CONTENTS

Executive Summary 1
Housing Markets 7
Demographic Drivers 13
Homeownership 19
Rental Housing 25
Housing Challenges 31
Appendix Tables 38

JOINT CENTER FOR HOUSING STUDIES
OF HARVARD UNIVERSITY

HARVARD GRADUATE SCHOOL OF DESIGN
HARVARD KENNEDY SCHOOL

Principal funding for this report was provided by the Ford Foundation and the Policy Advisory Board of the Joint Center for Housing Studies. Additional support was provided by:

Federal Home Loan Banks
Housing Assistance Council
MBA’s Research Institute for Housing America
National Association of Home Builders
National Association of Housing and Redevelopment Officials (NAHRO)
National Association of REALTORS®
National Council of State Housing Agencies
National Housing Conference
National Housing Endowment
National League of Cities
National Low Income Housing Coalition
National Multifamily Housing Council

© 2017 by the President and Fellows of Harvard College.
The opinions expressed in The State of the Nation’s Housing 2017 do not necessarily represent the views of Harvard University, the Policy Advisory Board of the Joint Center for Housing Studies, the Ford Foundation, or the other sponsoring organizations.
A decade after the onset of the Great Recession, the national housing market is finally returning to normal. With incomes rising and household growth strengthening, the housing sector is poised to become an important engine of economic growth. But not all households and not all markets are thriving, and affordability pressures remain near record levels. Addressing the scale and complexity of need requires a renewed national commitment to expand the range of housing options available for an increasingly diverse society.

**NATIONAL HOME PRICES REGAIN PREVIOUS PEAK**

US house prices rose 5.6 percent in 2016, finally surpassing the high reached nearly a decade earlier. Achieving this milestone reduced the number of homeowners underwater on their mortgages to 3.2 million by year’s end, a remarkable drop from the 12.1 million peak in 2011. In inflation-adjusted terms, however, national home prices remained nearly 15 percent below their previous high (Figure 1-a). As a result, the typical homeowner has yet to fully regain the housing wealth lost during the downturn.

The increase in nominal home prices was widespread, with home values gaining ground in 97 of the nation’s 100 largest metros. But the extent of the recoveries differs significantly. Home prices in only 41 of these metros now exceed previous highs, while prices in 32 metros are still down 15 percent or more. Markets where prices are well below peak include not only metros at the epicenter of the housing boom and bust, such as Las Vegas and Tampa, but also Midwestern markets where the cycle in home prices was comparatively mild, such as Chicago and Detroit.

The rebound in home prices also differs sharply across neighborhoods by income. Based on Zillow data for over 9,000 ZIP codes, home prices in low-income areas (with median incomes under 80 percent of statewide median) were still 13.7 percent below their pre-recession peaks on average in 2016. By comparison, prices were 6.5 percent below peak in moderate-income neighborhoods and only 3.3 percent below peak in high-income neighborhoods (with median incomes over 120 percent of statewide median). This means that larger shares of homeowners in low-income communities than in higher-income neighborhoods remain underwater on their mortgages, with no opportunity to refinance or sell without bringing money to the closing table.

The cumulative impact of these differences on real home price appreciation has a strong regional pattern. Markets primarily along the East and West Coasts have seen inflation-adjusted home values increase by more than 40 percent since 2000, while metros in large swaths of the Midwest and South have experienced declines (Figure 1-b). Although the substantial increase in
high-appreciation markets is a boon for current homeowners, it has also pushed homeownership out of reach for many. Indeed, home values now average $575,000 in the 10 metros with the highest appreciation rates—more than four times the $135,000 average in the 10 markets with the lowest appreciation rates.

MODERATE GAINS IN CONSTRUCTION BUT TIGHTENING SUPPLY

New construction added 1.17 million units to the national stock in 2016, a 5.6 percent increase from 2015. While marking the seventh year of gains, last year’s growth rate was the lowest since 2011 thanks largely to the flattening of multifamily starts from 397,000 units to 393,000. Meanwhile, construction of single-family homes picked up by 9.4 percent in 2016, to 781,600 units, outpacing growth in multifamily construction for the first time since the recession.

But even after seven consecutive years of growth, new residential construction in 2016 was well below the 1.4–1.5 million unit annual rates averaged in the 1980s and 1990s. In fact, coming on the heels of the most prolonged and pronounced downturn since the Great Depression, housing completions in the past 10 years totaled just 9.0 million units—more than 4.0 million units less than in the next-worst 10-year period going back to the late 1970s. Together with steady increases in demand, the low rate of new construction has kept the overall market tight, leaving the gross vacancy rate at its lowest point since 2000 (Figure 2).

The lack of inventory for sale is evident in both the new and existing segments of the market. In 2016, the typical new home for sale was on the market for 3.3 months, well below the 5.1 months averaged since recordkeeping began in 1988. Meanwhile, only 1.65 million existing homes were for sale in 2016, the lowest count in 16 years. And with sales volumes picking up, the inventory represented just 3.6 months of supply, an 11-year low.

Conditions are particularly tight at the lower end of the market, likely reflecting both the slower price recovery in this segment and the fact that fewer entry-level homes are being built. Between 2004 and 2015, completions of smaller single-family homes (under 1,800 square feet) fell from nearly 500,000 units to only 136,000. Similarly, the number of townhouses started in 2016 (98,000) was less than half the number started in 2005.

Meanwhile, rental markets are extremely tight despite the relatively strong pickup in multifamily construction. According to the Housing Vacancy Survey, the rental vacancy rate fell for the seventh straight year in 2016, dipping to 6.9 percent—its lowest level in more than three decades. MPF Research reports that the vacancy rate for professionally managed apartments was also just 4.4 percent. While some rental markets showed signs of softening in early 2017—most notably in San Francisco and New York—there is generally little indication that increases in supply are outstripping demand.
Indeed, rent gains across the country continue to far outpace inflation. The Consumer Price Index for rent on primary residences was up 3.8 percent last year, while MPF Research estimates that rents for professionally managed apartments rose by a similar amount. With most new supply coming at the upper end of the market and strong demand pushing up rents across the board, the number of modestly priced units available for under $800 declined by 261,000 between 2005 and 2015, while the number renting for $2,000 or more jumped by 1.5 million.

A variety of factors may be holding back a more robust supply response. Labor shortages are a key constraint, reflecting both the substantial drop in the construction workforce following the housing bust and the lower number of young workers entering the industry. In addition, regulatory and stricter financing requirements have limited the supply of land available for both single- and multifamily housing construction. In combination, these forces raise development costs and make it less feasible to build smaller homes for first-time buyers and rental units affordable to low- and moderate-income households.

**PICKUP IN HOUSEHOLD GROWTH**

The sluggish rebound in construction also reflects the striking slowdown in household growth after the housing bust. Depending on the government survey, household formations averaged just 540,000 to 720,000 annually in 2007–2012 before reviving to 960,000 to 1.2 million in 2013–2015.

Much of the falloff in household growth can be explained by low household formation rates among the millennial generation (born between 1985 and 2004). Indeed, the share of adults aged 18–34 still living with parents or grandparents was at an all-time high of 35.6 percent in 2015. But through the simple fact of aging, the oldest members of this generation have now reached their early 30s, when most adults live independently. As a result, members of the millennial generation formed 7.6 million new households between 2010 and 2015.

While sharply lower immigration also contributed to weak household growth after the bust, net inflows picked up from 854,000 in 2011 to just under 1.0 million in 2016. Pew Research Center estimates also indicate little change in the undocumented population since 2007, implying that virtually all of these new arrivals are documented immigrants.

The Joint Center for Housing Studies has revised its household growth projections to reflect these recent trends as well as the Census Bureau’s 2014 population projections, which assume that growth in the foreign-born population increases to 1.27 million per year by 2020. Growth in US households is now projected to reach 13.6 million in 2015–2025, roughly in line with the increase in the 1990s. Minorities will drive almost three-quarters of these gains, with Hispanics alone accounting for a third (Figure 3).

Over the decade, the aging of the millennial generation will boost the number of households in their 30s by 2.6 million.
At the same time, the aging of the baby boomers will lift the number of households age 65 and over by some 11.3 million. By 2035, one out of every three households will be headed by someone in this older age group. In the following decade, however, household growth is projected to slow to 11.5 million as mortality rates rise among the baby-boom generation. With the white population increasing only slowly, minorities will account for over 90 percent of household growth in 2025–2035.

Whether these projections come to pass will depend in no small part on the health of the US economy. But perhaps the key unknown is the pace of immigration. If successful, proposed policies to curtail both undocumented and documented immigration would be a significant drag on household growth in the coming years.

HOMEOWNERSHIP DECLINES MODERATING, WHILE RENTAL DEMAND STILL STRONG

After 12 years of decline, there are signs that the national homeownership rate may be nearing bottom. As of the first quarter of 2017, the homeownership rate stood at 63.6 percent—little changed from the first quarter two years earlier. In addition, the number of homeowner households grew by 280,000 in 2016, the strongest showing since 2006. Early indications in 2017 suggest that the upturn is continuing. Still, growth in renters continued to outpace that in owners, with their numbers up by 600,000 last year.

While there is no ideal homeownership rate, its long-term decline is a policy concern in part because of its disproportionate impact on black households. Over the past 12 years, the black homeownership rate fell sharply to just 42.2 percent, slightly below the 1994 level (Figure 4). With white rates increasing to 71.9 percent over this period, the black-white homeownership gap widened by 2.3 percentage points to 29.7 percentage points in 2016—the largest disparity since World War II.

At the same time, the homeownership rates were up nearly 5 percentage points among Asians (to 55.5 percent) and Hispanics (to 46.0 percent), narrowing the gap with white homeownership rates by 2.8 percentage points. Together with growth in their populations, these gains lifted the combined Asian and Hispanic share of homebuying activity from one out of seven sales in 2001 to nearly one out of five in 2015.

Now that foreclosures are ebbing and incomes are rebounding, the national homeownership rate may level off. But the ongoing tightness of mortgage credit and the limited supply of lower-cost housing are still serious constraints for potential homebuyers. The current debate about the federal role in backstopping the mortgage market thus has important implications for the cost and availability of financing. The role and capabilities of the Federal Housing Administration (FHA) must be part of the policy discussion, given the outsized role it plays in supporting home purchase loans for minority and lower-income households.

The future course of homeownership will also be shaped by how affordable local home prices are for typical renters. On average, 45 percent of renters across the nation’s metropolitan areas can afford the payments on a median-priced home in their market area, but the shares range from less than one in ten in the high-cost markets concentrated on the Pacific Coast as well as in Florida and the Northeast, to two-thirds or more in low-cost metros in the Midwest and rural South. In areas where homebuying is well out of reach for a large majority of renters, there is much less potential for increases in homeownership.

Joint Center projections suggest that demand for owner-occupied housing could rebound sharply even as demand for rentals remains strong. Assuming that the homeownership rate stabilizes near its current level, the number of homeowner households could grow by 8.9 million in 2015–2025 while the number of renter households could increase by about 4.7 million. And even if the downtrend in homeownership continues for another five years, owner household growth would still total 4.9 million by 2025. In that case, renter household growth would hold near its recent annual pace, lifting the total increase in 2015–2025 to 8.7 million.
AFFORDABILITY PRESSURES REMAIN WIDESPREAD

Based on the 30-percent-of-income affordability standard, the number of cost-burdened households fell from 39.8 million in 2014 to 38.9 million in 2015. As a result, the share of households with cost burdens fell 1.0 percentage point, to 32.9 percent. This was the fifth straight year of declines, led by a considerable drop in the owner share from 30.4 percent in 2010 to 23.9 percent in 2015. The renter share, however, only edged down from 50.2 percent to 48.3 percent over this period.

With such large shares of households exceeding the traditional affordability standard, policymakers have increasingly focused their attention on the severely burdened (paying more than 50 percent of their incomes for housing). Although the total number of households with severe burdens also fell somewhat from 19.3 million in 2014 to 18.8 million in 2015, the improvement was again on the owner side (Figure 5). Indeed, 11.1 million renter households were severely cost burdened in 2015, a 3.7 million increase from 2001. By comparison, 7.6 million owners were severely burdened in 2015, up 1.1 million from 2001.

The share of renters with severe burdens varies widely across the nation’s 100 largest metros, ranging from a high of 35.4 percent in Miami to a low of 18.4 percent in El Paso. While most common in high-cost markets, renter cost burdens are also widespread in areas with moderate rents but relatively low incomes. Augusta is a case in point, where the severely cost-burdened share of renters was at 30.3 percent in 2015.

Regardless of location, the cost-burdened shares among lowest-income households (earning under $15,000 a year, roughly equivalent to working full-time, year-round at the federal minimum wage) are consistently high. In the nation as a whole, 70.3 percent of lowest-income households face severe housing cost burdens. Indeed, in certain metros such as Cape Coral and Las Vegas, nearly nine out of ten lowest-income renters are severely burdened. But even in the markets with the smallest shares, such as El Paso and Knoxville, six out of ten lowest-income renters face these burdens.

The scale and pervasiveness of severe cost burdens among lowest-income renters underscores the fundamental challenge of providing housing that these households can afford. A recent National Low Income Housing Coalition study found that for every 100 extremely low-income renters (earning 30 percent of area median income) in 2015, only 35 rental units were affordable at the 30-percent standard, in adequate condition, and not occupied by higher income households. In seven metros, fewer than 20 units were affordable and available for every 100 extremely low-income renters.
SEGREGATION BY INCOME ON THE RISE

A growing body of social science research has documented the long-term damage to the health and well-being of individuals living in high-poverty neighborhoods. Recent increases in segregation by income in the United States are therefore highly troubling. Between 2000 and 2015, the share of the poor population living in high-poverty neighborhoods rose from 43 percent to 54 percent. Meanwhile, the number of high-poverty neighborhoods rose from 13,400 to more than 21,300. Although most high-poverty neighborhoods are still concentrated in high-density urban cores, their recent growth has been fastest in low-density areas at the metropolitan fringe and in rural communities (Figure 6).

