

# **Joint Center for Housing Studies**

## **Harvard University**

### **The Impact of New Census Bureau Interim National Population Projections on Projected Household Growth in the United States**

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## **Background**

The previous round of Joint Center household projections were produced in October 2000<sup>1</sup> and expanded in 2002 to include tenure detail for four race/Hispanic origin populations — non-Hispanic whites, non-Hispanic blacks, non-Hispanic Asians/others, and Hispanics.<sup>2</sup> These household projections were driven by Census Bureau population projections released in January 2000 that were benchmarked to 1999 population estimates updated from the 1990 Census. Baseline data from the 2000 Census were not yet available and were not incorporated into either the 2000 Census Bureau population projections or the 2000 and 2002 Joint Center household projections.

A new set of 2000 Census-based population projections was released by the Census Bureau in March 2004 and are available on the Census Bureau web site.<sup>3</sup> This research note explores the implications of these new population projections for future household growth in the United States. The Census Bureau has labeled these projections “interim” because, while they incorporate 2000 Census data on age and sex by race/Hispanic origin, they make only minor adjustments to the basic fertility, mortality and immigration assumptions that drive the projections. A completely new population projection methodology and new set of basic projection assumptions are presently being developed at the Census Bureau and will be introduced into an expanded set of population projections scheduled to be released in 2005.

The motivation for releasing interim population projections approximately a year early was primarily to incorporate higher 2000 Census base population numbers. In addition, the new projections also incorporate slightly higher future net immigration assumptions than contained in the 2000 projections and updates the racial categories used in the 2000 Census. All of these factors have consequences for household projections as well. In this Research Note we have produced two interim sets of basic household projections to explore the implications of the new population projections for future household growth.

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

<sup>2</sup> See George S. Masnick and Zhu Xiao Di, “Projections of U.S. Households by Race/Hispanic Origin, Age, Family Type, and Tenure to 2020: A Sensitivity Analysis,” *Issue Papers on Demographic Trends Important to Housing*, U.S. Dept. of Housing and Urban Development, Office of Policy Development and Research, February 2003. pp. 79-123.

<sup>3</sup> <http://www.census.gov/ipc/www/usinterimproj/>. Details for the Interim projections by single year and detailed age groups, necessary to run the Joint Center household projection model, were made available to the authors by the Census Bureau Population Division.

## Higher Base Population Numbers in the 2000 Census

The 2000 Census counted about 6.8 million more people than the Census Bureau had previously estimated as residing in the U.S. in 2000. Initially it was thought by most housing analysts and others that the majority of the 6.8 million higher Census count was undocumented immigrants unaccounted for in previous population estimates.<sup>4</sup> This conclusion has recently been revised as further analysis of 2000 Census questionnaires revealed that much of the 6.8 million can be explained by the difference in net Census undercount between 1990 and 2000. According to latest estimates there was a 1.61 percent undercount in 1990 and a 0.48 percent over count in 2000, accounting for 5.4 of the difference of 6.8 million.<sup>5</sup> Still, newly counted immigration of between 1 and 2 million over the 1990s is not insignificant.

## Higher Immigration

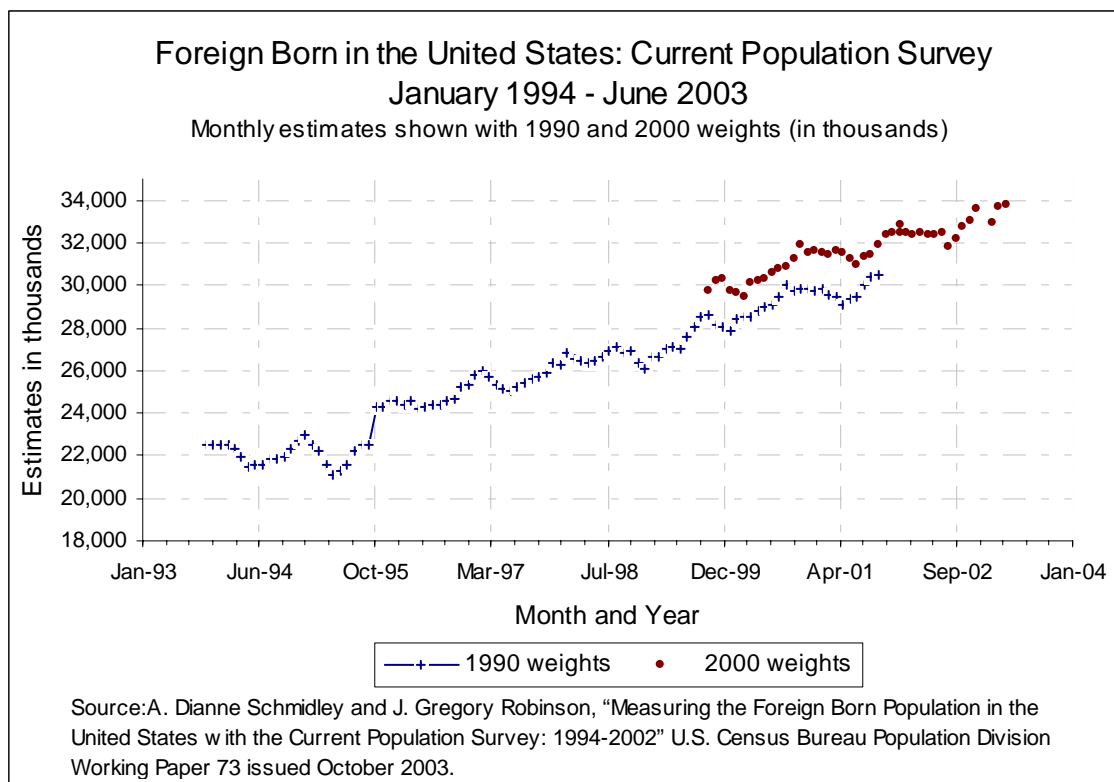
Whatever the true levels of actual 1990s undocumented immigration implied by the differences between 1990 and 2000 Census counts, the Census Bureau now concludes that net foreign immigration in the first few years of the new century is significantly higher than previously estimated or projected. The official re-weighting of the Current Population Survey (CPS) to the 2000 Census counts has elevated the estimates of the number of foreign born residing in this country by about 6.1 percent or 1.8 million in number (see Figure 1).

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<sup>4</sup> See for example see Michael Carliner, "Lifting the Veil," *Housing Economics*, May 2001.

<sup>5</sup> U.S. Census Bureau, *Technical Assessment of A.C.E. Revision II*, Released March 12, 2003. This analysis of the 2000 census returns identified at least 5.8 million duplicate records. In addition, Census Bureau analysts now estimate that there were 2.84 million vacant units counted as occupied in 2000, and 1.20 million occupied units counted as vacant, for a net misclassification of 1.64 million vacant units counted as occupied. Similar data on misclassified vacancy status and on duplicate records were not collected in 1990, so it is impossible to estimate the net difference between the 1990 and 2000 censuses on these erroneous counts. There appears to be a consensus, however, that duplicate records and misclassified vacant units were much higher in 2000 than in 1990. These findings have led the Bureau to conclude that "***there is strong evidence pointing to a number of erroneous enumerations much higher than the 5.8 million duplicates identified***" (p7). The Census Bureau has decided to not remove these duplicate records and erroneous imputations from the data that the public is now using with the hope that the overcounted cases are pretty good substitutes for the almost equally large gross undercount also known to exist.

**Figure 1.**



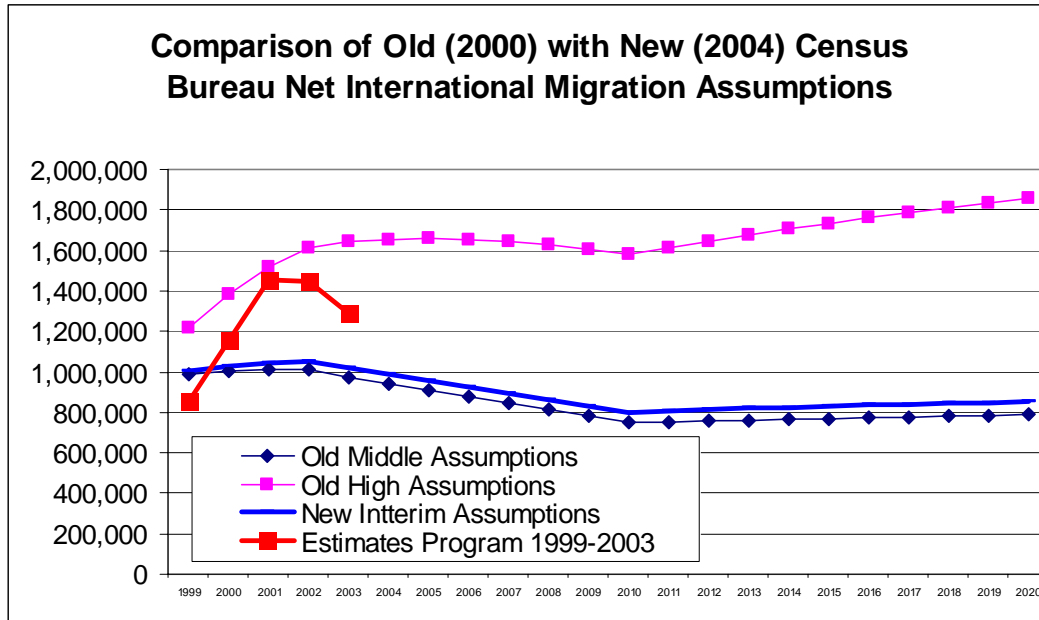
Published data from the American Community Survey (ACS) indicate a net annual increase of about 1.45 million foreign born between 2000 and 2002. However, recent re-weighting of these ACS data by Census Bureau staff has reduced net immigration estimates to 1.29 million for both 2000-01 and 2001-02.<sup>6</sup> Census Bureau estimates of net foreign immigration for the July 2002-July 2003 period made in conjunction with the Census Bureau's annual estimates of national population growth reflect this downward revision. The lower number is more consistent with longer term CPS estimates of the annual net change in foreign born having entered the U.S. since 1990 (1.31 million per year based on the 2002 CPS count of foreign born having arrived since 1990<sup>7</sup>). Figure 2 contrasts recent net foreign immigration assumptions incorporated into Census Bureau estimates of annual population growth for 1999-2003 with the middle and high series assumptions from the January 2000 population projections.

<sup>6</sup> Memo prepared by Signe Wetrogan, Population Division, dated February 27, 2004.

<sup>7</sup> A. Dianne Schmidley and J. Gregory Robinson. Measuring the Foreign-Born Population in the United States with the Current Population Survey: 1994-2002, U.S. Census Bureau Population Division Working Paper No. 73. Issued October 2003. <http://www.census.gov/population/www/techpap.html>

Also included in Figure 2 is the trend in net foreign immigration assumed by the new set of interim population projections.<sup>8</sup>

**Figure 2.**



Net foreign immigration in the new interim population projections is only slightly higher than in the old projections. Clearly, recent levels of immigration have been running well above the new interim projection assumptions. Whether actual future net immigration levels will ultimately be closer to the interim assumptions, or to the high assumptions of the 2000 Series, will only be known after the fact.

It should be noted, however, that the Census Bureau’s 13 previous national population projections produced over the past 40 years have consistently underestimated average levels of net immigration (see Table 1). There is reason to believe, therefore, that the Census Bureau’s recently released interim population projections will also underestimate future net immigration levels. The new Joint Center “interim” household projections reported below based on the 2004 Census Bureau’s interim population projections could therefore underestimate future household growth as well, perhaps by as much as 100,000 to 200,000 annually if actual future net

<sup>8</sup> The new Interim population projections contain only one series. The Interim projections use a weighted average of 0.938 of the middle series immigration assumption and 0.062 of the high series assumption developed for the 2000 set of projections.

immigration levels fall somewhere mid-way between the 2000 middle and high assumptions. That would place household growth for the 2005-2015 on trajectory 1-2 million higher than reported below based on the baseline immigration assumptions behind the Census Bureau's interim population projections.

**Table 1.**

<b>Percent Error for Net Immigration Forecasts of the U.S: 1963-2001</b>					
<b>Base Year</b>	<b>Percent Error After X Years into Forecast</b>				
	<b>1 Year</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>	<b>20 Years</b>
1963	-5.36	-24.62	-26.29	-48.63	-49.34
1966	-3.38	-13.61	-6.76	-42.00	-39.51
1969	-22.18	2.04	-35.06	-32.11	-43.82
1970	-13.61	-23.81	-52.66	-38.32	-60.28
1972	-1.72	-14.89	-32.77	-39.92	-50.66
1974	-23.81	-35.06	-32.11	-43.82	-57.32
1976	-14.89	-42.00	-39.51	-58.34	
1982	-24.01	-32.41	-55.31	-53.94	
1986	-10.11	-44.89	-48.31		
1991	-12.62	-6.09			
1992	-0.29	-9.92			
1994	-4.42	-4.22			
1999*	-31.03				
<b>Average</b>	<b>-12.88</b>	<b>-20.79</b>	<b>-36.53</b>	<b>-44.64</b>	<b>-50.16</b>

\* Data for base year 1999 added to original Census Bureau published table.  
Source: Tammany Mulder, "Accuracy of the U.S. Census Bureau National Population Projections and Their Respective Components of Change," U.S. Census Bureau, Population Division working Paper No. 50, <http://www.census.gov/population/www/techpap.html>  
Released July 1, 2002. See Table 10.

## **New Race Categories and New Questions about Race/Hispanic Origin**

In addition to being broadly consistent with 2000 Census counts and adjusting the net immigration assumption slightly upward, the new interim population projections are different from previous projections in another fundamental way — the race/Hispanic origin categories are very different. The 2000 Census for the first time allowed respondents to pick more than one race category. Most respondents chose only one race category. Only 2.4 percent of the population was classified as multi-racial (6.8 million people). In the new interim population projections, three racial categories with the largest numbers are identified separately (white alone, black or African American alone, and Asian alone), while the various multi-race combinations are lumped together with two other smaller race alone categories (American Indian and Native Alaskan alone, and Native Hawaiian and Pacific Islander alone) to form a fourth category. In addition, non-Hispanic whites, and Hispanics (which can be of any race) are treated as separate categories.

