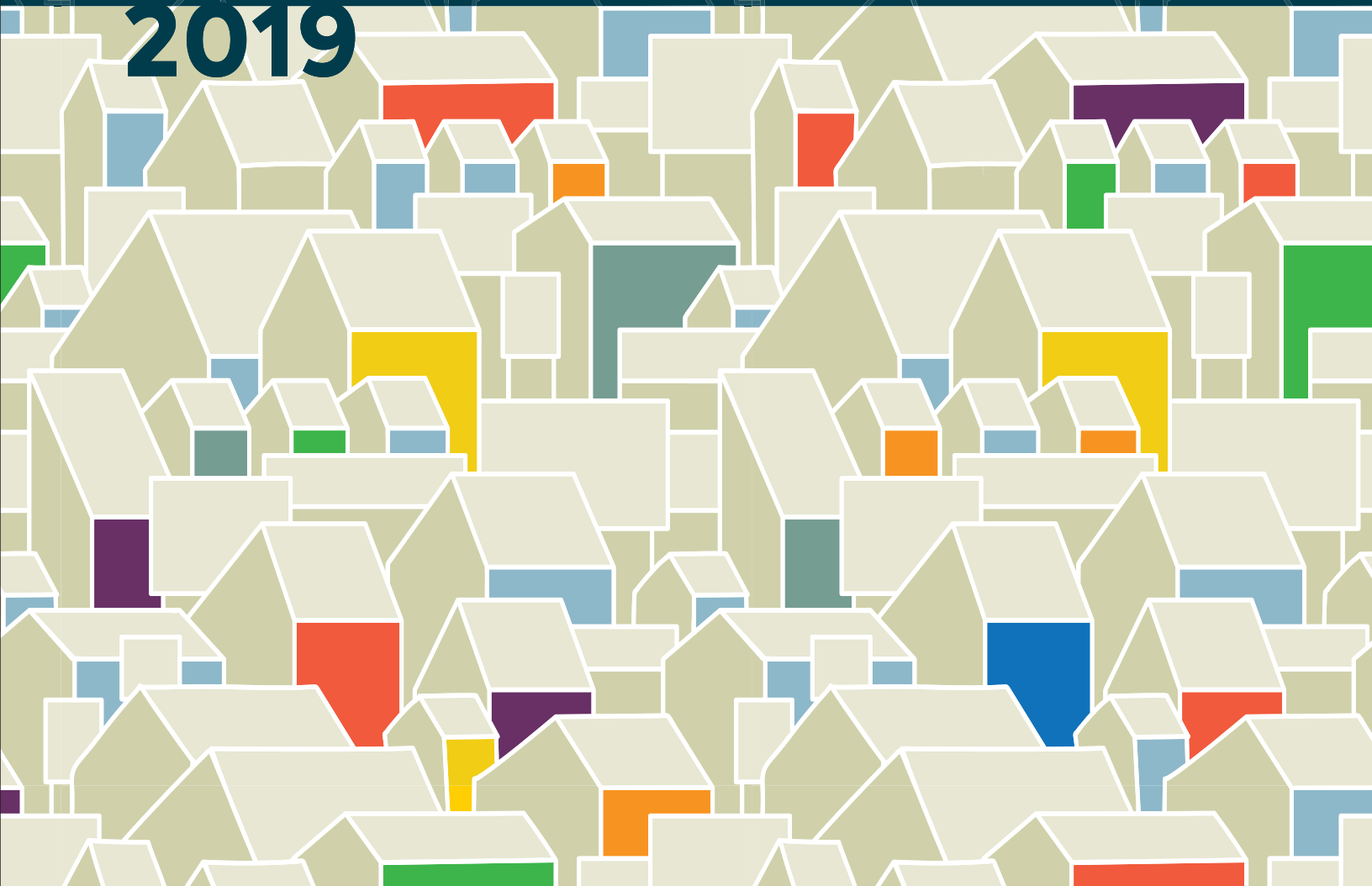
JOINT CENTER FOR HOUSING STUDIES OF HARVARD UNIVERSITY

THE STATE OF THE NATION'S HOUSING 2019



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1 / EXECUTIVE SUMMARY

With the economy on sound footing and incomes ticking up, household growth has finally returned to a more normal pace. Housing production, however, has not. The shortfall in new homes is keeping the pressure on house prices and rents, eroding affordability—particularly for modest-income households in high-cost markets. While demographic trends should support a vibrant housing market over the coming decade, realizing this potential depends heavily on whether the market can provide a broader and more affordable range of housing options for tomorrow's households.