At the same time, the growing demand for urban living has led to an influx of high-income households into city neighborhoods. While this revival of urban areas creates the opportunity for more economically and racially diverse communities, it also drives up housing costs for low-income and minority residents.

FUTURE OPPORTUNITIES AND CHALLENGES

By many metrics, the housing market has overcome the worst effects of the housing bust. Nominal house prices have regained previous peaks, construction volumes are nearing their long-term averages, and household growth is becoming more balanced between the owner and renter markets. And with inventories of both for-sale and for-rent homes extremely tight, the need for additional housing supply should be an important stimulus for economic growth.

Longer-term demographic trends are also favorable for the housing sector. Even if they remain somewhat less likely to form new households than previous generations, millennials will bolster demand for both rental and owner-occupied housing as they move into their late 20s and early 30s. This generation is the most racially and ethnically diverse in the nation’s history, and already demonstrates a greater interest in urban living than its predecessors. But providing housing for these younger adults—particularly at affordable price points and in the places where they want to live—will be a significant challenge.

For its part, the baby-boom generation will drive up investment in the existing housing stock as they modify their homes to accommodate their changing needs. While most are likely to remain in their current homes, some baby boomers will seek different housing options as they transition into old age. Although many of these households have the financial resources to support a range of housing options, millions of older households will be of modest means. Meeting the growing need for housing that is accessible, affordable and well-integrated into communities will require concerted efforts by the private and public sectors alike.

Given the pivotal role of housing in determining the well-being and financial security of every individual and family, attending to the nation’s critical housing challenges should have primacy in the debates over public spending, tax policy, and regulatory regimes. National housing policy must also recognize the diversity of conditions existing both within and across markets. As such, state and local governments have a central role to play in defining specific community needs, crafting policies, and marshaling resources to support housing solutions. But only the federal government can provide funding at the scale necessary to make meaningful progress toward the nation’s stated goal of a decent home in a suitable living environment for all.
Housing markets continued to strengthen in 2016, with new and existing home sales, prices, and construction levels all on the rise. Still, single-family construction, traditionally the largest source of residential investment, remains well below historical levels. As a result, low inventories of homes for sale are driving nominal prices above pre-recession peaks in many metros. In rental markets, low vacancy rates are pushing up rents and keeping multifamily construction relatively strong. Easing these tight conditions is especially difficult where labor shortages and limited land availability constrain new housing supply.

**SINGLE-FAMILY CONSTRUCTION ON THE INCREASE**

Housing construction continued to pick up pace over the past year, with total starts ticking up from 1.11 million units in 2015 to 1.17 million units in 2016 (Figure 7). In percentage terms, however, last year’s 5.6 percent increase is the smallest annual gain since 2010–2011. Moreover, housing starts were still running 14 percent below the 1.37 million unit annual rate averaged in the 1990s and 21 percent below the 1.49 million unit annual rate in the 1980s.

But for the first time since 2005, single-family construction drove last year’s growth, increasing 9.4 percent to 781,600 units. Meanwhile, multifamily starts edged down from 397,000 units in 2015 to 393,000 in 2016. This decline appears to result largely from the expiration of a property tax exemption program in New York in 2016, which had spurred a jump in multifamily construction over the previous year. Excluding the Northeast, multifamily starts rose 7.1 percent last year.

Despite these gains, housing construction is still weak by historical standards. Single-family starts have been particularly slow to recover, holding well below one million units every year since 2008—a level that, until the crash, had been posted only five times since 1976. While exceeding average annual rates in the 1990s (268,000 units), multifamily housing starts in 2016 were significantly below the annual averages in the 1970s (625,000 units) and 1980s (507,000 units).

Given that multifamily production has been relatively strong across the country, regional differences in total housing production stem largely from the single-family side. Single-family construction has recovered most in the South, with starts up 84 percent from the 2011 low and back within 13 percent of their average annual rate in the 1990s. In contrast, single-family construction in the Northeast has bounced back just 46 percent from its low and is still fully 53 percent below the 1990s annual average. Multifamily construction in the Northeast, however, has been strong, with starts in 2016 running more than three times above the average annual rate in the 1990s.
PERMITTING ACTIVITY GENERALLY STRONG

With permitting increasing in 70 of the nation’s 100 largest metro markets last year, the outlook for housing construction activity is encouraging. The single-family segment is now driving most of the gains in overall permitting, with the multifamily segment responsible for most of the declines (Figure 8). Still, overall trends were generally positive as 49 of the 100 largest metros posted increases in both single-family and multifamily permitting, and just 10 metros posted declines in both.

Several Texas metropolitan areas were among the top markets for building permits, with Dallas issuing the largest number (55,800), followed by Houston (44,700) and Austin (21,900). Outside of Texas, New York (43,200), Atlanta (36,400), and Los Angeles (32,100) were also among the top metros for permitting in 2016.

CHANGING CHARACTERISTICS OF NEW UNITS

Single-family construction remains skewed towards larger, more expensive homes. Indeed, the share of small single-family homes (under 1,800 square feet) fell from 37 percent of all completions in 1999 to just 21 percent in 2015. Over this same period, the share of large homes (over 3,000 square feet) nearly doubled from 17 percent to 31 percent.

Reduced construction of smaller single-family homes has not been offset by increased construction of condominiums and townhouses. Instead, multifamily construction has focused on rental apartments, with only 8 percent of newly completed units built as condominiums in 2016. This amounts to only 29,000 for-sale starts—less than a fifth of the average annual additions at the 2006 peak and lower than at any point prior to 2008 in records dating back to 1974.

Construction of town-houses, often a desirable option for first-time buyers, has risen recently but still does not approach its pre-recession high. Townhouse starts stood at 98,000 units in 2016, more than double the number in 2009 but less than half that in 2005.

Reduced construction of smaller single-family homes has not been offset by increased construction of condominiums and townhouses. Instead, multifamily construction has focused on rental apartments, with only 8 percent of newly completed units built as condominiums in 2016. This amounts to only 29,000 for-sale starts—less than a fifth of the average annual additions at the 2006 peak and lower than at any point prior to 2008 in records dating back to 1974. Construction of town-houses, often a desirable option for first-time buyers, has risen recently but still does not approach its pre-recession high. Townhouse starts stood at 98,000 units in 2016, more than double the number in 2009 but less than half that in 2005.

The limited data so far available for 2016 do, however, signal a modest decrease in the size of newly completed single-family homes. After four consecutive years of record highs, the median square footage edged down from 2,467 square feet in 2015 to 2,422 square feet in 2016. Each of the four census regions posted declines, suggesting that this was not just a shift in the regional mix of construction. Nevertheless, the median size of new single-family homes in 2016 exceeded that in all years up to 2014.

TIGHTENING INVENTORIES OF HOMES FOR SALE

Residential construction in the past decade has added fewer units to the housing stock than in any 10-year period in records dating back to 1968. The number of housing completions between 2007 and 2016 totaled just 8.98 million units, far below...
the 15 million-plus average for every 10-year period from the 1970s through the 1990s.

As a result, vacancy rates and inventories of homes for sale have fallen sharply. The national vacancy rate has receded to its 2000 level, erasing all of the run-up at the height of the housing boom. The largest declines are on the rental side, where the vacancy rate was 6.9 percent in 2016—its lowest point since 1985. The vacancy rate for homes for sale, which had risen to 2.8 percent in 2008, was also back down to 1.7 percent last year. Adding to market tightness in many areas, the share of units held off market remains elevated, likely reflecting the continued fallout from the foreclosure crisis.

Inventories of homes for sale also hit a record low in December 2016 (Figure 9). The National Association of Realtors® (NAR) reports that 1.65 million existing homes were available for sale in that month, down 6.25 percent from the previous year and 11.3 percent from 2014. The supply of existing homes on the market stood at just 3.6 months, marking the fourth consecutive year that supplies held below 6.0 months (the conventional measure of a balanced market).

Inventories are tightening in metros across the country. Zillow data show that for-sale inventories dropped in 78 of the top 100 metros in 2016, with an average decline of 10.4 percent across these metros. Indeed, the number of homes for sale was down by 39 percent on average from 2010, the first year data were available. And in some markets, such as Denver, Grand Rapids, Nashville, Salt Lake City, and Seattle, inventories of homes for sale fell by 65–70 percent between 2010 and 2016.

With so few units on the market, homes listed for sale sell quickly and often above the asking price. According to Zillow’s estimates, the median home sold in 2016 was listed for 93 days, 34 days less than in 2010. Listing times were even shorter in hot housing markets, averaging only 50 days in the San Jose and San Francisco metros and under 60 days in Dallas, Denver, and Seattle. House prices in these five markets were up 7.8 percent on average in 2016, exceeding the national average increase.

Within metro areas, inventories at the lower end of the market are especially tight. Indeed, supplies of modestly priced homes (selling at 75–100 percent of the area median list price) were lowest, dipping below 3.0 months at the end of 2016 (Figure 10). According to Zillow data, only one-fourth of the homes for sale at the end of last year were in the bottom one-third of area homes by price while half were in the top one-third.

**PICKUP IN HOME SALES**

More than 6 million homes changed hands in 2016, an increase of about 4.5 percent from 2015 and 33 percent from the post-recession low in 2010. By NAR’s count, existing home sales were
at 5.45 million units last year, up 3.8 percent from 2015. Sales of new single-family homes rose even faster, jumping 12 percent last year—the fourth double-digit sales gain in five years.

Even so, sales of new homes are still depressed by historical standards. At 561,000 units, sales of new homes stood 20 percent below the 698,000 units averaged annually in the 1990s and less than half the 1.3 million units sold in 2005. Meanwhile, sales of existing homes were fully 36 percent above the 4.0 million rate averaged in the 1990s, but still 23 percent below the 7.1 million units in 2005.

The composition of home sales suggests that the homeownership market is strengthening. After three years of declines, purchases by first-time homebuyers accounted for 35 percent of sales in 2016, up from 32 percent in 2015, according to NAR. At the same time, Metrostudy data show that sales to owner-occupants with mortgages rose by 7 percent, indicating that traditional sales are once again driving markets.

In contrast, sales of distressed properties continued to recede, dropping 19 percent in 2016. CoreLogic reports that the share of existing single-family home sales that were either real estate owned (REO) or short sales fell to 8.9 percent, far below the 32.4 percent peak in 2009. The share of cash-only home sales—typically to real estate investors—also declined for the fifth straight year, falling from a high of 38.8 percent in 2011 to 30.1 percent in 2016. The investor share of sales also continued its slide from the 30.9 percent peak in 2013 to 26.5 percent in 2016, approaching the pre-recession average of 22 percent.

**HOME PRICES MOVING UP**

By all major measures, home prices posted solid increases last year. NAR reports that the median sales price for existing homes was $233,800 in 2016, up 4.9 percent in real terms from 2015. The Freddie Mac House Price Index, the S&P CoreLogic Case-Shiller Index, Zillow’s Home Value Index, and the FHFA Purchase-Only Index all registered inflation-adjusted rates of appreciation in the 4–5 percent range.

While real home prices are still 9–16 percent below the mid-2000s peak, nominal prices finally regained previous highs in 2016. At year-end, the monthly S&P CoreLogic Case-Shiller index stood 1.2 percent above peak, while the Freddie Mac index was 1.9 percent above.

Home price appreciation was widespread in 2016, with nominal prices rising in 97 of the 100 largest metro areas and metro divisions tracked by CoreLogic. Prices rose by more than 8 percent in 14 large metros, including some of the most expensive (Seattle) and the least expensive (Detroit) markets. Home prices in Seattle posted the fastest rate of appreciation of 11.6 percent, with increases in Portland close behind at 10.6 percent. Slow-appreciation markets were located primarily in the Midwest and Northeast, but also included a handful of Southern metros such as El Paso and Virginia Beach.

**VARIATION IN METRO AREA PRICE CYCLES**

Nominal house prices in 41 of the 100 largest metros surpassed their previous highs by the end of 2016, up from 35 metros at the end of 2015. Some of these markets, such as Little Rock, Louisville, and Oklahoma City, have done so with only modest price appreciation because their downturns were relatively mild. But in others, such as San Jose and Seattle, prices have climbed rapidly since 2010. Other metros where appreciation has pushed home prices to levels far above previous peaks include Denver (up 41.6 percent), San Francisco (up 37.6 percent), and Austin (up 30.4 percent).

Still, home prices in the majority of metros have yet to fully recover, including some Sunbelt markets where prices have risen sharply in recent years. For example, home prices in the Riverside metro area climbed 45 percent between December 2012 and December 2016, but were still 23 percent below the peak. Prices also lag mid-2000s peaks in several markets where there was little boom or bust, including Akron, Allentown, Birmingham, Bridgeport, Dayton, and St. Louis.

Within metro areas, home prices in low-income neighborhoods have been slowest to bounce back. Nominal prices
exceeded their pre-recession peaks in only 22 percent of low-income neighborhoods, compared with 35 percent of moderate-income areas and 41 percent of high-income areas. Even in markets where metrowide prices were back above peak, home values in only 65 percent of low-income neighborhoods had rebounded fully by the end of 2016.

