Updated Household Growth Projections: 2018-2028 and 2028-2038

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JCHS
JOINT CENTER FOR HOUSING STUDIES
OF HARVARD UNIVERSITY

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Introduction

The Joint Center for Housing Studies (JCHS) last released its projections for household growth in 2016, calling for a robust increase of 13.6 million households over the decade from 2015 to 2025 and 11.0 million over 2025-2035.[1] Since then the Census Bureau has released updated population projections, a key input into the Center's outlook for household growth. These latest projections predict slower rates of population growth, largely due to reduced levels of net foreign immigration and slightly higher mortality rates for some segments of the populations.

The other key input into the JCHS projections are assumptions about future rates of household formation by different age and racial and ethnic populations. In projections prior to 2016, the Joint Center had assumed these rates of household formation would hold steady, as they had for much of the period before the housing boom and bust. When that assumption was rendered obsolete in the wake of the Great Recession by sharp declines in household headship rates, the Joint Center's 2016 projections introduced a new methodology that extrapolated long-term trends in these rates for different segments of the population to account for their variations over time. These projections predicted that, for population segments whose headship rates had sharply declined, these rates would rebound slightly as the economy recovered. However, for many groups these rates continued to fall over the past two years despite broad gains in employment and incomes. These additional years of data for headship rates provide an opportunity to revisit our assumptions about future trends in this important metric.

This brief presents updated JCHS household projections that incorporate the latest Census Bureau population projections and updated headship rate projections incorporating the experience of the last two years. The new projections call for household growth of 12.2 million in the 2018-2028 period and 9.6 million in 2028-2038, reductions of roughly 10 and 13 percent from our previous projections for the coming decades.

In all, lower Census Bureau population projections accounted for 1.0 million (or about 70 percent) of the 1.4 million difference between the previous household growth projection for 2015-2025 and the new projection for 2018-2028. The second major source of difference was simply shifting the starting point of the ten-year projection period three years forward, from 2015 to 2018. This change in time period alone reduced the ten-year household growth projection by 0.5 million, highlighting the 4 percent slowdown in underlying adult population growth in 2018-2028 relative to 2015-2025. Lastly, incorporating three additional years of data – 2016, 2017, and 2018 – to update long-term headship rate trends had only a small effect, producing slightly higher household growth than would have held using the 2016 headship rate trends.

Changes in Census Bureau Population Projections

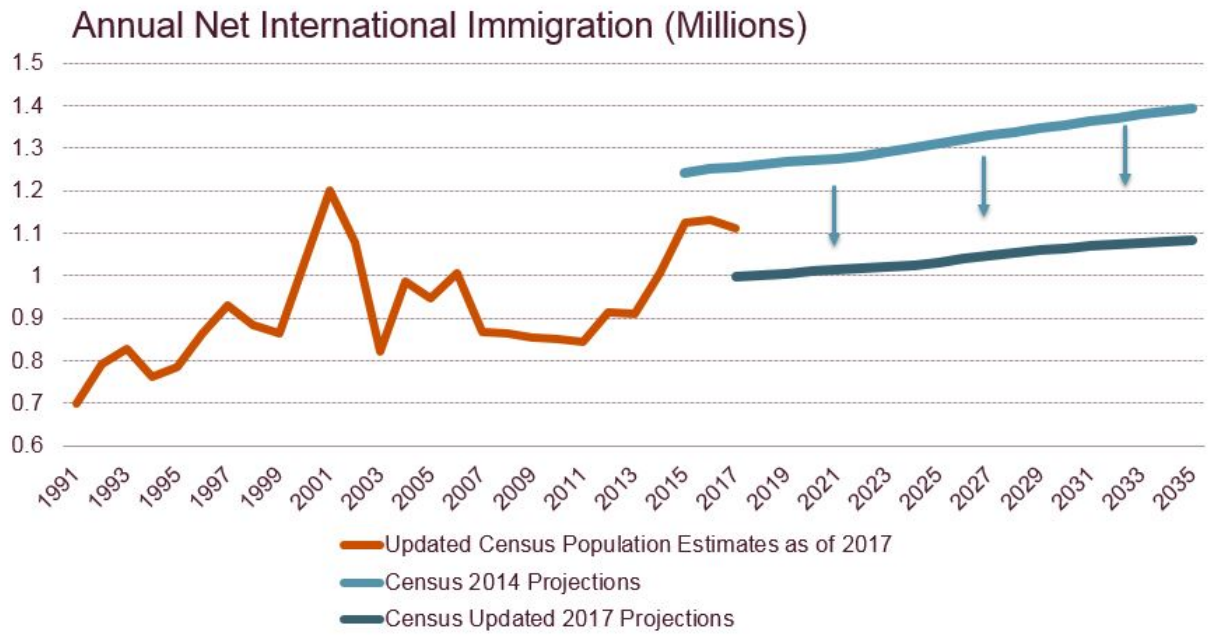
The Census Bureau's 2017 population projections are significantly lower than the 2014 projections they replaced.[2] For 2018-2028, the 2017 vintage (v2017) projections call for population growth of 2.65

[1] Daniel McCue and Christopher Herbert, "Updated Household Growth Projections, 2015-2035: Methodology and Results" (Cambridge, MA: Joint Center for Housing Studies of Harvard University, 2016), http://www.jchs.harvard.edu/sites/default/files/household_growth_projections2016_jchs.pdf.

[2] For a note on methodological changes, see US Census Bureau, "Demographic Turning Points for the United States: Population Projections for 2020 to 2060," https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf, and for the full

million fewer than the 2014 vintage (v2014) projections, including roughly 2.1 million fewer among the 15-and-over population used in the household projections.[3] In aggregate, lower immigration accounts for all of the difference between the two projections for population growth in 2018-2028. Specifically, the 2017 projection assumes an average annual immigration level of 1.0 million in 2018-2028, down from 1.27 million in the previous projections, for a net total of 2.7 million fewer international immigrants over these ten years **(Figure 1)**. The lower immigration assumptions have a particularly strong impact on lowering projected growth in Hispanic and Asian populations in the new projections. The lower immigration level also affects the age distribution of the household projections, for it reduces the projected numbers of younger adult and middle-aged households.

Figure 1: The Census Bureau's v2017 Projections for Net Immigration Are Now Below Current Levels



Source: JCHS Tabulations of US Census Bureau Population Projections

The JCHS 2016 household growth projections considered the projected immigration levels in the v2014 Census Bureau population projections as reasonable, even though at the time they were slightly higher than estimated prevailing levels, because immigration levels were rising sharply at a pace that would easily reach projected levels within a year or two. Immigration levels have since leveled off at 1.1 million net gain for the past three years, but projected immigration levels in the v2017 population projection are now lower than the most recent estimated level by a modest amount, about 100,000 per year. The assumption in the new population projections that immigration over the next ten years will be slightly lower than recent levels seems reasonable given recent trends. However, increasingly stringent federal policies and procedures towards immigration, both current and proposed, are not taken into account in these projections and could have the effect of lowering future immigration levels below

methodology, see "2017 National Population Projections: Methodology and Assumptions," https://www2.census.gov/programs-surveys/popproj/technical-documentation/methodology/methodstatement17.pdf.

[3] Population growth for 2018-2028 in the v2017 projections is fully 3.2 million fewer than population growth for 2015-2025 in the v2014 projections, which was the time period used in the last JCHS household projections.

current projections. Thus, while for the present we feel that the Census Bureau's projected immigration levels are reasonable, there is clearly the potential for a more significant downturn in immigration that would decrease projected household growth.

The updated population projections also introduce small reductions in the overall numbers of births and deaths. While these changes largely offset each other in terms of overall population growth, there are some notable differences among certain age groups. For instance, the 2017 projections call for less growth among older age groups relative to the 2014 projections. This change stems from the fact that the 2017 projections for the first time separate mortality rates for native- and foreign-born residents.[4] Because native-born mortality rates are now higher in the 2017 projections and the older population is predominantly native-born, projected population growth among older adults is lower than in 2014, particularly among older, non-Hispanic whites **(Figure 2)**. Unchanged from the previous projections, however, is the v2017 population projections' call for aging boomers to drive significant growth in adults (especially non-Hispanic whites) aged 65 and over, aging millennials to drive growth in 35-to-44- year-olds, and minorities to increase in population across age groups **(Figure 3)**.

