

REPORTS ON NEW ENGLAND



The Changing Faces of New England

Increasing Spatial and Racial Diversity

KENNETH M. JOHNSON



BUILDING KNOWLEDGE FOR FAMILIES
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The Changing Faces of New England

Increasing Spatial and Racial Diversity

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A Carsey Institute Report on New England

Summary

New England's population stood at 14,270,000 in July of 2006, a gain of 347,000 residents since 2000. This gain of 2.5 percent is less than half that of the nation as a whole and lags far behind the fast growing South and West. The modest overall population gain in New England masks sharply contrasting demographic trends within the region.

Overall New England Trends

- Racial diversity increased because all population growth in New England was due to a gain of 407,000 in its minority population. The white population declined by 60,000.
- Population growth rates were higher in northern New England which is receiving net in-migration from elsewhere in the country. Southern New England is losing migrants to other parts of the United States.
- New England lost nearly \$6 billion dollars of income in migration exchanges with other areas of the country between 2001 and 2005.
- The net out-migration of just over 251,000 was the result of 1,263,000 people leaving New England and 1,012,000 moving in. So, more than 2,275,000 people moved in and out of New England to produce a net change of just 251,000.

Boston Metropolitan Area (Population 4,455,000)

- Growth slowed to a gain of only 64,000 residents between 2000 and 2006.
- Hispanics and Asians accounted for most of the population increase in metropolitan Boston. The white population is declining.
- Boston lost 229,000 domestic migrants. Natural increase and immigration were barely sufficient to offset this.
- Boston gained large numbers of 20- to 29-year-olds from migration, but lost population at most other ages and particularly among those 30-49.

Other Metropolitan Areas in New England (Population 8,015,000)

- The population grew by 214,000 between 2000 and 2006; a rate of increase equal to that during the 1990s.
- The population grew because of immigration and natural increase. These metropolitan areas lost domestic migrants.
- The white population declined. Growth was due to the minority population gains.

Rural or Nonmetropolitan New England (Population 1,800,000)

- Growth is accelerating here. The annual gain since 2000 is 20 percent greater than during the 1990s.
- This is the only area of New England gaining migrants from within the United States. There has also been very modest immigration, but little natural increase.

Introduction

New England is a remarkably diverse region with rich history and traditions. Geographically, New England encompasses the urban canyons of Boston; colleges and university towns that count generations of the nation's elite among their graduates; mill towns that ushered in the Industrial Revolution, but have since faded or had to reinvent themselves to thrive again; picturesque villages where time seems to stand still; rugged seacoast towns where tourists rub shoulders with those making their livelihoods from the sea; sparkling lakes, ski slopes and beautiful mountain vistas that draw vacationers and second homeowners from proximate urban metropolises; and deep forests that provide raw material for the pulp and paper industry. New England's diversity is also reflected in its economy, which includes forestry, agriculture, manufacturing, banking, real estate, financial services, education, health care, computer development, and bio-technology.

Demographic trends in New England often run contrary to trends elsewhere in the nation. While some write this off to sheer Yankee independence, it actually reflects the complex interaction between fertility, mortality and migration over a protracted period which has redistributed the population of New England. The Northeast, which once dominated the nation, now has the smallest population of the nation's four census regions and has grown the least in recent years. With only 14.3 million people, New England includes less than five percent of the U.S. population and its rate of growth since 2000 is the lowest of any census division except its Northeastern counterpart, the Middle Atlantic States.

Given New England's economic and geographic diversity, it is little surprise that the patterns of population change within the region are also diverse. With densely settled urban cores, sprawling suburbs, struggling industrial towns, fast growing recreational and amenity areas and isolated rural villages, New England includes many of the diverse strands that together compose the demographic fabric of the nation.

The purpose of this report is threefold:

- Summarize recent population redistribution trends in New England;
- Show how natural increase (the balance of births and deaths), domestic migration and immigration have each contributed to this population redistribution;
- Document how these demographic trends vary by race and Hispanic origin, geography and economic function.

The patterns of demographic change in New England are complex and subtle, but their impact is not. We see it reflected in the diminished community capacity and increasing difficulties that North Country communities face in providing basic services to the dwindling, aging populations that remain. It is also evident in the strained infrastructure, pressed institutions, and rising housing costs in communities that are growing rapidly because of urban sprawl or migration to New England's high amenity areas. An in-depth understanding of the current demographic trends in New England contributes knowledge needed to identify regional challenges and inform the policy discussions to address the needs of the people, organizations, and institutions of New England.

The Changing Faces of New England

New England has gained 347,000 residents (2.5 percent) since 2000 according to Census Bureau estimates. The region's total population in July 2006 was 14,270,000. The growth rate for the metropolitan region has slowed slightly since the 1990s. Analysis of the demographic changes underway in New England is facilitated by dividing the region into three distinct sub regions. Some 31.2 percent of the area's population resides in the Boston metropolitan area, 56.2 percent live in the other metropolitan areas of New England and the remaining 12.6 percent reside in the nonmetropolitan, or rural, areas of New England.¹ Because growth has been slower in the Boston metropolitan area, its share of regional population has declined slightly since 2000.

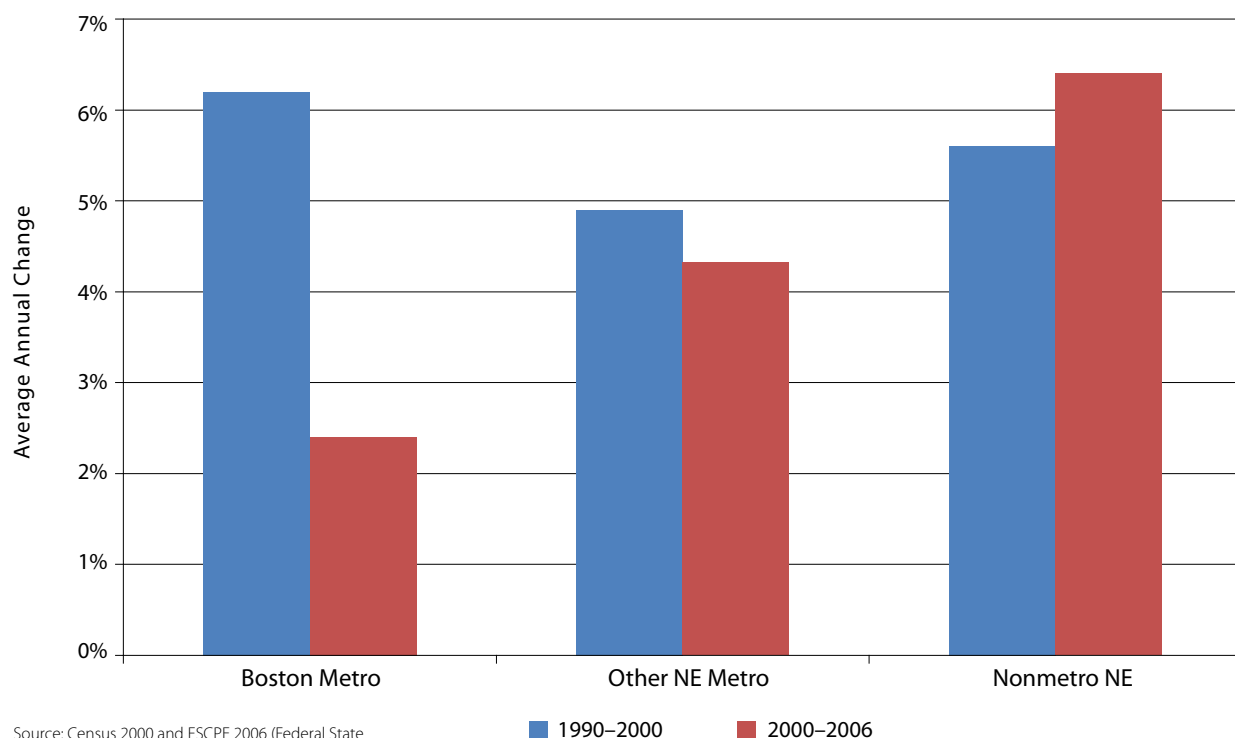
The overall population gains in New England mask contrasting demographic trends within the region (*Figure 1*). The population of the Boston metropolitan area was estimated to be 4,455,000 in July of 2006. The core of the Boston metropolitan region, Suffolk County, lost slightly more than 2,000 residents (-.3 percent) between April 2000 and July 2006. Although this is a modest loss, it contrasts with modest population gains in the 1980s and 1990s. In suburban Boston, the population

increased by 66,000 (1.8 percent) from 2000 to 2006. Even on an annualized basis, this gain is significantly smaller than that during the 1990s, when the population grew by 231,000 (6.7 percent). When Boston core and suburban Boston are combined, the metropolitan area as a whole grew by 1.5 between 2000 and 2006, this compares to a gain of 6.2 percent between 1990 and 2000. Thus, the annualized rate of population increase for the Boston metropolitan area is less than half what it was during the 1990s.

In metropolitan areas beyond Boston, identified in Figure 5, the population grew by 214,000 (2.7 percent) between 2000 and 2006 to 8,015,000. On an annualized basis, these population gains are slightly smaller than during the 1990s, when these areas grew by 366,000 (4.9 percent).

The difference between demographic trends in metropolitan and nonmetropolitan New England will be an important theme of this research because the situation in urban New England contrasts sharply with that in the rural areas of the region. Rural areas are growing faster since 2000 than they did during the 1990s. Since 2000, nonmetropolitan New England has grown by 70,000 (4 percent) to reach a population of 1,800,000 by 2006.

