

**Joint Center for Housing Studies
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Updated 2010-2020 Household and New Home Demand Projections

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Given the prolonged period of high unemployment and the possibility that it will influence headship rates and household growth, this working paper explores a variety of alternative headship rate assumptions to arrive at a new set of low and high household growth projections, and incorporates revisions to programming used to project household growth. A low headship scenario is also presented to explore what would happen if headship rates by each age fell to three-year average lows they experienced at any time since 1980. Because household growth is the cornerstone of new home demand, updated new home demand projections are also presented.

In our new household projections, headship rates by age and race are averaged over 2007-2009. The projections assume that these three-year averages by age and race/ethnicity are maintained over the entire projection period (2005-2025). These are picked because they incorporate recent downward trends in headship rates that coincide with the bursting of the housing bubble and the Great Recession but are in line with the relatively stable headship rate by age trends observed over most of the past decade.¹ By averaging across three years, the new headship assumptions do not give undue weight to any one year. This is important because in any given year headship rates by age—and especially by age and race/ethnicity—can deviate materially from the year before and the year after because of sampling variability.

This preferred set of headship rates is applied to baseline population growth by age and race as projected by the US Bureau of the Census for 2010-2020 (which we view as based on a high immigration assumption) as well as to projections that assume that immigration is half as great as projected by the Census Bureau (which we view as a low immigration assumption). These household projections are built up from 5-year age groups by race and ethnicity, and are allocated with full detail to household types.

Under the new household projections, total household growth for 2010-2020 is 11.8 million in the low immigration series and 13.8 million in the high immigration series. These new

¹ Holding age specific headship rates constant from other individual years in the 2000s does not yield results materially different from using the 2007-2009 average with the exception of using 2009. Using 2009 results in household growth estimates that are about one million lower than the 2007-2009 average. But most of the falloff comes from the 55-64 year age group—a group that has not experienced a large upward shift in unemployment, further underscoring the value of averaging headship rates across three years.

projections are 6.0 and 6.8 percent lower, respectively, than the 2009 low and high immigration series for 2010-2020. The new projections incorporate a change in headship rate assumptions from holding 2008 headship rates constant by age and race/ethnicity, to averaging them for 2007-2009. The projections also include a revision that addresses a programming issue found in the calculation of “Asian/Other” households, reducing the projected number of households in this category.

So far, there is little evidence that the recent downward shift in age-specific headship rates as measured 2007-2009 in the Current Population Survey (CPS) is large enough to have been the primary reason that household growth slowed as much as it did in recent years (from well over 1 million annually to well below 1 million annually as measured by various surveys). Instead, the sharp slowdown in household growth appears to have been driven by reductions in the rate of growth of the adult population resulting from a reduction in immigration. Thus, barring a worsening economic downturn that is dramatic and prolonged, future household growth is likely to be more sensitive to assumptions about immigration levels than headship rates.

Still, given the magnitude of sustained job losses that have occurred in the wake of the Great Recession, it is possible that headship rates may yet experience a significant decline. Perhaps the most relevant benchmark for the current situation would be the change in headship rates that resulted from the Great Depression. But there are no annual estimates of household growth and headship rates from the 1930s that can be used to examine the impact of the Great Depression and, even if there were, the unemployment rate in the Great Depression topped 25 percent², so it constitutes an event of much worse magnitude than has so far been experienced this downturn. Similarly, though unemployment rates in the early 1980s reached levels comparable to those of today, the rebound in employment was relatively swift, aided in part by sharp reductions in interest rates, and by the fact that smaller cohorts of young adults from the baby bust generation were beginning to enter the job market in the mid-1980s so fewer jobs were needed to reduce the unemployment rate. This time most economists believe employment will be much slower to

² Haugen, Steven E, 2009, “Measures of Labor Underutilization from the Current Population Survey” BLS Working Papers, U.S. Bureau of Labor Statistics, Office of Employment and Unemployment Statistics. (Accessed on 9/07/2010: <http://www.bls.gov/ore/pdf/ec090020.pdf>)

recover because this crisis was driven far more than was the 1980s contraction by a financial crisis and a great deleveraging. In addition, companies and businesses today, much more than in the 1980s, can expand productivity and increase their contribution to national GDP by hiring temporary workers, by out-sourcing jobs to other countries, and by reducing costs through adopting new technologies that impact production, marketing and sales - without increasing the permanent payroll. Furthermore, young cohorts now entering the job market are from the larger echo-boom generation born after 1985, requiring more jobs to be created to simply keep pace with young adult population growth.

As a test of the sensitivity of our new preferred projections to a potential across-the-board falloff in headship rates in response to sustained job losses, we present a low headship rate scenario. Our low headship rate scenario takes the lowest 3-year rolling average that each rate reached for each age group since 1980. This exercise shows that that one would need to apply the lowest three-year rolling average plumbed by each ten-year age group since 1980-1982 to reduce household growth for the coming decade to 1.0 million per year on average even under our low immigration assumptions.³ This is about 0.18 million per year less on average than our new low immigration series using 2007-2009 headship rate averages by age and race/ethnicity held constant. However, this scenario reveals that the specific years in which each ten-year age group reached its three-year rolling average low point did not line up that well with periods of economic turmoil, leaving open the question as to what an extended period of high unemployment might actually do to age-specific headship rates. Thus, we view this more as a sensitivity analysis than a projection of what might actually happen if the economy worsens further or takes many years to recover.

New home demand projections for years 2010 through 2019 are driven off our new preferred household projections and range from a low of 16.4 million completions (single-family,

³ Focusing on ten-year age groups rather than five-year age groups by race simplifies the analysis and comparisons and avoids larger random sampling variability by race in picking low points. Moving to age groups undivided by race and ethnicity, however, results in higher overall household growth estimates than would otherwise be the case because the minority population share is increasing and minorities on average have lower headship rates than non-Hispanic whites. Thus, controlling for race as well would lead to a low headship rate annual average estimate of somewhat lower than 1.0 million.

multifamily, and manufactured home placements) in the low immigration case to a high of 18.7 in the high immigration case. This compares with housing completions and placements of 17.4 million in the 1980s, 16.1 million in the 1990s, and 17.0 million in the 2000s. The lowest 10-year completion figure in records spanning back to 1974-1983 and forward to 2000-2009 was set at 15.7 million in the 1988-1997 period—a time when the baby bust generation was forming households and construction was expected to be lower.

These new home demand projections are *not* forecasts of the construction that will occur 2010-2020. To do so requires estimating whether we entered 2010 with a large *long-run* oversupply and predicting whether and by how much markets will be oversupplied or undersupplied in a *short-run* sense exiting the period at the end of 2019. Obviously there is no way to predict how close to balance housing supply and demand will be ten years from now. As we have seen, new additions to the housing stock are strongly cyclical, and it is impossible to predict where in such a cycle we will be in ten years.

As for assessing whether markets in a long-run sense are or are not in balance now, even that is challenging, and far too little work has been done to reliably estimate how close to long-run demand-supply balance housing markets are in at any given point in time. With vacancy rates well above those observed in past periods when markets appeared to be closer to balance (as evidenced by rents and prices nationally changing in line with fundamentals like income growth and construction cost changes), many deduce that housing markets in 2010 are way out of long-run balance. While such elevated vacancy rates clearly show a market that is oversupplied in the short run, it is more difficult to assess what it suggests about where markets may be in a long-run sense.

With household growth well below what most demographers believe would have occurred absent a severe housing and economic downturn, it is likely that part of the reason for elevated vacancies is that demand has been well below trend growth. Indeed, according to the Housing Vacancy Survey (HVS) used to estimate vacancy rates, household growth may have been off by

more than 3 million in 2005-2010 from its pace from 2000-2005.⁴ This suggests demand is being pent up, and when the economy improves and unemployment falls, at least some of the slowdown in net immigration may be made up, and people now doubling up—with their parents, their adult children, their siblings and roommates they would otherwise have split from if not for the economy—will strike out on their own. The new household projections presented here do not take into account any pent-up demand that may have developed in and around the recession (or may occur while unemployment remains so elevated) that could lift household growth above trend if pent-up demand gets released at some point in the coming years. Furthermore, as a result of the sharp inventory correction—annual starts and placements are at lows not seen since World War II—total new housing over the last decade has been no higher than the average rate of additions to the housing stock over the last several decades. Total completions plus placements 2000-2009 were 17.0 million – slightly less than 17.3 million average for all 27 ten-year periods from 1974-1983 to 2000-2009.

For both these reasons, markets may be closer to long-run balance than today's high vacancy rates would suggest. Thus, it is possible that housing markets nationally may not be that far out of long-run balance and that a surge in pent-up demand at some point in the coming years will absorb much of what today is showing up as excess vacancies.

Finally, it is important to underscore that the datasets used here to make household growth and new home demand projections vary in the amount of measurement error they are likely to introduce into the analysis. The household projections rely on headship rates 2007-2009 as measured by the CPS and on Census Bureau population projections released in 2008. This far from a re-benchmark to a decennial census, both these headship rate estimates and population projections are subject to the potential for increasing measurement error. When the 2010 Census results are released, we will gain a much more accurate picture of headship rate changes and population changes over the past decade. As for new home demand projections, these are built up from the sum of expected household growth, expected demand for additional vacant units to

⁴ Adjusting for the HVS revision in 2003 by excluding the 2002-3 period and taking the average growth of the other four years, the pace of annual household growth 2000-5 averaged 1.37 million. Using a combination of annual data and the most recent change in the 4 quarter rolling average occupied households from Q2:2009 to Q2:2010, household growth 2005-2010 averaged just 718,000 per year, a decline of 650,000 per year accumulated over five years to total 3.25 million fewer new households 2005-2010.

accommodate mobility of a larger number of households and for second homes as the baby boomers reach peak second-home buying ages, and expected demand to replace units lost from the housing stock. Vacancy rates and the number of vacant units are estimated by the HVS. Like the CPS, the HVS is subject to increasing measurement error this far out from a Census re-benchmark. Net removals are typically calculated as a residual based on the difference between how many new homes were built as well as manufactured homes placed over a period and how much the estimated size of the housing stock increased. These estimates of the total size of the housing stock are also subject to increasing measurement error between decennial censuses yet serve as the control totals for the HVS and as an important element of estimating net removals. Assumptions about normal net removals and natural vacancy rates must also be made to arrive at expected replacement demand and demand for additional vacant units. In contrast to the measurement issues and assumptions that feed into new home demand projections, estimates of the number of homes built and manufactured homes placed are subject to far less measurement error. Completions and placement are based on following a sample drawn from a near complete universe of housing permits issued and manufactured homes produced that are followed through to completion and placement. Thus, they are subject mostly only to sampling error with known characteristics and are the most reliable estimates of all those discussed in this report.

Choosing Headship Rate and Immigration Assumptions

To project household growth, two key sets of assumptions must be made. One is the rate at which individuals form independent households and the other is the rate of net immigration. The greatest uncertainty surrounds future rates of net immigration, which have an immediate and direct effect on growth in the number of households moving forward.⁵

Net immigration is the difference between the number of people who immigrate to the country and the number who emigrate away from it. During the 1990s and early 2000s immigration

⁵ The number of people living in the country and their ages, on the other hand, are known with some precision, especially after decennial censuses. Furthermore, mortality rates by age moving forward are reliable estimates. Thus, the component of population projections that deal with the size of the adult age population is reliable. Predictions about future fertility rate trends are unimportant to household projections because they do not affect projections of the size of the household formation population for another 20-to-30 years.

increased and the foreign born accounted for about a third of net household growth, raising the share of foreign-born households from 9.9 percent in 1995 to 11.2 percent in 2000 to 12.8 percent in 2005. We view immigration as the key wildcard in making household projections but acknowledge the possibility that headship rate assumptions may also turn out to be important drivers because of the depth of the recent downturn and the possibility of a very slow recovery or even a second economic dip.

While headship rates moving forward are uncertain, we do know that headship rates rise predictably with age and reflect the ways that people come together in households. As a result, they are heavily influenced by average age of first marriage, divorce rates and remarriage rates, as well as tastes for living with roommates, as adult children with parents, adult siblings, and in multigenerational households. While influenced by economic factors, these are also deeply personal decisions and reflect tastes and preferences. The last big changes in headship patterns by age occurred 1960-1980. They carried forward to a lesser degree 1980-2000 as the influences of increases in both age at first marriage and divorce rates together with the decline in remarriage rates during the 1960s and 1970s worked their way through adult ages. During the 1980s, for example, older age groups which started out with higher headship rates, because as young people in the 1960s and 1970s they began marrying later and divorcing more, carried higher headship rates into middle age. Similarly, middle-aged people divorcing more and remarrying less during the 1960s, 1970s and 1980s carried these higher headship rates into older age groups as they aged.

What appeared to have been behind these large headship rate changes was the increase in female labor force participation. This created greater economic independence for women. When age at first marriage and divorce started to move up and remarriage rates went down, headship rates increased compared to previous age cohorts. With these changes, it became important to use a technique called cohort smoothing to project household growth. This takes the higher headship starting point that each age group is on than the generation ahead of it and carries it through as the age groups age. This was done to project household growth in the 1980s and 1990s.

Relative stability in the underlying factors that drove big headship rate changes has now caused us to shift to holding headship rates by age and race/ethnicity constant when projecting household growth. As expected, given the severe economic recession, headship rates in some age groups fell in 2008 and 2009.. This is not to say that the Great Recession has not, and in and of itself might not have, a lasting negative impact of headship rates, especially among the young where the unemployment rate is highest. But so far, headship rates for all ages have not been significantly affected.

We use the CPS to estimate the numerators of our headship rates—the number of people who head a household—and divide by Census resident population estimates for July 1.⁶ We have chosen the CPS for several reasons. First, the CPS total households for 2000 were close to the 2000 census number (104.7 million in the former compared to 105.5 million in the latter), and these totals are even closer when the census is adjusted for the known household over count. Second, the March CPS numbers we use are part of a monthly data collection effort designed to measure changing household characteristics, particularly labor force participation and income, and to achieve robust estimates of these variables. In addition, population groups with low numbers—particularly among minorities and among non-traditional households—are oversampled. Our attention to different race/Hispanic origin populations in our projections requires this robustness. Third, the CPS has a long historical series, which enables us to compare and contrast current trends with historical levels and trends. Fourth, the CPS releases a timely public use micro-data file enabling us to generate custom tabulations during the current year. And fifth, there have been few fundamental changes in the CPS methodology since its inception, allowing us to attribute trends in the data to trends in the underlying household concept being measured.⁷

⁶ In calculating CPS headship rates we use July 1 resident population estimates in the denominator taken from the Census Bureau’s monthly population estimates series. The reason we use this “external” population number for the denominator of the headship rates is to produce rates that, when multiplied by resident population projections by age and race/Hispanic origin (that are July 1 numbers), produce consistent household projections. Internal CPS population numbers do not represent the entire resident population of the United States and are not July 1 numbers.

⁷ With other data sources, many of these advantages are not present. For example, the HVS, although more timely than the CPS (quarterly data are released within 2 months after the end of a quarter), does not release household data broken down by age and race/Hispanic origin, does not have a public use micro-data file to allow for custom tabulations, and has recently changed the method by which occupied housing units (households) are estimated, creating a dramatic break in the series. While the HVS formerly tracked CPS household growth quite closely, total household numbers no longer do. Another possible source of data on headship rates is the American Community

In order to minimize random variation in headship rates that normally occur for any given year when the CPS data are broken down by race/Hispanic origin, 5-year age groups, and partner/non-partner categories—as we do in our projection model—in this update to our projections we have averaged headship rates for 2007, 2008 and 2009 to produce a current preferred headship assumption.⁸ We assume that headship rates have likely bottomed out in 2009, or are close to doing so, and that a preferred set of rates that are consistent with the continued, albeit slow, economic recovery would more closely reflect the average for the years 2007, 2008 and 2009 than other possible periods.

While it is possible that a protracted economic downturn or jobless recovery could depress headship rates to levels as low—or even lower—than the lows of each age group over the last 30 years, there is scant evidence in the trends through 2009 that such declines are starting to take place. While the observed drop in headship rates among households under 35 may persist because of high unemployment and anxiety about the future among this group, their lower headship rates mean they are living in ways they would not have and did not just before the recession—living with unrelated roommates, siblings, grandparents, or parents. This creates pressure to move out at the first opportunity.⁹ As for the other age group that has shown a meaningful decline in headship rates – 55-64 year olds – it is not clear why they rose steadily through 2008 or fell off so much from 2008 to 2009. It is therefore difficult to know whether it is more of a measurement or sampling error than a trend that will persist. This underscores the value of averaging headship rates over a three-year period.

Survey, but it has only reached its first full sample in 2005, changed the definition of the population sampled in 2006, has a different definition of what constitutes a household, and is less timely (2009 ACS data have still not been released as of this writing). Still, the ACS probably represents the survey of choice for the future when looking at changing household numbers and characteristics because it is a larger sample and will have less sampling variability, so will produce more accurate short-term trends, and will allow greater attention to geographic and other sub-population differences.

⁸ Starting in 2009, Census Bureau annual population estimates no longer provide a full age and race/Hispanic origin breakdown that includes non-Hispanic blacks and non-Hispanic Asian/others. That full breakdown is still provided in the Census Bureau’s monthly population estimates series, however. Our updated household projections recalculate headship rates using the July resident population estimates from the monthly series.

⁹ A recent study finds a strong association for young adults between moving back home and labor market conditions, but that on average about half of boomerang kids have moved back out again after 1 year. See Greg Kaplan “Boomerang Kids: Labor Market Dynamics and Moving Back Home”, Federal Reserve Bank of Minneapolis Research Department, Working Paper 675, October 2009

In fact, headship rates 2001-2008 changed relatively little by age. Even in 2009 some age groups registered higher headship rates while others registered lower rates than in 2001 (Table 1).

Holding age-specific headship rates by ten-year age groups constant (but not controlling for race/ethnicity) for a number of different years in the 2000s, therefore, produces relatively small differences in household growth (Table 2). For example, using either 2001 or 2005 headship rates by age held constant produces household growth under low immigration assumptions of 13.4 million 2010-2020, while holding 2008 age-specific rates constant produces a projection of 12.4 million and 2009 rates produce 11.5 million. Using 2007-2009 average rates results in slightly fewer than 12.4 million additional households. Note that this figure is higher than our new low immigration projection of 11.8 million because race and ethnicity are not controlled for and ten rather than five year age groups are used in these sensitivity tests.

Table 1: Headship Rates by Age of Head of Household

Age of Household Head	CPS Headship Rates					Average
	2001	2005	2007	2008	2009	2007-08-09
15-24	0.1595	0.1596	0.1557	0.1526	0.1476	0.1520
25-34	0.4808	0.4863	0.4814	0.4694	0.4644	0.4717
35-44	0.5338	0.5339	0.5316	0.5314	0.5339	0.5323
45-54	0.5584	0.5524	0.5518	0.5547	0.5524	0.5530
55-64	0.5704	0.5777	0.5898	0.5921	0.5716	0.5845
65-74	0.6264	0.6176	0.6151	0.6100	0.6177	0.6142
75+	0.6467	0.6444	0.6388	0.6339	0.6386	0.6371
All Ages 15+	0.4820	0.4827	0.4828	0.4810	0.4780	0.4806

Table 2: Testing the Impact of Alternative Headship Rate Assumptions on Household Growth 2010-2020 under Low Immigration Assumptions, by 10-Year Age Group (Not Controlling for Race / Ethnicity)

Age of Household Head	Household Growth 2010-2020					Holding Constant Headship Average of 2007-08-09
	Reverting in 2020 to Headship Rates From:					
	2001	2005	2007	2008	2009	
15-24	161,778	162,986	2,914	-128,661	-336,699	-154,149
25-34	1,554,931	1,796,854	1,581,336	1,060,055	841,625	1,161,005
35-44	854,124	859,465	761,958	755,134	858,350	791,814
45-54	-1,876,494	-2,118,381	-2,144,583	-2,027,097	-2,120,358	-2,097,346
55-64	3,153,690	3,467,281	3,979,042	4,079,771	3,204,574	3,754,462
65-74	6,957,406	6,674,685	6,593,709	6,429,450	6,676,505	6,566,554
75+	2,564,265	2,512,708	2,387,183	2,277,847	2,383,407	2,349,479
Total	13,369,701	13,355,599	13,161,559	12,446,497	11,507,404	12,371,820
All Ages 15+	9,945,030	10,143,964	10,167,371	9,682,644	8,905,216	9,585,077

Notes: Households based on population growth under low immigration assumptions. Base year 2010 households calculated by applying the 2007-8-9 headship rate for each 10-year age group to the JCHS projection of the population in 2010 under low-immigration assumptions.

Sources: JCHS tabulations of JCHS low-immigration assumption population projections and Current Population Survey data.

Most of the difference in household growth using the most recent 2009 headship rate assumptions by ten-year age groups relative to using 2008 rates is the result of 426,000 fewer additional households headed by people under 35 years of age and an 875,000 fewer additional households headed by people 55-64 years of age. Some age groups show slightly higher growth under 2009 rates than 2008 rates that partially offset these differences. The finding that so much of the difference is from the 55-64 age group is perplexing because it was an age group far less affected by unemployment than others. Furthermore, even though the biggest drop in headship rates 2008-09 was among 55-64 year olds, headship rates that year went up for 65-74 year olds. In addition, while the slowdown in household growth among young adults under age 35 by holding 2009 instead of 2008 headship rates by ten-year age groups constant is consistent with more of these young adults living in their parental homes, direct evidence of doubling up from children moving back in with their parents is weak – the average number of children living at home with parents went up slightly for 45-54 year old parents but down slightly for 55-64 year olds 2008-2009.