Figure 2: Revisions to Census Bureau's Projected Adult Population Growth

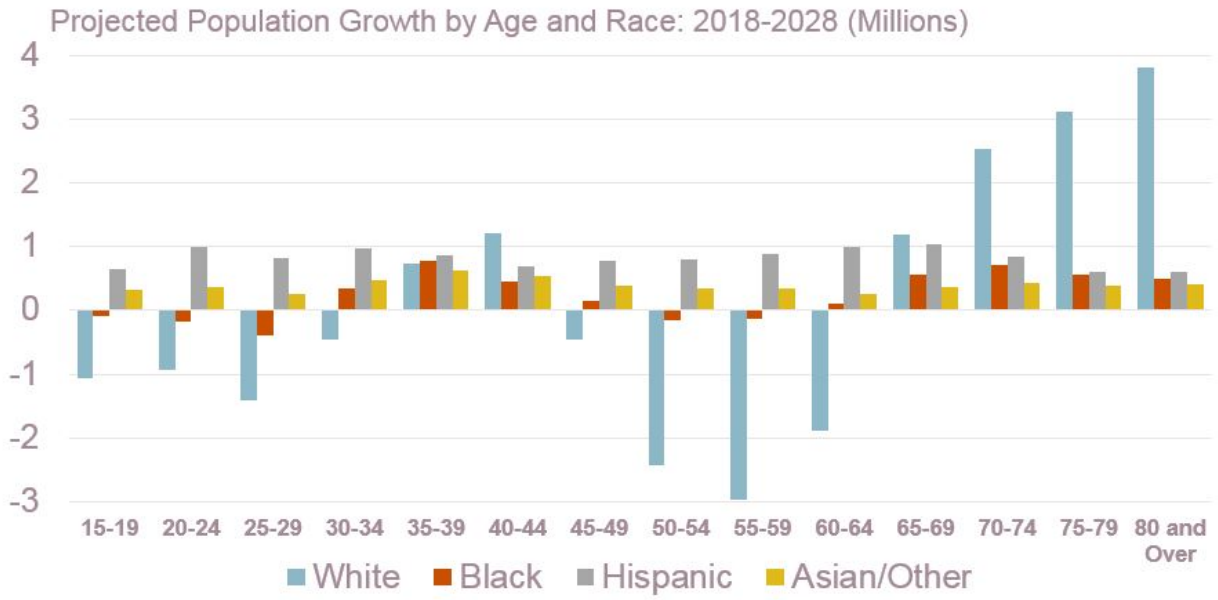
Projected Change in Population Aged 15 and Over: 2018-2028 (Thousands)

	v2014	v2017	Difference	%
Total	23,511	21,441	-2,070	-8.8%
Native-born non-Hispanic white	-807	-1,205	-398	-49.4%
Native-born minority	15,548	15,423	-125	-0.8%
Foreign-born non-Hispanic white	2,429	2,215	-214	-8.8%
Foreign-born minority	6,340	5,008	-1,332	-21.0%
Native-born total	14,741	14,218	-523	-3.6%
Foreign-born total	8,770	7,223	-1,547	-17.6%
Total non-Hispanic white	1,622	1,009	-613	-37.8%
Total non-Hispanic white age 65+	11,041	10,683	-358	-3.2%
Total Hispanic	12,507	11,594	-913	-7.3%
Total minority	21,889	20,431	-1,457	-6.7%

Source: JCHS tabulations of US Census Bureau Population Projections.

[4] See US Census Bureau, "2017 National Population Projections: Methodology and Assumptions," https://www2.census.gov/programs-surveys/popproj/technical-documentation/methodology/methodstatement17.pdf.

Figure 3: Population Projections Call for Growth in Older Whites, All 35-to-44 Year-Olds, and Minorities of All Ages.

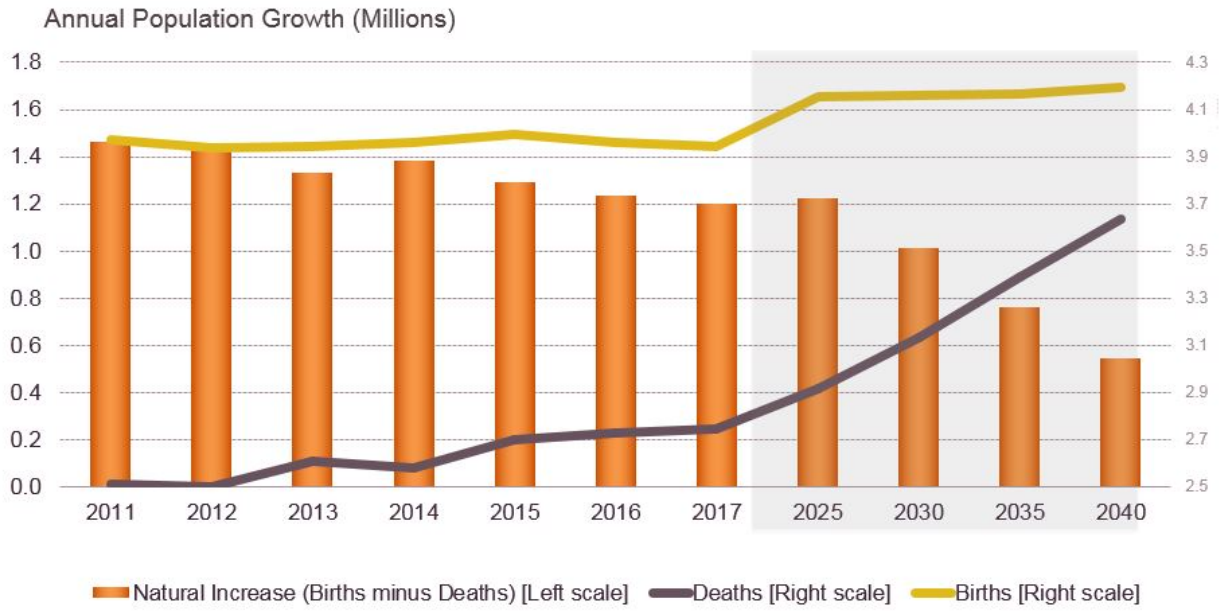


Source: JCHS Tabulations of US Census Bureau, 2017 vintage population projections.

Shifting the Projection Time Period from 2015-2025 to 2018-2028

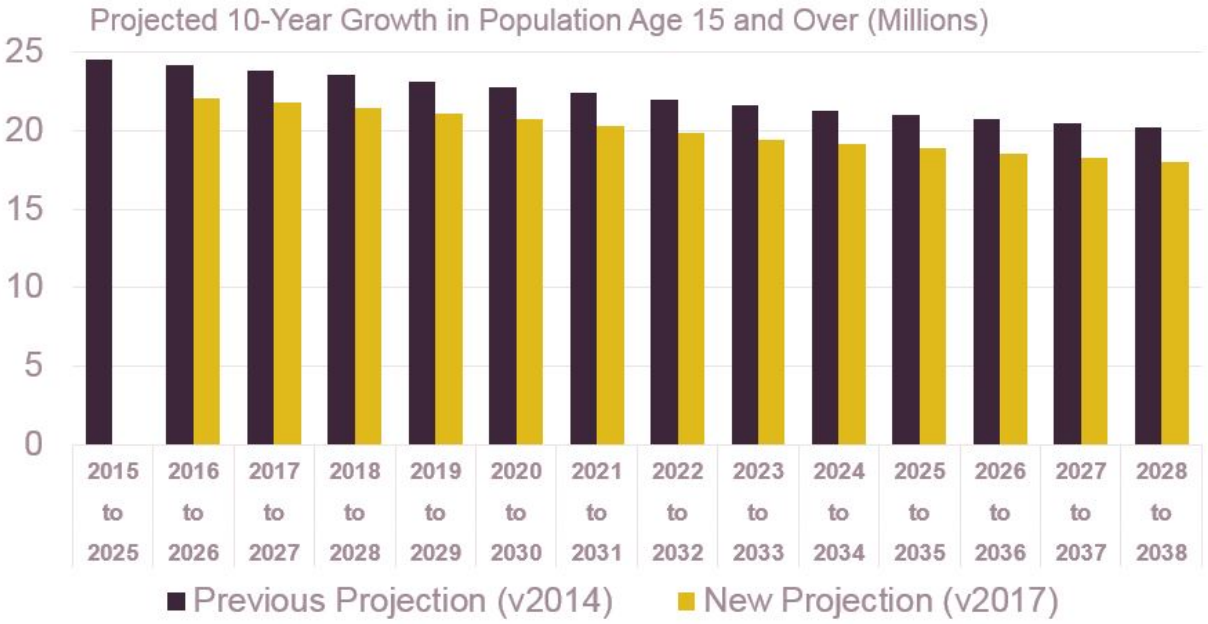
These updated JCHS household projections are also for years 2018-2028 and 2028-2038, three years later than the previous projections for 2015-2025 and 2025-2035. This shift also reduces the underlying population growth level given the slowing rate of adult population growth. Indeed, rolling ten-year adult population growth appears to peak around 2015-2025, after which the largest segment of the millennial generation has already entered adulthood and mortality rates among baby boomers only get higher **(Figure 4)**. The v2014 projections called for growth in the population aged 15 and over to slow from 24.5 million in 2015-2025 to 23.5 million in 2018-2028. Switching to the v2017 projections reduces projected growth even further, down to 21.4 million **(Figure 5)**. Overall, then, the change in time period and the change to new projections reduce underlying growth in the adult population by over 12 percent, or 3.1 million people, in the new household growth projection for 2018-2028 relative to the old projections for 2015-2025.