FIGURE 1: NEW ENGLAND POPULATION CHANGE, 1990–2006

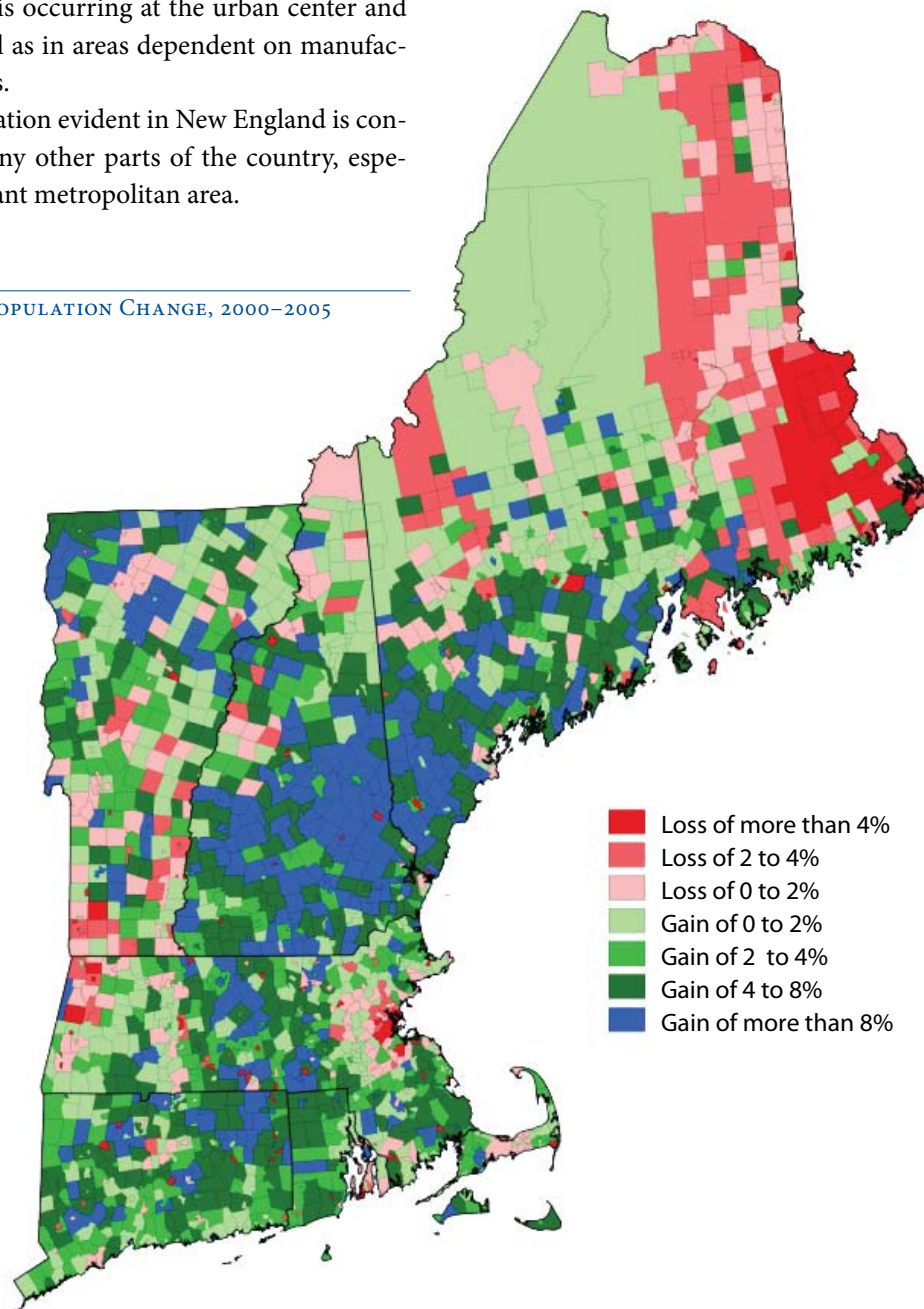


The contrasting trends in metropolitan and nonmetropolitan New England are clearly reflected in the spatial distribution of growing and declining towns. The outward sprawl from the metropolitan core of Boston and other metropolitan areas to the urban periphery and beyond is clearly evident in Figure 2. Population growth rates are highest in a broad band around the outer edge of the Boston metropolitan area and in adjoining rural areas as well as in the rural amenity areas of Northern New England. Losses are evident in the core of the Boston metropolitan area, including many of the inner suburbs, in far northern New England and in west central Massachusetts and Vermont. These trends suggest continued growth at the outer periphery of the metropolitan area, in the rural areas just beyond the urban edge and proximate recreational areas. In contrast, population loss is occurring at the urban center and proximate suburbs as well as in areas dependent on manufacturing and wood products.

The spatial deconcentration evident in New England is consistent with trends in many other parts of the country, especially those with a dominant metropolitan area.

The Boston core is not the only large metropolitan center experiencing population loss. Other large metro core counties, including Chicago, Philadelphia, Detroit, Cleveland, San Francisco, and Pittsburgh have also lost population since 2000. The percentage population loss in each of these cores is small, but the fact that the entire county including both the major city and the inner suburbs are losing population is new. It reflects the pervasive and on-going outward sprawl of the nation's metropolitan areas, often at the expense of the central core. Nationwide, growth is greatest on the outer periphery of metropolitan areas, in the nonmetropolitan areas that adjoin them and in high amenity areas like those in Northern New England.

FIGURE 2: NEW ENGLAND POPULATION CHANGE, 2000–2005



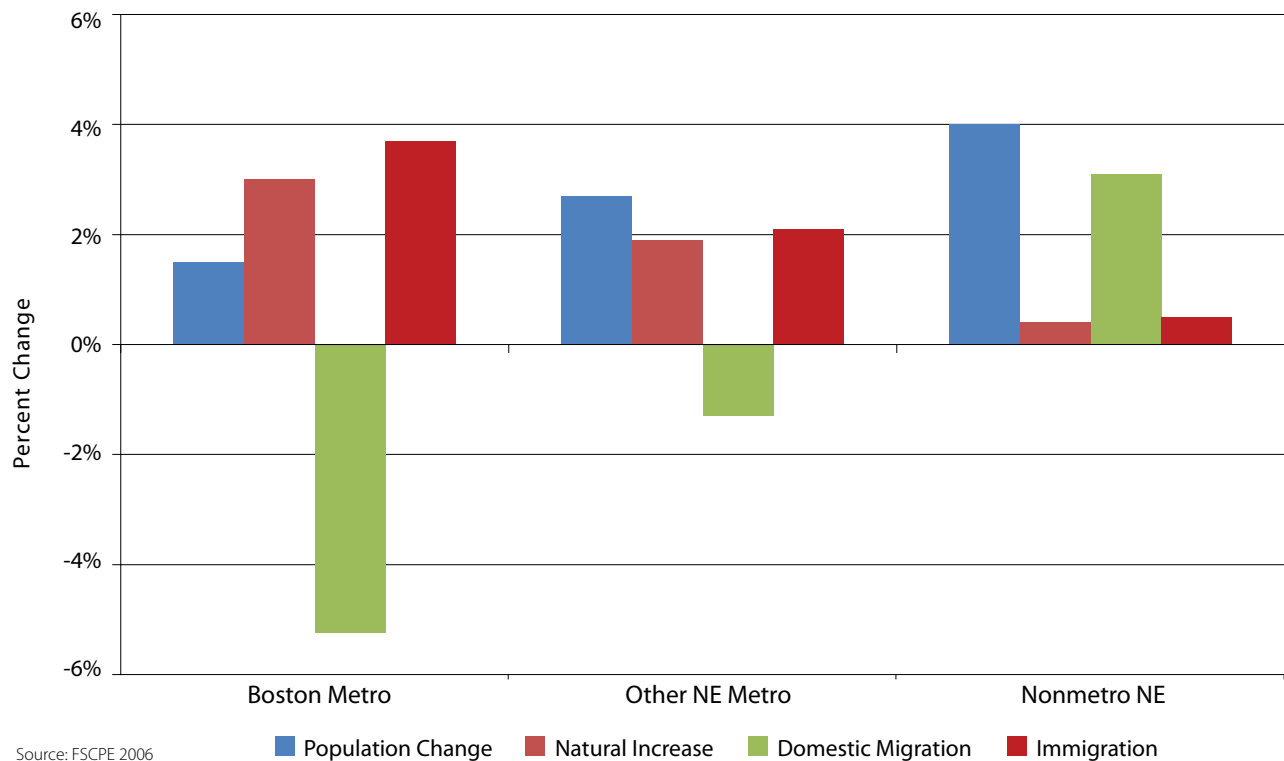
Demographic Components of Change

Population change in New England stems from a complex interaction between several demographic factors. Natural increase (the excess of births over deaths) contributes to population gains in most areas of the country. However, net migration (the difference between the number of individuals moving into and out of an area) has a far more differential effect; increasing the population of some places and decreasing it elsewhere. In studying New England, it is useful to disaggregate overall migration change into two separate components. The first is domestic migration, which includes the movement of a person between locations in the United States. The second is

net immigration, which is the difference between the number of people coming into an area from outside the country and the number of people from the area leaving the United States. Both types of migration played an important role in the demographic change in New England between 2000 and 2006.

The modest population gains in the Boston metropolitan area occurred because the excess of births over deaths was sufficient to offset the net outflow of people from the area. Between 2000 and 2006, there were an estimated 354,000 births in the Boston metropolitan area compared to 224,000 deaths, producing a natural increase of 130,000 (3.0 percent) (Figure 3).

FIGURE 3: NEW ENGLAND COMPONENTS OF DEMOGRAPHIC CHANGE, 2000–2006



This natural increase offsets net out-migration. In all, 66,000 more people moved out of the Boston metropolitan area than moved in, (a loss of 1.5 percent). This net migration loss occurred even though an estimated 164,000 (3.7 percent) people immigrated to the Boston area from outside the United States. This substantial immigration gain was not sufficient to offset the net loss of 229,000 domestic migrants (a loss of 5.2 percent) in exchanges with other U.S. counties. Thus, the Boston metropolitan area grew only because natural increase was sufficient to offset this migration loss.

Within the Boston metropolitan area, trends in the core differed from those in the fringe. In the urban core, natural increase of 26,000 was not sufficient to offset a migration loss of 28,000. In contrast, in the fringe a natural increase gain of 104,000 did offset a net migration loss of 38,000. The Boston metropolitan area is unusual in the country in this regard, in that it experienced a net domestic migration loss from both its urban core (-82,000) and its metropolitan fringe (-148,000). In most large metropolitan areas, the suburban fringe had net domestic in-migration. In fact, Boston is one of only two large metropolitan areas (New York is the other) to experience overall net domestic out-migration from both the core and fringe.

In the other metropolitan areas in New England, the trend differed from that in Boston. Here the surplus of births over

deaths of 147,000 (587,000 births compared to 440,000 deaths) was supplemented by a net migration gain of 66,000. This migration gain occurred because the influx of immigrants (168,000) was sufficient to offset the loss of domestic migrants (-101,000) resulting in a population gain of 214,000.

Demographic trends in rural New England differed in important ways from those in the region's urban areas. Annualized population gains in nonmetropolitan New England have been greater since the 2000 Census than they were during the 1990s. More importantly, the primary source of this population gain is domestic migration. Growth in nonmetropolitan New England was fueled by 63,000 migrants. Most were domestic migrants (53,000), though there was a small inflow of immigrants (9,000) as well. Thus, while metropolitan New England lost 330,000 domestic migrants, rural New England attracted a significant stream of domestic migrants. In contrast to the situation in metropolitan New England, natural increase in nonmetropolitan areas is very modest, with births (112,000) barely sufficient to offset deaths (105,000). Both the minimal natural increase in nonmetropolitan areas and the slow growth of metropolitan areas because of domestic out-migration underscore the critical role that migration currently plays and is likely to continue to play in the future growth of New England.

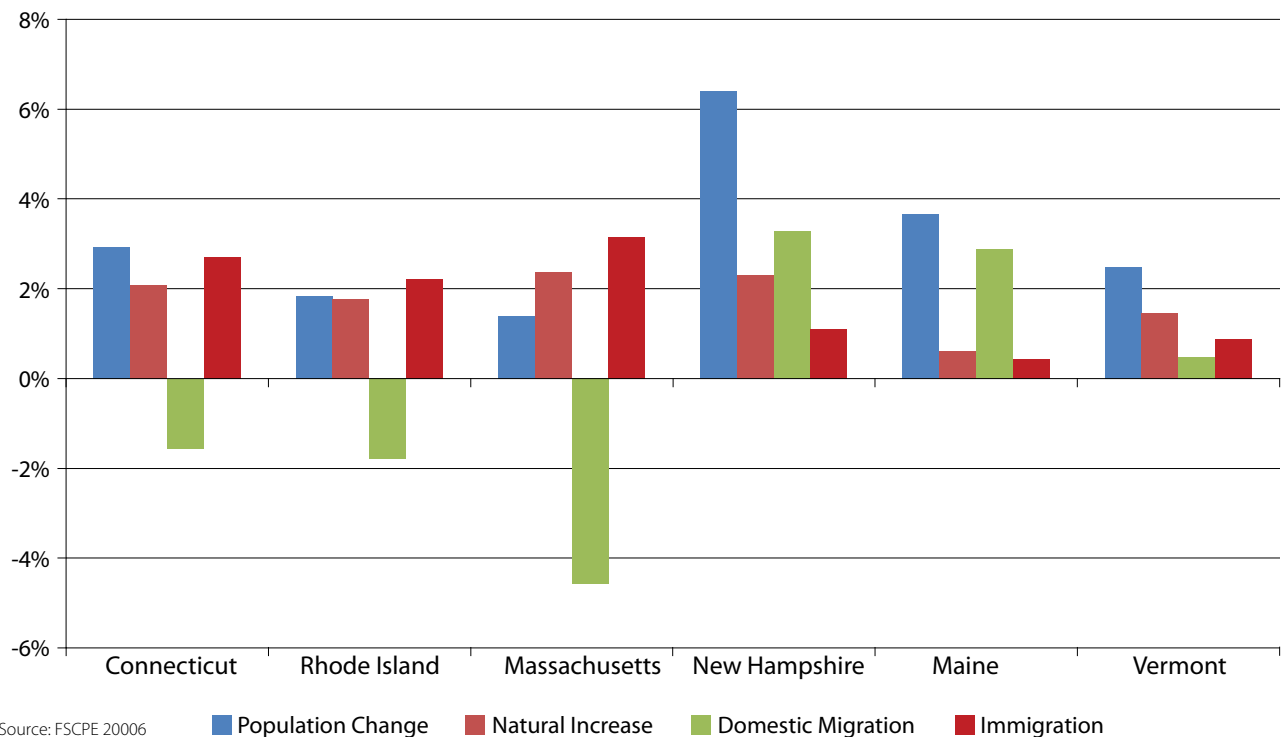
Regional Variation in New England Demographic Trends

There are distinct regional differences in the demographic trends in New England. In the northern tier (Maine, New Hampshire, and Vermont), population gains have generally been larger, with domestic migration fueling much of the growth (*Figure 4*). This trend is more pronounced in New Hampshire and Maine than in Vermont, but in each state domestic migration made a positive contribution to the state's population growth. Natural increase is the second largest contributor to population growth in the northern tier, with immigration contributing only modestly.