**GROWING DISPARITIES ACROSS AND WITHIN METROS**

The gap between home prices in low- and high-cost markets continues to grow. In 2000, the median home value in the nation’s most expensive housing market was only 6 times higher than that in the least expensive. In 2016, that multiple had jumped to more than 11.

This widening disparity reflects stark long-term differences in home price appreciation (Figure 12). In the 10 highest-cost areas in 2016, inflation-adjusted median home values were up 63 percent on average from 2000, to $574,460—nearly three times the national median home value of $193,800. Meanwhile, inflation-adjusted median home values in the 10 lowest-cost metros rose just 3.6 percent on average, to $112,940. Some of these lowest-cost metros were among the 19 markets (generally in the Midwest) where real home prices in 2016 were lower than in 2000.

Home price trends at the neighborhood level highlight the affordability crisis in the country’s most expensive markets. From 2000 to 2016, prices in low-income neighborhoods in the 10 highest-cost metros were up by 150 percent on average—outstripping even the 109 percent increase in high-income neighborhoods in those metros. At the same time, house prices in low-income neighborhoods in the 10 lowest-cost metros rose only 29 percent on average, much less than the 44 percent average increase in high-income neighborhoods. The disparities in home price appreciation both across and within markets adds to concerns that entire metro areas are becoming inaccessible to low- and moderate-income households.

**NEGATIVE EQUITY DOWN, BUT NOT OUT**

The steady climb in house prices has sharply reduced the number of homeowners with negative or low equity (under 20 percent of the home’s value). According to CoreLogic, the number of households underwater on their mortgages dropped from 4.3 million in 2015 to 3.2 million in 2016, reducing their share of all homeowners from 8.4 percent to 6.2 percent. The number of households with low equity also fell from 9.5 million to 7.7 million over the year.

Despite this progress, the share of homeowners with negative equity in some markets is still more than double the national rate. For example, 16.1 percent of homeowners in the Miami metro area were underwater on their mortgages in 2016, along with 15.5 percent in Las Vegas and 12.6 percent in Chicago. At the other extreme, only 0.6 percent of owners in the San Francisco metro area had negative equity.

Homeowners living in low-income neighborhoods are especially likely to have negative equity. A JCHS analysis of Zillow price trends in over 9,000 ZIP codes revealed that 15.3 percent of homeowners in low-income neighborhoods were underwater in 2016, more than double the share in high-income neighborhoods. The problem of negative equity is particularly acute in the low-income neighborhoods of markets where home prices have not yet regained their metrowide peaks, such as Baltimore, Jacksonville, and St. Louis. The shares of underwater homeowners living in the low-income neighborhoods of these metros average 16.5 percent, but in some cases exceed 40 percent. And even in markets where metrowide home prices have fully recovered, the share of underwater homeowners in low-income neighborhoods (12.0 percent) far exceeds the shares in moderate- and high-income neighborhoods (8.4 percent and 5.8 percent, respectively).

**HOUSING’S SHARE OF ECONOMY STILL LAGGING**

Residential fixed investment (RFI)—including housing construction, home improvements, expenditures on manufactured homes, and broker commissions on home sales—climbed for the sixth consecutive year, rising from $660.1 billion in 2015 to $706.1 billion in 2016. Spending on multifamily housing was at a 10-year
high of $60.4 billion while spending on homeowner improvements hit $154.4 billion, according to Census Bureau estimates. However, real spending on single-family construction totaled a modest $243 billion last year, close to the level in 1996. Indeed, single-family construction spending accounted for only 34 percent of RFI in 2016, significantly less than the 49 percent share averaged in 1993–2006.

Housing’s overall share of the economy was also low by historical standards. RFI contributed just 3.8 percent of GDP in 2016, compared with 4.5 percent annually on average since 1959. At the same time, however, spending on housing services (rent and utility payments by renters, plus imputed rents and utility payments by owners) accounted for 12.5 percent of GDP, exceeding its long-term average of 11.3 percent.

**THE CONSTRUCTION LABOR FORCE SHORTAGE**

At last measure in 2015, the construction industry employed 7.2 million workers and managers, about 20 percent fewer than in 2007 and roughly the same number as during the worst of the housing crisis in 2012. Meanwhile, the unemployment rate in the sector dropped by half between 2012 and 2016, falling from 13.9 percent to 6.3 percent. With demand for labor high, the lack of growth in construction employment suggests that many workers lost during the downturn have left the industry, creating a labor shortage that could constrain growth in housing construction.

The workers lost during the recession were disproportionately young. Between 2007 and 2015, the number of construction employees under age 35 dropped by 34 percent and the number aged 35–44 shrank by 21 percent, while the number over age 45 declined by just 1.5 percent. As a result, the share of older workers increased from 33 percent to 41 percent over this period.

In addition to being older on average, the construction workforce is overwhelmingly male. Only about 212,000 women were employed in construction jobs in 2015, representing less than 3 percent of the workforce. The construction industry also depends increasingly on immigrant labor, with the foreign-born share of the workforce steadily rising from 21 percent in 2002, to 26 percent in 2007 and 29 percent in 2015.

**THE OUTLOOK**

Homebuilders are optimistic about the market for new single-family homes. Indeed, the NAHB/Wells Fargo Housing Market Index reported that builder confidence in current and expected home sales was at a 12-year high in March 2017. Expectations about the multifamily market are more mixed, with permitting nationwide still higher than average levels in the 1990s or 2000s, but with some of the formerly hottest markets reporting a slowdown.

Several factors could constrain housing activity in the coming years. Rising home prices and historically low inventories of homes for sale are barriers to entry for many potential homebuyers, especially those seeking to relocate to the high-cost metros where price appreciation is outpacing increases in the rest of the country. In addition, construction levels are still well below historical averages, particularly for the types of housing that are often the choice of first-time buyers, including smaller single-family homes, townhouses, and condominiums.

Both land availability and labor market tightness make development of moderately priced housing difficult. Local land use regulations that favor low-density development, along with potential restrictions on immigrant workers, could further limit the ability of housing markets to meet growth in housing demand through new construction.
Household growth, the primary driver of housing demand, has picked up and is likely to remain strong as members of the millennial generation increasingly move into their 20s and early 30s over the coming decade. But immigration, typically a large source of household growth, could be in for a slowdown. Worsening income inequality, along with the increasing concentration of poverty and affluence, are also concerns. Still, the growing diversity and overall aging of the US population ensure that demand for a variety of housing types and locations is set to increase.

**REBOUND IN HOUSEHOLD GROWTH**

Census Bureau survey results confirm that household growth has steadily climbed from post-recession lows. Depending on the survey, between 960,000 and 1.2 million households were added on net in 2013–2015—a dramatic increase from the 540,000–720,000 averaged in the late 2000s. On a three-year rolling average basis, the Housing Vacancy Survey (the timeliest survey for tracking growth) shows a strong rebound in household growth from under 600,000 per year in 2009–2011 to more than 1.0 million in 2015–2016 (Figure 13).

This increase largely reflects the aging of the millennial generation (born 1985–2004) into the phase of life when they are most apt to form their own households. At 87 million strong, millennials are the largest generation in history. In 2010–2015, they lifted the population aged 10–29 by 3.4 million and formed 7.6 million new households, more than offsetting a decline of roughly 4 million among the nation’s oldest households over this period.

Still, the millennials have so far had only a muted impact on housing demand. Indeed, their household formation rates remain at post-recessionary lows, at least in part because many continue to live with their parents or grandparents. According to the latest American Community Survey, the share of adults aged 18–34 residing in their parents’ homes increased again in 2015 to an all-time high of 35.6 percent.

Low incomes are clearly part of the problem. In 2015, the median personal income of 25–29 year olds was $27,100, up 10.6 percent from $24,500 in 2011 (in constant dollars) but still well below the $30,300 posted in 2000. High housing costs in many markets have also prevented many millennials from living independently. Household headship rates for both the 18–24 and 25–34 year-old age groups are especially low in the nation’s least affordable markets (Figure 14).
Despite their slow start, the millennials will soon have a significant presence in housing markets. In 2015, members of this generation headed only 16 million of the nation’s 124.5 million households. By 2035, however, they are projected to head 49.8 million households and thus reshape housing demand in profound ways.

First of all, millennials not only outnumber members of generation X (born 1965–1984) and the baby-boom generation (born 1946–1964), but they are also much more racially and ethnically diverse. A little more than 45 percent of millennials are minorities, compared with only 41 percent of gen-Xers and 29 percent of baby boomers. Moreover, immigration has yet to have its full impact on the size and racial/ethnic mix of the millennial population. In 2015, only 8.3 million (9.6 percent of) millennials were foreign born. By 2035, however, the Census Bureau projects that the number of foreign-born members of that generation will rise sharply to 20.4 million, more than doubling the share to almost 21 percent. As a result, the minority share of millennials will increase to 49.9 percent by 2035, making this the first generation to be nearly majority-minority.

Millennials will thus continue to fuel the growing diversity of neighborhoods across the country. In 1990, nearly one-half (47 percent) of the nation’s census tracts were more than 90 percent white. By 2015, that share was down to one-fifth. Meanwhile, the share of majority-minority census tracts increased from 20 percent (12,100 tracts) to 30 percent (22,100 tracts). Majority-minority neighborhoods already make up as much as 75 percent of census tracts in the San Jose metro area, 71 percent in the Los Angeles metro area, and 49 percent in the New York metro area.

While the number of younger adults is growing rapidly, the older population is growing even faster. The latest Census Bureau projections put the total population age 65 and over at 79 million in 2035—an increase of more than 31 million from 2015. With more people living well into their 80s and beyond, the Census Bureau also projects that the number of “oldest-old” adults will double over this period from 12 million to 24 million. In all, one in five individuals, as well as one in three households, will be over age 65 in 2035.

This dramatic shift in the age distribution of the US population will drive up demand for a variety of housing options, including multigenerational living. According to the 2015 American Community Survey, 20 percent of non-institutionalized adults age 65 and over, fully 9.3 million people, live in households with at least two adult generations. The prevalence of multigenerational living rises steadily among individuals over age 70, reaching 27 percent among individuals age 85 and over.

The increasing diversity in the population may also lift demand for multigenerational living. Asians and Hispanics age 65 and
over are the most likely to live in households with adult children, with 42 percent of each group currently living in multigenerational settings, compared with just 31 percent of same-aged blacks and 15 percent of whites. The shares among immigrants are even higher, with just under half of foreign-born Asian, Hispanic, and black adults age 65 and over sharing homes with at least one other adult generation.

The biggest increase in housing demand among older adults, however, will come from the growing number of single-person households. In addition to living longer, adults are increasingly likely to live independently into old age. Indeed, the share of individuals age 75 and over living in nursing care facilities dropped from 10.2 percent in 1990 to 4.9 percent in 2015. As a result, there will be a growing need to improve the accessibility of the housing stock and to deliver in-home supportive services.

THE ROLE OF IMMIGRATION

A rebound in immigration helped to drive the recent pickup in household growth. Despite a modest slowdown from 1.04 million in 2015 to 1.0 million in 2016, net immigration is still well above the 850,000 annual pace averaged in 2009–2011. Increased in-migration from Asia and Africa helped to offset out-migration to Mexico and Latin America, and lifted the foreign-born share of population growth from 37 percent in 2011 to 45 percent in 2016.

Immigrants are an important source of housing demand, accounting for over a third (34 percent) of total household growth from 1995 to 2015 (Figure 15). Indeed, the foreign-born share of households increased from 9.5 percent to 14.7 percent over this period. Immigrants are especially likely to rent their housing, and thus made up an even larger share (about 20 percent) of renter households in 2015. At the same time, however, the foreign-born share of owner households was a healthy 12 percent.

INTERNATIONAL AND DOMESTIC MIGRATION FLOWS

International migration has been a vital source of population growth in several major metros that would otherwise have posted losses. For example, without the influx of nearly 144,000 immigrants over the past year, the population in the New York metro area would have fallen by about 105,000 rather than increase by about 35,500. In contrast, with only 26,000 immigrants to offset a net loss of nearly 90,000 domestic out-migrants, Chicago’s population fell by about 19,600 in 2016—the largest drop in any metro area.

In other metros experiencing losses, such as Pittsburgh and Youngstown, international immigration was the only source of population growth amid high rates of domestic out-migration and low rates of natural increase. Immigration was also an important force in certain rural areas where the pace of natural increase was either negative or too slow to offset domestic out-migration. In fact, while the total population of counties

---

**FIGURE 14**

High Rents in Many Metros Delay Household Formation Among Younger Adults

Share Heading Independent Households (Percent)

**FIGURE 15**

Immigrants Account for Only a Small Share of Households But a Large Share of Household Growth

Share (Percent)
outside of metropolitan areas declined by 20,000 last year, the losses would have been three times higher without the inflow of international immigrants.

In some metros, however, population gains from domestic in-migration and natural increase far outpace international immigration. Atlanta, Austin, Dallas, Phoenix, and Tampa are among the several metros benefitting from the resumption of north-to-south population flows in 2014–2016. Much of this movement was from Northern states to Sunbelt states, with net domestic in-migration in Florida and Texas increasing at the expense of increasingly large net outflows from New York and Illinois.

HOUSEHOLD MOBILITY AT HISTORIC LOWS
The recent rebound in domestic migration came amid a long-term decline in overall residential mobility. By the Current Population Survey’s estimate, the share of people that changed residences within the previous year dipped again in 2016 to just 11 percent—the lowest reading in 40 years.

While population aging is a factor (given that older people are less likely to move), mobility rates for younger age groups have also declined. In fact, the largest drop has been among 25–34 year olds. Their residential mobility rate fell steadily from 27 percent in 1996, to 24 percent in 2006, to just 20 percent in 2016. These declines make today’s younger adults the least mobile in history. Meanwhile, rates for all other age groups were also lower last year.