Figure 4: Rising Deaths related to an Aging Population Will Slow Population Growth After 2025



Note: Natural increase is the number of births minus deaths in the resident population.

Figure 5: Shifting the Projection Period Forward from 2015-2025 to 2018-2028 Lowers Underlying Population Growth

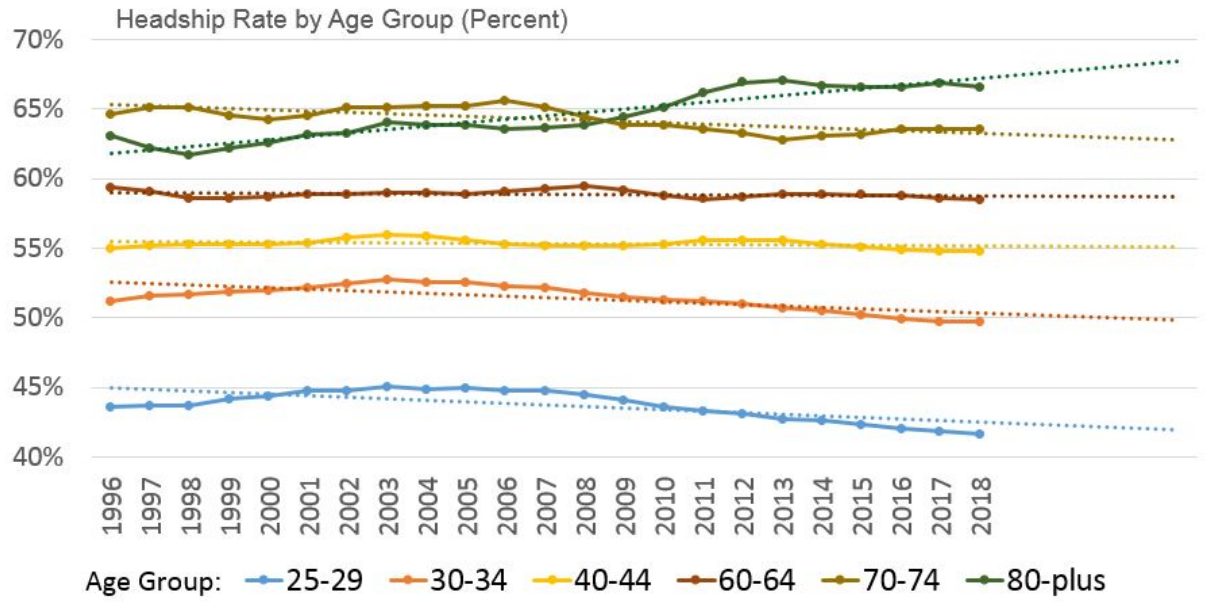


Source: JCHS tabulations of US Census Bureau Population Projections

Trends in Headship Rates

In the time since the 2016 JCHS household projections were produced, the Census Bureau also released three additional years of estimates for counts of the population and households – 2016, 2017, and 2018. These data can be used to update the long-term trends in headship rates, or the ratio of households per person, which guide the JCHS household projections. As a short review of the JCHS household projection methodology, the JCHS turns Census Bureau population projections into household projections by applying headship rates to the population for every 5-year age group within four race/ethnicity categories. In recent projections prior to 2016, JCHS projections held headship rates for each of these groups constant into the future. However, as a result of increasingly apparent long-term trends in headship rates for some groups evident in the wake of the Great Recession, the 2016 projections began projecting future headship rates to allow for the continuation of trends in this measure over the preceding two decades. Indeed, over this period a trend of delayed household formation has pushed down headship rates of young adults. At the same time a trend of lower mortality rates has helped older couples remain living together longer as couples rather than alone, which has also reduced headship rates for this age group over time. Meanwhile, in the most advanced age groups, people have grown increasingly likely and able to live alone in households rather than moving to nursing facilities or group quarters, which has worked to raise headship rates as a trend for this group over the long term. Figure 6 shows these trends across age groups as they appear for non-Hispanic white households **(Figure 6)**.

Figure 6: JCHS Household Projections Assume Headship Rates by Age and Race Follow Long-Run Trends

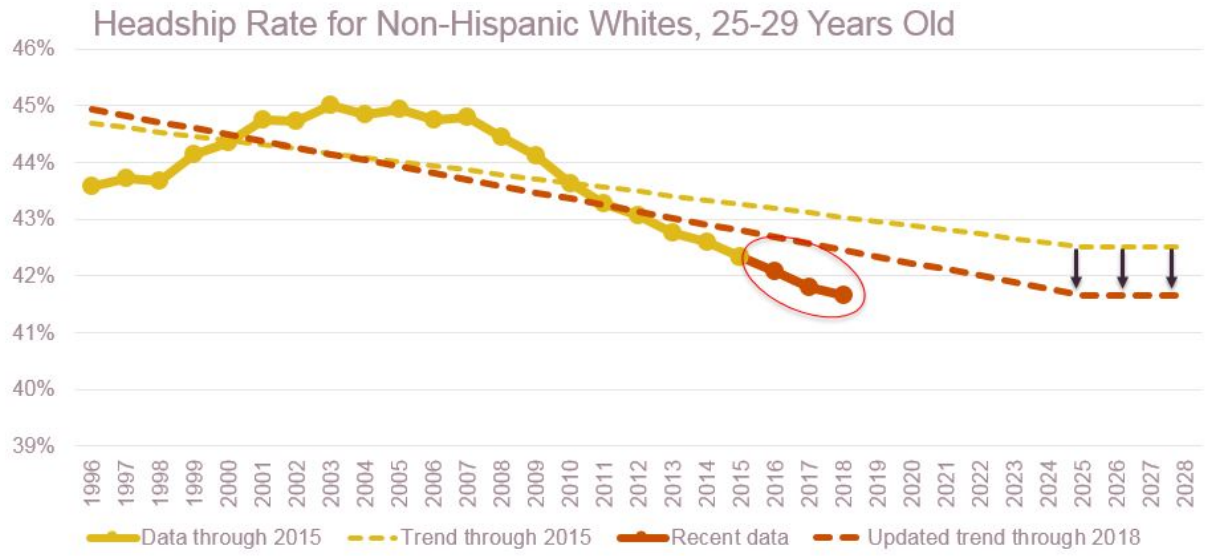


Note: Data shown are for non-Hispanic whites. Linear trends shown as dotted lines.
Source: JCHS tabulations of US Census Bureau data.

The JCHS household projections assume that headship rates for each 5-year age and race/ethnicity group will return to what the underlying long-term trends would project them to be by 2025. Three

