Alaska began the first half of the 1980's with a whopping 5-percent annual average rate of population growth, the highest of any State at the time. During 1985 to 1989, its high annual average net immigration rate (3.1 percent) turned to a net outmigration rate (-1.7 percent) and forced its 1985-to-1989 annual average rate of population change down to 0.2 percent. Its population changes seemed to be tied to slowdowns in the energy industry.

The trend in Oregon is somewhat opposite to Alaska's. In the 1980-to-1985 period, Oregon had an annual average rate of net outmigration (-0.3 percent) and a modest average growth rate (0.4 percent). However, in the second half of the decade, the annual average migration rate turned positive (0.6 percent) and spurred the annual average rate of population change to 1.2 percent.

## TRENDS IN AGE-SEX DISTRIBUTIONS

Fluctuations in fertility are reflected in changes in a State's age structure as the children from low-birth and

**Figure 2-6.**  
**States Ranked by Percent of Change in Population: 1980 to 1989**

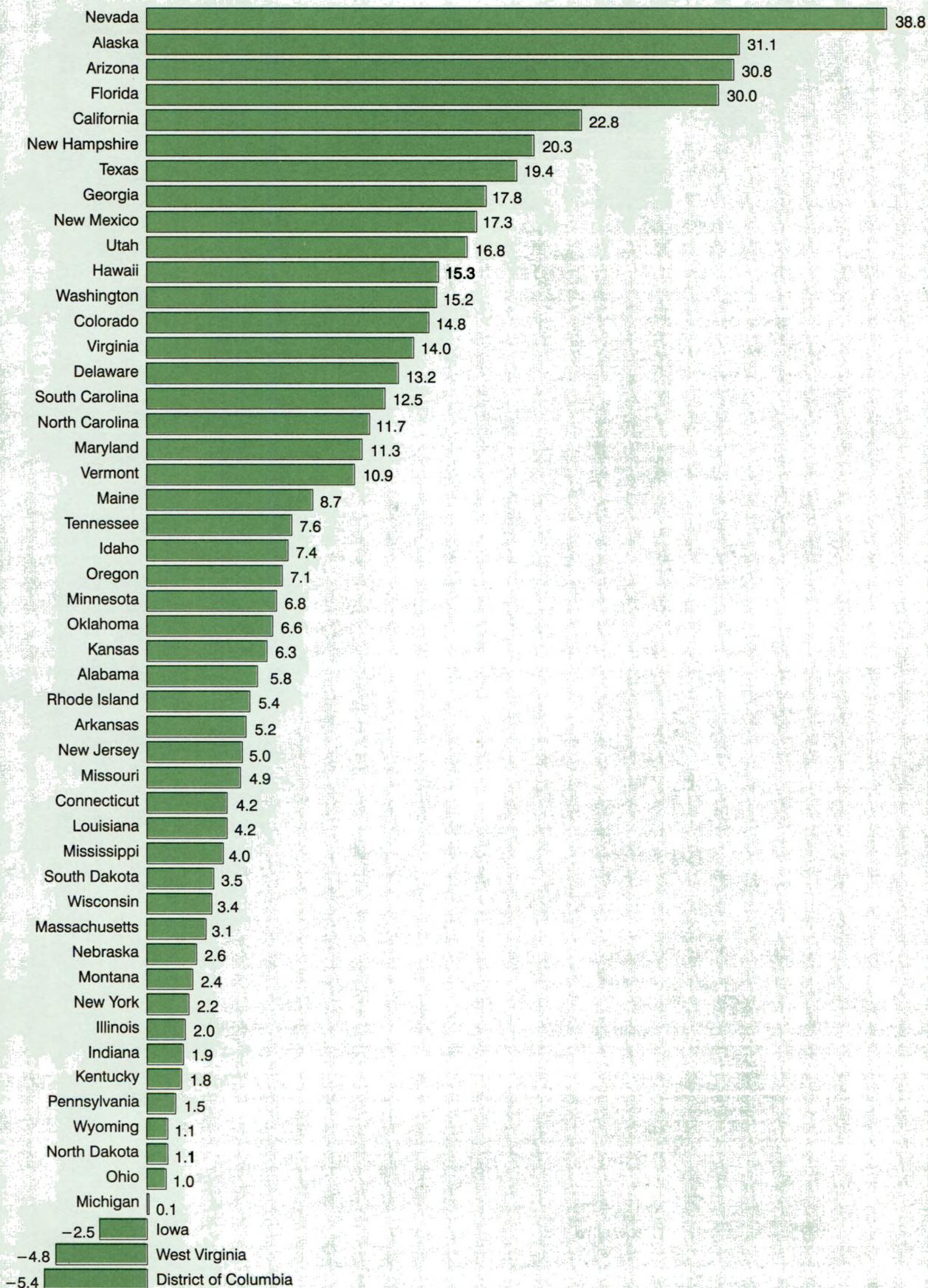
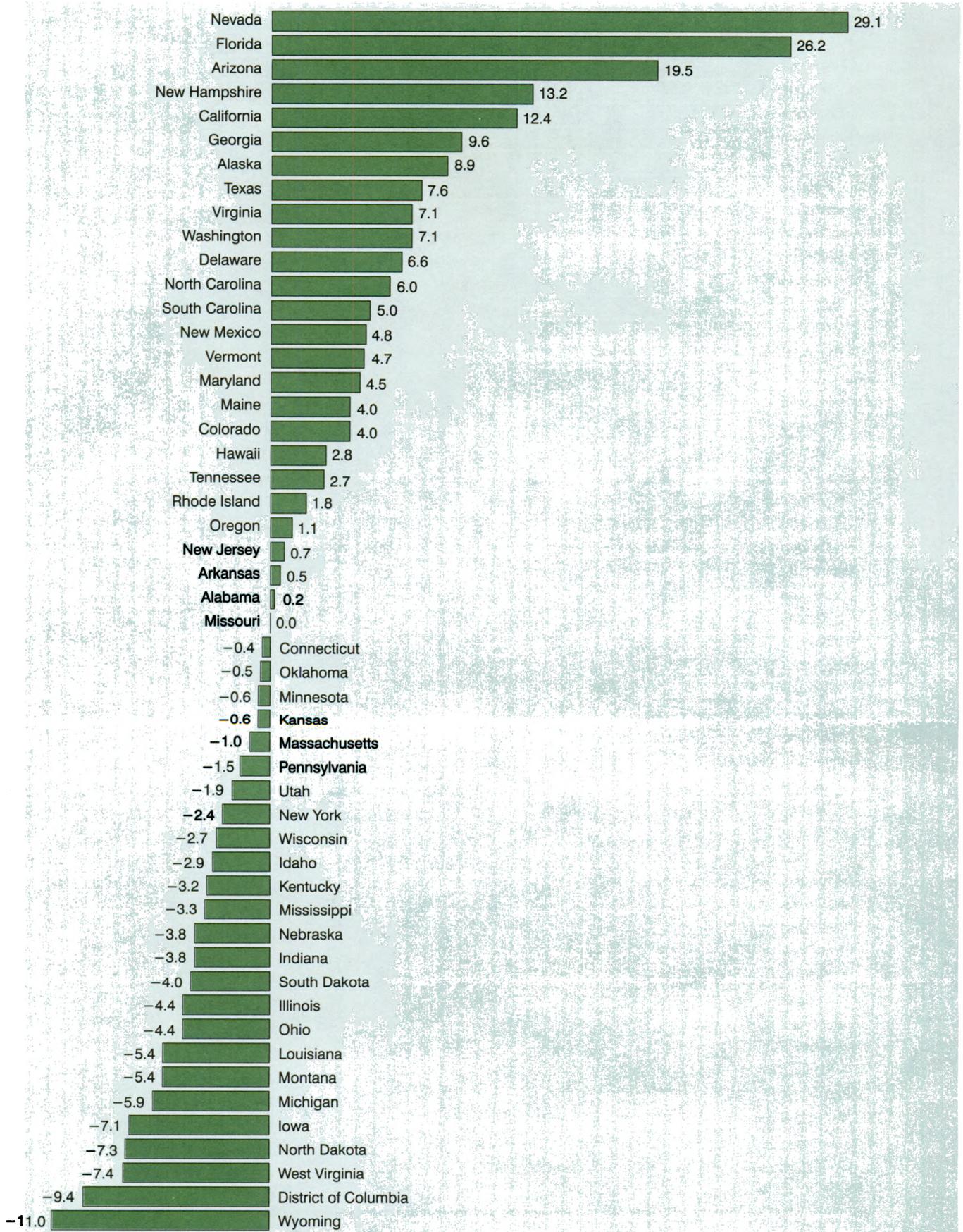


Figure 2-7.  
States Ranked by Percent Net Migration: 1980 to 1989



high birth periods age over time. Differences in migration patterns between States can also result in differences in State age-sex compositions. Young immigrants may lower the age structure of the area of destination, but the age-sex composition will be different depending on whether the migrants are young singles or families. Conversely, enough elderly retirees moving into an area will raise the age structure, and because females outlive males, it may also alter the sex ratio.

Because of the large number of women in their childbearing years, the 18.8 million population under 5 in 1989 is the highest level for this age group since 1967. Between 1980 and 1989, the Nation's preschool-age population grew by over 2.4 million or almost 15 percent. Florida had the highest 1980-to-1989 percent increase at 55.6 percent, followed by Nevada with 53.7 percent. The preschool-age population of eight States and the District of Columbia grew by over 25 percent during the 1980's. West Virginia's population aged 0 to 4 dropped by nearly 25 percent, the highest rate of loss of any State.

In 1986, Alaska overtook Utah as the State with the largest proportion of its population under age 5. The 1989 estimates show 10.4 percent of Alaska's, and 10.2 percent of Utah's populations are under 5 years of age. Alaska's young age structure results from young migrants (and their offspring) to the State, and to elderly and retirement age persons leaving the State. Utah's exceptionally high fertility is the reason for its young age structure. In 1989, West Virginia had the smallest proportion of preschool-age population at 5.9 percent. West Virginia's net outmigration this decade has probably consisted of young adults, and parents, which reduced the number of births and young children.

The Nation's school-age and young adult populations have decreased in size this decade as a result of the drop in births experienced after the Baby Boom. Between 1980 and 1989, America's population 5 to 17 years old shrank by just over 2 million or 4.4 percent. Although the South as a whole lost population in this age group, Georgia, Florida, and Texas expanded their 5-to-17 populations. The West showed growth in this age group, with all States sharing in this growth except Montana, Oregon, and Wyoming. Utah was the leader with a 30.3-percent increase since 1980. There were no States in the Midwest and Northeast that gained in population aged 5 to 17. Massachusetts experienced the largest 1980-to-1989 rate of decline (-19.8 percent) of any State.

Nationally, the population aged 5 to 17 is 18.3 percent of the population. Utah is the State with the highest proportion of its population in this age group (26.7 percent). The District of Columbia is at the opposite end of the spectrum with 15.1 percent. Since 1984 the decline in the school-age population has reversed

as the Baby Boom generation reached peak child-bearing years and the larger birth cohorts from the 0-to-4 age group have become school-age.

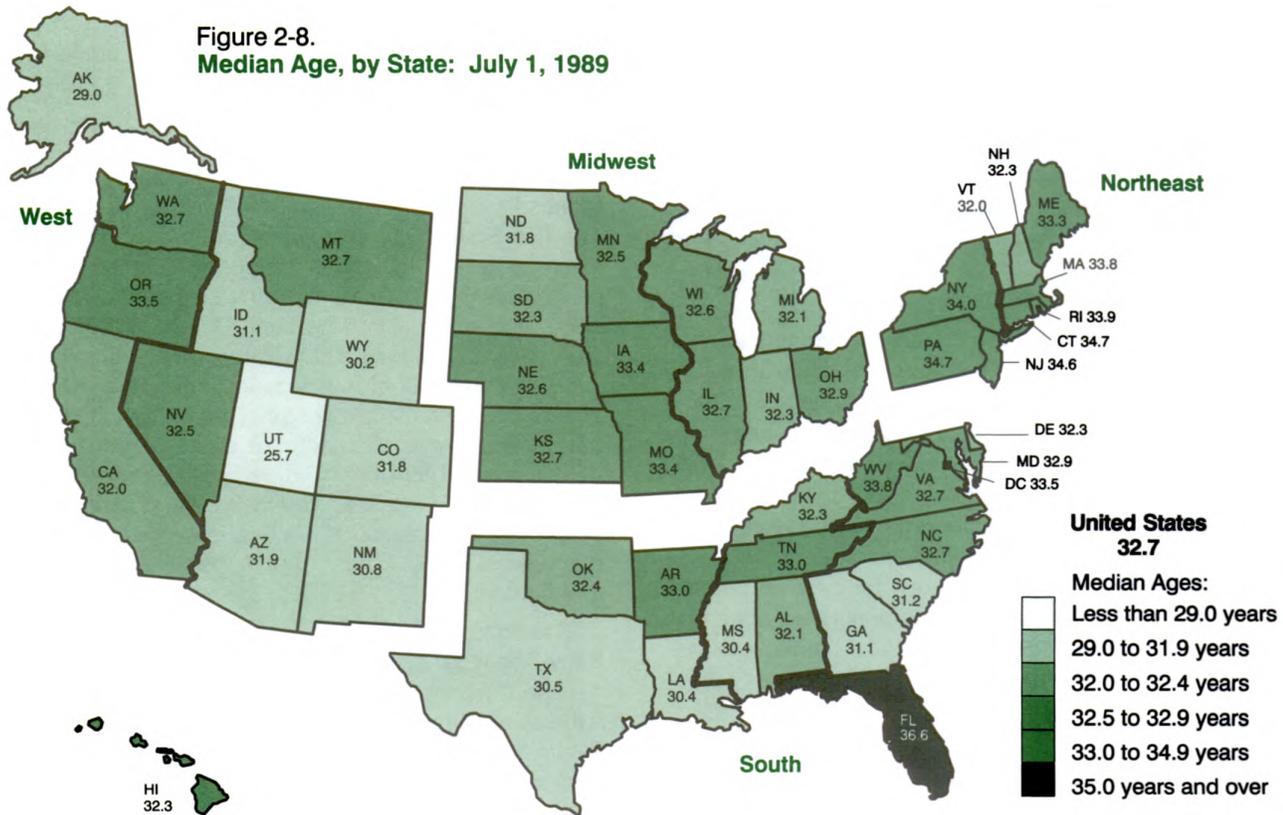
The Nation's young adult population (18 to 24) has experienced the largest loss of any broad age group, reduced by nearly 3.7 million (-12.2 percent) since 1980. The five States with a growing young adult population since 1980 are Nevada (5.3 percent), Florida (4.4 percent), Alaska (3.7 percent), New Hampshire (2.4 percent), and Arizona (1.0 percent). These are all States that have experienced high rates of net immigration during some or all of the decade, which overcame the effects of the small cohort size. The age group 18 to 24 has fallen from a 13.3 percent share of the Nation's population in 1980 to a 10.6-percent share in 1989. In both Utah and Alaska, young adults comprise 11.8 percent of the population. Florida is at the other end of the ranking with 9.4 percent of its population in the age group 18 to 24.

The age group 25 to 44, which in 1989 included the Baby Boom generation (born from 1946 to 1964), is the decade's fastest growing broad age group. Its ranks have swelled by 17.6 million (28.1 percent) since 1980. Every State shared in the growth, with rates ranging from 56.3 percent in Nevada to 7.7 percent in the District of Columbia. This age group is now 32.4 percent of the Nation's population, with States varying from 38.2 percent in Wyoming to 29.1 percent in Arkansas.

Growth in the age group 45 to 64 was sluggish during the 1980's with only a 4.5 percent increase, which was the result of low birth levels during the Depression and World War II. In the Northeast and Midwest regions, the population 45-to-64 years old actually declined during the period. Across the Nation, 1980-to-1989 rates of population change in this age group ranged from a 49.7 percent gain in Alaska to a loss of 21.6 percent in Wyoming. In 1989, Wyoming also had the smallest proportion of population in this age group (12.6 percent), and New Jersey had the largest (21.2 percent). The U.S. proportion is 18.7 percent. The age group 45 to 64 will begin to expand as aging Baby Boomers attain age 45.

States' populations in the age group 65 and over attained the decade's fastest rates of growth. While the U.S. growth rate was 21.3 percent since 1980, Alaska grew by a whopping 88.3 percent and Nevada by 84.5 percent. Every State enlarged their 65 and over population in the 1980's. Florida has the largest proportion of elderly (18.0 percent) of any State, and Alaska has the smallest at 4.1 percent. Although every State showed increases in its proportion of elderly population since 1980, Hawaii showed the largest increase, rising by 2.8 points.

The aging of America continued in the 1980's with a 2.7-year increase in median age from 30.0 years in 1980 to 32.7 years in 1989. Twenty States increased their



median ages by 3 years or more between 1980 and 1989. Among States, Hawaii registered the highest increase (4.0 years), climbing from 28.3 in 1980 to 32.3 years in 1989.

Though Florida has the highest median age (36.6 years) of any State, the six next highest median ages are in Northeastern States (figure 2-8). The Northeast is the region with the highest median age (34.2 years), and the West is the region with the lowest (31.9 years). Utah's 1.6-year increase in median age since 1980 has kept its present 25.7-year median age the lowest of any State.

Nationally the 1989 female median age (33.8 years) is 2.2 years higher than the male median age (31.6 years). Three States have gender differences in median age of 3 years or more: they are Florida (3.2 years), Pennsylvania (3.1 years), and Rhode Island (3.1 years). Nevada has the smallest difference (0.4 years). Only in Alaska is the 1989 male median age (29.4 years) higher than the female median age (28.4 years). Alaska, Wyoming, Hawaii, Nevada, and North Dakota are the only five States estimated to have more males than females. The proportion of males in these five States ranges from 52.9 percent in Alaska to 50.3 percent in North Dakota.

## CONCLUSION

The overall population trends among regions found in the 1970's continued into the 1980's, with the vast majority of the immigration and population growth occurring in the South and West. At the same time, the Northeast and Midwest were experiencing net outmigration and lagging behind the rest of the country in growth. California continued to outpace all other States in population size, amount of growth, and amount of immigration. Together, California, Florida, and Texas accounted for 52 percent of the Nation's 1980-to-1989 population increase. Florida and Texas join California as the three States with the largest amounts of immigration for the decade.

While the overall trends in the 1980's remained similar to the 1970's, there were several Divisional and State trends unique to the 1980's. The industrial-based East North Central division ended the first half of the decade with a population loss but rebounded in the decade's second half with modest population increases. Michigan, Ohio, and Indiana were the States most affected.

Another trend in the 1980's was the population slowdown in the West North Central division in States

with agricultural-based economies. Iowa was hardest hit, with heavy net outmigration and population losses in both halves of the decade. The Dakotas and Nebraska were also affected, though not as severely as Iowa.

Slowdowns in the energy industry in the mid-1980's were reflected by slowdowns in population growth in several West South Central States. Louisiana and Oklahoma both grew during the first half of the decade and lost population during the second half. Texas also felt the energy bust with lots of immigration and a high growth rate between 1980 and 1985 but outmigration and greatly reduced population growth between 1985 and 1989.

Net migration was the major contributor to population change since 1980 in California, Florida, Texas, Arizona, Nevada, New Hampshire, and Iowa. Only in Iowa was it in the form of net outmigration. In all other States natural increase (births minus deaths) was the dominant factor in population change this decade. All States and the District of Columbia experienced more births than deaths during the 1980's. In Utah, births outpaced deaths by over 4 to 1.

As our Nation's population ages, Florida remains the State with the highest median age (36.6 years) and the highest proportion of elderly (18.0 percent). Its large number of births makes Utah the State with the youngest population.

# Chapter 3. Trends in Internal Migration in the United States

Larry Sink

## HIGHLIGHTS

- The westward movement of the U.S. population may be coming to an end. Although the West continues to receive large numbers of migrants from abroad, net internal migration to the West has declined steadily throughout the decade and in 1988 was near zero.
- During the 1980's, U.S. migration trends favored the South and West at the expense of the Midwest and Northeast. The largest components of these trends were flows from the Mid-Atlantic and East North Central States to the South Atlantic States.
- Florida was the principal recipient of these trends with a net gain of more than three times that of any other State. New York suffered a net loss of nearly twice that of any other State.
- From 1980 through 1988, about 700,000 people moved from New York to Florida, a number roughly equal to the population of South Dakota.
- The early 1980's saw a huge influx of migrants, primarily from the Midwest, into the West South Central and Mountain division States. This trend reversed itself in the latter portion of the decade.
- The principal net result of these countervailing trends was a substantial gain for Texas and losses for Louisiana and Oklahoma.
- Florida and California received large net gains of migrants from the Nation as a whole but suffered net losses with their neighboring States, indicating that as new residents move in other residents move out.

## INTRODUCTION

Migration can be divided into two components, internal and external, or movements within the country and movements into and out of the country. There are several reasons that make this a useful distinction. Internal migration has displayed some fairly regular trends that can be analyzed and projected. However, as noted in chapter 1, the future course of external migration ultimately depends on a combination of world events and national policy that is largely beyond our power to predict. This chapter is concerned solely with internal migration, which will be referred to here simply as migration.

Analysis of trends in internal migration can show how the national population distribution is changing and can point out areas particularly affected by these changes. This chapter first examines these trends at the regional level to draw a general picture of their effect on the national population distribution, and then it carries this analysis to the division level to add detail to the regional picture. Trends are examined at the State level to locate areas where the trends have had a particularly large effect.

Regional scientists theorize that cities and towns are economically interlinked into hierarchical systems in which for each place the places that lie below it in the hierarchy constitute the market for its products.<sup>1</sup> The individuals who make up the population of such a system are theorized to become similarly interlinked by social ties. From this perspective there are two different types of migration. Population movement will occur within a system as it develops and expands (or contracts). Migration between systems, which involves the breaking of social ties, will only occur when individuals believe that significant benefits are available within another system that are not available within their own. For example, a substantial portion of the inter-regional migration discussed here is movement from areas with cold climate to areas with warm climate. While inter-regional migration consists almost entirely of movement between systems, interstate migration can consist of either type. To get an idea of the relative contributions of the two types of migration to the impact of migration on State populations, a section of this chapter is devoted to examining and comparing migration between contiguous States and between noncontiguous States. Of course, urban systems are not delineated by State boundaries, so comparing contiguous with noncontiguous State migration is not the same as comparing within-system and between-system migration. However, since these systems are not, in fact, delineated by any geopolitical boundaries, the contiguous/noncontiguous comparison is probably the best available method for distinguishing between migration resulting from regional development and that attributable to national population redistribution.

<sup>1</sup>A good reference is Brian J.L. Berry and Frank E. Horton's *Geographic Perspectives on Urban Systems*, Prentice-Hall, Inc., 1970, chapter 7. Also helpful is John Friedman's "Cities in Social Transformation," *Comparative Studies in Social History*, 4, 1961, 86-103.