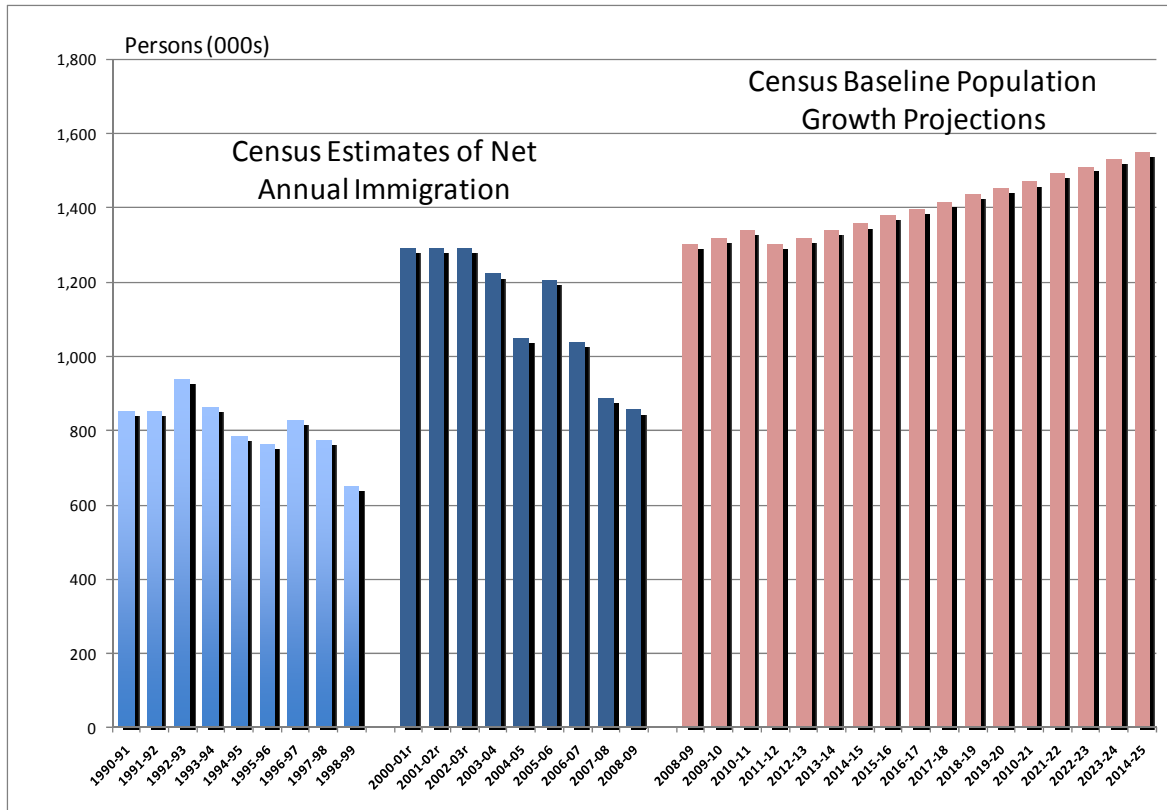
It is also worth noting that it is important to control for the effects of changes in the age distribution of the adult population in making projections. In Table 2, total household growth obtained by summing over the projected growth for each age group is presented as the total, while the growth obtained by simply multiplying a single total headship rate for the entire

population aged 15 or older is presented in italics. If, instead of using headship rates by ten-year age groups, the headship rate for the entire population 15 years of age or older is used, household growth projections are reduced significantly. The aging U.S. population gives increasing weight to age groups with higher headship rates, explaining the higher household growth if changing age structure is taken into account. It is critically important to take age effects into account. During the 1970s, for example, the aging of the baby boomers into household formation age groups drove the headship rate for the entire population age 15 or older in 1980 to its lowest level since then because the age distribution in that year was so heavily skewed to young adults who predictably have much lower headship rates. Yet, the age-specific headship rates in 1980 were higher than in 2009 for all but a couple of the older ten-year age groups (Appendix Table A-1).

Turning to immigration assumptions used in the new projections, we chose to use the Census Bureau's 2008 baseline population projections to create a "high" immigration series and half that to create a "low" immigration series. The Census Bureau's 2008 baseline population projections assume that immigration in 2010 is 1.3 million people and rises to 1.6 million by 2025 (Figure 1). In 2009 the Census Bureau released a "low" immigration series, going from 1.15 million in 2010 to 1.35 million in 2025, but we felt that even this assumption is still too high to constitute a "low" series. They also released a "high" immigration series at that time, going from 1.6 million annually in 2010 to 1.8 million in 2025. These numbers compare to Census Bureau estimates of 812,000 annually for the 1990s and 1.28 million on average for the first half of the 2000-2010 decade. Estimates for the 2005-2009 period have fallen below 1 million, with 2009 being 855,000. But just as it has been shown that the Census Bureau continually underestimated immigration when immigration was on the upswing (largely underestimating levels of illegal immigration), they are likely overestimating current levels of immigration when it is on a downward trajectory, missing the illegal immigrants who have returned home.¹⁰

¹⁰ See Tammany Mulder, "Accuracy of the U.S. Census Bureau National Population Projections and Their Respective Components of Change" Population Division Working Paper #50, Population Division, US Census Bureau 9/18/2001.

Figure 1: U.S. Census Bureau Immigration Estimates vs. Baseline Population Projections



Source: US Census Bureau.

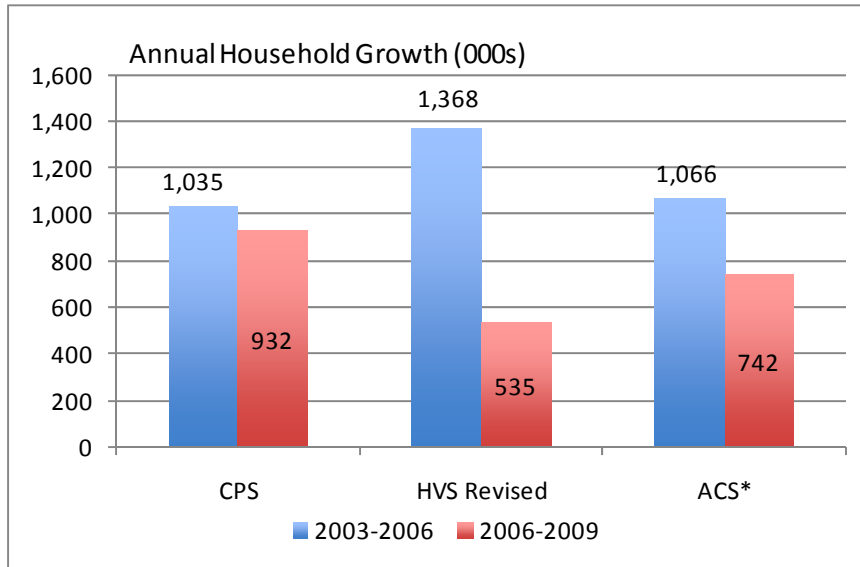
As a result, we produce a low immigration set of population projections by reducing annual immigration in the Census Bureau’s baseline series by half. Our low assumption is more likely to reflect actual trends during a slow economic recovery and is roughly in line with, but lower than, estimated immigration levels of the 1990s, especially if popular sentiment and political pressure stemming from high unemployment causes a sharp reduction in illegal immigration, and deters net legal immigration among a growing number of foreign born. If the economy enters a period of vigorous growth and unemployment falls, there will be a growing incentive for immigration to rebound and for Americans to once again recognize the importance of immigrant labor to the economy. Perhaps under such conditions, immigration levels reflected in the Census Bureau’s baseline population projections will become a reality.

Recent Household Growth Trends

Current interest in the impact of headship rate assumptions on household growth projections has been driven in part by a recent dramatic slowdown in household growth. A close examination of what has been driving the slowdown reveals that it is associated more with a falloff in immigration than a reduction in headship rates.

While household growth has slowed according to several Census Bureau data sources, it is difficult to pin down by exactly how much. Figure 2 shows growth estimates from three data series for two three-year periods, 2003-2006 and 2006-2009. Picking 2003 avoids problems with data revisions in 2002-2003 that produced implausible single year reductions in HVS household counts (when controlled to 2000 housing unit totals) relative to a modest increase in Current Population Household Surveys (controlled to 2000 population counts from the Census). Household growth was clearly lower 2006-2009 than 2003-2006, as one would expect in and around recessions. But the three key federal data sets range in their estimates of the falloff. The highest estimated decline is from the HVS, which shows growth falling by about 800,000 from an annual average of 1.37 million from 2003-06 to just 535,000 from 2006-09. The other two data sources—the CPS and the American Community Survey (ACS)—each show a drop of about 100,000 and 325,000, respectively.

Figure 2: Annual Household Growth Estimates Vary Widely but Each Shows Recent Declines



Notes: ACS data are for 2006-8.

Sources: US Census Bureau, American Community Survey, Housing Vacancy Survey, and Current Population Survey.

Within the CPS, our sensitivity analysis of headship rates in the 2000s has demonstrated that this recent falloff in total annual household growth, which is well below what is projected even under historically low headship rates, is not explained entirely or even mostly by increasing doubling up.¹¹ A slowdown, or possibly even a loss of net immigration, with its attending impact on adult age population growth, is therefore a more likely explanation. Indeed, while the number of native-born households under the age of 35 declined by only 2,000 households between March 2007 and March 2009 according to the CPS, the falloff in foreign-born households under the age of 35 was a much sharper 338,000.

A recent analysis by Gary Painter suggests that falling rates of household formation lay behind the recent sharp drop in household growth.¹² To reach this conclusion the author observes that headship rates have declined sharply between 2005 and 2008 for both native born and immigrants as measured in the ACS. But the decline in headship occurred between 2005 and

¹¹ The 2006-09 CPS average is made up of annual growth estimates that fall from 1.626 million in 2006-07, to 773,000 in 2007-08, to 397,000 in 2008-09.

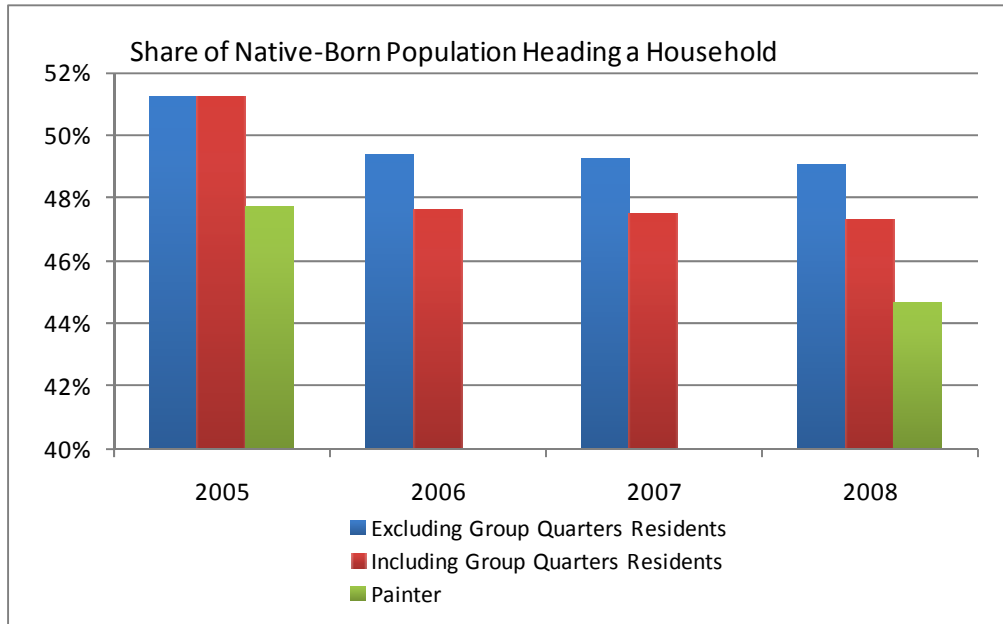
¹² Gary Painter, "What Happens to Household Formation in a Recession?," Research Institute for Housing America, April 2010.

2006, well before the Great Recession. The ACS began to include group quarters population in its sample beginning in 2006, raising the denominator of ACS headship rates, and this may explain part of Painter’s findings. But even excluding the group quarters population from the denominator of ACS headship rates results in most of the decline occurring between 2005 and 2006 for native born population, and in all of the decline over this period for the foreign born. In fact, foreign-born headship rates as measured by the ACS actually increased between 2006 and 2008 (see Figures 3a and 3b).

Painter calculated headship rates on a sub-sample of the national population that is more urban and more minority, including “established immigrant gateways”, “emerging immigrant gateways”, and “small metros”, which is an important factor in explaining why he came up with lower headship rates in his sample than in our national estimates using the ACS. In his conclusion Painter mentions the finding that the biggest declines in headship rates were among native-born Americans, which he found surprising since the foreign-born—with lower income and education—should have been hardest hit. But our finding of slightly rising foreign-born headship rates 2006-2008 is consistent with the growing loss of undocumented immigrants (who have lower headship rates) as the construction downturn accelerated and the nation fell into recession, leaving behind a foreign-born population with higher headship. The ACS headship rate trends in Figures 3a and 3b provides further confirmation of our findings from the CPS that headship rates have likely not fallen dramatically during the recent recession since they have changed little since 2006.

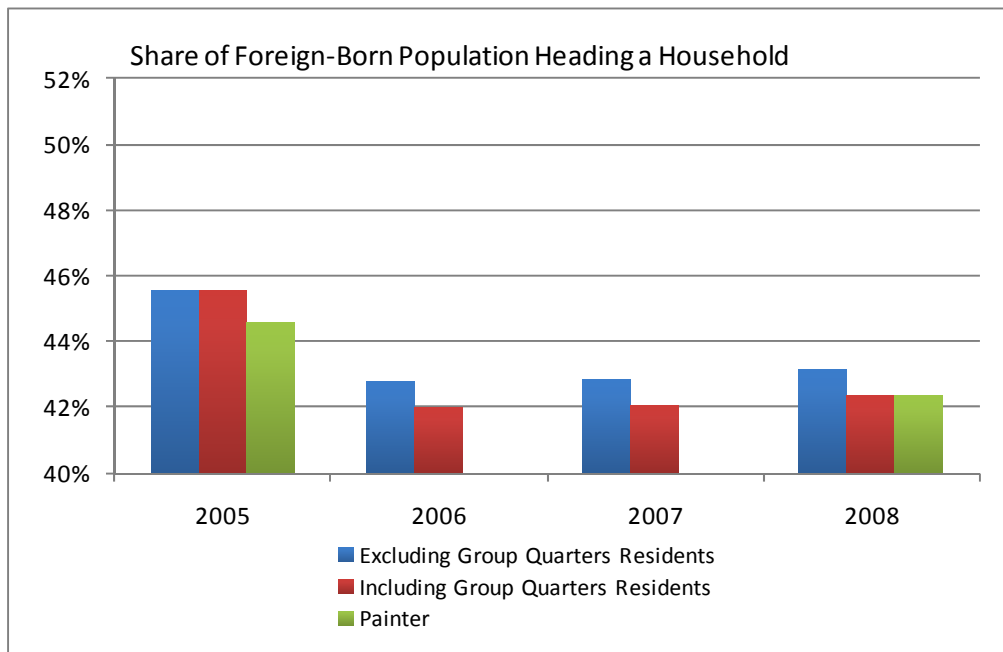
For all these reasons, we have selected the average of headship rates 2007-2009, though further broken down into five year-age groups by race/ethnicity, and held them constant in our new preferred household growth projections.

Figure 3a: Native-Born Headship Rate Trends from ACS Reveal a Drop Off Occurred 2005-2006 in This Dataset



Source: US Census Bureau, American Community Survey

Figure 3b: Foreign-Born Headship Rate from ACS Also Reveal an Unusual Drop 2005-2006



Source: US Census Bureau, American Community Survey

New Household Growth Projections

Our new updated projections by 5-year age groups, race/ethnicity, and household type are presented in Appendices B and C, and summarized in Table 3. Headship rates vary systematically by race and ethnicity as well as age so we control for them just as we control for age effects. Specifically, we calculate average headship rates 2007-2009 by five-year age groups for non-Hispanic whites, non-Hispanic blacks, non-Hispanic Asian/others and Hispanics. Total household growth 2010-20 under the low immigration series is 11.8 million. This number is lower than the projected growth obtained without controlling for race/Hispanic origin reported earlier in Table 2. The difference reflects the effect of changing racial and ethnic composition within the age groups on expected household growth.

Of the projected 11.8 million household growth from 2010-20, 3.4 million are non-Hispanic whites and the remaining 8.4 million are minority. Under these assumptions, minorities will therefore account for 71 percent of total household growth over the next decade. In the high immigration series, non-Hispanic white household growth is 3.8 million of the projected 13.8 million, making the 10 million projected minority growth 73 percent of the total.

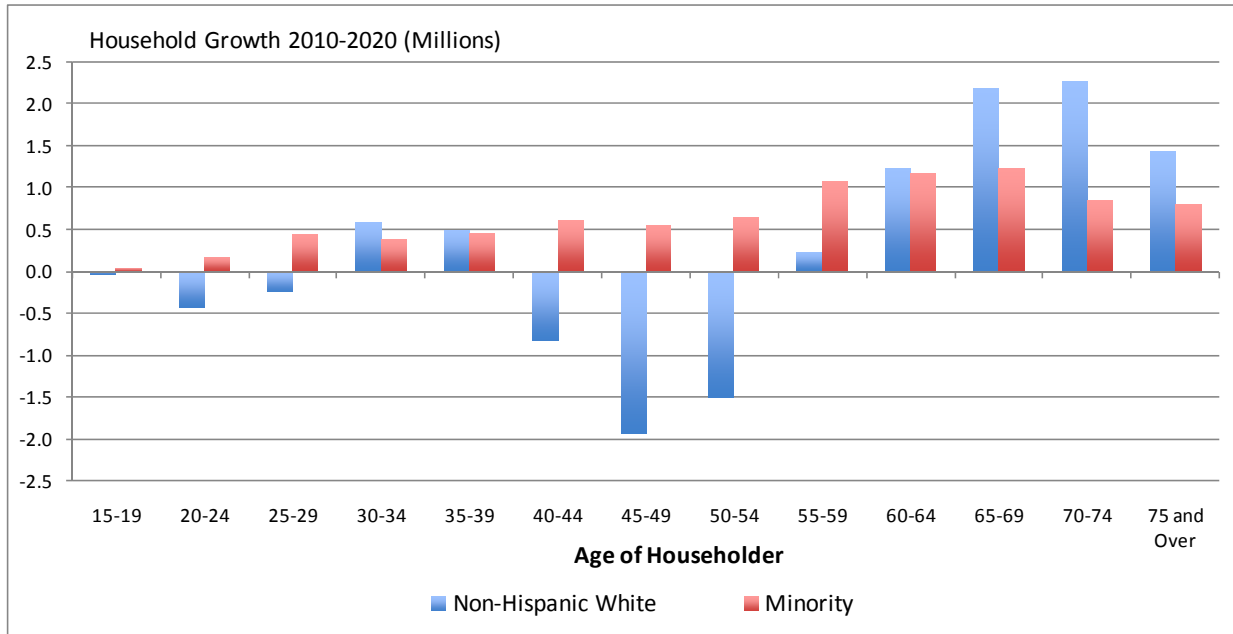
Table 3: New 2010 JCHS Household Growth Projections

	Household Growth 2010-20	
Age	Low Immigration Assumptions	High Immigration Assumptions
15-19	10,376	56,123
20-24	-267,455	-41,955
25-29	192,187	590,552
30-34	970,194	1,358,389
35-39	941,085	1,206,328
40-44	-222,297	-28,580
45-49	-1,403,257	-1,266,781
50-54	-865,347	-769,603
55-59	1,308,260	1,395,690
60-64	2,393,452	2,472,387
65-69	3,410,487	3,474,521
70-74	3,110,759	3,138,008
75+	2,223,705	2,243,040
Total	11,802,149	13,828,120

Note: Produced by holding 2007-2009 average headship rates by five-year age groups by race/ethnicity constant. High series uses US Census Bureau baseline population projections and low series uses a Joint Center for Housing Studies modification of US Census Bureau projections that reduces its baseline immigration assumptions by half.

Unlike non-Hispanic whites, minorities will register an increase in the number of households in every five-year age group in the next decade (Figure 4). Under the low immigration scenario, growth in minority householders under age 30 will almost completely counteract a decline among non-Hispanic whites in this age range, and will counteract 42 percent of the decline in non-Hispanic white households aged 40-54, as the baby bust generation replaces baby boomers in this age range. In age groups where the number of both non-Hispanic white and minority-headed households are projected to grow, minorities will constitute 44 percent of the growth in householders in their 30s and 61 percent of the increase of householders aged 55-64. Among householders aged 65 and older a much smaller 33 percent of the growth will be from minorities.

Figure 4: While Each Age Group Will See Growth in Minority Householders, the Number of Middle-Aged White Householders Will Fall and Older White Householders Grow from 2010-2020



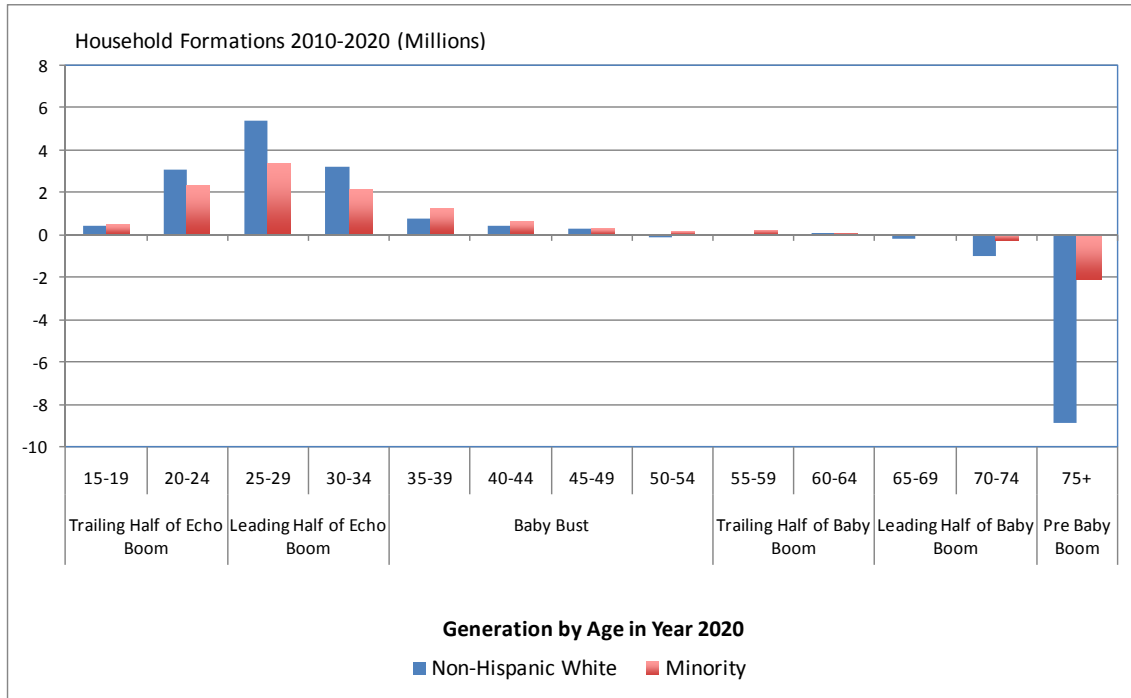
Note: Uses JCHS low-immigration population growth assumption.