CONTINUING SHORTFALL IN SUPPLY

Just as the recent housing downturn was longer and deeper than any other since the Great Depression, the residential construction rebound has been slower. Since reaching bottom in 2011 at just 633,000 new units, additions to the housing stock have grown at an average annual rate of just 10 percent. Despite these steady gains, completions and placements totaled only 1.2 million units last year—the lowest annual production, excluding 2008–2018, going back to 1982.

The sluggish construction recovery is in part a response to persistently weak household growth after the recession. On a three-year trailing basis, the number of net new households dropped below 1.0 million in 2008 and held below that mark for seven straight years, including a low of just 534,000 in 2009. By comparison, even through the three recessions and large demographic shifts that occurred between 1980 and 2007, household growth still averaged 1.3 million annually and only dipped below 1.0 million once.

With the economy finally back on track, household growth picked up to 1.2 million a year in 2016–2018, close to expected levels given the size and age composition of the population. But new construction was still depressed relative to demand, with additions to supply just keeping pace with the number of new households **(Figure 1).** As a result, the national vacancy rate for both owner-occupied and rental units fell again in 2018, to 4.4 percent, its lowest point since 1994.

Although there have been brief periods when residential construction was similarly constrained, the duration of today's tight conditions is unprecedented. Since 1974, annual additions to the housing supply exceeded household growth by an average of 30 percent to accommodate replacement of older housing, additional demand for second homes, population shifts across markets, and some slack for normal vacancies. According to Joint Center for Housing Studies estimates, annual construction should now be on the order of 1.5 million units, or about 260,000 higher than in 2018.

Several factors may be contributing to the unusually slow construction recovery. For one, the housing boom in the early 2000s created an excess supply of homes. The vacancy rate for housing units for

rent or sale began to climb after 2000 from its long-term average of 4.5 percent to a peak of 6.2 percent in 2009, and it took most of the ensuing decade to work off the surplus. With memories of these conditions still fresh, builders and lenders alike are wary of speculative development that would expand the housing supply too rapidly.

Labor shortages are another possible explanation. The residential construction sector has struggled for years to fill job openings, given that its traditional labor pool—younger men without college educations—is shrinking. With the economy near full employment, competition for workers has intensified, limiting the ability of the construction sector to ramp up quickly.

Meanwhile, the housing that is being built is intended primarily for the higher end of the market. The relative lack of smaller, more affordable new homes suggests that the rising costs of labor, land, and materials make it unprofitable to build for the middle market. By restricting the supply of land available for higher-density development, regulatory constraints and not-in-my-backyard (NIMBY) opposition may also add to the challenges of supplying more affordable types of housing.

HOMEOWNERSHIP ON THE REBOUND

After falling for 12 consecutive years, the US homeownership rate edged up in both 2017 and 2018, to 64.4 percent. Although last year's increase was just 0.5 percentage point, this translates into a 1.6 million jump in the number of homeowners, bringing growth since 2016 to 2.8 million. The largest increase was among households in the key age group of 25–39, whose homeownership rate was up by 2.0 percentage points or some 1.1 million owners in 2016–2018.

This rebound in homeownership comes amid worsening affordability. In the wake of the recession, falling home prices and historically low interest rates produced the most affordable homeownership conditions in decades. After adjusting for inflation, the monthly payment on the median-priced home was just $1,176 in 2012—45 percent below the peak in 2006 and 36 percent below the level in 1990.