At the household level, mobility rates were down for both renters and owners. On the renter side, the largest declines were among the 25–34 year-old age group (with a drop from 36 percent in 2006 to 29 percent in 2016) and the 35–44 year-old age group (with a drop from 27 percent to 19 percent). But on the owner side, mobility rates fell the most among those age 65 and over. Although the 0.6 percentage point decline for this age group appears modest, its impact was not. While there were 6 million (30 percent) more older homeowners in 2016 than in 2006, there were 30,000 (10 percent) fewer residential moves among this age group in 2016 than in 2006. If their mobility rate had not declined, homeowners age 65 and over would have made 140,000 additional residential moves last year.

The decline in residential mobility rates has played out most noticeably in rental markets. The American Housing Survey reports 5 million (20 percent) fewer moves in 2015 than in 1997. Households under age 35 were the biggest source of the slowdown, with renter-to-renter moves down by 2 million and renter-to-owner moves down by 1 million. Among households aged 35–44, however, the decline in mobility is most evident in the trade-up market, with owner-to-owner moves falling by about 800,000 between 1997 and 2015.

RISING INCOMES BUT RISING INEQUALITY
According to the latest Current Population Survey, real median household income rose 5.2 percent in 2015 and median per capita income increased 4.8 percent. While annual income numbers are known to be volatile, these gains are still substantial. Indeed, median household incomes were up 7.3 percent in inflation-adjusted terms from the 2011 low, while personal incomes were up 9.6 percent from the 2010 low. Importantly, strong growth in per capita incomes was reported among 25–29 year olds, the age group that drives growth in both household formations and first-time homebuying. Their median per capita income rose 10.6 percent between 2011 and 2015—well above the increase for the US population overall.

While the gains are generally good news for housing markets, they have occurred within the context of long-term growth in income inequality. While increasing across the board in 2015, the mean real incomes of households in the bottom quintile stood 12 percent below their 1999 level while those of households in the middle quintile held 3.1 percent below (Figure 16). In sharp contrast, the average income of households in the top quintile exceeded the 1999 level by 6.8 percent in real terms.

Unequal rates of household growth have helped to widen the gap between high- and low-income households, as well as to shrink the middle-income segment. The number of households earning less than $15,000 grew by roughly 37 percent between 2000 and 2016, while the number earning $150,000 or more was also up by 37 percent. Meanwhile, the number of households in all middle-income groups increased by just 16 percent. This squeezing out of middle-income households has serious impli-
cations for demand and consumption in the economy, and further threatens the financial security of millions of lower-income households.

**ECONOMIC SEGREGATION INTENSIFYING**

In addition to growing income inequality, neighborhoods are becoming more segregated economically. From 2000 to 2015, the number of people living below the federal poverty line soared from about 33.8 million to 47.7 million. As a result, the number of high-poverty neighborhoods (poverty rate of 20 percent or more) in the nation increased by 59 percent, and the poor population living in these areas increased 76 percent to 25.4 million. More than half (54 percent) of the nation’s poor now live in high-poverty neighborhoods, up from 43 percent in 2000.

Meanwhile, the number of poor people living in neighborhoods with concentrated poverty (poverty rate of 40 percent or more) doubled from 3.0 million in 2000 to 6.0 million in 2015. The overall share of the population living in concentrated poverty thus increased from 9 percent to 13 percent in 2000–2015, with fully 20 percent of the urban poor living in these conditions.

At the same time, high-income households have become more likely to live in largely high-income neighborhoods. From 1990 to 2015, the share of households earning $150,000 or more living in high-income neighborhoods (where 20 percent or more of households have incomes of at least $150,000) grew from 40 percent to 49 percent.

High-income households are also becoming more concentrated in dense urban neighborhoods. In fact, urban population growth in 2010–2015 was fastest in neighborhoods where incomes were in the top decile, suggesting that the popularity of high-end urban living is growing. And in a reversal of long-term trends, the share of 25–34 year olds living in urban neighborhoods increased 0.4 percentage point in 2010–2015, while the share of 35–44 year olds was up by 1.0 percentage point. The shift to urban living is especially evident in Northeast metros, where the share of 35–44 year olds living in high-density areas increased nearly 3 percentage points over this period.

The concentration of poverty has increased in both urban and suburban areas. While fully 34 percent of the nation’s poor population still lives in high-density neighborhoods, the largest and fastest increase in poverty has occurred outside of urban core areas (Figure 17). Moreover, most of that increase is concentrated in neighborhoods with already-high poverty rates. The poor population in high-poverty, medium-density areas (generally older first-ring suburbs) doubled from 3.1 million in 2000 to 6.4 million in 2015. Growth was even faster in high-poverty areas in the lowest-density communities of metro areas (exurbs), up 163 percent from 1.5 million to 3.9 million over this period. While the poor populations in non-metro areas also increased modestly, poverty rates in these communities jumped from 14.3 percent in 2000 to 17.4 percent in 2015—well above the 14.7 percent rate within metro areas.

**THE OUTLOOK**

According to the latest JCHS projections, household growth should average about 1.36 million annually in 2015–2025 and about 1.15 million in 2025–2035. These increases are in line with the pace averaged in the 1990s and early 2000s. Immigration, however, is a wild card in the current political climate. If the number of immigrants is cut as some federal officials have suggested, the slowdown in adult population growth would translate into somewhat lower annual household growth. Still, given that newly arrived immigrants often do not immediately form independent households, the impact of any new immigration controls on household growth may be delayed.

JCHS projections assume that as millennials age into adulthood over the next two decades, they will form households and consume housing at rates similar to those of previous generations. But the millennial generation’s positive impact on household growth will be partially offset by their slow start in living independently. In addition, the diversity of this younger generation will lift demand for different housing types in different locations. On net, millennials are projected to form an additional 34 million new households by 2035, lifting the total number to just under 50 million—considerably more than the 43.2 million currently headed by members of generation X.
Meanwhile, baby-boomer households will remain a force in housing markets even as they move into their 70s and 80s. Thanks to advances in health and longevity, the number of households headed by adults age 65 and over will increase 44 percent in 2015–2025 and 90 percent in 2025–2035. As a result, fully 50 million households—one out of every three—will be headed by older adults by 2035, including 16 million households headed by those over age 80 (Figure 18).

The magnitude of growth in older households will place new demands on the housing stock. Millions of homeowners will face the challenge of keeping their homes safe and accessible as they age. However, many may not have the resources to retrofit their homes with universal design features such as single-floor living and extra-wide doorways. Moreover, the fact that many older households live in lower-density suburban areas will make it difficult for social service providers and transportation systems to reach this large and geographically dispersed population. The decision of millions of older households to age in place could also limit the supply of suburban homes available for sale to millennial households seeking to trade up.
Although still on the decline, the national homeownership rate showed signs of stabilizing in 2016. The foreclosure inventory is approaching its pre-crisis volume and home purchase activity is slowly increasing. While high costs pose a challenge in certain markets, homeownership remains affordable in many metro areas of the country. Meanwhile, with conventional mortgage credit still tight, FHA continues to play a central role in serving first-time homebuyers. While the strengthening economy and the aging of the millennial generation may lift demand for homeownership, much uncertainty surrounds future economic, credit, and housing market conditions.

**SLOWDOWN IN HOMEOWNERSHIP RATE DECLINE**

The national homeownership rate dipped again for the 12th consecutive year, notching down from 63.7 percent in 2015 to 63.4 percent in 2016, according to the Housing Vacancy Survey (Figure 19). This was the smallest year-over-year decline since 2006 and may signal that the homeownership rate might be close to bottoming out.

With this latest decline, the homeownership rate stood 5.6 percentage points below the peak in 2004 and 0.6 percentage point below its level in 1994. The long slide in homeownership reflects the lingering effects of the foreclosure crisis and Great Recession, as well as delayed homebuying among younger households. Indeed, the number of homeowner households rose by just 280,000 last year—the largest gain since 2006 but less than half the 600,000 increase in the number of renter households.

Although down across the board from 2004 to 2016, the size and trajectory of homeownership rate declines vary widely by race and ethnicity. The 7.5 percentage point drop among black households (from 49.7 percent to 42.2 percent) was by far the largest. By comparison, the white homeownership rate was down 4.0 percentage points (from 76.0 percent to 71.9 percent) while the Hispanic rate fell only 2.1 percentage points (from 48.1 percent to 46.0 percent). The year-over-year changes in 2015–2016 followed this pattern, with the black homeownership rate off 0.8 percentage point, the white homeownership rate stable, and the Hispanic homeownership rate up 0.4 percentage point.

Homeownership trends also differ meaningfully across metropolitan areas. In the nation’s 50 largest metros, shares of homeowners ranged from 47.9 percent in Los Angeles to 69.2 percent in Pittsburgh. According to American Community Survey data, homeownership rates fell in all 50 of these areas between 2006 and 2015, with Las Vegas posting the largest decline (9.0 percentage points) and Buffalo the smallest (1.6 percentage points). More recently, though, rates actually increased between 2013 and 2015 in eight metro areas (Boston, Kansas City, Oklahoma City, Philadelphia, Portland, Sacramento, San Jose, and Seattle) and stabilized in three (Birmingham, Nashville, and Richmond).
Within metropolitan areas, the American Community Survey’s five-year estimates indicate that homeownership rates fell more sharply in low-income and minority neighborhoods than in more advantaged neighborhoods. Between the 2010 and 2015 estimates, the homeownership rate dropped 3.4 percentage points in majority-black census tracts and 3.3 percentage points in majority-Hispanic census tracts, compared with 2.5 percentage points in majority-white census tracts.

**ROLE OF THE FORECLOSURE CRISIS**

The persistent decline in the national homeownership rate has generated widespread discussion about the future of homeownership in the United States. According to a Joint Center analysis, recent changes in the age, race/ethnicity, and family structure of households explain little of the drop in homeownership because they largely offset one another. In particular, while the aging of the US population works to lift homeownership (because older adults have higher ownership rates), the growing diversity of the population exerts downward pressure (to the extent that racial/ethnic disparities in income and wealth continue).

Instead, the long-term falloff in homeownership reflects the combined effects of foreclosures, the Great Recession, and reduced home purchase activity. JCHS estimates suggest that foreclosures likely explain much of the declines among middle-aged and older adults, although far less of the drop among younger age groups (Figure 20). The sizable declines in homeownership among younger households are instead the fallout from weak income growth, delayed marriage and childbearing, and other factors that have made this age group slow to buy homes.

Looking forward, the downward pressure on the homeownership rate from the foreclosure inventory is likely to ease as the backlog continues to clear. The Mortgage Bankers Association’s National Delinquency Survey indicates that the foreclosure inventory shrank from 688,000 properties at the end of 2015 to 585,000 properties at the end of 2016—still above the 431,000 annual average in 2000–2005. Much of this inventory is concentrated in a handful of states, with Florida, New Jersey, and New York together accounting for one in three properties in foreclosure at the end of last year.

A large unknown is whether former owners that lost homes to foreclosure will get back into the market. According to a recent Experian analysis of credit records, only 12.6 percent of owners who underwent foreclosure between 2007 and 2015 had bought other homes by the end of 2015. While loan products are available that allow former owners to buy homes before the foreclosure disappears from their credit histories, it is unclear how many will take advantage of this opportunity in the future. Moreover, given that many of those who experienced foreclosure were middle-aged, buying again would likely mean carrying mortgage debt into their retirement years.
THE CHANGING PROFILE OF RECENT HOMEBUYERS

Recent homebuyers—those that moved into their current homes within the previous 12 months—differ from longer-term homeowners in age, household type, and race/ethnicity. In particular, recent buyers tend to be younger, have children, and be of Asian or Hispanic descent.

Demographic shifts have begun to reshape the characteristics of recent homebuyers in critical ways. With the aging of the baby boomers, the number of homeowners aged 55 and over jumped from 28.5 million in 2001 to 39.9 million in 2015, increasing their share from 41 percent to 54 percent. The number of recent homebuyers in this age group increased almost as much, while their share grew even faster—up 10 percentage points to 27 percent. Indeed, the share of recent buyers aged 65–75 nearly doubled to 9 percent over those 14 years, with most of the increase occurring after 2009. This shift reflects both the steady rise in the number of older households overall and the sharp drop-off in the number of younger homebuyers after the recession hit (Figure 21).

Along with their age profile, the racial/ethnic mix of recent homebuyers also shifted over the last 14 years. In 2015, the number of Asian homebuyers had increased 27 percent from its 2001 level. In contrast, the number of black homebuyers was still 33 percent below its 2001 level in 2015. The number of white homebuyers also remained 17 percent below its 2001 level, while the number of Hispanic recent homebuyers stood 4 percent below. As a result, Asian and Hispanic households accounted for larger shares of recent homebuyers in 2015 than in 2001, while white and black households accounted for smaller shares.

The changing characteristics of homebuyers may bring a shift in demand for certain types of homes. For example, older households are much more likely to buy units in multifamily buildings than younger households. In 2015, 14 percent of homebuyers age 65 or over moved into multifamily units (mostly in large buildings with at least 10 units), compared with 7.5 percent of those under age 65. The multifamily buyer share was highest among the oldest age groups, rising from 7 percent for households in their 30s to 9 percent for households in their 60s, and reaching 25 percent among recent homebuyers age 80 or over.
**METRO HOMEBUYING TRENDS**

Trends in the 25 largest metros generally mirror national shifts in the age distribution of homebuyers. In almost all of these areas, the share of recent homebuyers age 55 and over rose while that of those under age 35 fell in 2005–2015. The largest swings occurred in Phoenix, where the share of older buyers was up by 15 percentage points (to 39 percent) and the share of younger buyers was down 12 percentage points (to 23 percent). The share of older homebuyers in Tampa, which traditionally has the largest share of older buyers of the 25 largest metros, rose 8 percentage points (to 42 percent) and the share of younger homebuyers dropped by 4 percentage points (to 22 percent).