In the southern tier (Massachusetts, Connecticut, and Rhode Island), the situation is quite different. Population gains were modest. Each state also experienced net domestic out-

migration, a significant point of contrast with the northern tier. Domestic losses were smaller in Connecticut and Rhode Island. The domestic migration loss of 290,000 in Massachusetts was much larger both in percentage and absolute terms. In fact, it was so large that it negated a net gain elsewhere in New England producing a substantial region-wide domestic migration loss. Immigration provided the bulk of the population gain in each of the three southern New England states, though it was supplemented by natural increase. Thus, while growth in northern New England was primarily due to a net influx of migrants from elsewhere in the country, (including southern New England), the southern tier is losing domestic migrants, but growing through immigration and natural increase.

FIGURE 4: COMPONENTS OF DEMOGRAPHIC CHANGE IN NEW ENGLAND STATES, 2000–2006



Population Change by Race/Hispanic Origin

New England is less racially diverse than the nation. Non-Hispanic whites makeup 82.1 percent of New England's population, but only 66.3 percent of the U.S. total. Within New England there is considerable variation as well. The Boston metropolitan area was slightly more diverse than the region as a whole (*Figure 5*). Non-Hispanic whites represent nearly 79 percent of the population there. Hispanics (7.5 percent), African-Americans (6.7 percent) and Asians (5.8

percent) are also present in significant numbers in the Boston region. The racial composition of the other metropolitan areas in New England is similar to that of Boston. Whites (81 percent) and Hispanics (8.8 percent) were each a slightly larger share of the population than in Boston. Rural New England is much less diverse. Whites represent more than 95 percent of its population. Hispanics are the next largest group, but constitute only 1.7 percent of the rural total.

FIGURE 5: NEW ENGLAND METROPOLITAN OR NONMETROPOLITAN STATUS

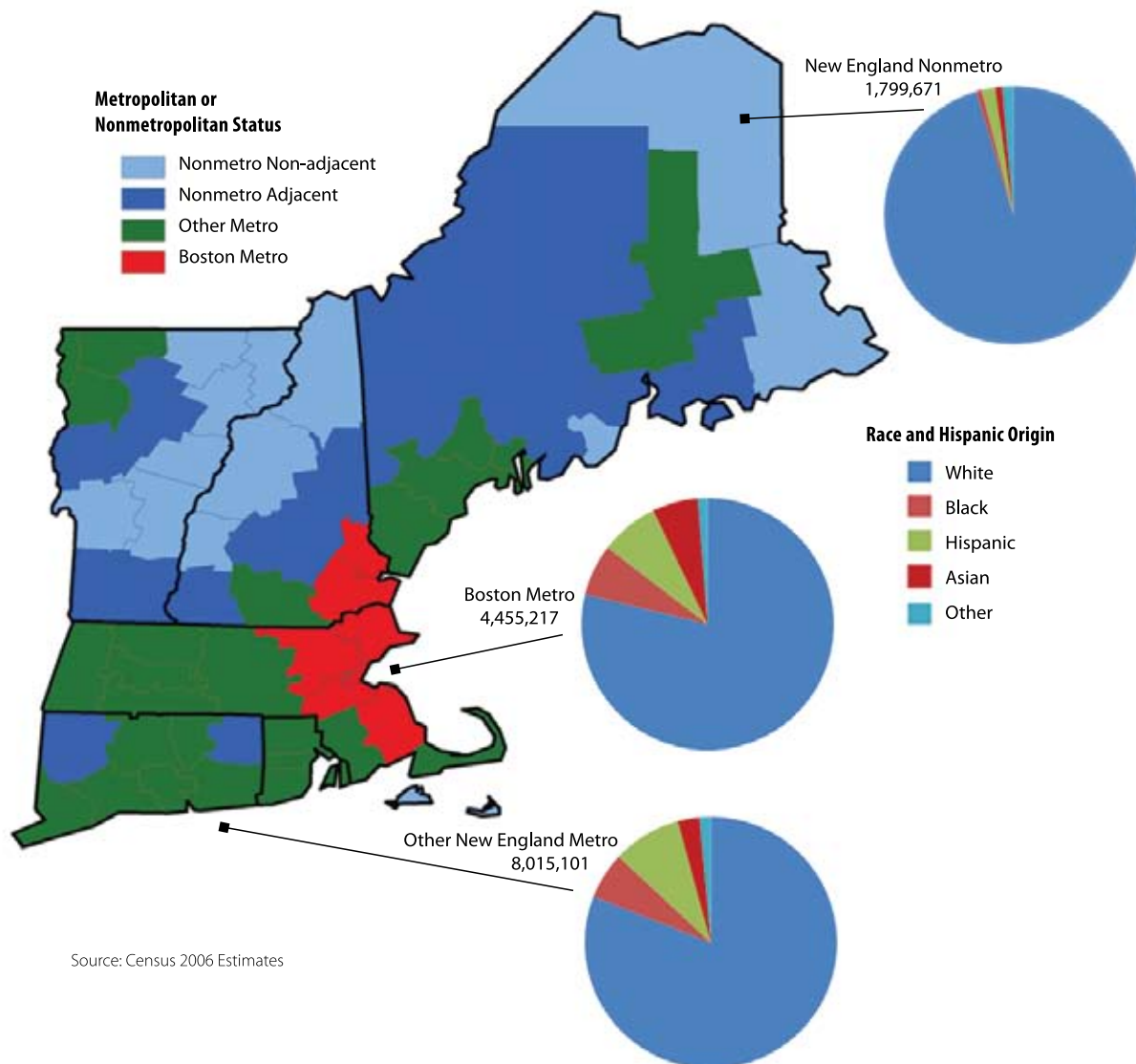
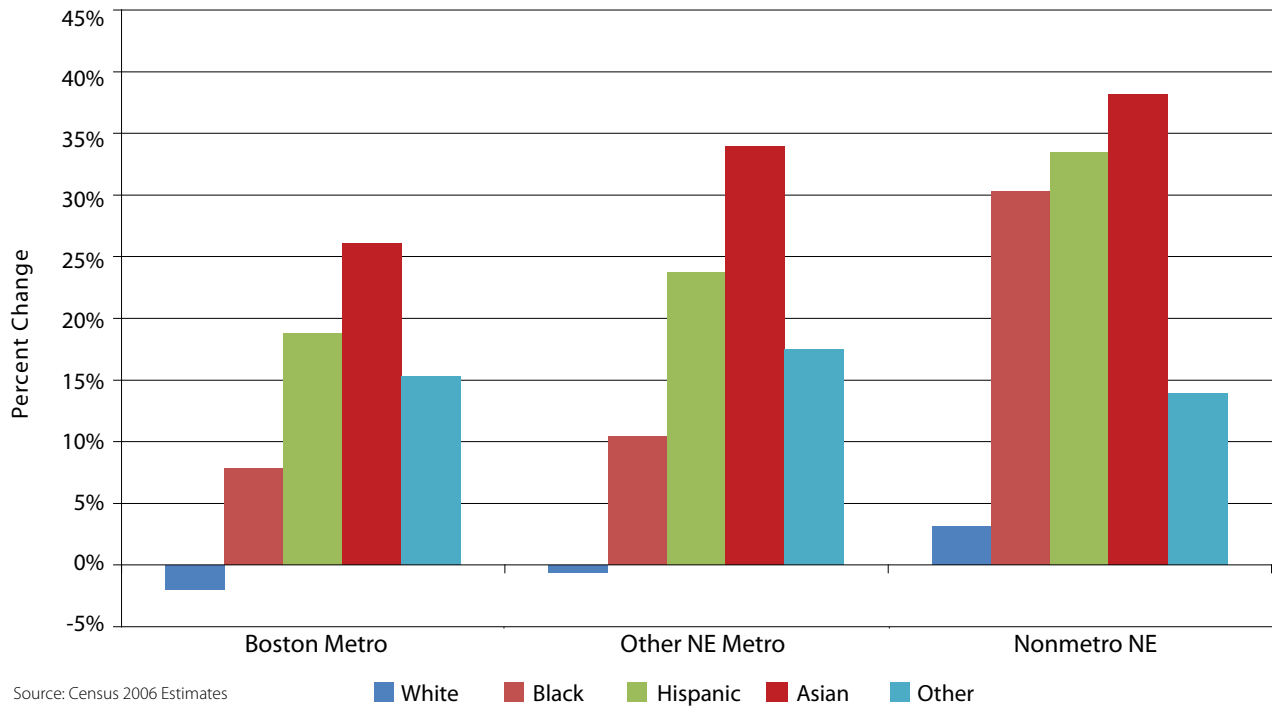


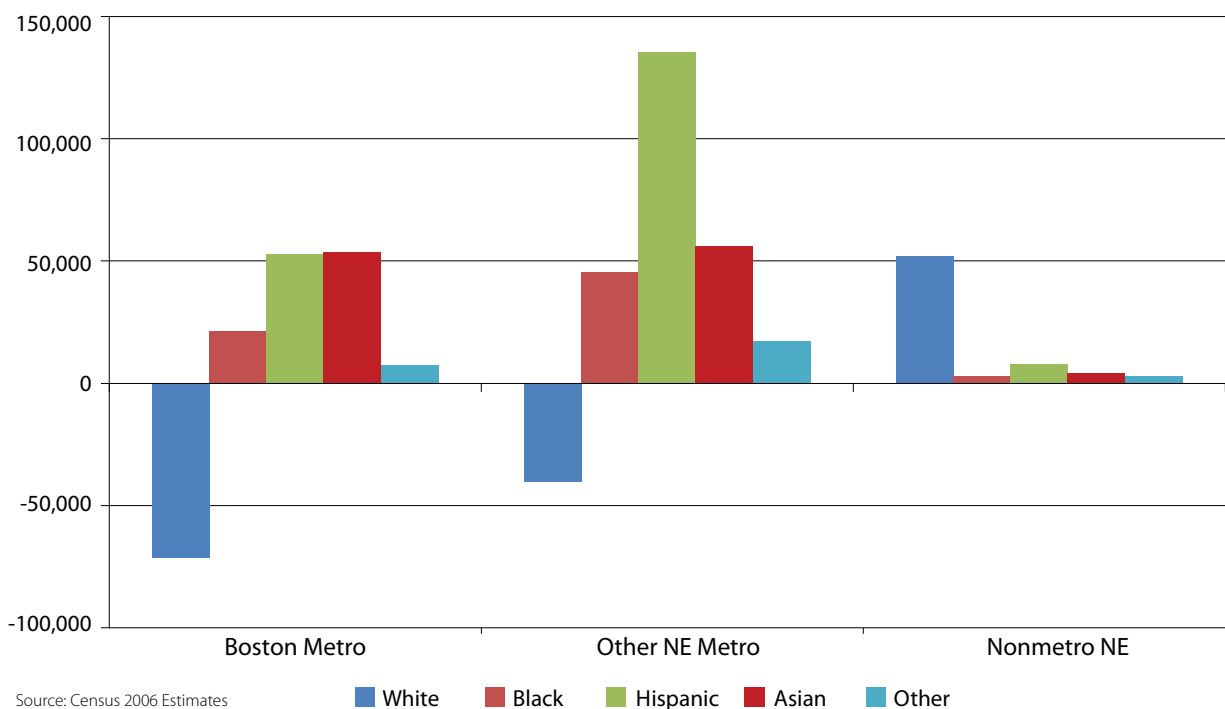
FIGURE 6: NEW ENGLAND PERCENT POPULATION CHANGE BY RACE AND HISPANIC ORIGIN, 2000–2006



There were modest changes in the composition of the region by race and Hispanic origin between 2000 and 2006 (*Figure 6*). In the Boston metropolitan area, the non-Hispanic white population declined by 2.0 percent (71,000). This loss

was offset by substantial gains in the Hispanic and Asian populations and modest gains among African Americans and others. Asians had both the largest percentage increase (26.1) and absolute (54,000) gains between 2000 and 2006 (*Figure 7*).