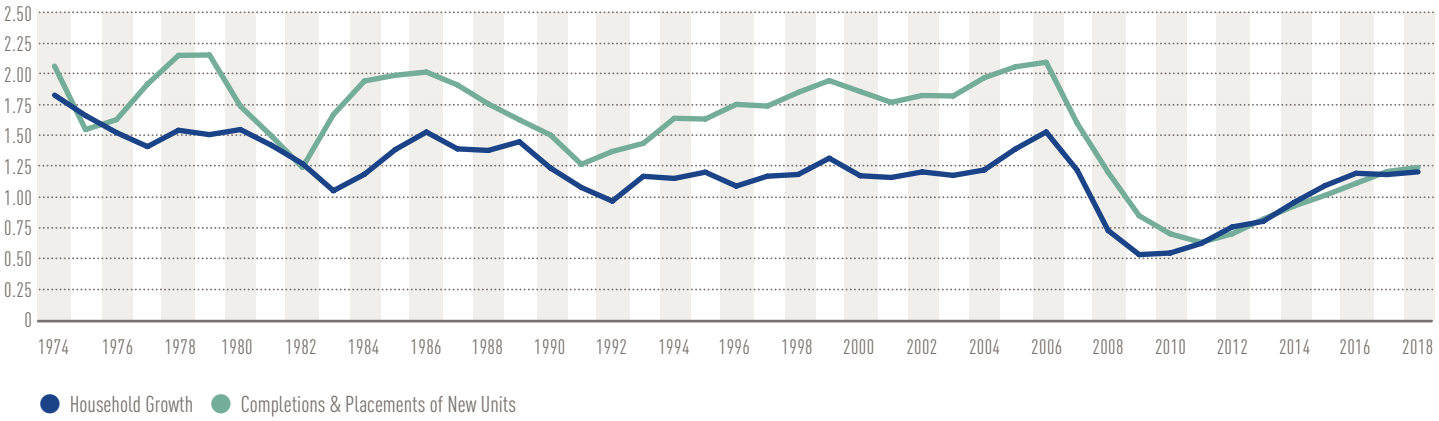
Since then, interest rates have remained low but home prices have climbed steadily. Indeed, real prices were back within 2 percent of their 2006 peak at the end of 2018, according to the FHFA Home Price Index. As a result, the monthly payment on a median-priced home stood at $1,775 last year, just 3 percent below its 1990 level and within 17 percent of its 2006 high. Strong income gains among younger households helped to counter the increase, however, with median incomes of households aged 25–34 and 35–44 both growing more than 11 percent in real terms between 2013 and 2017.

The ratio of median home price to median household income is a common yardstick for measuring affordability, indicating how difficult it is for would-be buyers to qualify for a mortgage and save for a downpayment. Nationwide, this ratio rose sharply from a low of 3.3 in 2011 to 4.1 in 2018, just shy of the 4.7 peak in 2005. But conditions for would-be buyers vary widely across the country, with home values more than 5.0 times incomes in roughly one in seven metro areas (located primarily on the West Coast) compared with less than 3.0 times income in about one in three metros (located primarily in the Midwest and South) **(Figure 2).** In the 100 largest metros with price-to-income ratios above 5.0, the median-income household could afford just 36 percent of recently sold homes on average in 2017. In metros where the ratio is under 3.0, however, the median-income household could afford 84 percent of recently sold homes.

FIGURE 1

Housing Construction Has Barely Kept Pace with Household Growth for an Unprecedented Eight Years

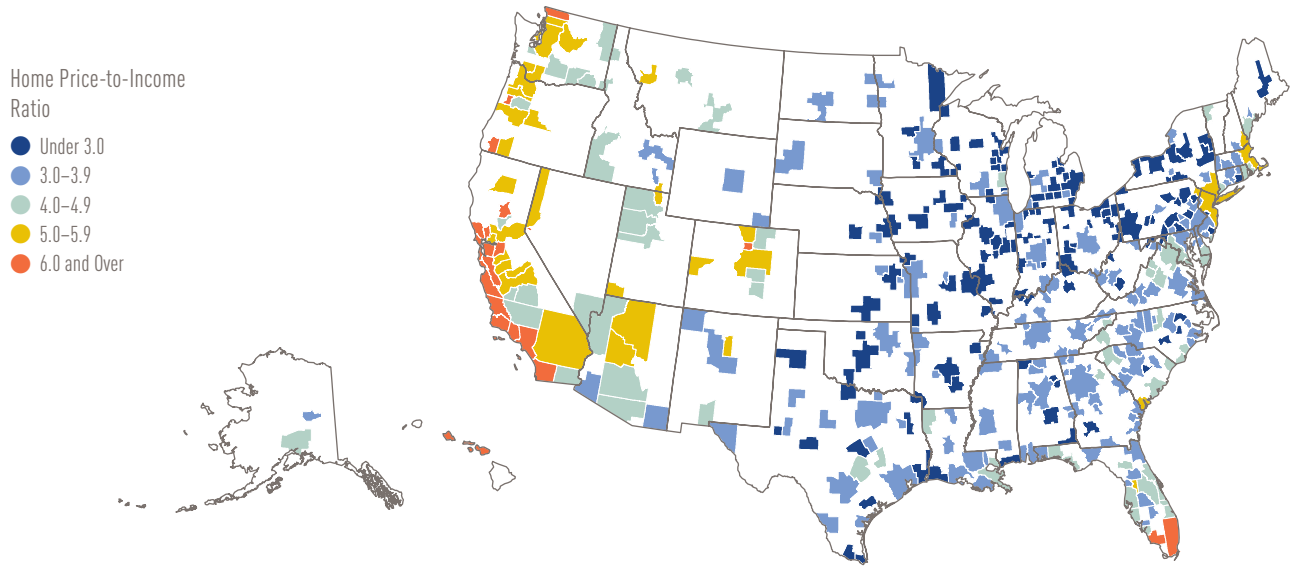
Units (Millions)



