# Joint Center for Housing Studies 

## Harvard University

# The New Demographics of Housing 

George S. Masnick
W01-11

November 2001

This paper was prepared for a Conference on Housing and the New Economy held at George Washington University in Washington DC on May 21, 2001. © by George Masnick. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source. This paper is to be published in Housing Policy Debate, Volume 13:2, 2002.

Any opinions expressed are those of the author and not those of the Joint Center for Housing Studies of Harvard University or of any of the persons or organizations providing support to the Joint Center for Housing Studies.


#### Abstract

During the 1990s, minorities have played an increasing role in population growth throughout the United States. Fueled by international migration and by high natural increase as an outcome of their young age structures, Asians and Hispanics have joined with African Americans to increasingly determine population and household growth at almost every level of geography. Broad regions, whole states, central cities of the nation's metropolitan areas, and a growing number of suburbs now all depend on minorities to sustain school enrollments, employment bases, downtown commerce, and housing markets. In addition to racial and ethnic turnover, households have been changing compositionally because of the general aging of the population and because of the increase in the number of unmarried adults.

This paper surveys these and other demographic changes that have been taking place in the U.S. at the end of the 20th century, and examines some of their implications for household growth and housing consumption. A clearer understanding of both white and minority roles in owner and renter housing trends is developed through tracking changing cohort housing consumption patterns. Minority increases in owners and renters among younger cohorts, when set against non-Hispanic white losses in the older age groups among owners, and across middle age groups among renters, has led to large net gains for minorities. Distinct patterns of cohort turnover have taken place in different vintage housing stock. These trends are expected to continue over the next decade and beyond.


## Key words:

Housing
Demographics
Minorities

## Note on Data Points for Figures

All figures are either individual Microsoft Excel charts, or multiple Excel charts imported into Word documents. They were produced using Microsoft ME Office Suite 2000.

Data points for the Excel files are straightforward. Data points for the charts that are embedded in a Word document can be obtained by double clicking on the chart and going to "chart options" on the menu bar, then to "data labels", then to "print values". Alternatively, go to "source data" and click on the series field. Finally, when the chart is "opened" by the double click, you can just point to the bar or point with the cursor, and the value appears on the screen in a box.

## I. Introduction

Significant demographic changes are shaping housing consumption as the United States has entered the 21 st century. The rapid increase of minorities (many of them recent immigrants) in both cities and suburbs of the nation's largest metropolitan areas, the aging of the baby boom generation through mid-life into old age, the declining share of married couple households and households with children, and the continuing redistribution of population within the U.S. from the Northeast and Midwest to the South and West, from older metropolitan areas to newer, from central cities to edge cities, suburbs and exurbs, all will influence tomorrow's housing trends. In addition, economic changes that are embedded in our shifting demographic landscape, including new patterns of work - what we do, when and where we work (and when we don't), how much we are paid, how we supplement and combine our income sources, and when and how we retire - also impact housing consumption. This dynamic geographic redistribution, shifting household and family composition, job and labor force restructuring, population aging, and racial reconfiguration are inextricably linked to each other and to housing trends for the new century.

As these changes have been taking place in the demography, sociology, and the economy of the United States, new housing construction has boomed in recent years. Much attention is being directed at the number, location characteristics and cost of new housing. However, a strong case can be made that new construction is not reflective of the housing needs of the majority of new and future households. It is the existing housing stock that, by default, must meet the bulk of our future housing needs. The patterns in which we occupy this existing stock, and how this stock is reconfigured to accommodate new and changing households, will determine most of the housing consumption changes we will observe in the decades immediately ahead.

The theme of this volume is how trends associated with the new globalized "high-tech" economy have affected housing consumption in those areas where the high-tech economy boomed in the mid-to-late1990s. Several papers have sought to identify specific metropolitan economies having greater dependence on high-tech employment and then examine their recent housing consumption patterns vs. those in metropolitan economies less identified as high-tech. An implicit theme is that the future will include many more metropolitan locations with "new economy" engines of economic growth. The demographic trends we have singled out, however, are already pervasive across the country, affecting both new and old economy locales. This "new
demography" is the context within which the new economy has emerged and will continue to develop.

The goal of this paper is to provide an anchor of understanding around several broad themes in the literature on housing demography. This understanding is both substantive and methodological. Methodologically we emphasize the unique perspective provided by decomposing growth into its component factors, and the particular insights that cohort analysis offers to better understand minorities' roles in the shifting demand for housing. Substantively we contrast the recent trends in owner and renter household growth of minorities with that of non-Hispanic whites. Because of the immigrant influence on minority household growth, this dimension of the new demography of housing might very well be viewed as simply one facet of economic globalization as it affects the U.S. It is perhaps not co-incidentally that the high-tech boom in places like greater San Francisco, Seattle, New York and Washington, D.C. has taken place in regions of significant influence from foreign immigration.

Because this paper deals with broad themes, there is not enough space to go into many of the important sub-themes in much, or sometimes any, detail. Considerable attention is given over to minority owner and renter housing trends, but lack of recent nativity data on housing variables precludes attention being focused on the foreign born component of recent minority trends, although these have been extremely important. The full release of 2000 census data are will make such a focus possible. We discuss the significance of changing patterns of marriage, divorce and remarriage on household composition overall, but do not delve into the significant differences that exist in marital status trends and household type by race and Hispanic origin. It is not that these sub-themes are any less important. In fact, it is often quite to the contrary. It is simply that their significance is often in their nuances, and their discussion deserves more space than we have been allotted.

## II. Regional Population Redistribution

A persistent late 20th century demographic trend has been the shift in population from the Northeast and Midwest to the South and West (Figure 1). Each broad region of the country has been gaining total population, but the South and West have been increasing considerably faster than the national average rate in recent decades (McArdle, 1999). The Northeast and Midwest
have been net exporters of domestic migrants (Figures 2a and 2b), primarily to the South. When combined with slower growth from natural increase in the Northeast and Midwest because of lower fertility and older age structures, these regions lag in overall population growth (Table 1). In fact, were it not for the component of growth due to foreign immigration, the Northeast would have lost population on net during each and every year of the 1990s.

Figure 1: Share of U.S. Population in Each Region: 1850-2020


Source: U.S. Bureau of the Census, Decennial Censuses and PPL-47 Popuilation Projections. Adapted from Nancy McArdle, "Outward Bound: The Decentralization of Population and Employment", Joint Center for Housing Studies, Working Paper W99-5.

After many decades of relative stagnation at just above 30 percent of the national population, the South began to increase its growth share during the 1970s and has achieved higher and higher percentages of the total U.S. population during each of the past three decades. The South has seen significant recent growth from both natural increase and from foreign immigration, in addition to its growth from net domestic migration (Figure 2c). Numerical population growth in the South was the largest of any region of the country during the 1990s. Smith and Welch (1989) attribute the turnaround in net domestic migration in the South to its dramatic improvement in public education following the civil rights movement, and to the subsequent overall improvement in local and regional economies that have turned the South from a net exporter of migrants to a destination that now attracts migrants from around the country (Frey, 1998).


Even higher levels of natural increase and growth from foreign immigration have catapulted the West to the fastest growing region of the country (in terms of rate of growth) in spite of almost no net domestic migration gain during the 1990s (Figure 2d and Table 1). Foreign immigration to the West has been half again as large as that to the Northeast and South and four times as large as that to the Midwest. The West's population has a young age structure, and its above average fertility accounts for its high rate of natural increase. During the late 1980s the West surpassed the Northeast in total population, and is on track to soon surpass the Midwest.

| Table 1: Components of Population Growth 1990-1999 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population | Natural | Net Domestic | Net International |  |
| Region and Census Division | Change | Increase | Migration | Migration | Other** |
| United States | 23,226,417 | 15,365,793 | 0 | 7,306,765 | 553,859 |
| Northeast | 954,323 | 2,192,633 | -2,938,095 | 1,805,070 | -105,285 |
| New England | 275,911 | 549,241 | -488,959 | 246,336 | -30,707 |
| Middle Atlantic | 678,412 | 1,643,392 | -2,449,136 | 1,558,734 | -74,578 |
| Midwest | 3,476,844 | 3,028,867 | -613,301 | 744,973 | 316,305 |
| East North Central | 2,365,506 | 2,226,717 | -730,470 | 579,761 | 289,498 |
| West North Central | 1,111,338 | 802,150 | 117,169 | 165,212 | 26,807 |
| South | 10,736,708 | 5,112,439 | 3,510,992 | 1,951,134 | 162,143 |
| South Atlantic | 5,802,759 | 2,229,248 | 2,310,320 | 1,122,009 | 141,182 |
| East South Central | 1,373,697 | 681,538 | 603,272 | 66,176 | 22,711 |
| West South Central | 3,560,252 | 2,201,653 | 597,400 | 762,949 | -1,750 |
| West | 8,058,542 | 5,031,854 | 40,404 | 2,805,588 | 180,696 |
| Mountain | 3,411,170 | 1,284,208 | 1,694,337 | 312,427 | 120,198 |
| Pacific | 4,647,372 | 3,747,646 | -1,653,933 | 2,493,161 | 60,498 |
| ** Includes net federal movement from abroad and a residual component. |  |  |  |  |  |

Because of the year-to-year stability of the three components of population growth in each region during the 1990s, we fully expect the broad regional growth trends of the past decade to continue for the next decade, at least. Future growth differences will be primarily in
the details of the intra-regional growth patterns, depending upon which particular states and which counties jump to the lead and which lag behind.