FIGURE 7: NEW ENGLAND POPULATION CHANGE BY RACE AND HISPANIC ORIGIN, 2000–2006



Boston's Hispanic population is its largest minority, increasing by approximately 53,000 (18.8 percent). Non-Hispanic blacks gained 21,000 (7.8 percent) and the group containing all other racial groups (including those of multiple race) increased by 7,000 (15.3 percent).

In metropolitan areas outside of Boston, the Hispanic population had the greatest numerical gain at 135,000 (23.7 percent). Gains among the African-American and Asian populations were also notable with an increase of 56,000 (10.4 percent) for blacks and 56,000 (33.9 percent) for Asians. There was also a modest gain 17,000 (17.5 percent) among those of other races. In contrast, the non-Hispanic white population declined by 41,000 (-.6 percent).

The situation is quite different in nonmetropolitan New England; here population gains occurred for all racial and ethnic groups. The numerical gain was greatest for non-Hispanic

whites; this population grew by 52,000 (3.1 percent) between 2000 and 2006. The next largest numerical gain was registered by Hispanics, who grew by 8,000 (33.5 percent). The Asian population also had a large percentage gain (38.2) though it was modest in absolute size (4,000).

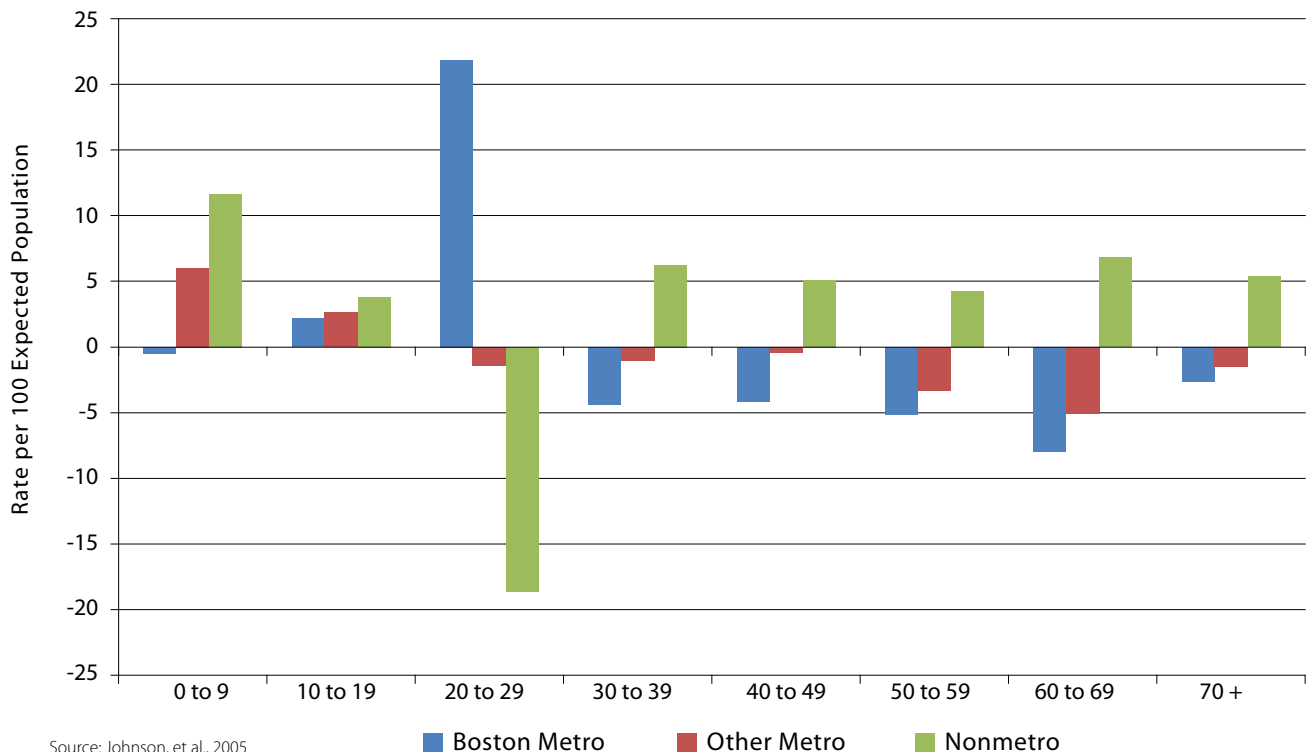
The overall effect of recent patterns of race and Hispanic origin change has been to increase the diversity of New England's population because the minority population has grown and the white population has declined. Minorities made up only 15.4 percent of New England's population in 2000, but accounted for all the growth. The minority population grew by 407,000 (27.6 percent), while the white population declined by 60,000 (.5 percent). As a result, the share of New England's population that was minority increased from 15.4 percent in 2000 to 17.9 percent in 2006.

Age-specific Migration Patterns

Migration drives much of the recent demographic change in New England.ⁱⁱ Examining net migration by age and race provides additional insights into the demographic change underway in the region. Between 1990 and 2000, there were significant differences in the age-specific net migration trends in each of the three sectors of New England.

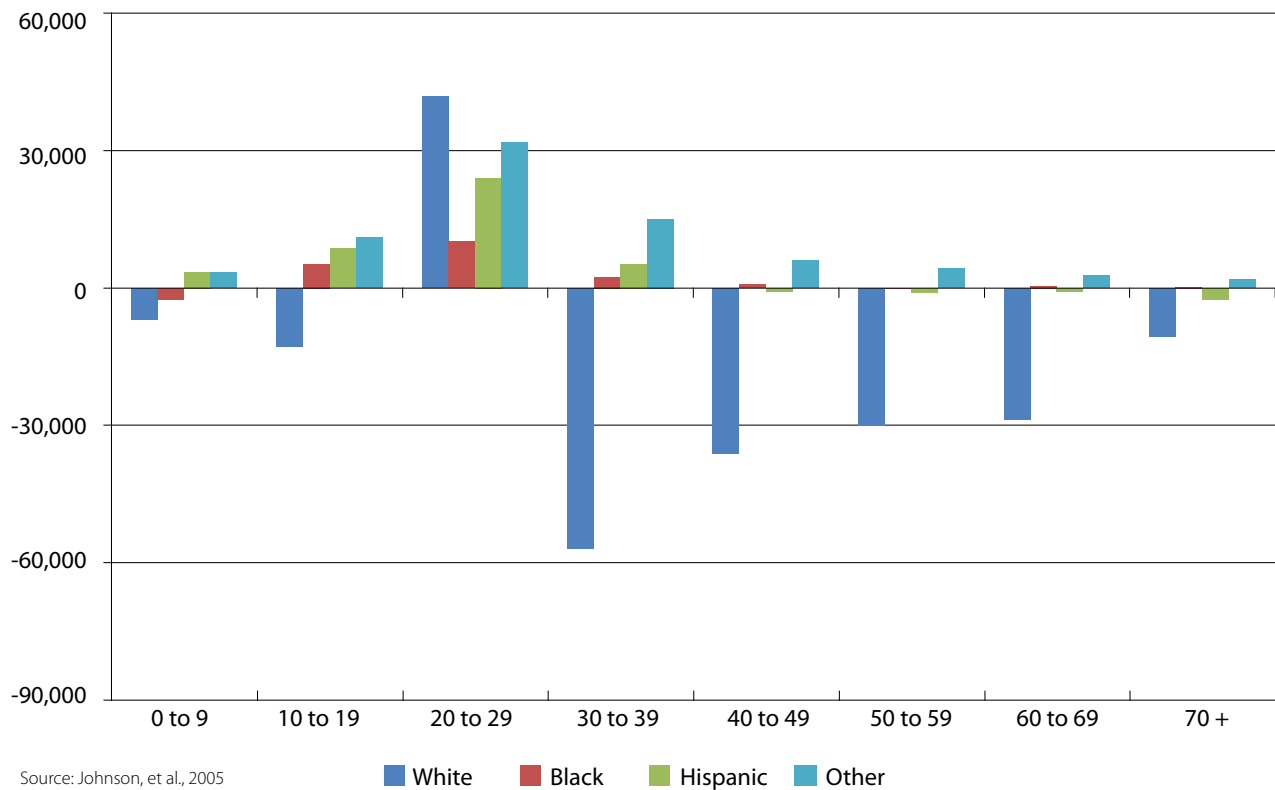
The Boston metropolitan region received a substantial influx (107,000) of 20- to 29-year-olds from migration. As a result, the young adult population in Boston is some 22 percent larger than it would have been without migration. Aside from a modest gain among 10- to 19-year-olds, Boston metro lost migrants in every other age group (*Figure 8*).

FIGURE 8: AGE-SPECIFIC NET MIGRATION BY METROPOLITAN STATUS, 1990–2000



Source: Johnson, et al., 2005
Demography 42(4):791-812

FIGURE 9: BOSTON METROPOLITAN AREA AGE-SPECIFIC NET MIGRATION BY RACE AND HISPANIC ORIGIN, 1990–2000



In other New England metropolitan areas, net out-migration has been widespread, though in general the rate of out-migration is smaller than that from Boston. The key point of difference is among 20- to 29-year-olds. While Boston receives a significant influx of young adults, other metropolitan areas in New England are losing them.

Migration trends are significantly different in nonmetropolitan New England. Here there is a net inflow of migrants at every age except those 20–29. Although the outflow of young adults is cause for some concern, the trends for the other age groups suggest brighter prospects. Rural New England is gaining families as reflected in the influx of those in their 30s and 40s together with their children. It is also gaining older adults; a significant contrast to the trends in metropolitan New England.

A fuller explanation of the dynamics behind these patterns is evident in the migration trends among the major racial and Hispanic groups that make up the New England population.ⁱⁱⁱ Because whites represent such a substantial part of Boston's population, they heavily influence overall trends. Among whites the only migration gain was among those 20–29 (Figure 9). At every other age, more whites left

the Boston metropolitan areas than came to it and the losses among those of prime family age (30–49) were particularly pronounced. Though rates of white migration loss are modest (rate data not shown), the absolute losses are substantial. Among Hispanics and other racial groups (mostly Asian), there were significant migration gains for those under age 40. Modest gains for the other groups continued among older age cohorts, but there was a net outflow of older Hispanics. The numerical gains (or losses) for these groups were modest, but with a much smaller base than whites, the rates of migration were quite high. Net migration trends for African Americans were less pronounced. Black gains were modest for those in their teens and twenties, with relative stability among those at other ages.

Examination of race-specific migration trends in metropolitan areas outside of Boston suggests two countervailing trends; white out-migration and minority migration gain. In fact, the overall net loss of migrants is entirely due to white out-migration. These white losses are greatest among those in their 20s (Figure 10). In contrast, there is a net influx of minority populations of all races and virtually all ages. Hispanic gains are greatest among those 20-29, but

are substantial for all ages under 40. The pattern for the other group is similar, though gains are sustained to older ages. Black gains are greatest for those in their 20s, but diminish rapidly for older adults.

White population drives virtually all the migration change in nonmetropolitan New England, minority populations there are quite small. However, it is clear that the gains reflected in the white population are generally mirrored in the minority population. There is one exception to this trend. While young white adults are leaving rural New England, the minority rural population in this age group is growing (*Figure 11*). The contrast between rural New England and the Boston region is particularly striking. Boston attracts young adults in their 20s, but loses family-age populations and older adults. These are the groups that rural New England is gaining. So, while nonmetropolitan New England loses young adults, it gains family age and

older adults. To be sure, Boston's numerical losses of family-age populations and gains of those in their 20s are considerably larger than concomitant gains and losses in nonmetropolitan New England, but the patterns are essentially mirror images.