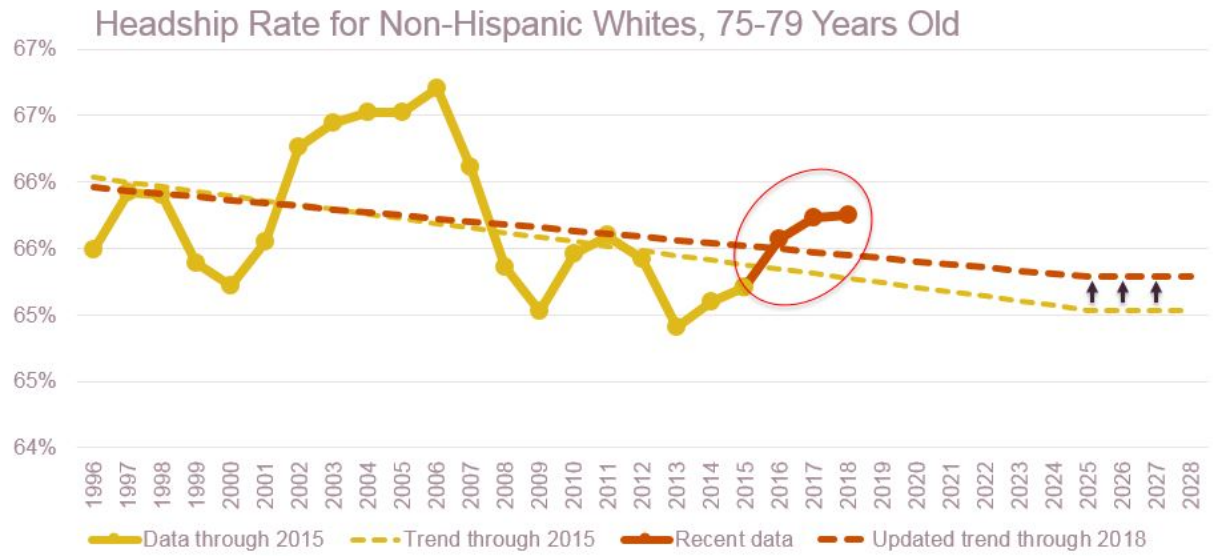
additional years of data can alter the long-term trends and lead to a different projection for this 2025 headship rate, especially if the most recent three years of additional data are significantly different than what the previous long-term trends would have predicted. We find that the new data does lead to differences in headship rate trends for some groups, but the overall impact is mixed, with adjustments upwards for some groups and downwards for others. As an example, for non-Hispanic whites aged 25-29, headship rates, which were already below trend in 2015, continued to decline in 2016, 2017, and 2018, such that the new trend based on data through 2018 is more steeply negative than the trend built on 1996-2015 data and therefore leads to a lower projected headship rate target for 2025 **(Figure 7)**. Meanwhile, headship rates for non-Hispanic white 75-79 year olds, which have been trending downwards over the long term, moved higher in 2016, 2017, and 2018. Incorporating these additional years of data, the new long-term headship rate trend is not as steeply negative as the previous trend and thus results in a higher projected 2025 headship rate for this group than under the previous projections **(Figure 8)**. In all, these changes to headship rate trends can affect projected growth within certain age and race/ethnicity groups, but as discussed in the following section, they largely cancel each other out across age and race/ethnicity groups and lead to little difference in the overall number of households.

Figure 7: Recent Declines for Some Young Age Groups Nudge Down the Longer-Term Trend of Decline



Source: JCHS 2018 Household Growth Projections

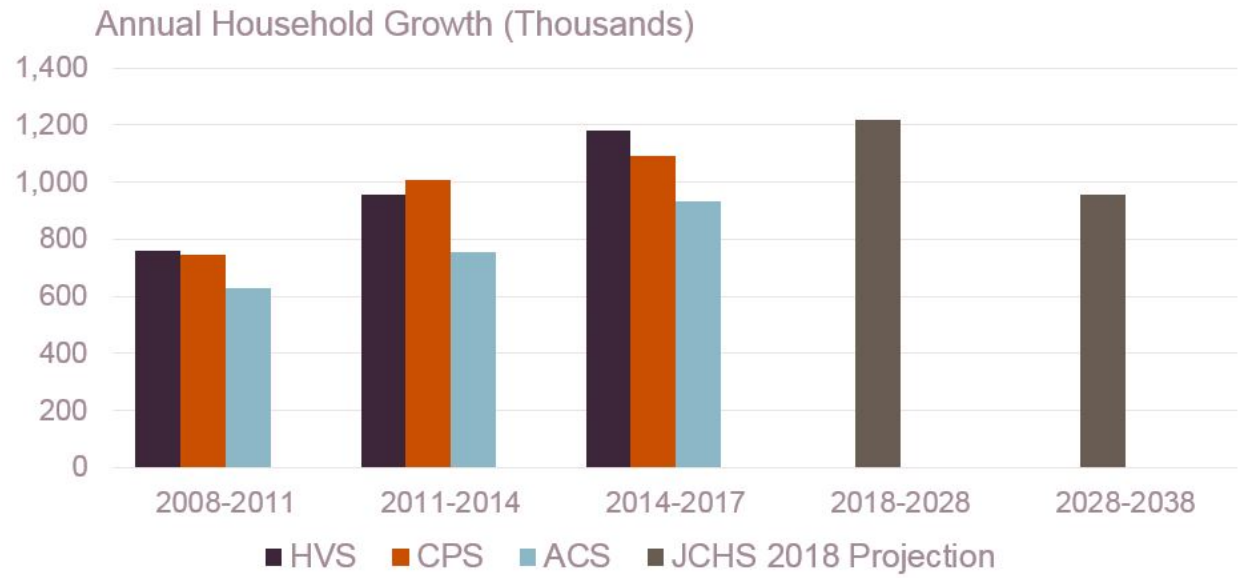
Figure 8: Recent Increases Among Some Older Age Groups Modify the Decline in the Longer-Term Trend



Updated Household Growth Projections for 2018-2028 and 2028-2038

The 2018 updated JCHS household growth projections are for 12.2 million additional households in 2018-2028, slowing to 9.6 million additional households in 2028-2038. The projection for 2018-2028 amounts to household growth of 1.4 million fewer than in the 2016 projections for 2015-2025. The projected rate of growth of 1.2 million per year in 2018-2028 is roughly equal to the average annual level of household growth in the Housing Vacancy Survey over the last three years and in line with the trend of rising rates of household growth in other surveys such as the CPS/ASEC and ACS **(Figure 9)**. The growth also falls in between the 11.6 million growth in households in the 1980s and 13.5 million growth in the 1990s as reported by the decennial censuses.

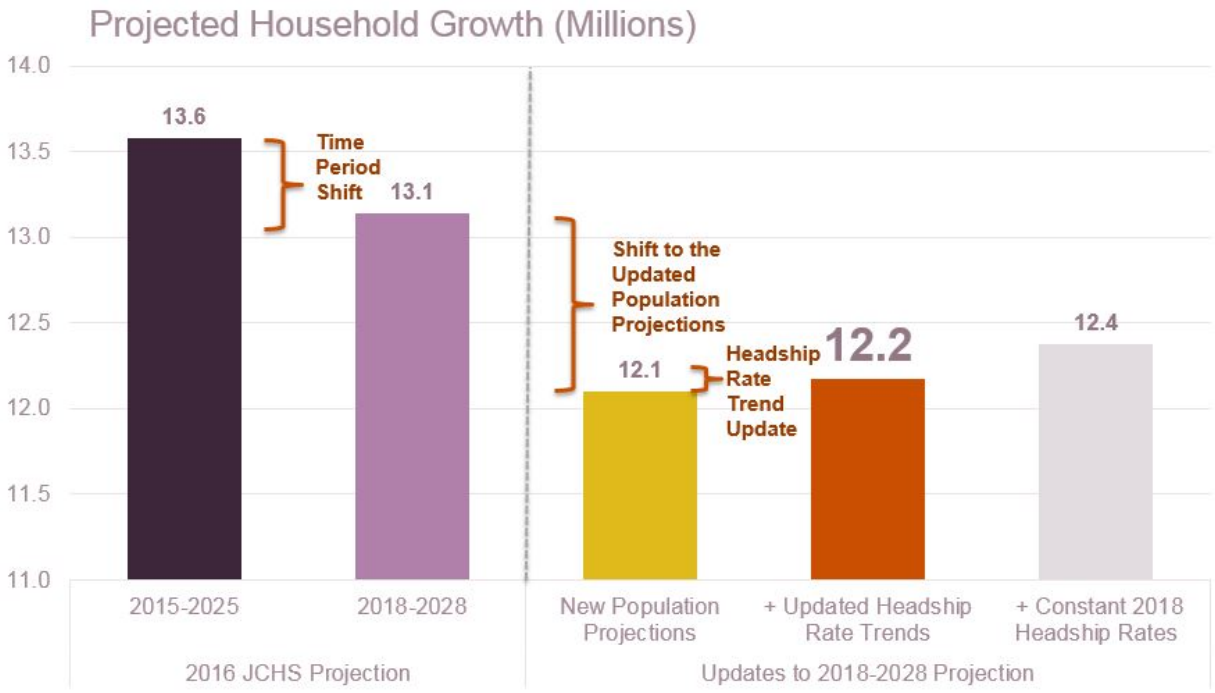
Figure 9: Updated JCHS Projections Are in Line with the Rising Pace of Household Growth in Census Survey



Source: JCHS tabulations of US Census Bureau data.