The aging of the echo baby boom generation will only cause modest increases in the number of households headed by a person under 40 years of age but will be reversing declines when the baby bust passed through the 25-39 age range during the 2000s. As the baby bust moves into the 40-54 age ranges over the course of the 2010s, the number of households in this age range will decline while the aging of the leading edge of baby boom into the 65-74 age range will drive explosive growth in this age range. All these shifts are reflected in Figure 4.

But it is also important to recognize that, while the echo baby boom will only drive modest increases in the number of households with heads under the age of 35 (the size of the 15-34 age groups are roughly similar in both 2010 and 2020), they will be creating millions of new households as they reach young adulthood and as many strike out on their own. This is reflected in Figure 5, which shows the number of households that are expected to be gained or lost as each age group gets ten years older from 2010-2020. As the echo baby boom starts to form households when heads age into the under 35 range over the period, the non-Hispanic whites

among them will form fully 12.1 million additional households and minorities fully 8.3 million under a low immigration scenario, and 12.4 million and 9.4 million respectively under the high immigration scenario. The baby bust and trailing edge of the baby boom will gain a total of 3.9 million net additional households (63 percent being minority) as they age into the ranges of 35-54 and 55-64 respectively by 2020. But as mortality rates increase among members of the leading edge of the baby boom generation as they age into the 65-74 old age range, and also increase among those over 75 born into generations older than the baby boomers, the losses of non-Hispanic whites from these generation will be especially dramatic. Indeed, the number of non-Hispanic whites in baby boom and older generations is expected to fall by 10.1 million under both the low and high immigration series (few immigrants are over 65). However, only 2.3 million minorities born into the baby boom and older generations as they age over 65 and beyond will be lost in each series. Thus, it is primarily the loss of non-Hispanic white members of the baby boom and older generations, together with more proportionate gains in the number of minority and non-Hispanic white households from the echo baby boom generation, that will drive significant shifts in the overall racial/ethnic composition of households.

Figure 5: Over the Next Decade, New Households Formed by Younger Generations Will Exceed Losses from Older Generations



Note: Uses JCHS low-immigration population growth assumption.

Figure 6 shows the importance of immigration levels for future <35 household growth on an annual basis from 2006 to 2020 and, together with Figure 7 showing past patterns of births, drives home several points. First, the run-up in projected households with heads under the age of 35 that begins after 2006, even in the low immigration series, results from the much earlier sharp increase in the number of births starting in the mid-1970s as the largest baby boom cohorts became parents for the first time and as many of the older baby boomers had their second or third child. This run-up in the number of births lasted until about 1990 (see Figure 7). Second, throughout the 1990s the number of births declined slightly and then turned sharply upward in the 2000s as immigrant births surged and the oldest of the native-born cohorts born the late 1970s and early 1980s reached their 20s and began having children of their own. This main impact of the latest surge in births will not be reflected in household growth until after 2025, beyond the date of our current projections. Were it not for the immigration levels that we assume under the low immigration projections, the decline in births in the 1990s would have resulted in a decline in the number of households under age 35 between 2015 and 2025.

Figure 6: Immigration Impacts Younger Household Growth Significantly

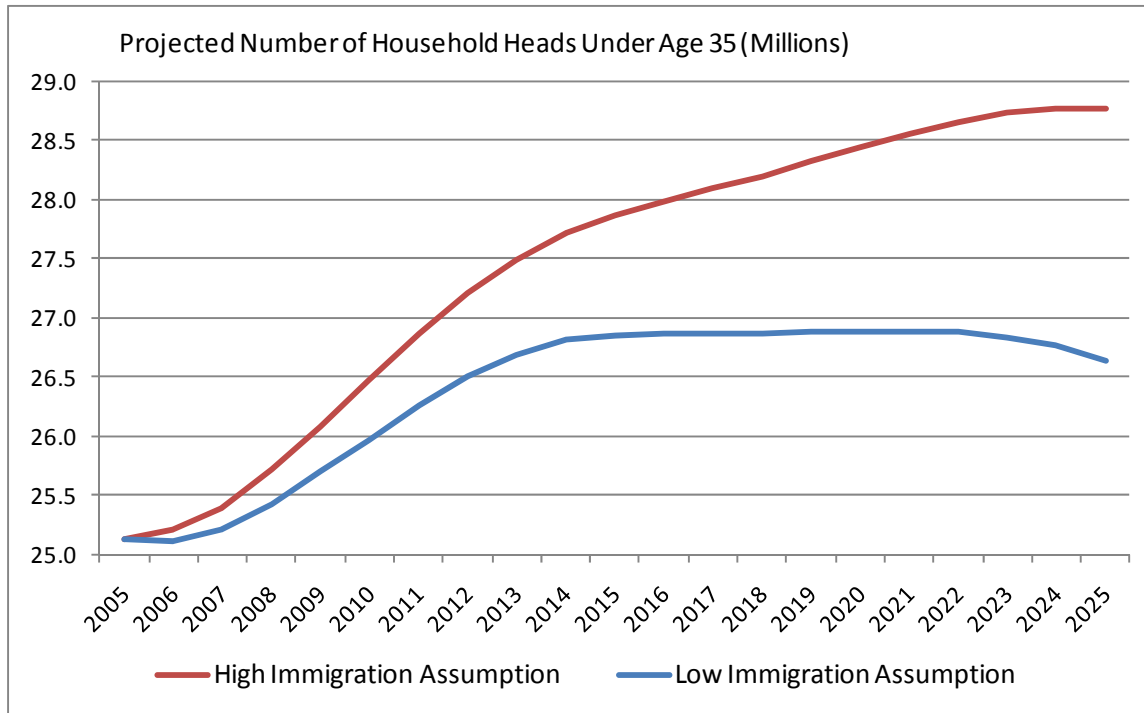
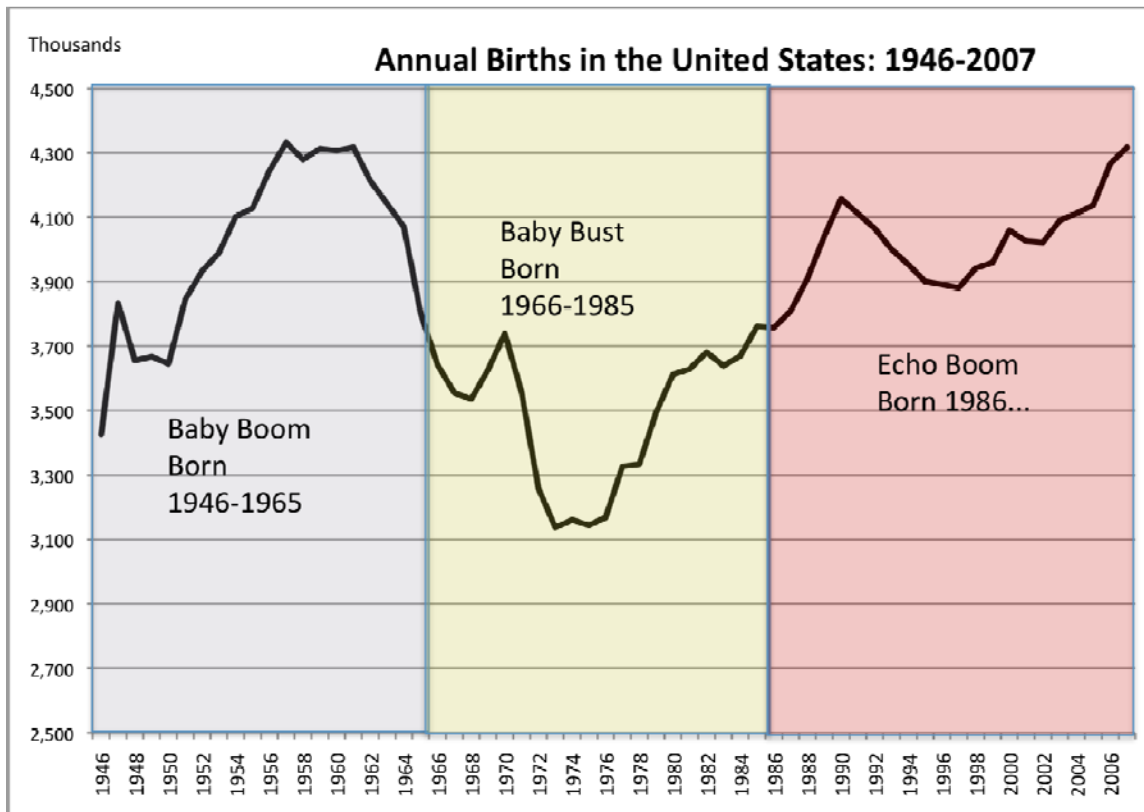


Figure 7: Annual Births in the U.S. 1946-2007 and the Three Generations They Define



The aging of the echo boom into household formation ages, and the changing ethnic composition of the population, will mean that the net growth in households will take on a different composition as we move forward in time. Recently, about half of all net household growth has been married and partner couples without minor children in the household. This reflects the increasing number of baby boom parents entering the empty nest stage (or those whose children who are still at home are 18 or older), as well as the delay in family formation among young adults (see Figures 8 and 9). As we move through this decade and into the next, however, the share of new married couple or partner households that are childless is projected to decline dramatically as both households with young children increase and as aging baby boomers find themselves widowed or divorced. Figure 8 shows projection results for the total population under the low immigration scenario, and the share of household growth in the married without children plus partnered without children columns falls from 47.7 percent in 2010-15 to 38.2 percent in 2015-20, and then to 28.5 percent in 2020-25. During the same three periods, the share of total net household growth in the married with children plus partnered with children categories climbs steadily from 2.6 to 8.0 to 11.1 percent. Under the high immigration assumption these percentages are 7.1, 12.2 and 15.0 (see Appendix C for the numbers from which these percentages are calculated).

The category that captures the largest share of future household growth is persons living alone. Under the low immigration scenario the share of growth in this category is 34.5 percent in 2010-15, climbing to 42.3 percent in 2020-25. Under the high immigration scenario, with more household growth in the younger age groups, the share of the growth that is people who live alone climbs from 32.3 percent to 38.5 percent over this period.

Figure 8 examines projected household growth by family type under the low immigration assumption for all race/Hispanic origin groups combined. Table 4a examines the ethnic breakdown of projected household growth. When we break things down this way, we get a markedly different picture for non-Hispanic whites compared to minorities. The large presence of middle-age and older white households means that the only household categories with positive net household growth are married couples plus partners without children and single person households. Early in the projection period, it is households without minor children that dominate

the household growth for whites, but by 2025 the aging of the baby boom will have caused total white household growth to fall dramatically. By 2025 almost all of the net growth for whites is in the single person category. For minorities, however, household growth is more evenly distributed across different family types throughout the projection period, especially for Hispanics. Non-Hispanic Asians/others have the highest sustained growth in couple households without minor children, while Hispanics have the largest share of any ethnic group with growth in married plus partner households with minor children. Non-Hispanic blacks just edge out Hispanics in having household growth in the “other” family type category with about 25 percent of the growth in this residual grouping, including single parents without partners, single parents with other non-partner adults present and other multi-adult non-partner households. The high immigration series replicates these basic findings with even more growth falling in the Married and Partner with Kids column (Table 4b). The residual “All Other Household Types” column also captures more growth under the high immigration scenario because immigrants without partners are more likely to double up with roommates or other adult relatives.

Figure 8: New Household Growth Will Change the Family Type Distribution

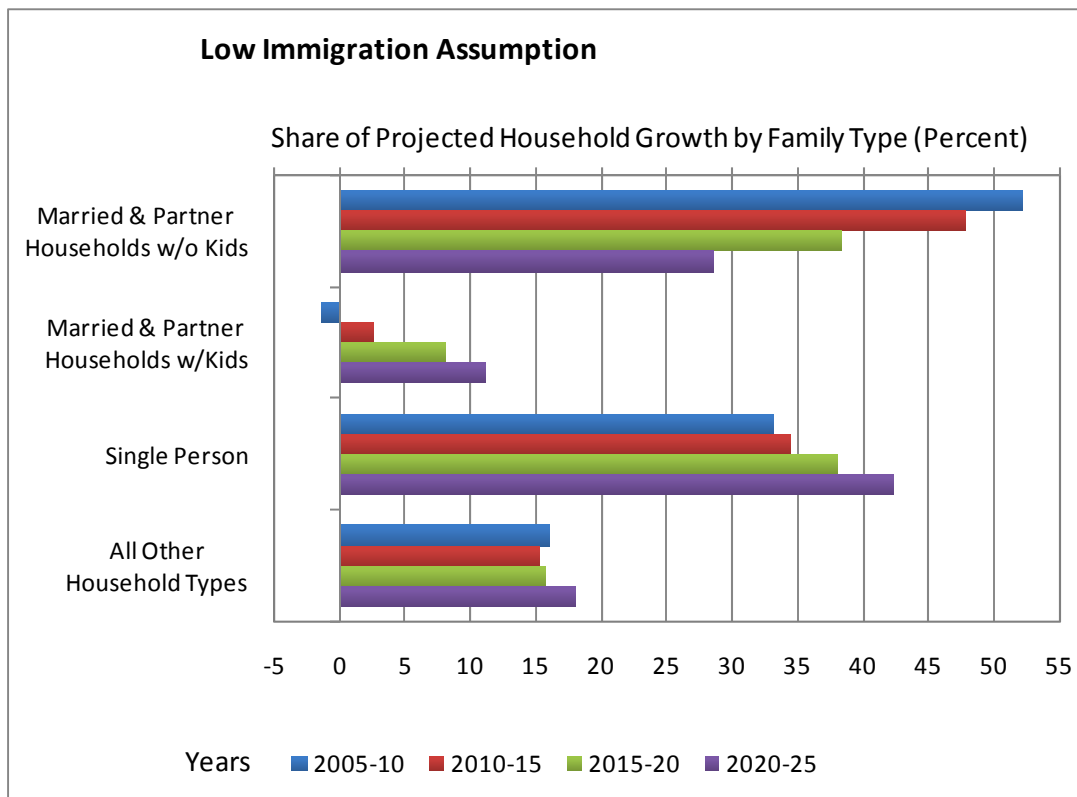


Figure 9: Higher Immigration Favors Married Couple and Partner Households with Children

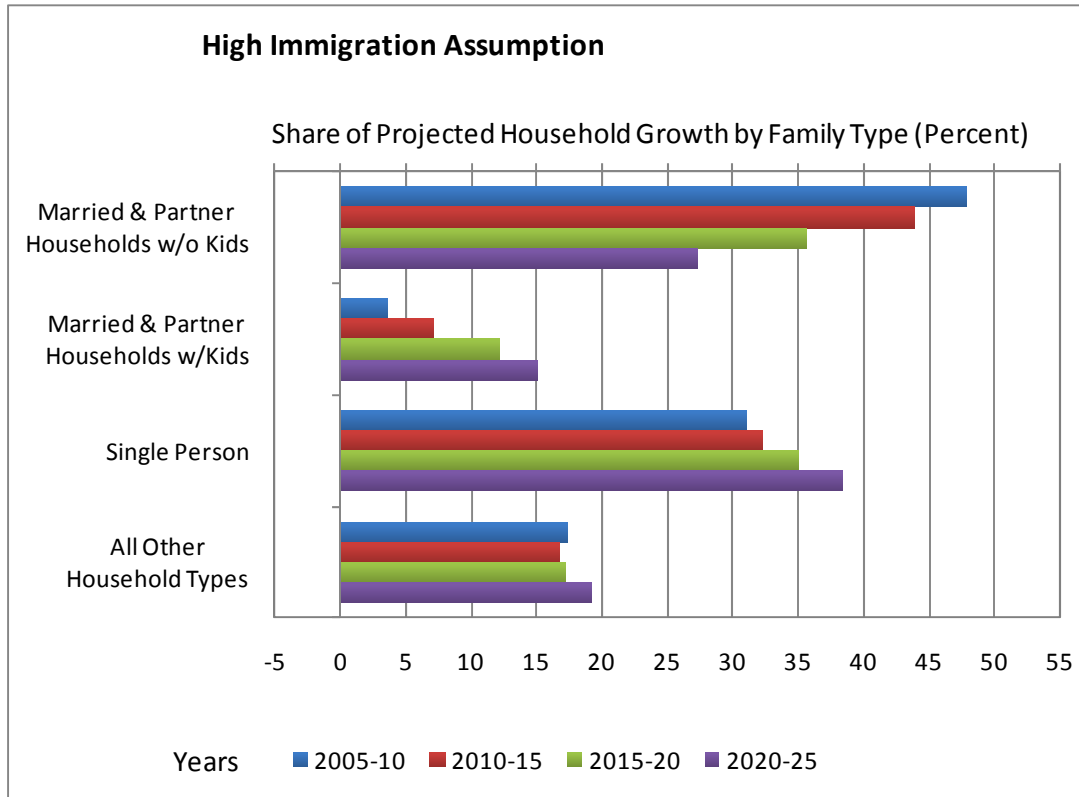


Table 4a: The Distribution of Household Growth by Family Type Differs for Whites and Minorities

Low Immigration Projected Household Growth						
	Projection Period	Share of Projected Growth by Family Type				Total Growth
		Married + Partners w/o Kids	Married + Partners w/Kids	Single Person	All Other Household Types	
Total	2010-15	47.7%	2.6%	34.5%	15.2%	6,004,643
	2015-20	38.2%	8.0%	38.1%	15.7%	5,797,506
	2020-25	28.5%	11.1%	42.3%	18.1%	5,682,229
Non-Hispanic White	2010-15	81.9%	-30.5%	49.2%	-0.6%	1,922,472
	2015-20	56.9%	-20.3%	66.5%	-3.1%	1,473,798
	2020-25	17.0%	-16.8%	96.8%	3.0%	1,117,381
Non-Hispanic Black	2010-15	25.6%	7.1%	40.6%	26.6%	1,122,544
	2015-20	24.3%	9.0%	42.0%	24.7%	1,069,239
	2020-25	22.8%	8.8%	44.3%	24.1%	984,629
Non-Hispanic Asian/Other	2010-15	40.5%	19.3%	24.5%	15.6%	846,981
	2015-20	40.7%	17.0%	26.4%	15.8%	897,636
	2020-25	40.4%	15.5%	27.8%	16.3%	962,043
Hispanic	2010-15	31.3%	23.5%	21.8%	23.4%	2,112,645
	2015-20	31.9%	21.9%	22.9%	23.2%	2,356,833
	2020-25	31.2%	22.2%	23.7%	22.9%	2,618,175

Table 4b: Higher Immigration Favors Household Growth Among Married and Partner Households with Children

High Immigration Projected Household Growth						
	Projection Period	Share of Projected Growth by Family Type				Total Growth
		Married + Partners w/o Kids	Married + Partners w/Kids	Single Person	All Other Household Types	
Total	2010-15	43.9%	7.1%	32.3%	16.6%	6,988,303
	2015-20	35.6%	12.2%	35.1%	17.1%	6,839,817
	2020-25	27.3%	15.0%	38.5%	19.2%	6,796,755
Non-Hispanic White	2010-15	76.5%	-24.2%	46.6%	1.0%	2,121,884
	2015-20	52.9%	-13.2%	60.9%	-0.6%	1,683,602
	2020-25	18.3%	-8.0%	84.4%	5.3%	1,336,364
Non-Hispanic Black	2010-15	24.7%	8.0%	39.7%	27.6%	1,210,830
	2015-20	23.4%	9.9%	40.8%	25.9%	1,164,965
	2020-25	21.9%	9.9%	42.7%	25.6%	1,088,648
Non-Hispanic Asian/Other	2010-15	36.8%	22.9%	23.5%	16.8%	1,132,370
	2015-20	36.9%	21.2%	24.9%	16.9%	1,205,024
	2020-25	36.7%	20.1%	25.9%	17.3%	1,294,916
Hispanic	2010-15	29.0%	26.0%	20.6%	24.4%	2,523,219
	2015-20	29.7%	24.5%	21.6%	24.2%	2,786,227
	2020-25	29.1%	24.7%	22.3%	23.9%	3,076,827

Note: Only considers children who are minors under 18 years of age.

Household Growth Scenario under Low Headship Rate Assumptions

To test the sensitivity of changing headship rates on projected household growth we prepared a simplified set of household projections for 2010-2020 using a synthetic low series that selects low age-specific headship rates based on a 3-year rolling average over the past 30 years. We do not go back before 1980 in search of such lows because female labor force participation and marriage patterns were changing rapidly in the 1970s in ways that profoundly affected headship rates. The low headship rates for young adults, for example, based on early age at marriage and low female labor force participation rates that prevailed before 1980, are unlikely to represent any scenario we might experience over the next decade. Because the historical data going back to 1980 that we use to generate a synthetic low headship series is not readily available broken down by race/Hispanic origin or 5-year age groups, this sensitivity analysis is based on data for all races combined and uses 10-year age-specific headship rates.