Table 3-1. Regional Migration: 1980 to 1988

Year	Northeast				Midwest			
	In	Out	Net	Net rate	In	Out	Net	Net rate
1980 .....	506	766	-260	-529.9	700	1106	-406	-688.8
1981 .....	505	754	-249	-505.2	679	1213	-534	-903.6
1982 .....	497	668	-171	-347.8	669	1075	-406	-688.5
1983 .....	542	713	-171	-346.2	740	1091	-351	-595.2
1984 .....	520	699	-179	-361.3	726	1068	-342	-579.5
1985 .....	527	710	-183	-367.4	754	1052	-298	-503.1
1986 .....	552	725	-173	-345.0	798	997	-199	-337.1
1987 .....	563	741	-178	-353.3	795	918	-123	-207.1
1988 .....	543	772	-229	-452.3	795	892	-97	-161.4

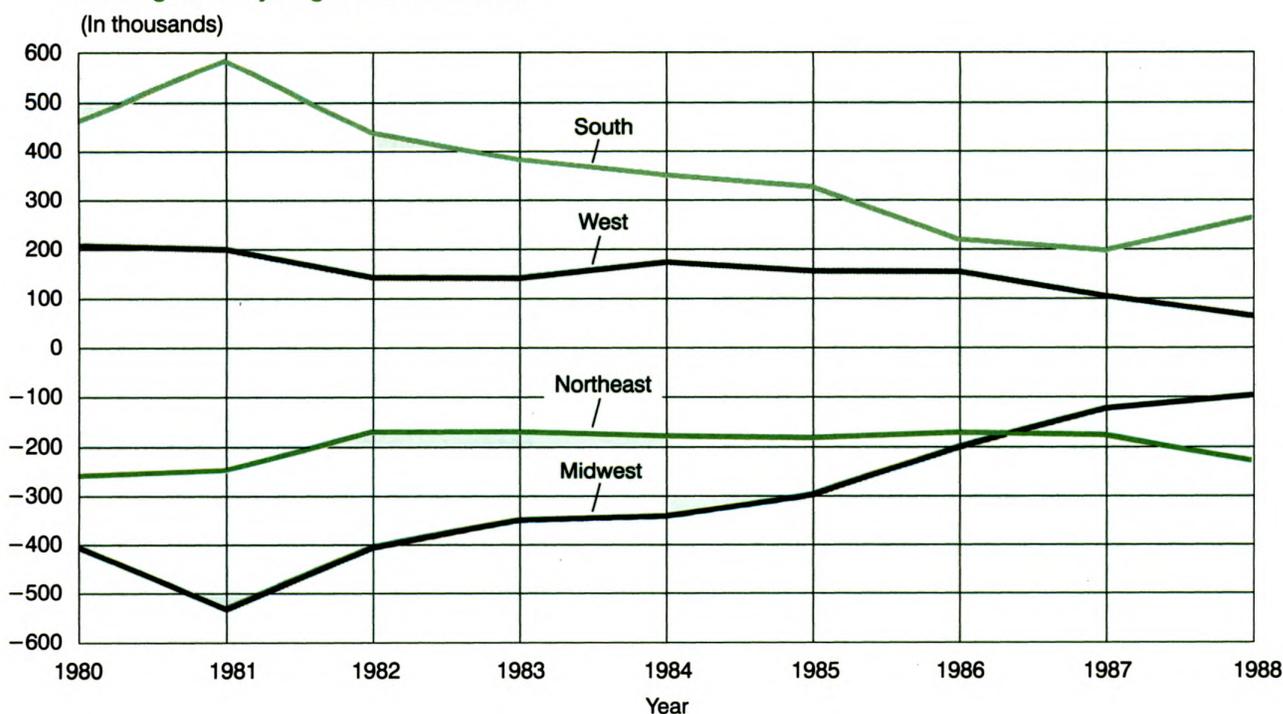
Year	South				West			
	In	Out	Net	Net rate	In	Out	Net	Net rate
1980 .....	1507	1048	459	606.4	947	740	207	477.2
1981 .....	1625	1043	582	756.1	954	754	200	450.1
1982 .....	1461	1026	435	554.8	865	723	142	314.0
1983 .....	1494	1113	381	478.0	907	765	142	306.0
1984 .....	1442	1093	349	431.8	897	724	173	369.4
1985 .....	1452	1127	325	397.6	897	742	155	325.1
1986 .....	1416	1197	219	263.6	899	746	153	315.5
1987 .....	1381	1185	196	234.2	852	748	104	210.1
1988 .....	1413	1151	262	309.8	830	767	63	124.8

NOTE: Numbers are thousands of migrants. Rates are per 100,000.

Table 3-2. Effectiveness Index of Regional Migration: 1980 to 1988

Year	Northeast	Midwest	South	West
1980 .....	34.0	36.7	43.8	28.0
1981 .....	33.0	44.0	55.9	26.5
1982 .....	25.7	37.8	42.5	19.6
1983 .....	24.0	32.1	34.2	18.4
1984 .....	25.7	32.1	31.9	23.9
1985 .....	25.8	28.3	28.9	20.9
1986 .....	23.8	20.0	18.3	20.6
1987 .....	24.0	13.4	16.6	14.0
1988 .....	29.7	10.8	22.8	8.2

Figure 3-1.  
**Net Migration by Region: 1980 to 1988**



The analysis presented here differs from other analyses of U.S. internal migration in that it is based on data that have only recently become available for analysis. The significance of these data is that they consist of estimates of all interstate moves by the States of origin and destination by the year in which the move occurred. Thus, the data permit both the comparison of different migratory flows at a point (or points) in time and the analysis of how specific migratory flows change over time. These data are derived from administrative records. The State of residence given on individual tax returns was compared across successive years to produce counts of interstate moves, which are weighted by the number of exemptions claimed on the respective returns. Thus, if an individual claiming two exemptions filed returns showing New York as State of residence in 1980 and Florida as State of residence in 1981, then two moves from New York to Florida would be counted for the 1980-to-1981 interval. This "1980-to-1981 interval" extends from January 1980 to April 1981, since tax returns are generally filed between January and April. For the sake of convenience, such moves are assumed to have occurred in 1980 in this analysis.

The data used in this analysis were compiled from tax returns filed in 1980 through 1989. The information from these forms enabled us to construct counts of interstate moves for the years 1980 to 1988. A weakness of these data stems from the fact that to appear in the count for a given year an individual must have filed (or been

claimed on) tax returns in both the given year and the following year. As a result, only 82 percent of the population is represented in these counts. The extent of coverage varies somewhat among States, from a low of 73 percent for West Virginia in 1987 to a high of 92 percent for Wyoming in 1980. To remedy this problem, migration rates were constructed for each year by taking the ratio of the counts for each State-to-State flow to the total number of matched exemptions for the State of origin in that year. These rates were then multiplied by the estimated population of the State of origin in the year in question to obtain estimates of the number of State-to-State moves. This approach assumes that those who move and those who do not move are equally likely to file income tax returns, and it could cause problems for this analysis if this assumption is invalid. However, there is no evidence to indicate deviations from this assumption are sufficient to produce serious biases in the measures used here.

### TRENDS AT THE REGIONAL LEVEL

In every year of the 1980 to 1988 period, the Northeast and Midwest experienced net outmigration and the South and West experienced net immigration. The trends for the South and Midwest seem in some respects to be mirror images (see figure 3-1). The South experienced a sharp increase in 1981 followed by a return to the 1980

level in 1982 and a gradual decrease thereafter, and the reverse was true in the Midwest. The West experienced a steady decline in net migration to a level in 1988 about one-third that in 1980. The net outflow from the Northeast decreased substantially between 1980 and 1982 and then remained fairly constant until it increased in 1988.

The region to region flows were fairly consistent over this period except for an unusually high value for the Midwest to South flow in 1981 (see figures 3-2a through 3-2d). The South was clearly the favorite destination for migrants from the other regions, and migrants from the South went primarily to the West and Midwest. Figure 3-3 displays the net interregional flows for the entire period. As can be seen, the South received net gains of 1.7 million migrants from the Midwest and 1.6 million migrants from the Northeast but lost 95,000 migrants to the West.<sup>2</sup> The West also received net gains of 920,000 migrants from the Midwest and 320,000 migrants from the Northeast, and the Northeast received a net gain of 100,000 migrants from the Midwest. The Northeast was consistently the least favorite destination for migrants from other regions over this period.

Table 3-2 presents effectiveness indexes for regional migration.<sup>3</sup> The effectiveness index is net migration expressed as a percent of the sum of total in- and outflows and measures the effectiveness of migration in altering the population distribution. To illustrate, if 100 people moved from A to B and none from B to A, the effectiveness index would be 100 as migration has been completely effective in redistributing the population. If 100 people moved from A to B and 100 moved from B to A, the effectiveness index would be 0, since migration has had no effect on the population distribution. The indexes in table 3-2 show a pattern of generally declining migration effectiveness, except for the Northeast. In particular, migration effectiveness appears to be approaching zero for the West and Midwest, suggesting that these regions may be nearing equilibrium with respect to national population redistribution. The various trends involved can be seen more clearly when the data are examined at the divisional level in the next section.

## TRENDS AT THE DIVISIONAL LEVEL

The trends observed at the regional level are by no means uniform throughout the respective regions over

this period. In fact, it is not uncommon for different divisions within a given region to move in opposite directions with respect to net migration (see table 3-3).

While the Northeast as a whole was experiencing steady net outmigration, net migration in New England fluctuated around zero. The Middle Atlantic, the other division in the Northeast, had strongly negative net migration over the entire period.

Within the Midwest, the East North Central division enjoyed a considerable improvement in net migration from a rate of -831 in 1980 to one of -190 in 1988, resulting from both a decrease in outmigration and an increase in immigration.<sup>4</sup> Net migration in the West North Central division dipped sharply in 1981 and then improved significantly as a result of a decrease in outmigration. Both divisions lost population to migration over the whole period, however.

The three divisions that make up the South showed radically different migration patterns over this period. The South Atlantic began with strongly positive net migration which steadily increased over the whole period, largely because of increasing immigration. The East South Central improved from a net rate of -210 in 1980 to 132 in 1988 as a result of modest improvements in in- and outmigration. The West South Central showed by far the largest decline of any division. It went from a net rate of 1,688 in 1981 to -993 in 1987, before improving to -582 in 1988. This was the result of increasing outmigration coupled with a dramatic decline in immigration.

Within the West, the Mountain division experienced a very sharp decline from a net rate of 1,379 in 1980 to 151 in 1988 as a result of a pronounced decrease in immigration. Despite this decline, the Mountain division maintained by far the highest rates of in- and outmigration in every period. Net migration in the Pacific division fluctuated slightly above zero.

Certain of the individual division-to-division flows merit special mention. The Middle Atlantic-to-South Atlantic flow was by far the largest division-to-division flow in every period, and it comprised about 60 percent of the Northeast-to-South flow and about 40 percent of total outmigration from the Northeast. The East North Central-to-South Atlantic flow was the second largest division-to-division flow in every period, comprising from 30 to 45 percent of the Midwest-to-South flow and from 20 to 25 percent of total outmigration from the Midwest. The South Atlantic division, in fact, was consistently the favorite migration destination for every division except the West North Central and the two divisions of the West region.

The East North Central-to-West South Central flow displayed a particularly dramatic decline, from 213,000

<sup>2</sup>All migration numbers presented in this text are rounded.

<sup>3</sup>The effectiveness index is given by the following formula:

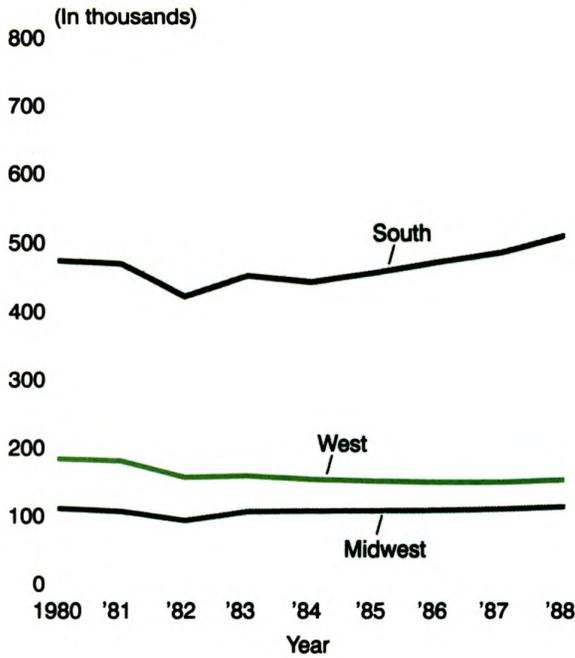
$$EF = 100 * \frac{IM-OM}{IM+OM}$$

where: EF = effectiveness index  
IM = immigration  
OM = outmigration

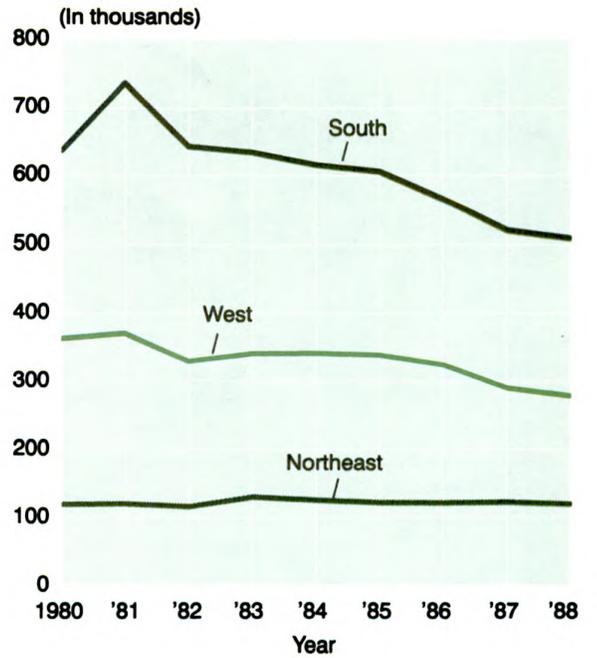
The vertical bars in the formula indicate that the quantity within the bars (in this case, IM-OM) is to be taken as a positive number. See Shryock, H.S., J.S. Siegel, and Associates, *The Methods and Materials of Demography*, Condensed Edition, Academic Press, Inc., 1976, p.394.

<sup>4</sup>All rates in this chapter are per 100,000.

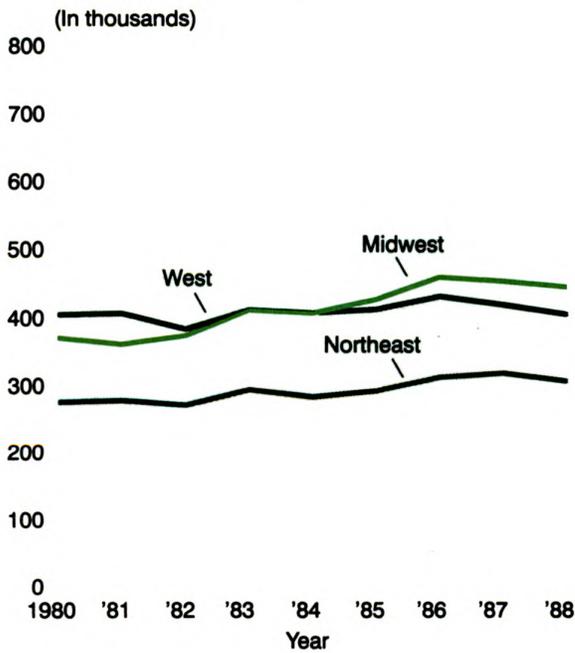
**Figure 3-2a.**  
Region to Region Migration  
Origin=Northeast



**Figure 3-2b.**  
Region to Region Migration  
Origin=Midwest



**Figure 3-2c.**  
Region to Region Migration  
Origin=South



**Figure 3-2d.**  
Region to Region Migration  
Origin=West

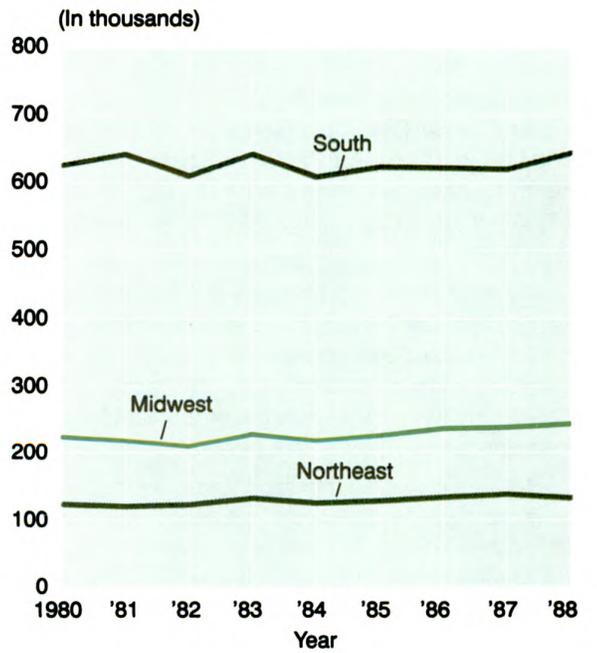
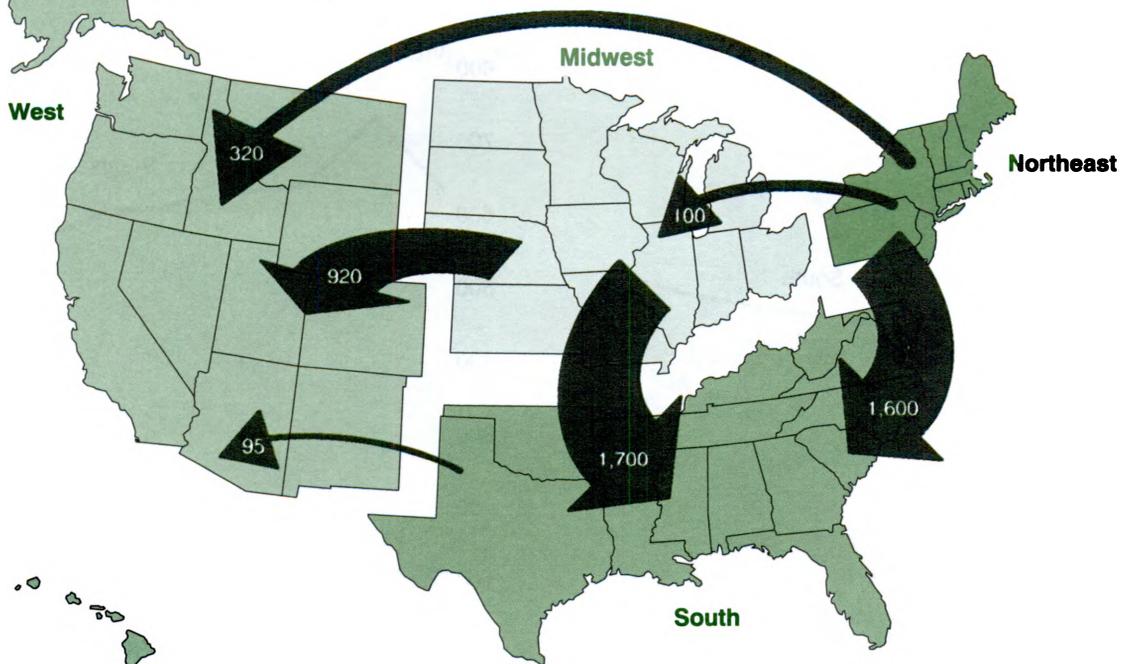


Figure 3-3.  
**Net Interregional Migration: 1980 to 1988**  
 (In thousands)



in 1981 to 66,000 in 1987. The West North Central-to-West South Central flow displayed a similar if less dramatic decline from 128,000 in 1981 to 62,000 in 1987. At the same time, the West South Central-to-East North Central flow increased from 57,000 in 1981 to 103,000 in 1986, and the West South Central-to-West North Central flow increased from 60,000 in 1981 to 86,000 in 1986 (both flows declined somewhat in 1987 and 1988).

For each of the two divisions of the West, the favorite destination was the other by a substantial margin in both cases. At the beginning of the decade, this exchange favored the Mountain division, but the Pacific-to-Mountain flow fell off after 1981 while the Mountain-to-Pacific flow increased steadily over this period.

Net inter-divisional migration flows that totaled 100,000 or more over the 1980-to-1988 period are displayed in figure 3-4. This figure provides a graphic picture of U.S. population movement during the 1980's. Most noteworthy are the large number of small arrows pointing west and the two huge ones from the Middle Atlantic and East North Central divisions to the South Atlantic. Also of interest is the fact that the only arrow pointing north is that from the Middle Atlantic to New England.

Table 3-4 displays effectiveness indexes for inter-divisional migration. New England and the East South Central division show negligible migration effectiveness, and despite a slight upsurge in the middle of the decade, the same is basically true of the Pacific division. The East and West North Central divisions and the Mountain division all showed sharp declines in migration effectiveness over this period. The South Atlantic is the only division to show increasing migration effectiveness, and it and the Middle Atlantic are the only divisions to show relatively strong migration effectiveness over the entire decade.

Taken together, these statistics reinforce the pattern noted at the regional level of the West appearing to approach a migration equilibrium with the rest of the Nation. The same appears to be basically true for the Midwest despite a continuing large flow from the East North Central to the South Atlantic division. The Nation's one large and ongoing population redistribution is from the Middle Atlantic to the South Atlantic division. This redistribution has a particular impact on Florida and New York, as is discussed in the following section.