For example, the West's low overall net domestic migration conceals large swings in migration among states in the region. High net domestic out migration from California during the early 1990s translated into large in-migration flows to many other states in the West, but these flows have been quite unstable and are difficult to predict for the future. From the middle to the end of the 1990s, annual net domestic out migration from California had fallen from over 450,000 to fewer than 90,000 . Growth from domestic migration in other western states has consequently fallen proportionally. There is great uncertainty about likely future trends in domestic net migration in California and throughout the West. Similar uncertainty exists about the regional influences of shifting net domestic migration components to other mega-states like Texas and Florida.

## III. Our Changing Racial/Hispanic Composition

The U.S. population has entered an historical period where an increasing share of population growth is contributed by minorities. Between 1990 and 2000, total population growth was 13.2 percent, non-Hispanic white growth was 3.4 percent, and minority growth was 43.4 percent. ${ }^{-1}$ According to the latest Census Bureau population projections, over the next twenty years nonHispanic whites will increase by an average of only 2.5 percent per decade, while all other groups will grow by an average of 29 percent per decade, dropping the share non-Hispanic whites in the overall population from about 70 percent to 64 percent (U.S. Bureau of the Census, 2000).

A growing share minority is taking place in virtually every state in the nation (Table 2). In many large states the minority ascendancy in growth rates has been striking. New York and New Jersey in the East, Illinois in the Midwest, Georgia, Florida and Texas in the South, and California and all but a handful of small states in the West have all made strong additions to minority shares during the 1990s. Minority populations are increasing rapidly because of high levels of foreign immigration, because of minority fertility that is higher than average, and

[^0]because of younger minority age structures favoring births over deaths. Non-Hispanic whites, on the other hand, have low levels of net immigration, below replacement levels of fertility, and an older age structure where births and deaths are in closer balance. In at least a dozen states the white population was smaller in 2000 than in 1990 (Table 2).

Nowhere has the influence of minority population growth been felt more strongly than in the core cities of the nation's largest metropolitan areas (Joint Center for Housing Studies, 2001). Even by 1990 , fully 17 of the core cities of the 50 metropolitan areas with a million or more population had become "majority minority". But by 2000 a majority (27) had surpassed the 50 percent minority mark. Minority populations in these cities continue to expand by virtue of their high natural increase and foreign immigration. Racial turnover is occurring in many of these cities despite increasing minority out migration to the suburbs.

Non-Hispanic whites living in these large cities have especially low rates of natural increase because of very low urban fertility and older age structures that produce substantial deaths. More importantly, net non-Hispanic white migration away from core cities has remained high, and takes place without the benefit of significant non-Hispanic white foreign replacements in most cases. Consequently, 35 of the core cities in the nation's 50 largest metropolitan areas lost non-Hispanic white population between 1990 and 2000. In contrast, fully 48 of the 50 core cities experienced positive minority growth. In half of the 35 cities with white losses, minority gains were sufficient to keep the core cities from losing population overall (Joint Center for Housing Studies, 2001).

These differences in components of population growth between whites and minorities have resulted in rapid racial/Hispanic origin turnover in our metropolitan centers. Most large cities, especially those in the Northeast and Midwest, remain totally dependent upon minority natural increase, and on immigration from abroad, to offset low natural increase of whites and ongoing domestic out migration to prevent overall net population loss. Minority population growth has become critical to sustain housing markets, employment bases, school enrollments, and commerce in almost every large core metropolitan city.

[^1]Table 2: Total, White and Minority Population Change for States Sorted by Percent Minority in 2000

|  |  | 2000 Cen | sus |  |  | 1990 | Census |  | 1990- | 00 Grow | Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | o-Hispanic |  |  |  | on-Hispanic |  |  |  | n-Hispanic |  |
| State | Total | Whites | Minority* | Minority | Total | Whites | Minority* | \% Minority | Total | Whites | Minority |
| Northeast |  |  |  |  |  |  |  |  |  |  |  |
| NY | 18,976,457 | 11,760,981 | 7,215,476 | 38.0\% | 17,990,455 | 12,460,189 | 5,530,266 | 30.7\% | 5.5\% | -5.6\% | 30.5\% |
| NJ | 8,414,350 | 5,557,209 | 2,857,141 | 34.0\% | 7,730,188 | 5,718,966 | 2,011,222 | 26.0\% | 8.9\% | -2.8\% | 42.1\% |
| Ст | 3,405,565 | 2,638,845 | 766,720 | 22.5\% | 3,287,116 | 2,754,184 | 532,932 | 16.2\% | 3.6\% | -4.2\% | 43.9 |
| MA | 6,349,097 | 5,198,359 | 1,150,738 | 18.1\% | 6,016,425 | 5,280,292 | 736,133 | 12.2\% | 5.5\% | -1.6\% | 56.3\% |
| RI | 1,048,319 | 858,433 | 189,886 | 18.1\% | 1,003,464 | 896,109 | 107,355 | 10.7\% | 4.5\% | -4.2\% | 6.9 |
| PA | 12,281,054 | 10,322,455 | 1,958,599 | 15.9\% | 11,881,643 | 10,422,058 | 1,459,585 | 12.3\% | 3.4\% | -1.0\% | 4.2\% |
| NH | 1,235,786 | 1,175,252 | 60,534 | 4.9\% | 1,109,252 | 1,079,484 | 29,768 | 2.7\% | 11.4\% | 8.9\% | 103.4\% |
| vt | 608,827 | 585,431 | 23,396 | 3.8\% | 562,758 | 552,184 | 10,574 | 1.9\% | 8.2\% | 6.0\% | 121.3 |
| ME | 1,274,923 | 1,230,297 | 44,626 | 3.5\% | 1,227,928 | 1,203,357 | 24,571 | 2.0\% | 3.8\% | 2.2\% | 81.6\% |
| Midwest |  |  |  |  |  |  |  |  |  |  |  |
| IL | 12,419,293 | 8,424,140 | 3,995,153 | 32.2\% | 11,430,602 | 8,550,208 | 2,880,394 | 25.2\% | 8.6\% | -1.5\% | 38.7\% |
| мI | 9,938,444 | 7,806,691 | 2,131,753 | 21.4\% | 9,295,297 | 7,649,951 | 1,645,346 | 17.7\% | 6.9\% | 2.0\% | 29.6\% |
| KS | 2,688,418 | 2,233,997 | 454,421 | 16.9\% | 2,477,574 | 2,190,524 | 287,050 | 11.6\% | 8.5\% | 2.0\% | 8.3 |
| мо | 5,595,211 | 4,686,474 | 908,737 | 16.2\% | 5,117,073 | 4,448,465 | 668,608 | 13.1\% | 9.3\% | 5.4\% | 3.9\% |
| OH | 11,353,140 | 9,538,111 | 1,815,029 | 16.0\% | 10,847,115 | 9,444,622 | 1,402,493 | 12.9\% | 4.7\% | 1.0\% | 29.4\% |
| in | 6,080,485 | 5,219,373 | 861,112 | 14.2\% | 5,544,159 | 4,965,242 | 578,917 | 10.4\% | 9.7\% | 5.1\% | 8.7 |
| wi | 5,363,675 | 4,681,630 | 682,045 | 12.7\% | 4,891,769 | 4,464,677 | 427,092 | 8.7\% | 9.6\% | 4.9\% | 59.7\% |
| NE | 1,711,263 | 1,494,494 | 216,769 | 12.7\% | 1,578,385 | 1,460,095 | 118,290 | 7.5\% | 8.4\% | 2.4\% | 83.3\% |
| SD | 754,844 | 664,585 | 90,259 | 12.0\% | 696,004 | 634,788 | 61,216 | 8.8\% | 8.5\% | 4.7\% | 47.4\% |
| mN | 4,919,479 | 4,337,143 | 582,336 | 11.8\% | 4,375,099 | 4,101,266 | 273,833 | 6.3\% | 12.4\% | 5.8\% | 112.7\% |
| ND | 642,200 | 589,149 | 53,051 | 8.3\% | 638,800 | 601,592 | 37,208 | 5.8\% | 0.5\% | -2.1\% | 42.6\% |
| IA | 2,926,324 | 2,710,344 | 215,980 | 7.4\% | 2,776,755 | 2,663,840 | 112,915 | 4.1\% | 5.4\% | 1.7\% | 91.3\% |
| South |  |  |  |  |  |  |  |  |  |  |  |
| DC | 572,059 | 159,178 | 412,881 | 72.2\% | 606,900 | 166,131 | 440,769 | 72.6\% | -5.7\% | -4.2\% | -6.3\% |
| TX | 20,851,820 | 10,933,313 | 9,918,507 | 47.6\% | 16,986,510 | 10,291,680 | 6,694,830 | 39.4\% | 22.8\% | 6.2\% | 48.2\% |
| MS | 2,844,658 | 1,727,908 | 1,116,750 | 39.3\% | 2,573,216 | 1,624,198 | 949,018 | 36.9\% | 10.5\% | 6.4\% | 17.7\% |
| MD | 5,296,486 | 3,286,547 | 2,009,939 | 37.9\% | 4,781,468 | 3,326,109 | 1,455,359 | 30.4\% | 10.8\% | -1.2\% | 38.1\% |
| LA | 4,468,976 | 2,794,391 | 1,674,585 | 37.5\% | 4,219,973 | 2,776,022 | 1,443,951 | $34.2 \%$ | 5.9\% | 0.7\% | 16.0\% |