Notes: Household growth estimates are based on three-year trailing averages. Placements refer to newly built mobile homes placed for residential use.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys and New Residential Construction data.

FIGURE 2

Although Homebuying Is Still Affordable in Many Markets, Price-to-Income Ratios Are Back Near Peak Levels



Notes: Home prices are the median prices of existing homes sold in the metro area in 2018. Incomes are the median household incomes for each metro.
Sources: JCHS tabulations of National Association of Realtors (NAR), Metropolitan Median Area Prices; Moody's Analytics Estimates.

The ability to purchase a home depends largely on access to mortgage financing. Both the Urban Institute and Mortgage Bankers Association indexes show that credit conditions tightened significantly after the crash, particularly for loans to borrowers with less than stellar credit histories. By this measure, conditions in the last few years have remained tight. But there has also been a significant increase in loans with debt-to-income (DTI) ratios above 43 percent. According to a recent Urban Institute report, the share of Fannie Mae loans with such high DTI ratios more than doubled from 13 percent in 2013 to 29 percent in 2018, while the share of Freddie Mac loans was up from 14 percent to 25 percent.

A 43 percent DTI ratio is the cutoff set by the Consumer Financial Protection Bureau for qualified mortgages—loans that borrowers are more likely to be able to afford. This limit does not, however, apply to loans insured by the Federal Housing Administration (FHA) and, at least for the time being, to loans insured by Fannie Mae and Freddie Mac under a temporary exemption. Given the significant growth in mortgage loans exceeding the 43 percent limit, expiration of the exemption in 2021 could result in a substantial shift in lending volumes from Fannie Mae and Freddie Mac to FHA at a higher cost for borrowers or a sharp reduction in credit access for those with these high debt-to-income ratios.

In the years ahead, demographic trends should support growing demand for homeownership as more members of the large millennial generation age into their 30s when homebuying peaks. According to the latest Joint Center projections, if age-specific homeownership rates remained at the same level as in 2018, household growth alone would add roughly 8.0 million homeowners between 2018 and 2028. And if, consistent with recent trends, the overall homeownership rate rises by 1.6 percentage points from the 2018 level, growth in the number of homeowners could reach 10.1 million for the decade.

At the same time, a rise in interest rates and home prices plus a tightening of credit, on top of the limited supply of entry-level housing, could put homeownership out of reach for many more households. The sensitivity of the market to changes in homebuying conditions was evident at the end of 2018 when a jump in interest rates was followed by a slowdown in home sales. Although a retreat in interest rates in early 2019 helped to stabilize the market, the near-term outlook for homeownership still depends on how trends in house prices, interest rates, household incomes, and credit availability affect affordability for first-time buyers.

RENTAL MARKETS STEADY AMID SLACKENING DEMAND

According to the Housing Vacancy Survey, the number of renter households fell again in 2018. Although down by just 239,000 over two years, even this modest dip is in stark contrast to average annual increases of nearly 850,000 renter households in the preceding 12 years. The declines were widespread, with 31 states losing renters from 2015 to 2017. However, estimates show an uptick in early 2019, in keeping with Joint Center projections of about 400,000 net new renter households annually over the coming decade.

Trends in rents and vacancy rates indicate that rental markets are still on solid footing. The Consumer Price Index indicates that overall rents rose at a 3.6 percent annual rate in early 2019, or twice the pace of overall inflation. Meanwhile, rents for professionally managed apartments were up more than 3.0 percent in more than half of the 150 metros that RealPage tracks, with growth exceeding 5.0 percent in 25 of those markets. Low and falling vacancy rates are keeping the pressure on rents, with the national vacancy rate sliding from 7.2 percent in 2017 to 7.0 percent in the first quarter of 2019. Tightening occurred in all regions of the country and in about two-thirds of RealPage metros.