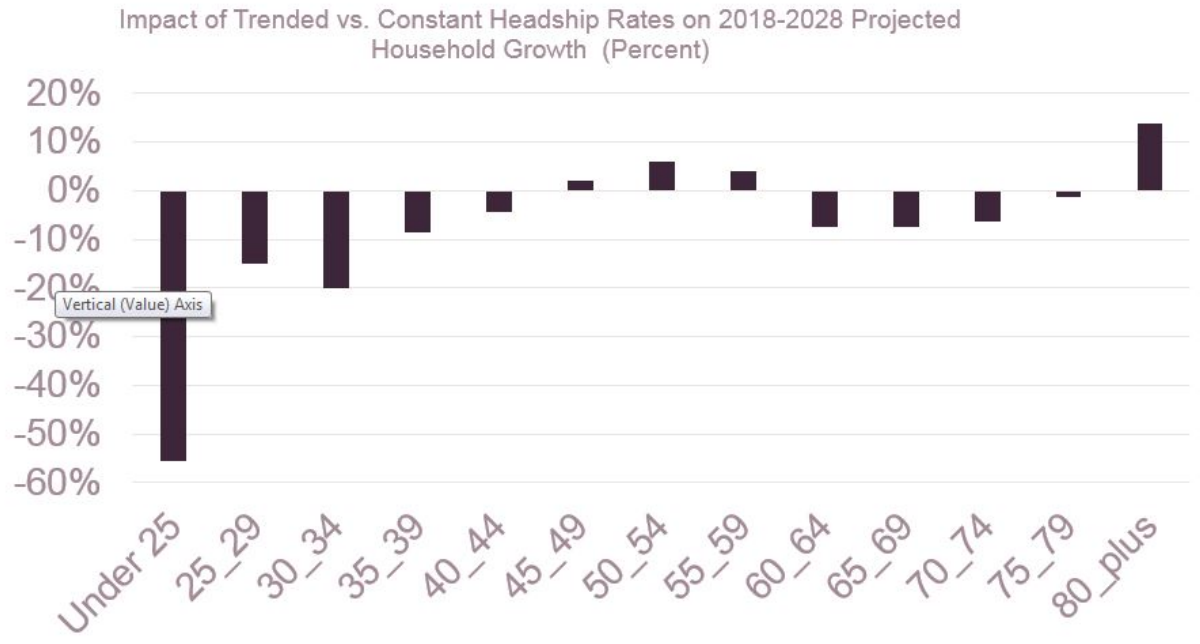
The three changes made to the projections in this update – the shift in time period, the lower population projections, and the updated headship rate trends – each played a role in the downward revisions from the 2016 JCHS household projections, but the lower population projections and the shift in time period were the major factors **(Figure 10)**. Specifically, even under the old population projections, the shift in time period from 2015-2025 to 2018-2028 alone reduced projected 10-year household growth by half a million. Switching to use the new population projections then reduced growth by another 1.0 million. Updating the headship rate trends actually had the overall effect of increasing 10-year household growth slightly, by 0.1 million, resulting in the new 12.2 million overall total for 2018-2028. Notably, however, Figure 9 also shows that while updating the headship rate trends increased household growth relative to the previous projection, headship rate trends overall have a net negative effect on household growth in 2018-2028. If headship rates were assumed to hold constant at current levels by age and race/ethnicity, overall household growth would be 12.4 million.

Figure 10: The New Population Projections and Time Period Pulled Down the JCHS Household Projections



Looking more closely at the net impact on the household projections for 2018-2028 of trending headship rates rather than holding them constant by race and age group finds trends pulling down household growth most sharply for the youngest age groups, resulting in over 50 percent less growth among households under age 25 and 20 percent less growth in households headed by 30-34 year olds **(Figure 11)**. Given the small amount of household growth expected in these age groups under the constant headship rate scenario, however, these sharp percentage reductions in growth rate do not translate into many total households. However, projected growth in households aged 80 and over in 2018-2028 is raised by 14 percent by trending headship rates into the future, an increase which does have a large impact on household growth given the significant projected growth in population for this age group.

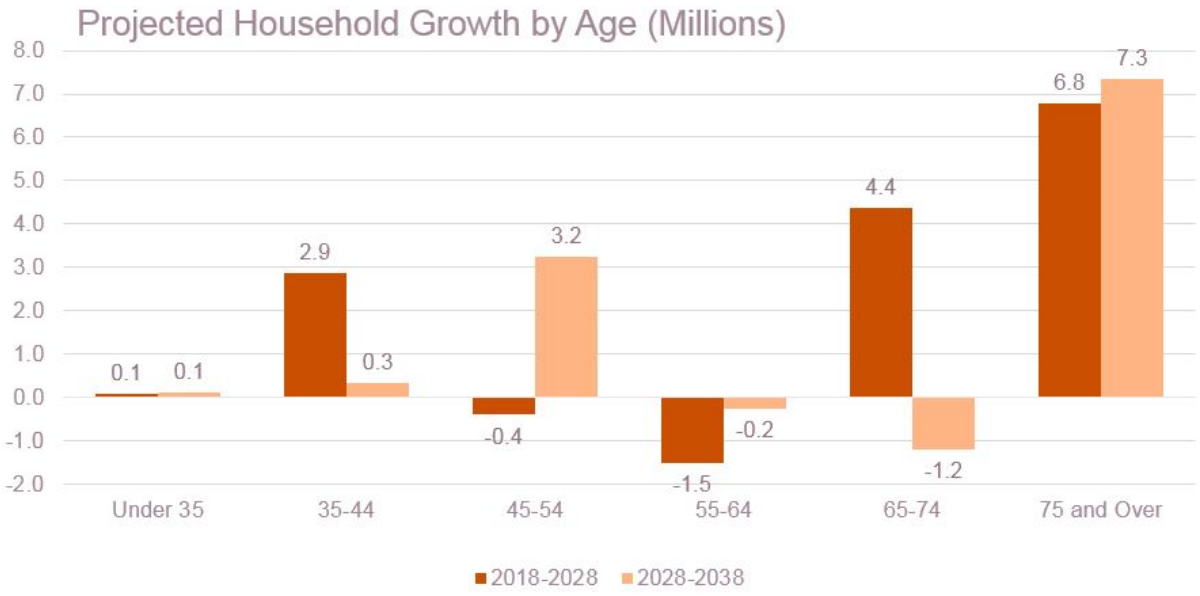
Figure 11: Headship Rate Trends Reduce Growth in Young and Increase Growth in Those Aged 80 and Older



The Composition of Projected Household Growth by Age Driven by Boomers and Millennials

The composition of growth by age and race in the new projections is very similar to that of the previous projections. Indeed, these projections call for significant growth in the number of older adult households in 2018-2028, specifically calling for 11.1 million additional households aged 65 and over – a number that includes 6.8 million additional households aged 75 and over **(Figure 12)**. The projections also call for the number of households aged 35-44 to grow by 2.9 million in 2018-2028 as millennials boost the population at these ages. Finally, the projections also expect the number of households headed by people aged 45-64 to decline by 1.9 million as the baby boomers move out and are replaced by the smaller Gen-X at these ages.

Figure 12: The Number of Older Households is Projected to Grow Significantly over the Next Two Decades



Change in Households (Thousands)

		2018–2028	2028–2038
Total			
	Total	12,174	9,564
Age			
	Under 25	21	28
	25–34	64	83
	35–44	2,855	328
	45–54	-401	3,236
	55–64	-1,513	-249
	65–74	4,361	-1,199
	75 and Over	6,787	7,337

Sources: JCHS tabulations of US Census Bureau and 2018 JCHS Household Projections

After 2028, the projections call for the overall level of household growth to decline and shift older as the baby-boom-driven increase moves entirely to the 75-and-over age group. Growth in households aged 75 and over is projected to increase from 6.8 million in 2018-2028 to 7.3 million in 2028-2038, but with the number of households aged 65-74 declining during this time, overall growth in the number of households aged 65 and over will slow to 6.1 million in 2028-2038. The number of households aged 55-64 will also decline. Meanwhile, millennials will drive the number of middle-aged households aged 45-54 up by 3.2 million in 2028-2038, while the number under age 45 is projected to remain steady.