Table 5: Comparing the Impacts of Low Headship Rate Assumptions and Recent 3-Year Average Headship Rates on Potential Household Growth 2010-2020, by 10-Year Age Groups (Not Controlling For Race/Ethnicity)

Age of Household Head	Low Immigration Assumption		High Immigration Assumption	
	Average Current 2007-08-09 Headship Rates	Lowest 3-Year Rolling Average Rate 1980-2009	Average Current 2007-08-09 Headship Rates	Lowest 3-Year Rolling Average Rate 1980-2009
15-24	-154,149	-863,345	122,222	-632,591
25-34	1,161,005	770,713	2,001,456	1,587,774
35-44	791,814	762,697	1,270,413	1,240,392
45-54	-2,097,346	-2,152,471	-1,852,948	-1,908,946
55-64	3,754,462	2,933,339	3,932,127	3,102,474
65-74	6,566,554	6,546,136	6,664,196	6,643,630
75+	2,349,479	2,114,442	2,373,886	2,138,266
Sum of Ages	12,371,820	10,111,512	14,511,353	12,171,000

Table 5 summarizes projected household growth 2010-2020 under a low headship rate assumption. The three-year rolling average low point for each age group is our preferred low headship rate scenario because if we simply pick the lowest headship rate observed in any particular year since 1980 for each age group, there is a possibility of selecting those rates most affected by random variation. The results of the low headship rate scenario shaves about 230,000 households off annual projected growth and suggests that demographically driven household

projections, even under a low immigration assumption, and even assuming historically low age-specific headship rates, would not fall much below 1 million annual growth over the next decade.¹³

Given the severity of the recent recession and the continued high unemployment rates during the recovery, it is reasonable to ask why current headship rates have not fallen to levels represented by the historic low series (Appendix Tables A-1 and A-2). There are several possible reasons. The labor force participation and income decline among younger persons (especially among males) has been a long one - predating this recession by many years. Young people have already made adjustments in their household formation rates based on this long-term trend. Men are increasingly being carried enough by women's employment, which has fared better during this recession, to maintain living in their own households. Also, unemployment benefits are blunting the impact of the recession on household formations. On top of this—and importantly—falling rents and home prices in many areas (in particular in areas that were previously prohibitively expensive for young people) has allowed many lower wage employed persons to now afford their own house or apartment. This counter-trend among the employed could offset the impact on the unemployed. The point is that to assume that loss of jobs automatically and immediately means less overall household formation is an incomplete view of the world because lower housing costs can accelerate household formation among those employed and people can tap other resources at least for a time. That said, today's long-term unemployed is at high levels and unless reduced could cause some of the recession-related declines in headship rates to persist.

Finally, the loss of immigrant population (those with the lowest headship rates) creates upward pressure on headship rates of the remaining resident population. The Department of Homeland Security Office of Immigration Statistics estimates that a million fewer unauthorized immigrants were living in the U.S. in January 2009 compared to January 2007. This contrasts with their estimates of a net gain of 1.3 million illegal residents between 2005 and 2007.¹⁴ Such a large

¹³ The numbers in Table 5 would be slightly lower than calculated because of shifts in the racial and ethnic composition over the period to groups with lower headship rates which we do not control for under these stylized scenarios.

¹⁴ Michael Hoefer, Nancy Rytina, and Bryan C. Baker, "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2009" Department of Homeland Security, Office of Immigration Statistics,

swing from positive to negative can easily account for the majority of the recent decline in overall household growth. The poor job market, most notably but not exclusively in the construction industry, explains this turnaround in undocumented immigration.

While we have examined the sensitivity of household projections to substantial declines in headship rates based on the lowest rolling three-year average rates since 1980, we do not believe that such low rates will materialize during the next decade. We therefore do not produce a full set of detailed age/race-Hispanic origin/family type projections using a low headship assumption. Future household growth is more likely to fall between the low immigration current preferred headship assumption projections and the high immigration, current preferred headship assumption projections.

New Home Demand Projections

Demand for new residential units is the sum of three components: 1) demand for additional units to accommodate household growth, 2) demand for additional second homes and vacant units for rent or sale to accommodate the normal turnover of a larger housing stock, and 3) demand for additional units to replace existing units lost on net from the stock (including net conversions from residential to non-residential use). To turn projected new home demand into an estimate of the amount of construction needed to meet demand 2010-2019, one must also factor in market imbalances entering the period (and assume markets in balance at the end). This section details the components of new home demand. The following section then considers whether the market is likely oversupplied in a long-run sense entering 2010 and 2011.

Net household growth is the largest single driver of demand for new housing units. The 11.8 and 13.8 million additional households projected to form from 2010-2020 account for fully 72 and 74 percent of our low and high new-home demand projections. Replacement of units lost on net from the existing housing stock units is the second largest component of new housing unit demand, making up slightly less than 20 percent of the totals. The rest is created by demand for additional vacancies assuming the market is in balance in a long-run sense entering the period. Such vacancies include multiple units owned by members of a given household, including former units owned or rented by partner households that have not yet been put back on the market, additional units owned or rented to facilitated employment at a distance from the primary residence, units that are undergoing renovation and repair and are not yet occupied, vacation and investment homes, and foreclosures that are held off the market, as well as vacant units that are for sale or for rent.

As detailed in JCHS Working Paper W07-7¹⁵, net replacements over the next 10-year period are calculated using a loss rate of 2.5 percent of the total housing stock at the start of the period. This loss rate is based both on the residual estimates of differences between the amount of housing produced and the change in the total housing stock over recent ten year periods, as well as on tracking losses of housing units of different ages over a recent two-year period. Because

¹⁵ “Projecting the Underlying Demand for New Housing Units: Inferences from the Past, Assumptions about the Future” Harvard Joint Center for Housing Studies Working Paper W07-7, November 2007.

net replacements are a function of the size of the stock at the beginning of the period, our net replacement projections are not affected by our new household growth projections. But replacement demand projections have been updated to use the most recent estimate of the total housing stock from the second quarter 2010 HVS. This equates to approximately 3.3 million units over the 10 year projection period needed to replace lost units.

Projected demand for additional seasonal and vacant homes ranges from 1.4 to 1.6 million units. Thus, demand for vacancies to accommodate a larger number of households and demand for second homes is slightly less than half that of net replacements, amounting to just over 8 percent of the total projected new unit demand. Because it is a function of the projected size and composition of household growth, expected vacancy demand is updated based on the new household growth projections. Approximately two-thirds of the new vacant unit demand is for second homes. Second homes include homes held for recreational or vacation homes, held for use by seasonal or migrant workers, used for employment related reasons, occupied temporarily by a household with a usual residence elsewhere (URE), and unoccupied units held off the market for a number of reasons. For reasons outlined in JCHS Working Paper W07-7, it is difficult to estimate a sustainable level of second home demand, but propensities to own second homes have been shown to increase with wealth and age. We obtain a doubly-conservative estimate of new second home demand by applying the new household growth projections by age group to the lowest second homeownership rates for each age group going back to 1993, obtained from the already conservative Survey of Consumer Finances that provides by far the lowest estimates of the number of second homes of all federal data series. This calculation results in a total increase in demand for second homes of 0.9 to 1.0 million units from 2010-2020.

The remaining one-third of the demand for new vacancies is for growth in natural vacancies of for-sale and for-rent units. Similar to the way in which there is a certain number of unemployed persons at full employment as people move between jobs, a certain number of vacant units is needed to accommodate turnover in the housing stock for a mobile population. Due largely to the fact that renters move more than owners, but also because of the complex behavior of landlords in setting and managing the rental stock, sustainable vacancy rates in the rental market

are higher than in the for-sale market, and it is appropriate to disaggregate for-rent and for-sale vacancies in determining sustainable vacancy levels. Having identified various years when markets appeared to be more or less stable or at equilibrium during the past 20 years, we obtain a range of potential natural vacancy rates for for-sale and for-rent unit. For rentals, the lowest sustainable rental vacancy rate during this period is 8.0 percent averaged across 1991-1994, while the lowest for-sale vacancy rate is 1.5% of owner households from 1992-1995 (for more details behind the selection of these vacancy rate assumptions see JCHS Working Paper W07-7). Applying the lowest observed natural vacancy rates of for-sale and for-rent units since 1990 to the new household growth projections results in demand for approximately 300,000-360,000 vacant for-rent units and 120,000-210,000 vacant for-sale units for the *entire* ten-year projection period depending on whether the low or high immigration series is used.¹⁶

Together the projected components of new home demand 2010-2020 under the low immigration household growth series is 16.4 million units and under the high immigration household growth series is 18.7 million. The individual components are summarized in Table 6.¹⁷

¹⁶ Implicit in the calculation of demand for natural vacancies is a homeownership rate projection for 2010. However, because natural for-rent and for-sale vacancy demand is such a small fraction of new housing unit demand, there is not much sensitivity to the homeownership rate. For example, the difference between assuming a tenure split based on constant 2009 homeownership rates versus that obtained from a reversion to the lowest recorded homeownership rates for each age group going back to 1982 amounts to a difference in new vacant unit demand of only 15,000 additional units for the entire ten-year projection period. For this reason and for simplicity, the new unit demand projections simply apply the most recent annual homeownership rate from 2009.

¹⁷ As a cross-check on these new home demand projections, as in JCHS Working Paper W07-7, we multiply our updated household growth projections by the average ratio of completions plus placements to household growth as measured by the HVS over 10-year periods going back to 1974. This ratio is 1.40 and implies a low immigration new home demand projections of 16.5 million and high immigration new home demand projections of 19.3 million. These are very much in line with the sum of our detailed projections of household growth, demand for new vacancies, and net removals. Even if the ten-year periods that end in 2000-2009 are excluded – a period when the ratio was high for a number of years, the ratio is 1.33 and implies new home demand of 15.6 million completions and placements 2010-2020 – in line with the lowest point reach in any ten-year period since 1974-1983.

Table 6: Components of New Home Demand 2010-2020

	JCHS Low Immigration Projection	JCHS High Immigration Projection
Projection Period	2010-2020	2010-2020
Projected Household Growth (000s)	11,802	13,828
Projected Total Vacant Unit Demand (000s)	1,361	1,595
<i>Vacant For Rent (000s)</i>	<i>308</i>	<i>361</i>
<i>Vacant For Sale (000s)</i>	<i>119</i>	<i>209</i>
<i>Second Homes (000s)</i>	<i>934</i>	<i>1,026</i>
Projected Total Estimated Net Removals	3,279	3,279
<i>(Total Units * .025% / Year)</i>		
Projected Total Demand for New Units	16,442	18,702
<i>Annual Average</i>	<i>1,644</i>	<i>1,870</i>

Adjusting New Home Demand for Potential Market Imbalances Entering the Period

The new home demand projections just presented do not take into account any cyclical factors or short-term market imbalances entering or exiting the projection period. Therefore these new home demand projections are not a forecast for new housing construction 2010-2020. In order to estimate expected new housing unit construction based on these new home demand projections, one would need to back out any estimates of long-run over or undersupply on the markets entering the projection period. To make something closer to a forecast out of new home demand projections, the amount of long-run undersupply entering the period must be added to new home projections or the amount of long-run oversupply subtracted from the projection. Even then, equating new home demand projections to forecasts would also require adding or subtracting short-run market imbalances at the end of the projection period. For these reasons, new home demand projections reflect the fundamental forces shaping demand but are not a prediction of the amount of actual construction that will occur.

Attempting to judge whether the market entering 2010 was in over or undersupply in a long-run sense is challenging because there are not direct measures of these long-run imbalances. There

are, of course, short-run measures of imbalance: changes in vacancy rates above or below long-run trend levels. When vacancy rates move below these levels, this can be viewed as indicating at least a short-term undersupply. When they move above these levels, this can be viewed as indicating at least a short-run oversupply. Right now vacancy rates appear well above historical norms for periods in which it looked like markets were in balance.

However, it is risky to make facile assumptions about what a certain vacancy rate at a given moment implies about whether markets are, or are not, in *long-run* balance. This is because during periods in which housing demand is pulled forward, overbuilding can occur but not show up immediately in higher vacancy rates. Conversely, during periods in which housing demand is lagging its long-run potential, markets can be at or near long-run balance even though vacancy rates remain at elevated levels. Indeed, there are reasons to believe that oversupplies started to develop in the 2000s before for-sale vacancy rates began to climb sharply in 2005 and reasons to believe that markets have now begun to move back into balance in ways not yet reflected in reduced vacancy rates.

The impact of the recent sharp supply-side correction in housing has not yet brought down vacancy rates much from peak levels because of a similarly sharp slowdown in recent household growth to levels that are well below long-run trends. It is this below-trend household growth that has produced today's stubbornly high vacancy rates despite housing construction reaching lows not seen since World War II.

While this below-trend household growth may not all be 'pent-up' and ready to re-emerge in the future, recent household growth levels—as measured by all three data sources earlier discussed—are well below nearly all estimates of what household growth would have been absent major financial and economic dislocations. Short of a significant, dramatic and lasting cultural shift in household formation rates – on par with that of the 1960's and 70's when divorce rates surged and women began entering the workforce and forming independent households – much of the household growth one would expect due to the aging of the population has been delayed as a result of the economic environment and will likely materialize in the future as pent-

up demand is released. As for net immigration, it appears to have taken a hit, and while it should recover along with the economy, some of the immigration that was lost may not be made up.

Previous ten-year periods of completions and placements also suggest that the housing inventory correction may have brought markets closer to long-run balance. Completions plus placements from 2000-2009 were 17.0 million. This is slightly lower than the average of 17.3 million for all the ten-year periods that have occurred since the 1974-1983 period. Furthermore, the low point for the last 27 ten-year periods was 15.7 million during 1988-1997 (Table 7). With completions and placements on an annual pace of just 0.73 million through July 2010, completions 2001-2010 are on track to end closer to 15.9 million, and will likely move even lower in 2002-11. This will drive total completions and placements below even the previous low despite the fact that household growth should get a lift 2010-2020 from the entrance of the echo baby boomers into household forming years. In contrast, the falloff in household growth and accompanying slowdown in completions and placements which occurred 1988-1997 was expected due to the entrance of the baby bust into household forming ages.

Even at about 16 million, the period from 2001-2010 will be near the lowest point for new housing construction over the last 27 10-year periods. This does not suggest a market grossly out of long-run balance in the quantity of homes demanded and supplied. Instead it suggests an inventory correction that may have already run its necessary course, with markets now at or near balance in a long-run sense, even though it is not evident yet due to depressed household formation and possibly replacement demand that will be made up in the years ahead. Finally, it is worth noting that after the last low point from 1988-1997, ten-year total of completions plus placements had recovered to 17.0 million just four years later by 2001. And 2001 predated signs that housing markets were overheating—house price appreciation had not yet skyrocketed

The JCHS new low series projections for new home demand 2010-2020 of 16.4 million completions plus placements would be below the long-term average of 17.3 million. The high series projection of 18.6 million would be above that average but we would only expect it to hit that number if fundamentals come in as per the assumptions behind the projection – the

dynamics of the changing number and age composition of the population and immigration as high as the baseline assumptions of the Census Bureau.

Table 7: Historic Completions & Placements

Year	Residential Completions	Mobile Home Placements	Total Completions & Placements	10-Year Rolling Average of Completions & Placements
1968	1,319.8			
1969	1,399.0			
1970	1,418.4			
1971	1,706.1			
1972	2,003.9			
1973	2,100.5			
1974	1,728.5	332.0	2,060.5	
1975	1,317.2	229.3	1,546.5	
1976	1,377.2	249.6	1,626.8	
1977	1,657.1	257.5	1,914.6	
1978	1,867.5	279.9	2,147.4	
1979	1,870.8	279.9	2,150.7	
1980	1,501.6	233.7	1,735.3	
1981	1,265.7	229.2	1,494.9	
1982	1,005.5	234.1	1,239.6	
1983	1,390.3	278.1	1,668.4	1,758.5
1984	1,652.2	287.9	1,940.1	1,746.4
1985	1,703.3	283.4	1,986.7	1,790.5
1986	1,756.4	256.1	2,012.5	1,829.0
1987	1,668.8	239.2	1,908.0	1,828.4
1988	1,529.8	224.3	1,754.1	1,789.0
1989	1,422.8	202.8	1,625.6	1,736.5
1990	1,308.0	195.4	1,503.4	1,713.3
1991	1,090.8	174.3	1,265.1	1,690.4
1992	1,157.5	212.0	1,369.5	1,703.3
1993	1,192.7	242.5	1,435.2	1,680.0
1994	1,346.9	290.9	1,637.8	1,649.8
1995	1,312.6	319.4	1,632.0	1,614.3
1996	1,412.9	337.7	1,750.6	1,588.1
1997	1,400.5	336.3	1,736.8	1,571.0
1998	1,474.2	373.7	1,847.9	1,580.4
1999	1,604.9	338.3	1,943.2	1,612.1
2000	1,573.7	280.9	1,854.6	1,647.3
2001	1,570.8	196.2	1,767.0	1,697.5
2002	1,648.4	174.3	1,822.7	1,742.8
2003	1,678.7	139.8	1,818.5	1,781.1
2004	1,841.9	124.4	1,966.3	1,814.0
2005	1,931.4	122.9	2,054.3	1,856.2
2006	1,979.4	112.4	2,091.8	1,890.3
2007	1,502.8	94.8	1,597.6	1,876.4
2008	1,119.7	80.5	1,200.2	1,811.6
2009	794.4	52.2	846.6	1,702.0
2010(e)	684.2	47.9	732.0	1,589.7

Source: US Census Bureau

Note: Annual 2010 completions are estimated to be 13.87% below annual 2009 levels, because Jan-Jul 2010 completions are 13.87% below Jan-Jul 2009 completions. Similarly Jan-May 2010 placements are 8.33% below Jan-May 2009 levels, so the annual 2010 placements estimate here is 8.33% below 2009 annual placements.

Conclusions

This is a time of significant uncertainty about the state of the economy and what the recovery—should it continue—will look like over the next 5-10 years. Both immigration and headship rates appear to have been negatively affected by the economic downturn. The specific age groups that have seen their headship rates driven down, however, do not follow a predictable pattern of groups hardest hit by high unemployment having the biggest reductions. And some age groups even saw their headship rates go up. Furthermore, in one of two federal datasets used to examine age-specific headship rates the declines that did occur took place 2005-2006, before either the housing or the broader economic recession gathered speed.

Moving ahead, unless there is a long jobless recovery or a further contraction, improved housing affordability, together with a return to job gains and a restoration of consumer confidence, should cause households that delayed forming as a result of the recession to form. More importantly, it should restore net immigration to at least half the levels that the Census Bureau assumed in its baseline population projections from 2010-2020 as we assume in our low household growth series. If the Census baseline population projections are correct about a return to higher levels of immigration—and the coming decade does not see further erosion in age-specific headship rates—this will be the strongest decade for household growth since the baby boomers entered housing markets in the 1970s. Immigration since 2005 appears to be running close to half of Census Bureau baseline projections, and so our new low immigration series—which reflects this slower than assumed pace and an average of the past three-year average headship rates by age and race—could prove realistic if immigration does not bounce back. If it does, it will also have to make up for lost immigration to achieve the Census Bureau's baseline assumptions, which is why we treat this as our high immigration series. Actual household growth is likely to come in somewhere in between our low and high series.

Constructing new home demand projections based on the new low and high immigration household projections implies new home demand in the range of about 16.4 to 18.7 million. The long-run average of actual completions plus placements for ten-year periods beginning with 1974-1983 and ending with 2000-2009 is 17.3 million. The lowest ten-year total was 15.7

million in 1988-1997 and we are about to reach that level in 2001-2010. But back then a slowdown was expected due to the entrance of the baby bust generation into household forming ages. With the echo baby boomers entering household forming ages over the coming decade, that is not the case this time. It is important to underscore that these projections are not predictions of actual construction because these will be influenced by whether housing markets reach 2020 in balance.