### IMPACT ON INDIVIDUAL STATES

Figure 3-5 displays the total net migration for the 1980-to-1988 period by State. For most States there

Table 3-3. Divisional Migration: 1980 to 1988

Year	New England				Middle Atlantic				East North Central			
	In	Out	Net	Net rate	In	Out	Net	Net rate	In	Out	Net	Net rate
1980.....	227	246	-19	-146.9	407	650	-243	-658.6	512	858	-346	-830.7
1981.....	220	254	-34	-271.8	413	629	-216	-583.9	502	928	-426	-1022.0
1982.....	216	228	-12	-98.3	401	560	-159	-431.9	488	823	-335	-804.7
1983.....	251	242	9	65.2	431	611	-180	-485.0	551	846	-295	-711.3
1984.....	245	226	19	152.2	410	608	-198	-535.2	552	812	-260	-623.9
1985.....	249	231	18	143.4	416	617	-201	-541.3	584	789	-205	-493.7
1986.....	257	235	22	170.7	433	628	-195	-521.1	611	751	-140	-335.5
1987.....	264	245	19	151.2	438	635	-197	-526.4	605	707	-102	-242.9
1988.....	252	258	-6	-41.8	428	652	-224	-593.8	607	687	-80	-189.6

Year	West North Central				South Atlantic				East South Central			
	In	Out	Net	Net rate	In	Out	Net	Net rate	In	Out	Net	Net rate
1980.....	357	417	-60	-345.1	1059	809	250	673.9	367	398	-31	-209.7
1981.....	343	450	-107	-619.1	1037	833	204	538.6	376	410	-34	-230.7
1982.....	333	405	-72	-409.6	1014	742	272	709.6	350	371	-21	-140.1
1983.....	364	420	-56	-318.3	1133	773	360	924.0	365	392	-27	-186.5
1984.....	344	427	-83	-474.1	1134	754	380	962.0	353	380	-27	-178.3
1985.....	342	434	-92	-525.3	1177	772	405	1006.4	368	374	-6	-42.8
1986.....	354	414	-60	-340.8	1232	777	455	1113.0	385	362	23	151.9
1987.....	356	378	-22	-122.0	1227	791	436	1047.6	381	354	27	176.8
1988.....	357	374	-17	-94.6	1217	818	399	939.0	377	357	20	131.8

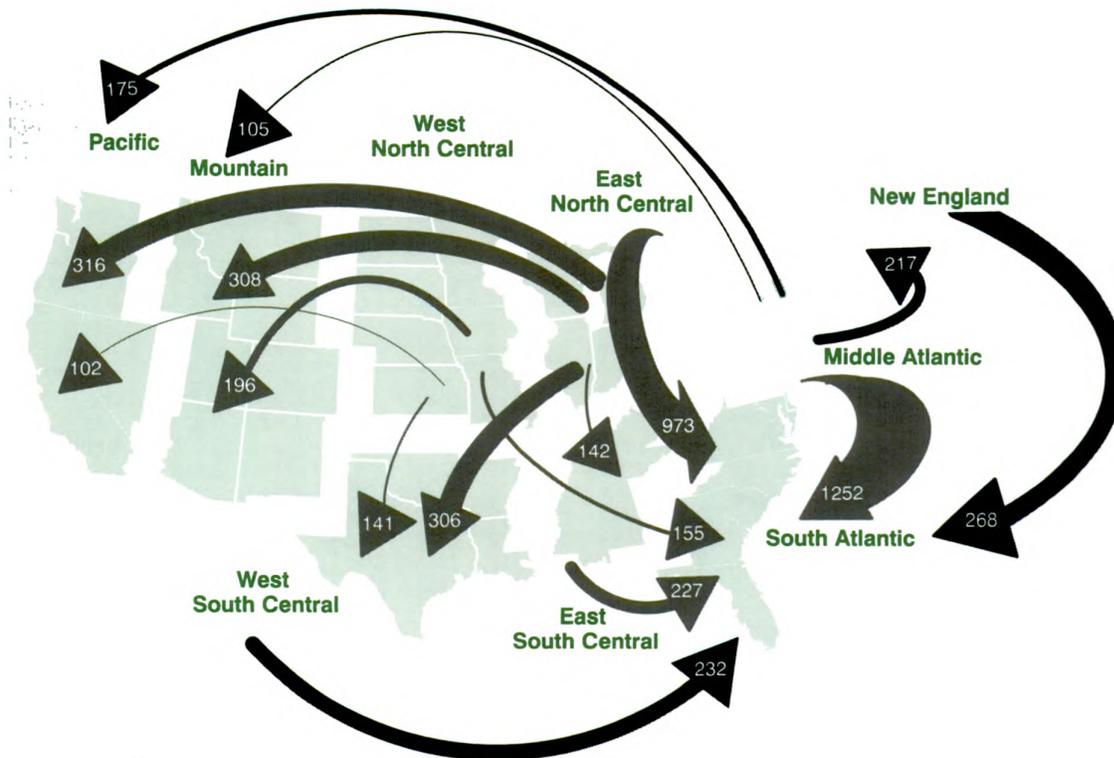
Year	West South Central				Mountain				Pacific			
	In	Out	Net	Net rate	In	Out	Net	Net rate	In	Out	Net	Net rate
1980.....	750	511	239	1003.4	601	444	157	1379.2	713	664	49	154.1
1981.....	918	505	413	1688.2	611	455	156	1323.5	710	666	44	135.3
1982.....	747	563	184	728.9	527	443	84	695.1	664	606	58	175.5
1983.....	672	622	50	192.2	545	471	74	607.5	714	648	66	196.0
1984.....	606	611	-5	-17.6	531	462	69	555.5	715	612	103	301.5
1985.....	573	645	-72	-273.6	537	473	64	498.5	718	626	92	261.9
1986.....	490	750	-260	-967.5	527	487	40	308.4	736	623	113	318.0
1987.....	466	733	-267	-993.0	497	489	8	62.3	722	625	97	263.4
1988.....	503	660	-157	-581.7	508	488	20	150.5	706	663	43	115.6

NOTE: Numbers are thousands of migrants. Rates are per 100,000.

Table 3-4. Effectiveness Index of Inter-divisional Migration: 1980 to 1988

Year	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1980.....	7.4	37.3	40.4	14.3	30.9	7.7	47.0	35.6	7.4
1981.....	13.3	34.2	45.9	23.8	24.4	8.3	81.8	34.1	6.6
1982.....	5.4	28.4	40.7	17.6	36.6	5.6	32.8	18.9	9.6
1983.....	3.4	29.4	34.9	13.2	46.5	7.1	8.0	15.9	10.2
1984.....	8.5	32.7	32.0	19.5	50.4	7.1	0.8	15.1	16.9
1985.....	7.9	32.6	26.0	21.2	52.4	1.7	11.3	13.5	14.6
1986.....	9.2	31.0	18.6	14.5	58.7	6.4	34.7	8.2	18.3
1987.....	7.9	31.0	14.4	5.7	55.2	7.6	36.5	1.7	15.4
1988.....	2.1	34.3	11.6	4.5	48.7	5.7	23.7	4.1	6.5

Figure 3-4.  
**Net Interdivisional Migration: 1980 to 1988**  
 (In thousands)



Note: Flows of less than 100,000 not shown.

was little overall impact, but there was one clear winner and one clear loser. Florida had three times the net migration over this period as the No. 2 State (Georgia), and New York lost nearly twice as many people to migration over the period as the No. 50 State (Illinois). It is interesting to note that the New York-to-Florida flow was the largest State-to-State flow in every year of this period except 1985 (when New York to New Jersey was No. 1). With at least 65,000 migrants a year, the New York-to-Florida flow was larger than most division-to-division flows.

Table 5 shows how the States ranked in terms of net migration for each year of the 1980-to-1988 period. Florida ranked No. 1 in every year except 1981 (when Texas was No. 1), and New York ranked No. 51 in every year without exception. Table 3-5 also points out some trends that tend to be obscured by cumulative measures such as those displayed in figure 3-5, in particular, that a number of States experienced large changes in their relative standing with regard to net migration over this period. Perhaps the most interesting case in this regard

is California; consistently among the leading States in net migration for most of the decade, it fell from No. 7 in 1987 to No. 47 in 1988. Long the principal recipient of America's migration westward, California's turnaround adds weight to the conclusion that this trend is coming to an end (or at least a pause).

The most dramatic change was that experienced by Texas, which fell from No. 1 in 1981 to No. 50 in 1986. The magnitude of the Texas turnaround can be illustrated by examining the changes in certain State-to-State flows. Of the 25 State-to-State flows with the largest increases over the 1980-to-1988 period, 13 originate in Texas. Of the 25 flows with the largest decreases over this period, 13 have Texas as their destination. Particularly noteworthy are the flows from Michigan and Ohio to Texas, both of which were among the 10 largest in 1981 and both of which had fallen to a third of their 1980 values by 1987.

A different perspective on the impact of migration is offered by table 3-6, which shows the States ranked by net migration rate. Since most migrants come from and

Table 3-5. States Ranked by Net Migration

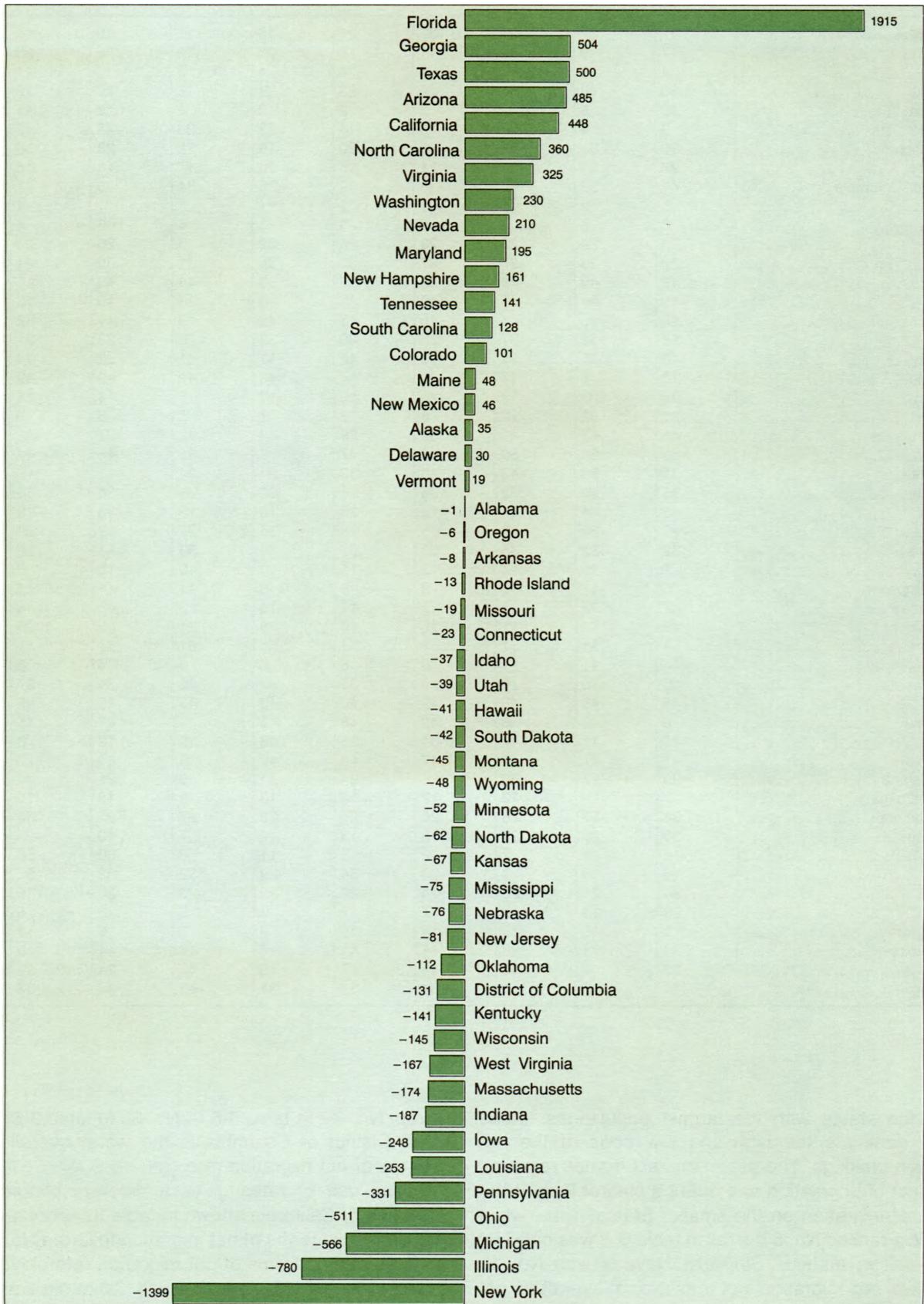
State	1980	1981	1982	1983	1984	1985	1986	1987	1988	Overall
Alabama	37	37	33	33	21	15	14	16	17	20
Alaska	17	9	9	11	15	25	39	39	28	17
Arizona	4	6	5	4	4	4	3	5	11	4
Arkansas	36	40	16	19	23	24	16	22	22	22
California	12	5	3	5	2	2	2	7	47	5
Colorado	3	4	6	10	14	23	29	46	42	14
Connecticut	30	31	26	22	20	19	22	28	38	25
Delaware	27	24	21	21	18	20	17	19	16	18
District of Columbia	41	36	40	38	39	35	34	40	41	39
Florida	1	2	1	1	1	1	1	1	1	1
Georgia	8	8	4	3	3	3	4	2	4	2
Hawaii	38	29	23	23	26	32	25	26	24	28
Idaho	22	25	27	27	30	34	31	30	21	26
Illinois	49	49	49	50	50	50	48	48	48	50
Indiana	46	46	46	46	43	40	26	15	13	44
Iowa	44	45	45	45	45	46	46	41	32	45
Kansas	28	33	37	36	38	33	28	23	31	34
Kentucky	40	35	36	43	42	41	41	32	34	40
Louisiana	10	7	17	39	44	48	49	49	49	46
Maine	25	23	18	20	19	17	15	14	14	15
Maryland	21	22	12	8	8	7	8	8	9	10
Massachusetts	45	43	41	37	29	43	42	37	43	43
Michigan	50	50	50	48	47	38	35	45	44	49
Minnesota	31	38	42	40	32	27	24	17	15	32
Mississippi	35	26	32	35	36	30	30	35	35	35
Missouri	43	44	24	18	25	16	13	18	19	24
Montana	23	20	20	25	28	36	37	33	29	30
Nebraska	32	32	35	32	37	39	33	31	25	36
Nevada	7	10	14	13	11	10	10	10	6	9
New Hampshire	15	17	15	9	9	8	11	11	12	11
New Jersey	42	39	31	17	17	14	23	43	46	37
New Mexico	18	13	11	16	16	18	21	29	26	16
New York	51	51	51	51	51	51	51	51	51	51
North Carolina	14	11	7	6	6	6	6	4	3	6
North Dakota	26	19	25	29	33	37	36	34	37	33
Ohio	48	48	48	49	49	49	45	42	39	48
Oklahoma	6	3	8	42	46	45	47	47	45	38
Oregon	19	41	44	31	35	26	18	12	8	21
Pennsylvania	47	47	47	47	48	47	38	21	23	47
Rhode Island	29	27	30	28	24	21	19	25	27	23
South Carolina	13	16	13	12	12	13	12	13	10	13
South Dakota	34	30	28	26	27	28	27	27	30	29
Tennessee	20	28	29	15	13	12	7	9	7	12
Texas	2	1	2	2	5	11	50	50	50	3
Utah	16	15	19	30	34	29	32	38	36	27
Vermont	24	21	22	24	22	22	20	20	18	19
Virginia	9	14	10	7	7	5	5	3	5	7
Washington	5	18	39	14	10	9	9	6	2	8
West Virginia	33	34	38	41	41	44	44	44	40	42
Wisconsin	39	42	43	44	40	42	40	24	20	41
Wyoming	11	12	34	34	31	31	43	36	33	31

go to the states with the largest populations, these States dominate the high and low ends of the net migration rankings. The use of migration rates removes the effect of population and offers a clearer look at the impact of migration on the smaller States. Thus, while California ranked No. 5 overall in table 5, it was only No. 19 overall in table 6. Similarly, Nevada was No. 10 overall in net migration but was No. 1 overall in net migration rate. The same principle is in operation at the other end of the distribution, where Pennsylvania went

from No. 47 in table 3-5 to No. 30 in table 3-6. Further, the District of Columbia is the worst overall loser in terms of net migration rate.

The use of rates gives a different picture of the decline of California shown in table 5. Although California's rank in terms of net migration fell from No. 7 to No. 47, its rank in terms of net migration rate only fell from No. 19 to No. 25. And although California was among the leading States in terms of net migration for most of the decade, its net migration rate was actually only

**Figure 3-5.**  
**Total Net Migration by State: 1980 to 1988**  
(In thousands)



slightly above zero as was the case for the Pacific division as a whole. With its large population, even a small migration rate can still translate into a large number of migrants, which tends to obscure the fact that, like the rest of the West, California has apparently been moving into migration equilibrium with the rest of the Nation.

Table 3-6 also offers a different perspective on other migration turnarounds. Seen in terms of rates, the Texas turnaround looks much less severe, in contrast to Alaska which went from being No. 1 for three consecutive years (1982-to-1984) to No. 50 in 1986 and Wyoming made the spectacular plunge from No. 4 in 1981 to No. 49 in 1982! To illustrate the changes that occurred in migration patterns over the 1980-1988 period, Figures 3-6 and 3-7 display net migration as a percent of state population for the first and second halves of this period, respectively. Comparison of these two figures shows that the coastal and Midwestern States remained basically unchanged, while a section of the country extending from Texas and Louisiana north and west to Montana and including Alaska experienced a major turnaround in migration over this period. It can also be seen that a few States bordering this region experienced lesser turnarounds in the opposite direction, perhaps resulting from the return of migrants lost to the "boom" areas in the first half of the period.

It should not be inferred that these States' migration patterns went one way between 1980 and 1983 and the opposite way between 1984 and 1988. Closer inspection of table 3-6 shows that the timing and the sharpness of this turnaround were different for different States. However, this choice of periods is convenient for illustrating the magnitude of the change that has occurred in migration patterns involving this section of the country during the 1980's. The proximity of the States affected and the similarity of the timing of the changes in these States indicate that these changes are all part of the same trend.

## **CONTIGUOUS VERSUS NONCONTIGUOUS STATE MIGRATION**

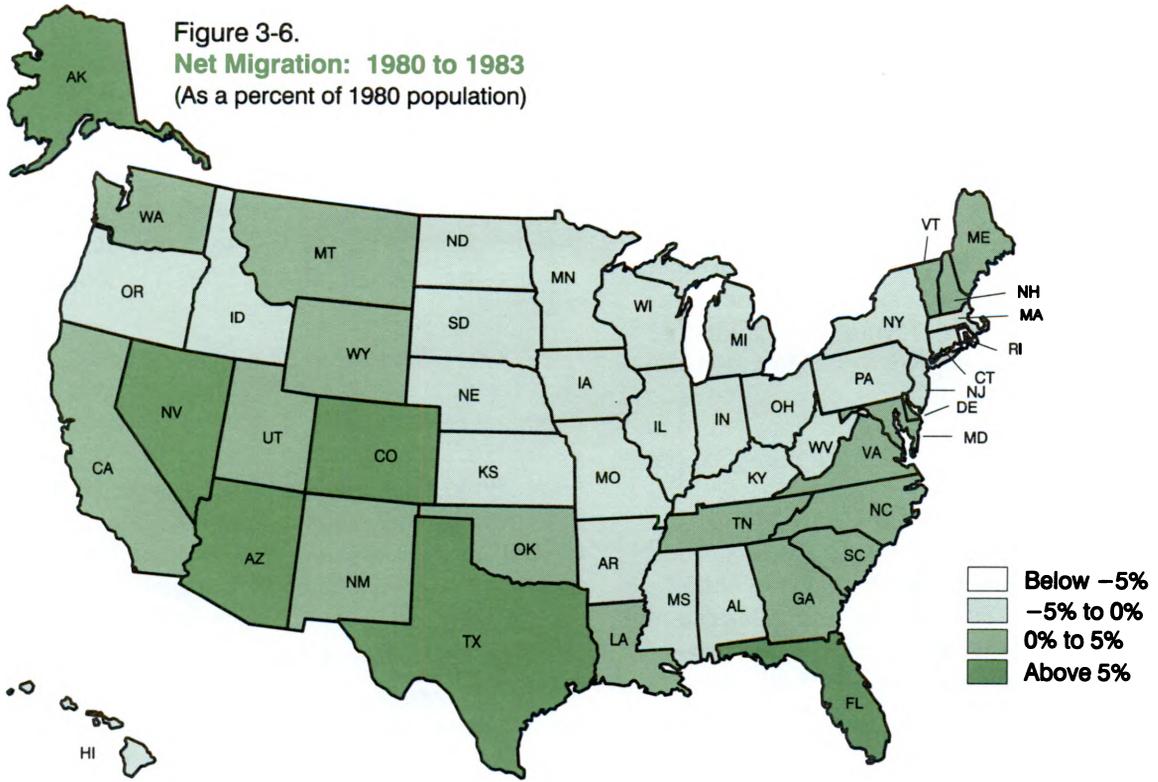
About one-third of all interstate moves are to a contiguous State. Moves to contiguous States typically involve considerably less distance and can even take place within an urban area; for example, one can move from Missouri to Kansas and remain within the Kansas City metropolitan area. Some concern has been expressed, in fact, that such moves may dominate recorded State-to-State moves and, thus, obscure other migration patterns. This has been the case for the District of Columbia, where the net migration rate with contiguous States has been -2511, completely overwhelming the net migration rate of 187 with noncontiguous States. Of course, in the District of Columbia, migration to contiguous States consists primarily of moves from downtown Washington to its Virginia and Maryland suburbs.

The District of Columbia, however, is a special case, and intra-urban moves do not appear to play a dominant role in contiguous State migration for the Nation as a whole. In fact, the ratio of contiguous to noncontiguous migration is slightly lower for those States with a major urban area (i.e. one with a million or more people) on their borders than is the ratio for those States without a major urban area on their borders (.60 compared with .64).

Although distance clearly plays an important role in shaping the patterns of interstate migration, it is equally clear that there must be other important factors involved. Every State on the east coast has a higher rate of migration to California than to any State in the Midwest. In fact, 10 of the 14 east coast States have higher rates of migration to California than to any other noncontiguous State except Florida and Texas, and 8 of these States have higher rates of migration to California than to at least one of their contiguous States.

Though considering determinants of interstate migration is beyond the scope of this paper, it is necessary to say something about one set of factors that is believed to play a central role in shaping interstate migration trends. It was mentioned in the introduction that regional scientists theorize that cities and towns are interlinked into hierarchical systems and that the persons who dwell within these systems become socially interlinked. This social linkage not only includes personal ties to family and friends, but also reflects the fact that one's acquaintances are a valuable source of information regarding economic and social opportunities. Thus, migration between systems requires breaking one set of social ties and establishing another. However, the cost this imposes on the individual migrant can be considerably reduced when a large number of others have already made the same move. Every substantial migratory flow is accompanied by a counter-flow that consists of migrants for whom their prior move did not work out and who are now returning to their original area. Thus, if there is considerable migration from system A to system B, there will be former residents of system A returning from system B and serving as information sources about system B to their acquaintances in system A. Further, former residents of system A who have moved to system B are potential social contacts for their acquaintances in system A. Consequently, for many residents of system A, it would be much easier to move to system B than to a system to which system A does not send a substantial number of migrants. If we hypothesize further that system B receives significant immigration from some number of other systems, then it can be seen that migrants to system B could acquire information and social contacts that would facilitate a future move to one of the other systems. In this way, certain areas become nodes in a national network of migration flows.