In the previous Census Bureau population projections by age, sex and race/Hispanic origin released in 2000, Native Hawaiians were lumped with American Indians, Eskimos and Aleuts, Pacific Islanders were lumped with Asians, and multi-racial combinations were not allowed. And most important, in the 2000 population projections non-Hispanics were tabulated separately for all racial groups, not just for whites.

In addition to the redefinition of races, the census questionnaire in 2000 was changed in ways that make even non-Hispanic whites and Hispanics not exactly comparable between the two projection series. These changes include: 1) the Hispanic origin question was placed before the race question instead of after the race question as in 1990; 2) the 2000 question was worded “Is this person Spanish/Hispanic/Latino?”, while the 1990 Census question was worded “Is this person of Spanish/Hispanic origin?”; 3) examples of specific Hispanic groups differed between the two censuses — both listed Mexican, Mexican American, Chicano, Cuban, Puerto Rican and “other,” but the 1990 Census expanded the “other” category by using the words “for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on,” while the 2000 Census questionnaire provided no such “prompts” for the “other” Hispanic category. New census Hispanic counts, population estimates, and population projections can not be confidently compared with previous Hispanic data because of these changes in the way Hispanics were identified in the 2000 Census.

The racial categories and projected numbers from each set of population projections are contrasted in Table 2. For analytical purposes, the racial categories available in the new population projections are far from ideal. The old population projections allowed us to separate out non-Hispanic whites from minorities in a way that allowed for a further partition of the minority population into mutually exclusive and exhaustive sub-categories that distinguished Hispanics from non-Hispanic blacks and non-Hispanic Asians and others. The finest partition of the minority category that the 2004 Interim projection allows is: Hispanic white alone; black or African American alone (including Hispanics); Asian alone (including Hispanics) and; all other races alone combined with all multi-racial respondents (including Hispanics).

In this partition, Hispanics are not identified as a separate minority category. Adding Hispanics to this list doubles the count of Hispanics. One could alternatively separate Hispanics from the total un-partitioned minority category and thus create a residual “all other non-Hispanic” minority category that combines blacks, Asians, American Indians and Eskimos, Hawaiian and Pacific Islanders, and all multi-racial respondents. But this broad category would be unlikely to be analytically very useful, and would certainly be objected to by those in the residual non-Hispanic minority category who are being lumped together. Because of these problems, we have chosen to produce interim household projections for only two categories by race/Hispanic origin — non-Hispanic white, and total minority (including Hispanics).



**Table 2.**

	<b>Number of Persons.....</b>	
	<b>July 2000</b>	<b>July 2020</b>
<b>2000 Population Projections</b>		
White (Including Hispanic)	226,265,000	257,394,000
Black (including Hispanic)	35,332,000	44,735,000
Asian and Pacific Islander (incl. Hispanic)	11,275,000	19,589,000
Other (Including Hispanic)	2,433,000	3,208,000
<b>Total</b>	<b>275,305,000</b>	<b>324,926,000</b>
Non-Hispanic White	196,670,000	207,146,000
Non-Hispanic Black	33,488,000	41,549,000
Non-Hispanic Asian and Pacific Islander	10,619,000	18,527,000
Non-Hispanic Other	2,049,000	2,548,000
Hispanic	32,479,000	55,156,000
<b>Total</b>	<b>275,305,000</b>	<b>324,926,000</b>
Total Minority	78,635,000	117,780,000
<b>2004 Interim Population Projections</b>		
White Alone (including Hispanic)	228,548,000	260,629,000
Black Alone (including Hispanic)	35,818,000	45,365,000
Asian Alone (including Hispanic)	10,684,000	17,988,000
Other Alone plus All Multiracials	7,075,000	11,822,000
<b>Total</b>	<b>282,125,000</b>	<b>335,805,000</b>
Hispanic	35,622,000	59,756,000
Non-Hispanic White Alone	195,729,000	205,936,000
Total Minority	86,396,000	129,869,000

It should also be noted that even the 2000 data in the new interim projections differ from the raw 2000 Census counts that appear in most published census reports. Not only are the baseline 2000 data used in the interim projections for July 1 while the Census is an April 1 estimate, the Census Bureau's Population Estimates Program further modified the raw 2000 Census counts for use in the production of post-2000 population estimates and projections. In this modification, the individual race categories are readjusted to assign persons who did not choose one of the five specified races listed on the 2000 Census questionnaire to one of these specified categories. The five "official" OMB race categories are: 1) white; 2) black or African American; 3) Asian; 4) American Indian and Alaska Native, and; 5) native Hawaiian and other Pacific Islander.

There were roughly 18.5 million people who, when filling out the 2000 Census questionnaire, identified "some other race" as part of, or their only, race response. These people were primarily of Hispanic origin (90.4 percent or 16.8 million people), and many wrote in a detailed Hispanic origin type (such as Mexican or Puerto Rican) as their race. Since these people did not select one of the five official Office of Management and Budget (OMB) race categories, it was necessary to impute their race. Table 3 compares the 2000 raw census counts with the race modified counts.

The effect of this race modification was to redistribute the 18.5 million people without a specified race into one of the five official OMB race categories, alone or in combination. The white alone category received most of this redistribution, and increased from 75.1 percent to 81.1 percent of the total population.

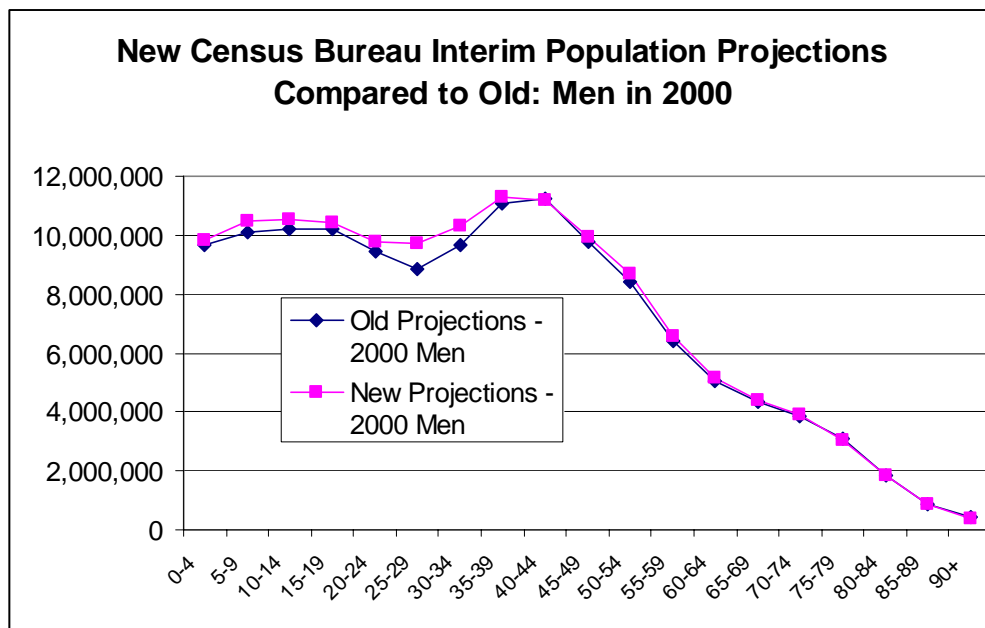
**Table 3**

	Number	Percent
<b>April 2000 Raw Census Counts</b>		
White Alone (Including Hispanic)	211,460,626	75.1%
Black Alone (Including Hispanic)	34,658,190	12.3%
Asian Alone (Including Hispanic)	10,242,998	3.6%
Other Specified Alone plus Non-Specified plus all Multi-Racials	9,701,019	3.4%
Non-Specified only	15,359,073	5.5%
<b>Total</b>	<b>281,421,906</b>	<b>100.0%</b>
Hispanic	35,305,818	12.5%
Non-Hispanic White Alone	194,552,774	69.1%
<b>April 2000 Modified Race Counts</b>		
White Alone (Including Hispanic)	228,104,485	81.1%
Black Alone (Including Hispanic)	35,704,124	12.7%
Asian Alone (Including Hispanic)	10,589,265	3.8%
Other Alone plus All Multiracials	7,024,032	2.5%
<b>Total</b>	<b>281,421,906</b>	<b>100.0%</b>
Hispanic	35,305,818	12.5%
Non-Hispanic White Alone	195,575,485	69.5%
Source: Census 2000 Modified Race Data [MR(31)-CO.txt], prepared by the U.S. Census Bureau, 2002. <a href="http://eire.census.gov/popest/data/national/tables/files/mod_race.php#ove">http://eire.census.gov/popest/data/national/tables/files/mod_race.php#ove</a>		

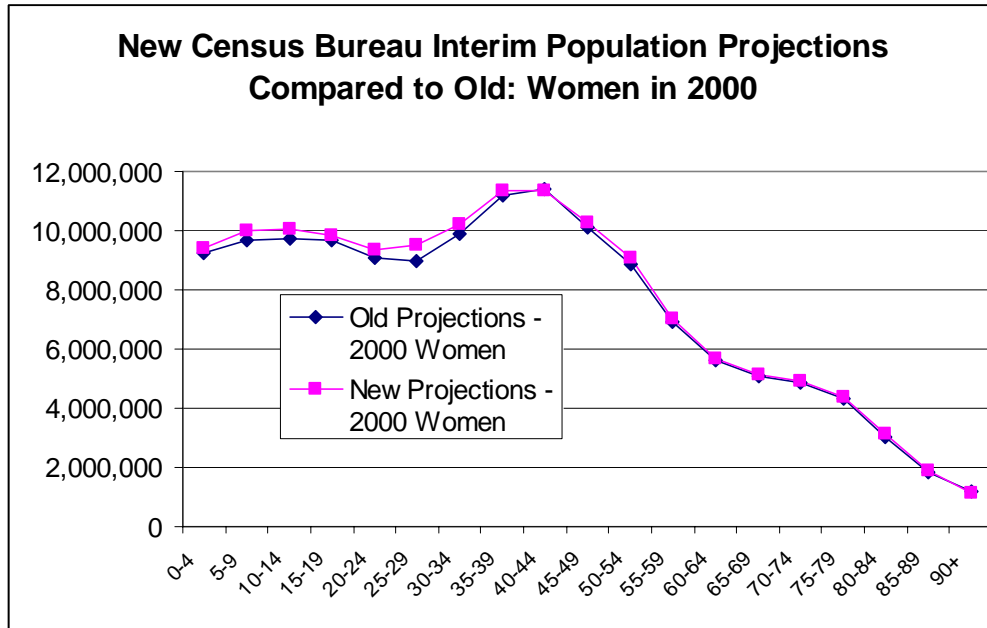
### New vs. Old Population Projection Differences by Age and Minority Status

Differences in the old Census Bureau population projections and the new interim projections fall mostly in the young adult ages and among children. Differences are larger for males than for females. These differences persist well into the projection period. Figures 3a and 3b compare the old 2000 projections with the 2000 baseline population numbers contained in the new interim projections, while 3c and 3d draw the comparisons for 2020. Most of these differences fall in the minority categories, although precise comparisons cannot be made because of the change in race/Hispanic origin definitions discussed above.

**Figure 3a.**



**Figure 3b.**



**Figure 3c.**

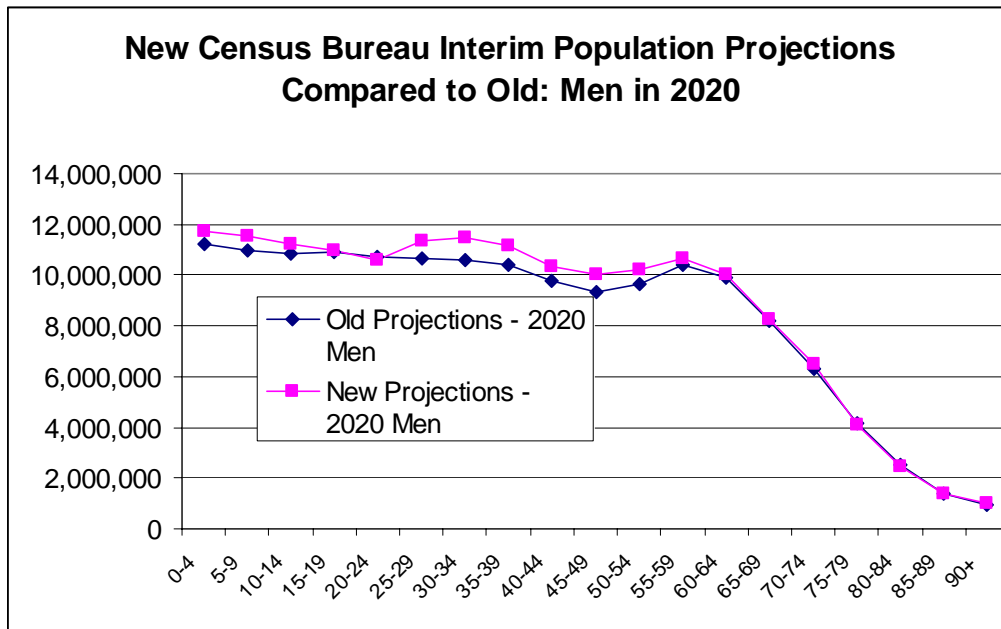
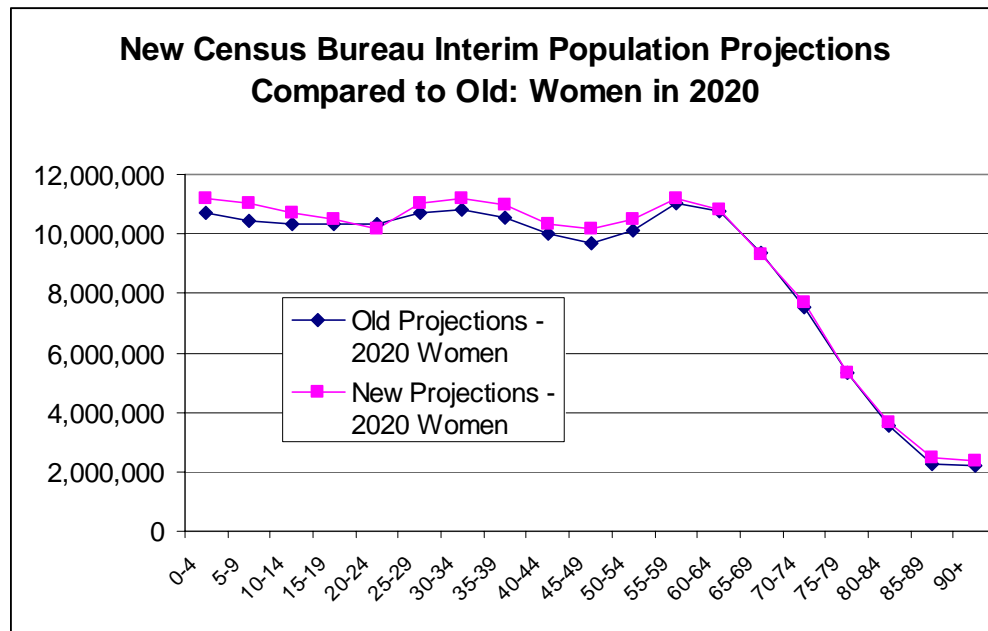


Figure 3d.