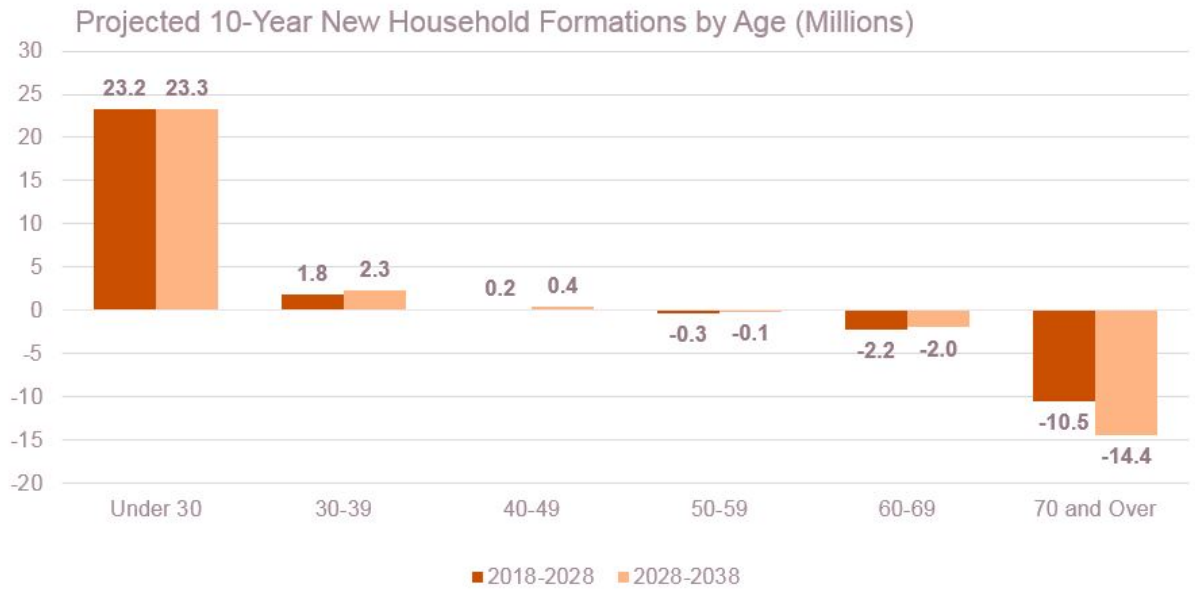
Household growth levels by age group largely reflect the shifting age mix of the population over time rather than changes in the rate at which specific population groups are forming or dissolving households. For example, the substantial growth in older households largely reflects the aging of the

large Baby Boom generation into this phase of life, replacing the much smaller Greatest Generation born before World War II.

To understand the rate at which different generations are contributing to household growth, an alternative way to assess these changes is to follow an age group over time to assess net household formation rates. As shown in **Figure 13**, the projections call for the formation of 23.2 million households in 2018-2028 by those currently under age 30, with a net additional 1.8 million households formed in the next ten years by those currently in their 30s. In contrast, the group aged 60-69 in 2018 will lose a net 2.2 million households over the next ten years, while the number of households represented by the cohort currently aged 70 and over in 2018 will fall by 10.5 million in 2018-2028.

In the 2028-2038 period, even though household growth slows, new household formations by those in their 20s and 30s will actually increase slightly to 23.3 million. However, the large Baby Boom population's aging into groups with much higher mortality rates will greatly increase the number of household losses among those 70 and older to 14.4 million. As a result, the slowdown in household growth in 2028-2038 relative to 2018-2028 will be entirely due to the increase in losses of older adult households and not to any reduction in household formations by young adults.

Figure 13: Losses to Older Households, Not Reduced Household Formation by Young Adults, Will Slow Growth in 2028-2038



Projected Net New Household Formations and Losses by Age Cohort (Thousands)

Cohort Age at Start of Period	2018-2028	2028-2038
Under 30	23,214	23,331
30-39	1,833	2,310
40-49	173	397
50-59	-285	-96
60-69	-2,223	-1,972
70 and Over	-10,537	-14,406
Total	**12,174**	**9,564**

Source: JCHS 2018 Household Projections.

Minorities Accounting for a Rising Share of Household Growth

The updated household projections show a diverse mix of household growth by race and ethnicity in the 2018-2028 period **(Figure 14)**. The number of non-Hispanic white households is projected to grow by 2.8 million households and make up 23 percent of total household growth. Meanwhile, the number of Hispanic households is projected to grow by 4.5 million in 2018-2028 (accounting for 37 percent of total growth), while the number of non-Hispanic black households will grow by 1.9 million (accounting for 16 percent of growth), and Asian and all other non-Hispanic households will grow by 2.7 million, accounting for 24 percent of total household growth. Overall, the 77 percent minority share of growth represents an increase from the 72 percent share in the last JCHS projections, underscoring that even with lower immigration assumptions, population growth for non-Hispanic white adults is still 38 percent lower in the new projections (relative to a 7 percent decline for all other adults) and has an oversized impact on lowering household growth among non-Hispanic whites.

In the 2028-2038 period, the updated projections call for minorities (households other than non-Hispanic white alone) to account for all total household growth as growth in the number of non-Hispanic white alone households turns negative – dragged down by projected declines in the non-Hispanic white adult population. The primary reason for the loss of white household growth will be the rising number of losses among older age groups **(Figure 15)**.

Figure 14: Projected Household Growth by Age and Race/Ethnicity: 2018-2028

Thousands of Households

	White	Black	Hispanic	Asian/other	**Total**
Under 25	-331	-58	298	112	**21**
25-34	-822	-32	551	367	**64**
35-44	1,089	588	579	600	**2,855**
45-54	-1,442	-88	727	402	**-401**
55-64	-2,674	-91	867	385	**-1,513**
65-74	2,148	839	849	525	**4,361**
75 and Over	4,879	779	658	471	**6,787**
Total	**2,846**	**1,938**	**4,529**	**2,862**	**12,174**

Note: White, black, and Asian/other are non-Hispanic. Hispanics may be of any race.
Source: JCHS 2018 Household Projections.

Figure 15: Projected Household Growth by Age and Race/Ethnicity: 2028-2038

Thousands of Households

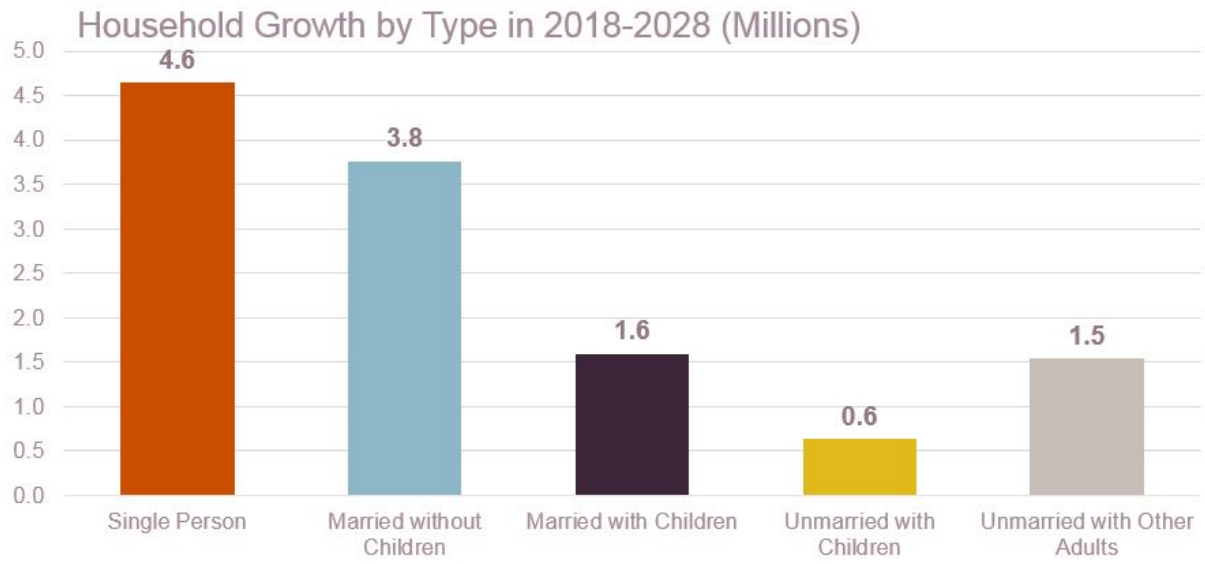
	White	Black	Hispanic	Asian/other	**Total**
Under 25	-146	26	46	102	**28**
25-34	-862	-65	678	332	**83**
35-44	-947	27	855	393	**328**
45-54	1,133	732	767	604	**3,236**
55-64	-1,472	61	771	391	**-249**
65-74	-2,470	73	882	316	**-1,199**
75 and Over	4,602	1,067	1,105	564	**7,337**
Total	**-162**	**1,921**	**5,104**	**2,702**	**9,564**

Note: White, black, and Asian/other are non-Hispanic. Hispanics may be of any race.
Source: JCHS 2018 Household Projections.