The magnitude of changes in the racial composition of homebuyers also varied substantially across the largest 25 metros. For example, Chicago, St. Louis, and Tampa experienced only modest shifts in the racial/ethnic mix of homebuyers from 2005 to 2015, while Houston, Los Angeles, and San Francisco saw more substantial changes. At the same time, however, the direction of these changes was consistent with national trends, with the share of black recent homebuyers dropping in 20 of the 25 largest metros. The decline among black homebuyers was especially sharp in Atlanta, where their numbers were down by half and their share shrank from 28 percent to 22 percent of all buyers. Baltimore, Dallas, and Detroit also posted large declines in black recent homebuyers, with a 49 percent average drop in their numbers and a 5 percentage point decline in share.

Meanwhile, the share of Asian recent buyers increased in 21 of the top 25 metros over the decade, and their numbers exceeded their 2005 levels in 10. The largest gains in Asian buyers were in San Francisco (up 14 percentage points to 40 percent) and Los Angeles (up 12 percentage points to 31 percent).

**WIDE VARIATION IN AFFORDABILITY**

Despite the ongoing rise in prices, low interest rates have helped keep homeownership conditions generally favorable. Indeed, a majority of households (59 percent) living in metro areas across the country could afford the monthly payments on a median-priced home in their market in 2015 (Figure 22). However, the extent of affordability varied widely by tenure. For example, 72 percent of all households in St. Louis had sufficient income to afford the median monthly payment, compared with 64 percent in Philadelphia, 48 percent in Denver, and 25 percent in Los Angeles. However, the shares of renters with sufficient income to afford homes were significantly lower at just 51 percent in St. Louis, 42 percent in Philadelphia, 27 percent in Denver, and 12 percent in Los Angeles.

Another gauge of homeownership affordability is the percentage of income that the median-income household would have

---

**FIGURE 22**

Homeownership Is Still Affordable for a Majority of Households in All But the Most Expensive Metros

<table>
<thead>
<tr>
<th>Share of Households that Can Afford Payments on the Median-Priced Single-Family Home (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.0 or More</td>
</tr>
<tr>
<td>66.6–74.9</td>
</tr>
<tr>
<td>50.0–66.5</td>
</tr>
<tr>
<td>33.3–49.9</td>
</tr>
<tr>
<td>Less than 33.3</td>
</tr>
</tbody>
</table>

Notes: Monthly payments assume a 5% downpayment on the median-priced existing home with property taxes of 1.25%, property insurance of 0.25%, and mortgage insurance of 0.5%. Income is median household income. Affordable monthly mortgage payments are up to 36% of monthly income.

Source: JCHS tabulations of NAR, Existing Home Prices, Moody’s Analytics Forecasts, and US Census Bureau, 2015 American Community Survey 1-Year Estimates.
to spend on monthly payments for the median-priced home (including principal, interest, property taxes, and insurance). By this measure, a median-income household would spend 18.2 percent of monthly income on home payments in a typical Midwestern metro, compared with 24.2 percent in Southern metros, 26.4 percent in New England metros, and 37.7 percent in Pacific division metros (including Alaska, California, Hawaii, Oregon, and Washington).

In the nation’s 50 largest metros, the typical share of income required for home payments is 26.8 percent—somewhat higher than the 23.4 percent share for all other metros—and ranges from a low of 17.6 percent in Cleveland to a high of 68.6 percent in San Jose. By comparison, typical payments would require 37.0 percent of the median household’s monthly income in Boston, 25.6 percent in Houston, and 21.3 percent in Atlanta.

Increasing prices and the prospect of interest rate hikes add considerable uncertainty to the future affordability of homeownership. As of April 2017, the net share of respondents to Fannie Mae’s National Housing Survey expecting home prices to rise in the next 12 months had climbed to 45 percent. A one percentage point hike in mortgage interest rates would raise the typical monthly payments on a median-priced home by about $130, reducing the share of households able to afford homeownership in their respective metros from 59.0 percent to 55.7 percent—a decline of 3.3 million households.

**MORTGAGE CREDIT CONSTRAINTS**

The ability of most US households to become homeowners depends on the availability and affordability of financing. In 2015, only 36.7 percent of all homeowners owned their homes outright and, of those owners, most were older adults that had paid off mortgages.

The evidence continues to suggest that mortgage credit has tightened for households unable to meet standard underwriting criteria. The median credit score for owner-occupied home purchase originations increased from about 700 in 2005 to 732 in 2016, reflecting a sharp reduction in lending to households with lower scores. CoreLogic data indicate that just 0.1 percent of conventional first-lien home purchase mortgages last year were to borrowers with credit scores below 620 and 3.3 percent were to borrowers with scores between 620 and 659. The comparable shares in 2001 were 7.3 percent and 10.6 percent (Figure 23).

Mortgage credit indexes—which consolidate information about credit scores, downpayments, payment-to-income ratios, and other underwriting criteria and loan terms—confirm that conditions remained tight in 2016. Both the Urban Institute and CoreLogic indexes show that credit tightened dramatically following the foreclosure crisis and has not eased in recent years. While the Mortgage Bankers Association index does indicate a slight loosening from 2013 through 2016, the changes are minimal compared with the tightening that occurred from 2006 to 2009.

Access to small mortgage loans has become a particular challenge in metros with lower-cost homes. According to an Urban Institute analysis, the share of mortgage loans for less than $50,000 declined to 2.3 percent in 2014 after hovering near 3.0–4.0 percent from 2004 to 2011. While fixed origination costs and lower servicing income make these loans less attractive to lenders, the availability of small mortgage loans is critical to communities with large stocks of lower-priced homes. In these areas, limited access to mortgage credit could open the door to greater use of land contracts and other credit options that provide fewer protections for borrowers.

**THE SUSTAINING ROLE OF FHA**

The Federal Housing Administration (FHA) plays a critical counter-cyclical role in ensuring access to mortgage credit. Between 2005 and 2009, the number of FHA home purchase mortgages increased by more than 350 percent just as the number of conventional home purchase mortgages plummeted. While the number of conventional loans has notched up in recent years, FHA still accounted for 24.8 percent of first-lien home purchase loans in 2015.

FHA’s purchase loans primarily serve first-time homebuyers—especially those with limited income and wealth. In 2016, the
The sustained pace of FHA and VA lending has contributed to growth in the outstanding volume of Ginnie Mae mortgage-backed securities, which now surpasses that of Freddie Mac. As of February 2017, Ginnie Mae accounted for 28.2 percent of the $6.1 trillion in agency securities, compared with shares of 27.6 percent for Freddie Mac and 44.2 percent for Fannie Mae.

NEED FOR CONSUMER EDUCATION

Potential homebuyers consistently point to affordability and lending requirements as the primary obstacles to homeownership. According to a 2015 Fannie Mae Survey, 41 percent of all households and 69 percent of renters believed it would be difficult to obtain a mortgage. The primary reasons given are insufficient income, limited or damaged credit histories, amount of existing debt obligations, and inability to afford the downpayment and closing costs.

Lack of education about mortgage options and the home purchase process may prevent some households from even considering a home purchase. More than three-quarters of all consumers and 70 percent of renters planning to buy homes within five years were unaware that the downpayment requirements could be as low as 3 percent. Among renters planning to buy within five years, 38 percent responded “don’t know” when asked about the minimum downpayment requirement, while the average response of those that did answer was 13 percent. These survey results underscore the potential for consumer education campaigns and counseling to help connect would-be buyers to suitable mortgage products.

THE OUTLOOK

The future trajectory of the homeownership rate depends primarily on how quickly the foreclosure backlog clears, how many foreclosed households reenter homeownership, and how many millennials ultimately buy homes. Of course, major changes in the broader economy, housing finance system, and housing preferences could also affect the direction of homeownership rates to the extent that they alter access to and demand for homebuying.

Given great uncertainty on multiple fronts, JCHS homeowner projections examine the consequences of several scenarios. In the base projection, the national homeownership rate stabilizes near current levels. Under this assumption, the number of homeowners would grow by 4.6 million between 2015 and 2020. Alternatively, if the homeownership rate resumes the same pace of decline averaged over the past decade, the ranks of homeowners would increase by less than 750,000 households over this period.
After more than a decade of soaring demand and five years of real rent increases, rental markets across the nation remain extremely tight in 2016. Rapid growth in both renters and rents continued in most markets, although the pace moderated somewhat in certain high-cost markets. Meanwhile, multifamily construction took up the lead from single-family conversions in adding supply, but most of these new apartments are concentrated at the high end. As a result, the diminishing supply of low-cost rental housing remains in high demand, fueling ongoing concerns about the market’s ability to meet the housing needs of lower-income households.

**PERSISTENT STRENGTH OF DEMAND**

By the Housing Vacancy Survey’s count, the number of renter households rose by 600,000 from 2015 to 2016, marking 12 consecutive years of growth and lifting net growth since 2005 to nearly 10 million (Figure 25). Although still solid, the level of renter growth in 2016 did represent a sharp deceleration from the previous two years.

Some 43.3 million households currently rent their housing, including more than 80 million adults and families with over 30 million children. The renter share of US households now stands at a 50-year high of 37 percent, up more than 5 percentage points from 2004, when the homeownership rate peaked.

The surge in rental demand that began in 2005 is broad-based and includes several types of households that traditionally prefer homeownership—in particular, older adults, families with children, and high-income households. These changes reflect a number of factors, including the fallout from the mortgage foreclosure crisis as well as larger demographic shifts, particularly the aging of the US population.

Indeed, older households aged 55 and over accounted for fully 44 percent of renter household growth between 2005 and 2016. As a result, the share of renters in this age group increased to 27 percent last year—up from 22 percent in 2005. Renters under age 35 were responsible for the next largest share of growth (25 percent), driven primarily by their delayed entry into the homebuying market. Meanwhile, households in the 35–44 age range—the group that experienced the sharpest drop in homeownership after the housing crash—contributed 14 percent of renter household growth in 2005–2016 despite a net loss of households in this age range.

Families with children are also increasingly likely to rent rather than own their homes. The share of these households living in rental housing jumped from 32 percent in 2005 to 39 percent in 2016, accounting for 22 percent of renter household growth over this period. The large increases in renting among families with children reflect high rates of foreclosure-induced exits from

After more than a decade of soaring demand and five years of real rent increases, rental markets across the nation remain extremely tight in 2016. Rapid growth in both renters and rents continued in most markets, although the pace moderated somewhat in certain high-cost markets. Meanwhile, multifamily construction took up the lead from single-family conversions in adding supply, but most of these new apartments are concentrated at the high end. As a result, the diminishing supply of low-cost rental housing remains in high demand, fueling ongoing concerns about the market’s ability to meet the housing needs of lower-income households.

**PERSISTENT STRENGTH OF DEMAND**

By the Housing Vacancy Survey’s count, the number of renter households rose by 600,000 from 2015 to 2016, marking 12 consecutive years of growth and lifting net growth since 2005 to nearly 10 million (Figure 25). Although still solid, the level of renter growth in 2016 did represent a sharp deceleration from the previous two years.

Some 43.3 million households currently rent their housing, including more than 80 million adults and families with over 30 million children. The renter share of US households now stands at a 50-year high of 37 percent, up more than 5 percentage points from 2004, when the homeownership rate peaked.

The surge in rental demand that began in 2005 is broad-based and includes several types of households that traditionally prefer homeownership—in particular, older adults, families with children, and high-income households. These changes reflect a number of factors, including the fallout from the mortgage foreclosure crisis as well as larger demographic shifts, particularly the aging of the US population.

Indeed, older households aged 55 and over accounted for fully 44 percent of renter household growth between 2005 and 2016. As a result, the share of renters in this age group increased to 27 percent last year—up from 22 percent in 2005. Renters under age 35 were responsible for the next largest share of growth (25 percent), driven primarily by their delayed entry into the homebuying market. Meanwhile, households in the 35–44 age range—the group that experienced the sharpest drop in homeownership after the housing crash—contributed 14 percent of renter household growth in 2005–2016 despite a net loss of households in this age range.

Families with children are also increasingly likely to rent rather than own their homes. The share of these households living in rental housing jumped from 32 percent in 2005 to 39 percent in 2016, accounting for 22 percent of renter household growth over this period. The large increases in renting among families with children reflect high rates of foreclosure-induced exits from
Note: Single-family homes include both detached and attached units as well as mobile homes and trailers.

Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

FIGURE 25

Rental Demand Was Up for the 12th Consecutive Year in 2016

Millions

0 0.5 1.0 1.5 2.0 2.5

-100 -50 0 50 100 150 200 250 300 350 400 450 500


Renter Households (Left scale)  Annual Change in Renter Households (Right scale)

Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys.

FIGURE 26

Single-Family Additions to the Rental Supply Have Slowed

Annual Change in Occupied Rental Units (Thousands)

-100 0 100 200 300 400 500 600 700 800


Structure Type  Single-Family  Multifamily

Note: Single-family homes include both detached and attached units as well as mobile homes and trailers.

Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

homeownership in combination with lower rates of homebuying since the Great Recession. As a result of these shifts, the share of children living in rental housing climbed from 29 percent in 2005 to 36 percent in 2016.