Table 2: Total, White and Minority Population Change for States Sorted by Percent Minority in 2000 (cont.)

|  |  | 2000 Census |  |  |  | 1990 Census |  |  |  | 1990-2000 Growth Rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Non- <br> Hispanic |  |  |  | Non-Hispanic |  |  |  | Non-Hispanic |  |  |
| South | State | Total | Whites | Minority* | \% <br> Minority | Total | Whites | Minority* | \% Minority | Total | Whites | Minority |
|  | GA | 8,186,453 | 5,128,661 | 3,057,792 | 37.4\% | 6,478,216 | 4,543,425 | 1,934,791 | 29.9\% | 26.4\% | 12.9\% | 58.0\% |
|  | FL | 15,982,378 | 10,458,509 | 5,523,869 | 34.6\% | 12,937,926 | 9,475,326 | 3,462,600 | 26.8\% | 23.5\% | 10.4\% | 59.5\% |
|  | SC | 4,012,012 | 2,652,291 | 1,359,721 | 33.9\% | 3,486,703 | 2,390,056 | 1,096,647 | 31.5\% | 15.1\% | 11.0\% | 24.0\% |
|  | VA | 7,078,515 | 4,965,637 | 2,112,878 | 29.8\% | 6,187,358 | 4,701,650 | 1,485,708 | 24.0\% | 14.4\% | 5.6\% | 42.2\% |
|  | NC | 8,049,313 | 5,647,155 | 2,402,158 | 29.8\% | 6,628,637 | 4,971,127 | 1,657,510 | 25.0\% | 21.4\% | 13.6\% | 44.9\% |
|  | AL | 4,447,100 | 3,125,819 | 1,321,281 | 29.7\% | 4,040,587 | 2,959,793 | 1,080,794 | 26.7\% | 10.1\% | 5.6\% | 22.3\% |
|  | DE | 783,600 | 567,973 | 215,627 | 27.5\% | 666,168 | 528,092 | 138,076 | 20.7\% | 17.6\% | 7.6\% | 56.2\% |
|  | OK | 3,450,654 | 2,556,368 | 894,286 | 25.9\% | 3,145,585 | 2,547,588 | 597,997 | 19.0\% | 9.7\% | 0.3\% | 49.5\% |
|  | AR | 2,673,400 | 2,100,135 | 573,265 | 21.4\% | 2,350,725 | 1,933,082 | 417,643 | 17.8\% | 13.7\% | 8.6\% | 37.3\% |
|  | TN | 5,689,283 | 4,505,930 | 1,183,353 | 20.8\% | 4,877,185 | 4,027,631 | 849,554 | 17.4\% | 16.7\% | 11.9\% | 39.3\% |
|  | KY | 4,041,769 | 3,608,013 | 433,756 | 10.7\% | 3,685,296 | 3,378,022 | 307,274 | 8.3\% | 9.7\% | 6.8\% | 41.2\% |
|  | WV | 1,808,344 | 1,709,966 | 98,378 | 5.4\% | 1,793,477 | 1,718,896 | 74,581 | 4.2\% | 0.8\% | -0.5\% | 31.9\% |
| West |  |  |  |  |  |  |  |  |  |  |  |  |
|  | HI | 1,211,537 | 277,091 | 934,446 | 77.1\% | 1,108,229 | 347,644 | 760,585 | 68.6\% | 9.3\% | -20.3\% | 22.9\% |
|  | NM | 1,819,046 | 813,495 | 1,005,551 | 55.3\% | 1,515,069 | 764,164 | 750,905 | 49.6\% | 20.1\% | 6.5\% | 33.9\% |
|  | CA | 33,871,648 | 15,816,790 | 18,054,858 | 53.3\% | 29,760,021 | 17,029,126 | 12,730,895 | 42.8\% | 13.8\% | -7.1\% | 41.8\% |
|  | AZ | 5,130,632 | 3,274,258 | 1,856,374 | 36.2\% | 3,665,228 | 2,626,185 | 1,039,043 | 28.3\% | 40.0\% | 24.7\% | 78.7\% |
|  | NV | 1,998,257 | 1,303,001 | 695,256 | 34.8\% | 1,201,833 | 946,357 | 255,476 | 21.3\% | 66.3\% | 37.7\% | 172.1\% |
|  | AK | 626,932 | 423,788 | 203,144 | 32.4\% | 550,043 | 406,892 | 143,151 | 26.0\% | 14.0\% | 4.2\% | 41.9\% |
|  | CO | 4,301,261 | 3,202,880 | 1,098,381 | 25.5\% | 3,294,394 | 2,658,945 | 635,449 | 19.3\% | 30.6\% | 20.5\% | 72.9\% |
|  | WA | 5,894,121 | 4,652,490 | 1,241,631 | 21.1\% | 4,866,692 | 4,221,622 | 645,070 | 13.3\% | 21.1\% | 10.2\% | 92.5\% |
|  | OR | 3,421,399 | 2,857,616 | 563,783 | 16.5\% | 2,842,321 | 2,579,732 | 262,589 | 9.2\% | 20.4\% | 10.8\% | 114.7\% |
|  | UT | 2,233,169 | 1,904,265 | 328,904 | 14.7\% | 1,722,850 | 1,571,254 | 151,596 | 8.8\% | 29.6\% | 21.2\% | 117.0\% |
|  | ID | 1,293,953 | 1,139,291 | 154,662 | 12.0\% | 1,006,749 | 928,661 | 78,088 | 7.8\% | 28.5\% | 22.7\% | 98.1\% |
|  | WY | 493,782 | 438,799 | 54,983 | 11.1\% | 453,588 | 412,711 | 40,877 | 9.0\% | 8.9\% | 6.3\% | 34.5\% |
|  | MT | 902,195 | 807,823 | 94,372 | 10.5\% | 799,065 | 733,878 | 65,187 | 8.2\% | 12.9\% | 10.1\% | 44.8\% |
| Total U.S. |  | 281,421,906 | 194,552,774 | 86,869,132 | 30.9\% | 248,709,873 | 188,128,092 | 60,581,781 | 24.4\% | 13.2\% | 3.4\% | 43.4\% |

[^2]This influence of minority population growth has also begun to play an increasing role in the suburbs. A recent Brookings Institution report calculates that minorities were also responsible for the bulk of suburban population gains between 1990 and 2000 in 65 of the nation's 102 metropolitan areas with populations above 500,000 (Frey, 2001). New economy metros dominate the list with the highest suburban minority concentrations, while old economy metros have the least representation of minorities in their suburbs. ${ }^{3}$ Minority dominance of growth in these suburbs is due to the growing city-suburb migration of minorities as well as increased foreign immigration directly to the suburbs and to high natural increase of suburban minorities (young age structures with many more births than deaths). Aiding this trend in about two dozen metros was a numerical decline of the non-Hispanic white suburban population, in some cases at levels that even exceeded the white losses in their central cities (Frey, 2001).

In spite of occasional signs that net out migration from cities might be slowing in certain places, especially in downtown neighborhoods (Sohmer and Lang, 2001), there is little evidence that net suburban-ward migration as a whole is about to turn around. Current data on nonHispanic white migration patterns between cities and suburbs clearly show almost no evidence of a net "back to the city" movement in any age group (Figure 3a). These data also show that minorities are now an important share of the net out migration streams to the suburbs (Figure 3b). Between 1998 and 1999, roughly about twice as many people moved from cities to suburbs as moved in the opposite direction, and this ratio does not vary terribly much by age group. Overall, the non-Hispanic white gross and net flows are now about twice the levels of the minority, but this ratio may change in the future as more minorities seek housing opportunities in the suburbs (see below). As minorities grow to become ever-greater shares of the populations of both cities and suburbs, we can perhaps expect increasing parity with whites on the size of gross flows, but there is little to suggest that the net direction of migration is about to turn around. As minority access to suburban housing markets increases, net out migration from core cities should be sustained.

[^3]Figure 3: Recent Movers To and From Central Cities/Suburbs - Within and Between MSAs

Figure 3a
Non-Hispanic Whites


Source: http://www.census.gov/population/socdemo/migration/p20-531/tab23.txt

Figure 3b
Minorities


Source: http://www.census.gov/population/socdemo/migration/p20-531/tab23.txt

## IV. Household Trends

## Minority Contribution to Household Growth

Raw population counts have been the first detailed data released from the 2000 census, and it is therefore understandable why raw population growth trends and differentials have presently captured our imagination. It is the household trends, however, that are more closely linked with housing consumption. We anticipate a great deal of detailed geographic analyses of household and housing trends once the full 2000 census data on these variables are released. In the absence of the detailed 2000 census data, however, currently available data sources such as the Current Population Survey and the American Housing Survey best serve a national focus, and it to this level of analysis that our own discussion now shifts.

Just as minorities are largely determining the scope of population growth in many parts of the country, they have been the drivers of recent net household growth as well. Non-Hispanic whites accounted for over three-quarters of the total households in 1995, but accounted for less than one third of household growth between 1995 and 2000 (Figure 4a). While accounting for almost 85 percent of owner households in 1995, non-Hispanic whites accounted for only 56 percent of the increase in owner households between 1995 and 2000 (Figure 4b).