In sum, between 1990 and 2000 New England had a net migration gain of 181,000 under the age of 30, but a net migration loss of 164,000 among those over the age of 30 (*Figure 12*). Given the size of New England's population (14.3 million), the net migration gains and losses of the 1990s were modest. The region lost whites at virtually every age; growth occurred because there was a net inflow of minorities. At ages below 30, this minority gain was sufficient to offset the white losses. At ages over 30, the white losses were too large to offset minority gains. It is also important to recognize that the influence of these younger migrants is greater than their numbers because they bring with them the potential for children in the near term.

FIGURE 10: OTHER METROPOLITAN AREAS AGE-SPECIFIC NET MIGRATION BY RACE AND HISPANIC ORIGIN, 1990–2000

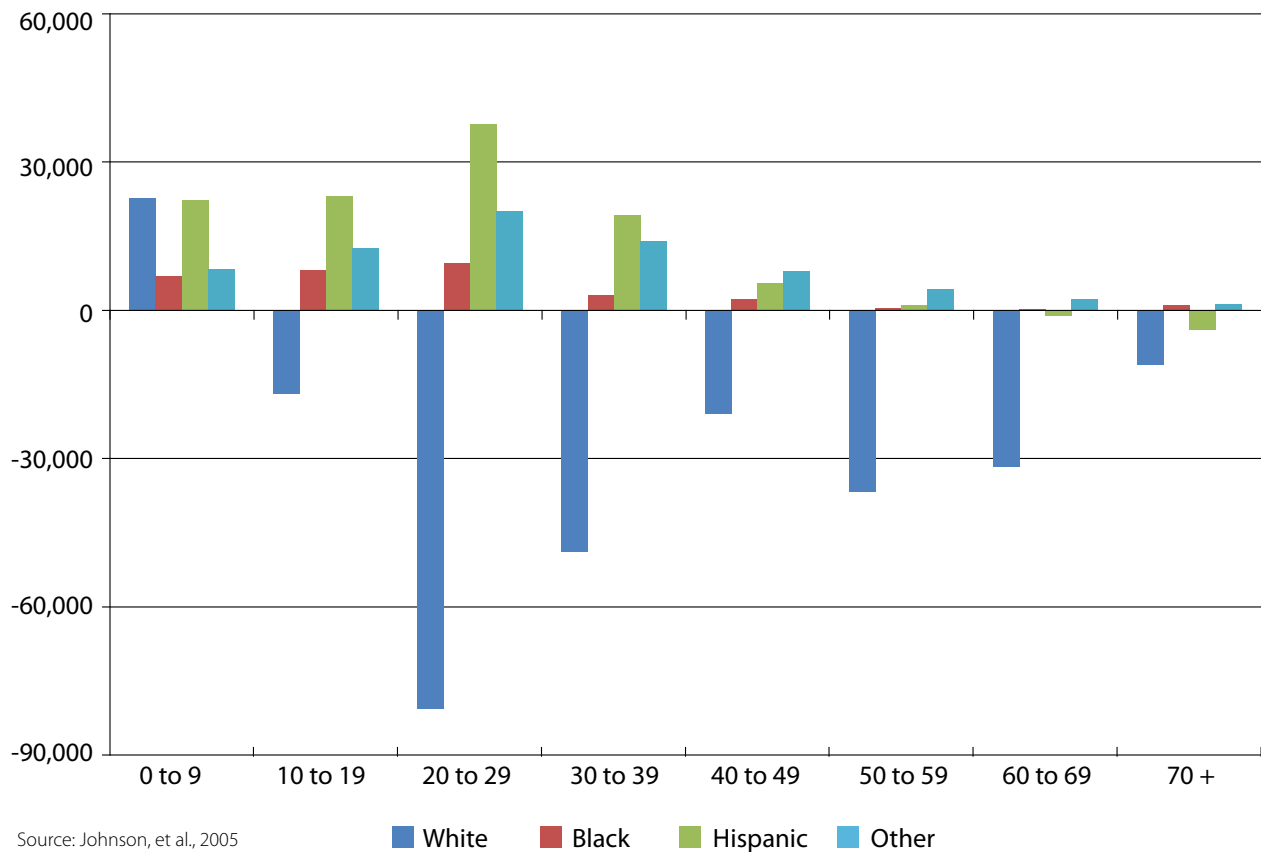


FIGURE 11: NONMETROPOLITAN AGE-SPECIFIC NET MIGRATION BY RACE AND HISPANIC ORIGIN, 1990–2000

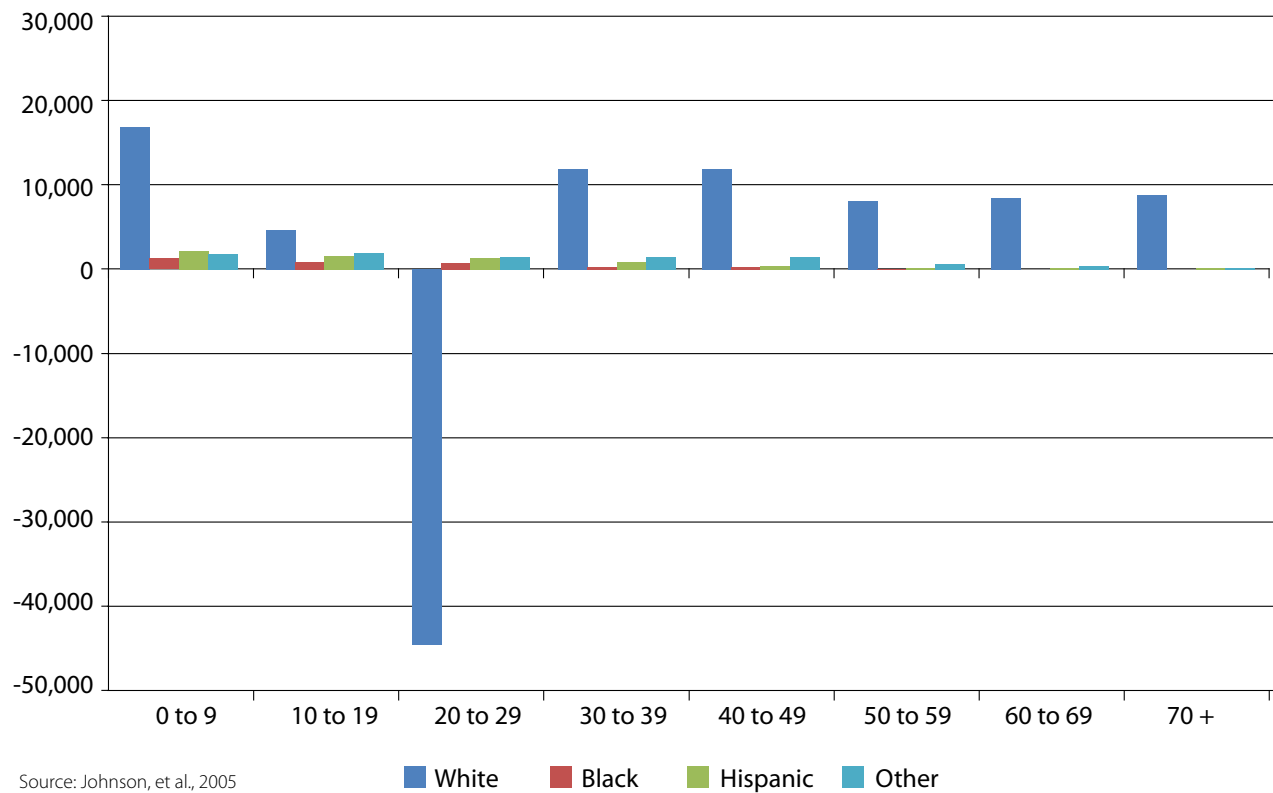
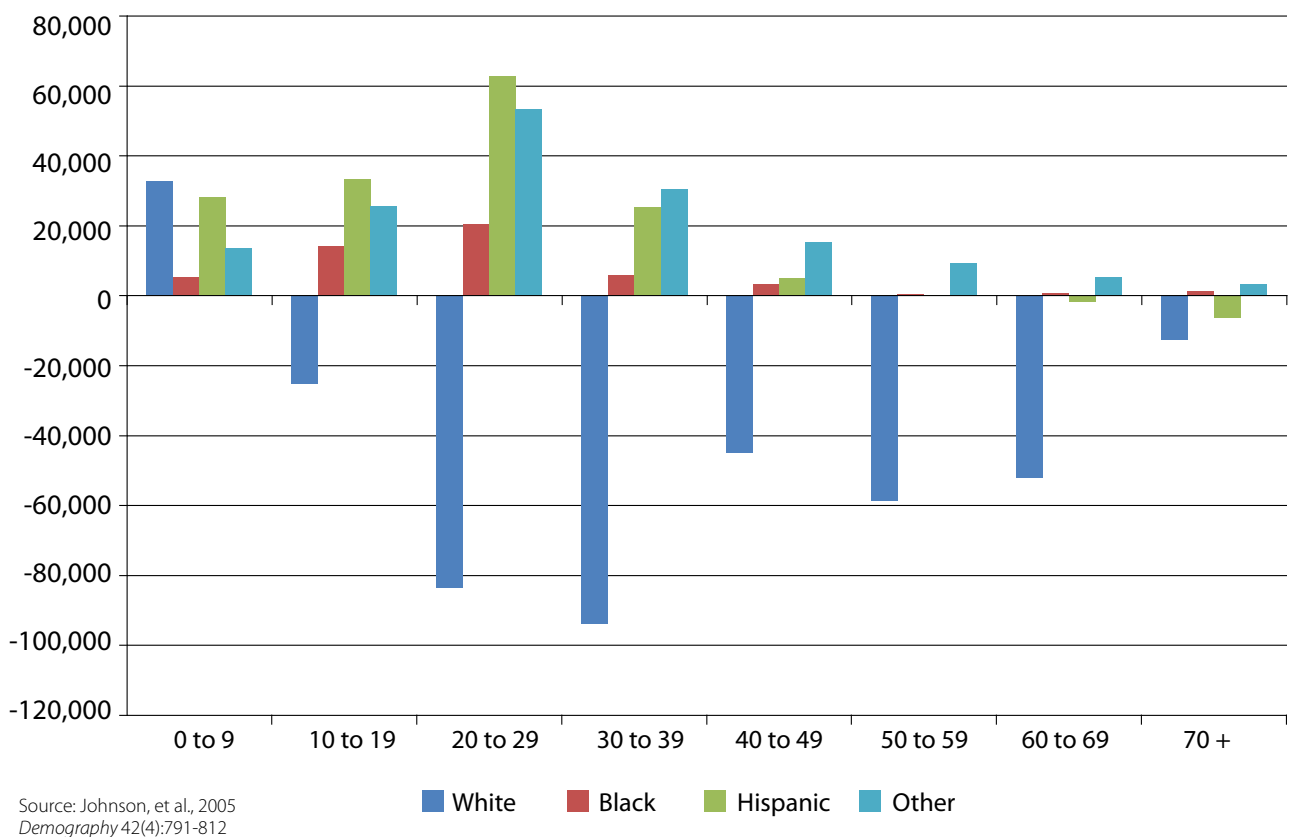


FIGURE 12: NEW ENGLAND AGE-SPECIFIC NET MIGRATION BY RACE AND HISPANIC ORIGIN, 1990–2000



Demographic Trends for Selected Economic Types

New England has long been economically diverse and that is reflected in recent demographic trends. By contrasting manufacturing, long a mainstay of the New England economy, with the emerging regional specialization in recreation and retirement, it is possible to examine the implications that economic activity have for demographic trends. New England has 10 counties where manufacturing is the major element of the economy (*Figure 13*). Recreational activity and retirement are prominent elements of the local economy in 17 counties. In 6 others, manufacturing and recreation coexist. Finally, in 34 New England counties, the economy is quite diverse, with no single economic sector dominating.