Meanwhile, the share of high-income households (earning at least $100,000) that rented their homes increased from 12 percent to 18 percent from 2005 to 2016. High-income households thus drove 22 percent of the overall growth in renter households, while households earning $50,000–99,999 accounted for an equal share. The move to renting among high-income households—most with two earners—intensified in recent years, accounting for nearly half (47 percent) of the growth in renters between 2013 and 2016.

Despite the influx of higher-income households into the market, the typical renter household had an annual income of just $37,900 in 2015—only about half the $70,800 annual income of the typical homeowner household. In addition, 16 million renter households had annual incomes of less than $25,000, including 11 million with incomes below the federal poverty threshold.

According to the latest American Community Survey, the share of households renting their homes continued to grow in the majority of the nation’s largest 50 metro areas between 2013 and 2015. Increases in renting even picked up pace in several markets (including Houston, Jacksonville, and Miami) relative to the previous eight years. However, the renter share of households actually fell in 11 of the 50 largest metros.
As Losses in Low-Rent Units Continue, Growth of the Rental Housing Stock Is Shifting to the High End

Number of Rental Units (Millions)

<table>
<thead>
<tr>
<th>Real Gross Rent (2015 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 400</td>
</tr>
<tr>
<td>400–599</td>
</tr>
<tr>
<td>600–799</td>
</tr>
<tr>
<td>800–999</td>
</tr>
<tr>
<td>1,000–1,199</td>
</tr>
<tr>
<td>1,200–1,399</td>
</tr>
<tr>
<td>1,400–1,599</td>
</tr>
<tr>
<td>1,600–1,799</td>
</tr>
<tr>
<td>1,800–1,999</td>
</tr>
<tr>
<td>2,000–2,199</td>
</tr>
<tr>
<td>2,200–2,399</td>
</tr>
<tr>
<td>2,400 or More</td>
</tr>
</tbody>
</table>

2005 | 2015

NOTES: Data exclude rental units occupied without payment of rent. Gross rents are adjusted by the CPI-U for All Items less shelter.

Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

SHIFTS IN THE RENTAL SUPPLY

Changes in the supply of rental housing reflect a mix of new construction, conversions to and from owner occupancy and other uses, and losses of housing from the stock due to structural inadequacies and demolitions. Between 2005 and 2015, increases in single-family rental homes drove much of the growth in occupied rentals, adding nearly 4 million units on net to the national stock and lifting the single-family share from 36 percent to 39 percent. Over this period, the single-family share of occupied rental housing increased in 49 of the 50 largest metros (New Orleans being the exception), with especially strong growth in areas with high foreclosure rates and little new multifamily construction (such as Cleveland, Memphis, Phoenix, and Riverside).

But construction of multifamily housing has been increasing since 2010 and replaced single-family homes as the primary source of rental stock growth in 2013. In fact, the number of single-family homes occupied by renters fell slightly in 2015 while the number of renter-occupied multifamily units—mainly in large structures with 10 or more apartments—increased by 407,000 (Figure 26). Growth in the large multifamily share of rentals in 2013–2015 was particularly strong in metros such as Austin, Portland, and Seattle, where new construction added significantly to the stock.

Completions of new multifamily units totaled 321,000 in 2016, only slightly higher than the 2015 level but up 5 percent from annual averages in the 2000s. Over 90 percent of multifamily units started or completed last year were intended for the rental market, and more than 80 percent were in properties with 20 or more units. In addition, nearly half of new multifamily rental units completed in 2015 were located in structures with at least four floors—more than double the share in 2005. Although typical floor area has changed little over time, newer rental units are less likely to have three or more bedrooms.

Recent additions to the rental supply remain concentrated at the upper end of the market. According to preliminary data from the Survey of Market Absorption, the typical asking rent for a new unfurnished apartment climbed by 5.6 percent annually in real terms in 2016, rising to $1,478. Although newly constructed units have always commanded a rent premium, the asking rent for new multifamily apartments increased significantly from 61 percent above the median asking rent for all existing vacant units in the 2000s to 73 percent in 2016. The 2015 American Community Survey data for the 100 largest metros confirm this trend, indicating that nearly half (46 percent) of the rental units built in 2010 or later were in the top quartile of area rents, while more than two-thirds fell into the top half.

SHORTAGES OF LOW-COST RENTALS

Although new rental construction is aimed primarily at the upper end of the market, these additions to the stock have the potential to alleviate pressure at the lower end if some units filter down to lower rent levels. But even with multifamily construction at its highest level in two decades, additions to the rental supply have not kept pace with swelling demand. As a result, rents have climbed across the board (Figure 27). Indeed,
bolstered by new high-end construction and rising rents for existing apartments, the number of units renting for $2,000 per month or more increased 97 percent in real terms between 2005 and 2015. At the same time, the supply of units renting for less than $800 declined by 2 percent, with most of the loss occurring at the lowest rent levels. The total number of units renting for less than $800 declined by over 260,000 from 2005 to 2015, a time when the overall rental stock increased by over 6.7 million units. The shift in the rental stock toward the high end is also clear from the 32 percent rise in real median asking rents since 2000.

Nearly half of the nation’s 100 largest metro areas posted absolute declines in their stocks of low-rent units (defined as having real gross rents under $800) between 2005 and 2015. Metros with the largest losses in percentage terms included Austin, Denver, Portland, and Seattle, where supplies were down by a third or more. At the same time, 88 of the largest 100 metros reported declines in the shares of low-rent units. Among the markets with the smallest shares were San Diego, San Jose, and Washington, DC, where under 10 percent of units rented for less than $800 in 2015.

The result is a worsening mismatch of demand and supply, with the number of low-income renters far outstripping the number of available units at the lowest end of the market. Indeed, the National Low Income Housing Coalition reports that the absolute deficit of rental units affordable and available to low-income households exceeds 500,000 in the New York and Los Angeles metro areas. In addition, the gap in units affordable and available to extremely low-income renters exceeds 50,000 in fully 31 metropolitan areas. The failure of higher-end units to filter down to lower price points is also apparent in the deficit of units affordable and available to middle-income renters in more than 10 metro areas, including Los Angeles, New York, Miami, and San Francisco.

**VACANCY RATE AT NEW LOWS**

Despite the recent burst of multifamily construction, the national rental vacancy rate slipped to a 30-year low of 6.9 percent in 2016. Indeed, rental markets in most areas of the country remain tight. MPF Research reports that vacancy rates for professionally managed apartments in early 2017 were under 3 percent in 20 of the 100 markets it tracks, and under 5 percent in 65 of those markets.

Under these historically tight conditions, rents were up both nationally and in the majority of markets in early 2017. The US Consumer Price Index for rent of primary residence rose at a 3.8 percent annual rate through April, far exceeding the 0.9 percent inflation rate for non-housing-related goods. According to MPF Research data, rents for units in professionally managed properties were up by 3.7 percent nationwide in early 2017, with increases in 91 of the 100 markets tracked.

Rental market conditions did, however, show some signs of easing last year. For one, the nominal rent increase MPF Research reported represents a slowdown from the 4.7 percent pace averaged in 2014–2015. In addition, rent gains decelerated in 2016 in more than half (58) of the 100 markets that MPF Research tracks, while the number posting actual rent declines rose to 10 (Figure 28). Among the list of metros where rents were down...
are several large, high-profile markets, including Houston, New York City, and San Francisco.

Within markets, signs of easing were most apparent in the high-end segment. Vacancy rates for professionally managed (Class A) rentals were up in more than two-thirds of the 100 markets in the first quarter of 2017 from a year earlier, climbing more than 2.0 percentage points in many areas to a nationwide average of 6.4 percent. At the same time, however, vacancy rates in the lowest-quality segment (Class C) fell nationwide for the seventh straight year, to just 3.8 percent.

STRONG RENTAL PROPERTY PERFORMANCE

With ultra-low vacancy rates and widespread real rent gains, multifamily rental properties continued to perform well. According to data from the National Council of Real Estate Investment Fiduciaries (NCREIF), net operating income for investment-grade properties rose for the seventh consecutive year in 2016. While lower than the 10.7 percent gain in 2015, last year’s increase was still strong at 6.9 percent.

The rise in nominal apartment property prices also slowed somewhat from a 14.8 percent increase in 2015, but remained a healthy 11.0 percent in 2016 according to Moody’s/RCA Apartment Price Index. As of March 2017, apartment property prices were still rising at an 8.1 percent annual rate, and exceeded the 2007 peak by 52 percent in nominal terms and 31 percent in real terms. The impressive rebound in rental property prices far outstrips the recoveries in both the single-family housing and commercial real estate markets (Figure 29).

Meanwhile, annual investor return on investment dipped to 6.7 percent in the first quarter of 2017, following several years of double-digit gains. Still, investor demand for rental properties remains strong, with NCREIF data showing a drop in the required rate of return or capitalization rate to 4.6 percent in the first quarter of 2017—one of the lowest rates posted in records dating back to 1982. Indeed, CBRE reports even lower cap rates for Class A multifamily properties in city centers of several large markets, including Los Angeles, New York, and San Francisco.

Many property owners have taken advantage of years of strong financials to make improvements deferred during the downturn. The National Apartment Association (NAA) reports that capital spending per unit increased 13 percent annually from 2010 to 2015 in real terms. Community-wide upgrades often focus on fitness centers, business centers, clubhouses, and other common areas, while in-unit improvements typically include installation of washer/dryers and high-end kitchen appliances. According to other NAA/Axiometrics research, these upgrades and other major renovations have lifted effective rents for apartment properties 8 percent on average.

ROBUST MULTIFAMILY LENDING

The value of multifamily debt outstanding rose by nearly $100 billion in 2016, marking the second year of record-high increases and lifting the total to over $1.1 trillion. More than two-thirds of the growth ($67 billion) came from federal sources, while banks and thrifts contributed $39 billion. In contrast, multifamily mortgage debt in commercial mortgage backed securities continued to shrink, by $15 billion.

At the same time, however, MBA’s Multifamily Originations Index indicates that growth in the dollar value of loan originations slowed from 31 percent in 2015 to just 6 percent last year. One of the reasons for this moderation may be changing multifamily lending standards. According to a Federal Reserve survey in the first quarter of 2017, one-third of domestic banks reported tightening standards for commercial real estate loans secured by multifamily residential structures, up from 22.5 percent a year earlier and no reports of tightening two years earlier.

Stricter underwriting comes partly in response to concerns over rising property prices as well as excess high-end supply in some markets. Developers also grew more cautious as evidenced by the Federal Reserve’s survey of loan officers, with the share reporting stronger demand for multifamily loans falling from 20.6 percent at the end of 2015 to just 2.9 percent at the end of 2016.

Loan performance in the rental property sector continued to improve last year. Only 0.18 percent of all FDIC-insured loans secured by multifamily residential properties were in noncurrent status (90 days past due or in nonaccrual status) as of the last quarter of 2016, down from 0.28 percent a year earlier.
According to Moody’s Delinquency Tracker, the noncurrent rate for commercial mortgage-backed securities (60 days past due, in foreclosure, or REO) was higher but still stood at a relatively low 2.5 percent in March 2017.

**THE OUTLOOK**

The last 12 years have seen unprecedented growth in rental housing demand across a broad cross-section of US households. New multifamily construction has rebounded strongly in an effort to keep up with this surge in demand, with most new supply aimed at the upper end. While there are indications that some luxury segments are becoming saturated, rental conditions in a large majority of metropolitan areas remain tight.

Growth in rental demand may, however, moderate as the share of households opting to rent appears to be stabilizing near 37 percent. But with the large millennial generation now moving into their 20s and 30s, Joint Center projections point to solid growth in renter households over the next 20 years. And even if demand were to slow, there is still broad need for additional supply—particularly of rental units at the lower end of the market where ultra-low vacancy rates are pushing up rents.

In the near term, rising vacancy rates at the upper end, record-setting apartment prices, and the specter of interest rate hikes have the potential to slow the growth in luxury units. But given how tight rental markets remain and the ongoing strength of demand, any slowdown in construction will likely be neither steep nor prolonged.
Nearly 39 million US households live in housing they cannot afford. The shrinking supply of low-cost rentals, along with potential losses of subsidized units and declines in the value of tax credits, could widen the already substantial gap between the demand for and supply of affordable housing. Meanwhile, the retrenchment in federal funding has put increased pressure on state and local governments to address the housing needs of the most vulnerable individuals. The aging of the US population adds to the nation’s challenges by driving up demand for housing that is both accessible and affordable.

**Renters Especially Cost Burdened**

Despite a slight improvement from 2014, fully one-third of US households paid more than 30 percent of their incomes for housing in 2015. Renters continue to be more likely to face cost burdens. Indeed, the number of cost-burdened renters (21 million) considerably outstrips the number of cost-burdened owners (18 million) even though nearly two-thirds of US households own their homes.

While the share of renters with housing cost burdens was down 1.0 percentage point in 2015, the decline reflects an increase in the number of higher-income renters rather than improved affordability among low- and moderate-income households. Nearly half (48 percent) of all renters were cost burdened in 2015, but shares among lower-income households were much higher—83 percent for renters with incomes under $15,000 and 77 percent for those with incomes between $15,000 and $29,999. In addition, some 26 percent of renter households paid more than half their incomes for housing in 2015. Among those earning under $15,000 per year, the share with severe burdens exceeded 70 percent (Figure 30).

Meanwhile, the cost-burdened share of homeowners also fell 1.0 percentage point in 2015, thanks to an interest rate-driven decline in median housing costs and an increase in median income. Unlike the situation for renters, the cost-burdened share of homeowners fell steadily from a peak of 30 percent in 2006–2010 to 24 percent in 2015—close to the level in 2001 well before the housing crisis hit. Even so, 10 percent of owners, or more than 7.6 million households, were severely burdened in 2015.