**Figure 3-6.**  
**Net Migration: 1980 to 1983**  
 (As a percent of 1980 population)



**Figure 3-7.**  
**Net Migration: 1984 to 1988**  
 (As a percent of 1984 population)

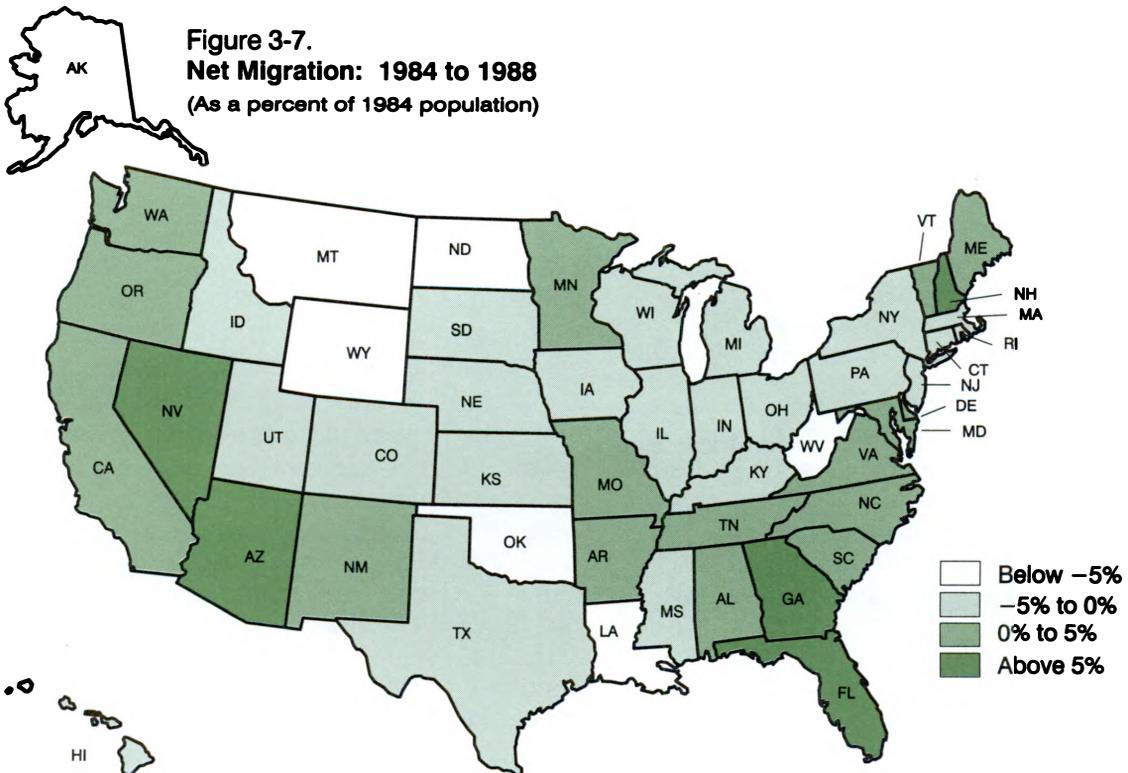


Table 3-6. States Ranked by Net Migration Rate

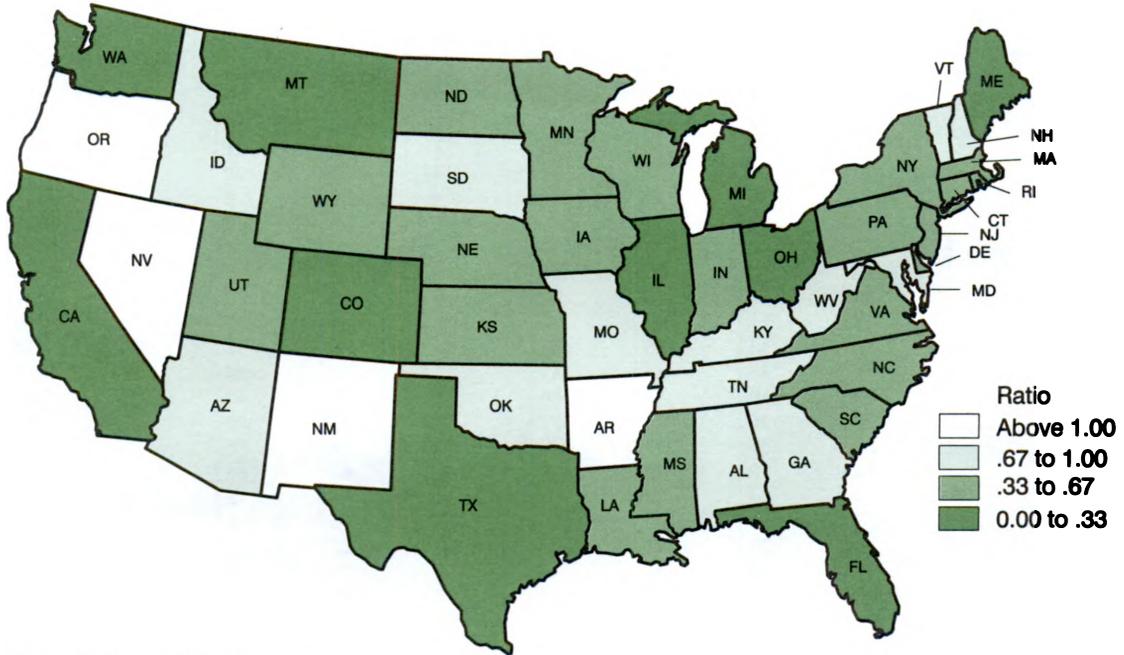
State	1980	1981	1982	1983	1984	1985	1986	1987	1988	Overall
Alabama	32	32	28	26	22	18	19	16	19	20
Alaska	4	1	1	1	4	30	50	51	44	6
Arizona	5	8	3	3	1	2	3	4	15	4
Arkansas	41	43	17	19	23	24	17	22	22	22
California	23	17	14	18	14	15	16	19	25	19
Colorado	6	6	6	11	17	23	31	41	42	16
Connecticut	28	28	24	24	21	20	22	25	35	24
Delaware	30	29	19	13	9	9	6	9	5	10
District of Columbia	51	51	51	51	51	51	49	50	51	51
Florida	3	7	2	2	2	4	4	3	2	2
Georgia	13	13	10	6	6	5	5	7	10	5
Hawaii	50	39	26	22	30	40	29	30	31	38
Idaho	17	27	30	30	37	44	43	38	16	36
Illinois	46	48	46	47	45	38	37	36	38	45
Indiana	45	46	44	41	33	29	24	18	17	34
Iowa	43	49	47	48	49	47	42	39	30	47
Kansas	26	36	35	37	32	34	28	23	27	29
Kentucky	40	31	31	42	43	37	35	27	29	37
Louisiana	14	12	22	33	40	43	45	47	48	42
Maine	24	24	16	15	16	11	12	6	8	12
Maryland	22	21	18	10	11	8	9	12	14	11
Massachusetts	38	37	34	29	26	32	33	28	37	32
Michigan	49	50	50	46	36	26	27	31	32	44
Minnesota	27	30	41	34	27	25	25	17	18	26
Mississippi	36	23	29	36	29	28	34	34	33	31
Missouri	39	41	23	21	24	21	18	20	20	23
Montana	20	20	13	25	41	48	46	44	40	41
Nebraska	35	38	39	35	42	41	40	35	26	40
Nevada	1	3	7	5	5	3	1	1	1	1
New Hampshire	8	9	8	4	3	1	2	2	3	3
New Jersey	31	26	25	23	20	19	23	32	39	25
New Mexico	12	10	4	9	10	16	20	33	28	15
New York	47	44	43	45	44	39	41	43	47	46
North Carolina	18	16	11	7	7	7	10	11	9	7
North Dakota	29	14	32	40	47	50	48	46	50	49
Ohio	44	47	45	44	38	33	30	26	24	39
Oklahoma	9	2	9	43	46	45	47	48	46	35
Oregon	19	42	48	27	28	27	21	14	6	21
Pennsylvania	42	34	37	38	35	31	26	21	23	30
Rhode Island	33	33	38	31	25	17	15	29	36	27
South Carolina	15	15	15	14	15	13	14	15	12	13
South Dakota	48	45	36	28	39	42	36	37	43	43
Tennessee	21	25	27	17	18	14	8	13	13	18
Texas	7	5	5	12	13	22	39	40	34	17
Utah	11	11	20	32	34	35	38	42	41	28
Vermont	25	22	21	20	19	12	13	10	7	14
Virginia	16	18	12	8	8	6	7	8	11	8
Washington	10	19	33	16	12	10	11	5	4	9
West Virginia	37	40	40	49	48	46	44	45	45	48
Wisconsin	34	35	42	39	31	36	32	24	21	33
Wyoming	2	4	49	50	50	49	51	49	49	50

It is appropriate to repeat here the point made earlier that urban systems are not delineated by political boundaries. Comparing contiguous to noncontiguous State migration is not the same as comparing within-system to between-system migration. However, we can expect noncontiguous State migration to consist primarily of between-system migration and contiguous State migration to contain a much larger proportion of within-system migration. Thus, comparison of a State's contiguous

State migration with its noncontiguous State migration should give a reasonable idea of the relative importance of regional development and national population redistribution in that State's migration experience.

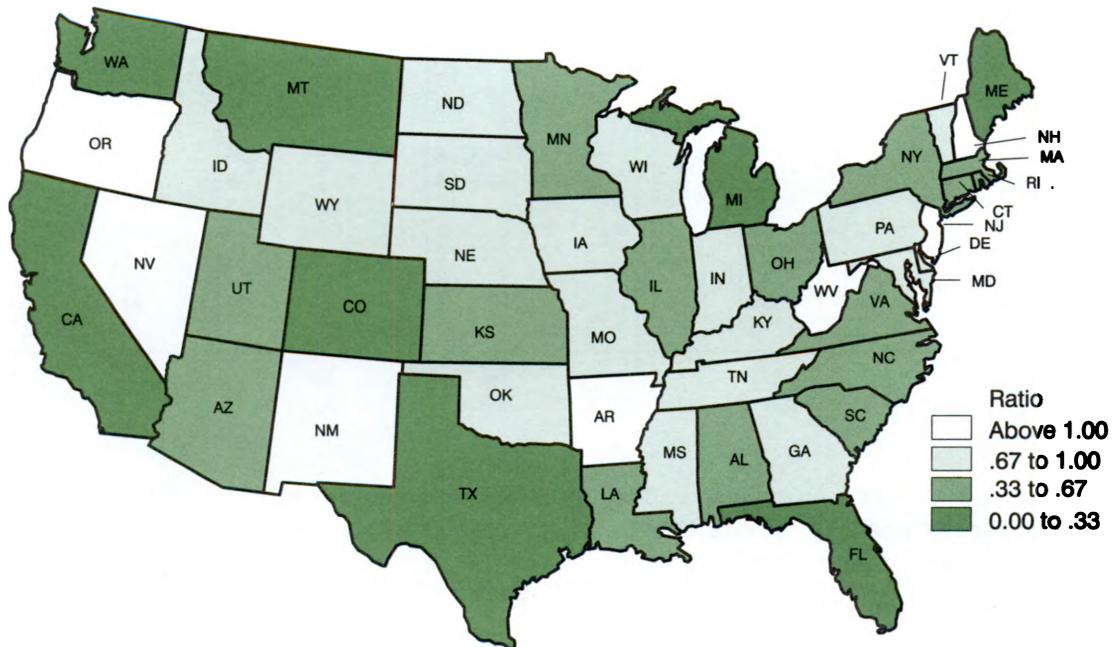
Figure 3-8 classifies the States by the ratio of outmigration with contiguous States to that with noncontiguous States, and figure 3-9 displays the corresponding classification for immigration ratios. Comparison of the two figures shows those States that have unusually low

**Figure 3-8.**  
**Ratio of Contiguous to Noncontiguous**  
**State Outmigration: 1980 to 1988**



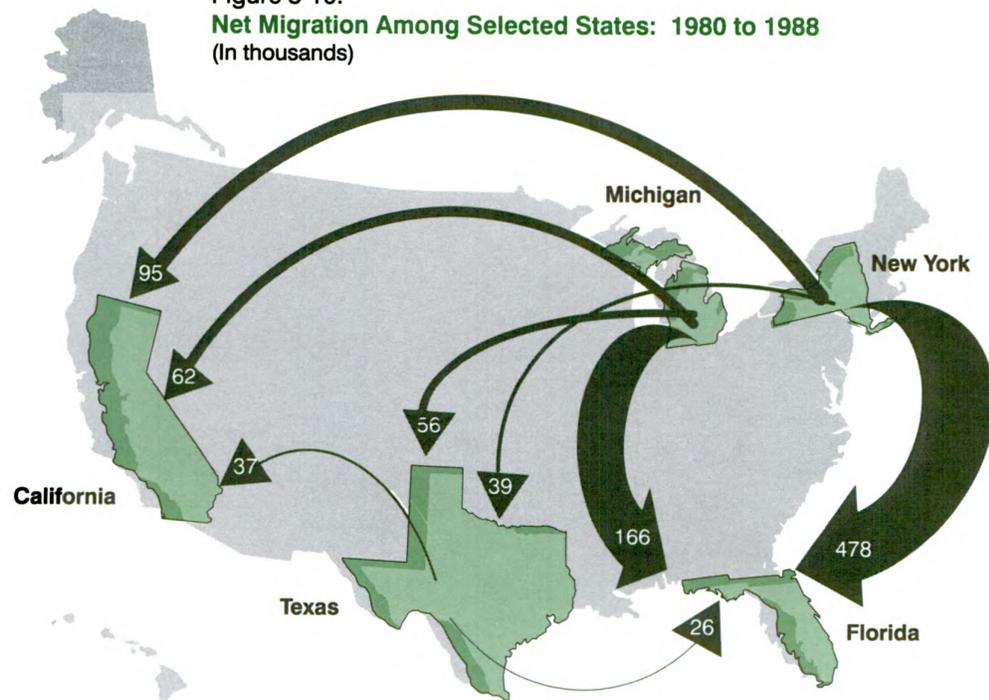
Note: Alaska and Hawaii not shown.

**Figure 3-9.**  
**Ratio of Contiguous to Noncontiguous**  
**State Immigration: 1980 to 1988**



Note: Alaska and Hawaii not shown.

Figure 3-10.  
**Net Migration Among Selected States: 1980 to 1988**  
 (In thousands)



Note: Flows less than 10,000 not shown.

contiguous/noncontiguous outmigration ratios also have unusually low immigration ratios, suggesting that these States serve as nodes in the national network of migration flows. (Maine and Montana may be exceptions to this rule since New Hampshire is Maine's only contiguous State and Montana only borders low population States.) The same correspondence does not exist among the high-ratio States. Those States with unusually high contiguous/noncontiguous ratios for outmigration all border either California or Texas, while on the immigration side, there are States with unusually high ratios bordering the major migration-losing States of the Northeast. Overall, however, the correspondence between figures 3-8 and 3-9 suggests that for most States the geographic distribution of in- and outmigration is quite similar.

To illustrate the significance of a State's role as a node in the national migration network, the five largest such States have been selected, and those net flows between them of 10,000 or more are displayed in figure 3-10. Comparison of figure 3-10 with figure 3-4 shows that figure 3-10 conveys essentially the same picture of U.S. migration, albeit with somewhat less detail. Thus,

within the time period under consideration, a reasonable picture of U.S. migration trends can be obtained simply by examining the various flows between these five States; and this is true because these States are nodes in the national migration network.

Net migration and net migration rates with contiguous and noncontiguous States over the 1980-to-1988 period are shown in table 3-7, along with the contiguous/noncontiguous ratio. (Note that the ratio of migration counts is equivalent to the ratio of the corresponding migration rates when both rates are from the same population.) A negative sign in the ratio column means that for that State the direction of migration with contiguous States was opposite that with noncontiguous States. For example, both Alabama and Arkansas lost more migrants to contiguous States than they gained from noncontiguous States. Perhaps the most interesting information revealed by table 3-7 is that the two States with the largest net migration with noncontiguous States, Florida and California, both had negative net migration with contiguous States. This implies that as new migrants are moving in, other residents are moving out to neighboring States.

Given the size of California's population, this outmigration seems likely to have a considerable impact on

Table 3-7. Contiguous Versus Noncontiguous State Migration: 1980 to 1988

State	Contiguous		Noncontiguous		Ratio
	Net Migration	Net Rate	Net Migration	Net Rate	
Alabama	-109748	-304.99	108848	302.49	-1.01
Arizona	72441	261.07	411745	1483.87	0.18
Arkansas	-28477	-135.07	20098	95.33	-1.42
California	-142488	-61.08	591072	253.38	-0.24
Colorado	18826	66.29	82222	289.52	0.23
Connecticut	72113	253.24	-95236	-334.44	-0.76
Delaware	19928	357.71	9922	178.10	2.01
District of Columbia	-141438	-2510.9	10530	186.93	-13.40
Florida	-32216	-32.30	1947303	1952.28	-0.02
Georgia	169909	321.03	334443	631.91	0.51
Idaho	-36963	-416.02	100	1.13	-370.00
Illinois	-98194	-94.69	-682132	-657.79	0.14
Indiana	62397	126.00	-248905	-502.62	-0.25
Iowa	-66165	-254.98	-182217	-702.21	0.36
Kansas	-367	-1.67	-66302	-302.51	0.01
Kentucky	-29668	-88.88	-111647	-334.46	0.27
Louisiana	-99991	-252.08	-152940	-385.57	0.65
Maine	3052	29.25	45268	433.81	0.07
Maryland	133027	337.55	62646	158.96	2.12
Massachusetts	-77545	-148.55	-96896	-185.61	0.80
Michigan	-16471	-20.00	-549485	-667.16	0.03
Minnesota	43767	116.42	-95350	-253.63	-0.46
Mississippi	36067	154.78	-111169	-477.08	-0.32
Missouri	41755	92.55	-60814	-134.79	-0.69
Montana	-521	-7.15	-44366	-609.00	0.01
Nebraska	-14645	-102.09	-61703	-430.14	0.24
Nevada	91943	1106.28	118333	1423.81	0.78
New Hampshire	114064	1279.75	46774	524.78	2.44
New Jersey	264999	390.94	-346450	-511.10	-0.76
New Mexico	8059	63.06	38550	301.67	0.21
New York	-462060	-289.90	-937022	-587.89	0.49
North Carolina	21060	37.87	339022	609.57	0.06
North Dakota	-9112	-150.39	-52819	-871.74	0.17
Ohio	7401	7.63	-518372	-534.43	-0.01
Oklahoma	-71542	-245.47	-40924	-140.42	1.75
Oregon	-7059	-29.16	570	2.35	-12.40
Pennsylvania	21002	19.61	-352051	-328.66	-0.06
Rhode Island	10637	122.40	-23734	-273.12	-0.45
South Carolina	-14376	-48.40	142540	479.93	-0.10
South Dakota	-6687	-105.81	-36771	-581.82	0.18
Tennessee	12736	29.87	127896	299.93	0.10
Texas	168383	117.67	329672	230.39	0.51
Utah	-15659	-108.41	-25584	-177.13	0.61
Vermont	10031	209.59	8540	178.44	1.17
Virginia	38889	76.39	286158	562.13	0.14
Washington	60583	153.85	167886	426.33	0.36
West Virginia	-48110	-276.22	-119368	-685.35	0.40
Wisconsin	33858	78.87	-179878	-419.02	-0.19
Wyoming	-7425	-184.14	-32416	-803.94	0.23

Note: Rates are per 100,000.

its neighbors. To assess this impact, net migration rates were computed for the western States withholding flows to and from California. These are compared with total net migration rates in table 3-8, which also presents the ranks of the respective rates. As can be seen, the apparent strong performance of some of the western

States is largely because of outmigration from California, without which they more closely follow the general downward trend of the West. The one clear exception to this rule is Nevada, which even though it owes over a third of its net migration to California, is still No. 1 in net migration rate without it.

Table 3-8. Net Migration Rates of Western States With and Without California: 1988

State	Net migration rate	Rank of net rate	Net migration rate without California	Rank without California
Alaska .....	-902.09	44	-753.14	44
Arizona .....	607.01	15	470.49	14
Colorado .....	-661.88	42	-472.91	39
Hawaii .....	-241.61	31	-269.07	32
Idaho .....	311.37	16	-5.98	23
Montana .....	-593.05	40	-666.96	43
Nevada .....	4227.91	1	2791.47	1
New Mexico .....	-218.74	28	-256.62	31
Oregon .....	1113.66	6	388.48	15
Utah .....	-653.64	41	-575.46	41
Washington .....	1332.93	4	830.76	8
Wyoming .....	-1625.20	49	-1487.90	49

Note: Rates are per 100,000.

## SUMMARY

There were three distinct trends in U.S. internal migration apparent over the 1980-to-1988 period. The most pronounced trend was a redistribution of population from the Northeast and Midwest to the South, fed primarily by large movements from the Middle Atlantic and East North Central divisions to the South Atlantic division. Over the course of the decade, the contribution of the Midwest to this redistribution fell off markedly as the Midwest appeared to move toward migration equilibrium with the rest of the Nation; but the Middle Atlantic division continued to make a net contribution of over 100,000 a year to the population of the South Atlantic division. This trend produced one pronounced winner and one pronounced loser among the States in terms of net migration over this period. Florida gained far more and New York lost far more population to migration than did any of the other States in the Nation. In fact, the New York-to-Florida flow was the largest State-to-State flow, and it was larger than most division-to-division flows.

Perhaps the most venerable trend in U.S. migration history is the westward movement of the population, which has been going on since the Nation was founded. Although this trend persisted throughout the 1980's, it appears to be nearing an end. The West's net migration in 1988 was less than a third its 1980 value, and its migration effectiveness was approaching zero. The most conspicuous indication of the imminent end of this trend is the downward trend of migration to California, in recent times the principal recipient of westward migration. Nevada is notable for its singular success in bucking this trend. In 1988, when most of the West region States were experiencing net outmigration, Nevada ranked No. 1 nationally in net migration rate by a large margin, and was No. 1 in net migration rate for the

1980-to-1988 period. It should be stressed that in this chapter, the term migration is used to mean internal migration. California and the rest of the southern border States all receive considerable net gains from international migration.

The third of the migration trends mentioned at the beginning of this section consisted of a huge influx of migration into the West South Central and Mountain divisions from the rest of the Nation, particularly the Midwest, in the early part of the period that reversed itself in the latter portion of the period. This trend had its greatest impact in Texas, which ranked No. 1 in net migration in 1981 and had fallen to No. 50 by 1986. Despite its losses in the latter portion of the period, Texas did so well in the early 1980's that it emerged No. 3 in net migration for the period as a whole. Louisiana and Oklahoma, also centrally involved in this trend, were net losers overall and ended up ranking No. 44 and No. 38, respectively, for the period. Thus, the distributional effects of this trend are unclear.

The net effect of these trends was the transfer of population from the Midwest and Northeast to the South and West. Overall, the South gained 3.2 million people, the West gained about 1.3 million, the Northeast lost 1.8 million, and the Midwest lost about 2.8 million in net migration. While the movement from Northeast to South continued at a steady pace throughout the decade, the trends involving the Midwest and West slackened considerably, and both regions appeared headed towards zero net migration. The trend involving the West South Central and Mountain divisions appears to have been an isolated phenomenon that may already have run its course. However, the fact of its occurrence suggests that other such phenomena may occur in the future. Nonetheless, as such phenomena have no clear distributional implications, the most likely trend for the future is continued population redistribution from the Middle Atlantic to the South Atlantic States.