Increasing Shares of Single-Person Households and Married Couples without Children

Given the large share of growth accounted for by older-adult households, single-person households and married couples without children under age 18 – the two household types most prevalent among older adults – are expected to increase more than other household types over the 2018-2028 period. Together, these two types will account for the large majority (69 percent) of household growth during this time, with single-person households growing by 4.6 million and married couples without children growing by 3.8 million **(Figure 16)**.

Figure 16: Growth in Older Age Groups will Lift the Number of Single-Person Households and Married Couples Without Children



Note: Children in this definition are limited to those under age 18. Unmarried with Other Adult households includes all households where the householder is not married but is living with another person who is not their child under age 18, so could include those with an adult child over age 18 or a grandchild under age 18.

The rise in older-adult households will also lift the number of multi-adult households not headed by a married couple. This category includes householders living with someone not related to them such as a partner or roommate, as well as those living with relatives such as siblings, adult children or grandchildren of any age – multigenerational situations that are more common among householders aged 65 and over. In all, the number of these households is projected to grow by 1.5 million in 2018-2028, representing 13 percent of household growth, with 1.4 million of this growth coming from households aged 65 and over.

The number of married couples with children under age 18 is also projected to increase by 1.6 million, as the millennial generation raises the number of households in their 30s and 40s, ages where having children is most likely. In all, 1.3 million of the growth in married couple households with children will be in the 35-to-44-year-old age group. While this is not the household type with the largest projected growth, the trend is perhaps the most changed from as recently as the 2003-2013 period: in that period, according to JCHS tabulations of CPS/ASEC data, the number of households consisting of married couples with children aged 35-44 dropped by 1.6 million, reflecting a 2.7 million drop in households of this age group during the period as a relatively small Generation X cohort aged into it.

There were slight differences in the distribution of household growth by type across race and ethnicity in the 2018-2028 projection. White households, and to a lesser extent non-Hispanic black households, reflected the overall patterns just described, with growth predominantly among single-person and married couples without children **(Figure 17)**. While these two types of households also account for a larger share of growth among Hispanic and Asian/other households, married households with children

also account for about a fifth or more of growth among these minority groups. However, even though there will be an overall decline in the number of married couples with children among white households, within the 35-to-44-year-old age group the number of these households is still expected to grow by over 500,000 during the period, outnumbering each of the other race/ethnicity categories in that age group. But increases in this age group will not be enough to overcome losses of such households across other age groups.

Figure 17: Older Single-Person Households and Married Couples Without Children Will Lead Growth

Thousands of Households

		Single Person	Married, no Children	Married with Children	Unmarried with Children	Unmarried with Other Adults	Total
White	Under 35	-282	-171	-233	-125	-341	-1,153
	35-44	169	146	532	153	89	1,089
	45-64	-1,086	-1,929	-456	-123	-522	-4,117
	65 Plus	3,309	2,966	41	15	696	7,027
	Total	2,109	1,011	-116	-80	-79	2,846
Black	Under 35	-30	-1	9	-27	-42	-90
	35-44	137	55	148	184	63	588
	45-64	-67	-50	-12	-9	-40	-178
	65 Plus	824	431	12	18	334	1,618
	Total	865	436	157	166	315	1,938
Hispanic	Under 35	107	73	243	167	260	849
	35-44	61	58	283	127	51	579
	45-64	280	605	309	103	297	1,594
	65 Plus	551	626	39	14	277	1,507
	Total	998	1,361	873	410	885	4,529
Asian/Other	Under 35	107	79	109	43	140	479
	35-44	74	83	343	60	40	600
	45-64	131	309	211	35	102	787
	65 Plus	359	484	18	4	131	996
	Total	671	955	680	142	414	2,862
Total	Under 35	-98	-20	127	58	18	85
	35-44	441	342	1,305	524	243	2,855
	45-64	-743	-1,066	52	5	-163	-1,914
	65 Plus	5,043	4,507	110	51	1,438	11,149
	Total	4,644	3,763	1,594	637	1,536	12,174

Notes: Children are defined as only those of the head of household that are under age 18. Unmarried with Other Adult households include all households where the householder is not married but is living with another person who is not their child under age 18, so could include those with an adult child over age 18 or a grandchild under age 18.

As the age distribution of growth shifts older, single-person households will rise from 38 percent of growth in 2018-2028 to 40 percent of growth in 2028-2038. Meanwhile, growth in married couples without children will slow from being 33 percent of growth in 2018-2028 to 24 percent of growth in 2028-2038. Growth in married couples with children households will decline from 1.6 million in 2018-2028 to 1.3 million in 2028-2038, but will make up a similar share of household growth in both periods. Lastly, growth in the number of other types of childless households, mainly unmarried people living with other adults, is projected to increase from 1.5 million in 2018-2028 to 1.6 million in 2028-2038, rising to make up 17 percent of household growth in that latter period.

Figure 18: Projected Growth in Households by Type and Age: 2018-2028

Thousands of Households

Age of Householder	Married with Children	Married without Children	Unmarried with Children	Single Person	Unmarried with Other Adults	*Total*
Under 25	19	-11	7	-39	45	21
25-34	108	-9	51	-59	-27	64
35-44	1,305	342	524	441	243	2,855
45-54	79	-259	21	-204	-38	-401
55-64	-27	-807	-16	-539	-124	-1,513
65-74	63	2,109	27	1,584	579	4,361
75 and Over	47	2,399	24	3,459	859	6,787
Total	1,594	3,763	637	4,644	1,536	12,174

Note: Children are defined as only those of the head of household that are under age 18. Unmarried with Other Adult households include all households where the householder is not married but is living with another person who is not their child under age 18, so could include those with an adult child over age 18 or a grandchild under age 18.

Source: JCHS 2018 Household Projections

Figure 19: Projected Growth in Households by Type and Age: 2028-2038

Thousands of Households

Age of Householder	Married with Children	Married without Children	Unmarried with Children	Single Person	Unmarried with Other Adults	*Total*
Under 25	0	-7	5	-3	33	28
25-34	75	-15	58	-51	16	83
35-44	187	29	82	-6	36	328
45-54	925	894	310	645	462	3,236
55-64	77	-214	18	-192	61	-249
65-74	12	-732	3	-446	-36	-1,199
75 and Over	50	2,330	28	3,921	1,008	7,337
Total	1,326	2,285	505	3,869	1,580	9,564

Note: Children are defined as only those of the head of household that are under age 18. Unmarried with Other Adult households include all households where the householder is not married but is living with another person who is not their child under age 18, so could include those with an adult child over age 18 or a grandchild under age 18.

Source: JCHS 2018 Household Projections

Impact of Lower Projected Household Growth on Total New Home Demand in 2018-2028

Growth in the number of households is a fundamental driver of demand for additional housing units. Indeed, household growth must be accommodated either by the addition of a new housing unit, the absorption of an existing vacant unit, the subdivision of an existing home into multiple housing units, or the conversion of a non-residential structure into a home. Additional housing units are also needed to meet demand for second homes and to accommodate the replacement of units that are lost or otherwise removed from the market though demolition or conversion to non-residential use.

With regard to vacancies, JCHS new housing demand estimates assume that future vacancy rates in the rental and for-sale markets will remain stable; that is, these estimates assume that markets are and will remain more or less balanced and do not encounter any future swings that would increase or decrease the new housing demand estimate. Given that rates today remain close to the average rates that prevailed from the 1990s through the early 2000s, the assumption that rates are likely to hold near current levels in future years during normal market conditions appears reasonable. Thus, the growth in households is multiplied by the current for-rent and for-sale vacancies as a share of households to determine the number of additional units needed to maintain constant rates.

Demand for second homes is estimated based on the share of households by age and race/ethnicity that are reported to own second homes in the Survey of Consumer Finance (SCF). Since the rate of second home ownership is subject to survey variation, we average the rates from several survey years to produce more reliable estimates for these population segments. For the current estimates, we have combined information from the 2016 SCF with the previous estimates based on the 2010 and 2013 surveys. The latest estimate calls for a slight overall increase in the rate of second home ownership due to the aging of the population and increases in age groups most likely to own these homes. These rates of second home ownership are multiplied by the gain in households to estimate additional homes needed to meet this demand.

Finally, we estimate the net loss of existing housing units and the need for replacement of these homes. The net replacement rate compares the change in the housing stock over the previous ten-year period to the number of homes added through new construction and manufactured home placement. The difference between these estimates indicates the net rate at which the existing housing stock is replaced. For example, over the period from 2007 to 2017, the Housing Vacancy Survey indicates that the total housing stock increased by 8.3 million units. Meanwhile, in the ten years from 2007 to 2017, 9.0 million new housing units were completed and 0.6 new manufactured homes were placed. The difference between these two figures – 1.3 million – represents the number of housing units that were lost from the housing stock on net. The figure incorporates both the loss of housing units to demolition or the merger of existing housing units into a smaller number of homes, and the gain of housing units from conversions from non-residential use or the subdivision of existing homes into multiple units. The

rate of 1.25 percent over a ten-year period represents the average rate from ten-year periods beginning in the years from 2000 to 2007.