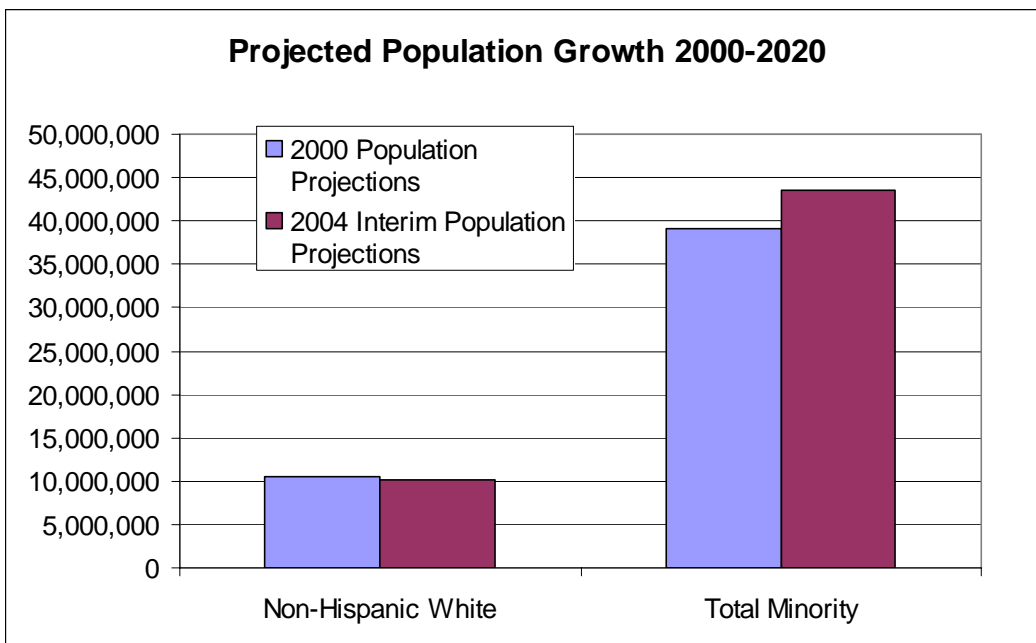


In addition to the initial differences in the total sizes of the white and minority populations in the jump-off year for the projections, projected growth of these two categories over the next 20 years also differs between the old and new projections. Non-Hispanic white growth is slightly less in the interim series, and total minority growth is almost 5 million higher (see Figure 4 — although these numbers are only approximate because of the change in definitions). While some of the increase in projected minority growth is due to higher natural increase (because of the addition of more people in the reproductive ages resulting in a greater impact on births than deaths), and a small amount due to the shifting out of the non-Hispanic white category because of the new race/Hispanic origin questions discussed above, some is also due to the higher immigration assumptions. The implications of the higher 2000 base populations and higher minority growth in the household formation age groups over the next two decades, as we shall see below, will be to raise total projected household formations mostly in the minority category.

A consequence of the shift in definitions of racial/Hispanic origin categories following the 2000 Census is that we will be unable to precisely compare our previous household projections with our new interim household projections, except for the totals. Non-Hispanic whites in previous projections included some multi-racial respondents who selected the white

racial identification, and some who otherwise might have identified themselves as Hispanic if they had been presented with the new ordering and wording of the questions (for example Brazilians who might think of themselves as Latino, but not Hispanic or of Spanish origin). Because of the changes in the race/Hispanic origin questions, the numbers of people with race imputed was also different in the modified baseline population data used for the two sets of population and household projections.

**Figure 4.**



### **Headship Rates**

Projected households are calculated by multiplying projected population by age and race/Hispanic origin by projected age and race/Hispanic origin specific headship rates. Headship rates are the number of households of a particular classification in a particular year divided by the population of that classification. In the accounting scheme used by the Joint Center, the headship rates are further partitioned into family and non-family rates that sum to a total headship rate. The family category includes married couples (with or without children <18 at home), single parents and other family (single parent and older children, and adult heads with other immediate family members present in the household (siblings or parents)). The non-family category includes single-person households and all other households with two or more people

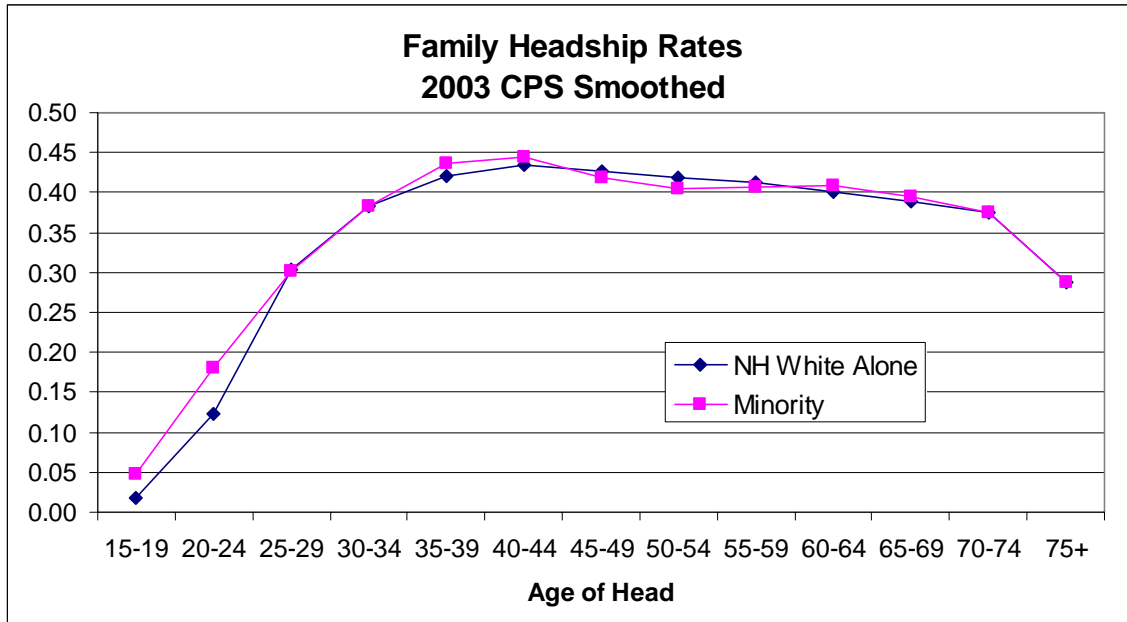
where all other household members are unrelated to the head. After total family and non-family households are projected by age and race/Hispanic origin, it is possible to further decompose these two broad categories into the six-category detailed schema just described if the detailed shares can also be projected. But for the interim household projections reported here, only the two broad family and non-family categories are tabulated.

One of the hallmarks of the Joint Center household projection methodology has been the cohort trending of headship and homeownership rates. This trending requires historical data on the number of households for 5-year age groups, preferably spanning 5-year historical time periods that we can stipulate as being “representative” of longer term trends. A practical consequence of the new race/Hispanic origin categories is that we are unable to develop any profile of the way that headship and homeownership rates have been trending within the new race/Hispanic origin groups because of a lack of historical data using consistent definitions. The new racial categories are so recent that the Current Population Survey and the Housing Vacancy Survey, sources of our previous data on headship and homeownership, introduced them only in 2003. The American Community Survey follows the new 2000 Census race/Hispanic origin protocol, but we only have nationally representative ACS data for 2001 and 2002, with the 2003 ACS data not due out until the fall of 2004. Our new “interim” household projections, by default, therefore required us to hold headship rates constant at recent levels. As it turns out, holding headship rates constant is probably not a bad choice for reasons we will discuss below, but holding ownership rates constant is problematic.

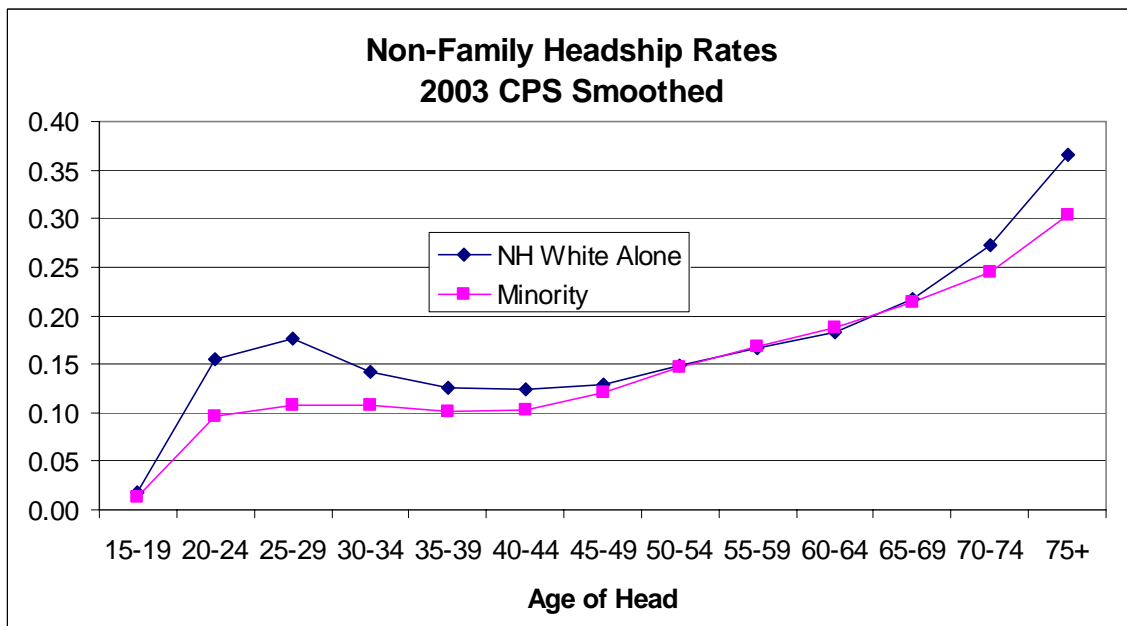
The most recent household data come from the 2003 March CPS. This is the first CPS to use the 2000 Census race/Hispanic origin definitions. In order to produce a headship rate such that when multiplied by the projected population will yield the number of projected households it is necessary to have the population units be the same for both the denominator of the headship rates and for the population projections. The population numbers internal to the CPS refer to the household population, while the interim projection numbers refer to the total resident population, including those in group quarters. To make the population numbers consistent, headship rates for 2003 were calculated using the CPS household counts in the numerator and the 2003 projected population numbers in the denominator. These 2003 headship rates for non-Hispanic whites and for total minorities, for family and non-family households, are presented in Figures 5a and 5b. Corresponding headship rates based on the 2000 Census PUMS data are given in

Figures 5c and 5d. Because the CPS data are based on a sample that is significantly smaller than the PUMS sample, the CPS rates were smoothed by fitting a 6<sup>th</sup> degree polynomial through the raw data to remove any distortions due to sampling variability.