Growth rates are higher in counties that are centers for recreational and retirement and in manufacturing counties;

however, the demographic components of change that produces such population growth differs significantly between these two county types (*Figure 14*). In recreation and retirement counties, virtually all of the growth is fueled by domestic migration. In contrast, the manufacturing counties are losing domestic migrants. Growth in the manufacturing counties comes from immigration and natural increase, demographic components that have little impact in recreation and retirement counties. Population gains are smallest in counties which combine a manufacturing base with recreation. Here there is actual natural decrease (more deaths than births), significant domestic in-migration and very

FIGURE 13: NEW ENGLAND RECREATIONAL, RETIREMENT, AND MANUFACTURING COUNTIES

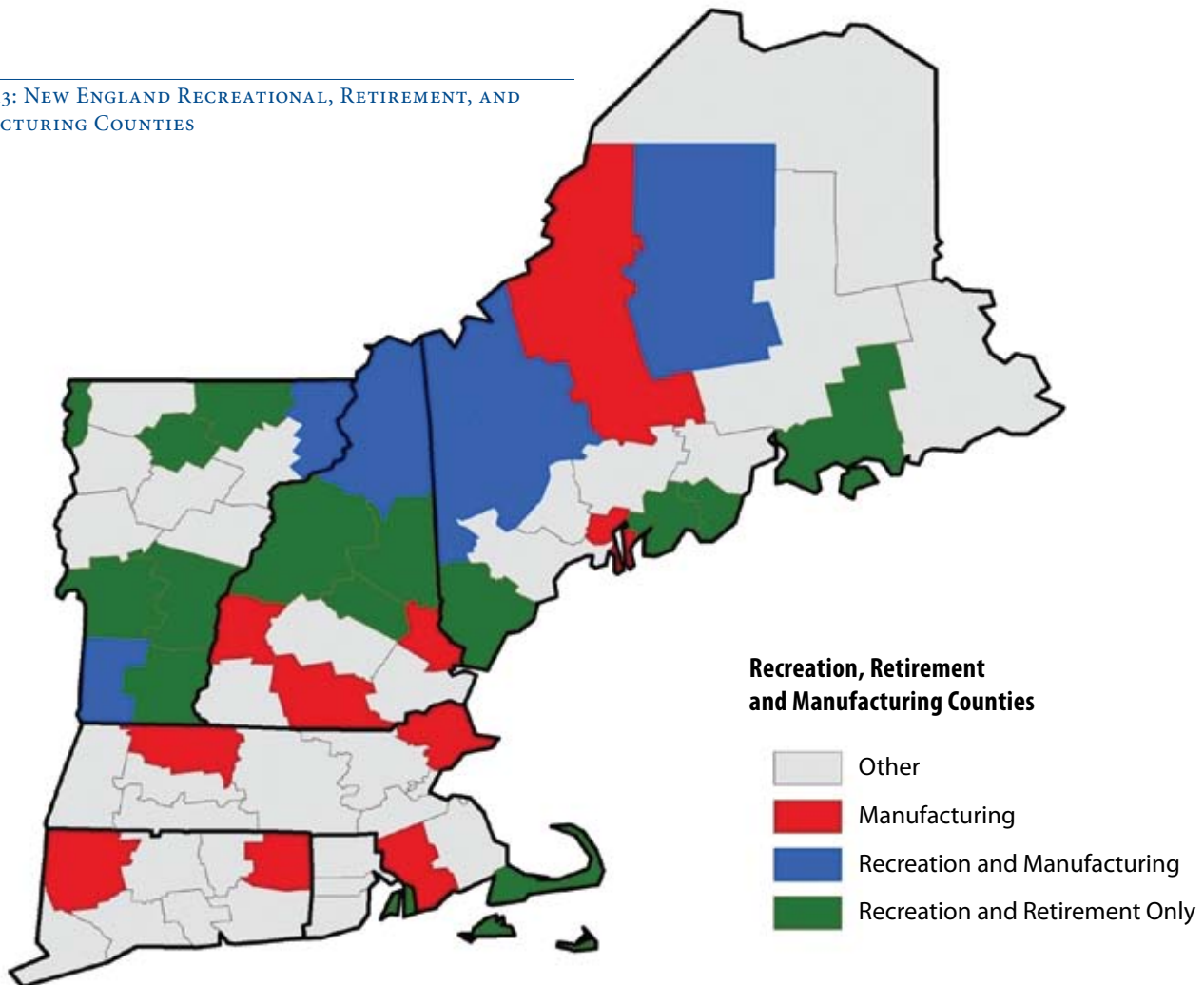
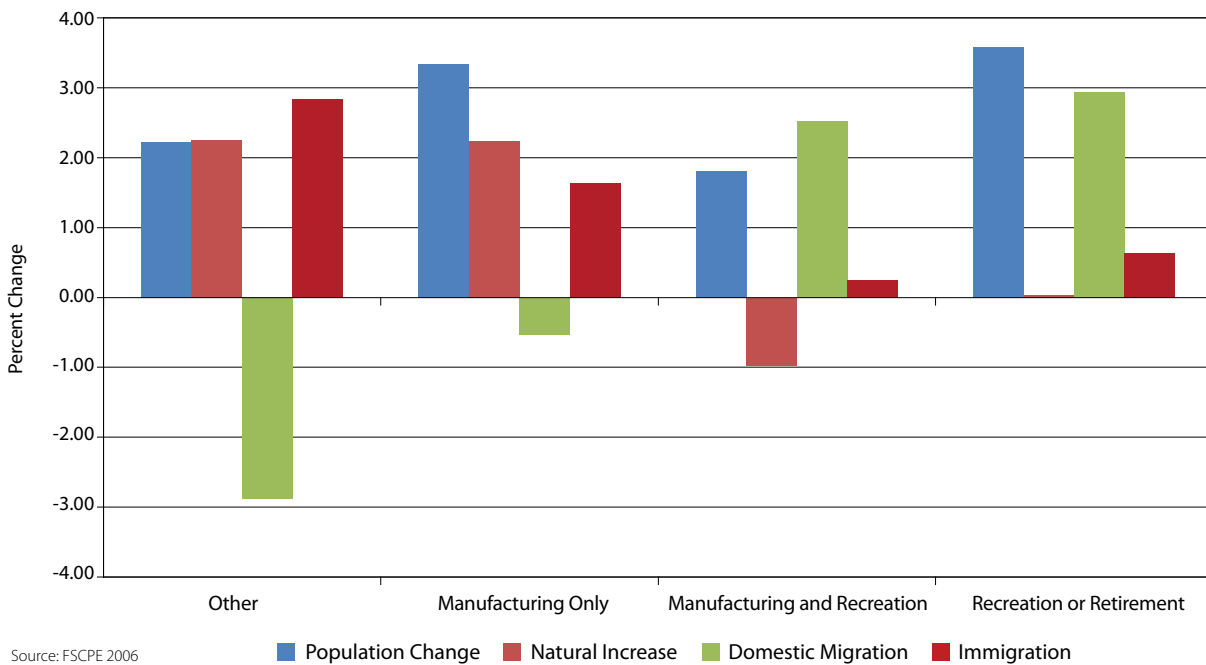


FIGURE 14: DEMOGRAPHIC CHANGE FOR SELECTED COUNTY TYPES, 2000–2006

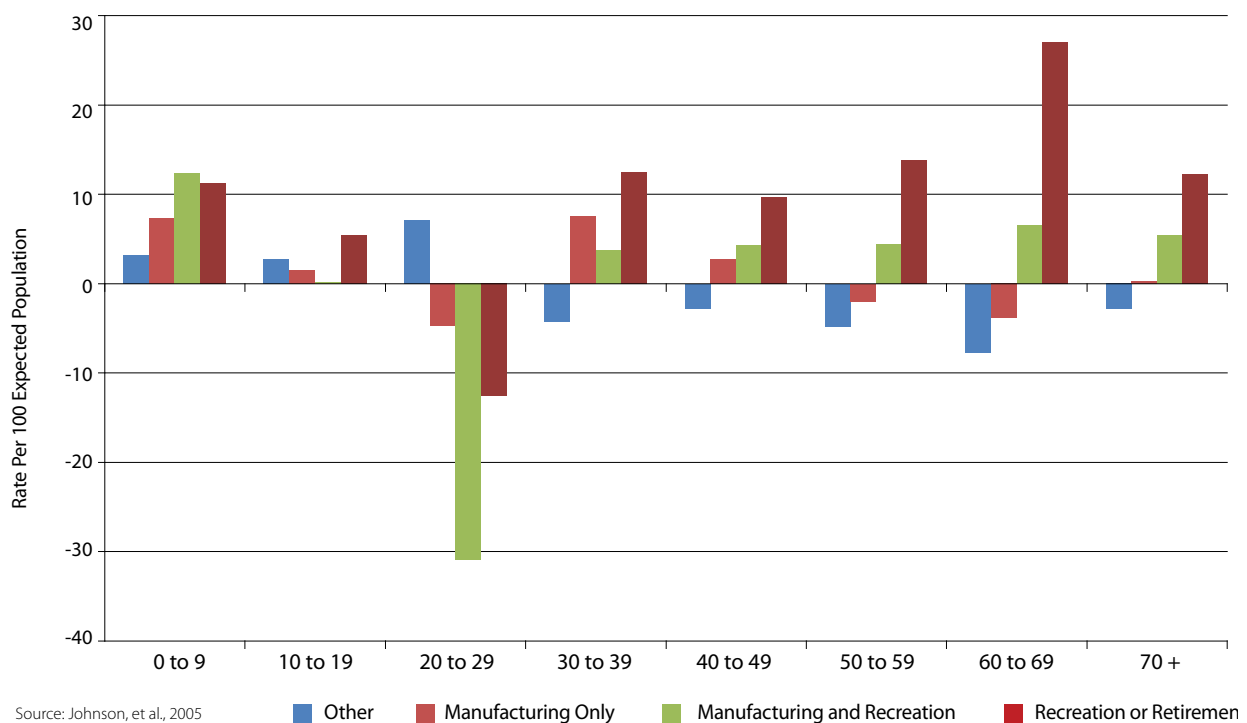


modest immigration. Finally, in the large group of counties with diversified economies, domestic out-migration is common. Only the large incremental gains from immigration and natural increase allow these counties to grow.

How can such a diverse set of demographic trends occur in these county types? A careful look at age-specific net mi-

gration patterns helps to illustrate the demographic forces at work. Recall that recreational and retirement counties are growing primarily through domestic in-migration. This domestic inflow includes large influxes of individuals in their 50s and 60s combined with modest gains among those in their 30s and 40s together with their children (*Figure 15*).

FIGURE 15: AGE-SPECIFIC NET MIGRATION BY COUNTY TYPE, 1990–2000



Such groups are drawn to the area by scenic and recreational amenities as well as by the opportunities that such amenity migrants provide for the working-age population (jobs in construction, services, etc.). Recreation and retirement destinations are losing young adults in their 20s.

In contrast to the situation in recreational counties, manufacturing counties are losing older adults and young adults in their 20s, but gaining those in their 30s and children (many of whom are likely to be minorities). This is consistent with an exodus of retiring workers and of entry level workers leaving for better opportunities elsewhere. The counties that are both manufacturing and recreational are in some ways an amalgam of these two. They are gaining people in the same age groups as the counties that specialized in recreation and retirement albeit at lower rates, but losing young adults at much higher rates. Many of these counties are engaged in the paper and timber industry, which has fallen on particularly hard times recently, fostering the outflow of young adults. At the same time, older adults are attracted by the natural and recreational amenities. The precipitous loss of young adults in such counties is also contributing to the occurrence of natural decrease or very modest natural increase. During the 1990s, both recreational and retirement counties were losing the young adults that would now be producing the next generation of children, while simultaneously gaining older adults at great risk of mortality.

Migration and Income Flows in New England

Using data from the Internal Revenue Service (IRS), it is possible to examine the movement of population and income to and from New England to gain further insights into how migration is reshaping the demographic structure of the region. The IRS data do not cover the entire population, but the coverage is quite comprehensive. Therefore, conclusions drawn from analysis of the IRS migration data are likely to be indicative of overall migration and income streams to and from the region.