Large shares of minority households, who are more likely to live in high-cost metro areas and have lower incomes than white households, also had cost burdens. In 2015, the cost-burdened share was 47 percent for blacks, 44 percent for Hispanics, and 37 percent for Asians/others, compared with 28 percent for whites. Minority households are also more likely to have severe burdens. For example, 25 percent of black households paid more than half their incomes for housing in 2015, nearly twice the 13 percent share of white households.
While housing affordability is a growing concern for communities nationwide, the cost-burdened shares in 11 of the country’s largest metros were above 40 percent. At the top of the list are Los Angeles, Miami, and New York City, where more than 44 percent of households were cost burdened in 2015. Among renters alone, the share was 62 percent in Miami; 57 percent in Daytona Beach, Los Angeles, and Riverside; and 56 percent in Honolulu. The incidence of cost burdens among households earning less than $15,000 was 94 percent in both Las Vegas and San Jose.

Affordability pressures reach further up the income scale in many of the nation’s most populous metros, including Bridgeport, Honolulu, Los Angeles, New York, Oxnard, San Diego, San Jose, and Washington, DC. The cost-burdened share of renters earning $30,000–45,000 topped 70 percent in these areas, compared with 43 percent nationwide. In addition, the cost-burdened shares of households earning $45,000–75,000 neared or exceeded 50 percent in these metros.

Widespread cost burdens are not just confined to large metropolitan housing markets. Nearly 12 million households living outside the top 100 metros (in less populous metros, micro areas, and non-metro areas) also pay excessive shares of income for housing. Cost-burdened households in these markets are about evenly split between renters and owners, and about half are severely burdened.

**THE PLIGHT OF YOUNGER AND OLDER HOUSEHOLDS**

High housing costs are a special concern for younger and older households, which both have relatively low median incomes. Indeed, large shares of these households are headed by a single adult and thus rely on the income of just one wage earner. Nearly 47 percent of single-person households (including both owners and renters) were cost-burdened in 2015, as well as 54 percent of those headed by a single parent (Figure 31).

Meanwhile, nearly 25 million children lived in households with cost burdens in 2015. The problem is especially widespread among family households earning under $30,000 a year, which have a cost-burdened rate of 85 percent. And the larger the family, the more likely a household is to have cost burdens. Indeed, 58 percent of renter households with three or more children were housing cost-burdened in 2015, compared with 47 percent of those with just one child.

At the other end of the age spectrum, one-third of older adults faced cost burdens in 2015, including 54 percent of renters and 43 percent of owners with mortgages on their homes. Moreover, the share of older adults with mortgage debt, as well as the median amount of that debt, is on the rise. Between 2001 and 2013 alone, the share of owners age 65 and over with mortgages increased by 12 percentage points to 36 percent, while median debt rose 26 percent to $73,000. This is a trend to watch, given the projected surge in the older population over the next 20 years.
DIFFICULT TRADEOFFS OF THE COST BURDENED

Households paying half their incomes or more for housing have little money left over to cover other basic necessities. In 2015, severely cost-burdened households in the bottom expenditure quartile (a proxy for low income) spent 53 percent less on food, healthcare, and transportation combined than households without cost burdens. Severely cost-burdened households in the lower-middle expenditure quartile also spent 47 percent less on these basic needs than their counterparts without burdens.

Different households skimp on different expenses (Figure 32). For example, severely cost-burdened families with children in the bottom expenditure quartile cut back most on food, spending just under $300 per month compared with nearly $500 among comparable households without cost burdens. To make ends meet, these families often do not buy enough food for their households or they substitute cheaper but less nutritious foods, either of which can jeopardize their children’s health and development. Just as critically, severely cost-burdened families with children in the bottom expenditure quartile spent 75 percent less on healthcare in 2015—just $18 per month—compared with otherwise similar households living in affordable housing. Severely cost-burdened households age 65 and over in the bottom expenditure quartile also made significant cuts in their healthcare spending, reducing outlays to just $99 per month compared with $263 among counterparts without cost burdens.

Transportation expenditures also differ between those who are affordably housed and those who are not. Low-income households may find housing they can afford but at some distance from employment centers. As a result, they have to spend more to commute to work than their counterparts who are cost burdened but live closer to their jobs and other destinations. At the same time, however, cost-burdened households have less to spend on transportation, which also contributes to the gap. In the search for housing they can afford, low-income households may also sacrifice quality for cost by living in units that have structural issues, system deficiencies, or are otherwise inadequate. According to the American Housing Survey, of those earning under $30,000 per year, a higher share of renters (11 percent) than owners (7 percent) make this tradeoff. In all, over 2 million units occupied by families with children—many headed by a single parent—had some deficiency in 2015, including 24 percent with severe deficiencies. While families living in inadequate housing are less likely to be cost burdened, such living conditions expose children to serious health and safety hazards that can undermine their current and future well-being.

HOMELESSNESS SPIKING IN CERTAIN METROS

By HUD’s annual point-in-time count, 549,928 people were homeless in 2016—a decline of 14 percent from 2010. Much of this progress reflects a major push at the federal and local levels, including concerted efforts by US mayors, to end hom-
Notes: Low-income households are in the bottom quartile of all households ranked by total spending. Not burdened (severely burdened) households devote 30% or less (more than 50%) of expenditures to housing, including utilities. All other households are childless households under age 65.


Families with Children and Older Households Cut Back on Different Vital Needs When Housing Costs Take Up Most of Their Incomes

Average Monthly Expenditures of Low-Income Households (Dollars)

FIGURE 32

Families with Children

Age 65 and Over

All Other Households

Food Transportation Healthcare Food Transportation Healthcare Food Transportation Healthcare

Not Burdened Severely Burdened

Although the overall trend is down, homelessness in certain high-cost metros is on the rise. New York and Los Angeles reported record-high homeless populations in 2016. Homelessness was also up by 20 percent or more in 2011–2016 in San Francisco, Seattle, and Washington, DC. Places with legal right-to-shelter policies, such as Boston, New York, and Washington DC, saw large five-year increases as well. These cities (and some states) require public provision of shelter for those experiencing homelessness, which can lead to increased demand for services—particularly if they are located near communities without this right.

As provision of permanent supportive housing continues to expand, cost has become a key issue. Over 50,000 PSH beds were added nationwide in just the past three years. While people in PSH beds are not counted as homeless, their shelter still requires significant funding from homeless services grants. Even so, New York City’s Department of Health and Mental Hygiene estimated that the city’s supportive housing program saved about $10,000 per person served each year.

SHORTFALLS IN ASSISTANCE

In 2016, HUD-administered rental assistance programs provided support to 9.8 million people living in over 5.0 million housing units. Overall, 94 percent of HUD-assisted households have very low incomes (under 50 percent of area medians), including 73 percent with extremely low incomes (under 30 percent of area medians). Assisted households are primarily families with children, older adults, and persons with disabilities who are not in...
Even if it were stable, rising rents plus relatively weak income gains at the low end would raise the per unit costs of assistance, causing further reductions in the number of households served. Addressing the housing needs of low-income households has thus fallen increasingly to states and particularly local governments. According to the Center for Community Change, over 770 states, counties, and communities now have housing trust funds that generate over $1.2 billion per year to support affordable and other housing needs. Many cities—including Boston, New York City, and San Francisco—have also taken steps to strengthen inclusionary zoning requirements. Other local approaches to expanding the supply include contributing public land for housing, linking commercial development approvals to funding for affordable units, creating mechanisms to provide affordable housing developers with low-cost loans, and removing barriers to the development of accessory dwelling units.

Yet many municipalities still grapple with the need to balance demand for affordable housing against other public goals such as protecting local character. Some states have adopted inclusionary programs in response. For example, the Massachusetts Comprehensive Permit Law, enacted in 1969, allows for approval of housing developments under flexible rules if a portion of the units have long-term affordability. In addition, the Smart Growth Overlay District program in Massachusetts and the HOMEConnecticut initiative provide incentives to communities to allow construction of higher-density affordable housing in downtowns and near transit. Still, state-level action to facilitate affordable housing development are complex and contentious. For example, California’s state legislature recently defeated a move to streamline the approval process for affordable housing.

### Threats to the Affordable Supply

According to the National Low Income Housing Coalition, the shortfall between the demand for housing among extremely and very low-income households (earning up to 30 percent/30–50 percent of area median incomes) and the available supply of market-rate units that these households could afford was 8.0 million units in 2015. Nationwide, there were only 35 affordable and available units for every 100 extremely low-income households and 55 units for every 100 very low-income households.

The worst shortage was in Las Vegas, where just 12 units were affordable and available for every 100 extremely low-income households. Even so, none of the other 50 largest metros in the country had sufficient supplies of affordable rentals to meet the needs of their lowest-income households. Meanwhile, much of the existing stock of affordable housing is at risk. Privately owned, unsubsidized low-cost units are increasingly lost to upgrading and rent increases, particularly in hot markets where demand for affordable housing is strong but new construction is focused at the high end. Units subsidized under Section 8 are also under possible threat, with contracts on more than 380,000

---

FIGURE 33

More Than Half of Rental Assistance Benefits Children, Older Adults, and People with Disabilities

Share of Households Receiving HUD-Funded Rental Assistance

- Adults without Children: 11%
- Adults with Children: 32%
- Adults with Disabilities with Children: 5%
- Adults with Disabilities: 18%
- Older Adults: 34%

Notes: Older adult households are headed by a person age 62 and over, including those with disabilities and/or with children. Adult households are headed by a person under age 62. Households with a disability are headed by a person who has a disability or has a spouse with a disability. Household counts include those assisted by housing choice vouchers, public housing, project-based Section 8, Section 202, and Section 811.

Source: JCHS tabulations of US Department of Housing and Urban Development, 2016 Public Use Microdata Sample.
A recent HUD study found that even though only 4 percent of Section 8 property owners opt out of the program at the end of their contracts, owners in neighborhoods where rents were twice the county median were four times more likely to do so. In addition, rents for about half of Section 8 project-based units exceeded the area fair market rent (FMR). If those property owners opt out, rents would likely remain at those elevated levels.

Affordable units created under the Low Income Housing Tax Credit program are yet another source of concern. The LIHTC program has provided most of the funding for both new construction and preservation of affordable housing in the country for 30 years, helping to add 2.8 million rental units to the stock from 1987 through 2014—more than any other program within the same time span. Absent other changes to tax credit rules, however, the Trump Administration’s proposed cuts to corporate tax rates could dampen investor demand for the credits. Nevertheless, the value of the credits is still high by historical standards, and a recent Senate bill—coproduced by a bipartisan group of 19 senators—proposes to expand the funds available to the LIHTC program.

In addition to potential funding cuts to the program itself, the affordability restrictions on over half a million LIHTC units will expire over the next decade (Figure 34). While only 5 percent of LIHTC units typically convert to market rate at the end of their affordability periods, absent additional subsidies, units in low-poverty neighborhoods are at higher risk. The possible loss of affordable units in these areas—where lower-income households typically have more access to employment, education, and other opportunities—is of great concern.

LACK OF ACCESSIBLE HOUSING

According to a recent JCHS analysis, 12.8 million older households (age 65 and over) and 17.3 million younger households include at least one person with a disability. For 8.3 million older households and nearly 9.0 million younger households, the disability relates to ambulatory problems that directly affect the accessibility of their homes (Figure 35). Ambulatory disabilities are particularly common among lower-income households. Indeed, one-quarter of households earning under $15,000 a year include someone with an ambulatory disability, more than three times the share among households earning at least $75,000.

But despite widespread need for accessible housing, only 1.0 percent of the national housing stock offers five basic universal design features: no-step entry, single-floor living, extra-wide hallways and doorways, electrical controls reachable from a wheelchair, and lever-style handles on faucets and doors. With the older population poised to increase dramatically in the coming decades, many more homes will require accessibility-related modifications. JCHS projections suggest that 17.1 million older households will have ambulatory disabilities by 2035. Ensuring that necessary home modifications and supportive services are affordable to older low-income households will be a critical challenge.

For some older households with disabilities, living with other family members may be an option. As it is, 18.7 percent of the US population—comprising 58.7 million individuals living in 13.1 million households—currently live in homes that include at least two generations of adults. This living arrangement is most common among minority and foreign-born households,
with roughly one-quarter of each group living in multigenerational homes. Accessibility features, flexible floor plans that can change with families’ needs, and features to enhance privacy can help make housing more suited to multigenerational living.

But living with other family members is often more of a necessity than a choice for older adults. For example, 19 percent of families that use food stamps live in multigenerational homes, compared with 10 percent of families that do not. But with the longevity and diversity of the US population increasing, multigenerational living may become more widespread in the future.

RISKS OF CLIMATE CHANGE
The impacts of climate change pose risks for communities across the country. Zillow estimates that if sea levels rise by 2100 as predicted, almost 300 cities will lose at least half their residential stock to floods. Nationwide, nearly 1.9 million homes—worth over $880 billion in 2016 dollars—are at risk of being submerged at least to the first floor by 2100. For homeowners, falling property values in vulnerable areas would mean huge losses in housing wealth. And in inland communities, climate change may bring protracted heat waves and potential drought that increase the risk of forest fires. With episodes of extreme weather on the rise, households could experience more incidents of property damage, temporary or permanent loss of critical neighborhood resources, and higher insurance premiums.