**Figure 5a.**

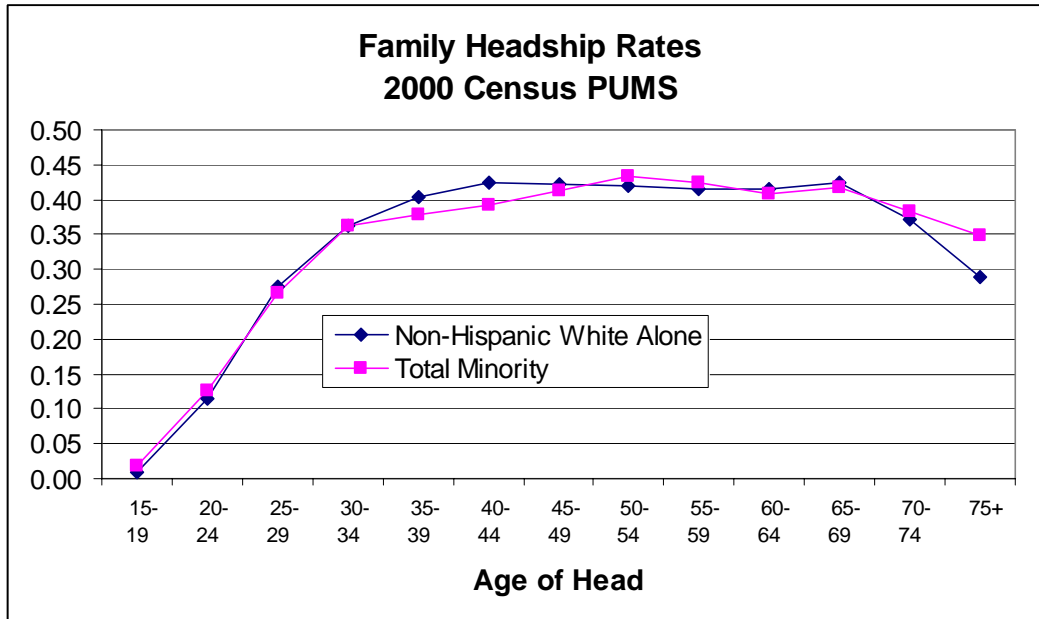


**Figure 5b.**

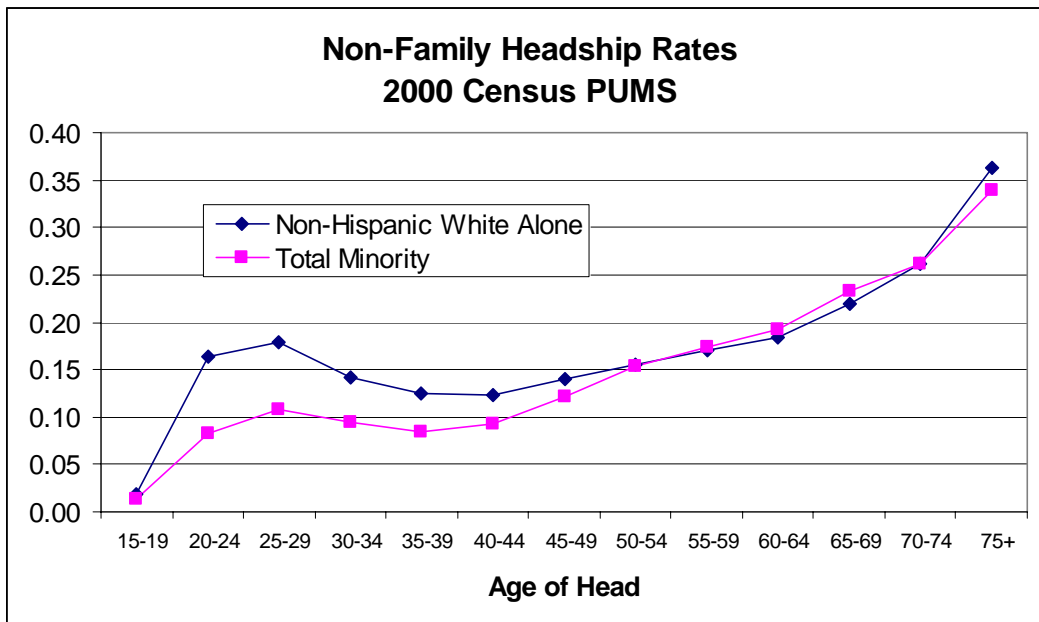




**Figure 5c.**



**Figure 5d.**



White and minority family headship rate patterns are quite similar in both CPS and PUMS, with minority rates slightly higher in the CPS series in the youngest age groups because of higher minority fertility rates (family creation) in the younger ages. While not all young

parents form independent family households, especially if the childbearing is out of wedlock, rates of independent household formation in the youngest age groups are higher when children are present than when they are not.

In contrast to the broad similarity between minority and non-Hispanic white family headship rates, non-family headship rates between the two groups are quite dissimilar in both CPS and PUMS (See Figure 5b and 5d). Up to middle age, minorities are much less likely to form independent non-family households, with their lower rates indicating that they are more likely to either form family households, as just noted, or to double up as non-heads in either family or non-family households. This is also true for the oldest minorities, again with the CPS based rates showing the largest differences.

The interim household projections reported here hold the headship rates in Figures 5a and 5b constant throughout the projection period to produce a CPS based series and hold the rates in Figures 5c and 5d constant to produce a Census based series. How valid an assumption is this holding constant of rates? While we do not have an historical series that splits out non-Hispanic white alone and total minority populations, we can examine the total family and non-family headship rates over the past five years for all races combined to check for recent trends using CPS data. Figures 6a and 6b compares CPS headship rates in 1998 and 2003, and the results show very little change over the past five years. The 1998 values were those used in our previous projections and consist of an average March 1997, 1998 and 1999 values in order to minimize random variation. The 2003 March CPS data were smoothed as described above, also to minimize random variation. This comparison confirms that holding headship rates constant is a reasonable assumption for all races combined.

Figure 6a.

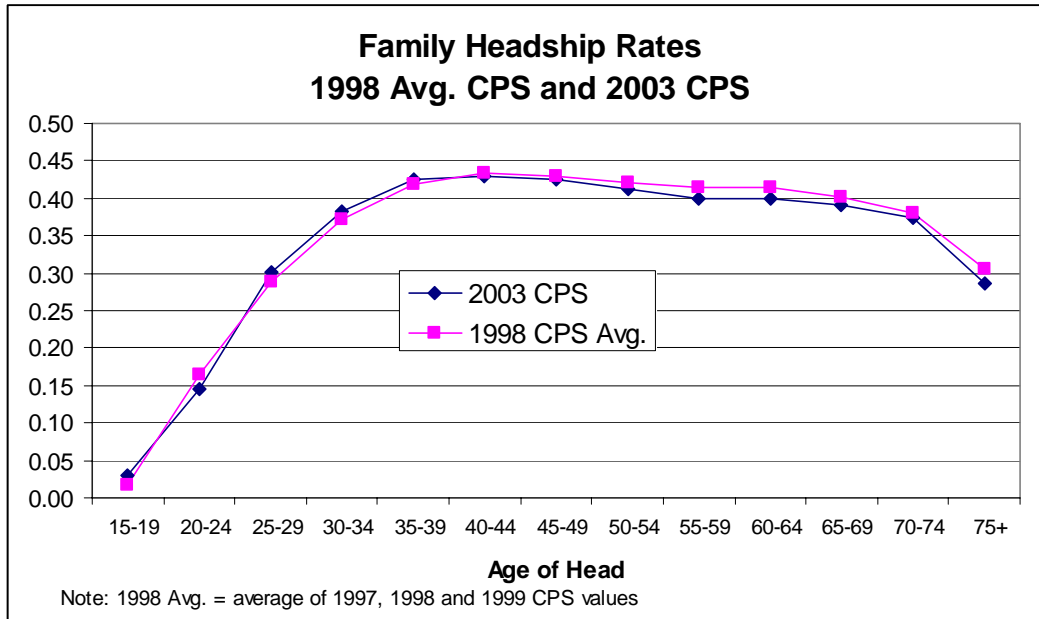
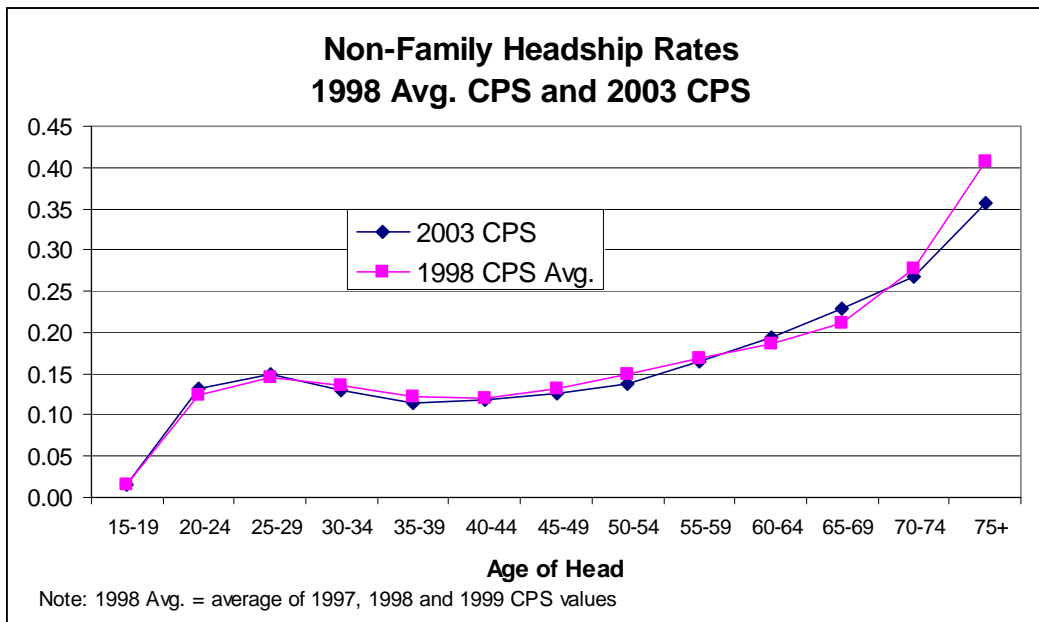


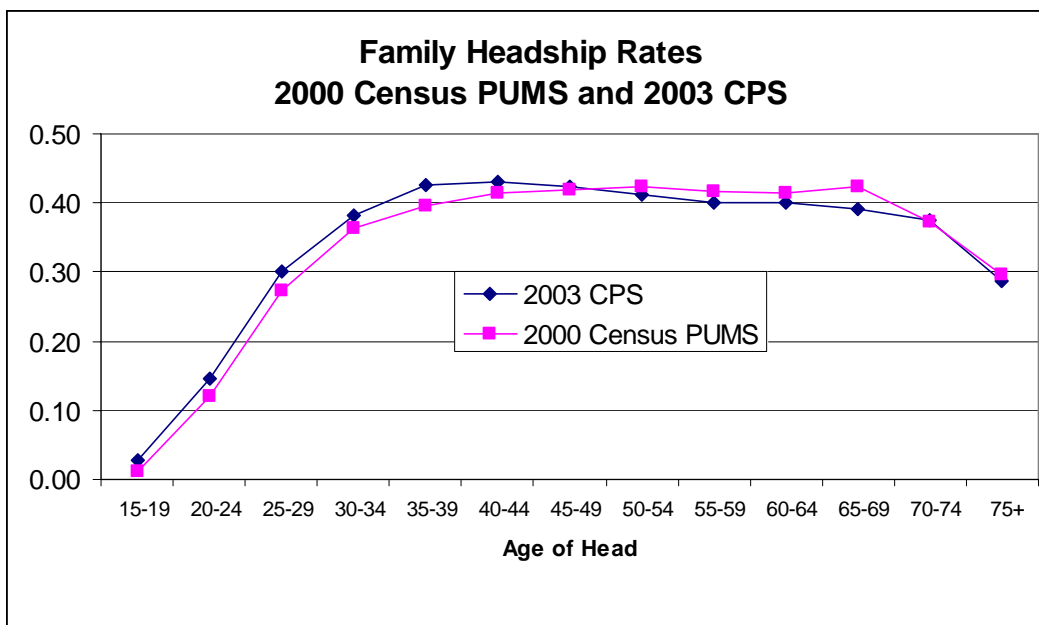
Figure 6b.



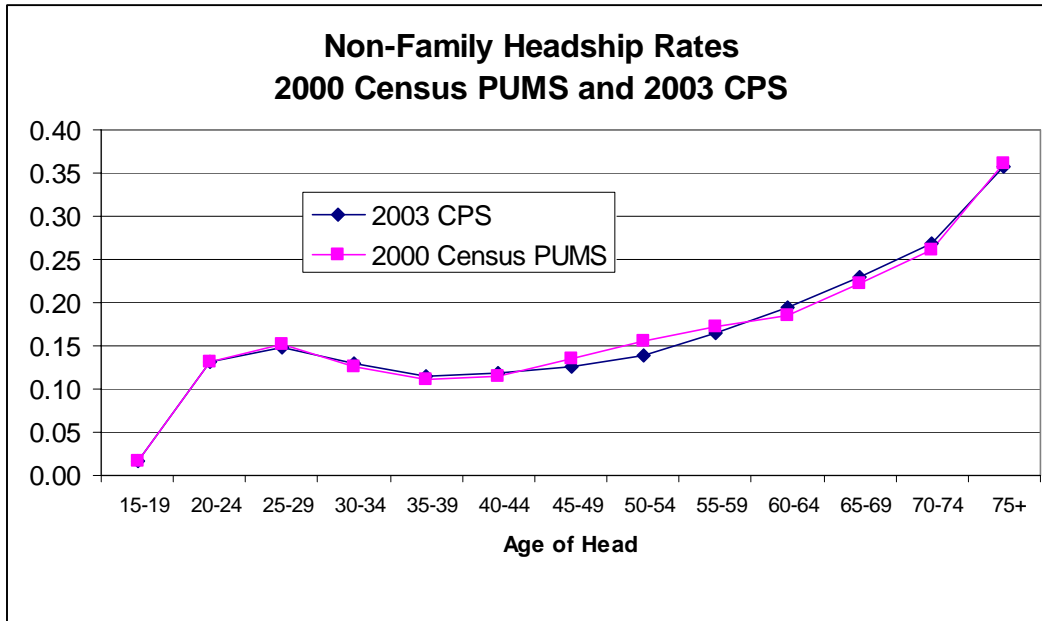
Overall differences between 2003 CPS and 2000 Census headship rates can be observed in Figures 7a and 7b. Why the CPS should have higher family headship rates in the younger age groups than the Census is not certain. It is likely due to the ability of respondents in the CPS to list children who “usually live in the household” as residents, while the Census requires the child

to be present in the household on April 1<sup>st</sup>. Children away at school or in joint custody arrangements can get listed as household member in the CPS, but not necessarily in the Census. Some children not physically present in the parental household, but nonetheless counted as household members in the CPS, are in dormitories and will be counted in the group quarters population by the Census, or might even be living in other households, and could therefore be counted twice by the CPS. For parents without a spouse present, adding children to the household in this way converts a household from a non-family household to a family household.

**Figure 7a.**



**Figure 7b.**



### **Interim Household Projections**

Two interim set of household projections have been calculated by multiplying 2003 CPS and 2000 Census headship rates by non-Hispanic white alone and total minority populations from the Census Bureau's 2004 interim population projections. Non-Hispanic white alone and total minority household projections were then summed together to get the total number of households. These interim household projections can be found in Appendix Tables A and B. Appendix C compares annually projected households from these two series with previous Joint Center projections based upon previous Census Bureau population projections.

The CPS based series gives a higher household count in the baseline year (2000) and slightly less annual growth in households than the Census based series. We have chosen the CPS based interim household projections as our baseline interim series both because the Joint Center's previous projections were based on CPS headship rates and because it is the CPS that is the most timely series used for tracking annual household changes in the U.S. In the future, the ACS may replace the CPS as survey used to monitor many aspects of household change because of its larger size and greater geographic coverage. The household projections in Appendix B keyed to Census headship rates are closer to the ACS numbers for 2001 and 2002. The two result

in roughly comparable totals, but the CPS results in projections that are slightly lower than the Census, and thus are more conservative estimates of future growth.