Table A-1: Annual Headship Rates by 10-Year Age Groups, 1980-2009

	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65-74	Age 75+	Total
2009	0.1476	0.4644	0.5339	0.5524	0.5716	0.6177	0.6386	0.4780
2008	0.1526	0.4694	0.5314	0.5547	0.5921	0.6100	0.6339	0.4810
2007	0.1557	0.4814	0.5316	0.5518	0.5898	0.6151	0.6388	0.4828
2006	0.1598	0.4786	0.5318	0.5506	0.5796	0.6172	0.6443	0.4815
2005	0.1596	0.4863	0.5339	0.5524	0.5777	0.6176	0.6444	0.4827
2004	0.1582	0.4834	0.5297	0.5575	0.5795	0.6215	0.6503	0.4827
2003	0.1602	0.4822	0.5447	0.5556	0.5848	0.6181	0.6441	0.4851
2002	0.1567	0.4801	0.5380	0.5563	0.5722	0.6265	0.6375	0.4814
2001	0.1595	0.4808	0.5338	0.5584	0.5704	0.6264	0.6467	0.4820
2000	0.1487	0.4677	0.5303	0.5509	0.5567	0.6163	0.6239	0.4719
1999	0.1492	0.4684	0.5317	0.5511	0.5707	0.6175	0.6237	0.4741
1998	0.1430	0.4670	0.5351	0.5548	0.5681	0.6070	0.6371	0.4738
1997	0.1383	0.4671	0.5386	0.5513	0.5642	0.6251	0.6190	0.4730
1996	0.1435	0.4598	0.5333	0.5490	0.5744	0.6326	0.6253	0.4729
1995	0.1484	0.4626	0.5365	0.5588	0.5734	0.6256	0.6416	0.4759
1994	0.1441	0.4658	0.5331	0.5584	0.5760	0.6194	0.6305	0.4729
1993r	0.1442	0.4702	0.5344	0.5686	0.5780	0.6242	0.6344	0.4754
1993	0.1377	0.4628	0.5309	0.5743	0.5915	0.6331	0.6377	0.4752
1992	0.1334	0.4653	0.5447	0.5644	0.5981	0.6515	0.6401	0.4776
1991	0.1337	0.4702	0.5417	0.5713	0.5951	0.6560	0.6307	0.4770
1990	0.1387	0.4737	0.5440	0.5758	0.5937	0.6481	0.6409	0.4775
1989	0.1448	0.4839	0.5479	0.5691	0.6028	0.6488	0.6340	0.4795
1988	0.1370	0.4772	0.5493	0.5691	0.5971	0.6473	0.6437	0.4742
1987	0.1336	0.4786	0.5464	0.5720	0.5916	0.6456	0.6351	0.4699
1986	0.1391	0.4817	0.5452	0.5781	0.5843	0.6510	0.6267	0.4690
1985	0.1360	0.4800	0.5516	0.5623	0.5906	0.6436	0.6321	0.4656
1984	0.1362	0.4836	0.5441	0.5571	0.5923	0.6435	0.6400	0.4633
1983	0.1388	0.4751	0.5474	0.5526	0.5913	0.6460	0.6456	0.4603
1982	0.1467	0.4903	0.5468	0.5576	0.5877	0.6427	0.6516	0.4632
1981	0.1527	0.4924	0.5480	0.5622	0.5797	0.6436	0.6471	0.4622
1980	0.1546	0.4944	0.5418	0.5564	0.5758	0.6461	0.6396	0.4591

Sources: JCHS tabulations of Current Population Survey and US Census Bureau Populations Estimates data

Table A-2: 3-Year Rolling Average Headship Rates by 10-Year Age Groups, 1982-2009

	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65-74	Age 75+	Total
2007-2009	0.1520	0.4717	0.5323	0.5530	0.5845	0.6142	0.6371	0.4806
2006-2008	0.1560	0.4765	0.5316	0.5524	0.5872	0.6141	0.6390	0.4818
2005-2007	0.1584	0.4821	0.5324	0.5516	0.5824	0.6166	0.6425	0.4823
2004-2006	0.1592	0.4828	0.5318	0.5535	0.5789	0.6188	0.6463	0.4823
2003-2005	0.1593	0.4840	0.5361	0.5552	0.5807	0.6191	0.6462	0.4835
2002-2004	0.1584	0.4819	0.5375	0.5565	0.5788	0.6220	0.6440	0.4830
2001-2003	0.1588	0.4810	0.5388	0.5568	0.5758	0.6237	0.6428	0.4828
2000-2002	0.1550	0.4762	0.5340	0.5552	0.5664	0.6231	0.6360	0.4784
1999-2001	0.1525	0.4723	0.5319	0.5535	0.5660	0.6201	0.6314	0.4760
1998-2000	0.1470	0.4677	0.5324	0.5523	0.5652	0.6136	0.6283	0.4733
1997-1999	0.1435	0.4675	0.5351	0.5524	0.5677	0.6165	0.6266	0.4737
1996-1998	0.1416	0.4647	0.5357	0.5517	0.5689	0.6216	0.6271	0.4732
1995-1997	0.1434	0.4632	0.5362	0.5530	0.5707	0.6278	0.6286	0.4739
1994-1996	0.1454	0.4627	0.5343	0.5554	0.5746	0.6259	0.6325	0.4739
1993r-1995	0.1456	0.4662	0.5346	0.5619	0.5758	0.6231	0.6355	0.4748
1991-1993	0.1349	0.4661	0.5391	0.5700	0.5949	0.6469	0.6362	0.4766
1990-1992	0.1353	0.4697	0.5435	0.5705	0.5956	0.6519	0.6372	0.4774
1989-1991	0.1391	0.4759	0.5445	0.5721	0.5972	0.6510	0.6352	0.4780
1988-1990	0.1402	0.4783	0.5471	0.5713	0.5979	0.6481	0.6395	0.4771
1987-1989	0.1385	0.4799	0.5479	0.5701	0.5972	0.6472	0.6376	0.4745
1986-1988	0.1366	0.4792	0.5470	0.5731	0.5910	0.6480	0.6352	0.4710
1985-1987	0.1362	0.4801	0.5478	0.5708	0.5889	0.6467	0.6313	0.4682
1984-1986	0.1371	0.4818	0.5470	0.5658	0.5891	0.6461	0.6329	0.4660
1983-1985	0.1370	0.4796	0.5477	0.5573	0.5914	0.6444	0.6392	0.4631
1982-1984	0.1406	0.4830	0.5461	0.5558	0.5904	0.6441	0.6457	0.4622
1981-1983	0.1461	0.4859	0.5474	0.5575	0.5862	0.6441	0.6481	0.4619
1980-1982	0.1513	0.4924	0.5455	0.5587	0.5811	0.6441	0.6461	0.4615
Lowest Rate	0.1349	0.4627	0.5316	0.5516	0.5652	0.6136	0.6266	0.4591

Note: Lowest years for each age group are shaded.

Sources: JCHS tabulations of Current Population Survey and US Census Bureau Populations Estimates data

Appendix B: Low Immigration Series Household Projections 2005-2025

TOTAL HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	25,982	76,683	28,449	34,702	140,297	31,723	32,290	489,311	859,438
2005	20-24	498,895	536,043	668,684	322,479	1,425,921	465,761	151,578	1,427,260	5,496,621
2005	25-29	1,228,966	634,179	2,280,829	441,585	2,012,958	922,818	177,405	1,087,519	8,786,260
2005	30-34	1,220,634	381,179	4,210,519	343,950	1,748,530	1,216,032	219,669	639,156	9,979,669
2005	35-39	1,006,127	287,355	5,420,257	308,280	1,730,082	1,228,053	383,439	511,478	10,875,071
2005	40-44	1,550,898	381,630	5,577,049	235,354	2,177,822	1,144,657	519,573	777,931	12,364,914
2005	45-49	2,903,873	379,633	4,094,146	134,952	2,599,706	757,940	396,565	1,103,903	12,370,718
2005	50-54	4,295,959	307,241	2,032,255	46,319	2,675,693	329,450	208,580	1,175,779	11,071,277
2005	55-59	5,033,531	241,677	712,575	11,307	2,791,479	122,284	69,925	1,067,306	10,050,085
2005	60-64	4,144,881	154,102	209,791	5,819	2,427,004	31,027	18,856	745,220	7,736,700
2005	65-69	3,346,601	86,763	77,624	1,342	2,171,772	20,040	16,231	618,390	6,338,762
2005	70-74	2,502,204	50,873	41,398	1,917	2,055,202	11,577	7,344	505,464	5,175,978
2005	75+	3,732,875	72,565	31,005	441	6,479,364	12,817	5,203	1,214,156	11,548,427
2005	Total	31,491,427	3,589,923	25,384,581	1,888,447	30,435,832	6,294,180	2,206,657	11,362,873	112,653,920
2010	15-19	27,009	76,472	29,797	35,637	140,035	32,477	33,625	501,847	876,899
2010	20-24	510,148	548,884	689,188	332,781	1,466,510	487,926	158,168	1,469,545	5,663,150
2010	25-29	1,316,644	680,970	2,413,753	467,889	2,166,880	990,640	187,329	1,151,805	9,375,909
2010	30-34	1,219,764	381,669	4,233,465	347,929	1,757,696	1,242,717	225,608	645,047	10,053,894
2010	35-39	949,435	267,788	5,183,796	297,141	1,639,424	1,184,423	381,686	502,272	10,405,967
2010	40-44	1,401,758	342,213	5,113,884	220,616	1,965,927	1,053,709	495,371	729,919	11,323,397
2010	45-49	2,881,088	377,569	4,109,106	137,964	2,583,194	764,476	407,737	1,124,896	12,386,031
2010	50-54	4,711,104	337,782	2,247,202	52,229	2,948,227	365,772	236,037	1,315,275	12,213,628
2010	55-59	5,584,261	268,208	805,225	12,953	3,122,592	138,863	81,714	1,220,347	11,234,163
2010	60-64	5,283,346	196,635	272,859	7,695	3,102,965	40,548	24,485	967,020	9,895,554
2010	65-69	4,017,787	104,069	94,170	1,625	2,598,807	23,955	19,604	741,847	7,601,865
2010	70-74	2,670,502	54,296	46,151	2,146	2,198,613	12,527	8,237	547,563	5,540,036
2010	75+	3,868,288	75,669	33,765	448	6,693,716	13,691	5,838	1,273,990	11,965,405
2010	Total	34,441,134	3,712,225	25,272,364	1,917,055	32,384,585	6,351,725	2,265,438	12,191,372	118,535,898
2015	15-19	26,353	72,605	29,410	34,824	131,870	30,446	32,213	485,577	843,298
2015	20-24	506,193	540,108	706,780	337,198	1,449,445	496,373	162,522	1,476,796	5,675,416
2015	25-29	1,337,281	692,263	2,469,053	480,470	2,213,900	1,031,608	194,509	1,178,007	9,597,091
2015	30-34	1,306,085	409,187	4,501,792	370,606	1,889,181	1,331,694	239,690	684,048	10,732,282
2015	35-39	957,131	269,253	5,250,678	303,014	1,661,366	1,214,098	395,691	514,646	10,565,877
2015	40-44	1,328,860	321,372	4,921,979	216,520	1,862,250	1,017,739	495,293	718,943	10,882,956
2015	45-49	2,615,024	343,498	3,799,039	130,075	2,345,971	707,627	386,382	1,055,907	11,383,524
2015	50-54	4,703,861	337,612	2,274,008	54,145	2,951,160	369,977	244,941	1,342,609	12,278,312
2015	55-59	6,134,441	294,648	902,675	14,745	3,453,477	156,013	94,583	1,381,551	12,432,132
2015	60-64	5,876,834	219,530	313,925	9,160	3,479,334	47,348	28,245	1,111,602	11,085,977
2015	65-69	5,146,487	133,823	123,437	2,099	3,343,040	31,178	26,094	969,503	9,775,661
2015	70-74	3,227,870	65,613	56,688	2,592	2,651,368	14,895	10,042	662,440	6,691,507
2015	75+	4,072,233	80,237	37,438	462	7,023,797	14,920	6,698	1,360,721	12,596,507
2015	Total	37,238,655	3,779,750	25,386,901	1,955,911	34,456,158	6,463,916	2,316,902	12,942,350	124,540,541

Appendix B: Low Immigration Series Household Projections 2005-2025

TOTAL HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	28,088	75,374	31,605	37,032	136,248	31,596	34,005	513,327	887,275
2020	20-24	482,112	507,653	689,533	323,627	1,359,149	465,287	155,380	1,412,954	5,395,695
2020	25-29	1,311,927	677,671	2,485,200	485,569	2,176,637	1,044,678	200,408	1,186,005	9,568,096
2020	30-34	1,331,459	417,965	4,612,153	382,039	1,938,364	1,387,886	250,747	703,475	11,024,088
2020	35-39	1,031,031	290,828	5,624,131	324,487	1,795,371	1,308,441	422,709	550,053	11,347,051
2020	40-44	1,347,829	325,328	5,009,437	222,689	1,893,731	1,044,209	514,807	743,069	11,101,099
2020	45-49	2,489,580	327,810	3,688,861	128,478	2,236,094	687,260	383,932	1,040,760	10,982,774
2020	50-54	4,310,928	309,112	2,127,353	52,043	2,707,386	344,076	235,128	1,262,255	11,348,281
2020	55-59	6,137,068	294,101	930,028	15,481	3,471,213	159,980	101,131	1,433,422	12,542,424
2020	60-64	6,470,242	242,694	358,530	10,834	3,856,813	54,607	32,006	1,263,281	12,289,007
2020	65-69	5,755,246	150,333	142,805	2,386	3,773,393	36,090	30,920	1,121,180	11,012,352
2020	70-74	4,155,367	84,479	75,985	3,538	3,429,674	19,768	13,636	868,349	8,650,795
2020	75+	4,590,060	90,845	43,849	511	7,889,276	17,247	8,046	1,549,275	14,189,111
2020	Total	39,440,937	3,794,193	25,819,470	1,988,714	36,663,349	6,601,125	2,382,854	13,647,406	130,338,047
2025	15-19	29,075	76,803	32,804	38,246	138,763	32,345	35,072	529,277	912,386
2025	20-24	500,917	522,095	732,759	339,694	1,397,552	482,281	163,346	1,476,948	5,615,593
2025	25-29	1,234,697	634,967	2,382,335	464,279	2,029,777	975,071	192,204	1,136,939	9,050,269
2025	30-34	1,314,610	412,969	4,632,534	386,035	1,920,916	1,411,982	259,560	713,657	11,052,263
2025	35-39	1,060,112	298,397	5,803,842	337,055	1,856,576	1,367,399	445,896	573,847	11,743,124
2025	40-44	1,455,843	351,813	5,387,012	238,007	2,052,768	1,127,209	552,529	800,178	11,965,359
2025	45-49	2,535,880	334,642	3,775,514	132,923	2,283,815	707,719	399,379	1,077,553	11,247,424
2025	50-54	4,144,500	296,778	2,090,294	52,375	2,607,665	335,907	236,416	1,245,246	11,009,181
2025	55-59	5,641,069	268,663	889,361	15,097	3,198,387	150,996	100,782	1,375,267	11,639,621
2025	60-64	6,487,440	244,415	378,109	11,895	3,885,809	57,662	32,850	1,314,367	12,412,546
2025	65-69	6,370,220	166,810	163,947	2,700	4,210,981	41,373	36,163	1,281,034	12,273,229
2025	70-74	4,668,148	95,123	90,713	4,399	3,889,638	23,438	16,674	1,004,923	9,793,056
2025	75+	5,597,824	111,443	55,520	612	9,596,612	21,630	10,468	1,912,116	17,306,225
2025	Total	41,040,336	3,814,918	26,414,745	2,023,315	39,069,259	6,735,012	2,481,339	14,441,352	136,020,276
Household Growth										
	2005-10	2,949,707	122,302	-112,218	28,608	1,948,754	57,545	58,781	828,499	5,881,978
	2010-15	2,797,521	67,524	114,537	38,856	2,071,572	112,191	51,464	750,977	6,004,643
	2015-20	2,202,283	14,443	432,569	32,803	2,207,191	137,209	65,952	705,056	5,797,506
	2020-25	1,599,398	20,726	595,275	34,602	2,405,910	133,887	98,485	793,946	5,682,229

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC WHITE HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	11,618	54,617	14,021	20,115	85,427	10,104	10,439	245,944	452,286
2005	20-24	379,160	409,126	386,432	189,957	980,339	174,949	61,266	882,090	3,463,319
2005	25-29	941,663	492,958	1,454,962	249,586	1,377,045	358,625	66,076	625,731	5,566,646
2005	30-34	884,524	276,400	2,769,674	203,037	1,135,187	517,487	75,350	349,465	6,211,124
2005	35-39	739,904	224,797	3,755,328	188,521	1,129,402	632,212	140,575	262,714	7,073,454
2005	40-44	1,180,322	301,706	4,077,332	150,510	1,548,147	706,156	231,392	400,520	8,596,084
2005	45-49	2,277,959	287,165	3,035,503	86,241	1,913,158	499,454	212,465	643,005	8,954,950
2005	50-54	3,440,792	236,738	1,507,270	28,565	1,951,079	223,629	116,678	730,130	8,234,881
2005	55-59	4,131,452	197,648	502,669	7,114	2,091,200	79,462	32,361	649,292	7,691,199
2005	60-64	3,463,820	125,650	134,258	2,548	1,873,216	15,424	9,872	452,574	6,077,362
2005	65-69	2,794,610	68,318	50,132	1,062	1,657,048	12,355	7,118	372,204	4,962,848
2005	70-74	2,137,272	43,192	20,900	303	1,614,479	4,725	2,155	334,623	4,157,651
2005	75+	3,308,316	58,155	17,080	441	5,665,350	7,626	1,202	907,969	9,966,139
2005	Total	25,691,411	2,776,470	17,725,561	1,128,000	23,021,078	3,242,210	966,950	6,856,262	81,407,942
2010	15-19	11,075	52,068	13,367	19,176	81,439	9,632	9,952	234,464	431,174
2010	20-24	384,180	414,542	391,548	192,472	993,319	177,265	62,077	893,768	3,509,172
2010	25-29	1,023,262	535,675	1,581,040	271,213	1,496,371	389,702	71,802	679,953	6,049,018
2010	30-34	874,343	273,219	2,737,794	200,700	1,122,121	511,531	74,483	345,442	6,139,631
2010	35-39	661,263	200,905	3,356,189	168,484	1,009,362	565,017	125,634	234,791	6,321,644
2010	40-44	1,015,270	259,516	3,507,174	129,463	1,331,661	607,410	199,035	344,513	7,394,043
2010	45-49	2,182,054	275,075	2,907,705	82,610	1,832,612	478,427	203,520	615,934	8,577,938
2010	50-54	3,673,690	252,762	1,609,294	30,499	2,083,142	238,766	124,576	779,551	8,792,278
2010	55-59	4,467,619	213,730	543,570	7,693	2,261,356	85,928	34,994	702,123	8,317,013
2010	60-64	4,340,691	157,458	168,246	3,192	2,347,424	19,329	12,371	567,144	7,615,856
2010	65-69	3,337,684	81,595	59,874	1,269	1,979,060	14,756	8,501	444,534	5,927,273
2010	70-74	2,240,875	45,285	21,913	318	1,692,740	4,954	2,260	350,844	4,359,190
2010	75+	3,366,121	59,171	17,379	448	5,764,339	7,759	1,223	923,833	10,140,273
2010	Total	27,578,127	2,821,001	16,915,093	1,107,538	23,994,946	3,110,476	930,428	7,116,896	83,574,504
2015	15-19	10,186	47,886	12,293	17,636	74,899	8,859	9,153	215,635	396,547
2015	20-24	366,026	394,954	373,046	183,377	946,381	168,889	59,144	851,535	3,343,351
2015	25-29	1,032,507	540,515	1,595,325	273,664	1,509,891	393,222	72,450	686,096	6,103,671
2015	30-34	948,717	296,459	2,970,678	217,772	1,217,572	555,043	80,819	374,827	6,661,886
2015	35-39	654,957	198,989	3,324,182	166,877	999,736	559,629	124,436	232,552	6,261,357
2015	40-44	908,642	232,261	3,138,834	115,866	1,191,803	543,617	178,131	308,331	6,617,485
2015	45-49	1,880,178	237,019	2,505,438	71,181	1,579,079	412,239	175,364	530,723	7,391,222
2015	50-54	3,525,556	242,570	1,544,402	29,269	1,999,144	229,138	119,553	748,117	8,437,749
2015	55-59	4,776,450	228,505	581,146	8,225	2,417,676	91,868	37,413	750,658	8,891,940
2015	60-64	4,704,579	170,658	182,350	3,460	2,544,213	20,949	13,408	614,689	8,254,307
2015	65-69	4,197,289	102,609	75,295	1,596	2,488,758	18,557	10,691	559,022	7,453,815
2015	70-74	2,691,726	54,396	26,322	382	2,033,310	5,951	2,715	421,432	5,236,234
2015	75+	3,468,078	60,964	17,905	462	5,938,936	7,994	1,260	951,815	10,447,415
2015	Total	29,164,890	2,807,785	16,347,216	1,089,767	24,941,397	3,015,955	884,536	7,245,431	85,496,977

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC WHITE HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	10,236	48,123	12,354	17,723	75,270	8,902	9,198	216,701	398,508
2020	20-24	336,322	362,902	342,772	168,496	869,580	155,183	54,344	782,431	3,072,031
2020	25-29	982,314	514,239	1,517,772	260,360	1,436,491	374,107	68,928	652,743	5,806,955
2020	30-34	957,700	299,266	2,998,808	219,834	1,229,101	560,299	81,584	378,376	6,724,967
2020	35-39	711,992	216,317	3,613,663	181,409	1,086,797	608,363	135,272	252,804	6,806,616
2020	40-44	901,804	230,513	3,115,213	114,994	1,182,834	539,526	176,791	306,010	6,567,685
2020	45-49	1,686,592	212,616	2,247,475	63,853	1,416,495	369,794	157,308	476,079	6,630,213
2020	50-54	3,045,546	209,544	1,334,129	25,284	1,726,957	197,940	103,275	646,260	7,288,935
2020	55-59	4,590,030	219,586	558,464	7,904	2,323,316	88,282	35,953	721,361	8,544,896
2020	60-64	5,040,173	182,832	195,358	3,707	2,725,700	22,444	14,365	658,537	8,843,115
2020	65-69	4,564,219	111,579	81,877	1,735	2,706,327	20,179	11,625	607,892	8,105,433
2020	70-74	3,401,830	68,747	33,266	483	2,569,717	7,521	3,431	532,609	6,617,605
2020	75+	3,838,674	67,478	19,819	511	6,573,565	8,849	1,394	1,053,525	11,563,815
2020	Total	30,067,433	2,743,742	16,070,969	1,066,293	25,922,150	2,961,389	853,469	7,285,329	86,970,775
2025	15-19	10,216	48,025	12,329	17,687	75,117	8,884	9,179	216,261	397,699
2025	20-24	337,823	364,521	344,302	169,248	873,460	155,876	54,587	785,922	3,085,737
2025	25-29	901,130	471,739	1,392,334	238,842	1,317,770	343,188	63,232	598,797	5,327,032
2025	30-34	911,922	284,962	2,855,466	209,326	1,170,350	533,517	77,684	360,290	6,403,516
2025	35-39	720,440	218,884	3,656,538	183,562	1,099,691	615,581	136,877	255,803	6,887,375
2025	40-44	981,546	250,896	3,390,678	125,163	1,287,427	587,234	192,424	333,069	7,148,437
2025	45-49	1,677,586	211,480	2,235,474	63,512	1,408,932	367,820	156,468	473,537	6,594,809
2025	50-54	2,739,166	188,464	1,199,917	22,740	1,553,226	178,028	92,886	581,246	6,555,673
2025	55-59	3,971,492	189,996	483,207	6,839	2,010,233	76,385	31,108	624,152	7,393,413
2025	60-64	4,853,167	176,048	188,109	3,569	2,624,568	21,611	13,832	634,103	8,515,008
2025	65-69	4,904,667	119,902	87,984	1,864	2,908,193	21,684	12,493	653,235	8,710,023
2025	70-74	3,717,350	75,123	36,352	528	2,808,058	8,219	3,749	582,009	7,231,387
2025	75+	4,593,618	80,749	23,716	612	7,866,376	10,589	1,668	1,260,720	13,838,048
2025	Total	30,320,122	2,680,789	15,906,405	1,043,492	27,003,402	2,928,615	846,187	7,359,144	88,088,156
Household Growth										
	2005-10	1,886,715	44,531	-810,468	-20,462	973,868	-131,734	-36,522	260,634	2,166,563
	2010-15	1,586,763	-13,216	-567,877	-17,771	946,451	-94,522	-45,892	128,535	1,922,472
	2015-20	902,543	-64,042	-276,247	-23,474	980,753	-54,565	-31,067	39,897	1,473,798
	2020-25	252,689	-62,953	-164,564	-22,802	1,081,252	-32,774	-7,283	73,816	1,117,381