# Chapter 4. Metropolitan and County Population Trends in the 1980's

Richard L. Forstall  
Donald E. Starsinic

## INTRODUCTION

This chapter focuses mainly on the distribution of the metropolitan population (those people living in metropolitan statistical areas) and the nonmetropolitan population (persons living outside these areas). An explanation of metropolitan terms used in the chapter (MSA, CMSA, PMSA, NECMA, central city, suburban) appears in the "Definitions" section (see page 44).

Since population estimates were available only through 1988 for areas below the State level, the discussion focuses on change from 1980 to 1988 and its subdivision into the two periods 1980 to 1984 and 1984 to 1988.

## HIGHLIGHTS

- The metropolitan population in 1988 reached 189 million, an increase of almost 17 million (nearly 10 percent) since 1980.
- The United States became increasingly metropolitan during the 1980's. The share of the Nation's population living in metropolitan areas as now defined increased from 76.2 percent in 1980 to 76.4 in 1984 and 77.1 percent in 1988.
- Metropolitan growth has edged slightly upward from an annual average of 1 percent in the 1970's to 1.2 percent in 1984 to 1988. By then, the metropolitan growth rate was almost four times the nonmetropolitan rate. This was a sharp reversal from the 1970's, when nonmetropolitan territory grew faster than metropolitan areas, although not as great a differential as in the 1960's, when the metropolitan growth rate was more than six times the nonmetropolitan rate.
- The nonmetropolitan population was 56 million in 1988. Its growth has slowed decidedly from an average 1.3 percent per year in the 1970's to only 0.3 percent per year in 1984 to 1988.
- Metropolitan areas gained 5.7 million population through net migration from 1980 to 1988, at an increasing rate after 1984. By contrast, after 1984, nonmetropolitan territory had a small net outmigration.
- In the South, metropolitan areas continued to grow quite rapidly in the 1980's, but the growth of the nonmetropolitan population slowed substantially, with net outmigration in 1984 to 1988.
- In the Northeast, metropolitan areas lost population in the 1970's but have grown modestly in population since 1980 to a level of 0.4 percent a year by 1984 to 1988.
- In the Midwest, both metropolitan and nonmetropolitan areas have experienced heavy outmigration since 1980. Since 1984 the region's metropolitan areas have recovered somewhat, but its nonmetropolitan population has declined.
- In 1980 to 1984, nonmetropolitan territory lost population only in three Midwestern States (Indiana, Illinois, and Iowa). In the 1984 to 1988 period, however, population losses occurred in the nonmetropolitan portions of 18 contiguous States from Pennsylvania west to Idaho and south to the Gulf of Mexico.
- Growth rates in metropolitan areas under 250,000 population fell since the 1970's from an annual rate of 1.6 percent in the 1970's to 1.2 percent from 1980 to 1984 and 0.9 percent from 1984 to 1988.
- From 1980 to 1984, over 80 percent of the MSA's losing population were in the Midwest and Northeast. By 1984 to 1988, however, over half the losing MSA's were in the South and West.
- The Los Angeles CMSA gained over 1.1 million net immigrants over the 1980 to 1988 period, followed by Dallas-Fort Worth with 500,000.
- Since 1980, nonmetropolitan counties close to metropolitan areas generally have had higher growth and immigration rates than more distant counties. Counties remote from metropolitan centers, which grew at 1.2 percent per year in the 1970's, were losing population as a group by 1984 to 1988.
- The share of the U.S. population living in central cities of metropolitan areas has remained fairly constant at about one-third of the total ever since 1950, but the suburban portions of metropolitan areas have increased from 23 percent of the Nation's population in 1950 to 46 percent in 1988.
- Central cities as a group have grown somewhat more since 1980 than during the 1970's. Even so, their rate of growth is less than half that of the suburbs in the same period.

- Of the 522 metropolitan central cities, 43 percent lost population from 1984 to 1988. In the South and West, the percentage was only 17, but in the Northeast it was 69.
- From 35 million in 1950, the suburban population more than tripled to over 112 million in 1988. By then, nearly 60 percent of the metropolitan population lived outside the central cities.
- Suburban territory absorbed over 95 percent of metropolitan growth in the 1970's, but this fell to 76 percent in 1980 to 1988 as the growth of central cities picked up somewhat.
- Between 1984 and 1988, almost 1,500 counties lost population compared with 923 in 1980 to 1984 and only 560 during the 1970's.
- One in six metropolitan counties lost population from 1980 to 1988, but nearly half of all nonmetropolitan counties lost.

## DEFINITIONS

Standard definitions of metropolitan statistical areas (MSA's) are issued by the Office of Management and Budget (OMB) to be used in the presentation of statistics by agencies of the Federal Government.

The general concept of a metropolitan statistical area is that of a population nucleus of at least 50,000, generally consisting of a city and its immediate suburbs, together with adjacent communities having a high degree of economic and social integration with that nucleus. MSA's are defined in terms of counties except in New England, where the definitions are in terms of cities and towns.

By the current standards, an area qualifies for recognition as an MSA if there is (1) a city of at least 50,000 population or (2) a Census Bureau-defined urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (75,000 in New England).

In addition to the county containing the main city, an MSA also includes additional counties having strong economic and social ties to the central county, determined chiefly by (1) the extent of the urbanized area as defined by the Census Bureau and (2) census data on commuting to work. New England MSA's are defined in terms of a core area and related cities and towns.

For users who cannot obtain subcounty statistical data for New England, an alternate series of New England county metropolitan areas (NECMA's) uses counties as the building blocks.

If an MSA has at least 1 million population and meets certain other specified requirements, it is termed a consolidated metropolitan statistical area (CMSA), consisting of major components recognized as primary metropolitan statistical areas (PMSA's). All other areas are referred to as MSA's.

The largest city in population in an MSA is designated a central city. Other cities in the MSA may also qualify as central cities if they meet a minimum population size (generally 25,000) and specified place-of-work requirements.

Although there is no official Federal definition of "suburban" population, this chapter makes use of the term in a loose sense when referring to the portion of MSA's outside the central cities, which may include both densely settled and sparsely settled territory.

Further information on the official MSA standards may be obtained from the Secretary, Federal Executive Committee on Metropolitan Areas, Population Division, Bureau of the Census, Washington, DC 20233.

## METROPOLITAN GROWTH PATTERNS

By 1988, the metropolitan population of the United States had reached 189.4 million, amounting to 77.1 percent of the U.S. total of 245.8 million. Another 56.4 million people lived in nonmetropolitan territory outside the 283 officially designated metropolitan areas. From 1980 to 1988, the population of metropolitan America, as currently defined, increased by 16.8 million (9.7 percent), well above the national average increase of 8.5 percent. Nonmetropolitan America—smaller cities and towns and rural areas—increased only 2.4 million or 4.5 percent, less than half the metropolitan rate of growth (table 4-1).

During the 1970's, a "rural renaissance" saw the nonmetropolitan population growing by 14.3 percent compared with metropolitan America's growth of 10.6 percent. That decade was the only one since the Great Depression when metropolitan areas did not absorb the overwhelming majority of population increase in the United States. The 1980's pattern, however, represents a move back toward the metropolitan dominance in growth exhibited prior to 1970, although not a complete reversion to the patterns of the 1950's and 1960's, when virtually all population growth occurred in metropolitan areas.

Annual rates of growth for metropolitan areas, which had subsided from 1.6 percent in the 1960's to only 1.0 percent in the 1970's, recovered slightly to 1.1 percent from 1980 to 1984 and to 1.2 percent from 1984 to 1988. The exceptionally high annual rate of increase for the nonmetropolitan population in the 1970's (1.3 percent a year compared with only 0.2 percent in the 1960's) subsided by almost half (to 0.7 percent) in the 1980 to 1984 period. It dropped off still further to 0.3 percent from 1984 to 1988, nearly back to the level of the 1960's.

Because they have a younger age makeup, metropolitan areas as a group had a higher annual percent increase in their population from natural increase (0.7 percent) than did nonmetropolitan territory (0.5 percent)

**Table 4-1. Population Change and Net Migration Rates by Metropolitan Status, for Regions: 1960 to 1970, 1970 to 1980, 1980 to 1984, and 1984 to 1988**

(Numbers in thousands. MSA's as defined by the Office of Management and Budget, June 30, 1989)

Region and metropolitan status	Population, July 1, 1988 (estimate)	Average annual percent change				Average annual percent net migration			
		1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
<b>TOTAL POPULATION</b>									
United States .....	245,803	0.97	1.01	1.08	1.25	0.28	0.29	0.44	0.18
Northeast .....	50,596	0.45	0.26	0.02	0.94	-0.01	-0.14	-0.37	0.09
Midwest .....	59,879	0.33	0.09	0.39	0.92	-0.28	-0.59	-0.24	-0.13
South .....	84,650	1.17	1.63	1.82	1.33	0.47	0.89	1.10	0.15
West .....	50,678	1.95	1.94	2.14	2.16	0.93	0.90	1.30	0.94
North .....	110,476	0.38	0.17	0.22	0.93	-0.16	-0.39	-0.30	-0.03
South and West .....	135,328	1.46	1.74	1.93	1.62	0.64	0.89	1.17	0.42
<b>INSIDE MSA's</b>									
United States .....	189,413	1.17	1.09	1.00	1.58	0.41	0.34	0.34	0.46
Northeast .....	44,655	0.42	0.25	-0.10	0.98	-0.05	-0.15	-0.49	0.12
Midwest .....	42,601	0.51	0.09	0.27	1.23	-0.20	-0.65	-0.45	0.06
South .....	59,529	1.53	1.92	1.96	1.98	0.72	1.10	1.19	0.70
West .....	42,628	2.15	1.96	2.04	2.46	1.12	0.95	1.23	1.24
North .....	87,256	0.46	0.17	0.08	1.10	-0.12	-0.39	-0.47	0.09
South and West .....	102,157	1.79	1.94	1.99	2.17	0.88	1.04	1.20	0.92
<b>OUTSIDE MSA's</b>									
United States .....	56,390	0.31	0.75	1.33	0.24	-0.17	0.13	0.76	-0.67
Northeast .....	5,941	0.67	0.35	0.97	0.57	0.30	-0.07	0.56	-0.21
Midwest .....	17,278	-0.11	0.09	0.71	0.17	-0.50	-0.45	0.26	-0.56
South .....	25,121	0.34	0.99	1.51	0.11	-0.10	0.42	0.92	-0.90
West .....	8,050	0.87	1.82	2.64	0.68	-0.04	0.68	1.69	-0.54
North .....	23,220	0.09	0.15	0.77	0.26	-0.30	-0.36	0.33	-0.48
South and West .....	33,170	0.47	1.18	1.76	0.22	-0.08	0.48	1.09	-0.83

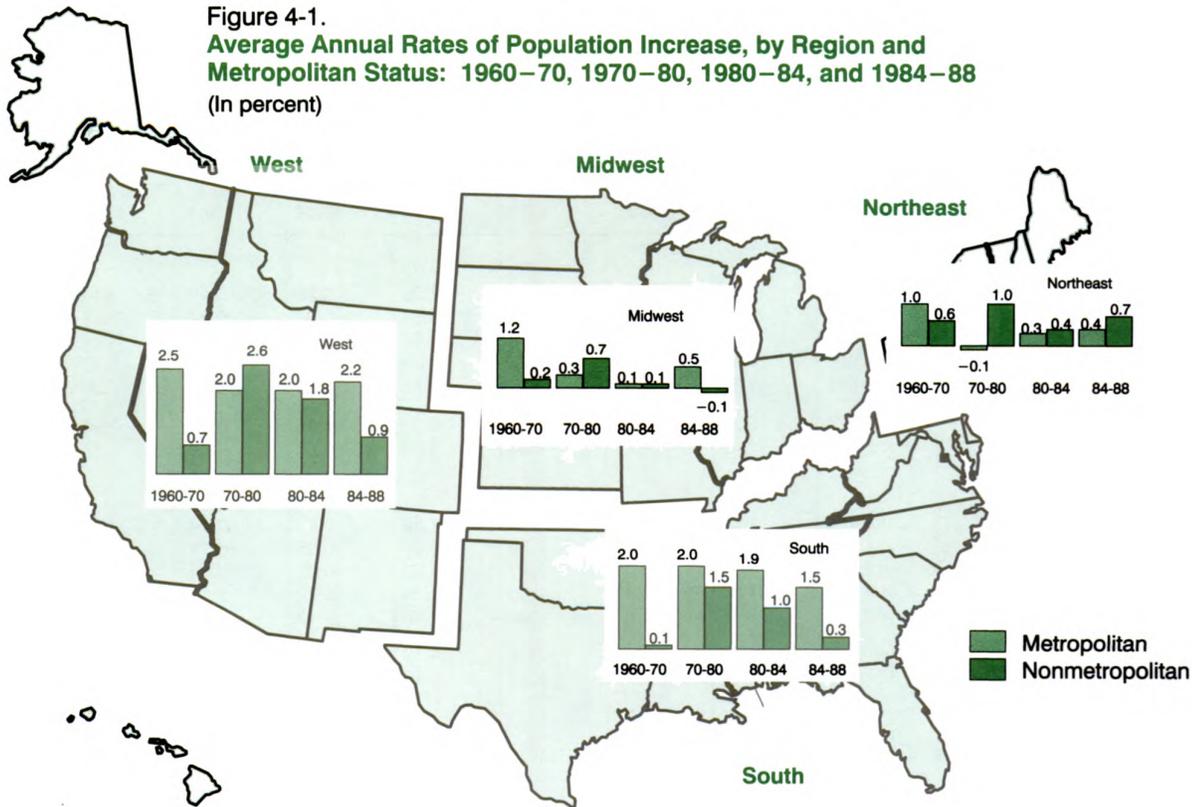
- Represents zero.

<sup>1</sup>Net migration for the 1970's is calculated as the difference between intercensal population change and the balance of births and deaths and, therefore, includes net improvement in coverage in the 1980 census as compared with 1970. The estimated actual annual rate of net migration in the 1970's was about 0.3 percent for the United States, -0.4 for the Northeast, -0.3 for the Midwest, about 0.7 percent for the South, and about 1.3 percent for the West.

**Table 4-2. Rates of Natural Increase for Metropolitan and Nonmetropolitan Areas by Region: 1960 to 1970, 1970 to 1980, 1980 to 1984, and 1984 to 1988**

Region	Average annual natural increase percent			
	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
United States .....	0.69	0.71	0.64	1.07
Metropolitan .....	0.75	0.74	0.66	1.12
Northeast .....	0.47	0.40	0.39	0.86
Midwest .....	0.70	0.75	0.72	1.18
South .....	0.81	0.82	0.78	1.28
West .....	1.03	1.02	0.81	1.22
Nonmetropolitan .....	0.48	0.62	0.57	0.91
Northeast .....	0.37	0.42	0.41	0.77
Midwest .....	0.39	0.54	0.45	0.73
South .....	0.44	0.57	0.59	1.01
West .....	0.91	1.14	0.95	1.21

Figure 4-1.  
Average Annual Rates of Population Increase, by Region and  
Metropolitan Status: 1960–70, 1970–80, 1980–84, and 1984–88  
(In percent)



Source: Table 4-1.

in the 1980 to 1988 period. However, the much larger increase since 1980 in the metropolitan population (9.7 percent) compared with the nonmetropolitan population (4.5 percent) is mainly the result of differential migration. At the U.S. level, metropolitan areas gained 5.7 million population through net migration, and this took place at an increasing rate after 1984. Nonmetropolitan America, however, after a modest immigration for 1980 to 1984, had a small outmigration for 1984 to 1988.

## REGIONAL TRENDS IN METROPOLITAN GROWTH

The broad patterns of regional population growth are discussed in chapter 2. The patterns of the 1980's are similar to those of the 1970's in that the South and the West dominate with over 85 percent of the total population growth (16.8 million out of 19.3 million national growth in the 1980 to 1988 period compared with 20.9 million out of 23.2 million in the 1970's), leaving the Northeast and Midwest with the small remaining increase. However, there also are important changes in pattern during the 1980's. (See table 4-1.)

Although Southern and Western MSA's continue to grow much more rapidly than their counterparts in the Northeast and Midwest, the regional disparity in growth rates had fallen notably by the late 1980's. In the 1970's, the Southern and Western areas had an annual growth rate 1.9 percentage points higher than the Northern areas. This difference fell slightly to 1.8 points for 1980 to 1984, but for 1984 to 1988, it dropped to 1.3 points.

Metropolitan population growth since 1970 in the Northeast and the Midwest has been quite modest, and both regions have experienced heavy outmigration.<sup>1</sup> In the Northeast, which is overwhelmingly metropolitan,

<sup>1</sup>In this discussion, the populations and growth rates for metropolitan and nonmetropolitan areas are for the areas as defined in 1989. This assigns to the metropolitan category some growth that took place in the 1960's and 1970's in territory that was classified as nonmetropolitan at that time. Over time, metropolitan areas typically grow through territorial expansion. Many cities have achieved metropolitan status since 1960, and most of the metropolitan areas recognized in 1960 have added territory since that time. In that sense, actual metropolitan growth has been more rapid than shown by these data based on constant 1989 geography, while actual nonmetropolitan population growth has been less than shown here.

metropolitan growth was negative in the 1970's but increased to 0.4 percent per year by 1984 to 1988. Nonmetropolitan growth, which reached 1.0 percent per year in the 1970's, declined to 0.3 percent in the early 1980's but then recovered to 0.7-percent annually in 1984 to 1988 (figure 4-1). Natural increase rates in the Northeast have consistently been below the national average, especially in metropolitan areas (table 4-2).

In the Midwest, the MSA's had a slight net immigration in the 1960's when the region as a whole had net outmigration. In the 1970's, the pattern shifted, and Midwestern MSA's experienced net outmigration at a rate of 0.5 percent per year, about the same as that of the region. This metropolitan net outmigration rate continued into the 1980's, but at a reduced level. Nonmetropolitan areas in the Midwest, however, had an actual loss in population between 1984 and 1988. Every State in the Midwest experienced nonmetropolitan population loss from 1980 to 1988 except Michigan, Wisconsin, and Missouri.

Natural increase rates in the Midwest are close to the U.S. average, with the metropolitan natural increase rate substantially higher than the nonmetropolitan.

In the West, there has been rapid metropolitan growth and net immigration in all three decades, with the rates highest in the 1960's. The nonmetropolitan growth rate in the West, however, fell somewhat in the early 1980's and even more in the 1984 to 1988 period, especially in the Mountain States. However, it is still more than twice that of the remainder of nonmetropolitan United States, as has been true since at least 1960. By 1984 to 1988, there was a small net outmigration and all of the nonmetropolitan growth in the region was due to natural increase.

The contrast between total and metropolitan growth patterns is greatest in the South, the region that has the largest share of its population living outside metropolitan areas. In the 1960's, Southern MSA's grew by 2.0 percent per year compared with only 1.3 percent annual growth for the region. In the 1970's, when the South's average growth rate jumped to 1.8 percent annually, the metropolitan growth rate continued at about 2 percent. Since 1980, both regional and metropolitan growth rates have fallen somewhat. However, net immigration to the South has been higher since 1980 than in the 1960's when fertility rates were higher and the annual rate of natural increase was 1.2 percent compared with 0.8 percent in 1984 to 1988.

Population growth throughout the nonmetropolitan South has fallen considerably since the 1970's, dropping from 1.5 percent a year to 1 percent in the 1980 to 1984 period and to less than 0.5 percent since 1984. By the 1984 to 1988 period, nonmetropolitan areas in the South were experiencing outmigration for the first time since the 1960's. In addition, their natural increase rate had tumbled from 1.1 percent per year in the 1960's to

0.4 percent per year in 1984 to 1988, no higher than that of the nonmetropolitan North.

The decline in population growth in nonmetropolitan America intensified as the 1980 decade progressed. From 1980 to 1984 only Illinois, Indiana, and Iowa showed nonmetropolitan population losses. In the 1984 to 1988 period, however, population losses occurred in the nonmetropolitan parts of 18 contiguous States spread across the American heartland from Pennsylvania west to Idaho and south to the Gulf of Mexico (figure 4-2).

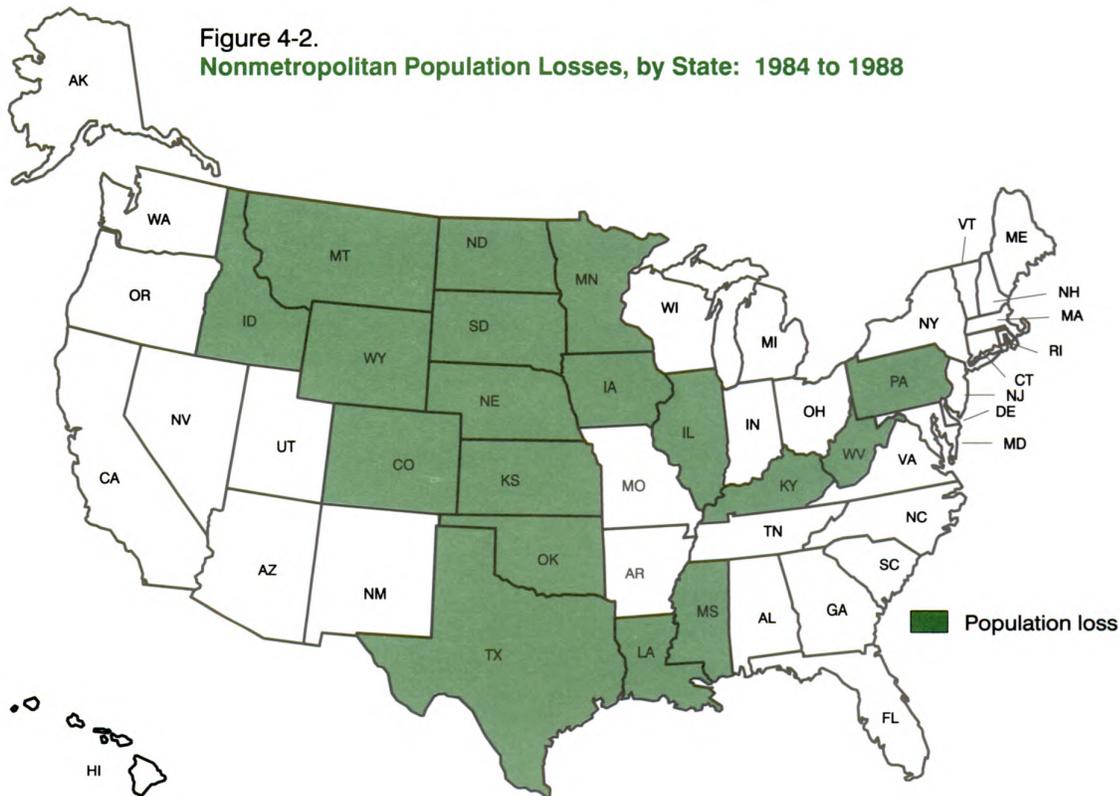
In summary, the 1984 to 1988 period saw a rapidly growing metropolitan population in the West, some slowing of rapid metropolitan growth in the South, and a modestly recovering metropolitan growth in the Northeast and the Midwest. By contrast, nonmetropolitan population increase had essentially come to a halt in most of the interior part of the country by 1988. By the late 1980's, growth in the nonmetropolitan population was occurring only in States on the Pacific Coast, in the South Atlantic States, and in New England.