It is tempting to link the recent surge in minority household growth, and owner household growth in particular, with favorable economic trends and targeted mortgage lending initiatives during the late 1990s aimed at both low income households and minorities As an explanation of minority strength in market share, the economic and public policy trends of the late 1990s tell only part of the story, and perhaps not the most important part. Rather, it is basic demographics that have largely determined the differences in owner and renter household growth between whites and minorities (Masnick, 1998). These demographic differences include such things as the age structures of the different population groups, the size and duration of residence of different immigrant cohorts, basic long-term differences in white and minority headship and homeownership rates, and enduring differentials in family structures.

[^4]Figure 4: Share of Total and Owner Household Growth by Race/Hispanic Origin - 1995-2000

Figure 4a
Total Households


Figure 4b
Owner Households


Source: average annual data from the monthly Current Population Survey as tabulated in the Housing Vacancy Survey release

Such a broader interpretation of recent trends is supported by the fact that the 1995-2000 differentials in total and owner household growth between whites and minorities exactly mirror the longer term trends as measured between 1985 and 1995 (Figure 5). Over this earlier 10-year period, the share of total and owner household growth from minorities was very close to that measured between 1995 and 2000, suggesting the importance of longer term structural factors as opposed to late-1990s economic or public policy related influences. To be sure, the modest increases in minority shares of total and owner household growth in the late 1990s might reflect economic and housing policies of that period. We would first need to discount any heightened effects during the late 1990s of trends in the broader demographic factors to firmly reach such a conclusion, however.

## Figure 5: Minority Share - Household Stock/Growth Total and Owner Households



Source: 1985 and 1995 American Housing Survey and 1995 and 2000 Annual Housing Vacancy Survey
Figure 6: Cohort Contributions to Household Growth 1995-2000: by Race/Hispanic Origin



The key to understanding the differential racial/ethnic contributions to household growth is in understanding how the different age cohorts in each racial group are contributing to this growth. These cohort contributions to both owner and renter household growth that took place over the last half of the 1990s are presented for four race/Hispanic origin groupings in Figures $6 \mathrm{a}-6 \mathrm{~h}$. Over the life course, as a cohort ages into its 20 s , it begins to form independent households, typically renter households at first. As the cohort moves further along in the life course, it begins to make the transition from renter to owner occupancy. The peak ages for owner household formation are between the late 20s and early thirties. Beginning in the 30s, a cohort typically loses renter households on net. By the time a cohort reaches age 50, few net additional owner household formations typically take place. When a cohort reaches its late 50s and 60s, net total household accumulation turns negative. Household dissolution, due to death and due to transitions from head to non-head increasingly characterizes the older age groups. After age 70, net cohort losses of households become substantial. The change in the number of total households between two points in time is simply the sum of these net gains and net losses in owners and renters as individual cohorts move across the age spectrum.

The details of this scenario of cohort growth and decline in household numbers can be seen to differ for whites and minorities in several important respects. First, minorities have tended to move more slowly during their 20s and 30s into both household formation and homeownership than have whites. Economic realities and cultural traditions both work to delay the formation of independent households by minorities, especially those with a large share of recent immigrants in its young adult population base (Glick, et al. 1997). Housing discrimination, both real and perceived, undoubtedly also has an influence in slowing minority owner housing progress (Ratner 1996).

Secondly, while net owner household formation turns negative for whites after age 55, it has remained positive for minorities until the late 60s. Whites lose owner households on net after age 55 because, having formed owner households more quickly earlier in life, there are fewer new renter-to-owner transitions to offset the inevitable owner losses that accompany the aging process. Elderly owner losses sometimes occur because of transitions from own to rent when "downsizing" during the retirement years, or because of the disappearance of households altogether as infirmity and death begin to take their toll. The effects of delayed minority (especially immigrant minority) entry into the housing market, and the greater time it takes
minorities, on average, to overcome economic and housing market obstacles in attaining homeownership help explain the pattern of sustained minority owner growth in late mid-life. Dissolution of older owner households does occur for minorities just as for whites above age 55, but the delayed additions that take place have more than offset minority dissolution in these middle age groups.

Thirdly, it is important to recognize the larger number of total and owner households being lost in the older age groups for whites. Minorities, and in particular Asians and Hispanics, have relatively fewer households headed by persons age $65+$. Whereas fully 24 percent of nonHispanic white household heads were over the age of 65 in 1995, only 11 percent of Hispanic and 9 percent of non-Hispanic other (mostly Asian) households were headed by persons age 65 and older. Owner household differences among the groups are even more skewed. In recent years whites have both added new owner households in large numbers among younger age cohorts, and lost households in large numbers among older cohorts (Figure 6a and 6b). This combination of gains and losses lowers overall net owner and renter household growth relative to the stock of households for whites. Minorities do not yet suffer the large numerical losses among older households to offset their gains registered in the younger ages (Figures 6c-6h).

## More on The Aging of Baby Boom Households (Empty Nesters, Second Homes, and Single Person Households)

Although baby boomers (age 35-54 in 2000) have already stopped contributing to total net household growth, their influence on housing will still remain strong for the next few decades. As they age, they replace the smaller cohorts that preceded them in the age structure, and their changing life course demography will prompt new patterns of housing consumption.

Households headed by 55-64 year olds will increase from 13.9 million in 2000 to 17.1 million in 2005 to 20.4 million in 2010 to 22.9 million in 2015 to 24.3 million in 2020 , as the smaller cohorts born before 1945 gradually move out of this age group and the larger baby boom cohorts replace them (Masnick and Di, 2000). Remember that these are for the most part not new households being formed, but are already existing households getting older and changing in composition.

The cohort that will be age 55-64 in 2020 was born 1955-64 and is the largest of the baby boom generation. Between 2000 and 2020, these late baby boomers will be moving through the
ages when their incomes are peaking, when they begin to plan seriously for retirement, and when a growing number in this cohort will not be supporting children. When they were age 35-44 in 2000, 60 percent were married and 64 percent had children under the age of 18 living with them. In 2020 they will represent about the same number of total households as in 2000, but only 51 percent are expected to be married couples and only 6 percent of the households will have children under the age of 18 living with them. Single person households are expected to be 30 percent of the 2020 total for this late baby boom cohort, compared to an estimated 17 percent in 2000 (Masnick and Di 2000).

This stage in the life course when the cohort is aging from 35-44 to 55-64 is a period when households often upgrade their housing. Many will choose to trade up to newer housing at this time, and although some of this trade-up will involve downsizing, most movers seek out housing with better amenities. Many moves at mid-life will involve the purchase of even larger homes. Some who do not move will remodel the home they currently have. About 12-15 million households undertake a significant remodeling project every year, many in conjunction with a move (Joint Center for Housing Studies, 2001a).

The middle years are also a time during which second homes are typically purchased. During the 1990s the number of second homes increased faster than the rate of increase in the housing stock overall (Di, McArdle and Masnick 2001). Between 1985 and 1995 the amount consumers spent on owned vacation homes more than doubled, from $\$ 6.2$ billion to $\$ 13.1$ billion (adjusted for inflation). Some of these second homes might be in anticipation of imminent retirement and will soon become the primary residence. Some might accommodate delayed retirement for many years while still providing for leisure opportunities in the pre-retirement years. Some retirees might have what amounts to several "second" homes, enabling households to spend part of the year in different locations. The second home trend is one that appears to be driven by both demographics and wealth, and it is one we expect to strengthen as the baby boom generation ages toward retirement. ${ }^{5}$

[^5]The aging of the population is also partly responsible for the dramatic increase in the share of households that are composed of only one person. Surviving widows and widowers most commonly live alone. In 1960, only 13.3 percent of all households were people living alone. Today that share has almost doubled, and the trend is expected to continue to increase (Figure 7). Fully 40 percent of the projected growth in households between now and 2020 are persons living alone (Masnick and Di,2001).

Figure 7: Number of 1-Person Households: 1940 to 2000 (Percentages represent share of total households that are 1-person)


Source: 1940-1990 decennial censuses, 2000 Houing Vacancy Survey.

Prior to 1990, the majority of single-person households were renters, and prior to 1980 single-person renter households were growing more rapidly than single-person owners. After 1980, the rate of growth of single-person renters tailed off dramatically, so that by the early 1990s owners overtook renters among persons who live alone (Figure 7). This trend can partly be explained by the growing number of older married-couple owner households being transformed to single-person owner households upon the death of a spouse. Also, divorce without remarriage results in the same outcome. Finally, during the 1990s the youngest and largest half of the baby boom aged from age 25-34 to 35-44, and many unmarried lone renters in this age group benefited from a period of sound income growth and favorable housing market conditions that allowed them to move into homeownership.

Over 40 percent of the net household growth for the next 20 years will be married couples without children under 18 (Masnick and Di, 2000). Most married couples eventually do become empty nesters, and baby boom households will move through this life course stage during the next two decades. Most empty nesters are destined to eventually become singleperson households as they age and are depleted by death of a partner. Thus the aging of the baby boom should support a continued increase in single-person households well beyond 2020.

## Marital Status Trends

The other demographic drivers besides widowhood that have contributed to the increase in single-person households are the delay in marriage, the high proportions that will never marry, high levels of divorce, and declining rates of remarriage. The effects of delayed marriage, high divorce, and low remarriage go beyond influencing single-person household trends, however. These marital status trends also increase the number of single parent households, multigenerational households, and unmarried couple households as well. All of these household types have increased during the 1990s to become a significant dimension of the "new demographics" of housing (U.S. Bureau of the Census, 2001).