Many cities and some regions are taking steps to lower the carbon emissions contributing to climate change, minimize the damage to housing and community resources from extreme weather, and prepare residents for natural disasters. The City of New Orleans, for example, has plans to create a savings-matching program for low-income residents that can be used in the event of emergency, and is also establishing a resiliency retrofit program for residents with limited financial resources. Finding ways to assist residents—particularly those with low incomes and few housing choices—in coping with climate-induced housing challenges is becoming an ever more urgent priority.

THE OUTLOOK
Access to affordable, accessible, and safe housing is critical to the health and well-being of all households, and particularly the most vulnerable—the very young and very old, those with disabilities, and those living in poverty. But with rents rising, there is growing demand for housing assistance at the same time that government budgets are shrinking. For the 75 percent of eligible households that are eligible for assistance but do not receive it, affordable housing choices are in increasingly limited supply.

The public sector has an essential role to play in creating an environment where the private and nonprofit sectors can effectively meet the nation’s housing challenges. Regulations at the federal, state, and local levels that affect construction and financing define what types of housing can be built and where. There are valid concerns that the regulatory environment has grown overly restrictive and has contributed to today’s shortage of affordable homes. But addressing these concerns requires balancing the legitimate public benefits of regulation against their costs.

Beyond changes in the regulatory realm, public subsidies are also necessary to close the gap between what very low-income households can afford to pay for decent housing and what it costs to provide that housing. Investments in permanently affordable housing have the added benefit of preventing displacement in gentrifying neighborhoods and ensuring that low-income households have access to the economic and social opportunities that these neighborhoods can provide. Just as critical, strategic investments in the rehabilitation or construction of affordable housing can help to stem the growth of high-poverty neighborhoods in communities across the country.
Table A-1 .......... Housing Market Indicators: 1980–2016

The following tables can be downloaded in Microsoft Excel format at www.jchs.harvard.edu.

Table W-1 ........ US National–High-Poverty and Concentrated Poverty Neighborhoods: 2000 and 2015
Table W-3 ........ US National–Average Real Household Incomes by Income Quintile: 2000–2016
Table W-5 ........ US National–Housing Cost-Burdened Households by Demographic Characteristics: 2015
Table W-6 ........ US National–Monthly Housing and Non-Housing Expenditures by Households: 2015
Table W-7 ........ Metro Area–Home Price Changes: 2000–2016
Table W-8 ........ Metro Area–Headship Rates and Related Characteristics: 2015
Table W-10 ....... Metro Area–Households Able to Afford Monthly Payments on Median Priced Home in Their Metro Area: 2015
Table W-11 ....... Metro Area–Median Payment-to-Income Ratios: 1990–2016
Table W-12 ....... Metro Area–Median Home Price-to-Median Income Ratios: 1990–2016
Table W-13 ....... Metro Area–Cost-Burden Rates for Renters and Owners: 2015
Table W-14 ....... Metro Area–Cost-Burden Rates by Household Income: 2015
Table W-15 ....... Metro Area–Poverty Characteristics: 2000 and 2015
Table W-16 ....... Metro Area–Occupied Rental Units by Real Gross Rents: 2005 and 2015
Table W-17 ....... Continuum of Care (CoC)–Homelessness in the 25 Largest Metros: 2015–2016
Table W-18 ....... State Level–Total Homelessness and Rate of Homelessness: 2015–2016
## Housing Market Indicators: 1980–2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>852</td>
<td>1,595</td>
<td>545</td>
<td>188,161</td>
<td>180,734</td>
<td>1.4</td>
</tr>
<tr>
<td>1981</td>
<td>705</td>
<td>1,550</td>
<td>436</td>
<td>181,919</td>
<td>174,592</td>
<td>1.4</td>
</tr>
<tr>
<td>1982</td>
<td>663</td>
<td>1,520</td>
<td>412</td>
<td>172,357</td>
<td>168,378</td>
<td>1.5</td>
</tr>
<tr>
<td>1983</td>
<td>1,084</td>
<td>1,565</td>
<td>623</td>
<td>181,452</td>
<td>184,258</td>
<td>1.5</td>
</tr>
<tr>
<td>1984</td>
<td>1,072</td>
<td>1,605</td>
<td>639</td>
<td>188,036</td>
<td>186,090</td>
<td>1.7</td>
</tr>
<tr>
<td>1985</td>
<td>1,179</td>
<td>1,660</td>
<td>708</td>
<td>201,466</td>
<td>175,754</td>
<td>1.6</td>
</tr>
<tr>
<td>1986</td>
<td>1,081</td>
<td>1,755</td>
<td>750</td>
<td>220,781</td>
<td>180,969</td>
<td>1.6</td>
</tr>
<tr>
<td>1987</td>
<td>1,003</td>
<td>1,810</td>
<td>767</td>
<td>228,240</td>
<td>180,969</td>
<td>1.7</td>
</tr>
<tr>
<td>1988</td>
<td>895</td>
<td>1,850</td>
<td>817</td>
<td>232,265</td>
<td>182,538</td>
<td>1.8</td>
</tr>
<tr>
<td>1989</td>
<td>1,030</td>
<td>1,905</td>
<td>850</td>
<td>211,460</td>
<td>179,785</td>
<td>1.7</td>
</tr>
<tr>
<td>1990</td>
<td>840</td>
<td>1,995</td>
<td>890</td>
<td>207,846</td>
<td>179,706</td>
<td>1.7</td>
</tr>
<tr>
<td>1991</td>
<td>1,030</td>
<td>2,020</td>
<td>910</td>
<td>209,466</td>
<td>179,706</td>
<td>1.7</td>
</tr>
<tr>
<td>1992</td>
<td>1,126</td>
<td>2,040</td>
<td>946</td>
<td>210,110</td>
<td>179,799</td>
<td>1.4</td>
</tr>
<tr>
<td>1993</td>
<td>1,198</td>
<td>2,075</td>
<td>970</td>
<td>210,533</td>
<td>182,556</td>
<td>1.5</td>
</tr>
<tr>
<td>1994</td>
<td>1,076</td>
<td>2,120</td>
<td>1,086</td>
<td>210,872</td>
<td>182,420</td>
<td>1.5</td>
</tr>
<tr>
<td>1995</td>
<td>1,161</td>
<td>2,150</td>
<td>1,106</td>
<td>214,155</td>
<td>186,443</td>
<td>1.6</td>
</tr>
<tr>
<td>1996</td>
<td>1,134</td>
<td>2,195</td>
<td>1,130</td>
<td>218,324</td>
<td>191,649</td>
<td>1.6</td>
</tr>
<tr>
<td>1997</td>
<td>1,271</td>
<td>2,200</td>
<td>1,150</td>
<td>224,546</td>
<td>198,730</td>
<td>1.7</td>
</tr>
<tr>
<td>1998</td>
<td>1,302</td>
<td>2,000</td>
<td>1,186</td>
<td>231,939</td>
<td>202,047</td>
<td>1.5</td>
</tr>
<tr>
<td>1999</td>
<td>1,391</td>
<td>2,028</td>
<td>1,206</td>
<td>235,647</td>
<td>203,502</td>
<td>1.6</td>
</tr>
<tr>
<td>2000</td>
<td>1,302</td>
<td>2,057</td>
<td>1,235</td>
<td>237,432</td>
<td>209,391</td>
<td>1.7</td>
</tr>
<tr>
<td>2001</td>
<td>1,359</td>
<td>2,103</td>
<td>1,283</td>
<td>240,045</td>
<td>209,391</td>
<td>1.8</td>
</tr>
<tr>
<td>2002</td>
<td>1,499</td>
<td>2,114</td>
<td>1,308</td>
<td>243,941</td>
<td>221,718</td>
<td>1.7</td>
</tr>
<tr>
<td>2003</td>
<td>1,611</td>
<td>2,140</td>
<td>1,328</td>
<td>247,427</td>
<td>221,718</td>
<td>1.8</td>
</tr>
<tr>
<td>2004</td>
<td>1,716</td>
<td>2,195</td>
<td>1,353</td>
<td>250,792</td>
<td>228,811</td>
<td>1.7</td>
</tr>
<tr>
<td>2005</td>
<td>1,465</td>
<td>2,227</td>
<td>1,383</td>
<td>255,792</td>
<td>232,594</td>
<td>1.6</td>
</tr>
<tr>
<td>2006</td>
<td>1,514</td>
<td>2,248</td>
<td>1,403</td>
<td>259,792</td>
<td>232,594</td>
<td>1.6</td>
</tr>
<tr>
<td>2007</td>
<td>1,346</td>
<td>2,277</td>
<td>1,423</td>
<td>266,744</td>
<td>232,594</td>
<td>1.6</td>
</tr>
<tr>
<td>2008</td>
<td>622</td>
<td>2,215</td>
<td>1,448</td>
<td>286,965</td>
<td>245,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2009</td>
<td>445</td>
<td>2,135</td>
<td>1,473</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2010</td>
<td>471</td>
<td>2,169</td>
<td>1,503</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2011</td>
<td>431</td>
<td>2,233</td>
<td>1,533</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2012</td>
<td>505</td>
<td>2,306</td>
<td>1,563</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2013</td>
<td>678</td>
<td>2,384</td>
<td>1,603</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2014</td>
<td>648</td>
<td>2,453</td>
<td>1,603</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2015</td>
<td>715</td>
<td>2,467</td>
<td>1,603</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
<tr>
<td>2016</td>
<td>782</td>
<td>2,422</td>
<td>1,603</td>
<td>296,792</td>
<td>252,794</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Notes: All value series are adjusted to 2016 dollars by the CPI-U for All Items. All links are as of May 2017. n/a indicates data not available.

Sources:
5. National Association of Realtors®, Existing Single-Family Home Sales obtained from and annualized by Economy.com, and JCHS historical tables.
7. National Association of Realtors® (NAR), Median National Sales Price of Existing Single-Family Homes, obtained from NAR and Economy.com.

**Thousands**

<table>
<thead>
<tr>
<th>Tenure and Income</th>
<th>2001</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Burdened</td>
<td>Moderately Burdened</td>
<td>Severely Burdened</td>
</tr>
<tr>
<td><strong>Owners</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $15,000</td>
<td>1,008</td>
<td>855</td>
<td>2,683</td>
</tr>
<tr>
<td>$15,000–29,999</td>
<td>4,314</td>
<td>1,803</td>
<td>1,816</td>
</tr>
<tr>
<td>$30,000–44,999</td>
<td>5,711</td>
<td>2,037</td>
<td>991</td>
</tr>
<tr>
<td>$45,000–74,999</td>
<td>13,100</td>
<td>3,293</td>
<td>723</td>
</tr>
<tr>
<td>$75,000 and Over</td>
<td>29,098</td>
<td>2,282</td>
<td>272</td>
</tr>
<tr>
<td>Total</td>
<td>53,231</td>
<td>10,270</td>
<td>6,485</td>
</tr>
</tbody>
</table>

| Renters           |      |      |      |      |      |      |      |      |
|                   |      |      |      |      |      |      |      |      |
| Under $15,000     | 1,460 | 933  | 4,921 | 7,314 |
| $15,000–29,999    | 2,369 | 3,218 | 2,101 | 7,688 |
| $30,000–44,999    | 4,134 | 2,098 | 321  | 6,553 |
| $45,000–74,999    | 7,390 | 900  | 102  | 8,592 |
| $75,000 and Over  | 6,304 | 186  | 12   | 6,502 |
| Total             | 21,658 | 7,335 | 7,457 | 36,450 |

| All Households    |      |      |      |      |      |      |      |      |
|                   |      |      |      |      |      |      |      |      |
| Under $15,000     | 2,449 | 1,788 | 7,684 | 11,861 |
| $15,000–29,999    | 6,683 | 5,021 | 3,918 | 15,622 |
| $30,000–44,999    | 9,846 | 4,135 | 1,311 | 15,292 |
| $45,000–74,999    | 20,490 | 4,193 | 825  | 25,508 |
| $75,000 and Over  | 35,402 | 2,468 | 284  | 38,153 |
| Total             | 74,889 | 17,605 | 12,942 | 106,436 |

Notes: Moderate (severe) burdens are defined as housing costs of more than 30% and up to 50% (more than 50%) of household income. Households with zero or negative income are assumed to be severely burdened, while renters paying no cash rent are assumed to be unburdened. Income cutoffs are adjusted to 2015 dollars by the CPI-U for all Items.

Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.
The Joint Center for Housing Studies of Harvard University advances understanding of housing issues and informs policy. Through its research, education, and public outreach programs, the center helps leaders in government, business, and the civic sectors make decisions that effectively address the needs of cities and communities. Through graduate and executive courses, as well as fellowships and internship opportunities, the Joint Center also trains and inspires the next generation of housing leaders.

STAFF
Matthew Arck
Kermit Baker
James Chaknis
Kerry Donahue
Angela Flynn
Christopher Herbert
Alexander Hermann
Elizabeth La Jeunesse
Mary Lancaster
David Luberoff
Sonali Mathur
Daniel McCue
Jennifer Molinsky
Shannon Rieger
Jill Schmidt
Jonathan Spader
Donald Taylor-Patterson
Alexander von Hoffman
Abbe Will

FELLOWS
Barbara Alexander
William Apgar
Michael Berman
Rachel Bratt
Michael Carliner
Kent Colton
Daniel Fulton
George Masnick
Shekar Narasimhan
Nicolas Retsinas
Mark Richardson

EDITOR
Marcia Fernald

DESIGNER
John Skurchak

For additional copies, please contact
Joint Center for Housing Studies
of Harvard University
One Bow Street, Suite 400
Cambridge, MA 02138

www.jchs.harvard.edu
twitter: @Harvard_JCHS
Joint Center for Housing Studies of Harvard University
FIVE DECADES of HOUSING RESEARCH SINCE 1959