The new projections based on each of these factors translate into demand for 15.1 million new housing units in 2018-2028, which is a fairly substantial reduction from the previous projection that called for 16.9 million **(Figure 20)**. The majority of the 1.8 million decline in total projected new housing demand in 2018-2028 was due to the 1.4 million decline in expected household growth. The lesser remaining amount is split roughly evenly between lower demand for additional seasonal/vacant units and lower estimates for replacement of teardowns and conversions.

Figure 20: Baseline Demand for Additional Housing Units: 2018-2028 (Thousands of Housing Units)

Source of Demand for New Housing Units	**Updated 2018 Projection**	2016 Projection
Projected Household Growth	**12,174**	**13,576**
Projected Additional Vacant Unit Demand	**1,159**	**1,291**
Vacant For Rent		
Updated Current Rate: 2.84% of households	*345*	
Previous Rate: 2.79% of households		*379*
Vacant For Sale		
Updated Current Rate: 1.05% of households	*128*	
Previous Rate: 1.21% of households		*164*
Second Homes		
Updated: Average of 2010-2016 2nd Home Ownership Rate (SCF)	*686*	
Previous: Average of 2010-2013 2nd Home Ownership Rate (SCF)		*747*
Projected Total Estimated Net Replacements	**1,722**	**2,005**
Updated Recent Average(2000-10 through 2007-17): 1.25% of total units	*1,722*	
Previous Average Rate (2000-2015): 1.49% of total units		*2,005*
Projected Total Baseline Demand for New Units	**15,055**	**16,872**
Annual Average	1,505	1,687

Source: JCHS 2018 Household Projections

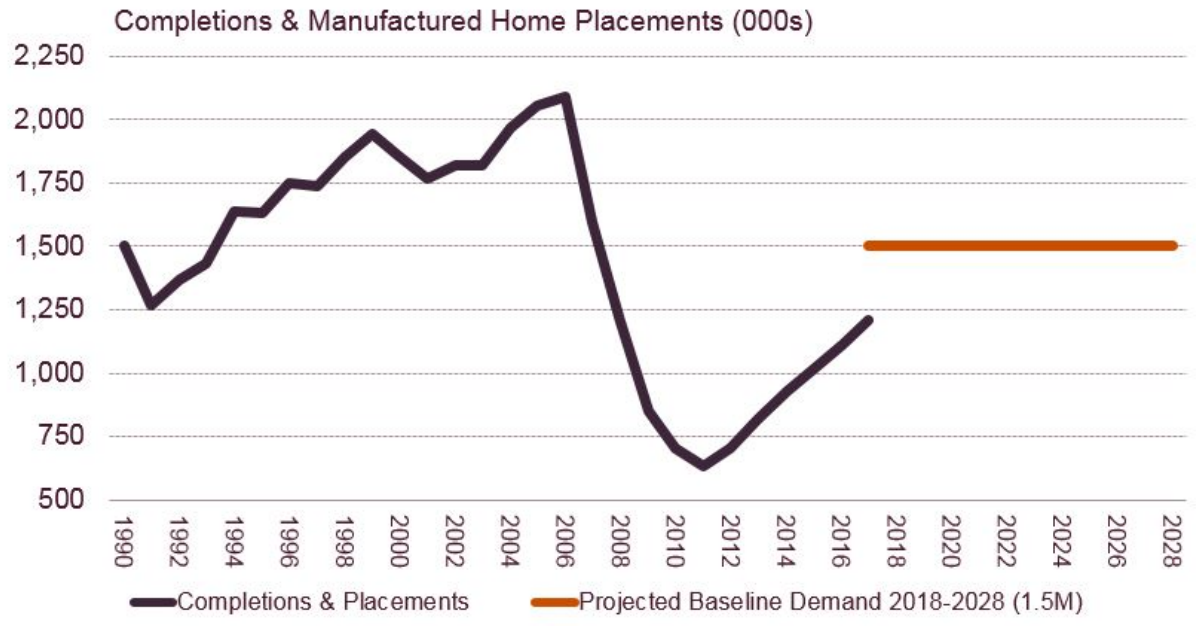
The majority of the drop in demand for additional vacant units is from a drop in expected second home demand in the latest projection, which fell from 747,000 to 686,000 additional second homes. This drop follows the drop in household growth, because additional second home demand is calculated simply by applying the rate of second home ownership by age and minority status to the expected household growth. The biggest factor in the drop in growth in second home ownership is the drop in projected household growth for non-Hispanic whites aged 60-69 who, as it happens, have the highest rate of second home ownership (15.1 percent). Ten-year population change for this group went from an

increase of 1.3 million in 2015-2025 to a decrease of 400,000 in 2018-2028, which dragged down projected growth in second home demand.

The remainder of the decline in projected total unit demand in 2018-2028 is from a decline in net replacement of units lost from the stock. This measure is the largest source of additional housing demand next to household growth, but it is an imprecise measure that may also have the largest margin of error. The updated projections use the average ten-year net replacement rate for the 2000-2010 through 2007-2017 periods, which was 1.25 percent of the stock, which is lower than the 1.49 percent of stock assumed in the 2016 report using data covering 2000-2010 through 2005-2015. Based on the current stock of 137.4 million housing units, the new rate of net replacements resulted in total replacement demand of 1.7 million additional new units for 2018-2028. The current net replacement rate is historically low, and at 1.25 percent amounts to assuming each housing unit lasts 800 years. In comparison, the average ten-year net replacement rate since 1980 is 2.5 percent of the stock over a ten-year period, which would lift replacement demand to 3.4 million units in the next 10 years. For this reason we take the 1.7 million net replacement demand for 2018-2028 as a conservative estimate.

Summing up each of the sources, the analysis suggests that total baseline demand for new housing will average 1.5 million units per year from 2018-2028. Completions and mobile home placements totaled 1.2 million per year at last measure in 2017. These figures suggest that construction levels remain lower than underlying demand by roughly 300,000 per year **(Figure 21)**. They also suggest that, given the assumptions outlined above, underlying demand would support continued growth in completions and placements.

Figure 21: Current Levels of New Additions to the Housing Stock Lag our Projections by 300,000 Units



Source: Joint Center for Housing Studies

Summary

The JCHS household projections call for 12.2 million additional households formed between 2018 and 2028. This is 1.4 million lower than the 13.6 million growth projected by JCHS's 2016 projections for the 2015-2025 time period. Based on these lower projections, total baseline demand for new housing in 2018-2028 is projected to average 1.5 million per year and 15 million over 10 years. This new projection for 2018-2028 represents a downward revision of the 2016 projection of 16.9 million estimated baseline demand for 2015-2025, but would still exceed the rate of housing production as of 2018. After 2028, household growth is expected to decline to 9.6 million in 2028-2038 despite continued growth in the number of new household formations by young adults, which will be outweighed by the growth in losses of households among the rising number of households in the oldest age groups.

Whether these projections come to pass will depend on a variety of factors. With regard to the level of household formation, the most important factor is the rate of foreign immigration. As shown by changes since last projection, shifts in these estimates can have a large impact on household projections. The level of net immigration projected over the next ten years is actually slightly below current levels and so seems like a reasonably conservative estimate. However, given the strong steps taken by the Trump administration to curtail immigration, it remains to be seen whether there will be further declines going forward.

The other key factor affecting the household projections are trends in headship rates. The latest estimates suggest that declines in these rates among younger households have slowed, and so the assumption that rates will decline slightly over the next five years also seems conservative. But changes in economic conditions or housing affordability could further reduce the rate of household formation in the future.

With regard to estimates of future need for new housing: after household growth projections, the second most important driver of JCHS's projections of future demand for housing is the rate at which existing housing units are replaced. The assumed net replacement rate is also near historic lows and so seems conservative – particularly in that such a rate would assume each house lasts 800 years. However, the consistent downward trend in this rate in recent years suggests that the rate could fall even further in the future. In fact, current additions to the housing stock are falling short of the needed rate given current levels of household formation. The reasons for this shortfall are not entirely clear, but suggest that some form of supply constraint may limit the market's ability to meet demand for housing. If that shortfall persists, the expected result would be rising housing prices and rents that would result in lower rates of household formation than currently predicted.