Total household growth in this interim CPS series over the 10 years from 2005 to 2015 is a little over a million higher than household growth in the previous set of Joint Center household projections, and in the Census series about 1.2 million higher. The breakdown of this additional growth by age groups is given in Table 4. The largest additions fall in the 35-44 and 45-54 age groups in both interim series, reflecting the higher levels of baseline population in their 20s and 30s enumerated 15 years earlier in the 2000 Census.

**Table 4.**

2003 CPS Based

Household Growth 2005-2015			
	New Jt Ctr Projections	Old Jt. Ctr Projections	Difference New-Old
Age			
15-24	256,327	405,615	-149,288
25-34	2,099,731	2,022,950	76,781
35-44	-1,594,117	-2,167,020	572,903
45-54	459,628	102,895	356,733
55-64	5,855,508	5,868,535	-13,027
65-74	4,924,128	4,866,590	57,538
75+	1,304,082	1,191,840	112,242
Total	13,305,287	12,291,405	1,013,882

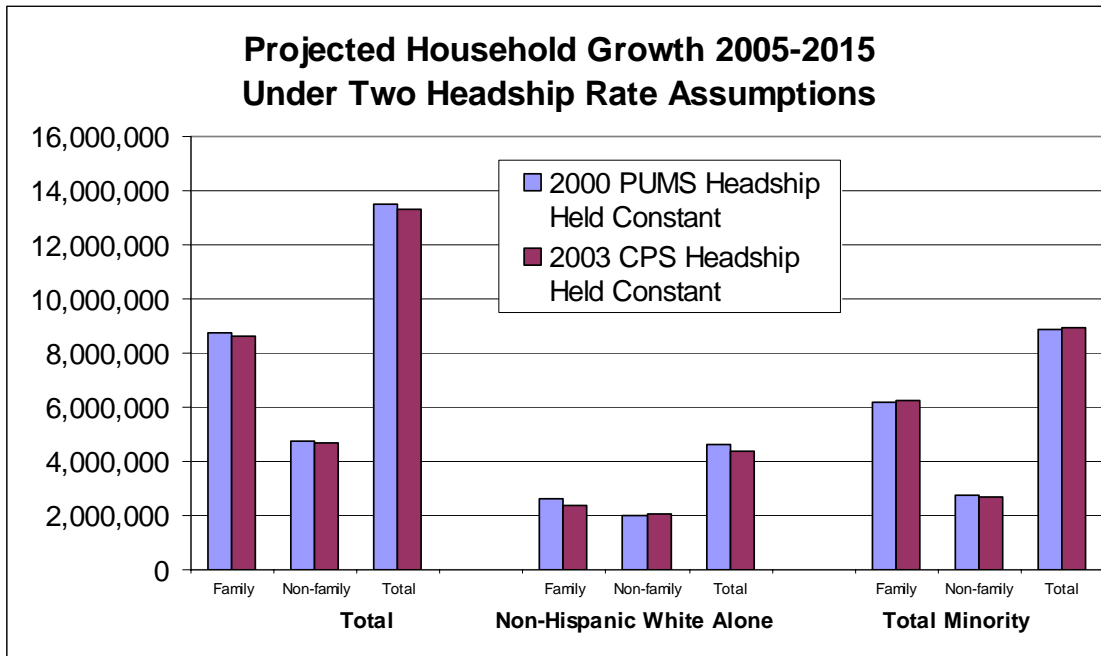
2000 PUMS Based

Household Growth 2005-2015			
	New Jt Ctr Projections	Old Jt. Ctr Projections	Difference New-Old
Age			
15-24	152,379	405,615	-253,236
25-34	1,975,861	2,022,950	-47,089
35-44	-1,674,280	-2,167,020	492,740
45-54	505,773	102,895	402,878
55-64	5,986,869	5,868,535	118,334
65-74	5,132,147	4,866,590	265,557
75+	1,419,661	1,191,840	227,821
Total	13,498,410	12,291,405	1,207,005

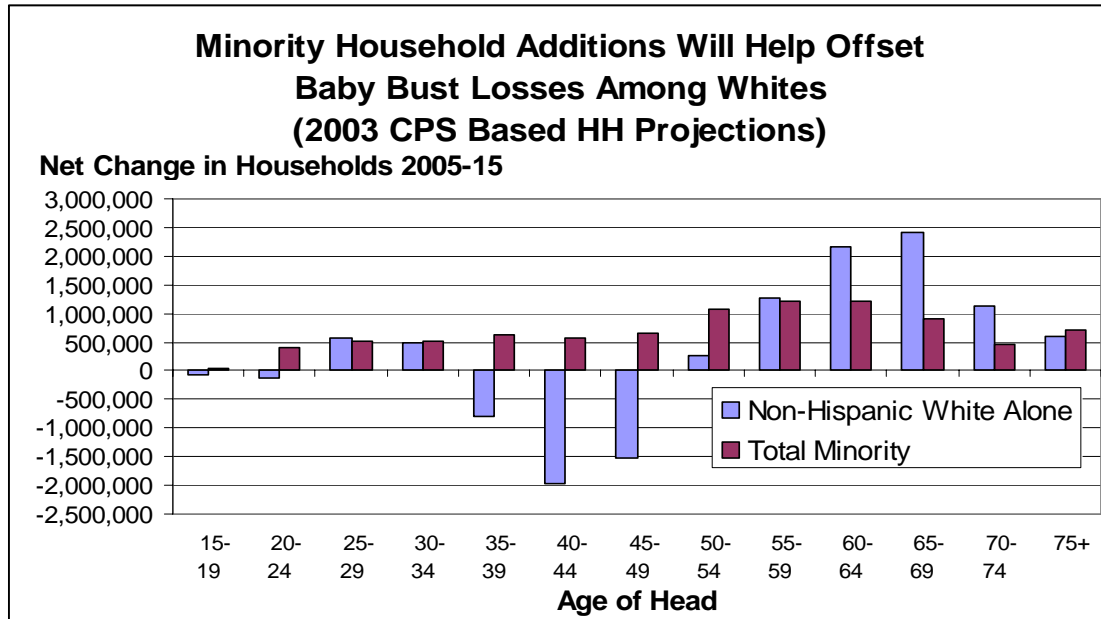
Of the 13.3-13.5 million net new households projected to be added between 2005 and 2015, just over two thirds, or 8.9 million, are minority and about 4.4-4.6 million are non-Hispanic white alone (Figure 8). The white net gain is the result of large gains in the older age

groups as Baby Boomers age, and significant losses in the number of non-Hispanic white households in the young adult age groups as the Baby Bust passes through. Minority household growth, on the other hand, takes place across all age groups as immigrants have back-filled the minority Baby Bust losses and amplified the minority Baby Boom gains (Figure 9). Figure 9 refers to CPS based projections, but Census based projections result in a very similar pattern.

**Figure 8.**



**Figure 9.**

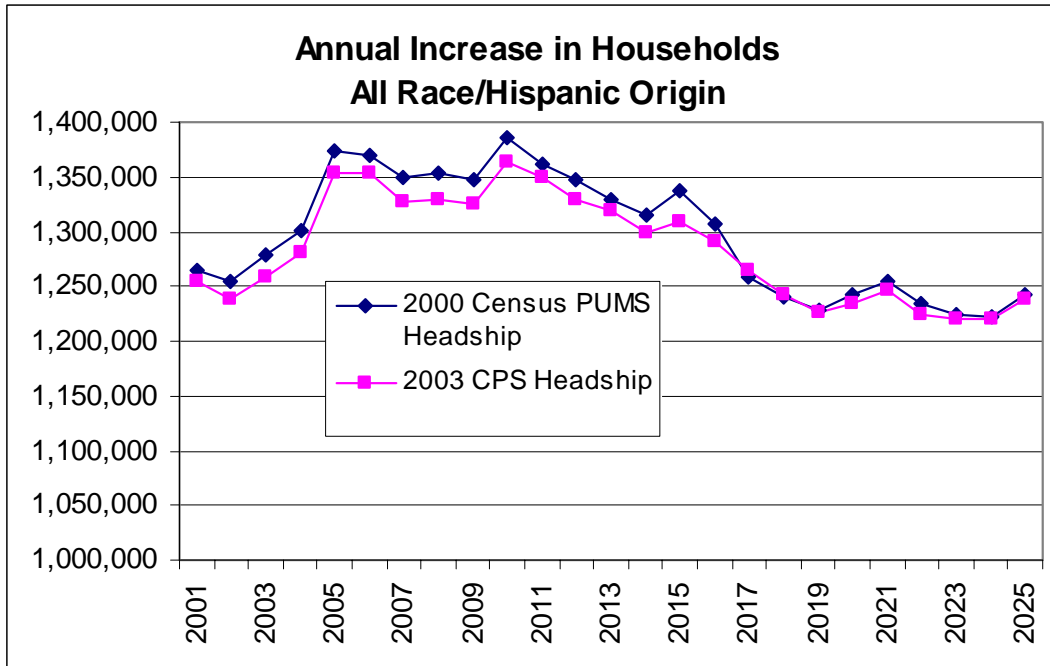


After 2015, as the Baby Boomers begin to reach their 70s, net white household growth falls below 400,000 annually because of household losses as Boomers begin to die off in ever increasing numbers. Minority net household growth, on the other hand, will continue to increase, reaching almost a million a year by 2025. (Figures 10a-10c). Minority growth will be even higher than shown in Figure 10c if immigration levels are higher than assumed in the Census Bureau’s 2004 interim population projections, which is very likely judging from the Bureau’s records of underestimating immigration over four decades and the recent levels of immigration. In addition, past immigration tends to spawn at least some additional future immigration as family members follow behind them.

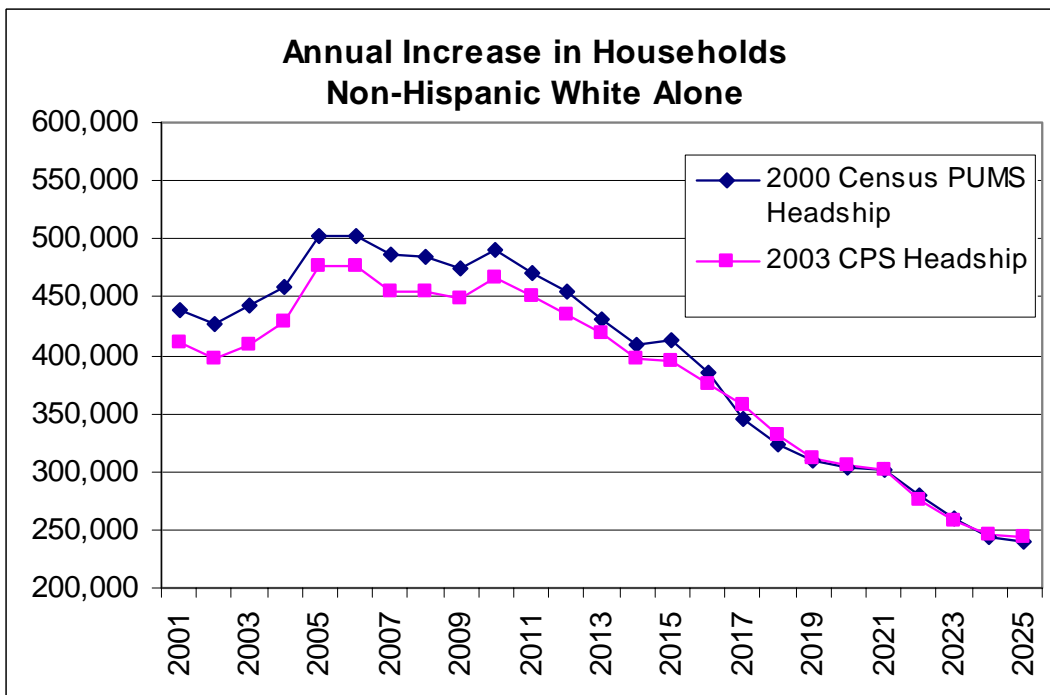
All of the difference between the CPS and Census PUMS based estimates of annual household growth is on the non-Hispanic white side. This is because of higher headship rates in the PUMS series for several older age groups, and the fact that the largely white Baby Boom cohorts will be passing through those age groups during the next 10 years.