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC BLACK HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	4,315	6,815	2,087	1,715	29,177	15,000	11,835	78,562	149,507
2005	20-24	18,150	50,254	48,285	45,730	235,241	200,121	47,305	179,209	824,295
2005	25-29	58,933	41,717	164,339	61,244	318,600	375,077	49,280	109,093	1,178,284
2005	30-34	82,640	34,459	289,657	51,907	302,223	419,627	72,507	74,641	1,327,661
2005	35-39	92,309	26,653	415,463	46,568	330,088	358,443	123,777	95,985	1,489,286
2005	40-44	153,354	37,526	408,378	25,296	372,872	244,852	147,261	204,071	1,593,608
2005	45-49	280,169	47,458	327,947	20,114	405,058	143,201	102,707	254,363	1,581,017
2005	50-54	319,960	36,512	154,848	6,904	428,318	59,549	47,050	256,932	1,310,072
2005	55-59	328,265	22,361	63,913	1,477	420,994	25,487	16,902	218,615	1,098,014
2005	60-64	247,409	12,428	24,606	1,335	331,491	9,923	7,206	165,428	799,825
2005	65-69	196,458	8,767	6,199	0	295,526	4,712	4,205	134,179	650,045
2005	70-74	148,696	3,101	7,020	1,068	263,836	6,147	2,840	97,521	530,229
2005	75+	166,163	8,708	6,277	0	499,109	3,169	2,189	186,258	871,874
2005	Total	2,096,820	336,758	1,919,019	263,360	4,232,533	1,865,309	635,064	2,054,857	13,403,719
2010	15-19	4,384	6,923	2,120	1,743	29,639	15,238	12,022	79,806	151,873
2010	20-24	19,545	54,115	51,994	49,242	253,311	215,493	50,938	192,975	887,612
2010	25-29	65,142	46,112	181,653	67,697	352,165	414,592	54,472	120,586	1,302,418
2010	30-34	86,758	36,176	304,090	54,494	317,282	440,536	76,120	78,360	1,393,815
2010	35-39	89,945	25,970	404,820	45,375	321,633	349,261	120,606	93,526	1,451,136
2010	40-44	142,261	34,811	378,837	23,466	345,900	227,140	136,608	189,309	1,478,333
2010	45-49	288,621	48,889	337,841	20,721	417,278	147,521	105,805	262,037	1,628,714
2010	50-54	371,580	42,403	179,830	8,018	497,421	69,156	54,641	298,384	1,521,432
2010	55-59	396,573	27,014	77,212	1,785	508,598	30,791	20,420	264,106	1,326,498
2010	60-64	329,651	16,559	32,786	1,779	441,683	13,222	9,601	220,419	1,065,698
2010	65-69	226,142	10,092	7,135	0	340,179	5,424	4,841	154,454	748,267
2010	70-74	162,152	3,381	7,655	1,165	287,712	6,704	3,097	106,346	578,212
2010	75+	177,541	9,305	6,707	0	533,285	3,387	2,339	199,012	931,575
2010	Total	2,360,293	361,749	1,972,681	275,484	4,646,084	1,938,463	651,510	2,259,319	14,465,582
2015	15-19	3,882	6,132	1,878	1,543	26,251	13,496	10,648	70,683	134,513
2015	20-24	19,858	54,983	52,828	50,033	257,377	218,952	51,756	196,072	901,859
2015	25-29	69,796	49,406	194,631	72,533	377,326	444,212	58,364	129,202	1,395,470
2015	30-34	95,739	39,921	335,570	60,135	350,128	486,142	84,000	86,472	1,538,106
2015	35-39	94,814	27,376	426,737	47,832	339,046	368,170	127,136	98,590	1,529,700
2015	40-44	139,274	34,080	370,882	22,973	338,636	222,371	133,740	185,334	1,447,289
2015	45-49	268,979	45,562	314,848	19,311	388,879	137,481	98,605	244,203	1,517,868
2015	50-54	384,500	43,877	186,083	8,297	514,716	71,561	56,540	308,758	1,574,332
2015	55-59	462,968	31,537	90,140	2,083	593,749	35,946	23,838	308,324	1,548,585
2015	60-64	400,856	20,136	39,868	2,163	537,087	16,077	11,675	268,030	1,295,890
2015	65-69	304,202	13,575	9,598	0	457,603	7,296	6,512	207,768	1,006,554
2015	70-74	189,128	3,944	8,929	1,358	335,578	7,819	3,612	124,039	674,407
2015	75+	195,070	10,223	7,370	0	585,938	3,721	2,570	218,661	1,023,553
2015	Total	2,629,067	380,752	2,039,361	288,262	5,102,312	2,033,243	668,995	2,446,135	15,588,126

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC BLACK HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	3,881	6,129	1,877	1,543	26,241	13,491	10,644	70,657	134,463
2020	20-24	17,622	48,792	46,880	44,399	228,396	194,298	45,928	173,994	800,309
2020	25-29	70,852	50,154	197,576	73,631	383,036	450,935	59,247	131,157	1,416,589
2020	30-34	102,664	42,808	359,841	64,484	375,452	521,302	90,076	92,726	1,649,352
2020	35-39	105,041	30,329	472,766	52,991	375,616	407,881	140,849	109,223	1,694,696
2020	40-44	147,574	36,111	392,985	24,343	358,817	235,623	141,710	196,379	1,533,542
2020	45-49	264,687	44,835	309,825	19,003	382,674	135,287	97,031	240,307	1,493,649
2020	50-54	360,125	41,095	174,286	7,771	482,086	67,024	52,956	289,185	1,474,528
2020	55-59	481,511	32,800	93,750	2,167	617,529	37,386	24,793	320,673	1,610,608
2020	60-64	470,752	23,647	46,819	2,540	630,738	18,881	13,710	314,766	1,521,853
2020	65-69	372,767	16,635	11,761	0	560,742	8,940	7,979	254,597	1,233,422
2020	70-74	257,369	5,367	12,150	1,849	456,660	10,640	4,916	168,794	917,745
2020	75+	224,240	11,752	8,472	0	673,555	4,277	2,954	251,358	1,176,609
2020	Total	2,879,085	390,454	2,128,988	294,720	5,551,543	2,105,966	692,794	2,613,816	16,657,365
2025	15-19	3,918	6,187	1,895	1,557	26,490	13,619	10,745	71,328	135,740
2025	20-24	17,653	48,878	46,962	44,477	228,796	194,639	46,009	174,300	801,713
2025	25-29	62,784	44,443	175,079	65,247	339,420	399,588	52,501	116,222	1,255,283
2025	30-34	104,381	43,524	365,860	65,563	381,732	530,023	91,582	94,277	1,676,943
2025	35-39	113,089	32,652	508,988	57,051	404,395	439,132	151,641	117,592	1,824,539
2025	40-44	164,088	40,152	436,962	27,067	398,971	261,991	157,568	218,355	1,705,154
2025	45-49	281,690	47,715	329,728	20,224	407,257	143,978	103,264	255,744	1,589,600
2025	50-54	355,957	40,620	172,269	7,681	476,507	66,248	52,343	285,838	1,457,465
2025	55-59	453,344	30,881	88,266	2,040	581,406	35,199	23,343	301,914	1,516,392
2025	60-64	492,395	24,734	48,972	2,657	659,736	19,749	14,341	329,237	1,591,820
2025	65-69	440,881	19,675	13,911	0	663,204	10,574	9,437	301,119	1,458,801
2025	70-74	318,347	6,638	15,029	2,287	564,855	13,161	6,081	208,786	1,135,184
2025	75+	284,607	14,916	10,752	0	854,881	5,429	3,750	319,025	1,493,359
2025	Total	3,093,135	401,016	2,214,672	295,850	5,987,651	2,133,329	722,604	2,793,738	17,641,994
Household Growth										
	2005-10	263,473	24,991	53,662	12,124	413,551	73,154	16,447	204,462	1,061,863
	2010-15	268,774	19,003	66,680	12,778	456,228	94,780	17,485	186,816	1,122,544
	2015-20	250,018	9,702	89,627	6,458	449,231	72,723	23,799	167,681	1,069,239
	2020-25	214,050	10,562	85,684	1,130	436,108	27,363	29,810	179,921	984,629

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC ASIAN/OTHER HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	1,526	2,836	490	2,781	10,184	1,003	0	45,171	63,990
2005	20-24	25,846	24,834	26,911	13,542	82,821	13,452	5,059	129,296	321,761
2005	25-29	93,189	36,132	99,486	24,605	149,911	32,201	9,132	123,145	567,800
2005	30-34	121,657	26,876	327,746	17,222	138,644	53,398	11,427	79,301	776,270
2005	35-39	76,173	14,430	381,854	14,887	119,319	50,285	16,913	44,695	718,556
2005	40-44	81,334	12,320	394,439	10,196	102,090	48,908	31,590	45,058	725,935
2005	45-49	123,406	14,889	286,338	5,588	106,075	29,856	16,999	61,896	645,048
2005	50-54	213,891	11,389	163,879	2,906	124,727	16,594	11,122	58,352	602,862
2005	55-59	262,816	7,279	54,842	586	106,872	4,138	5,852	53,520	495,905
2005	60-64	202,522	5,543	14,439	137	82,022	839	835	37,776	344,113
2005	65-69	151,262	5,642	7,475	50	75,084	0	1,879	38,678	280,071
2005	70-74	92,496	1,213	3,928	0	62,405	251	491	24,731	185,515
2005	75+	105,797	1,628	1,418	0	117,636	704	764	37,771	265,718
2005	Total	1,551,915	165,010	1,763,245	92,501	1,277,791	251,627	112,063	779,391	5,993,544
2010	15-19	1,636	3,040	525	2,980	10,916	1,075	0	48,418	68,591
2010	20-24	26,762	25,714	27,864	14,022	85,755	13,928	5,238	133,876	333,160
2010	25-29	96,402	37,377	102,916	25,453	155,080	33,311	9,447	127,392	587,378
2010	30-34	119,419	26,381	321,716	16,905	136,094	52,416	11,216	77,842	761,988
2010	35-39	87,175	16,515	437,010	17,037	136,554	57,548	19,356	51,151	822,347
2010	40-44	88,349	13,383	428,460	11,076	110,896	53,126	34,315	48,944	788,548
2010	45-49	134,668	16,248	312,469	6,098	115,756	32,580	18,551	67,545	703,915
2010	50-54	246,807	13,142	189,099	3,354	143,921	19,148	12,834	67,332	695,637
2010	55-59	315,131	8,728	65,759	703	128,145	4,961	7,017	64,174	594,617
2010	60-64	288,152	7,887	20,544	195	116,702	1,193	1,189	53,748	489,610
2010	65-69	194,645	7,260	9,619	65	96,619	0	2,418	49,771	360,396
2010	70-74	116,967	1,534	4,967	0	78,915	318	620	31,274	234,595
2010	75+	130,290	2,004	1,747	0	144,870	867	941	46,515	327,234
2010	Total	1,846,403	179,212	1,922,695	97,888	1,460,223	270,471	123,142	867,983	6,768,017
2015	15-19	1,724	3,203	553	3,140	11,500	1,133	0	51,010	72,263
2015	20-24	28,359	27,248	29,527	14,859	90,871	14,759	5,550	141,863	353,037
2015	25-29	96,394	37,374	102,907	25,451	155,067	33,308	9,446	127,381	587,329
2015	30-34	123,518	27,287	332,760	17,485	140,765	54,215	11,601	80,514	788,146
2015	35-39	88,235	16,716	442,322	17,244	138,214	58,247	19,592	51,773	832,342
2015	40-44	102,400	15,511	496,603	12,837	128,533	61,575	39,773	56,728	913,960
2015	45-49	148,225	17,883	343,926	6,712	127,409	35,860	20,418	74,345	774,779
2015	50-54	273,349	14,555	209,434	3,714	159,399	21,207	14,214	74,573	770,445
2015	55-59	366,420	10,149	76,461	818	149,001	5,769	8,159	74,618	691,394
2015	60-64	347,361	9,507	24,765	235	140,682	1,438	1,433	64,792	590,213
2015	65-69	279,120	10,410	13,794	93	138,551	0	3,467	71,372	516,806
2015	70-74	153,969	2,019	6,538	0	103,880	418	817	41,168	308,809
2015	75+	165,423	2,545	2,218	0	183,935	1,101	1,195	59,059	415,475
2015	Total	2,174,496	194,407	2,081,808	102,588	1,667,807	289,031	135,664	969,196	7,614,998

Appendix B: Low Immigration Series Household Projections 2005-2025
NON-HISPANIC ASIAN/OTHER HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	1,920	3,567	616	3,497	12,807	1,262	0	56,806	80,473
2020	20-24	29,841	28,672	31,070	15,635	95,621	15,531	5,840	149,279	371,490
2020	25-29	99,025	38,394	105,716	26,146	159,299	34,217	9,704	130,857	603,357
2020	30-34	123,848	27,360	333,650	17,532	141,142	54,360	11,633	80,730	790,255
2020	35-39	93,664	17,744	469,538	18,305	146,718	61,831	20,797	54,958	883,557
2020	40-44	105,286	15,948	510,596	13,199	132,155	63,310	40,893	58,327	939,713
2020	45-49	173,239	20,901	401,964	7,845	148,910	41,912	23,864	86,891	905,525
2020	50-54	304,509	16,214	233,308	4,138	177,569	23,624	15,834	83,074	858,270
2020	55-59	408,460	11,313	85,233	911	166,096	6,430	9,095	83,179	770,718
2020	60-64	405,350	11,094	28,900	274	164,168	1,678	1,672	75,609	688,745
2020	65-69	339,346	12,656	16,771	113	168,446	0	4,215	86,772	628,319
2020	70-74	222,531	2,919	9,450	0	150,138	604	1,180	59,500	446,323
2020	75+	217,348	3,344	2,914	0	241,671	1,446	1,570	77,597	545,889
2020	Total	2,524,366	210,127	2,229,726	107,595	1,904,739	306,207	146,297	1,083,578	8,512,634
2025	15-19	2,054	3,816	659	3,741	13,702	1,350	0	60,776	86,097
2025	20-24	33,154	31,856	34,520	17,371	106,239	17,255	6,489	165,854	412,740
2025	25-29	100,615	39,011	107,414	26,566	161,857	34,767	9,860	132,959	613,048
2025	30-34	127,307	28,124	342,967	18,021	145,083	55,878	11,957	82,984	812,321
2025	35-39	96,538	18,288	483,945	18,867	151,220	63,729	21,435	56,644	910,666
2025	40-44	113,043	17,123	548,215	14,171	141,891	67,975	43,906	62,624	1,008,948
2025	45-49	180,083	21,727	417,845	8,155	154,793	43,568	24,807	90,323	941,299
2025	50-54	358,089	19,067	274,360	4,866	208,813	27,781	18,620	97,691	1,009,288
2025	55-59	456,987	12,657	95,360	1,020	185,829	7,194	10,175	93,061	862,284
2025	60-64	453,235	12,405	32,314	307	183,561	1,877	1,870	84,541	770,109
2025	65-69	398,478	14,862	19,693	132	197,798	0	4,950	101,892	737,805
2025	70-74	273,062	3,581	11,596	0	184,230	741	1,448	73,011	547,671
2025	75+	303,554	4,670	4,070	0	337,523	2,020	2,193	108,373	762,402
2025	Total	2,896,198	227,187	2,372,955	113,217	2,172,541	324,134	157,710	1,210,735	9,474,677
Household Growth										
	2005-10	294,487	14,202	159,450	5,387	182,432	18,844	11,078	88,592	774,473
	2010-15	328,093	15,195	159,114	4,700	207,584	18,560	12,523	101,213	846,981
	2015-20	349,870	15,720	147,918	5,007	236,932	17,176	10,633	114,381	897,636
	2020-25	371,833	17,061	143,229	5,622	267,802	17,927	11,412	127,157	962,043

Appendix B: Low Immigration Series Household Projections 2005-2025
HISPANIC HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	8,522	12,415	11,851	10,091	15,509	5,616	10,017	119,634	193,655
2005	20-24	75,738	51,829	207,056	73,250	127,520	77,238	37,949	236,665	887,246
2005	25-29	135,181	63,372	562,042	106,150	167,403	156,916	52,916	229,550	1,473,530
2005	30-34	131,813	43,444	823,442	71,784	172,475	225,520	60,385	135,749	1,664,613
2005	35-39	97,740	21,475	867,613	58,304	151,273	187,114	102,173	108,084	1,593,776
2005	40-44	135,889	30,078	696,900	49,352	154,713	144,741	109,330	128,283	1,449,286
2005	45-49	222,339	30,122	444,358	23,008	175,414	85,428	64,394	144,639	1,189,702
2005	50-54	321,317	22,603	206,258	7,943	171,569	29,678	33,730	130,365	923,462
2005	55-59	310,998	14,389	91,151	2,129	172,414	13,197	14,810	145,879	764,967
2005	60-64	231,130	10,481	36,488	1,800	140,275	4,842	942	89,441	515,399
2005	65-69	204,271	4,036	13,818	230	144,115	2,973	3,028	73,328	445,798
2005	70-74	123,741	3,367	9,550	545	114,480	453	1,858	48,588	302,583
2005	75+	152,599	4,074	6,229	0	197,269	1,318	1,048	82,159	444,696
2005	Total	2,151,280	311,686	3,976,756	404,586	1,904,430	935,034	492,580	1,672,363	11,848,715
2010	15-19	9,913	14,441	13,785	11,738	18,041	6,532	11,651	139,159	225,261
2010	20-24	79,662	54,513	217,782	77,045	134,126	81,240	39,915	248,925	933,207
2010	25-29	131,838	61,805	548,145	103,525	163,263	153,036	51,608	223,874	1,437,094
2010	30-34	139,245	45,894	869,865	75,831	182,199	238,234	63,789	143,403	1,758,459
2010	35-39	111,052	24,399	985,777	66,245	171,875	212,598	116,089	122,804	1,810,840
2010	40-44	155,878	34,503	799,412	56,612	177,471	166,032	125,412	147,153	1,662,472
2010	45-49	275,745	37,357	551,091	28,534	217,548	105,948	79,861	179,380	1,475,464
2010	50-54	419,027	29,476	268,980	10,358	223,743	38,703	43,987	170,008	1,204,281
2010	55-59	404,939	18,736	118,684	2,772	224,494	17,183	19,283	189,944	996,035
2010	60-64	324,853	14,731	51,284	2,529	197,156	6,805	1,324	125,709	724,391
2010	65-69	259,316	5,123	17,542	291	182,949	3,774	3,844	93,088	565,928
2010	70-74	150,509	4,096	11,616	663	139,245	551	2,260	59,098	368,038
2010	75+	194,336	5,189	7,932	0	251,223	1,678	1,335	104,630	566,323
2010	Total	2,656,311	350,264	4,461,895	436,145	2,283,333	1,032,314	560,358	1,947,174	13,727,794
2015	15-19	10,561	15,384	14,686	12,505	19,219	6,959	12,412	148,249	239,976
2015	20-24	91,951	62,923	251,379	88,930	154,817	93,772	46,072	287,326	1,077,169
2015	25-29	138,584	64,968	576,190	108,822	171,616	160,865	54,248	235,328	1,510,621
2015	30-34	138,111	45,520	862,784	75,214	180,716	236,295	63,270	142,235	1,744,144
2015	35-39	119,125	26,173	1,057,438	71,061	184,370	228,052	124,528	131,731	1,942,478
2015	40-44	178,545	39,520	915,659	64,844	203,278	190,176	143,649	168,551	1,904,222
2015	45-49	317,643	43,034	634,827	32,870	250,603	122,046	91,995	206,637	1,699,655
2015	50-54	520,456	36,611	334,088	12,865	277,901	48,071	54,634	211,160	1,495,787
2015	55-59	528,603	24,458	154,929	3,619	293,052	22,431	25,172	247,951	1,300,214
2015	60-64	424,039	19,229	66,942	3,302	257,353	8,882	1,729	164,091	945,567
2015	65-69	365,877	7,229	24,750	411	258,129	5,325	5,424	131,340	798,486
2015	70-74	193,047	5,253	14,899	851	178,600	707	2,899	75,801	472,058
2015	75+	243,661	6,506	9,946	0	314,987	2,104	1,674	131,187	710,065
2015	Total	3,270,202	396,807	4,918,515	475,293	2,744,642	1,125,687	627,706	2,281,587	15,840,440