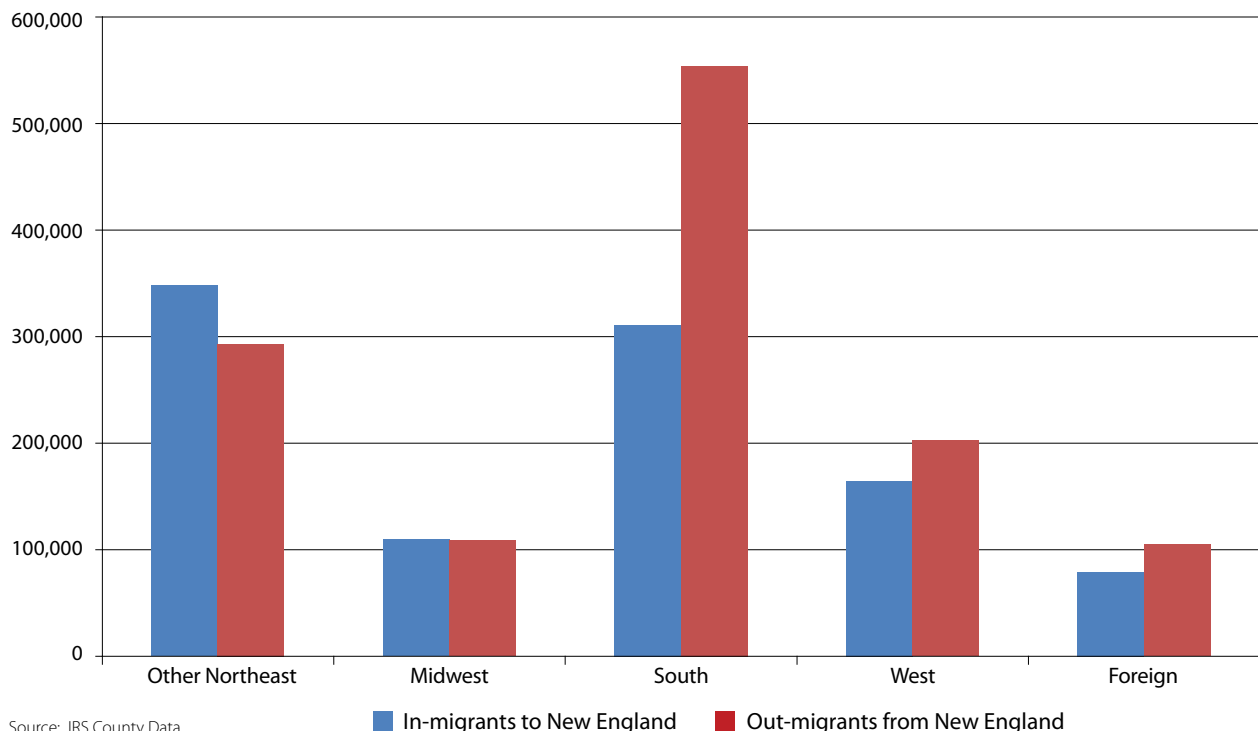
New England lost population in migration exchanges with other regions of the country. In all, 251,000 more people left New England than came to it between the beginning of 2001 and the end of 2005. IRS data also reveals the streams of in- and out- migration that underlay these net changes. The sheer volume of migration that produced the net change is stunning. The net out-migration of just over 251,000 was the result of 1,263,000 people leaving New England and 1,012,000 moving in. So, more than 2,275,000 people moved in and out of New

England to produce a net change of just 251,000. Researchers and policy makers rarely appreciate the population turnover that occurs to produce even a modest net migration change.

New England gains in exchanges with some areas of the country and loses in others. It benefits the most from migration exchanges with the Mid-Atlantic states. While 293,000 New Englanders left for these states, nearly 348,000 migrated in resulting in a net gain of 55,000 (*Figure 16*). New England had a roughly even exchange of migrants with the Midwest, but it did not fare as well in exchanges with the South, West or foreign countries.^{iv} The greatest loss (-243,000) was to the South. More than 554,000 New Englanders left for the South compared to only 311,000 Southerners moving to New England. The loss to the West was a much more modest -38,000.

In addition to 2,275,000 people migrating between New England and other regions, there is considerable internal movement within New England. Some 800,000 people moved from one New England state to another, according to IRS data.

FIGURE 16: REGIONAL MIGRATION FLOWS TO AND FROM NEW ENGLAND, 2001–2005

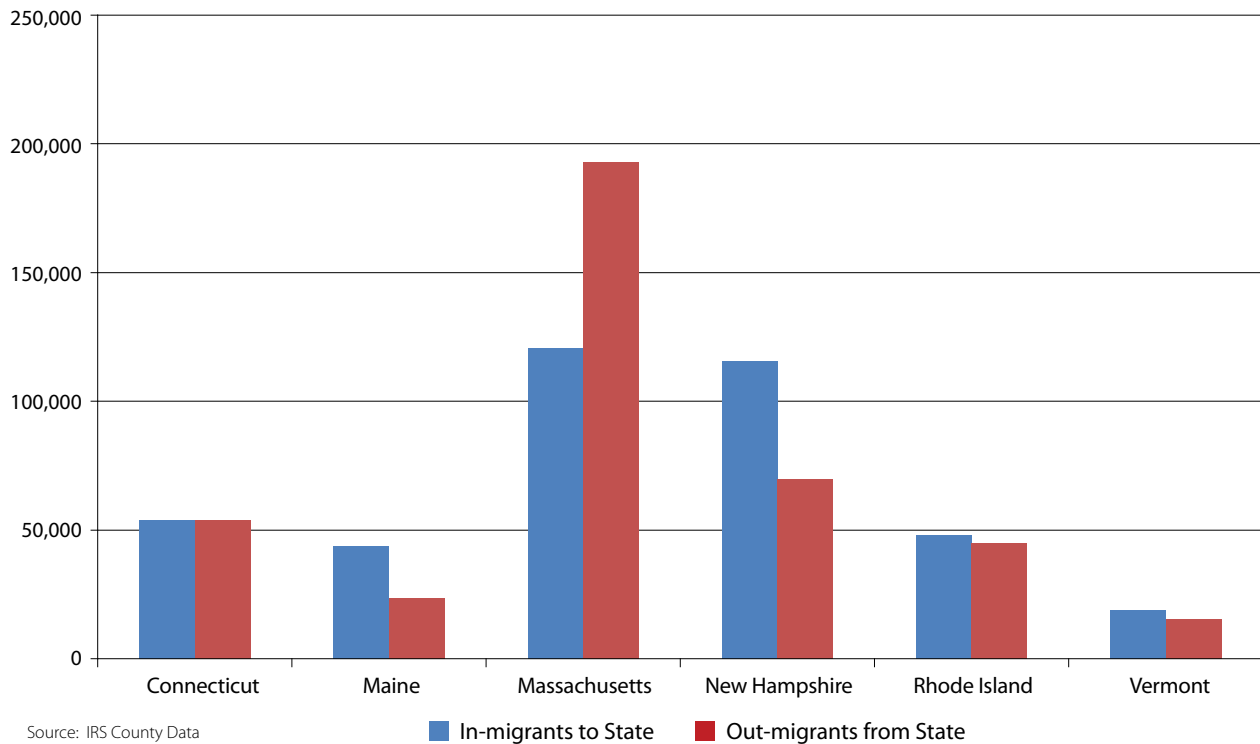


More than 192,000 of these migrants moved from Massachusetts to another New England state (*Figure 17*). In contrast, only 121,000 moved from other states to Massachusetts, resulting in a net loss of 72,000 for the state. The influx and exodus from Connecticut just balanced each other in exchanges with other states in the region. New Hampshire gained the most migrants from such migration exchanges. Nearly 116,000 people moved to New Hampshire from within the region, while a little less than 70,000 left for another state in the region. Maine, Vermont, and Rhode Island also gained from intra-regional ex-

changes, but New Hampshire's gain exceeded that of the other three combined.

Demographic trends have implications that reach beyond population redistribution. They also serve to redistribute income. The outflow of population from New England is matched by an outflow of income. Households leaving New England had an aggregate income of roughly \$39.6 billion, whereas those moving in earned \$33.7 billion. So, in addition to losing 251,000 people, New England lost nearly \$6 billion of income in migration exchanges with other regions.

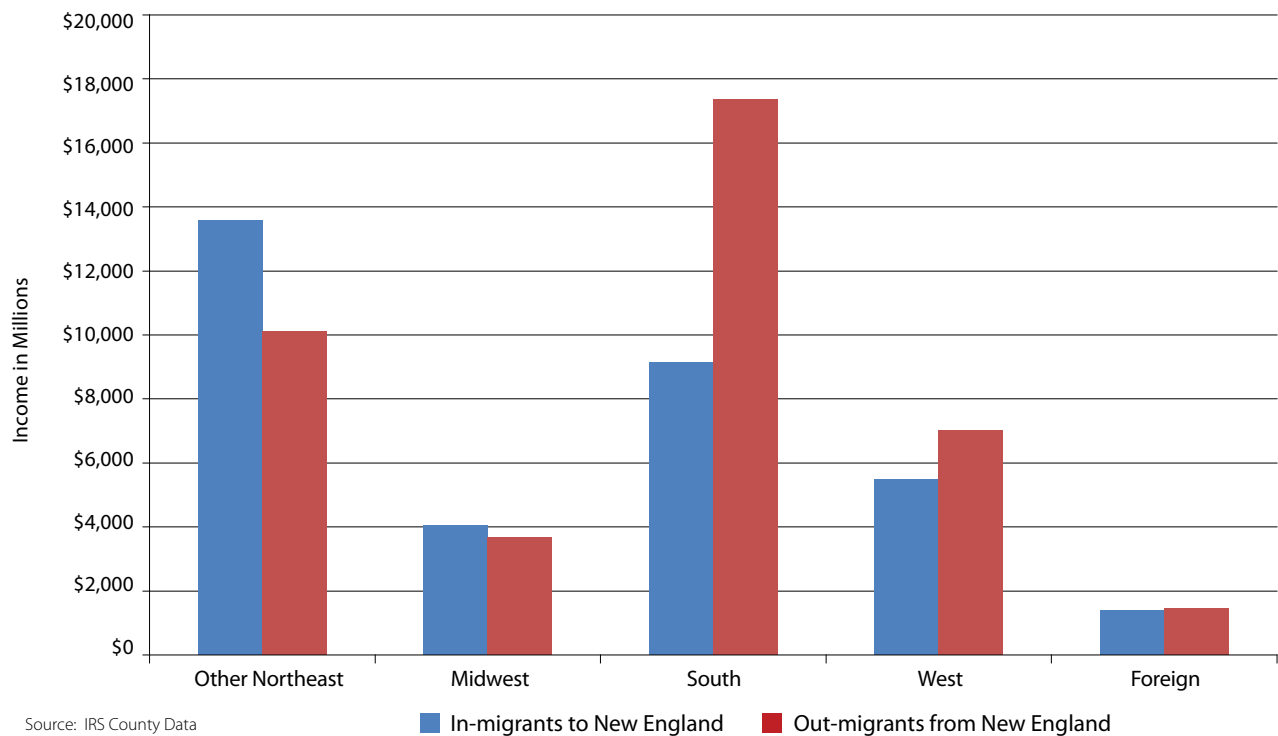
FIGURE 17: MIGRATION FLOWS BETWEEN STATES WITHIN NEW ENGLAND, 2001–2005



There are regional differences in how New England fares in income exchanges with other regions. It gains significant income (\$3.5 billion) from migration exchanges with the rest of the Northeast (*Figure 18*). In these exchanges with the Mid-Atlantic states, New England benefits both from the net inflow of migrants and from the fact that the in-migrants earn considerably more on average than those leaving New England. The region also gains modestly from migration exchanges with the Midwest because of a minimal migration gain and because those moving in

earn slightly more than those leaving. The biggest income loss (\$8.2 billion) occurs in exchanges with the South. Not only do many more households leave New England for the South, but the average incomes of those leaving are moderately higher than the incomes of those coming. In exchanges with the West, New England also suffers a significant income loss (\$1.5 billion), but this loss is entirely due to the net outflow of people. The incomes of those moving to New England from the West are actually slightly higher than the incomes of those leaving.