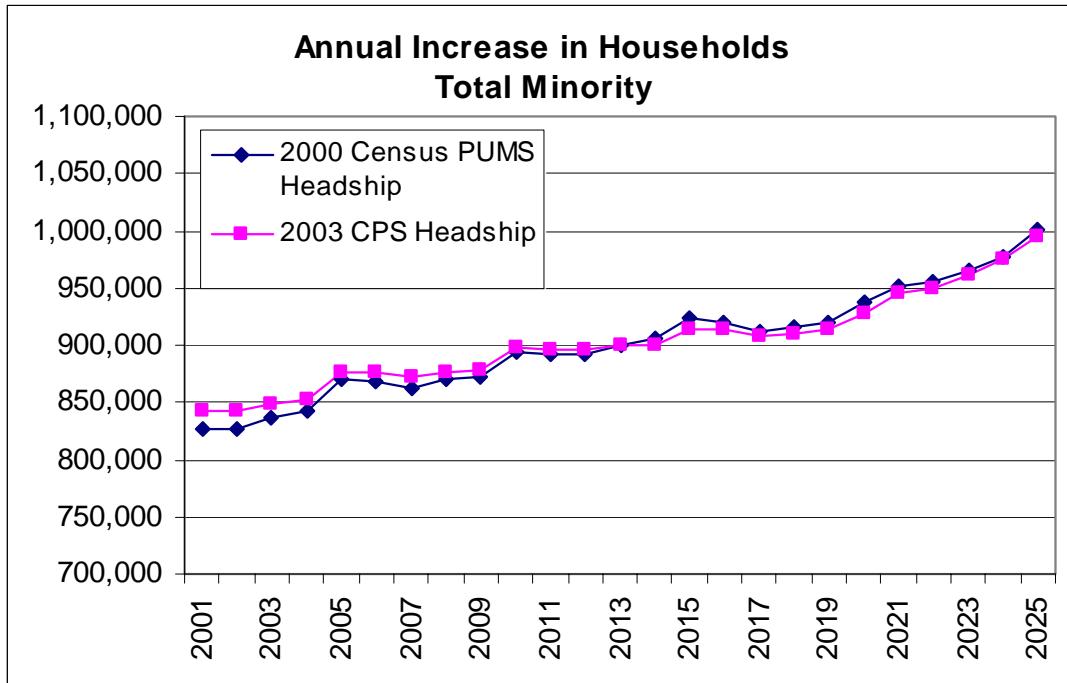
**Figure 10a.**



**Figure 10b.**



**Figure 10c.**



### **Tenure**

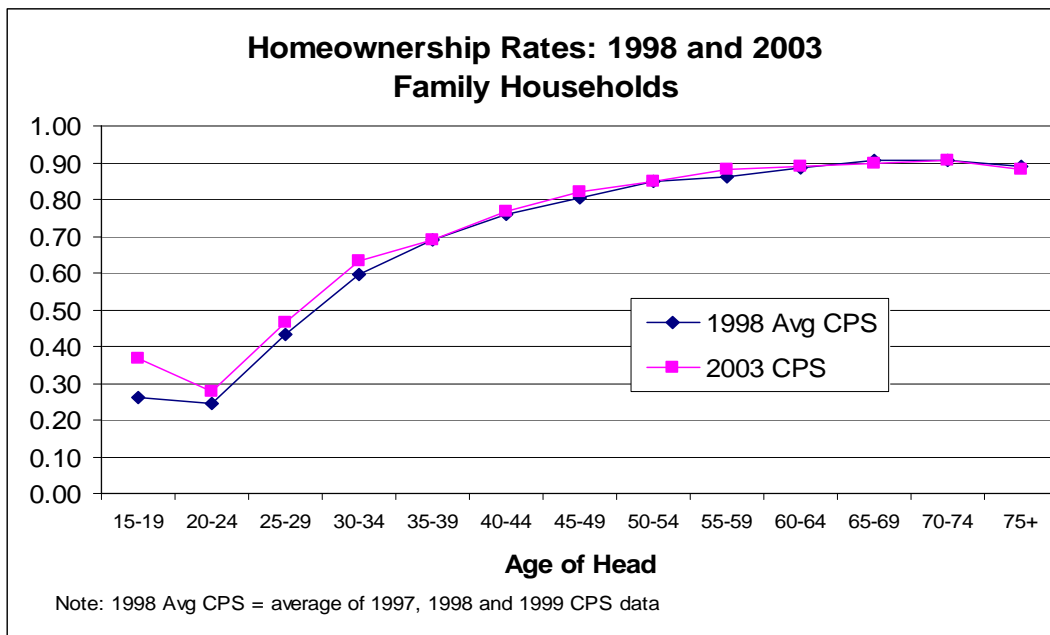
Previous Joint Center household projections were further broken down by tenure. For the interim projections presented here, such a breakdown is difficult because, unlike headship rates, ownership rates have been changing significantly in recent years. In addition, lack of historical data with the new race/Hispanic origin categories prevents us from measuring this homeownership rate change for the population categories available in the new interim population projections.

If we were to hold ownership rates constant, as we did for headship, we would seriously distort future ownership rates for the various cohorts. Holding these rates constant would be equivalent to assuming that any given cohort will achieve the same levels of future homeownership as it ages as previous cohorts did at that age, even though we know for certain that different cohorts are on very different cohort homeownership trajectories. That is, holding rates constant assumes cohorts will jump to several different previous cohorts' trajectories as they age through successive age groups over the next 25 years. This is highly unlikely to occur.

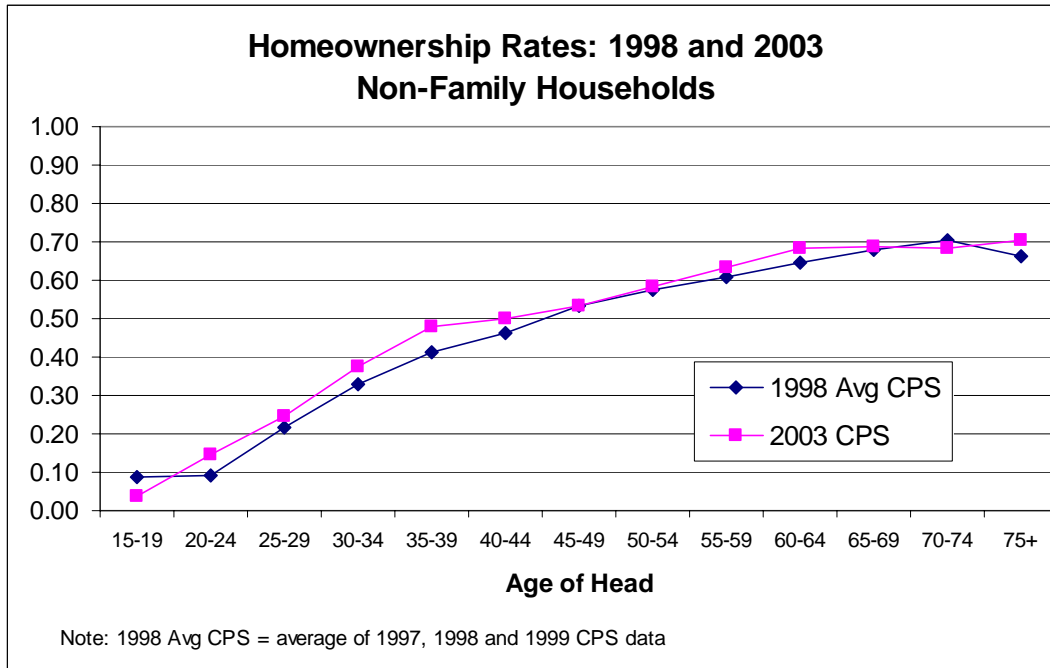
To demonstrate how homeownership rates have been changing in the total population in recent years we have plotted CPS homeownership rates for family and non-family households

for 1998 and 2003 in Figures 11a and 11b. It can be clearly seen that homeownership rates have been increasing during the past five years both for young families and for non-families pretty much across all age groups. These trends for total households are almost certainly even larger for non-Hispanic whites and for minorities taken as separate categories, as the shift toward greater share minority with lower homeownership rates has served to dampen the increasing homeownership trend in the total population.

**Figure 11a.**



**Figure 11b**



### **Conclusions**

The release of new interim Census Bureau population projections has prompted us to inquire about their possible impact on household projections. We were unable to incorporate these new interim population projections into the standard Joint Center household projection model because of a lack of historical data on headship and ownership using the new race/Hispanic origin categories adopted in the population projections. Instead, we simply held headship rates constant and chose to not project households by tenure. We produced two sets of interim household projections, one based on holding headship rates constant at levels measured by the 2003 Current Population Survey, and one set produced by holding headship rates constant at 2000 Census levels (using the 1 percent PUMS data). The results of the two projections are broadly similar, and we recommend the CPS based series as the one that can best be used to check against both our previous household projections (also CPS based) and against the most recently available household growth estimates from the CPS.

The result of this exercise is to demonstrate that the higher population counts of the 2000 Census, incorporated into the interim population projections, result in higher annual projected

household growth than previous Joint Center household projections had forecast. The increase is of a magnitude of about 100,000 to 120,000 annually, bringing the total projected household growth 2005-2015 to between 13.3 to 13.5 million households. This number is about 1.0-1.2 million higher than the previous Joint Center household projections for that 10-year span, and all of this added growth is in the minority category. The old minority definition and old population projections showed 7.6 million net new minority households between 2005 and 2015, while the new minority definition (including a new definition of Hispanic and including all multi-racial respondents) and new population projections show a net minority growth of 8.9 million households over the same time period.

In closing, it should be emphasized that the interim household projections reported here will likely underestimate future household growth if net immigration to the U.S. averages over a million per year, as it has for the past decade or more. The Census Bureau interim population projections assume conservatively that future immigration declines to between 850,000 and 800,000 per year over the next decade. The difference between 1.2 million and 850,000 net immigrants will translate into over a million additional households over a ten-year period.

## Appendix A: Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2003 CPS Modified Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2000	15-19	579,564	320,320	899,884	226,044	228,612	454,656	353,520	91,708	445,228
2000	20-24	2,777,481	2,537,840	5,315,321	1,448,967	1,836,537	3,285,504	1,328,514	701,303	2,029,817
2000	25-29	5,821,067	2,894,616	8,715,683	3,620,377	2,109,596	5,729,973	2,200,690	785,020	2,985,710
2000	30-34	7,862,204	2,679,009	10,541,213	5,141,687	1,915,530	7,057,217	2,720,517	763,479	3,483,996
2000	35-39	9,612,069	2,677,846	12,289,915	6,565,747	1,975,977	8,541,724	3,046,322	701,869	3,748,191
2000	40-44	9,855,848	2,675,719	12,531,567	7,067,253	2,026,639	9,093,892	2,788,595	649,080	3,437,675
2000	45-49	8,595,222	2,560,644	11,155,866	6,427,750	1,938,408	8,366,158	2,167,472	622,236	2,789,708
2000	50-54	7,388,087	2,637,229	10,025,316	5,714,897	2,029,321	7,744,218	1,673,190	607,908	2,281,098
2000	55-59	5,584,360	2,258,212	7,842,572	4,395,780	1,764,481	6,160,261	1,188,580	493,731	1,682,311
2000	60-64	4,370,139	1,997,556	6,367,695	3,423,250	1,561,153	4,984,403	946,889	436,403	1,383,292
2000	65-69	3,714,811	2,066,873	5,781,684	2,975,883	1,665,269	4,641,152	738,928	401,604	1,140,532
2000	70-74	3,313,697	2,373,810	5,687,507	2,745,825	2,002,363	4,748,188	567,872	371,447	939,319
2000	75+	4,788,486	5,963,226	10,751,712	4,120,607	5,259,158	9,379,765	667,879	704,068	1,371,947
	Total	74,263,035	33,642,900	107,905,935	53,874,067	26,313,044	80,187,111	20,388,968	7,329,856	27,718,824
2005	15-19	619,032	332,804	951,836	229,028	231,631	460,659	390,004	101,173	491,177
2005	20-24	3,025,321	2,764,750	5,790,071	1,578,876	2,001,193	3,580,069	1,446,445	763,557	2,210,002
2005	25-29	5,966,552	2,941,599	8,908,151	3,598,636	2,096,927	5,695,563	2,367,916	844,672	3,212,588
2005	30-34	7,593,098	2,554,889	10,147,987	4,612,922	1,718,540	6,331,462	2,980,176	836,349	3,816,525
2005	35-39	8,884,781	2,446,502	11,331,283	5,661,781	1,703,926	7,365,707	3,223,000	742,576	3,965,576
2005	40-44	9,955,411	2,684,010	12,639,421	6,791,652	1,947,606	8,739,258	3,163,759	736,404	3,900,163
2005	45-49	9,536,514	2,837,451	12,373,965	6,881,949	2,075,381	8,957,330	2,654,565	762,070	3,416,635
2005	50-54	8,292,337	2,961,818	11,254,155	6,194,451	2,199,608	8,394,059	2,097,886	762,210	2,860,096
2005	55-59	7,147,263	2,892,091	10,039,354	5,492,386	2,204,662	7,697,048	1,654,877	687,429	2,342,306
2005	60-64	5,236,488	2,393,717	7,630,205	4,068,597	1,855,459	5,924,056	1,167,891	538,258	1,706,149
2005	65-69	3,945,645	2,194,023	6,139,668	3,081,183	1,724,193	4,805,376	864,462	469,830	1,334,292
2005	70-74	3,182,721	2,273,488	5,456,209	2,550,844	1,860,175	4,411,019	631,877	413,313	1,045,190
2005	75+	5,189,264	6,441,243	11,630,507	4,370,565	5,578,182	9,948,747	818,699	863,061	1,681,760
	Total	78,574,427	35,718,385	114,292,812	55,112,870	27,197,483	82,310,353	23,461,557	8,520,902	31,982,459

## Appendix A (continued): Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2003 CPS Modified Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2010	15-19	645,370	331,539	976,909	218,259	220,740	438,999	427,111	110,799	537,910
2010	20-24	3,170,743	2,855,693	6,026,436	1,598,045	2,025,489	3,623,534	1,572,698	830,204	2,402,902
2010	25-29	6,456,796	3,187,587	9,644,383	3,913,301	2,280,283	6,193,584	2,543,495	907,304	3,450,799
2010	30-34	7,755,439	2,597,547	10,352,986	4,581,347	1,706,777	6,288,124	3,174,092	890,770	4,064,862
2010	35-39	8,587,643	2,337,027	10,924,670	5,080,451	1,528,974	6,609,425	3,507,192	808,053	4,315,245
2010	40-44	9,196,967	2,457,181	11,654,148	5,860,360	1,680,544	7,540,904	3,336,607	776,637	4,113,244
2010	45-49	9,615,420	2,856,241	12,471,661	6,615,373	1,994,990	8,610,363	3,000,047	861,251	3,861,298
2010	50-54	9,193,800	3,285,697	12,479,497	6,637,031	2,356,765	8,993,796	2,556,769	928,932	3,485,701
2010	55-59	8,028,187	3,251,419	11,279,606	5,964,380	2,394,122	8,358,502	2,063,807	857,297	2,921,104
2010	60-64	6,712,056	3,068,791	9,780,847	5,099,687	2,325,682	7,425,369	1,612,369	743,109	2,355,478
2010	65-69	4,744,478	2,637,855	7,382,333	3,681,994	2,060,400	5,742,394	1,062,484	577,455	1,639,939
2010	70-74	3,406,199	2,428,276	5,834,475	2,665,449	1,943,749	4,609,198	740,750	484,527	1,225,277
2010	75+	5,448,654	6,736,878	12,185,532	4,470,466	5,705,686	10,176,152	978,188	1,031,192	2,009,380
	Total	82,961,752	38,031,731	120,993,483	56,386,143	28,224,201	84,610,344	26,575,609	9,807,530	36,383,139
2015	15-19	623,637	312,522	936,159	200,467	202,746	403,213	423,170	109,776	532,946
2015	20-24	3,230,539	2,831,536	6,062,075	1,522,703	1,929,995	3,452,698	1,707,836	901,541	2,609,377
2015	25-29	6,703,637	3,285,856	9,989,493	3,958,512	2,306,627	6,265,139	2,745,125	979,229	3,724,354
2015	30-34	8,362,409	2,803,967	11,166,376	4,973,927	1,853,032	6,826,959	3,388,482	950,935	4,339,417
2015	35-39	8,766,377	2,375,630	11,142,007	5,043,927	1,517,982	6,561,909	3,722,450	857,648	4,580,098
2015	40-44	8,882,885	2,351,695	11,234,580	5,260,743	1,508,596	6,769,339	3,622,142	843,099	4,465,241
2015	45-49	8,873,923	2,630,283	11,504,206	5,712,071	1,722,582	7,434,653	3,161,852	907,701	4,069,553
2015	50-54	9,268,585	3,314,957	12,583,542	6,383,210	2,266,635	8,649,845	2,885,375	1,048,322	3,933,697
2015	55-59	8,906,358	3,610,149	12,516,507	6,397,312	2,567,902	8,965,214	2,509,046	1,042,247	3,551,293
2015	60-64	7,553,938	3,454,622	11,008,560	5,549,417	2,530,778	8,080,195	2,004,521	923,844	2,928,365
2015	65-69	6,090,419	3,384,623	9,475,042	4,629,987	2,590,886	7,220,873	1,460,432	793,737	2,254,169
2015	70-74	4,113,610	2,931,353	7,044,963	3,202,556	2,335,429	5,537,985	911,054	595,924	1,506,978
2015	75+	5,795,991	7,138,598	12,934,589	4,630,578	5,910,037	10,540,615	1,165,413	1,228,561	2,393,974
	Total	87,172,308	40,425,791	127,598,099	57,465,410	29,243,227	86,708,637	29,706,898	11,182,564	40,889,462