## METROPOLITAN SIZE CLASSES

In the Nation as a whole, the relationship between size of MSA and rate of growth has been different in each of the four recent periods (table 4-3 and figure 4-3). At the national level, the growth of different size groups of metropolitan areas is affected considerably by regional factors. The very large MSA's (over 5 million) are concentrated in the North and the West, while the South has many MSA's in the 500,000 to 5 million range. At the same time, practically all Northern metropolitan areas have had much lower growth rates since 1970 than most Southern and Western MSA's, irrespective of metropolitan size. Thus, at the national level, MSA size groups of less than 5 million tend to show a higher growth rate than the very large areas.

In the 1960's, the most rapid growth was in areas of 1-to-5 million population, a group including such fast-growing Southern areas as Dallas-Fort Worth, Houston, and Miami. This group grew faster than smaller areas and faster than the five metropolitan areas over 5 million.

In the 1970's, smaller MSA's in the South and West grew as rapidly as the larger ones, and smaller areas in the North grew while larger ones declined. All five metropolitan areas over 5 million had sharp drops in growth in that decade. The group as a whole had net outmigration, since heavy outflow from metropolitan New York, Philadelphia, and Chicago more than compensated for immigration that continued to Los Angeles and San Francisco. MSA's under 500,000, however, did relatively well in the 1970's in all regions, producing a clear inverse relationship in that decade between metropolitan size and rate of growth at the national level (figure 4-3).



Since 1980, the pattern has moved back closer to that of the 1960's, although all growth rates are lower, especially for the largest MSA's. The MSA's in the 1-to-5-million and 500,000-to-1 million range still show somewhat higher growth and immigration rates than the others. For areas under 250,000, by contrast, rates of population change have dropped sharply since the 1970's. Their average annual rate of growth declined from 1.6 percent in the 1970's to 1.2 percent from 1980 to 1984 and 0.9 percent from 1984 to 1988. In the process, they moved from being the fastest-growing to the slowest-growing size class.

This fall in growth and net immigration rates has resulted almost entirely from smaller Southern and Western MSA's. From 1984 to 1988, net immigration to MSA's under 250,000 in the South and West fell to only 0.3 percent per year. During the same period, MSA's in the various size groups in the North hardly differed in their growth rates.

In the 1960's and 1970's, some of the growth advantage of smaller MSA's derived from their higher rates of natural increase (table 4-4). By 1984 to 1988, however, natural increase levels were quite similar across different size groups of areas, so differences in growth rates were almost entirely because of differences in migration rates.

### INDIVIDUAL MSA'S

Throughout the 1980's, the New York-Northern New Jersey-Long Island complex remained by far the largest

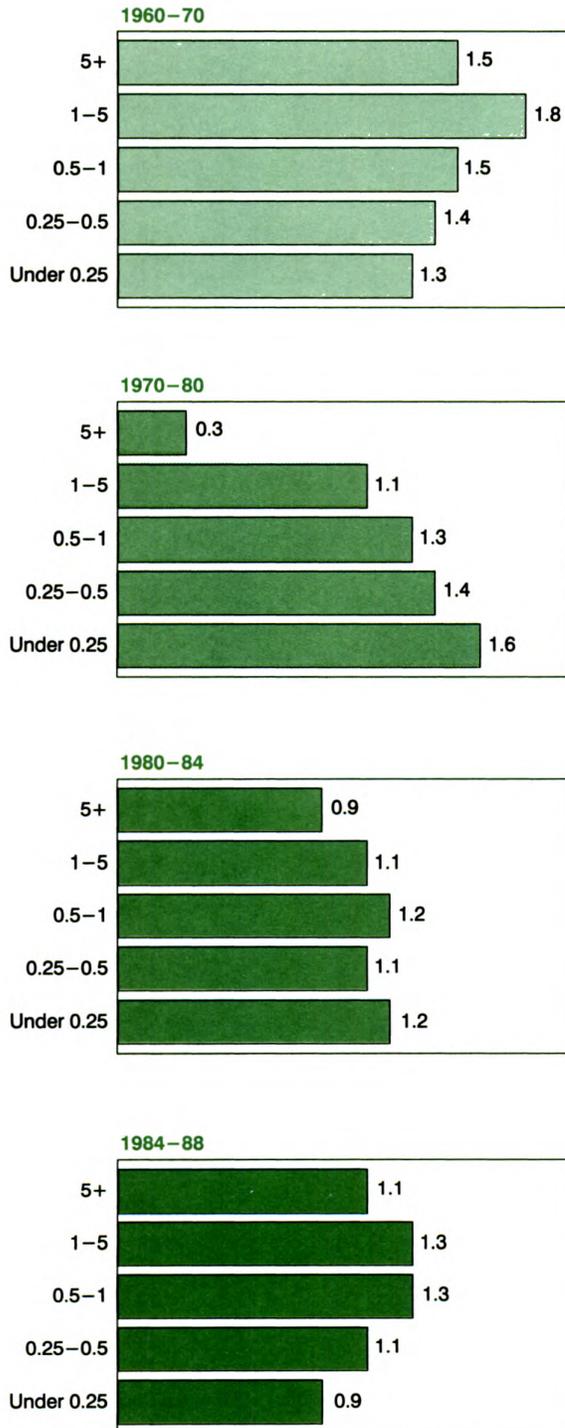
metropolitan area in population, increasing by 581,000 to reach 18.1 million in 1988. Growth in 1980 to 1984 was 304,000, but it was slightly lower in 1984 to 1988. The second-ranked Los Angeles-Anaheim-Riverside area exceeded all others by far in numeric growth, with an increase of 2.3 million, bringing the area to a 1988 total of 13.8 million. Its increase of 1 million in 1980 to 1984 was surpassed by a growth of 1.3 million from 1984 to 1988 (table 4-5).

There were six other metropolitan areas that increased by at least a half million population, including Dallas-Fort Worth (+835,000); San Francisco-Oakland-San Jose (+674,000); Atlanta (+598,000); Houston-Galveston-Brazoria (+542,000); Phoenix (+520,000); and San Diego (+509,000); and the Washington, DC, area was not far behind (+483,000). The Atlanta, Phoenix, San Diego, and Washington areas all grew significantly faster in 1984 to 1988 than in 1980 to 1984, while the Dallas and San Francisco areas slowed somewhat, and the Houston area slowed dramatically. Another 33 metropolitan areas grew by at least 100,000 over the 8-year period.

Six Florida metropolitan areas head the list of the fastest-growing metropolitan areas from 1980 to 1988, four of them with average population increases exceeding 5 percent per year. Naples, FL, was the fastest growing at 5.8 percent per year. The 10 fastest-growing areas from 1980 to 1988 regardless of size are shown in table 4-6. Except for Orlando, all of these areas had somewhat lower growth rates for 1984 to 1988 than for 1980 to 1984.

**Figure 4-3.**  
**Average Annual Rates of Population Increase,**  
**by Population Size of MSA: 1960–70, 1970–80,**  
**1980–84, and 1984–88**

In millions



Source: Table 4-3.

Anchorage, AK, with the fastest rate of increase in population of any MSA from 1980 to 1984 (6.3 percent per year), lost population during the later period. Other areas with large rates of increase in the early part of the 1980's that fared poorly after 1984 were Midland, TX (ranked 3rd with an average rate of 5.8 percent from 1980-84); Bryan-College Station, TX (ranked 6th, 5.1 percent); Odessa, TX (ranked 19th, 3.5 percent); Houston, TX (ranked 20th, 3.5 percent); and Oklahoma City, OK (ranked 30th, 2.8 percent). Midland and Houston increased only slightly from 1984 to 1988, while the other three areas declined.

Among metropolitan areas over 1 million population, Phoenix was the fastest-growing from 1980 to 1988, increasing by 3.6 percent a year, followed by Dallas-Fort Worth (3.0 percent), Atlanta (3.0 percent), and San Diego (2.9 percent). Houston had been the growth leader among these large areas in the early 1980's (3.5 percent a year), followed by Dallas (3.3 percent) and Phoenix (3.2 percent). Phoenix's accelerated growth in the 1984 to 1988 period enabled it to pass the other two areas in growth, as the Houston economy sagged badly and Dallas' leveled off.

Between 1980 and 1988, 50 metropolitan areas declined in population (table 4-7) compared with only 22 in the 1970's. Over half (26) of the areas were in the Midwest and 12 were in the Northeast. The first 4 years of the decade were particularly hard on the Midwest, where 45 percent of all the MSA's lost population compared with 33 percent in the Northeast but only 8 percent in the South and 6 percent in the West. Over 80 percent of the 59 MSA's losing population in 1980 to 1984 were in the Midwest and Northeast. Eight MSA's lost population in both Michigan and Ohio, six each in Pennsylvania and Indiana, five in New York, and four in Iowa and Illinois.

From 1984 to 1988, however, many of the Midwestern areas rebounded from economic recession, but MSA's in the South and West began to feel the cut-backs in energy exploitation, which had caused their economies to boom so strongly in the early 1980's. Over half the 67 MSA's losing population from 1984 to 1988 were Southern or Western, led by 7 in Texas, 6 in Louisiana, and 4 each in Oklahoma and West Virginia.

Pittsburgh had the largest population decline of any metropolitan area after 1980 (-139,000, most of it between 1984 and 1988), followed by Detroit (-133,000) with a loss of 170,000 from 1980 to 1984 offset by a recovery of 38,000 in the next 4 years. The largest rates of decline in population during the 1980 to 1988 period were in the metropolitan areas of Casper, WY; Steubenville-Weirton, OH-WV; Duluth, MN; and Waterloo-Cedar Falls, IA. All had losses of 1.2 to 1.3 percent per year. For Casper and Waterloo, the loss was heavily concentrated in 1984 to 1988, while it was spread throughout the 8-year period for Steubenville and Duluth.

**Table 4-3. Population Change and Net Migration Rates for MSA's, by Population Size Class in 1980: 1960-70, 1970-80, 1980-84, and 1984-88**

(Populations in thousands. MSA's as defined by Office of Management and Budget, June 30, 1989)

Region and size class in 1980	Number of MSA's	Population July 1, 1988 (estimate)	Average annual percent change				Average annual percent net migration			
			1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
United States .....	283	189,413	1.17	1.09	1.00	1.58	0.41	0.34	0.34	0.46
Over 5 million .....	5	52,076	1.09	0.88	0.33	1.54	0.33	0.21	-0.24	0.53
1 to 5 million .....	30	66,167	1.33	1.14	1.09	1.82	0.56	0.41	0.44	0.68
500,000 to 1 million .....	33	25,794	1.26	1.19	1.32	1.47	0.55	0.47	0.63	0.35
250,000 to 500,000 .....	57	21,707	1.10	1.13	1.44	1.37	0.33	0.30	0.64	0.12
Less than 250,000 .....	157	23,669	0.87	1.22	1.62	1.33	0.12	0.38	0.82	0.09
North .....	118	87,256	0.46	0.17	0.08	1.10	-0.12	-0.39	-0.47	0.09
Over 5 million .....	3	31,757	0.45	0.37	-0.19	1.11	-0.14	-0.15	-0.68	0.18
1 to 5 million .....	14	29,184	0.49	-0.02	-0.01	1.11	-0.10	-0.60	-0.56	0.05
500,000 to 1 million .....	13	9,069	0.49	0.14	0.29	1.11	-0.03	-0.40	-0.23	0.17
250,000 to 500,000 .....	24	8,343	0.38	0.09	0.54	1.04	-0.22	-0.57	-0.10	-0.06
Less than 250,000 .....	64	8,903	0.46	0.24	0.69	1.07	-0.15	-0.43	0.04	-0.03
South and West .....	165	102,157	1.79	1.94	1.99	2.17	0.88	1.04	1.20	0.92
Over 5 million .....	2	20,319	2.12	1.76	1.32	2.48	1.09	0.82	0.61	1.31
1 to 5 million .....	16	36,983	2.02	2.17	2.21	2.70	1.09	1.29	1.48	1.47
500,000 to 1 million .....	20	16,725	1.68	1.81	2.01	1.73	0.88	0.98	1.20	0.48
250,000 to 500,000 .....	33	13,364	1.56	1.84	2.12	1.65	0.68	0.90	1.21	0.26
Less than 250,000 .....	94	14,766	1.11	1.85	2.27	1.53	0.28	0.90	1.37	0.17

**Table 4-4. Rates of Natural Increase for Metropolitan Areas by Size: 1960 to 1970, 1970 to 1980, 1980 to 1984, and 1984 to 1988**

Size class in 1980	Average annual percent natural increase			
	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
United States .....	0.75	0.74	0.66	1.12
Over 5 million .....	0.76	0.67	0.57	1.01
1 to 5 million .....	0.77	0.74	0.64	1.14
500,000 to 1 million .....	0.71	0.72	0.69	1.12
250,000 to 500,000 .....	0.76	0.83	0.80	1.26
Less than 250,000 .....	0.75	0.84	0.80	1.24

**Table 4-5. MSA's Growing by More Than 475,000 Population, 1980 to 1988**

(Numbers in thousands)

Metropolitan statistical area	Population			Change		
	1988	1984	1980	1980 to 1988	1984 to 1988	1980 to 1984
Los Angeles-Anaheim-Riverside, CA* .....	13,770	12,489	11,498	2,272	1,281	991
Dallas-Fort Worth, TX* .....	3,766	3,371	2,931	835	395	441
San Francisco-Oakland-San Jose, CA* .....	6,042	5,707	5,368	674	334	340
Atlanta, GA .....	2,737	2,379	2,138	598	357	241
New York-Northern New Jersey-Long Island, NY-NJ-CT* .....	18,120	17,843	17,540	581	277	304
Houston-Galveston-Brazoria, TX* .....	3,641	3,601	3,100	542	41	501
Phoenix, AZ .....	2,030	1,732	1,509	520	298	222
San Diego, CA .....	2,370	2,075	1,862	509	296	213
Washington, DC-MD-VA .....	3,734	3,439	3,251	483	295	188

\*Consolidated MSA.

Table 4-6. Fastest Growing MSA's, 1980 to 1988

(Numbers in thousands)

Metropolitan statistical area	Population			Average annual percent change		
	1988	1984	1980	1980 to 1988	1984 to 1988	1980 to 1984
Naples, FL .....	138.5	111.4	86.0	5.8	5.4	6.1
Ocala, FL .....	189.8	155.4	122.5	5.3	5.0	5.6
Fort Pierce, FL.....	231.8	191.3	151.2	5.2	4.8	5.5
Fort Myers-Cape Coral, FL .....	309.1	255.7	205.3	5.0	4.8	5.1
Melbourne-Titusville-Palm Bay, FL .....	388.3	330.4	273.0	4.3	4.0	4.9
West Palm Beach-Boca Raton-Delray Beach, FL .....	818.5	693.6	576.8	4.2	4.1	4.3
Austin, TX .....	748.5	652.1	536.7	4.0	3.4	4.6
Orlando, FL.....	971.2	828.9	699.9	4.0	4.0	4.0
Fort Walton Beach, FL .....	150.6	129.8	109.9	3.8	3.7	3.9
Las Cruces, NM.....	132.0	114.4	96.3	3.8	3.6	4.0

Table 4-7. Number of Metropolitan Areas Losing Population, by Region: 1980's

Area	Total	Northeast	Midwest	South	West
All metropolitan areas .....	283	43	75	118	47
Losing population, 1980 to 1988 .....	50	12	26	9	3
Percent.....	17.7	27.9	34.7	7.6	6.4
Losing population, 1980 to 1984 .....	59	14	34	9	2
Percent.....	20.8	32.6	45.3	7.6	4.3
Losing population, 1984 to 1988 .....	67	11	22	29	5
Percent.....	23.7	25.6	29.3	24.6	10.6

Among the 74 metropolitan areas over 500,000 population, 9 Northeastern and Midwestern areas lost population from 1980 to 1984: Buffalo, Detroit, Youngstown, Pittsburgh, Cleveland, Dayton, Milwaukee, Toledo, and Scranton—Wilkes-Barre. Five of these MSA's, however, gained population from 1984 to 1988. Cleveland and Buffalo lost population less heavily, and only Pittsburgh and Youngstown lost more heavily during the later period. From 1980 to 1988 the Dayton, Milwaukee, and Scranton areas gained population, leaving only six areas over 500,000 that lost population over the entire 8 years.

Of the 25 metropolitan areas with populations of 1.5 million or more in 1988, differential growth resulted in some significant changes in population rank during the 1980's. San Francisco-Oakland-San Jose supplanted Philadelphia in 4th place by 1985. Houston passed Washington and moved into 8th place by 1982, and Dallas-Fort Worth passed both areas between 1984 and 1988. By 1987, Houston had dropped back to 10th behind Washington in the competition among these three rapidly growing areas of roughly equal size. MSA's gaining considerably in rank after 1980 were Atlanta (from 16th in 1980 to 14th in 1984 and 13th in 1988); Seattle-Tacoma (from 18th in 1980 and 1984 to 15th in

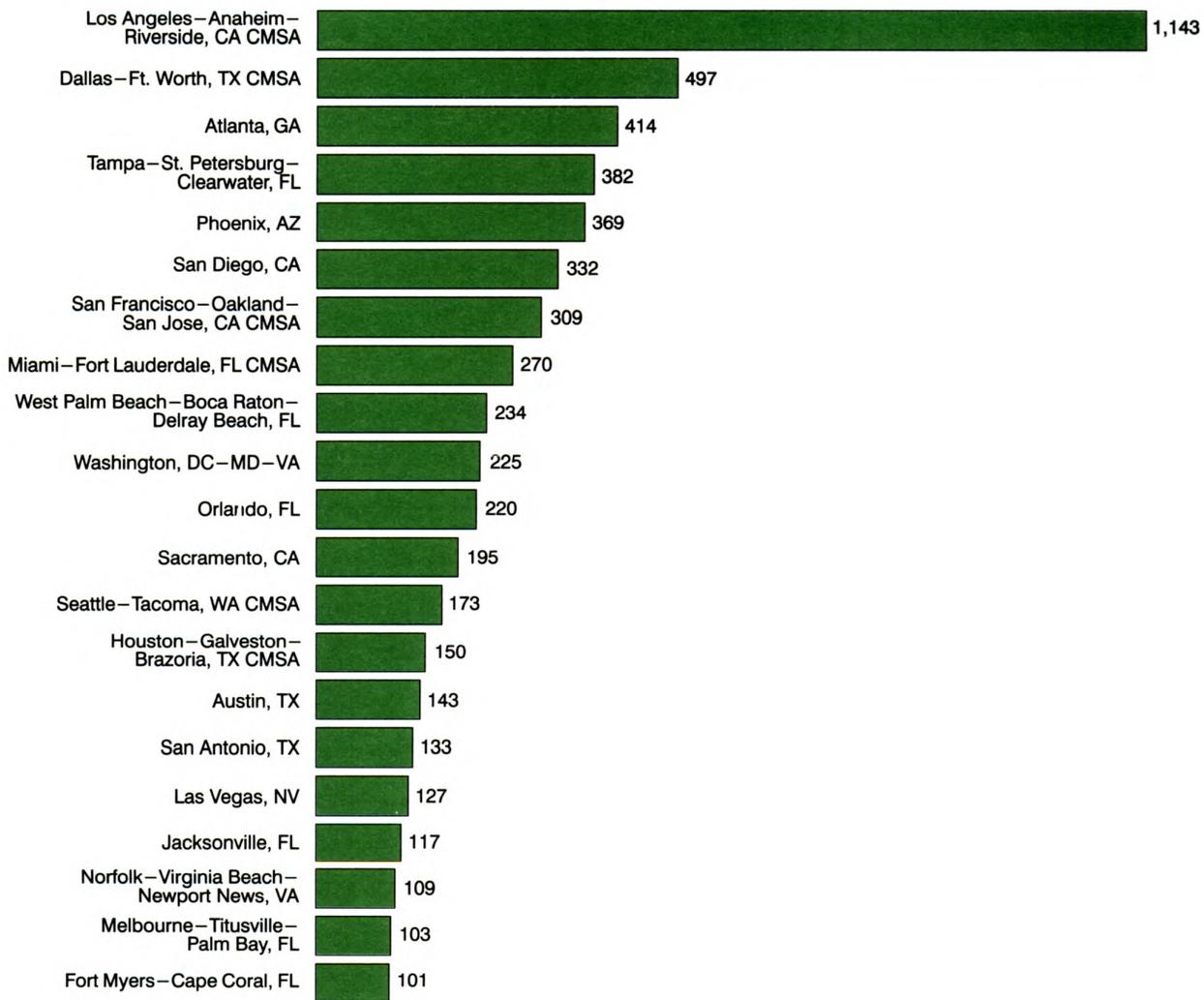
1988); and Phoenix (from 24th to 22nd to 20th). Pittsburgh dropped from 13th to 15th to 19th, Baltimore from 15th to 16th to 18th, and Cincinnati from 20th in 1980 to 23rd in 1984 and 1988.

### COMPONENTS OF POPULATION CHANGE FOR INDIVIDUAL MSA'S

With the South and West absorbing so much of the Nation's population increase, half of this increase through net migration, it is not surprising that many metropolitan areas in these two regions had large net migration increases during the 1980's. The Los Angeles CMSA gained by far the largest number of net immigrants, over 1.1 million (figure 4-4) from 1980 to 1988. Many of these undoubtedly were immigrants from other countries. Dallas-Fort Worth added 500,000 persons through net immigration; the Atlanta area over 400,000; and the Tampa-St. Petersburg, Phoenix, San Diego, and San Francisco areas over 300,000 each. In all, 21 MSA's gained 100,000 or more net immigrants during the 1980-to-1988 period and another 15 added 50,000 to 100,000. Twenty-three of those 36 areas were in the South, 12 in the West, and 1 in the Midwest (Minneapolis-St. Paul).

Four of the rapidly growing Florida MSA's have accrued net migration since 1980 amounting to half

Figure 4-4.  
**Estimated Net Migration Increases of  
 100,000 or More for MSA's: 1980 to 1988**  
 (In thousands)



Source: Current Population Reports, Series P-26, No. 88-B, table 1.

their 1980 populations—56 percent in Naples, 51 percent in Ocala, 50 percent in Fort Pierce, and 49 percent in Fort Myers-Cape Coral. All these MSA's have net migration rates more than double the national rate of overall population growth.