FIGURE 18: REGIONAL MIGRANT INCOME FLOWS TO AND FROM NEW ENGLAND, 2001–2005

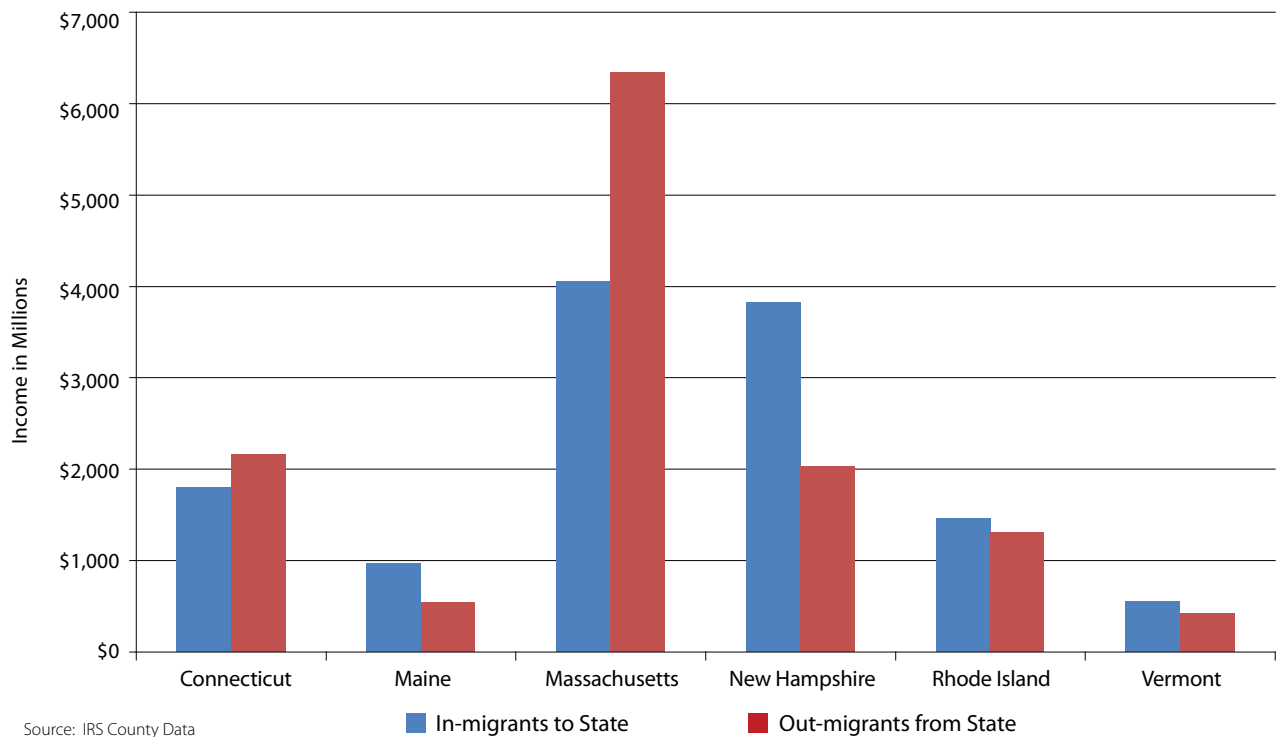


Source: IRS County Data
Aggregate Change 2001–2005
Income in 2005 dollars

The movement of population within New England also has significant implications for income streams between the six states. Massachusetts experienced the largest income loss in exchanges with its neighbors. People moving out of the state earned some \$2.3 billion more than migrants into the state (*Figure 19*). Most of this loss was because substantially more households leave for elsewhere in New England than come to Massachusetts. However, the average incomes of households leaving Massachusetts were also moderately higher than the

incomes of those moving in. Connecticut also lost \$366 million in income exchanges with other states in New England. New Hampshire gained the most in such income exchanges; an aggregate of \$1.8 billion. In addition to a large net population gain from migration, households moving into New Hampshire earned an average \$12,000 more than households leaving. Maine also benefited from such migration exchanges with a net income gain of nearly \$425 million. Income gains in Vermont and Rhode Island were more modest.

FIGURE 19: MIGRANT INCOME FLOWS BETWEEN STATES IN NEW ENGLAND, 2001–2005



Conclusion

New England gained 347,000 residents between 2000 and 2006. This gain of 2.5 percent is less than half that of the nation as a whole and lags far behind that of the fast growing South and West. Since 2000, minority populations in New England have grown and the white population has declined. As a result, New England is slightly more diverse than it was in 2000. New England's population grew because of immigration and natural increase. These gains were sufficient to offset a significant net out-migration of residents to other areas of the United States. This outflow of domestic migrants had economic implications as well. Out-migrants from the region earned nearly \$6 billion more than the people moving to New England from elsewhere in the United States.

New England is a diverse region and that variety is reflected in the demographic changes it has experienced since 2000. The southern tier of states grew more slowly than the northern tier. The southern states all lost domestic migrants and grew only because they had sufficient immigration and natural increase to offset domestic losses. In contrast, each northern state received a net inflow of domestic migrants coupled with modest natural increase and immigration. New Hampshire exemplifies the trend in the north with a population gain more than twice the rate of the region as a whole fueled largely by domestic migration and natural increase.

Population gains were greatest in rural New England with annual percentage gains there exceeding those during the 1990s. Whites contributed most of the growth, though minority populations are also growing. Domestic migration fuels almost all the growth in nonmetropolitan New England, immigration is quite modest and there are barely enough births to offset deaths. People are moving to rural New England from outside the region as well as from urban areas in New England. Rural growth is fueled by migrants attracted to the recreational and scenic amenities of the region. Additional growth results from the outward sprawl from the large urban areas in southern New England. Many rural migrants are in their 50s and 60s, though there are also significant net inflows of 30- to 49-year-olds and their children. A persistent concern in nonmetropolitan areas is the continuing out-migration of young adults.

The situation is quite different in metropolitan New England. There was little growth in metropolitan Boston because immigration and natural increase was barely sufficient to cover the loss of domestic out-migrants. Boston attracts many young

adults in the 20s, but loses migrants at most other ages, including significant numbers of 30- to 49-year-olds. Boston's modest population gains between 2000 and 2006 were entirely due to minority gains; the white population actually declined.

In metropolitan areas outside of Boston, the growth rate since 2000 is roughly equivalent to that during the 1990s. Like Boston, these areas have grown because of natural increase and immigration. Such gains were large enough to make up for losses from domestic out-migration. Unlike Boston, these areas are losing adult migrants at every age including a significant net loss of 20- to 29-year-olds. Minority population gains account for all of this population growth; the white population is diminishing here as it is in Boston.

Migration is critical to the demographic future of New England. With only modest natural increase and an aging population, future population gains or losses in New Hampshire depend heavily on whether the net flow of migration to the region is positive or negative. The region currently only gains in migration exchanges with the mid-Atlantic states of the Northeast. It barely holds its own in migration exchanges with the Midwest. It suffers significant migration losses in exchanges with the South and modest losses in exchanges with the West.

Within New England, the northern states, and particularly New Hampshire, gain in migration exchanges with other states. Massachusetts loses significant numbers of migrants both in intra- and inter-regional exchanges. These substantial domestic migration losses exceed the significant gains from immigration giving Massachusetts the slowest growth rate in New England. The loss of so many domestic migrants from New England is an issue of some concern. The region attracts significant numbers of young adults to the Boston metropolitan area. Given the concentration of colleges and universities, cutting edge firms and the social and cultural amenities of the Boston area, the appeal of the area to 20- to 29-year-olds is hardly surprising. What is surprising is the apparent inability of the region to retain these young adults when they reach their 30s and 40s. A few areas such as southern New Hampshire are attracting this age group together with their children, but New England as a whole has been less successful. The impact of such migration goes far beyond the migrants themselves. Because young adults are the most likely to migrate, they bring the potential to further expand the local population in the near term with their children. They also represent an important source of social capital for the

region. Such migration has significant economic implications as well because the loss of income New England experiences in many of these migration exchanges is considerable.

This report provides insights into the patterns of demographic change underway in the region because New England's future depends in part, on the size, composition and distribution of its population. For New England to continue to be a vibrant and diverse region, planners and policy-makers need to how consider how these demographic trends are likely to impact the future needs of its 14.3 million people and the numerous institutions, organizations and firms that support and enhance the lives of this population.

Methods and Data

The data for this project was assembled from a variety of sources. Most is from the U.S. Census Bureau. Data were obtained from the 1990 and 2000 Census and the 1990 and 2000 Modified Age-Race-Sex file (MARS) prepared by the U.S. Census Bureau. Detailed race-based birth and death data were obtained from the National Center for Health Statistics. Additional data for 1990 to 2006 come from the Federal State Cooperative Population Estimates series (FSCPE). Such estimates have proven quite reliable in the past, but results must be interpreted with caution. To produce a database consistent in time and structure, a number of additional estimates and adjustments were made using procedures widely accepted by demographers. Although these estimation and adjustment procedures introduce some uncertainty into the results, conclusions here accurately represent the overall demographic trends in New England.

The age-specific net migration estimates were produced using a modified cohort-component method. Detailed birth and death data by age, race, and sex were obtained from the National Center for Health Statistics. The 1990 and 2000 Census populations were adjusted for the enumeration undercount prior to calculating age-specific net migration. A detailed description of the methods and data employed for these calculations is available.^v

Data on migration and income flows between counties are from the Internal Revenue Service County-to-County Migration Flow Data. The IRS measures migration by comparing the county of residence in successive years of income tax returns. For each return indicating a change in county of residence, the county of origin, destination, number of dependents and income is reported. Coverage includes between 95 and 98 percent of all tax returns filed. However, the data series excludes persons that do not file returns (due to low income, income from non-taxed retirement plans, recent international immigrants, some undocumented immigrants, etc). Although the coverage is not complete, the vast majority of the population is included and findings reported for the IRS data are likely to closely approximate overall migration trends.

The unit of analysis for this study is the county. Though counties are not significant units of government in New England, they are important units for the collection of demographic data. They are also the basic building blocks for metropolitan areas. In many cases, the county level data are aggregated to other levels of geography. For purposes of this study, the Boston metropolitan area is defined as the Boston-Cambridge-Quincy Metropolitan Statistical Area. This includes Essex, Middlesex, Norfolk, Plymouth and Suffolk counties in Massachusetts as well as Rockingham and Strafford counties in New Hampshire. The core of the Boston metropolitan area is defined as Suffolk County and is reported separately in some analysis.

Endnotes

i The terms rural and nonmetropolitan are used interchangeably here, as are the terms urban and metropolitan.

ii Because the data and computational demands required to produce age-specific net migration estimates are substantial, they can only be produced at this level of detail with data from the decennial Census. Thus, the analysis is limited to 1990 to 2000.

iii The focus here is on net trends, so negative net migration for a given age group does not mean that no individuals of that group are moving into the area, it simply means that more are leaving than coming.

iv Migrants from foreign areas include U.S. residents returning from overseas assignments. However, very few immigrants are included in this group because only people who filed income tax returns in two successive years are included in IRS records.

v See Johnson, K.M., P.R. Voss, R.B. Hammer, G.V. Fuguitt and S. McNiven. 2005. "Temporal and Spatial Variation in Age-Specific Net Migration in the United States." *Demography*, 42(4): 791-812.

About the author

KENNETH M. JOHNSON is Senior Demographer at the Carsey Institute and Professor of Sociology at the University of New Hampshire. Dr. Johnson is a nationally recognized expert on population redistribution and demographic trends in nonmetropolitan areas of the United States. He has done extensive research on changing demographic trends in rural and urban America, on recreational and high amenity areas, and on the environmental impact of demographic change.

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