One of the most important marital status trends of the past three decades has been the rising age at marriage and the increasing percent of the young adult population that has never married. First marriage rates eached their peak in the immediate post-WW II period and have since fallen by about half (Masnick, 1996). Between 1950 and 1970, the median age at marriage hovered between 20 and 21 for women and between 22 and 23 for men. Since 1970, the median ages at first marriage have climbed steadily and are now about 25 for women and 27 for men. Today, there are more than twice as many never married men and women age 15+ as there were in 1950 (U.S. Bureau of the Census, 1999). Among 20-24 year olds, 70 percent of women and 83 percent of men have never been married. Among 30 to 34 year olds, these percentages are 21 and 29 percent, respectively. These high percentages unmarried in the young adult age groups are unprecedented (Figure 8).

For many, marriage is no longer a prerequisite for other adult life course transitions such as parenthood (Raley, 2001) or homeownership. The share of all births to unmarried women has risen from 18 percent in 1980 to 33 percent in 1998 (Ventura et al., 2000). Fully 47 percent of

[^6]women age 25-29 in 1995 report that they had experienced non-marital cohabitation and 21 percent of all unmarried women were currently cohabiting (Bumpass and Lu, 2000). Many unmarried men and women now occupy owner housing. According to the American Housing Survey, in 1999 over 35 percent of owner housing was headed by other than married couples. In the older housing stock built before 1950, this share is over 45 percent (see below for more occupancy characteristics by year unit built).

Figure 8: Percentage Never Married: 1890-2000


Source: U.S. Census Bureau, Decennial Census Data and Current Population Reports, "Marital Status and Living Arangements: 2000, " Internet Release Date: June 29, 2001.

Formerly married men and women have dramatically increased their representation in the population. Overall, there are about three times as many widowed and divorced men and women today as there were in 1950 (U.S. Bureau of the Census, 1999). During the past three decades there has been a shift in share from widowed to divorced. Prior to 1970 there were only about 25 divorces taking place for every 100 marriages in any given year. Since 1980, that ratio has risen to 50 divorces per 100 marriages taking place per year. Estimates are that between 50 and 60 percent of marriages will eventually end in divorce or permanent separation (Martin and Bumpass, 1989). This high fraction might have softened slightly in the 1990s due to selectivity for more durable marriages with declining marriage and remarriage rates (Masnick, 1996a).

Remarriage rates $\sqrt[7]{7}$, which began falling around 1970, have declined by over 40 percent from their peak (U.S. Bureau of the Census, 1992). Prior to 1970, the number of remarriages taking place almost equaled the number of divorces. Today, annual divorces outnumber remarriages by over 40 percent.

Because of these trends in marriage, divorce, and remarriage, married couples now head only about half of all households compared to 71 percent in 1970 and 78 percent in 1950. Perhaps the most significant outcome for housing markets of this bifurcation between married and unmarried households is on the economics of maintaining a household.

## Labor Force Participation

Previous research has shown that wives' employment was instrumental in maintaining homeownership among married couples during a period of escalating home prices and declines in the real earnings of men (Myers, 1985a and 1985b). Female labor force participation has risen across all marital statuses since 1970, but has raised most for married women, and among married women the greatest increase has been for mothers of pre-school children. In 1998, for the first time since the Census Bureau has begun keeping records, families with children in which both spouses worked became the majority of all married couple families (U.S. Bureau of the Census, 2000).

High rates of female labor force participation, even among mothers of very young children, have become almost universally necessary to meet overall household expenses, the largest of which is typically housing costs. Even among mothers of newborns, labor force participation is the norm. In 1998, fully 60 percent of married women who had given birth within the past 12 months were in the labor force, up from 56 percent in 1990. Among widowed, divorced or separated women the increase in labor force participation was from 51 percent in 1990 to 65 percent in 1998. For never married women the increase was from 40 percent to 54 percent (U.S. Bureau of the Census, 2000). Participation rates for unmarried women with young children spiked upward in the late-1990s as a result of welfare reform.

With the continued rise in wives' employment and earnings over the past several decades, married couples in two income households have been critical in setting market prices for housing and have been able to achieve much higher quality housing consumption than in previous

[^7]generations. But one-earner households are usually competing in the same housing markets as households where housing costs have become pegged to the incomes of two or more earners, and have therefore seen their housing costs take an ever-increasing bite out of their paychecks. A large number of one-earner households are currently paying more than 50 percent of their income for housing. Even between two earner households, a large number are extremely vulnerable to oppressive housing cost burdens if one income was lost (Joint Center for Housing Studies, 2001b).

Dramatic changes are also taking place in labor force participation rates at the older end of the age structure, for both women and men. After declining steadily for more than three decades from levels above 85 percent, the labor force participation rate of men age 60-64 suddenly stabilized in the mid-1980s at about 55 percent. For women in this age group, rates have climbed to about 40 percent (Quinn, 2000). The variation in age at retirement has also increased significantly (Han and Moen, 1999). While many workers hope to achieve early retirement, it appears that many in the cohorts that are now approaching the retirement years plan to keep working beyond age $65^{\boxed{2}}$. The labor economist Joseph Quinn thinks that this trend signals a fundamental change in retirement patterns, and that this is good news
...for the economy, for employers, and for many workers, who will find a mix of work and leisure preferable to all of one or all of the other, at least for a while. Employers offering job flexibility and creative compensation packages can tap a growing pool of experienced older workers, who are particularly attractive in a tight labor market. Finally, the economy will benefit as well, as goods and services produced by these older workers ease the burdens faced by an aging society. (Quinn, 2000. Pg. 15)

Changing labor force participation patterns in old age will have important effects on housing consumption of tomorrow's elderly. Retirement migration among baby boomers could be postponed unless retirement destinations provide for at least part-time employment opportunities. For older men and women who are unwilling to leave their current job, downsizing or moving to newer housing with less upkeep might be more difficult if such a move disrupts employment. Many baby boomer marriages are remarriages for one or both spouses,

[^8]and many involve a considerable age difference between husbands and wives (Masnick, 1996b). Typically, in such cases it is younger wives who are still in the labor force when husbands are ready to retire. Husbands are affected by the current employment status of their wives, retiring at a faster rate after their wives have retired than before (Henretta, e. al., 1993). It appears to be easier to undertake retirement migration when neither spouse is employed (Han and Moen, 2000).

On the other hand, a longer work life improves a household's bottom line, and greater investment in housing in old age is therefore possible. Some pre-retirees from the baby boom generation are increasingly preparing for a comfortable retirement by moving into expensive amenity filled homes that they think they will live in for the rest of their lives (Wyatt, 2001). Not all of these homes are free of financing and not all will be paid off by age 65, which might provide an additional incentive to postpone retirement. Older empty nesters can also prepare for a more comfortable retirement by improving the homes they are already in by drawing upon their home equity to undertake significant remodeling projects (Joint Center for Housing Studies, 2001b).

## V. Changing Use of Housing Inventory

Housing supply is readjusted to household demand in three different ways. New housing is built and old housing is torn down, housing is remodeled and reconfigured, and housing is recycled (although rarely swapped). New housing construction typically has met the needs of young and middle age married couples with growing families, although that is slowly changing. The housing demographer Dowell Myers reminds us that the typical household is no longer the married couple with children, but still the housing stock is expanded each and every year with units (typically the ever-larger single family house built in the suburbs) that best meets the needs of a small minority who buys such housing:

Given the durability of housing, most housing consumers must pick and choose among housing styles dictated by the preferences of the small minority that bought a new home some time in the past... Most of us must live in recycled housing that was built to meet other people's tastes and needs... The collective disadvantages imposed by the "consumer dictatorship" of these [relatively few] new buyers are two-fold. First, those initial preferences for individual housing
units aggregate into an overall development pattern that then survives for decades afterward. The new buyers' preferences are forced on future residents. Moreover, as time passes, continual development and growing congestion erase the initial advantages of peripheral [suburban] location. (Myers, 2000: p.65)

Notwithstanding the cumulative influence of the "tyranny of the minority" on structuring future housing options for everyone else, the existing housing stock is quite varied, and moving to a previously occupied housing unit is clearly the biggest way that housing adjustments are made. The fraction of the population that moves each year has been slowly trending downward as the population ages, from 20 percent typical in the 1950s through 1970s to about 16 percent today. Still, over 40 million persons move annually, representing about 16 million households. Even if the move is not prompted primarily by housing considerations, few movers pass up the opportunity to seek out new housing that better fits their needs and desires.

## Housing Consumption of Different Age Housing

We now turn to examine how white and minority population and household changes described earlier are related to one dimension of housing supply, namely housing of different vintage. To take a first cut at examining the match-up between households and housing and how it is changing, I have divided the housing stock into four vintage categories: built before 1950, built 1950-1969, built 1970-1984 and built since 1985. Each vintage grouping accounts for approximately one quarter of today's owner occupied housing stock. Each vintage also broadly represents areas that are comprised of cities and towns, early inner post-WW II suburbs, and middle age and newer outer-ring suburbs, although this match-up by age and location is fairly loose.