In a very few MSA's, net migration exceeded overall population growth from 1980 to 1988. This occurred because the areas experienced more deaths than births in their populations—a natural decrease. Although fertility levels vary considerably throughout the United States (high in Utah, Louisiana, New Mexico, and Alaska, and low in the Northeast), natural decrease generally

occurs only where the age structure of the population is old, resulting in a high death rate. Natural decrease occurred in the Scranton—Wilkes-Barre, PA MSA (-100) and in four Florida MSA's: Bradenton (-1,800), Daytona Beach (-3,800), Sarasota (-10,300), and Tampa-St. Petersburg-Clearwater (-500). In Scranton—Wilkes-Barre, the elderly age structure is a result of heavy outmigration of young people over several decades. In Florida, however, it results from large-scale immigration of elderly persons.

Close to half of all MSA's (135 of 283) lost population through net migration in 1980 to 1988 (table 4-8). Of

Table 4-8. Number of MSA's with Net Migration Gains and Losses: 1980 to 1988

Region	Number of MSA's		
	Total	Net migration gain	Net migration loss
United States.....	283	148	135
Northeast.....	43	19	24
Midwest.....	75	18	57
South.....	118	75	43
West.....	47	36	11

these, 81 were in the Northeast and Midwest, but more than one-third of Southern MSA's also had net outmigration during the period.

The largest number of net outmigrants from individual metropolitan areas from 1980 to 1988 were from seven of the CMSA's with 1 million or more population: Detroit (-364,300 net outmigration); Chicago (-290,000); Cleveland (-180,200); Pittsburgh (-168,100); Buffalo (-99,400); New York-Northern NJ-Long Island (-92,800); and Milwaukee (-92,700). All of these CMSA's except Chicago had actual population losses in the 1970's, and this was the case in Detroit, Cleveland, Pittsburgh, Buffalo, and Milwaukee in 1980 to 1984. However, in the mid-1980's, outmigration lessened from some of these areas. Detroit and Milwaukee had small population increases from 1984 to 1988, while the rates of decline in Cleveland and Buffalo lessened greatly.

## NONMETROPOLITAN GROWTH AND MIGRATION BY TYPE OF COUNTY

Growth and net migration rates for the nonmetropolitan population since 1960 have experienced wider swings than those for MSA's (table 4-9 and figure 4-5). Nationally, the nonmetropolitan growth rate in the 1960's (0.25 percent per year) was less than one-fifth the national growth rate, but in the 1970's, it leaped to 1.3 percent per year, above the national rate of 1.1 percent. In 1980 to 1984, nonmetropolitan growth subsided to an annual rate of 0.75 percent, and in 1984 to 1988 to only 0.3 percent, not much higher than the 1960's rate. Nonmetropolitan net migration swung from an 0.7-percent-per-year outflow in the 1960's to 0.8-percent annual inflow in the 1970's. By 1984 to 1988, it had returned to 0.2-percent annual outflow. During the same period, nonmetropolitan natural increase rates fell from 0.9 percent annually in the 1960's to 0.5 percent annually in 1984 to 1988, well below the metropolitan rates (table 4-2).

The growth rates for nonmetropolitan counties in the 1980's show a close relationship with ties to a metropolitan area as evidenced by commuting or geographic contiguity (table 4-9). Those counties with relatively high levels of commuting to a metropolitan area generally show higher growth rates. This relationship can also be

seen for the 1970's, but the difference in growth rates between counties with high metropolitan commuting and those remote from any MSA was much less in that decade because the "nonmetropolitan turnaround" brought growth to dozens of rural counties that had not experienced it for decades.

Among the nonmetropolitan counties with little commuting to an MSA, table 4-9 also identifies those that contain an important small city (at least 25,000 population or 10,000 jobs in 1980). Such counties had a clear growth advantage in the 1960's, when they grew much faster than the remainder of the nonmetropolitan category. Since 1970, this differential has largely disappeared, and counties containing small cities are growing at rates similar to or lower than those of nonmetropolitan counties in general. Counties remote from metropolitan centers, which grew at 1.2 percent per year in the 1970's, were losing population as a group by 1984 to 1988.

These national patterns for nonmetropolitan counties generally are seen in each region as well. In the North, the current high-commuting counties had little growth (and net outmigration) in the early 1980's, but they have been growing slowly since 1984. Those with minimal commuting have lost population. For the South and West, all groups of nonmetropolitan counties had lower rates in 1984 to 1988 than in 1980 to 1984 or the 1970's. For counties with less than 10 percent commuting, growth after 1984 was at less than half the rate of the 1970's.

## CENTRAL CITY AND SUBURBAN GROWTH PATTERNS

In 1950, the 193 central cities of metropolitan areas in the United States contained 49.4 million persons, nearly one-third the total U.S. population. By 1988, the 522 current central cities had a population of 77 million, more than 50 percent above their 1950 population, but their share of the total U.S. population had declined slightly to 31.3 percent as they failed to match the national growth (figure 4-6). During this same period, as many additional areas qualified for metropolitan status, the nonmetropolitan population declined by 10 million, and its share of the U.S. total declined from 44 to 23

**Table 4-9. Population Change and Net Migration Rates for Nonmetropolitan Areas by Type of County: 1960 to 1970, 1970 to 1980, 1980 to 1984, and 1984 to 1988**

(Classification of counties based on 1980 census data on commuting to an individual MSA)

County type	Population, July 1, 1988 (estimate)	Average annual percent change				Average annual percent net migration			
		1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
United States .....	245,803	0.97	1.01	1.08	1.25	0.28	0.29	0.44	0.18
Metropolitan (1988 definition) .....	189,413	1.17	1.09	1.00	1.58	0.41	0.34	0.34	0.46
Nonmetropolitan (1988 definition) .	56,390	0.31	0.75	1.33	0.24	-0.17	0.13	0.76	-0.67
Nonmetropolitan (1983 definition) .	57,351	0.34	0.77	1.34	0.25	-0.15	0.14	0.77	-0.66
Became metropolitan 1984-89 ...	961	1.88	1.83	2.03	1.16	1.06	0.94	1.19	-0.16
15 percent or more commuting ...	5,875	1.08	1.04	1.71	0.30	0.57	0.42	1.16	-0.55
10 to 14 percent commuting .....	5,888	0.79	0.77	1.48	0.63	0.32	0.20	0.91	-0.29
5 to 9 percent commuting .....	8,949	0.56	0.72	1.33	0.60	0.13	0.17	0.81	-0.27
Less than 5 percent commuting ..	35,678	0.05	0.71	1.25	0.09	-0.44	0.06	0.66	-0.84
With important city .....	9,507	0.30	0.74	1.32	0.70	-0.34	-0.02	0.57	-0.42
Other contiguous .....	8,126	0.35	0.76	1.29	0.15	-0.06	0.21	0.78	-0.71
Other nonmetropolitan .....	18,045	-0.22	0.68	1.20	-0.24	-0.67	0.03	0.66	-1.10
North .....	110,476	0.38	0.17	0.22	0.93	-0.16	-0.39	-0.30	-0.03
Metropolitan (1988 definition) .....	87,256	0.46	0.17	0.08	1.10	-0.12	-0.39	-0.47	0.09
Nonmetropolitan (1988 definition) .	23,220	0.09	0.15	0.77	0.26	-0.30	-0.36	0.33	-0.48
Nonmetropolitan (1983 definition) .	23,474	0.09	0.16	0.77	0.26	-0.30	-0.36	0.33	-0.48
Became metropolitan 1984-89 ...	254	0.30	0.31	0.58	0.19	-0.37	-0.41	-0.11	-0.88
15 percent or more commuting ...	2,521	0.59	0.14	1.20	0.42	0.20	-0.38	0.74	-0.28
10 to 14 percent commuting .....	2,596	0.55	0.17	0.94	0.60	0.09	-0.37	0.42	-0.18
5 to 9 percent commuting .....	4,642	0.39	0.20	0.88	0.63	0.01	-0.26	0.44	-0.13
Less than 5 percent commuting ..	13,461	-0.19	0.14	0.63	0.06	-0.56	-0.39	0.21	-0.68
With important city .....	3,599	-	0.09	0.61	0.82	-0.55	-0.56	-0.01	-0.16
Other contiguous .....	3,075	-0.01	0.10	0.67	0.02	-0.35	-0.37	0.30	-0.66
Other nonmetropolitan .....	6,786	-0.37	0.18	0.62	-0.31	-0.67	-0.30	0.29	-0.94
South and West .....	135,328	1.46	1.74	1.93	1.62	0.64	0.89	1.17	0.42
Metropolitan (1988 definition) .....	102,157	1.79	1.94	1.99	2.17	0.88	1.04	1.20	0.92
Nonmetropolitan (1988 definition) .	33,170	0.47	1.18	1.76	0.22	-0.08	0.48	1.09	-0.83
Nonmetropolitan (1983 definition) .	33,877	0.51	1.21	1.78	0.25	-0.05	0.50	1.10	-0.81
Became metropolitan 1984-89 ...	707	2.47	2.45	2.71	1.71	1.59	1.49	1.81	0.25
15 percent or more commuting ...	3,354	1.46	1.77	2.15	0.19	0.85	1.07	1.52	-0.80
10 to 14 percent commuting .....	3,292	0.98	1.26	1.95	0.65	0.50	0.66	1.34	-0.39
5 to 9 percent commuting .....	4,307	0.75	1.29	1.87	0.56	0.26	0.65	1.26	-0.46
Less than 5 percent commuting ..	22,217	0.20	1.07	1.66	0.11	-0.37	0.34	0.97	-0.96
With important city .....	5,908	0.49	1.15	1.80	0.61	-0.22	0.32	0.97	-0.61
Other contiguous .....	5,051	0.58	1.18	1.71	0.25	0.12	0.57	1.12	-0.74
Other nonmetropolitan .....	11,258	-0.13	0.98	1.57	-0.19	-0.67	0.24	0.90	-1.22

- Represents zero.

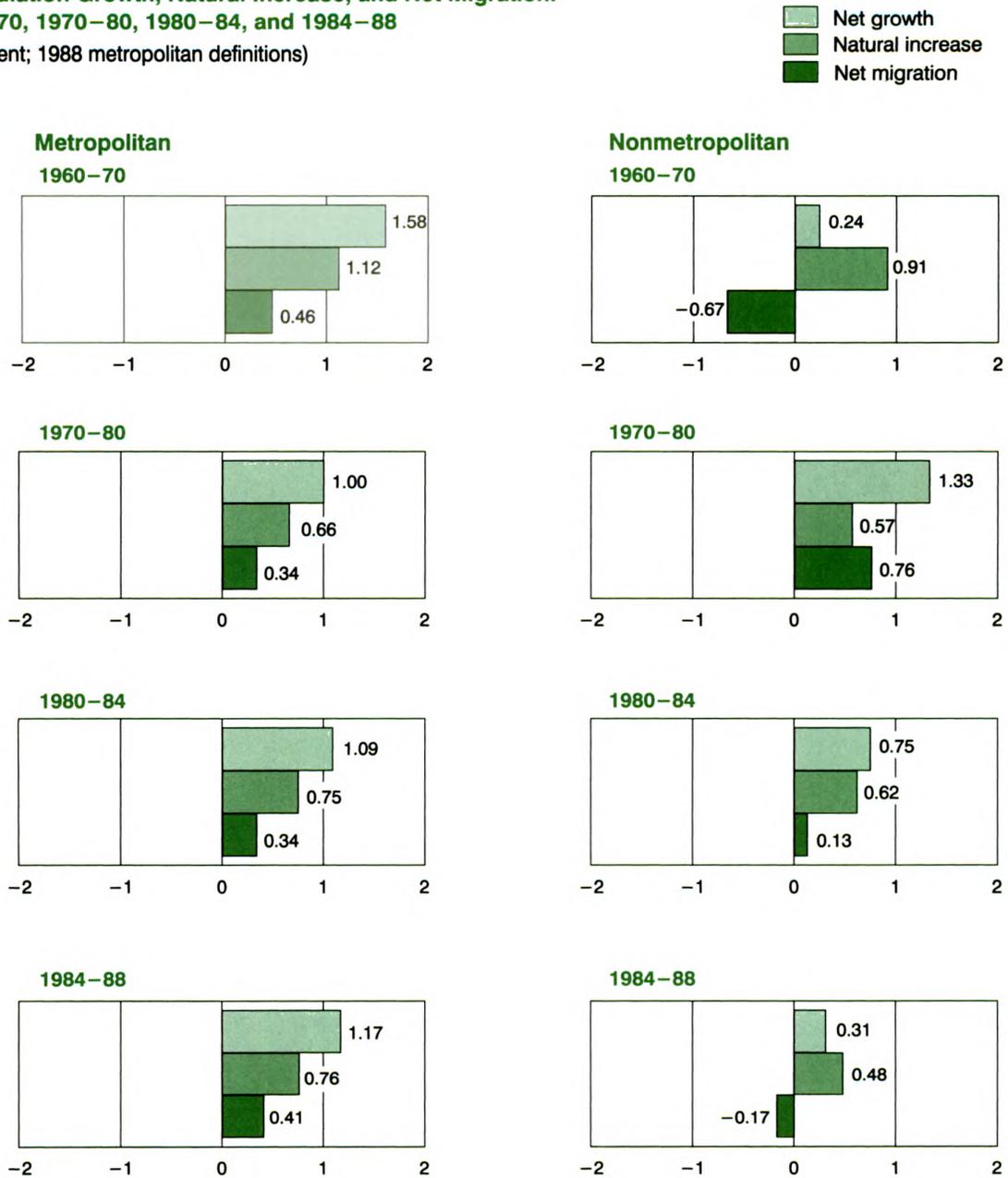
percent. The lion's share of population growth since 1950 has gone to suburban territory, the part of metropolitan areas outside their central cities, which more than tripled in population from 1950 to 1988. The share of the U.S. population in suburban territory went from 23 percent in 1950 to 46 percent in 1988.

Central cities of MSA's as currently defined have picked up momentum in population growth between 1980 and 1988 compared with the 1970's. More than 4 million additional persons lived in these central cities in 1988 than in 1980 (table 4-10). The 1970's, in contrast, showed almost no increase in the population of these same central cities (only 600,000 increase nationally and about a 10-percent loss for central cities in the Northeast and Midwest).

As a group, central cities in every region are estimated to have fared better in the 1980's than in the 1970's. Those in the Northeast as a group actually increased very slightly from 1984 to 1988, while those in the Midwest had only a small decline. The Southern central cities grew faster in the early 1980's than in the 1970's, but their rate fell off considerably in 1984 to 1988. Western central cities grew even faster after 1984 than before.

Of the 522 currently recognized central cities of MSA's, 222 (43 percent) are estimated to have lost in population from 1984 to 1988 (table 4-11). For this universe, this is an increase of 23 cities compared with the same cities in 1980 to 1984. The incidence of declining central cities is highest in the Northeast,

**Figure 4-5.**  
**Average Annual Metropolitan and Nonmetropolitan Rates**  
**of Population Growth, Natural Increase, and Net Migration:**  
**1960–70, 1970–80, 1980–84, and 1984–88**  
 (In percent; 1988 metropolitan definitions)



Source: Table 4-9.

where over half the cities have shown declines in every period since 1950. In both the Northeast and the Midwest, however, fewer central cities were declining by 1984 to 1988. The incidence of declining central cities has remained lowest in the West.

Some of these regional differences reflect the generally greater ability of Southern and Western cities to expand through annexation as compared with Northern

cities. For the 1980 to 1988 period, annexations of 655,000 population as of 1980 have been credited to selected central cities of MSA's. Of this total, about 380,000 are in the South, 195,000 in the West, 80,000 in the Midwest, and none in the Northeast.

In 1950, 23.3 percent of the U.S. population lived in the suburbs of metropolitan areas (as then defined). The suburban share rose rapidly in the next 30 years to

Figure 4-6.  
**Share of Population Living in Metropolitan Areas,  
 Inside and Outside Central Cities, and Outside  
 Metropolitan Areas: 1950, 1960, 1970, 1980,  
 1984, and 1988**  
 (In percent)

	Metropolitan— inside central cities	Metropolitan— outside central cities	Non- metropolitan
1950	32.9	23.2	43.9
1960	32.3	30.6	37.0
1970	31.4	37.2	31.4
1980	30.0	44.8	25.2
1984	31.7	44.8	23.6
1988	31.3	45.7	22.9

30.6 percent as defined in the 1960 census, 37.2 percent as defined in the 1970 census, and 44.8 percent in 1980. From 1950 to 1980, the total suburban population grew from 35.2 million for 1950 areas to 99.3 million for MSA's as defined in 1983. In fact, the portion of MSA's outside the central cities accrued the lion's share of metropolitan population growth in the 1950's and 1960's, and they so dominated growth in the 1970's that virtually all the population increase in MSA's occurred in the suburbs.

By the 1984-to-1988 period, suburban growth rates were lower than in the 1970's in three of the four regions but had risen above the 1970's level in the Northeast. For the Midwest, suburban growth recovered after 1984 from a low 1980-to-1984 annual rate of only 0.4 percent to a 1984-to-1988 annual rate of 1 percent. Suburban growth gradually slowed in the South after 1980 but held steady in the West. Both South and West continued to have suburban growth well above the national average.

Slowing suburban growth, combined with some recovery or lessened decline for central cities, has reduced the disparity between central city and suburban growth rates. Suburban territory absorbed 95 percent of metropolitan growth in the 1970's, but this fell to 76 percent in both 1980 to 1984 and 1984 to 1988.

The share of the metropolitan population living outside central cities is now approaching 60 percent with over 112 million persons in the suburbs in 1988 compared with 77 million in central cities. In 1960, the census showed the metropolitan population as then defined about evenly divided between central cities (51.4 percent) and suburbs (48.6 percent). By 1970, nearly 54 percent of the population then defined as metropolitan was suburban, increasing to about 58 percent of the population in the current MSA's in 1980 and 59.4 percent by 1988 (table 4-10).

Of the four regions, the Northeast (which has had almost no annexation activity for decades) is the most suburbanized with 63 percent of its metropolitan population outside the central cities. With 55 percent of its total population in these suburban areas, this is the only majority-suburban region.

## COUNTY GROWTH PATTERNS

During the 1980 to 1988 period, 1,223 counties or equivalent areas are estimated to have lost population, about 39 percent of the 3,139 total of such areas.<sup>2</sup> This

<sup>2</sup>Excludes Kalawao County, Hawaii, which is merged with Maui County for estimating purposes.

**Table 4-10. Metropolitan Population Inside and Outside Central Cities, by Region: 1970, 1980, 1984, and 1988**

(Numbers in thousands. MSA's as defined by Office of Management and Budget, June 30, 1989)

Region	July 1, 1988 (estimate)	July 1, 1984 (estimate)	April 1, 1980 (census)	April 1, 1970 (census)	Average annual percent change		
					1984 to 1988	1980 to 1984	1970 to 1980
<b>INSIDE MSA's</b>							
United States.....	189,413	180,755	172,602	156,086	1.17	1.09	1.00
Northeast.....	44,655	43,904	43,439	43,890	0.42	0.25	-0.10
Midwest.....	42,601	41,748	41,581	40,487	0.51	0.09	0.27
South.....	59,529	55,994	51,606	42,388	1.53	1.92	1.96
West.....	42,628	39,109	35,976	29,320	2.15	1.96	2.04
<b>INSIDE CENTRAL CITIES</b>							
United States.....	76,981	74,894	72,914	72,295	0.69	0.63	0.09
Northeast.....	16,648	16,598	16,640	18,562	0.07	-0.06	-1.09
Midwest.....	17,588	17,665	17,941	19,597	-0.11	-0.36	-0.88
South.....	24,862	24,072	22,836	20,840	0.81	1.24	0.91
West.....	17,883	16,558	15,497	13,296	1.92	1.56	1.53
<b>OUTSIDE CENTRAL CITIES</b>							
United States.....	112,432	105,861	99,688	83,791	1.51	1.41	1.73
Northeast.....	28,007	27,306	26,800	25,328	0.63	0.44	0.56
Midwest.....	25,013	24,083	23,639	20,890	0.95	0.44	1.23
South.....	34,667	31,922	28,770	21,549	2.06	2.44	2.87
West.....	24,745	22,550	20,479	16,025	2.32	2.27	2.44

**Table 4-11. Number of Central Cities and Percent Losing Population, by Region: 1940 to 1988**

(Central cities as recognized by the Office of Management and Budget, June 30, 1989)

Region	Total central cities	Losing population											
		1984 to 1988		1980 to 1984		1970 to 1980		1960 to 1970		1950 to 1960		1940 to 1950	
		Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
United States.....	522	222	42.5	199	38.1	221	42.3	164	31.4	92	17.6	25	4.8
Northeast.....	101	70	69.3	64	63.4	80	79.2	66	65.3	56	55.4	18	17.8
Midwest.....	138	71	51.4	83	60.1	86	62.3	41	29.7	16	11.6	2	1.4
South.....	187	65	34.8	42	22.5	43	23.0	47	25.1	15	8.0	5	2.7
West.....	96	16	16.7	10	10.4	12	12.5	10	10.4	5	5.2	-	-

- Represents zero.

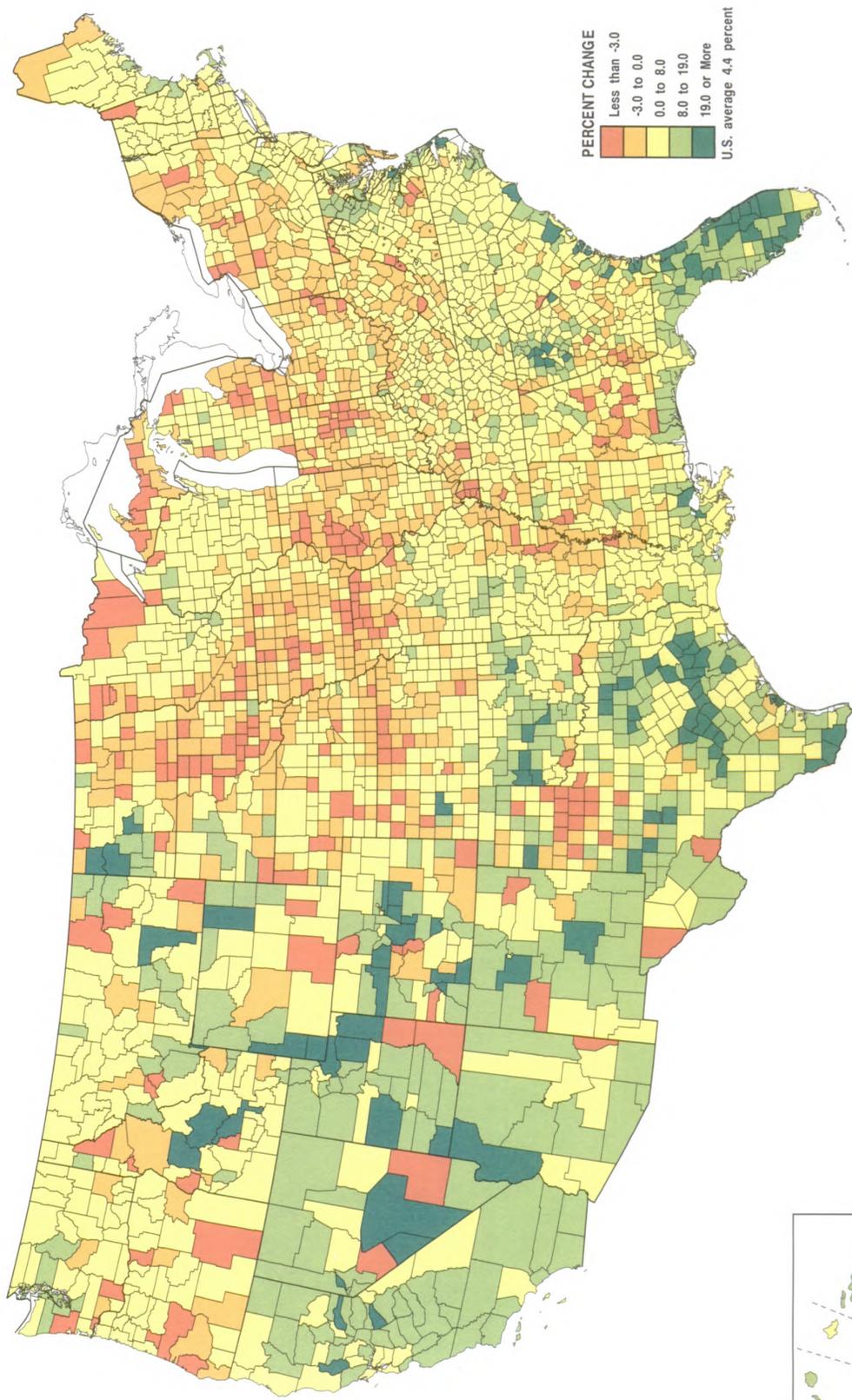
is more than double the 560 counties losing population during the 1970's (table 4-12), and it approaches the number of losing counties during the 1960's (1,369 or 44 percent).