Appendix B: Low Immigration Series Household Projections 2005-2025
HISPANIC HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	12,051	17,555	16,758	14,269	21,931	7,941	14,164	169,163	273,830
2020	20-24	98,327	67,286	268,811	95,097	165,553	100,275	49,267	307,250	1,151,866
2020	25-29	159,736	74,884	664,136	125,432	197,811	185,419	62,529	271,247	1,741,195
2020	30-34	147,247	48,531	919,855	80,189	192,670	251,925	67,455	151,644	1,859,514
2020	35-39	120,334	26,438	1,068,165	71,782	186,240	230,366	125,791	133,068	1,962,183
2020	40-44	193,166	42,756	990,643	70,154	219,924	205,750	155,413	182,354	2,060,159
2020	45-49	365,062	49,458	729,597	37,777	288,015	140,266	105,729	237,484	1,953,388
2020	50-54	600,749	42,259	385,629	14,850	320,774	55,487	63,062	243,736	1,726,547
2020	55-59	657,068	30,401	192,581	4,498	364,272	27,882	31,290	308,209	1,616,201
2020	60-64	553,966	25,121	87,453	4,313	336,207	11,604	2,259	214,370	1,235,293
2020	65-69	478,914	9,462	32,396	538	337,878	6,971	7,100	171,918	1,045,178
2020	70-74	273,636	7,447	21,118	1,206	253,158	1,003	4,109	107,445	669,122
2020	75+	309,799	8,271	12,645	0	400,485	2,676	2,128	166,795	902,799
2020	Total	3,970,054	449,870	5,389,787	520,106	3,284,916	1,227,563	690,294	2,664,683	18,197,273
2025	15-19	12,888	18,774	17,922	15,260	23,454	8,492	15,147	180,913	292,850
2025	20-24	112,287	76,840	306,975	108,598	189,057	114,511	56,262	350,872	1,315,403
2025	25-29	170,168	79,774	707,509	133,624	210,730	197,528	66,612	288,961	1,854,906
2025	30-34	171,000	56,360	1,068,242	93,125	223,750	292,564	78,336	176,106	2,159,483
2025	35-39	130,045	28,572	1,154,372	77,575	201,271	248,957	135,943	143,807	2,120,543
2025	40-44	197,166	43,642	1,011,157	71,607	224,479	210,010	158,631	186,130	2,102,820
2025	45-49	396,520	53,720	792,468	41,033	312,834	152,353	114,840	257,949	2,121,716
2025	50-54	691,288	48,628	443,747	17,088	369,118	63,850	72,566	280,470	1,986,755
2025	55-59	759,247	35,129	222,528	5,198	420,919	32,218	36,155	356,138	1,867,532
2025	60-64	688,642	31,228	108,714	5,362	417,943	14,425	2,808	266,486	1,535,609
2025	65-69	626,195	12,372	42,359	704	441,785	9,114	9,283	224,788	1,366,601
2025	70-74	359,389	9,780	27,736	1,584	332,494	1,317	5,396	141,117	878,815
2025	75+	416,045	11,108	16,982	0	537,832	3,593	2,858	223,997	1,212,415
2025	Total	4,730,881	505,926	5,920,712	570,757	3,905,665	1,348,934	754,839	3,077,735	20,815,448
Household Growth										
	2005-10	505,032	38,578	485,139	31,558	378,903	97,280	67,778	274,811	1,879,080
	2010-15	613,891	46,543	456,621	39,148	461,309	93,373	67,348	334,413	2,112,645
	2015-20	699,852	53,063	471,271	44,812	540,275	101,876	62,587	383,096	2,356,833
	2020-25	760,826	56,057	530,925	50,651	620,748	121,371	64,545	413,052	2,618,175

Appendix C: High Immigration Series Household Projections 2005-2025
TOTAL HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	25,982	76,683	28,449	34,702	140,297	31,723	32,290	489,311	859,438
2005	20-24	498,895	536,043	668,684	322,479	1,425,921	465,761	151,578	1,427,260	5,496,621
2005	25-29	1,228,966	634,179	2,280,829	441,585	2,012,958	922,818	177,405	1,087,519	8,786,260
2005	30-34	1,220,634	381,179	4,210,519	343,950	1,748,530	1,216,032	219,669	639,156	9,979,669
2005	35-39	1,006,127	287,355	5,420,257	308,280	1,730,082	1,228,053	383,439	511,478	10,875,071
2005	40-44	1,550,898	381,630	5,577,049	235,354	2,177,822	1,144,657	519,573	777,931	12,364,914
2005	45-49	2,903,873	379,633	4,094,146	134,952	2,599,706	757,940	396,565	1,103,903	12,370,718
2005	50-54	4,295,959	307,241	2,032,255	46,319	2,675,693	329,450	208,580	1,175,779	11,071,277
2005	55-59	5,033,531	241,677	712,575	11,307	2,791,479	122,284	69,925	1,067,306	10,050,085
2005	60-64	4,144,881	154,102	209,791	5,819	2,427,004	31,027	18,856	745,220	7,736,700
2005	65-69	3,346,601	86,763	77,624	1,342	2,171,772	20,040	16,231	618,390	6,338,762
2005	70-74	2,502,204	50,873	41,398	1,917	2,055,202	11,577	7,344	505,464	5,175,978
2005	75+	3,732,875	72,565	31,005	441	6,479,364	12,817	5,203	1,214,156	11,548,427
2005	Total	31,491,427	3,589,923	25,384,581	1,888,447	30,435,832	6,294,180	2,206,657	11,362,873	112,653,920
2010	15-19	27,817	77,833	30,800	36,626	142,314	33,149	34,556	514,753	897,848
2010	20-24	519,292	556,707	708,674	340,483	1,488,002	497,661	162,148	1,500,387	5,773,354
2010	25-29	1,339,016	691,500	2,466,992	478,562	2,201,839	1,009,809	192,239	1,180,137	9,560,094
2010	30-34	1,240,523	387,636	4,311,973	354,100	1,785,874	1,264,493	230,274	659,191	10,234,064
2010	35-39	959,985	270,339	5,246,334	300,688	1,657,434	1,197,934	386,949	509,369	10,529,031
2010	40-44	1,411,857	344,354	5,156,853	222,499	1,979,473	1,061,705	500,091	736,336	11,413,168
2010	45-49	2,894,060	379,253	4,132,791	138,739	2,594,575	768,247	410,056	1,131,339	12,449,061
2010	50-54	4,726,586	338,799	2,257,077	52,484	2,957,628	367,102	237,132	1,320,437	12,257,246
2010	55-59	5,602,995	268,954	809,245	13,022	3,132,256	139,381	82,243	1,225,907	11,274,002
2010	60-64	5,301,864	197,294	274,561	7,752	3,112,888	40,750	24,578	971,789	9,931,476
2010	65-69	4,032,169	104,488	94,883	1,634	2,607,962	24,057	19,776	746,041	7,631,010
2010	70-74	2,675,779	54,404	46,457	2,160	2,203,232	12,559	8,294	549,419	5,552,303
2010	75+	3,871,259	75,743	33,858	448	6,697,780	13,717	5,859	1,275,531	11,974,195
2010	Total	34,603,201	3,747,304	25,570,498	1,949,197	32,561,257	6,430,565	2,294,196	12,320,636	119,476,853
2015	15-19	28,017	75,390	31,473	36,859	136,534	31,824	34,125	512,128	886,350
2015	20-24	524,873	556,030	746,785	352,982	1,493,244	516,293	170,687	1,540,023	5,900,917
2015	25-29	1,382,872	713,660	2,577,993	502,341	2,285,122	1,070,814	204,598	1,236,219	9,973,621
2015	30-34	1,348,348	421,297	4,661,988	383,184	1,946,471	1,376,129	249,252	713,063	11,099,733
2015	35-39	978,600	274,413	5,378,280	310,248	1,698,016	1,241,633	406,481	529,200	10,816,870
2015	40-44	1,349,398	325,704	5,009,785	220,371	1,889,769	1,034,042	504,984	732,088	11,066,139
2015	45-49	2,641,440	346,927	3,847,582	131,663	2,369,145	715,329	391,138	1,069,122	11,512,347
2015	50-54	4,735,669	339,699	2,294,386	54,673	2,970,466	372,713	247,200	1,353,237	12,368,042
2015	55-59	6,172,954	296,175	910,979	14,886	3,473,317	157,079	95,678	1,393,023	12,514,091
2015	60-64	5,914,939	220,884	317,446	9,276	3,499,721	47,764	28,436	1,121,450	11,159,915
2015	65-69	5,176,066	134,686	124,913	2,117	3,361,855	31,389	26,451	978,169	9,835,646
2015	70-74	3,238,788	65,835	57,322	2,620	2,660,913	14,962	10,159	666,282	6,716,881
2015	75+	4,078,360	80,389	37,629	462	7,032,148	14,973	6,743	1,363,899	12,614,604
2015	Total	37,570,322	3,851,089	25,996,561	2,021,682	34,816,722	6,624,943	2,375,933	13,207,905	126,465,156

Appendix C: High Immigration Series Household Projections 2005-2025
TOTAL HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	30,665	79,678	34,799	40,183	143,470	33,731	36,967	554,478	953,971
2020	20-24	509,935	531,398	749,024	347,112	1,424,441	494,942	167,525	1,507,023	5,731,400
2020	25-29	1,382,365	710,685	2,653,642	519,425	2,286,776	1,105,433	216,050	1,276,269	10,150,646
2020	30-34	1,396,791	436,657	4,859,846	401,481	2,026,931	1,456,701	265,574	748,472	11,592,454
2020	35-39	1,064,217	298,782	5,821,482	335,676	1,852,068	1,351,064	439,445	572,627	11,735,360
2020	40-44	1,379,561	332,004	5,145,372	228,649	1,936,257	1,069,438	529,850	763,457	11,384,588
2020	45-49	2,530,414	333,111	3,764,122	130,938	2,271,935	699,187	391,310	1,061,266	11,182,281
2020	50-54	4,360,287	312,347	2,159,045	52,863	2,737,361	348,327	238,641	1,278,772	11,487,643
2020	55-59	6,196,850	296,466	942,945	15,700	3,502,002	161,636	102,836	1,451,257	12,669,692
2020	60-64	6,529,425	244,795	364,008	11,015	3,888,461	55,254	32,304	1,278,601	12,403,863
2020	65-69	5,801,172	151,676	145,103	2,414	3,802,605	36,417	31,476	1,134,668	11,105,531
2020	70-74	4,172,372	84,823	76,972	3,581	3,444,538	19,871	13,818	874,336	8,690,311
2020	75+	4,599,583	91,081	44,146	511	7,902,250	17,330	8,117	1,554,216	14,217,235
2020	Total	39,953,637	3,903,504	26,760,505	2,089,548	37,219,093	6,849,330	2,473,912	14,055,443	133,304,973
2025	15-19	32,624	82,721	37,198	42,585	148,714	35,290	39,150	585,976	1,004,258
2025	20-24	538,558	554,183	813,375	371,504	1,485,851	522,452	179,806	1,604,412	6,070,142
2025	25-29	1,331,607	680,348	2,614,063	510,904	2,181,482	1,058,879	213,773	1,261,425	9,852,479
2025	30-34	1,404,572	438,680	4,973,521	412,797	2,042,918	1,506,890	280,020	775,742	11,835,141
2025	35-39	1,105,810	309,328	6,075,618	352,463	1,934,722	1,426,168	468,994	605,003	12,278,106
2025	40-44	1,499,525	360,985	5,574,364	246,217	2,111,334	1,161,981	573,304	828,321	12,356,032
2025	45-49	2,592,107	341,942	3,879,352	136,315	2,333,193	724,161	409,562	1,105,865	11,522,497
2025	50-54	4,212,634	301,242	2,134,108	53,509	2,649,069	341,781	241,271	1,268,074	11,201,688
2025	55-59	5,723,609	271,924	907,217	15,399	3,240,895	153,283	103,140	1,399,914	11,815,381
2025	60-64	6,569,191	247,316	385,683	12,144	3,929,513	58,556	33,263	1,335,552	12,571,217
2025	65-69	6,433,643	168,668	167,125	2,739	4,251,324	41,824	36,934	1,299,693	12,401,949
2025	70-74	4,691,683	95,599	92,079	4,459	3,910,210	23,581	16,926	1,013,210	9,847,747
2025	75+	5,610,983	111,769	55,930	612	9,614,540	21,745	10,566	1,918,947	17,345,090
2025	Total	41,746,545	3,964,706	27,709,634	2,161,646	39,833,766	7,076,591	2,606,707	15,002,132	140,101,728
Household Growth										
2005-10		3,111,774	157,381	185,917	60,750	2,125,425	136,385	87,539	957,762	6,822,933
2010-15		2,967,121	103,785	426,063	72,484	2,255,466	194,378	81,737	887,269	6,988,303
2015-20		2,383,315	52,415	763,945	67,867	2,402,371	224,387	97,979	847,538	6,839,817
2020-25		1,792,909	61,202	949,129	72,097	2,614,673	227,261	132,795	946,689	6,796,755

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC WHITE HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	11,618	54,617	14,021	20,115	85,427	10,104	10,439	245,944	452,286
2005	20-24	379,160	409,126	386,432	189,957	980,339	174,949	61,266	882,090	3,463,319
2005	25-29	941,663	492,958	1,454,962	249,586	1,377,045	358,625	66,076	625,731	5,566,646
2005	30-34	884,524	276,400	2,769,674	203,037	1,135,187	517,487	75,350	349,465	6,211,124
2005	35-39	739,904	224,797	3,755,328	188,521	1,129,402	632,212	140,575	262,714	7,073,454
2005	40-44	1,180,322	301,706	4,077,332	150,510	1,548,147	706,156	231,392	400,520	8,596,084
2005	45-49	2,277,959	287,165	3,035,503	86,241	1,913,158	499,454	212,465	643,005	8,954,950
2005	50-54	3,440,792	236,738	1,507,270	28,565	1,951,079	223,629	116,678	730,130	8,234,881
2005	55-59	4,131,452	197,648	502,669	7,114	2,091,200	79,462	32,361	649,292	7,691,199
2005	60-64	3,463,820	125,650	134,258	2,548	1,873,216	15,424	9,872	452,574	6,077,362
2005	65-69	2,794,610	68,318	50,132	1,062	1,657,048	12,355	7,118	372,204	4,962,848
2005	70-74	2,137,272	43,192	20,900	303	1,614,479	4,725	2,155	334,623	4,157,651
2005	75+	3,308,316	58,155	17,080	441	5,665,350	7,626	1,202	907,969	9,966,139
2005	Total	25,691,411	2,776,470	17,725,561	1,128,000	23,021,078	3,242,210	966,950	6,856,262	81,407,942
2010	15-19	11,122	52,287	13,423	19,257	81,783	9,673	9,994	235,452	432,991
2010	20-24	386,130	416,646	393,535	193,449	998,361	178,165	62,392	898,305	3,526,984
2010	25-29	1,030,334	539,377	1,591,966	273,088	1,506,712	392,395	72,298	684,652	6,090,822
2010	30-34	880,827	275,245	2,758,098	202,188	1,130,443	515,324	75,035	348,004	6,185,165
2010	35-39	664,695	201,947	3,373,608	169,358	1,014,601	567,950	126,286	236,010	6,354,454
2010	40-44	1,018,788	260,416	3,519,326	129,911	1,336,275	609,514	199,725	345,707	7,419,662
2010	45-49	2,186,361	275,618	2,913,445	82,773	1,836,230	479,371	203,922	617,150	8,594,869
2010	50-54	3,677,070	252,995	1,610,774	30,527	2,085,059	238,985	124,690	780,268	8,800,370
2010	55-59	4,471,783	213,929	544,077	7,700	2,263,464	86,008	35,027	702,777	8,324,765
2010	60-64	4,344,410	157,593	168,390	3,195	2,349,435	19,346	12,382	567,630	7,622,381
2010	65-69	3,340,213	81,656	59,920	1,270	1,980,560	14,768	8,508	444,871	5,931,765
2010	70-74	2,241,003	45,288	21,915	318	1,692,837	4,955	2,260	350,864	4,359,440
2010	75+	3,366,167	59,172	17,379	448	5,764,417	7,759	1,223	923,846	10,140,411
2010	Total	27,618,903	2,832,170	16,985,856	1,113,484	24,040,175	3,124,213	933,741	7,135,537	83,784,078
2015	15-19	10,277	48,313	12,403	17,793	75,566	8,937	9,234	217,554	400,077
2015	20-24	369,838	399,067	376,931	185,287	956,237	170,648	59,760	860,403	3,378,169
2015	25-29	1,046,331	547,752	1,616,684	277,328	1,530,106	398,487	73,420	695,282	6,185,390
2015	30-34	961,317	300,397	3,010,133	220,664	1,233,743	562,415	81,892	379,805	6,750,365
2015	35-39	661,649	201,022	3,358,147	168,582	1,009,951	565,347	125,707	234,928	6,325,334
2015	40-44	915,515	234,017	3,162,576	116,742	1,200,818	547,729	179,479	310,663	6,667,538
2015	45-49	1,888,594	238,080	2,516,653	71,500	1,586,148	414,084	176,149	533,098	7,424,306
2015	50-54	3,532,204	243,027	1,547,314	29,324	2,002,914	229,570	119,778	749,528	8,453,659
2015	55-59	4,784,642	228,897	582,142	8,239	2,421,822	92,025	37,477	751,946	8,907,190
2015	60-64	4,711,880	170,923	182,633	3,465	2,548,161	20,982	13,429	615,643	8,267,116
2015	65-69	4,202,213	102,729	75,383	1,597	2,491,677	18,579	10,703	559,678	7,462,559
2015	70-74	2,691,946	54,401	26,324	382	2,033,476	5,952	2,715	421,466	5,236,661
2015	75+	3,468,138	60,965	17,906	462	5,939,040	7,994	1,260	951,832	10,447,596
2015	Total	29,244,542	2,829,589	16,485,229	1,101,367	25,029,657	3,042,748	891,004	7,281,825	85,905,962

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC WHITE HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	10,373	48,767	12,520	17,960	76,277	9,021	9,321	219,601	403,841
2020	20-24	342,084	369,120	348,645	171,383	884,478	157,842	55,275	795,836	3,124,662
2020	25-29	1,003,245	525,196	1,550,112	265,908	1,467,100	382,078	70,397	666,652	5,930,689
2020	30-34	976,738	305,215	3,058,418	224,204	1,253,533	571,436	83,206	385,897	6,858,647
2020	35-39	722,116	219,393	3,665,044	183,989	1,102,249	617,013	137,195	256,398	6,903,398
2020	40-44	912,208	233,172	3,151,154	116,321	1,196,481	545,750	178,831	309,541	6,643,458
2020	45-49	1,699,333	214,222	2,264,454	64,335	1,427,196	372,588	158,497	479,675	6,680,300
2020	50-54	3,055,633	210,238	1,338,548	25,368	1,732,677	198,596	103,617	648,400	7,313,076
2020	55-59	4,602,462	220,181	559,977	7,925	2,329,609	88,521	36,050	723,314	8,568,040
2020	60-64	5,051,244	183,234	195,787	3,715	2,731,687	22,493	14,396	659,983	8,862,539
2020	65-69	4,571,663	111,761	82,010	1,738	2,710,741	20,212	11,644	608,884	8,118,653
2020	70-74	3,402,146	68,753	33,269	483	2,569,956	7,522	3,431	532,659	6,618,220
2020	75+	3,838,749	67,479	19,819	511	6,573,694	8,849	1,394	1,053,546	11,564,042
2020	Total	30,187,994	2,776,731	16,279,756	1,083,840	26,055,678	3,001,922	863,255	7,340,387	87,589,563
2025	15-19	10,401	48,898	12,553	18,008	76,481	9,046	9,346	220,190	404,923
2025	20-24	345,489	372,794	352,116	173,089	893,283	159,413	55,825	803,759	3,155,769
2025	25-29	929,523	486,603	1,436,204	246,368	1,359,292	354,002	65,224	617,664	5,494,880
2025	30-34	937,718	293,022	2,936,238	215,247	1,203,456	548,608	79,882	370,481	6,584,652
2025	35-39	734,167	223,054	3,726,205	187,059	1,120,643	627,310	139,485	260,677	7,018,599
2025	40-44	995,659	254,503	3,439,428	126,962	1,305,938	595,677	195,190	337,858	7,251,215
2025	45-49	1,694,869	213,659	2,258,504	64,166	1,423,446	371,609	158,080	478,415	6,662,748
2025	50-54	2,752,864	189,406	1,205,917	22,854	1,560,994	178,918	93,350	584,153	6,588,457
2025	55-59	3,988,376	190,803	485,261	6,868	2,018,779	76,710	31,240	626,806	7,424,844
2025	60-64	4,868,197	176,594	188,692	3,580	2,632,696	21,678	13,875	636,067	8,541,378
2025	65-69	4,914,757	120,148	88,165	1,868	2,914,177	21,729	12,518	654,579	8,727,942
2025	70-74	3,717,766	75,131	36,356	528	2,808,373	8,220	3,749	582,074	7,232,197
2025	75+	4,593,709	80,750	23,717	612	7,866,531	10,589	1,668	1,260,745	13,838,322
2025	Total	30,483,495	2,725,367	16,189,356	1,067,210	27,184,089	2,983,508	859,434	7,433,468	88,925,928
Household Growth										
	2005-10	1,927,492	55,700	-739,705	-14,516	1,019,097	-117,997	-33,209	279,275	2,376,136
	2010-15	1,625,639	-2,581	-500,627	-12,117	989,482	-81,464	-42,738	146,289	2,121,884
	2015-20	943,452	-52,858	-205,473	-17,527	1,026,020	-40,826	-27,748	58,561	1,683,602
	2020-25	295,501	-51,364	-90,400	-16,630	1,128,412	-18,414	-3,821	93,081	1,336,364