Renters are more commonly found to occupy older housing, and owner households headed by older persons also occupy the oldest housing stock (Figures 9a and 9b). Older housing is also where unmarried households more typically reside (both renters and owners), while married couple owners are found more commonly in recently built housing. Young married couple owners (under age 35) in particular are more likely to be found in newer housing, with 40 percent living in units built since 1985 (data not shown).

Figure 9: Share of Renters and Owners in Old and New Housing by Age of Head - 1999

Figure 9a
Renters Generally Live in Older Housing


Source: Joint Center tabulations of 1999 American Housing Survey

Older Homeowners Generally Live in Older Homes
Figure 9b While Younger Owners Live in Newer Units

Percentage of Homeowners in Old and New Housing


Source: Joint Center tabulations of 1999 American Housing Survey

This skewed match-up between households and housing is part of what creates housing turnover. Younger renters are motivated to move into owner housing, partly to consume newer and better housing. However, it is more typically in the older housing stock where older household heads are vacating units and making them available to younger households. First-time homebuyers often find what is both available and affordable in the older stock.

You can think of the process of cohort change in housing consumption as a kind of a game of musical chairs, with several important differences from the game with which we are all familiar. Let the chairs be the housing stock, and in the beginning of the period under observation everyone is seated in a chair of different vintage (everyone except the homeless and people living in group quarters, that is). The "person" occupying a chair is the household. When the music starts, some people get up and change chairs (movers), but not everybody has to get up (stayers). Some people change household membership. All household members get older, as do the housing units. Some of the chairs are taken away (losses, vacancies, conversions to nonresidential, and mergers), but other chairs are added (primarily new construction but also older stock that is brought back into occupancy, splits, and conversions to residential). Some of the people die or quit the game while the music is playing, and other persons and households can join the game. When the music stops, there is a new configuration of the housing "chairs" and a new configuration of households sitting in them. Some are sitting in the same or similar chairs that they were in at the start of the music. Some who were sitting two or three or more to a chair when the music started form their own households and are able to find a chair of their own. Many wind up in different households and in different chairs.

While the process just described might sound like pure chaos, there is certain orderliness to it. A lot of the orderliness is because of typical life course patterns of housing consumption previously described in our discussion of Figures $6 \mathrm{a}-6 \mathrm{~h}$. We can capture many of the changes that take place by focusing separately on particular age cohorts of household heads as they age during a particular time period. I illustrate these dynamics of housing turnover by examining how different age and minority status cohorts changed their numerical representation in different vintages of housing stock during the 1990s. I do this separately for owners and renters.
Figure10: Changing Cohort Owner Occupancy of Different Vintage Housing - Minorities vs. Non-Hispanic Whites






Figures 10a-10d and 11a-11d and Appendix A record the number of non-Hispanic white and minority household heads occupying owner and renter housing of four different housing vintage groupings defined by the year the unit was built. The arrows on the graphs track the level of occupancy at the beginning and end of the period 1989-1999 for 10-year age cohorts. The tail of the arrow is the number of households contributed by the cohort in 1989, and the head of the arrow the number in 1999. When an arrow trends upward, the cohort occupies more of that type of housing at the end of the period than it did at the beginning. When an arrow trends downward, the opposite is true. ${ }^{-9}$

The dynamics of the movement of households through the housing stock is clearly shown in these cohort trajectories. The largest net movement out of the owner-occupied stock was by older non-Hispanic white household heads, and these losses occurred in both the pre-1950 built housing (Figure 10a) and in owner units built 1950-1969 (Figure 10b). Cohorts over the age of 75 in 1999 in these two vintages vacated approximately 6 million units during the previous 10 years. Older white cohorts living in owner units built between 1970 and 1984 also trended downward, but since fewer older cohorts live in these units, their losses were not much different from the younger cohorts' losses across the age range 45 to 74 in 1999.

The largest cohort movement into the owner occupied stock was for non-Hispanic white heads in the youngest cohorts into units built since 1985, but significant increases in owner occupancy also occurred for these young cohorts who moved into the older vintage categories as well. All cohorts increased their occupancy of units built since 1985, but generally only the youngest cohorts increased occupancy in the older three vintage categories.

Among middle-aged cohorts, the persistent declines in the levels of white owner occupancy in units built between 1970 and 1984 stands out (Figure 10c). The oldest of the nonHispanic white baby boomers (age 45-54 in 1999) still dominate the occupancy of this vintage housing in spite of their strong movement out between 1989 and 1999. We can expect that this housing stock will see additional high turnover in the decades ahead, making room for new and different occupants who will be younger, more minority and from a more diverse universe of household types.

Minority owner cohorts are both fewer and much more evenly distributed throughout the three oldest vintage housing categories of the owner occupied stock. Because of the white older

[^9]cohort losses in the three oldest vintage categories, there was a strong convergence in levels occupancy by age of head of these housing units between whites and minorities during the 1990s (Figures 10a-10c). We can expect that this pattern of convergence will continue in the decades ahead. This is in marked contrast to the divergence we observe between whites and minorities in levels of owner occupancy for units built since 1985 (Figure 10d). Desegregation in the older owner housing stock is taking place partly because of the normal household succession where older (mostly white) heads die out and relinquish their units to younger (increasingly minority households), but also because middle age white households are moving to newer units, many being built where few minorities live (Cutler, et. el., 1999).

On the rental side it can be seen that overall occupancy levels between whites and minorities have become much more similar when compared to owners in all age groups in 1999 (Figures 11a-11d). Between 1989 and 1999, there was an especially strong movement by the youngest of the white baby boom cohorts (age 35-44 in 1999) out of renter occupancy in older units that sealed this convergence, particularly in the 1970-84 stock. In this vintage, over 1.5 million renter households were lost from this cohort of non-Hispanic whites alone. The combined renter loss in the other three vintage categories for this white cohort was about 2.5 million, for a total of 4 million. Not surprisingly, the gain on the owner side was also about 4 million for this youngest of the white baby boom cohorts, with about 2.5 million of this increase occurring in units built since 1985. The remaining 1.5 million increase took place in the three older vintages. Some of this increase undoubtedly represents rental housing that was converted to ownership. The strong movement of the youngest of the baby boom cohorts out of rental and into owner housing during this period is testimony to the strong favorable housing market during the last half of the 1990s.

One consequence of the large white renter losses in the 1990s is that fewer renters are positioned to become first-time owners in the next period. Reinforcing this weakness on the rental side has been the slow movement of the baby bust (age 25-34 in 1999) into rental housing, particularly in the two middle stock vintages (Figures 11b and 11c). While it was certainly expected that this smaller cohort would form fewer rental households than the larger baby boom cohort that preceded them in the age structure, their rate of renter household formation was even slower than their smaller numbers or their movement into homeownership would suggest (Joint Center for Housing Studies, 2001b).

It is still unclear what share of the slow overall rate of renter household formation that took place in the 1990s is due to economic, housing market or cultural causes. Rising rents have typically wiped out much of the income gains that took place among potential renters, and new construction of rental housing has barely replaced the units lost to the stock (Joint Center for Housing Studies, 2001b). Sustained high rates of young adults living at home with their parents and an increased level of three generations living in grandparent households suggest that perhaps broader cultural changes are a factor that has figured prominently in the 1990s. The higher representation of immigrants in the young adult cohorts is certainly thought to account for the growing incidence of three generational households (U.S. Bureau of the Census, 2001), but it is important to stress that these trends toward doubling up among the young have taken place for all groups in all parts of the country.

## Homeownership Rates

No discussion about recent housing trends would be complete without a few words about trends and differentials in homeownership rates. After stagnating throughout most of the 1980s and the early 1990s, homeownership rates took a sharp turn upward through the mid-and-late 1990s. All age groups, all race/Hispanic origin groups, and all household types participated in this increase. The increase in black homeownership was particularly strong (Masnick, Mcardle, and Belsky, 1999). At 67.5 percent, the homeownership rate in 2000 stands at the highest level in U.S. history ${ }^{10}$

The long-term outlook for the future indicates that further increases in homeownership are likely in store, although perhaps not in the short run, and certainly not at the rates of increase we experienced in the late 1990s. The high rental occupancy rate of minorities, and especially recent immigrants, has established a pool of potential new first-time homeowners that is substantial. Asian immigrants typically move into homeownership quickly after their arrival, and Hispanic immigrants begin their housing careers at low levels of homeownership, but increase rapidly (even more rapidly than the native born passing through the same age span) during the two decades after their arrival (Myers and Lee, 1998). Thus, when they eventually move into homeownership, 1990s immigrants will help to raise overall homeownership rates. The continued movement of minorities out of central cities and into the suburbs will also serve to

[^10]raise homeownership rates as this population shifts from locations where there are fewer homeownership opportunities to places where there are more. The increased rate at which immigrants are locating directly to the suburbs should also boost immigrant homeownership. Finally, the simple aging of the population will raise homeownership rates as echo boomers follow their parents into the high homeownership age groups.

In the short run, however, we may experience a slowdown in homeownership growth as a simple consequence of the dramatic way in which the homeownership rate moved upward in the late 1990s. Once again, Figures 11a-11c remind us that the youngest of the non-Hispanic white baby boomers (age 35-44 in 1999) experienced an extraordinary drop in rental occupancy between 1989 and 1999, responding as they did to the favorable economic and ownership opportunities of that period. These new homeowners left in their wake a much smaller renter cohort to make further moves into homeownership during the next decade. And simultaneously, the baby bust cohorts (age 25-34 in 1999) formed noticeably fewer renter households than might have been expected of them during the past decade. This cohort is now in a weak position to contribute directly to new owner household formation, as many of them are still unmarried or living with parents (Joint Center for Housing Studies, 2001b).