## Appendix A (continued): Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2003 CPS Modified Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2020	15-19	676,135	329,002	1,005,137	204,273	206,594	410,867	471,862	122,408	594,270
2020	20-24	3,096,806	2,669,967	5,766,773	1,399,698	1,774,089	3,173,787	1,697,108	895,878	2,592,986
2020	25-29	6,752,460	3,262,081	10,014,541	3,776,244	2,200,419	5,976,663	2,976,216	1,061,662	4,037,878
2020	30-34	8,686,341	2,900,337	11,586,678	5,033,365	1,875,175	6,908,540	3,652,976	1,025,162	4,678,138
2020	35-39	9,447,412	2,562,952	12,010,364	5,474,978	1,647,708	7,122,686	3,972,434	915,244	4,887,678
2020	40-44	9,071,479	2,393,752	11,465,231	5,226,660	1,498,822	6,725,482	3,844,819	894,930	4,739,749
2020	45-49	8,566,718	2,533,702	11,100,420	5,133,100	1,547,982	6,681,082	3,433,618	985,720	4,419,338
2020	50-54	8,563,819	3,066,016	11,629,835	5,518,505	1,959,584	7,478,089	3,045,314	1,106,432	4,151,746
2020	55-59	8,994,489	3,650,074	12,644,563	6,160,415	2,472,811	8,633,226	2,834,074	1,177,263	4,011,337
2020	60-64	8,401,972	3,843,456	12,245,428	5,964,588	2,720,114	8,684,702	2,437,384	1,123,342	3,560,726
2020	65-69	6,871,412	3,815,934	10,687,346	5,055,338	2,828,907	7,884,245	1,816,074	987,027	2,803,101
2020	70-74	5,301,912	3,772,133	9,074,045	4,047,799	2,951,813	6,999,612	1,254,113	820,320	2,074,433
2020	75+	6,563,166	8,061,650	14,624,816	5,145,189	6,566,839	11,712,028	1,417,977	1,494,811	2,912,788
	Total	90,994,121	42,861,056	133,855,177	58,140,152	30,250,857	88,391,009	32,853,969	12,610,199	45,464,168
2025	15-19	719,025	341,846	1,060,871	206,558	208,905	415,463	512,467	132,941	645,408
2025	20-24	3,319,238	2,808,017	6,127,255	1,427,594	1,809,446	3,237,040	1,891,644	998,571	2,890,215
2025	25-29	6,458,211	3,090,385	9,548,596	3,480,943	2,028,348	5,509,291	2,977,268	1,062,037	4,039,305
2025	30-34	8,782,400	2,907,014	11,689,414	4,812,706	1,792,969	6,605,675	3,969,694	1,114,045	5,083,739
2025	35-39	9,838,666	2,658,171	12,496,837	5,546,896	1,669,352	7,216,248	4,291,770	988,819	5,280,589
2025	40-44	9,786,963	2,584,552	12,371,515	5,675,965	1,627,666	7,303,631	4,110,998	956,886	5,067,884
2025	45-49	8,758,199	2,588,282	11,346,481	5,106,153	1,539,856	6,646,009	3,652,046	1,048,426	4,700,472
2025	50-54	8,280,023	2,967,453	11,247,476	4,965,897	1,763,356	6,729,253	3,314,126	1,204,097	4,518,223
2025	55-59	8,336,997	3,388,490	11,725,487	5,336,034	2,141,902	7,477,936	3,000,963	1,246,588	4,247,551
2025	60-64	8,517,894	3,897,890	12,415,784	5,756,247	2,625,102	8,381,349	2,761,647	1,272,788	4,034,435
2025	65-69	7,665,336	4,253,793	11,919,129	5,450,841	3,050,226	8,501,067	2,214,495	1,203,567	3,418,062
2025	70-74	6,005,616	4,261,956	10,267,572	4,440,799	3,238,404	7,679,203	1,564,817	1,023,552	2,588,369
2025	75+	7,994,727	9,795,159	17,789,886	6,155,355	7,856,120	14,011,475	1,839,372	1,939,039	3,778,411
	Total	94,463,295	45,543,008	140,006,303	58,361,988	31,351,652	89,713,640	36,101,307	14,191,356	50,292,663



## Appendix B: Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2000 Census PUMS Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2000	15-19	250,155	341,494	591,649	120,728	240,171	360,899	129,427	101,323	230,750
2000	20-24	2,278,415	2,536,560	4,814,975	1,345,301	1,928,422	3,273,723	933,114	608,138	1,541,252
2000	25-29	5,250,995	2,939,716	8,190,711	3,301,248	2,146,648	5,447,896	1,949,747	793,068	2,742,815
2000	30-34	7,459,016	2,584,463	10,043,479	4,884,939	1,915,530	6,800,469	2,574,077	668,933	3,243,010
2000	35-39	8,957,918	2,543,323	11,501,241	6,318,750	1,958,781	8,277,531	2,639,168	584,542	3,223,710
2000	40-44	9,357,023	2,588,265	11,945,288	6,886,999	2,003,904	8,890,903	2,470,024	584,361	3,054,385
2000	45-49	8,486,373	2,744,587	11,230,960	6,350,996	2,111,480	8,462,476	2,135,377	633,107	2,768,484
2000	50-54	7,522,259	2,767,069	10,289,328	5,738,128	2,133,179	7,871,307	1,784,131	633,890	2,418,021
2000	55-59	5,649,076	2,327,469	7,976,545	4,406,416	1,817,660	6,224,076	1,242,660	509,809	1,752,469
2000	60-64	4,492,006	2,021,813	6,513,819	3,544,654	1,575,687	5,120,341	947,352	446,126	1,393,478
2000	65-69	4,037,501	2,114,360	6,151,861	3,255,470	1,677,525	4,932,995	782,031	436,835	1,218,866
2000	70-74	3,308,397	2,309,407	5,617,804	2,728,229	1,912,913	4,641,142	580,168	396,494	976,662
2000	75+	4,955,840	6,004,639	10,960,479	4,146,451	5,217,521	9,363,972	809,389	787,118	1,596,507
	Total	72,004,974	33,823,165	105,828,139	53,028,309	26,639,421	79,667,730	18,976,665	7,183,744	26,160,409
2005	15-19	265,106	355,123	620,229	122,322	243,343	365,665	142,784	111,780	254,564
2005	20-24	2,481,862	2,763,439	5,245,301	1,465,916	2,101,317	3,567,233	1,015,946	662,122	1,678,068
2005	25-29	5,379,329	2,987,089	8,366,418	3,281,424	2,133,757	5,415,181	2,097,905	853,332	2,951,237
2005	30-34	7,202,337	2,451,319	9,653,656	4,382,578	1,718,540	6,101,118	2,819,759	732,779	3,552,538
2005	35-39	8,241,022	2,307,542	10,548,564	5,448,790	1,689,098	7,137,888	2,792,232	618,444	3,410,676
2005	40-44	9,420,756	2,588,736	12,009,492	6,618,427	1,925,758	8,544,185	2,802,329	662,978	3,465,307
2005	45-49	9,415,029	3,036,066	12,451,095	6,799,772	2,260,682	9,060,454	2,615,257	775,384	3,390,641
2005	50-54	8,456,618	3,106,967	11,563,585	6,219,631	2,312,180	8,531,811	2,236,987	794,787	3,031,774
2005	55-59	7,235,848	2,980,922	10,216,770	5,505,675	2,271,108	7,776,783	1,730,173	709,814	2,439,987
2005	60-64	5,381,349	2,422,984	7,804,333	4,212,887	1,872,733	6,085,620	1,168,462	550,251	1,718,713
2005	65-69	4,285,550	2,247,931	6,533,481	3,370,663	1,736,883	5,107,546	914,887	511,048	1,425,935
2005	70-74	3,180,055	2,218,259	5,398,314	2,534,497	1,777,077	4,311,574	645,558	441,182	1,086,740
2005	75+	5,390,141	6,498,884	11,889,025	4,397,977	5,534,019	9,931,996	992,164	964,865	1,957,029
	Total	76,335,002	35,965,261	112,300,263	54,360,559	27,576,495	81,937,054	21,974,443	8,388,766	30,363,209

## Appendix B (continued): Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2000 Census PUMS Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2010	15-19	272,939	354,316	627,255	116,570	231,901	348,471	156,369	122,415	278,784
2010	20-24	2,588,336	2,846,744	5,435,080	1,483,713	2,126,829	3,610,542	1,104,623	719,915	1,824,538
2010	25-29	5,821,814	3,236,938	9,058,752	3,568,352	2,320,333	5,888,685	2,253,462	916,605	3,170,067
2010	30-34	7,355,817	2,487,237	9,843,054	4,352,580	1,706,777	6,059,357	3,003,237	780,460	3,783,697
2010	35-39	7,927,769	2,188,644	10,116,413	4,889,329	1,515,668	6,404,997	3,038,440	672,976	3,711,416
2010	40-44	8,666,319	2,360,891	11,027,210	5,710,888	1,661,692	7,372,580	2,955,431	699,199	3,654,630
2010	45-49	9,492,003	3,049,412	12,541,415	6,536,379	2,173,114	8,709,493	2,955,624	876,298	3,831,922
2010	50-54	9,390,306	3,446,016	12,836,322	6,664,010	2,477,380	9,141,390	2,726,296	968,636	3,694,932
2010	55-59	8,136,520	3,351,492	11,488,012	5,978,811	2,466,278	8,445,089	2,157,709	885,214	3,042,923
2010	60-64	6,893,703	3,107,000	10,000,703	5,280,545	2,347,334	7,627,879	1,613,158	759,666	2,372,824
2010	65-69	5,152,381	2,703,677	7,856,058	4,027,921	2,075,564	6,103,485	1,124,460	628,113	1,752,573
2010	70-74	3,405,156	2,374,115	5,779,271	2,648,367	1,856,917	4,505,284	756,789	517,198	1,273,987
2010	75+	5,683,950	6,813,342	12,497,292	4,498,504	5,660,514	10,159,018	1,185,446	1,152,828	2,338,274
	Total	80,787,013	38,319,824	119,106,837	55,755,969	28,620,301	84,376,270	25,031,044	9,699,523	34,730,567
2015	15-19	261,994	334,282	596,276	107,068	212,997	320,065	154,926	121,285	276,211
2015	20-24	2,613,301	2,808,332	5,421,633	1,413,761	2,026,556	3,440,317	1,199,540	781,776	1,981,316
2015	25-29	6,041,678	3,336,407	9,378,085	3,609,577	2,347,140	5,956,717	2,432,101	989,267	3,421,368
2015	30-34	7,931,643	2,686,207	10,617,850	4,725,556	1,853,032	6,578,588	3,206,087	833,175	4,039,262
2015	35-39	8,079,107	2,219,052	10,298,159	4,854,179	1,504,772	6,358,951	3,224,928	714,280	3,939,208
2015	40-44	8,334,911	2,250,706	10,585,617	5,126,565	1,491,672	6,618,237	3,208,346	759,034	3,967,380
2015	45-49	8,758,895	2,799,944	11,558,839	5,643,863	1,876,384	7,520,247	3,115,032	923,560	4,038,592
2015	50-54	9,485,848	3,475,766	12,961,614	6,409,158	2,382,638	8,791,796	3,076,690	1,093,128	4,169,818
2015	55-59	9,035,996	3,721,482	12,757,478	6,412,791	2,645,295	9,058,086	2,623,205	1,076,187	3,699,392
2015	60-64	7,751,726	3,498,768	11,250,494	5,746,225	2,554,340	8,300,565	2,005,501	944,428	2,949,929
2015	65-69	6,610,600	3,473,324	10,083,924	5,064,979	2,609,954	7,674,933	1,545,621	863,370	2,408,991
2015	70-74	4,112,812	2,867,206	6,980,018	3,182,032	2,231,100	5,413,132	930,780	636,106	1,566,886
2015	75+	6,071,960	7,236,726	13,308,686	4,659,620	5,863,247	10,522,867	1,412,340	1,373,479	2,785,819
	Total	85,090,471	40,708,202	125,798,673	56,955,374	29,599,127	86,554,501	28,135,097	11,109,075	39,244,172

## Appendix B (continued): Projected Total Households by Broad Family Type and Age of Head

Total, Non-Hispanic White Alone, and Total Minority

Census Bureau 2004 Population Projections and 2000 Census PUMS Family and non-Family Headship Held Constant