Almost 60 percent of the counties in the Midwest have lost population since 1980 compared with 31 percent in the Northeast, 30 percent in the South, and 29 percent in the West. The Midwest, with one-third of all counties in the United States, has half of the counties losing population (606), almost 300 more than in the 1970's and nearly 100 more than in the 1960's. The South has 422 losing counties, almost 300 more than in the 1970's, but this is still well below the level of the 1960's when 628 Southern counties lost population (44 percent). Both the Northeast and West have seen

increases in their number of losing counties in the 1980's, but the numbers are relatively small.

When the 1980's are split in two, the 1980 to 1984 period clearly shifts away from the 1970's, and 1984 to 1988 shows a pattern strikingly similar to the 1960's (figures 4-7 and 4-8). In fact, between 1984 and 1988, almost 1,500 counties lost population (48 percent of all counties), about 125 more than in the 1960's. More than 1,200 of these counties are in the Midwest and the South, with 59 percent of the Midwestern counties and 42 percent of all Southern counties losing population from 1984 to 1988 (figure 4-9). Although the numbers are small for the remaining two regions, the Northeast has maintained a stable 30 percent of its counties losing

Figure 4-7. POPULATION CHANGE BY COUNTY  
1980-1984



PERCENT CHANGE  
Less than -3.0  
-3.0 to 0.0  
0.0 to 8.0  
8.0 to 19.0  
19.0 or More  
U.S. average 4.4 percent

Figure 4 - 8. POPULATION CHANGE BY COUNTY  
1984-1988

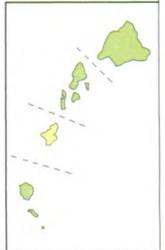
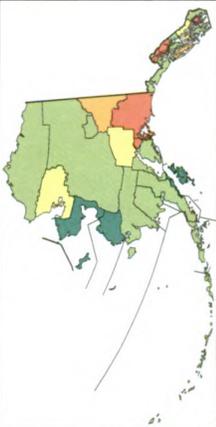
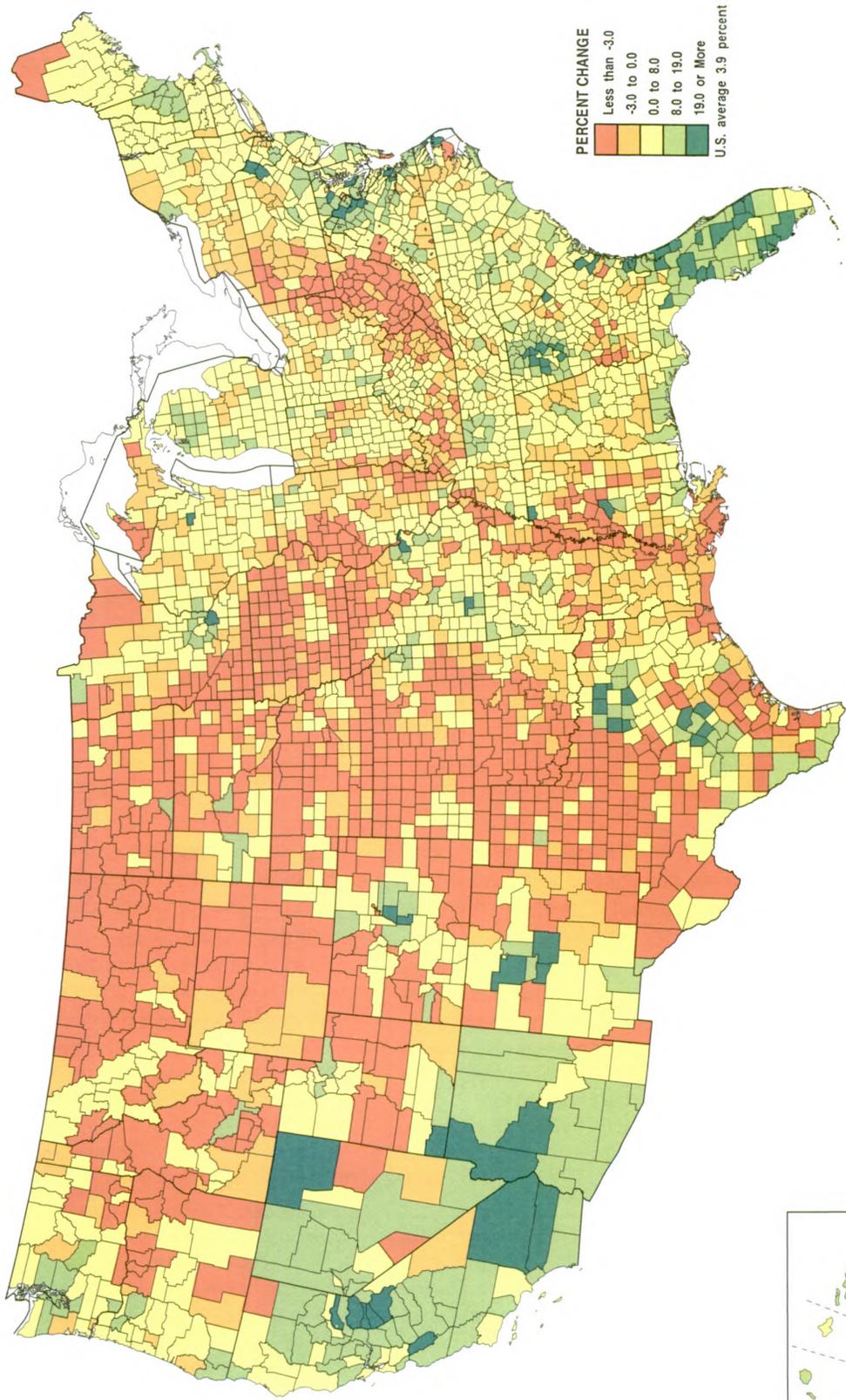
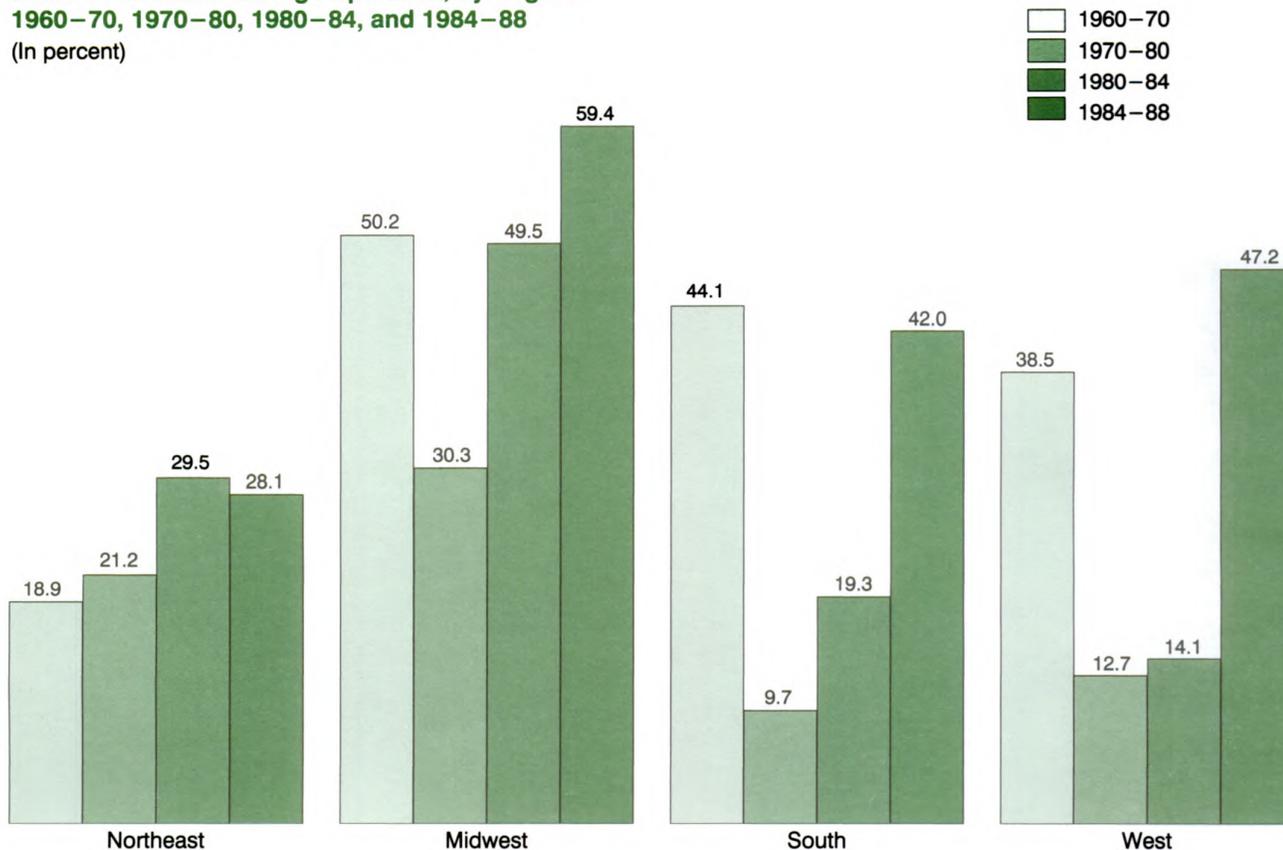


Figure 4-9.  
**Share of Counties Losing Population, by Region:**  
**1960–70, 1970–80, 1980–84, and 1984–88**  
 (In percent)



Source: Table 4-12.

population throughout the 1980's, but the West's proportion of losing counties has shot up to 47 percent by 1984 to 1988, largely as a result of declines in energy development in the Mountain States.

Metropolitan counties were far less likely to lose population during the 1980's than nonmetropolitan counties. Only 1 in 6 counties in metropolitan statistical areas or New England county metropolitan areas (NECMA's) lost during the period compared with nearly half of the nonmetropolitan counties. The number of losing MSA/NECMA counties remained relatively constant through the decade, but nonmetropolitan counties losing population increased from 784 in 1980 to 1984 to 1,337 in 1984 to 1988 (table 4-13).

About 500 of the Midwestern counties losing population in the 1980's are in the agricultural heartland of the Nation. In Illinois and the seven West North Central States, almost 70 percent of the counties have had population losses since 1980. With 87 counties out of 99 estimated to be losing population, Iowa had the highest proportion of losing counties (88 percent) followed by Nebraska (82 percent). Outside the Midwest,

West Virginia had 78 percent of its counties losing population. Texas, with 254 counties in all, had the largest number of losing counties (98).

Of the 3,139 counties, 622 were estimated to have gained in each year from 1980 to 1988, while 113 had losses in each year. The consistent losers included 21 metropolitan counties (figure 4-10).

There were 816 counties that gained population from 1980 to 1984 but lost from 1984 to 1988. Over half (414) of these were in the South. On the other hand, there were 245 counties that gained from 1984 to 1988 after losing over the 4 previous years. About half (120) were in the Midwest (figure 4-10).

Between 1980 and 1981, only 848 of the 3,139 counties are estimated to have lost population, the lowest share of the decade so far. The number of declining counties varied between 1,050 and 1,160 over the next 3 years, then jumped to 1,447 in 1984 to 1985 and to 1,543 in 1985 to 1986. In the following 2 years, the number gradually dropped to 1,480 in 1986 to 1987 and 1,362 in 1987 to 1988. The Midwest had from 440 to 660 declining counties in each year, with the highest

**Table 4-12. Number of Counties and Equivalent Areas Losing Population, by Region and Division: Selected Periods, 1960 to 1988**

(Includes equivalent areas such as parishes in Louisiana, boroughs and census areas in Alaska, the District of Columbia, and independent cities in Maryland, Missouri, Nevada, and Virginia)

Region and division	Total counties in 1988	Number losing population					Percent losing population				
		1980 to 1988	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970	1980 to 1988	1984 to 1988	1980 to 1984	1970 to 1980	1960 to 1970
United States.....	3,139	1,223	1,494	923	560	1,369	39.0	47.6	29.4	17.8	43.6
Northeast.....	217	67	61	64	46	41	30.9	28.1	29.5	21.2	18.9
New England.....	67	4	2	6	9	8	6.0	3.0	9.0	13.4	11.9
Middle Atlantic.....	150	63	59	58	37	33	42.0	39.3	38.7	24.7	22.0
Midwest.....	1,055	606	627	522	320	530	57.4	59.4	49.5	30.3	50.2
East North Central.....	437	186	174	209	46	115	42.6	39.8	47.8	10.5	26.3
West North Central.....	618	420	453	313	274	145	68.0	73.3	50.6	44.3	67.2
South.....	1,425	422	598	275	138	628	29.6	42.0	19.3	9.7	44.1
South Atlantic.....	591	130	148	109	42	229	22.0	25.0	18.4	7.1	38.7
East South Central.....	364	121	158	99	29	165	33.2	43.4	27.2	8.0	45.3
West South Central.....	470	171	292	67	67	234	36.4	62.1	14.3	14.3	49.8
West.....	442	128	208	62	56	170	29.0	47.2	14.1	12.7	38.5
Mountain.....	281	106	172	44	49	141	37.7	61.2	15.7	17.4	50.2
Pacific.....	161	22	36	18	7	29	13.7	22.5	11.3	4.4	18.1

Sources: Current Population Reports, Series P-26, No. 88-A, table 1; 1980 Census of Population, PC80-1-A1, Number of Inhabitants, *United States Summary*, table 22; and 1970 Census of Population, PC(1)-A1, Number of Inhabitants, *United States Summary*, table 25.

**Table 4-13. Number of Counties Losing Population by Metropolitan Status: 1980 to 1988**

Metropolitan status	Total	1980 to 1988		1984 to 1988		1980 to 1984	
		Losing	Percent	Losing	Percent	Losing	Percent
Total.....	3,139	1,223	39.0	1,494	47.6	923	29.4
Metropolitan.....	747	121	16.2	157	21.0	139	18.6
Nonmetropolitan.....	2,392	1,102	46.1	1,337	55.9	784	32.8

numbers in the 1984 to 1986 period. The South, however, had a rather steady increase in losing counties from only 273 in 1980 to 1981 to 668 in 1987 to 1988. Declining counties in the West were only 57 in the first year of the decade, reached a peak of 215 in 1985 to 1986, and numbered 188 in 1987 to 1988.

## CONCLUSION

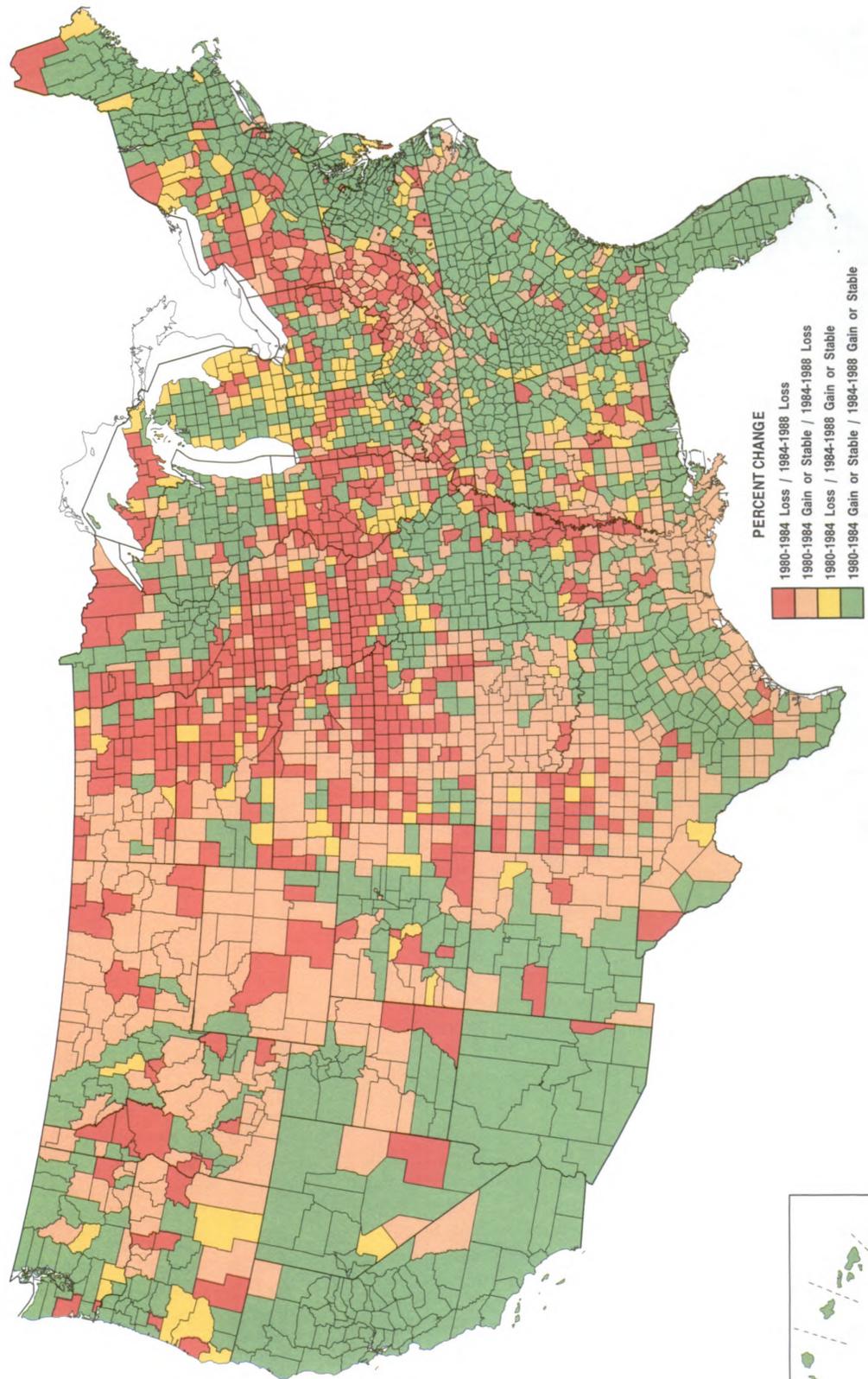
By 1988, the proportion of the population living in metropolitan areas reached 77 percent. Since 1980, the metropolitan population has grown at more than twice the rate of nonmetropolitan America, and this growth differential increased during the decade. The South and West continue to absorb the great majority of the Nation's population increase, but it is the metropolitan parts of these regions that have maintained rapid growth as the nonmetropolitan population showed minimal growth. There has been some small upturn in metropolitan population increase in the Northeast and Midwest, particularly after 1984, but the nonmetropolitan Midwest lost population after 1984.

After a 1970's decade of reduced population increase, metropolitan areas of 5 million or more have resumed growth in the 1980's, reaching the average percentage increase of all MSA's by 1984 to 1988. MSA's under 250,000, which were the most rapidly increasing population size group in the 1970's, had dropped to the slowest growing by 1984 to 1988.

Seven of the eight MSA's with population increases of 500,000 or more in the 1980's are located in the South or West, and all 10 of the fastest-growing metropolitan areas were in these two regions, including 8 in Florida. Of the 59 MSA's losing population in the 1980-84 period, over 80 percent were in the Northeast and Midwest. By 1984 to 1988, however, over half of the 69 losing areas were in the South and West, as many Northern areas rebounded from economic recession and Southern and Western areas were affected by cutbacks in energy development.

Many of the large metropolitan areas in the South and West accrued large amounts of net immigration in

Figure 4-10. CHANGING POPULATION GROWTH PATTERNS BY COUNTY  
1980-1984 AND 1984-1988



the 1980's, including the Los Angeles CMSA (+1.1 million) and Dallas-Fort Worth (+500,000). In all, 21 MSA's gained 100,000 or more net immigrants during the 1980 to 1988 period, all of them in the South and West. Four of the rapidly growing Florida MSA's from 1980 to 1988 added net migration amounting to half their 1980 populations.

Nonmetropolitan population growth declined from an annual rate of 1.3 percent in the 1970's to 0.75 percent in 1980 to 1984 and 0.3 percent in 1984 to 1988. During this period, net migration fell from an annual rate of +0.8 percent to -0.2 percent. Growth rates for nonmetropolitan counties in the 1980's show a positive correlation with proximity to metropolitan areas.

Central cities of metropolitan areas have maintained their share of about one-third the U.S. population since 1950. The suburban balance of metropolitan areas has increased its share from 23 percent in 1950 to 46

percent in 1988, essentially at the expense of the nonmetropolitan population. As a group, central cities have had higher growth rates in the 1980's than during the previous decade. About 43 percent of the central cities lost population from 1984 to 1988, somewhat more than in the early 1980's.

During the 1980-to-1988 period, 1,223 counties (39 percent) lost population, more than double the 560 in the 1970's. Almost 60 percent of the counties in the Midwest lost population in the 1980's compared with about 30 percent in the other three regions. As the 1980's progressed, the pattern worsened—from 1984 to 1988 almost 1,500 counties lost population (48 percent), more than in the 1960's. Metropolitan counties were far less likely to lose population during the 1980's than nonmetropolitan counties. On an annual basis the number of losing counties increased from 848 in 1980 to 1981 to 1,543 in 1985 to 1986 and declined thereafter.

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