The homeownership rate is simply the ratio of owner households in the numerator to the sum of owner plus renter households in the denominator. The inflation of the numerator by the baby boom first-time owners, and deflation of the denominator by low rentership rates of the baby bust, leveraged very rapid homeownership rate increases in the late 1990s. Any future slowdown in the rate of owner household formation or improvement in the rate of renter household formation will cause the numerator to grow more slowly and the denominator to grow more rapidly, thus leveraging the homeownership rate in the opposite direction. Given the current level of economic and social insecurity, the homeownership rate could very well decline before it resumes its upward demographic destiny.

The data we have presented help clarify how non-Hispanic whites and minorities increased their homeownership rates during the late 1990s. The white homeownership rate surged during the 1990s because new first-time owners in the younger age groups were more than enough to compensate for large white owner losses in the older age groups (Figure 6a). But most importantly, the large white loss of renter households leveraged the homeownership rate up (Figures 6b). Blacks, on the other hand, achieved large owner gains in the younger age groups
without significant losses in the older age groups (Figure 6c). Their low level of net renter loss was not a factor in boosting homeownership rates as it was for whites (Figure 6d). Consequently, the closely watched black/white homeownership gap changed little during this remarkable period of aggregate homeownership increase, and remains above 25 percentage points. The black/white gap has ranged between 24 and 28 points for much of the 20th century (Masnick, 2001). Research efforts over the past 30 years to understand this gap by statistically modeling the effects on homeownership of certain endowments like income, education and family structure have achieved greater or lesser success depending both on the period being studied and the variables included in the models (Masnick, 2001). Most studies conclude that a significant part of the black/white gap remains even after various endowments are controlled. Typical is a recent study of the Los Angeles metropolitan area that has found that all of the gap between whites and Asians or Hispanics could be fully accounted for by differential endowments, but only half of the gap for blacks could be explained by black/white differences (Painter et al., 2000). Recent research by Masnick and Di (2001) confirms that persistent black/white cohort differences in homeownership remain when controlling for such factors as education and family structure.

Figures $6 \mathrm{e}-6 \mathrm{~h}$ demonstrate that high renter household formation during the 1990s among Asians and Hispanics served to dampen their increase in aggregate homeownership rates. The fact that homeownership rate increases for these groups were still substantial is testimony to their high levels of owner household growth during the decade.

## VI. Conclusions

In discussing the new demographics of housing, we have chosen to focus on the changing demographic context in which emerging housing trends must necessarily operate. We have charted those broad demographic trends that have been gaining momentum for several decades and are likely to persist, and have drawn out some of their implications for recent housing trends. These are trends that effect both new economy and old economy housing markets. While our focus on household and housing has been on national average trends, clearly a focus that is shifted down to local and subgroup components of these trends would reveal cases where the trends are even more pronounced.

Foremost among recent demographic trends has been the surge in growth of minorities. I have placed minority growth in the context of the aging of the non-Hispanic white majority, and of the changing use of the existing housing stock by both whites and minorities. I have also suggested the significance of trends in household composition, marital status of heads, and number of workers in the household as important dimensions of the new demographics of housing.

I hope that some of what we have presented is new to those who think about differences in the characteristics of housing markets and future housing trends, or at least thought about in a way different from that which generally appears in the literature. The key has been to think in terms of cohort changes and in terms of component flows into and out of a particular group, or place, or housing type that is of special interest. The insights gained through the cohort analysis presented here, and the variables that have been analyzed with this approach, have just scratched the surface. In particular, we would like to know more about how foreign immigration has influenced recent minority housing trends, how different locations have varied from the national themes that have been presented, and how recent trends in household composition, marital status and labor force participation have affected housing consumption. The full release of the 2000 census data will provide just the new information we need to pursue this research.

## Appendix A

| Race by Age of Head, Units Built before $\mathbf{1 9 5 0}$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## Appendix A, continued

Race by Age of Head, Units Built 1950-69


[^11]
## Appendix A, continued

Race by Age of Head, Units Built 1970-1984


## Appendix A, continued

Race by Age of Head, Units Built 1985+

| All Households |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1989 |  |  | 1999 |  |  |
|  | Non-Hispanic White | All Others | Total | Non-Hispanic White | All Others | Total |
| $<25$ | 380,530 | 104,686 | 485,216 | 877,162 | 367,700 | 1,244,862 |
| 25-34 | 2,473,834 | 478,904 | 2,952,738 | 3,699,796 | 1,171,481 | 4,871,277 |
| 35-44 | 1,792,057 | 307,864 | 2,099,921 | 4,834,521 | 1,418,087 | 6,252,608 |
| 45-54 | 860,274 | 92,668 | 952,942 | 3,534,651 | 898,243 | 4,432,894 |
| 55-64 | 538,352 | 69,213 | 607,565 | 2,015,054 | 336,058 | 2,351,112 |
| 65-74 | 450,063 | 25,846 | 475,909 | 1,382,774 | 226,809 | 1,609,583 |
| 75-84 | 178,130 | 8,057 | 186,187 | 886,584 | 82,857 | 969,441 |
| 85+ | 41,839 | 6,929 | 48,768 | 205,680 | 18,526 | 224,206 |
| Total | 6,715,079 | 1,094,167 | 7,809,246 | 17,436,222 | 4,519,761 | 21,955,983 |
|  |  |  |  |  |  |  |
| Owners |  |  |  |  |  |  |
|  | 1989 |  |  | 1999 |  |  |
| Non-Hispanic White |  | All Others | Total | Non-Hispanic White | All Others | Total |
| $<25$ | 114,587 | 23,541 | 138,128 | 256,954 | 67,446 | 324,400 |
| 25-34 | 1,665,965 | 216,594 | 1,882,559 | 2,593,571 | 534,489 | 3,128,060 |
| 35-44 | 1,463,489 | 193,954 | 1,657,443 | 4,165,399 | 1,018,315 | 5,183,714 |
| 45-54 | 676,770 | 64,476 | 741,246 | 3,107,022 | 618,569 | 3,725,591 |
| 55-64 | 469,581 | 40,137 | 509,718 | 1,777,564 | 262,949 | 2,040,513 |
| 65-74 | 328,313 | 11,406 | 339,719 | 1,198,650 | 143,824 | 1,342,474 |
| 75-84 | 108,793 | - | 108,793 | 646,654 | 49,865 | 696,519 |
| 85+ | 23,632 | 2,936 | 26,568 | 104,216 | 10,940 | 115,156 |
| Total | 4,851,130 | 553,044 | 5,404,174 | 13,850,030 | 2,706,397 | 16,556,427 |
|  |  |  |  |  |  |  |
|  |  |  | Renters |  |  |  |
|  | 1989 |  |  | 1999 |  |  |
|  | Non-Hispanic White | All Others | Total | Non-Hispanic White | All Others | Total |
| $<25$ | 265,943 | 81,145 | 347,088 | 620,208 | 300,254 | 920,462 |
| 25-34 | 807,869 | 262,310 | 1,070,179 | 1,106,225 | 636,992 | 1,743,217 |
| 35-44 | 328,568 | 113,910 | 442,478 | 669,122 | 399,772 | 1,068,894 |
| 45-54 | 183,504 | 28,192 | 211,696 | 427,629 | 279,674 | 707,303 |
| 55-64 | 68,771 | 29,076 | 97,847 | 237,490 | 73,109 | 310,599 |
| 65-74 | 121,750 | 14,440 | 136,190 | 184,124 | 82,985 | 267,109 |
| 75-84 | 69,337 | 8,057 | 77,394 | 239,930 | 32,992 | 272,922 |
| 85+ | 18,207 | 3,993 | 22,200 | 101,464 | 7,586 | 109,050 |
| Total | 1,863,949 | 541,123 | 2,405,072 | 3,586,192 | 1,813,364 | 5,399,556 |

## References

Bumpass, Larry L., and Hsien-Hen Lu. 2000. Trends in Cohabitation and Implications for Children's Family Contexts. Population Studies 54:29-41.

Cutler, David M., Edward L. Glaeser, and Jacob L. Vigdor. 1999. The Rise and Decline of the American Ghetto. Journal of Political Economy 107:455-506.

Di, Zhu Xiao, Nancy McArdle, and George S. Masnick. 2001. Second Homes: What, Who Many, Where, and Who. Research Note N01-2. Harvard University Joint Center for Housing Studies.

Frey, William H. 1998. Black Movement to the South, and Regional Concentration of the Races. Research Report No. 98-412. University of Michigan Population Studies Center.

Frey, William H. 2001. Melting Pot Suburbs: A Census 2000 Study of Suburban Diversity. Research Paper. Brookings Institution Center on Urban and Metropolitan Policy.

Glick, Jennifer E., Frank D. Bean, and J.V.W. Van Hook. 1997. Immigration and Changing Patterns of Extended Family Household Structure in the United States: 1970-1990. Journal of Marriage and the Family 59:177-191.

Han, Shin-Kap, and Phyllis. Moen. 1999. Clocking Out: Temporal Patterning of Retirement. American Journal of Sociology 105:191-236.