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC BLACK HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	4,315	6,815	2,087	1,715	29,177	15,000	11,835	78,562	149,507
2005	20-24	18,150	50,254	48,285	45,730	235,241	200,121	47,305	179,209	824,295
2005	25-29	58,933	41,717	164,339	61,244	318,600	375,077	49,280	109,093	1,178,284
2005	30-34	82,640	34,459	289,657	51,907	302,223	419,627	72,507	74,641	1,327,661
2005	35-39	92,309	26,653	415,463	46,568	330,088	358,443	123,777	95,985	1,489,286
2005	40-44	153,354	37,526	408,378	25,296	372,872	244,852	147,261	204,071	1,593,608
2005	45-49	280,169	47,458	327,947	20,114	405,058	143,201	102,707	254,363	1,581,017
2005	50-54	319,960	36,512	154,848	6,904	428,318	59,549	47,050	256,932	1,310,072
2005	55-59	328,265	22,361	63,913	1,477	420,994	25,487	16,902	218,615	1,098,014
2005	60-64	247,409	12,428	24,606	1,335	331,491	9,923	7,206	165,428	799,825
2005	65-69	196,458	8,767	6,199	0	295,526	4,712	4,205	134,179	650,045
2005	70-74	148,696	3,101	7,020	1,068	263,836	6,147	2,840	97,521	530,229
2005	75+	166,163	8,708	6,277	0	499,109	3,169	2,189	186,258	871,874
2005	Total	2,096,820	336,758	1,919,019	263,360	4,232,533	1,865,309	635,064	2,054,857	13,403,719
2010	15-19	4,429	6,995	2,142	1,761	29,949	15,397	12,148	80,640	153,461
2010	20-24	19,758	54,705	52,561	49,779	256,074	217,844	51,494	195,080	897,296
2010	25-29	65,921	46,663	183,825	68,506	356,377	419,550	55,124	122,029	1,317,995
2010	30-34	87,827	36,621	307,836	55,165	321,191	445,964	77,058	79,325	1,410,987
2010	35-39	90,775	26,210	408,559	45,794	324,604	352,487	121,720	94,390	1,464,539
2010	40-44	143,073	35,010	381,000	23,600	347,874	228,437	137,388	190,390	1,486,771
2010	45-49	289,563	49,049	338,944	20,789	418,640	148,002	106,151	262,892	1,634,030
2010	50-54	372,474	42,505	180,263	8,037	498,617	69,322	54,772	299,102	1,525,092
2010	55-59	397,465	27,075	77,386	1,789	509,742	30,860	20,466	264,701	1,329,483
2010	60-64	330,509	16,602	32,871	1,783	442,833	13,256	9,626	220,993	1,068,474
2010	65-69	226,831	10,123	7,157	0	341,216	5,440	4,855	154,924	750,547
2010	70-74	162,554	3,390	7,674	1,168	288,425	6,720	3,105	106,610	579,645
2010	75+	177,762	9,316	6,716	0	533,950	3,391	2,342	199,260	932,737
2010	Total	2,368,943	364,263	1,986,934	278,172	4,669,492	1,956,671	656,248	2,270,335	14,551,058
2015	15-19	3,975	6,278	1,923	1,580	26,880	13,819	10,903	72,377	137,736
2015	20-24	20,291	56,180	53,978	51,122	262,979	223,718	52,882	200,340	921,490
2015	25-29	71,378	50,526	199,043	74,178	385,880	454,283	59,687	132,131	1,427,107
2015	30-34	97,907	40,825	343,168	61,497	358,056	497,149	85,902	88,430	1,572,933
2015	35-39	96,500	27,863	434,323	48,682	345,073	374,715	129,396	100,342	1,556,893
2015	40-44	140,922	34,484	375,273	23,245	342,645	225,003	135,323	187,528	1,464,425
2015	45-49	270,896	45,887	317,093	19,449	391,652	138,461	99,308	245,944	1,528,691
2015	50-54	386,324	44,085	186,966	8,336	517,158	71,900	56,809	310,223	1,581,801
2015	55-59	464,798	31,661	90,496	2,092	596,095	36,088	23,933	309,542	1,554,705
2015	60-64	402,620	20,224	40,043	2,172	539,451	16,148	11,726	269,209	1,301,595
2015	65-69	305,618	13,639	9,643	0	459,733	7,330	6,542	208,735	1,011,240
2015	70-74	189,953	3,961	8,968	1,364	337,041	7,853	3,628	124,580	677,348
2015	75+	195,522	10,247	7,387	0	587,295	3,730	2,576	219,167	1,025,923
2015	Total	2,646,706	385,860	2,068,304	293,717	5,149,938	2,070,198	678,614	2,468,550	15,761,887

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC BLACK HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	4,026	6,358	1,947	1,600	27,221	13,994	11,041	73,294	139,482
2020	20-24	18,268	50,579	48,597	46,025	236,762	201,415	47,610	180,368	829,624
2020	25-29	73,317	51,899	204,449	76,192	396,359	466,620	61,308	135,719	1,465,861
2020	30-34	106,038	44,215	371,668	66,604	387,792	538,437	93,036	95,774	1,703,563
2020	35-39	107,665	31,086	484,575	54,315	384,999	418,070	144,367	111,952	1,737,029
2020	40-44	150,142	36,740	399,824	24,766	365,062	239,723	144,176	199,796	1,560,229
2020	45-49	267,676	45,342	313,324	19,218	386,996	136,815	98,127	243,021	1,510,519
2020	50-54	362,972	41,420	175,664	7,832	485,897	67,554	53,375	291,471	1,486,185
2020	55-59	484,371	32,995	94,307	2,180	621,197	37,608	24,940	322,578	1,620,175
2020	60-64	473,513	23,785	47,094	2,555	634,437	18,992	13,791	316,612	1,530,779
2020	65-69	374,982	16,734	11,831	0	564,075	8,994	8,027	256,111	1,240,754
2020	70-74	258,659	5,394	12,211	1,858	458,949	10,694	4,940	169,640	922,346
2020	75+	224,945	11,789	8,498	0	675,672	4,291	2,964	252,148	1,180,307
2020	Total	2,906,574	398,335	2,173,989	303,144	5,625,418	2,163,205	707,703	2,648,483	16,926,852
2025	15-19	4,119	6,505	1,992	1,638	27,851	14,319	11,297	74,992	142,713
2025	20-24	18,527	51,297	49,287	46,679	240,123	204,274	48,286	182,928	841,401
2025	25-29	66,209	46,867	184,628	68,805	357,932	421,381	55,364	122,561	1,323,747
2025	30-34	109,068	45,478	382,289	68,507	398,874	553,823	95,695	98,511	1,752,245
2025	35-39	116,734	33,705	525,393	58,890	417,429	453,286	156,528	121,382	1,883,347
2025	40-44	167,656	41,026	446,465	27,655	407,647	267,688	160,995	223,103	1,742,236
2025	45-49	285,846	48,419	334,593	20,522	413,266	146,102	104,788	259,517	1,613,054
2025	50-54	359,918	41,072	174,186	7,766	481,809	66,986	52,926	289,019	1,473,681
2025	55-59	457,326	31,152	89,041	2,058	586,513	35,508	23,548	304,567	1,529,714
2025	60-64	496,241	24,927	49,354	2,677	664,889	19,903	14,453	331,809	1,604,254
2025	65-69	443,968	19,812	14,008	0	667,848	10,648	9,503	303,227	1,469,015
2025	70-74	320,144	6,676	15,114	2,300	568,044	13,235	6,115	209,964	1,141,591
2025	75+	285,587	14,967	10,789	0	857,825	5,447	3,763	320,124	1,498,503
2025	Total	3,131,344	411,904	2,277,139	307,497	6,090,050	2,212,601	743,260	2,841,704	18,015,500
Household Growth										
	2005-10	272,122	27,506	67,915	14,812	436,959	91,362	21,184	215,478	1,147,338
	2010-15	277,763	21,596	81,370	15,545	480,446	113,527	22,367	198,215	1,210,830
	2015-20	259,868	12,475	105,685	9,427	475,480	93,007	29,088	179,933	1,164,965
	2020-25	224,770	13,569	103,149	4,352	464,632	49,396	35,557	193,221	1,088,648

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC ASIAN/OTHER HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	1,526	2,836	490	2,781	10,184	1,003	0	45,171	63,990
2005	20-24	25,846	24,834	26,911	13,542	82,821	13,452	5,059	129,296	321,761
2005	25-29	93,189	36,132	99,486	24,605	149,911	32,201	9,132	123,145	567,800
2005	30-34	121,657	26,876	327,746	17,222	138,644	53,398	11,427	79,301	776,270
2005	35-39	76,173	14,430	381,854	14,887	119,319	50,285	16,913	44,695	718,556
2005	40-44	81,334	12,320	394,439	10,196	102,090	48,908	31,590	45,058	725,935
2005	45-49	123,406	14,889	286,338	5,588	106,075	29,856	16,999	61,896	645,048
2005	50-54	213,891	11,389	163,879	2,906	124,727	16,594	11,122	58,352	602,862
2005	55-59	262,816	7,279	54,842	586	106,872	4,138	5,852	53,520	495,905
2005	60-64	202,522	5,543	14,439	137	82,022	839	835	37,776	344,113
2005	65-69	151,262	5,642	7,475	50	75,084	0	1,879	38,678	280,071
2005	70-74	92,496	1,213	3,928	0	62,405	251	491	24,731	185,515
2005	75+	105,797	1,628	1,418	0	117,636	704	764	37,771	265,718
2005	Total	1,551,915	165,010	1,763,245	92,501	1,277,791	251,627	112,063	779,391	5,993,544
2010	15-19	1,703	3,164	546	3,102	11,360	1,119	0	50,389	71,382
2010	20-24	28,034	26,936	29,188	14,688	89,830	14,590	5,487	140,238	348,990
2010	25-29	102,949	39,916	109,906	27,182	165,612	35,573	10,088	136,044	627,271
2010	30-34	127,311	28,125	342,977	18,022	145,087	55,880	11,958	82,987	812,346
2010	35-39	90,909	17,222	455,727	17,767	142,403	60,013	20,186	53,342	857,568
2010	40-44	91,690	13,889	444,662	11,494	115,089	55,135	35,613	50,795	818,367
2010	45-49	139,044	16,776	322,624	6,296	119,518	33,639	19,154	69,740	726,791
2010	50-54	252,982	13,470	193,829	3,438	147,522	19,627	13,155	69,017	713,039
2010	55-59	323,057	8,948	67,412	721	131,368	5,086	7,193	65,788	609,573
2010	60-64	296,562	8,117	21,144	201	120,108	1,228	1,223	55,317	503,900
2010	65-69	200,661	7,484	9,917	67	99,605	0	2,493	51,310	371,536
2010	70-74	119,295	1,565	5,066	0	80,486	324	633	31,897	239,266
2010	75+	131,261	2,019	1,760	0	145,950	873	948	46,862	329,673
2010	Total	1,905,458	187,630	2,004,758	102,978	1,513,939	283,087	128,129	903,723	7,029,702
2015	15-19	1,863	3,461	597	3,393	12,429	1,225	0	55,128	78,097
2015	20-24	31,013	29,799	32,291	16,250	99,377	16,141	6,070	155,143	386,082
2015	25-29	110,093	42,686	117,532	29,068	177,104	38,042	10,788	145,483	670,796
2015	30-34	140,017	30,932	377,208	19,821	159,568	61,457	13,151	91,269	893,423
2015	35-39	96,041	18,194	481,452	18,770	150,441	63,400	21,325	56,353	905,975
2015	40-44	109,386	16,569	530,479	13,713	137,301	65,776	42,486	60,598	976,307
2015	45-49	157,374	18,987	365,154	7,126	135,273	38,074	21,679	78,933	822,600
2015	50-54	286,255	15,242	219,323	3,890	166,925	22,208	14,885	78,094	806,821
2015	55-59	382,990	10,608	79,919	855	155,739	6,029	8,528	77,993	722,660
2015	60-64	364,941	9,988	26,019	247	147,802	1,511	1,505	68,071	620,084
2015	65-69	291,695	10,879	14,416	97	144,793	0	3,623	74,588	540,091
2015	70-74	158,836	2,083	6,745	0	107,164	431	842	42,469	318,571
2015	75+	167,450	2,576	2,245	0	186,189	1,114	1,209	59,782	420,567
2015	Total	2,297,953	212,004	2,253,378	113,229	1,780,104	315,407	146,092	1,043,905	8,162,073

Appendix C: High Immigration Series Household Projections 2005-2025
NON-HISPANIC ASIAN/OTHER HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	2,138	3,972	686	3,894	14,262	1,405	0	63,259	89,615
2020	20-24	33,767	32,445	35,158	17,692	108,202	17,574	6,609	168,919	420,366
2020	25-29	120,499	46,720	128,641	31,816	193,844	41,637	11,808	159,235	734,200
2020	30-34	149,705	33,072	403,308	21,192	170,609	65,709	14,061	97,584	955,240
2020	35-39	105,897	20,061	530,861	20,696	165,880	69,907	23,513	62,136	998,951
2020	40-44	116,233	17,606	563,688	14,571	145,896	69,893	45,145	64,391	1,037,425
2020	45-49	187,575	22,631	435,230	8,494	161,233	45,380	25,839	94,082	980,464
2020	50-54	324,733	17,291	248,804	4,413	189,363	25,193	16,886	88,591	915,274
2020	55-59	434,427	12,032	90,652	969	176,655	6,839	9,673	88,467	819,716
2020	60-64	432,899	11,848	30,864	293	175,325	1,793	1,786	80,747	735,555
2020	65-69	359,053	13,391	17,744	119	178,228	0	4,460	91,811	664,808
2020	70-74	230,157	3,019	9,774	0	155,283	625	1,221	61,539	461,618
2020	75+	220,524	3,392	2,957	0	245,202	1,467	1,593	78,730	553,865
2020	Total	2,717,608	237,482	2,498,366	124,150	2,079,982	347,423	162,594	1,199,493	9,367,097
2025	15-19	2,357	4,379	756	4,294	15,726	1,549	0	69,751	98,812
2025	20-24	38,517	37,009	40,103	20,181	123,422	20,046	7,538	192,680	479,496
2025	25-29	130,492	50,595	139,309	34,454	209,919	45,090	12,787	172,440	795,086
2025	30-34	163,272	36,069	439,859	23,113	186,071	71,664	15,335	106,428	1,041,812
2025	35-39	113,553	21,512	569,243	22,192	177,874	74,961	25,213	66,628	1,071,178
2025	40-44	128,271	19,430	622,067	16,080	161,006	77,132	49,821	71,060	1,144,867
2025	45-49	200,025	24,133	464,116	9,058	171,934	48,392	27,554	100,326	1,045,536
2025	50-54	386,219	20,565	295,913	5,248	225,217	29,964	20,083	105,366	1,088,576
2025	55-59	493,107	13,657	102,897	1,100	200,517	7,763	10,980	100,417	930,439
2025	60-64	491,554	13,454	35,046	333	199,080	2,035	2,028	91,688	835,217
2025	65-69	425,888	15,884	21,047	141	211,404	0	5,290	108,901	788,557
2025	70-74	283,669	3,720	12,046	0	191,387	770	1,505	75,847	568,945
2025	75+	307,970	4,738	4,129	0	342,434	2,049	2,224	109,950	773,493
2025	Total	3,164,894	265,145	2,746,532	136,194	2,415,990	381,416	180,359	1,371,482	10,662,013
Household Growth										
	2005-10	353,543	22,619	241,513	10,477	236,148	31,460	16,066	124,332	1,036,158
	2010-15	392,494	24,375	248,620	10,251	266,165	32,320	17,963	140,181	1,132,370
	2015-20	419,655	25,477	244,988	10,921	299,878	32,016	16,502	155,588	1,205,024
	2020-25	447,287	27,663	248,166	12,045	336,008	33,993	17,765	171,989	1,294,916

Appendix C: High Immigration Series Household Projections 2005-2025
HISPANIC HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2005	15-19	8,522	12,415	11,851	10,091	15,509	5,616	10,017	119,634	193,655
2005	20-24	75,738	51,829	207,056	73,250	127,520	77,238	37,949	236,665	887,246
2005	25-29	135,181	63,372	562,042	106,150	167,403	156,916	52,916	229,550	1,473,530
2005	30-34	131,813	43,444	823,442	71,784	172,475	225,520	60,385	135,749	1,664,613
2005	35-39	97,740	21,475	867,613	58,304	151,273	187,114	102,173	108,084	1,593,776
2005	40-44	135,889	30,078	696,900	49,352	154,713	144,741	109,330	128,283	1,449,286
2005	45-49	222,339	30,122	444,358	23,008	175,414	85,428	64,394	144,639	1,189,702
2005	50-54	321,317	22,603	206,258	7,943	171,569	29,678	33,730	130,365	923,462
2005	55-59	310,998	14,389	91,151	2,129	172,414	13,197	14,810	145,879	764,967
2005	60-64	231,130	10,481	36,488	1,800	140,275	4,842	942	89,441	515,399
2005	65-69	204,271	4,036	13,818	230	144,115	2,973	3,028	73,328	445,798
2005	70-74	123,741	3,367	9,550	545	114,480	453	1,858	48,588	302,583
2005	75+	152,599	4,074	6,229	0	197,269	1,318	1,048	82,159	444,696
2005	Total	2,151,280	311,686	3,976,756	404,586	1,904,430	935,034	492,580	1,672,363	11,848,715
2010	15-19	10,563	15,387	14,688	12,507	19,222	6,960	12,414	148,272	240,013
2010	20-24	85,371	58,420	233,389	82,566	143,738	87,061	42,775	266,764	1,000,084
2010	25-29	139,811	65,543	581,295	109,786	173,137	162,291	54,729	237,413	1,524,005
2010	30-34	144,559	47,645	903,062	78,725	189,152	247,326	66,223	148,875	1,825,567
2010	35-39	113,605	24,960	1,008,440	67,768	175,827	217,485	118,758	125,627	1,852,470
2010	40-44	158,306	35,040	811,865	57,493	180,235	168,619	127,366	149,445	1,688,369
2010	45-49	279,091	37,811	557,779	28,881	220,188	107,234	80,830	181,557	1,493,371
2010	50-54	424,060	29,830	272,210	10,482	226,430	39,168	44,515	172,050	1,218,746
2010	55-59	410,690	19,002	120,369	2,812	227,682	17,427	19,557	192,641	1,010,181
2010	60-64	330,382	14,982	52,157	2,572	200,512	6,921	1,347	127,849	736,721
2010	65-69	264,463	5,225	17,890	297	186,581	3,849	3,921	94,936	577,162
2010	70-74	152,927	4,162	11,802	674	141,482	560	2,296	60,048	373,952
2010	75+	196,069	5,235	8,003	0	253,464	1,693	1,347	105,563	571,374
2010	Total	2,709,897	363,242	4,592,950	454,564	2,337,650	1,066,594	576,078	2,011,041	14,112,015
2015	15-19	11,902	17,337	16,550	14,092	21,659	7,842	13,988	167,069	270,440
2015	20-24	103,731	70,985	283,585	100,323	174,652	105,786	51,975	324,138	1,215,175
2015	25-29	155,070	72,696	644,734	121,768	192,032	180,002	60,702	263,323	1,690,328
2015	30-34	149,107	49,144	931,478	81,203	195,104	255,108	68,307	153,560	1,883,011
2015	35-39	124,411	27,334	1,104,358	74,214	192,550	238,171	130,053	137,577	2,028,668
2015	40-44	183,575	40,633	941,456	66,671	209,005	195,534	147,696	173,300	1,957,869
2015	45-49	324,575	43,973	648,682	33,588	256,073	124,710	94,003	211,146	1,736,750
2015	50-54	530,886	37,344	340,783	13,123	283,470	49,034	55,729	215,392	1,525,761
2015	55-59	540,524	25,009	158,423	3,701	299,661	22,937	25,740	253,542	1,329,537
2015	60-64	435,498	19,748	68,751	3,391	264,308	9,122	1,776	168,526	971,120
2015	65-69	376,540	7,440	25,471	423	265,652	5,481	5,582	135,168	821,756
2015	70-74	198,054	5,390	15,285	873	183,232	726	2,974	77,767	484,301
2015	75+	247,249	6,601	10,092	0	319,625	2,135	1,698	133,118	720,518
2015	Total	3,381,121	423,636	5,189,649	513,369	2,857,023	1,196,589	660,223	2,413,625	16,635,234

Appendix C: High Immigration Series Household Projections 2005-2025
HISPANIC HOUSEHOLDS

Year	Age	Married without Children	Partnered without Children	Married with Children	Partnered with Children	Single Person	Single Parent Alone	Single Parent with Other Non-Partner Adults	Other	Total
2020	15-19	14,128	20,581	19,646	16,729	25,711	9,309	16,605	198,323	321,032
2020	20-24	115,817	79,255	316,624	112,012	194,999	118,111	58,030	361,901	1,356,748
2020	25-29	185,304	86,870	770,440	145,509	229,473	215,098	72,537	314,664	2,019,896
2020	30-34	164,310	54,155	1,026,452	89,482	214,997	281,119	75,272	169,217	2,075,004
2020	35-39	128,539	28,241	1,141,002	76,676	198,939	246,074	134,369	142,142	2,095,982
2020	40-44	200,978	44,485	1,030,706	72,991	228,819	214,070	161,698	189,728	2,143,475
2020	45-49	375,829	50,916	751,114	38,891	296,509	144,403	108,847	244,488	2,010,998
2020	50-54	616,950	43,398	396,029	15,250	329,425	56,984	64,763	250,310	1,773,108
2020	55-59	675,590	31,258	198,009	4,625	374,540	28,668	32,172	316,898	1,661,761
2020	60-64	571,769	25,928	90,264	4,452	347,012	11,977	2,331	221,259	1,274,991
2020	65-69	495,474	9,789	33,517	557	349,560	7,212	7,345	177,862	1,081,316
2020	70-74	281,408	7,658	21,718	1,241	260,349	1,031	4,225	110,497	688,128
2020	75+	315,366	8,420	12,873	0	407,682	2,724	2,166	169,792	919,022
2020	Total	4,141,461	490,956	5,808,394	578,415	3,458,015	1,336,779	740,361	2,867,080	19,421,461
2025	15-19	15,747	22,939	21,897	18,645	28,656	10,376	18,507	221,043	357,809
2025	20-24	136,025	93,083	371,869	131,556	229,023	138,719	68,156	425,046	1,593,476
2025	25-29	205,383	96,283	853,923	161,276	254,338	238,405	80,397	348,760	2,238,766
2025	30-34	194,514	64,110	1,215,135	105,931	254,518	332,795	89,108	200,322	2,456,432
2025	35-39	141,356	31,057	1,254,777	84,322	218,777	270,611	147,767	156,315	2,304,982
2025	40-44	207,938	46,026	1,066,405	75,519	236,744	221,485	167,298	196,300	2,217,714
2025	45-49	411,367	55,731	822,140	42,569	324,547	158,058	119,140	267,607	2,201,159
2025	50-54	713,633	50,199	458,091	17,640	381,049	65,914	74,912	289,536	2,050,975
2025	55-59	784,799	36,311	230,018	5,373	435,085	33,302	37,372	368,124	1,930,384
2025	60-64	713,199	32,341	112,591	5,553	432,847	14,939	2,908	275,989	1,590,368
2025	65-69	649,030	12,823	43,904	729	457,895	9,447	9,622	232,985	1,416,435
2025	70-74	370,103	10,072	28,563	1,632	342,406	1,356	5,557	145,324	905,013
2025	75+	423,717	11,313	17,295	0	547,750	3,659	2,910	228,128	1,234,773
2025	Total	4,966,812	562,290	6,496,607	650,744	4,143,636	1,499,066	823,655	3,355,478	22,498,288
Household Growth										
	2005-10	558,617	51,556	616,194	49,978	433,220	131,560	83,498	338,677	2,263,300
	2010-15	671,224	60,394	596,699	58,804	519,373	129,995	84,145	402,584	2,523,219
	2015-20	760,340	67,320	618,745	65,046	600,992	140,190	80,137	453,455	2,786,227
	2020-25	825,351	71,333	688,213	72,330	685,621	162,286	83,294	488,398	3,076,827