Year	Age-grp	Total.....			Non-Hispanic White Alone.....			Total Minority.....		
		Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2020	15-19	281,853	352,281	634,134	109,100	217,040	326,140	172,753	135,241	307,994
2020	20-24	2,491,562	2,639,715	5,131,277	1,299,557	1,862,850	3,162,407	1,192,005	776,865	1,968,870
2020	25-29	6,080,216	3,311,613	9,391,829	3,443,376	2,239,067	5,682,443	2,636,840	1,072,546	3,709,386
2020	30-34	8,238,369	2,773,385	11,011,754	4,782,025	1,875,175	6,657,200	3,456,344	898,210	4,354,554
2020	35-39	8,710,516	2,395,616	11,106,132	5,269,015	1,633,368	6,902,383	3,441,501	762,248	4,203,749
2020	40-44	8,498,935	2,287,705	10,786,640	5,093,351	1,482,008	6,575,359	3,405,584	805,697	4,211,281
2020	45-49	8,454,579	2,689,136	11,143,715	5,071,805	1,686,195	6,758,000	3,382,774	1,002,941	4,385,715
2020	50-54	8,788,172	3,213,594	12,001,766	5,540,938	2,059,872	7,600,810	3,247,234	1,153,722	4,400,956
2020	55-59	9,138,343	3,762,937	12,901,280	6,175,320	2,547,338	8,722,658	2,963,023	1,215,599	4,178,622
2020	60-64	8,614,694	3,893,809	12,508,503	6,176,119	2,745,438	8,921,557	2,438,575	1,148,371	3,586,946
2020	65-69	7,452,300	3,923,343	11,375,643	5,530,292	2,849,727	8,380,019	1,922,008	1,073,616	2,995,624
2020	70-74	5,303,125	3,695,581	8,998,706	4,021,858	2,819,948	6,841,806	1,281,267	875,633	2,156,900
2020	75+	6,895,876	8,185,985	15,081,861	5,177,459	6,514,850	11,692,309	1,718,417	1,671,135	3,389,552
	Total	88,948,540	43,124,700	132,073,240	57,690,215	30,532,876	88,223,091	31,258,325	12,591,824	43,850,149
2025	15-19	297,940	366,347	664,287	110,321	219,468	329,789	187,619	146,879	334,498
2025	20-24	2,654,099	2,765,891	5,419,990	1,325,457	1,899,976	3,225,433	1,328,642	865,915	2,194,557
2025	25-29	5,811,877	3,136,898	8,948,775	3,174,105	2,063,973	5,238,078	2,637,772	1,072,925	3,710,697
2025	30-34	8,328,399	2,769,055	11,097,454	4,572,386	1,792,969	6,365,355	3,756,013	976,086	4,732,099
2025	35-39	9,056,384	2,478,348	11,534,732	5,338,227	1,654,824	6,993,051	3,718,157	823,524	4,541,681
2025	40-44	9,172,551	2,470,882	11,643,433	5,531,196	1,609,407	7,140,603	3,641,355	861,475	4,502,830
2025	45-49	8,643,148	2,744,086	11,387,234	5,045,180	1,677,343	6,722,523	3,597,968	1,066,743	4,664,711
2025	50-54	8,519,952	3,109,163	11,629,115	4,986,083	1,853,602	6,839,685	3,533,869	1,255,561	4,789,430
2025	55-59	8,486,449	3,493,637	11,980,086	5,348,945	2,206,456	7,555,401	3,137,504	1,287,181	4,424,685
2025	60-64	8,723,387	3,950,688	12,674,075	5,960,390	2,649,541	8,609,931	2,762,997	1,301,147	4,064,144
2025	65-69	8,306,623	4,381,828	12,688,451	5,962,954	3,072,675	9,035,629	2,343,669	1,309,153	3,652,822
2025	70-74	6,011,038	4,186,306	10,197,344	4,412,340	3,093,737	7,506,077	1,598,698	1,092,569	2,691,267
2025	75+	8,423,057	9,961,686	18,384,743	6,193,960	7,793,923	13,987,883	2,229,097	2,167,763	4,396,860
	Total	92,434,904	45,814,815	138,249,719	57,961,544	31,587,894	89,549,438	34,473,360	14,226,921	48,700,281

## Appendix C: Projected Annual Household Growth by Broad Family Type

Total, Non-Hispanic White Alone, and Total Minority

Comparison of results holding headship rates constant at 2000 Census and 2003 CPS levels.

### Annual Growth in Households

Year	Total..... 2000 Census Headship Held Constant			Total..... 2003 CPS Headship Held Constant			Total..... Previous Jt. Center Projections		
	Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2001	866,550	398,970	1,265,520	866,697	387,817	1,254,514	705,747	460,651	1,166,398
2002	841,424	412,521	1,253,945	838,427	400,915	1,239,342	685,020	494,456	1,179,476
2003	845,763	432,703	1,278,466	839,468	419,175	1,258,643	662,475	508,635	1,171,110
2004	864,936	436,158	1,301,094	859,272	421,427	1,280,699	649,361	496,163	1,145,524
2005	911,355	461,744	1,373,099	907,528	446,151	1,353,679	668,709	521,302	1,190,011
2006	907,255	461,628	1,368,883	905,254	448,025	1,353,279	742,719	414,567	1,157,286
2007	884,719	465,030	1,349,749	872,170	455,326	1,327,496	739,866	436,448	1,176,314
2008	879,997	473,683	1,353,680	863,854	465,887	1,329,741	723,338	445,278	1,168,616
2009	878,971	469,419	1,348,390	862,946	463,099	1,326,045	722,884	444,755	1,167,639
2010	901,069	484,803	1,385,872	883,101	481,009	1,364,110	755,323	471,491	1,226,814
2011	891,611	470,912	1,362,523	877,051	471,520	1,348,571	781,445	433,782	1,215,227
2012	864,806	481,765	1,346,571	844,272	485,033	1,329,305	776,441	466,517	1,242,958
2013	846,371	483,856	1,330,227	830,892	488,145	1,319,037	749,533	472,612	1,222,145
2014	841,470	473,410	1,314,880	823,830	474,543	1,298,373	746,340	461,668	1,208,008
2015	859,200	478,435	1,337,635	834,511	474,819	1,309,330	757,291	457,084	1,214,375
2016	837,747	468,715	1,306,462	823,830	466,302	1,290,132	743,576	451,320	1,194,896
2017	772,477	485,170	1,257,647	775,273	490,251	1,265,524	716,790	502,291	1,219,081
2018	749,369	490,643	1,240,012	746,866	495,591	1,242,457	684,932	510,158	1,195,090
2019	745,690	482,217	1,227,907	737,995	487,602	1,225,597	689,618	487,958	1,177,576
2020	752,786	489,753	1,242,539	737,849	495,519	1,233,368	687,507	477,032	1,164,539
2021	751,929	501,717	1,253,646	740,623	506,534	1,247,157	na	na	na
2022	691,540	542,985	1,234,525	682,238	542,199	1,224,437	na	na	na
2023	682,593	542,598	1,225,191	678,956	540,264	1,219,220	na	na	na
2024	680,701	540,602	1,221,303	683,900	537,306	1,221,206	na	na	na
2025	679,601	562,213	1,241,814	683,457	555,649	1,239,106	na	na	na
2000-05	866,006	428,419	1,294,425	862,278	415,097	1,277,375	674,262	496,241	1,170,504
2005-10	890,402	470,913	1,361,315	877,465	462,669	1,340,134	736,826	442,508	1,179,334
2010-15	860,692	477,676	1,338,367	842,111	478,812	1,320,923	762,210	458,333	1,220,543
2015-20	771,614	483,300	1,254,913	764,363	487,053	1,251,416	704,485	485,752	1,190,236
2020-25	697,273	538,023	1,235,296	693,835	536,390	1,230,225	na	na	na

## Appendix C: Projected Annual Household Growth by Broad Family Type (continued)

Total, Non-Hispanic White Alone, and Total Minority

Comparison of results holding headship rates constant at 2000 Census and 2003 CPS levels.

Year	Non-Hispanic White Alone 2000 Census Headship Held Constant			Non-Hispanic White Alone 2003 CPS Headship Held Constant			Non-Hispanic White Previous Jt. Center Projections		
	Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2001	271,773	167,716	439,489	254,779	156,420	411,199	185,817	242,155	427,972
2002	248,382	177,864	426,246	229,616	167,250	396,866	166,433	267,861	434,294
2003	249,814	192,133	441,947	228,491	181,167	409,658	146,043	277,316	423,359
2004	266,612	192,042	458,654	246,619	181,717	428,336	140,162	262,019	402,181
2005	295,669	207,319	502,988	279,298	197,885	477,183	155,795	279,314	435,109
2006	293,257	208,273	501,530	276,361	200,058	476,419	218,791	198,102	416,893
2007	276,751	210,005	486,756	249,885	205,268	455,153	217,679	213,510	431,189
2008	272,157	212,183	484,340	244,232	209,535	453,767	204,985	218,736	423,721
2009	271,127	204,147	475,274	245,653	202,285	447,938	203,285	213,103	416,388
2010	282,118	209,198	491,316	257,142	209,572	466,714	230,705	233,985	464,690
2011	272,765	197,780	470,545	249,692	201,937	451,629	247,638	200,763	448,401
2012	248,598	206,296	454,894	219,908	214,101	434,009	235,380	226,404	461,784
2013	227,429	202,456	429,885	206,034	213,051	419,085	215,221	232,381	447,602
2014	221,413	188,486	409,899	199,671	198,045	397,716	209,452	219,714	429,166
2015	229,200	183,808	413,008	203,962	191,892	395,854	219,563	212,041	431,604
2016	208,133	177,811	385,944	189,108	186,686	375,794	206,881	208,612	415,493
2017	150,801	194,925	345,726	146,547	211,061	357,608	173,523	253,406	426,929
2018	127,806	196,099	323,905	119,735	212,265	332,000	144,051	261,055	405,106
2019	124,327	184,224	308,551	111,723	200,261	311,984	146,204	236,770	382,974
2020	123,774	180,690	304,464	107,629	197,357	304,986	144,572	223,408	367,980
2021	113,502	188,970	302,472	98,223	203,175	301,398	na	na	na
2022	54,235	224,858	279,093	41,014	234,114	275,128	na	na	na
2023	41,865	217,545	259,410	31,598	225,503	257,101	na	na	na
2024	36,223	208,538	244,761	29,790	216,126	245,916	na	na	na
2025	25,504	215,107	240,611	21,211	221,877	243,088	na	na	na
2000-0!	266,450	187,415	453,865	247,761	176,888	424,648	158,850	265,733	424,583
2005-1!	279,082	208,761	487,843	254,655	205,344	459,998	215,089	215,487	430,576
2010-1!	239,881	195,765	435,646	215,853	203,805	419,659	225,451	218,261	443,711
2015-2!	146,968	186,750	333,718	134,948	201,526	336,474	163,046	236,650	399,696
2020-2!	54,266	211,004	265,269	44,367	220,159	264,526	na	na	na

## Appendix C: Projected Annual Household Growth by Broad Family Type (continued)

Total, Non-Hispanic White Alone, and Total Minority

Comparison of results holding headship rates constant at 2000 Census and 2003 CPS levels.

Year	Total Minority 2000 Census Headship Held Constant			Total Minority 2003 CPS Headship Held Constant			Total Minority Previous Jt. Center Projections		
	Family	Non-family	Total	Family	Non-family	Total	Family	Non-family	Total
2001	594,777	231,254	826,031	611,918	231,397	843,315	519,930	218,496	738,426
2002	593,042	234,657	827,699	608,811	233,665	842,476	518,587	226,595	745,182
2003	595,949	240,570	836,519	610,977	238,008	848,985	516,432	231,319	747,751
2004	598,324	244,116	842,440	612,653	239,710	852,363	509,199	234,144	743,343
2005	615,686	254,425	870,111	628,230	248,266	876,496	512,914	241,988	754,902
2006	613,998	253,355	867,353	628,893	247,967	876,860	523,928	216,465	740,393
2007	607,968	255,025	862,993	622,285	250,058	872,343	522,187	222,938	745,125
2008	607,840	261,500	869,340	619,622	256,352	875,974	518,353	226,542	744,895
2009	607,844	265,272	873,116	617,293	260,814	878,107	519,599	231,652	751,251
2010	618,951	275,605	894,556	625,959	271,437	897,396	524,618	237,506	762,124
2011	618,846	273,132	891,978	627,359	269,583	896,942	533,807	233,019	766,826
2012	616,208	275,469	891,677	624,364	270,932	895,296	541,061	240,113	781,174
2013	618,942	281,400	900,342	624,858	275,094	899,952	534,312	240,231	774,543
2014	620,057	284,924	904,981	624,159	276,498	900,657	536,888	241,954	778,842
2015	630,000	294,627	924,627	630,549	282,927	913,476	537,728	245,043	782,771
2016	629,614	290,904	920,518	634,722	279,616	914,338	536,695	242,708	779,403
2017	621,676	290,245	911,921	628,726	279,190	907,916	543,267	248,885	792,152
2018	621,563	294,544	916,107	627,131	283,326	910,457	540,881	249,103	789,984
2019	621,363	297,993	919,356	626,272	287,341	913,613	543,414	251,188	794,602
2020	629,012	309,063	938,075	630,220	298,162	928,382	542,935	253,624	796,559
2021	638,427	312,747	951,174	642,400	303,359	945,759	na	na	na
2022	637,305	318,127	955,432	641,224	308,085	949,309	na	na	na
2023	640,728	325,053	965,781	647,358	314,761	962,119	na	na	na
2024	644,478	332,064	976,542	654,110	321,180	975,290	na	na	na
2025	654,097	347,106	1,001,203	662,246	333,772	996,018	na	na	na
2000-05	599,556	241,004	840,560	614,518	238,209	852,727	515,412	230,508	745,921
2005-10	611,320	262,151	873,472	622,810	257,326	880,136	521,737	227,021	748,758
2010-15	620,811	281,910	902,721	626,258	275,007	901,265	536,759	240,072	776,831
2015-20	624,646	296,550	921,195	629,414	285,527	914,941	541,438	249,102	790,540
2020-25	643,007	327,019	970,026	649,468	316,231	965,699	na	na	na