Han, Shin-Kap, and Phyllis. Moen. 2000. Couple Careers: Men and Women's Pathways through Work and Marriage in the United States. In Couples' Careers in a Dynamic Perspective, ed. Hans-Peter Blossfeld (in preparation).

Joint Center for Housing Studies. 2001a. Remodeling Homes for Changing Households. Harvard University.

Joint Center for Housing Studies. 2001b. The State of the Nation's Housing: 2001, Harvard University.

Henretta, John C., Angela M. O'Rand, and Christopher G. Chan. 1993. Joint Role Investments and Synchronization of Retirement: A Sequential Approach to Couples' Retirement Timing. Social Forces 71:981-1000.

Martin, Teresa C., and Larry L. Bumpass. 1989. Recent Trends in Marital Disruption. Demography 26:37-51.

Masnick, George S. 1996a. Marriage, Divorce, Remarriage and Household Growth in the U.S.: 1940-1995. Research Note N96-1. Harvard University Joint Center for Housing Studies.

Masnick, George S. 1996b. The Consequences of Delayed Marriage and Remarriage on the Age Differences between Brides and Grooms. Research Note N96-5. Harvard University Joint Center for Housing Studies.

Masnick, George S. 1998. Understanding the Minority Contribution to U.S. Owner Household Growth. Working Paper W98-9. Harvard University Joint Center for Housing Studies.

Masnick, George S. 2001. Home Ownership Trends and Racial Inequality in the United States in the 20th Century. Working Paper W01-4. Harvard University Joint Center For Housing Studies.

Masnick, George S, Nancy McArdle, and Eric Belsky. 1999. A Critical Look at Rising Homeownership Rates in the United States Since 1994. Working Paper W99-2. Harvard University Joint Center for Housing Studies.

Masnick, George S., and Zhu Xiao Di. 2000. Updating and Extending the Joint Center Household Projections Using New Census Bureau Population Projections. Research Note N00-1. Harvard University Joint Center for Housing Studies.

Masnick, George S., and Zhu Xiao Di. 2001. Cohort Insights into the Influence of Education, Race and Family Structure on Homeownership Trends by Age: 1985 to 1995. Research Note N01-1. Harvard University Joint Center for Housing Studies.

Myers, Dowell. 1985a. Reliance Upon Wives' Earnings for Homeownership Attainment: Caught Between the Locomotive and the Caboose. Journal of Planning Education and Research 4:319329.

Myers, Dowell. 1985b. Wives' Earnings and Rising Costs of Homeownership. Social Science Quarterly 66:319-329.

Myers, Dowell. 2000. Building the Future as a Process in Time. Annual Roundtable: Metropolitan Development Patterns. Lincoln Institute of Land Policy.

Myers, Dowell., and Seong Woo Lee. 1998. Immigrant Trajectories into Homeownership: A Temporal Analysis of Residential Assimilation. International Migration Review XXXII:593-626.

Painter, Gary, Stuart Gabriel, and Dowell. Myers. 2000. The Decision to Own: The Impact of Race, Ethnicity, and Immigrant Status. Working Paper No. 00-02. Research Institute for Housing America.

Quinn, Joseph. 2000. Retirement Trends in the New Century: The End of an Era? TIAA-CREF Participant. November:14-15.

Raley, R. Kelly. 2001. Increasing Fertility in Cohabiting Unions: Evidence for the Second Demographic Transition in the United States? Demography 38:59-66.

Ratner, Mitchell S. 1996. Many Routes to Homeownership: A Four Site Ethnographic Study of Minority and Immigrant Experiences. Housing Policy Debate 7:103-145.

Smith, James P., and Finis R. Welch. 1989. Black Economic Progress After Myrdal. Journal of Economic Literature XXVII:519-564.

Sohmer, Rebecca R., and Robert E. Lang. 2001. Downtown Rebound. Census Note. Brookings Institution Center on Urban and Metropolitan Policy.
U.S. Bureau of the Census. 1992. Marriage, Divorce and Remarriage in the 1990's. Current Population Reports. P23-180.
U.S. Bureau of the Census. 1999. Marital Status and Living Arrangements; March 1998 (Update). Current Population Reports. P-20-514. Internet release date January 1999.
U.S. Bureau of the Census. 2000. Fertility of American Women: 1998. Current Population Reports. Internet release date October 24.
U.S. Bureau of the Census. 2000. Projections of the Resident Population by Race, Hispanic Origin, and Nativity: Middle Series. World Wide Web page [http://www.census.gov/population/nation/summary/np-t5-a.txt](http://www.census.gov/population/nation/summary/np-t5-a.txt).
U.S. Bureau of the Census. 2001. Households and Families. Census 2000 Brief C2KBR/01-8. Issued September 2001.
U.S. Department of Housing and Urban Development. 1994. "Homeownership Strategy." Memorandum for Robert E. Rubin from Henry G. Cisneros. August 17.

Ventura, Stephanie J., William D. Mosher, Sally C. Curtin, J.C. Abma, and S. Henshaw. 2000. Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 197696. National Center for Health Statistics. Hyattsville, MD.

Wyatt, K., 2001. Aging in Place: Boomers Prepare Homes for Comfy Retirement. Associated Press. April 22.


[^0]:    ${ }^{1}$ This growth rate derived by comparing census counts unadjusted for changes in undercount. Lower estimated undercount rates in 2000 (especially of minorities) thus helped raise growth rates. In addition, the 2000 census allowed for more than one race to be chosen. Some who were counted as white in 1990 when only a single race answer was permitted were counted as minority in 2000 if they identified themselves as multi-racial.

[^1]:    ${ }^{2}$ Among the 15 that gained non-hispanic white population all were either in the South or West. Many of these cities grew in part by annexation of adjacent areas with high percentages of whites population.

[^2]:    . W.S B

[^3]:    ${ }^{3}$ The top twenty metros with the highest suburban share minority (ranging from $92.2 \%$ to $40.2 \%$ ) include McAllen-Edinburg-Mission (TX), El Paso, Honolulu, Miami, Los Angeles-Long Beach, Jersey City, Albuquerque, Fresno, Riverside-San Bernardino, Bakersfield, Oakland, Venture, San Jose, San Francisco, Stockton-Lodi, Fort Lauderdale, San Antonio, Washington DC, Orange County (CA) and San Diego. The twenty with the lowest (ranging from $2.8 \%$ to $8.6 \%$ minority) included Scranton-Wilkes Barre-Hazelton, Fort Wayne, Knoxville, Syracuse, YoungstownWarren, Indianapolis, Akron, Milwaukee-Waukesha, Buffalo-Niagara Falls, Albany-Schenectady-Troy, Allentown-Bethlehem-Easton, Toledo, Pittsburgh, Harrisburgh-Lebanon-Carlisle, Rochester, Columbus, Omaha, Springfield (MA), Wichita, and Cincinnati. (Frey)

[^4]:    ${ }^{4}$ In 1994 the Clinton Administration developed a far-reaching program to help minorities and others who have been historically under-served by housing markets. The program had goals to: (1) make home ownership more affordable; (2) eliminate barriers to home ownership; (3) enable families to better manage the responsibilities and rewards of home ownership, and; (4) make it easier to complete the paperwork to buy a home. Initiatives were undertaken by the FHA, Fannie Mae, Freddie Mac, and others to lower the down-payment requirement, to recognize multiple income sources in qualifying a household for a housing loan, to reward the prompt and regular payment of monthly mortgages, to facilitate mortgage applications in languages other than English, and to work with realtors and banks to end discrimination in marketing and lending (U.S. Department of Housing and Urban Development, 1994).

[^5]:    ${ }^{5}$ There has been some anecdotal evidence that well-paid younger workers in the dot.com economy have been purchasing second homes as crash pads to avoid long commutes following long workdays, justifying their purchase as being not only convenient but a good investment. While the numbers might be small, there are other examples of fringe groups where owning multiple homes is perhaps on the increase, so that cumulatively, the increase in second "convenience homes" might also help explain why housing construction has been running well ahead net household formation in recent years. Other situations include extremely long distance commuters and telecommuters - including those who might view their jobs as temporary (e.g. people who live in Vermont but work in Washington, DC), unmarried couples who are reluctant to give up their own house or apartment even though they spend most of their time at one or the other's homes, grandparents who want to spend some time close to the grandkids, and seasonal employees (eg., resort workers) who earn enough to justify trading in the motor home for something more permanent.

[^6]:    ${ }^{6}$ First marriages per 1000 single women age 15-44.

[^7]:    ${ }^{7}$ Remarriages per 1000 widowed and divorced women age 15-54.

[^8]:    ${ }^{8}$ Quinn reports that a recent AARP survey found 80 percent of baby boomers plan to keep on working after age 65 . While 80 percent might not be a credible forecast, it contrasts sharply with the 30 percent of 65 year-old men that were employed in 1985.

[^9]:    ${ }^{9}$ The vertical rise (or fall) of these cohort trajectories is exactly what was plotted in Figures $6 \mathrm{a}-6 \mathrm{~h}$, summed across vintage categories.

[^10]:    ${ }^{10}$ This is the level as measured by the Current Population Survey and the related Housing Vacancy Survey. The 2000 census data show a somewhat lower homeownership rate of 66.2 percent.

[^11]:    Source: Joint Center Tabulations of 1989 and 1999 American Housing Survey