These conditions seem somewhat at odds with the falloff in demand and the continued strength of rental construction. Indeed, rental completions were near a 30-year high at 360,000 units last year, while starts rose 5.0 percent to 392,000 units. But even as overall demand cooled, higher-income households kept up demand for new apartments. Indeed, even after adjusting for inflation, the number of renters earning at least $75,000 increased for eight consecutive years, rising by 311,000 households in 2017–2018 alone and by some 4.6 million households since 2010.

Changes in the rental stock have also offset some new construction, keeping absorptions in line with supply. Of the 338,000 unit decline in rentals in 2017, most were single-family homes and apartments in two- to four-unit buildings that likely converted to owner occupancy. Thus, even if homeownership rates continue to increase, low vacancy rates and shifts in the existing stock are likely to prevent a significant softening of rental markets.

In fact, weaker overall rental demand could help to ease conditions at the low end. With most new construction targeting the high end of the market, there has been some potential for excess supply to filter down to lower rent levels. But with rental demand far outpacing additions to supply through 2016, this has not happened. In fact, CoStar reports that the vacancy rate for lower-quality rentals was only 4.8 percent at the beginning of 2019, down from 6.7 percent at the end of 2011.

This tightness reflects a substantial drop in the supply of low-cost units as overall market rents climbed. The number of units renting for under $800 fell by 1.0 million in 2017 alone, bringing the total drop in 2011–2017 to 4.0 million **(Figure 3).** Half of all metros posted declines of more than 10 percent over this period. The falloff was largely concentrated in the West, where the majority of metros lost over 20 percent of their low-rent units. But with rental demand now easing and new supply holding steady, more downward filtering of units could help to slow the shrinkage of the nation's low-cost stock.

COST BURDENS IMPROVING OVERALL, BUT RENTERS STILL PINCHED

The share of US households paying more than 30 percent of their incomes for housing, the standard definition of cost burdens, declined for the seventh straight year in 2017. The latest American Community Survey reports that the share of cost-burdened households inched down 0.5 percentage point to 31.5 percent—some 5.7 percentage points below the 2010 peak. The total number of cost-burdened households in the US also fell by 4.9 million in 2010–2017, to 37.8 million.

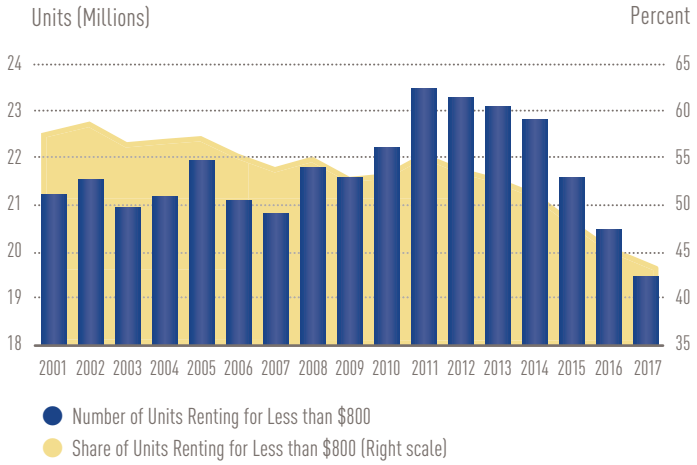
Much of this progress was among homeowners, whose overall cost-burden rate declined by nearly 8.0 percentage points in 2010–2017, to 22.5 percent—its lowest level this century. At the same time, however, 47.4 percent of renter households remained cost burdened, with the share improving just 0.1 percentage point in 2016–2017 and 3.4 percentage points from the peak in 2011. As a result, cost-burdened renters now outnumber cost-burdened homeowners by more than 3.0 million. In addition, renters make up 10.8 million of the 18.2 million severely burdened households that pay more than half their incomes for housing.

Public concern about a rental affordability crisis has increased in many areas of the country as cost burdens have moved up the income scale. Households with incomes under $15,000 continue to have the highest burden rates, with 83 percent paying more than 30 percent of income for housing, including 72 percent paying more than 50 percent. These shares were largely unchanged between 2011 and 2017, while cost-burden rates climbed 4.6 percentage points among households earning $30,000–44,999 and nearly 2.9 points among those earning $45,000–74,999 **(Figure 4).**

The spread of renter cost burdens is most evident in expensive metros such as Los Angeles, New York, San Francisco, and Seattle. In the nation's 25 highest-rent markets, some 46 percent of renter households with incomes of $45,000–74,999 were cost burdened in 2017,

FIGURE 3

The Low-Rent Stock Has Shrunk by Four Million Units Since 2011

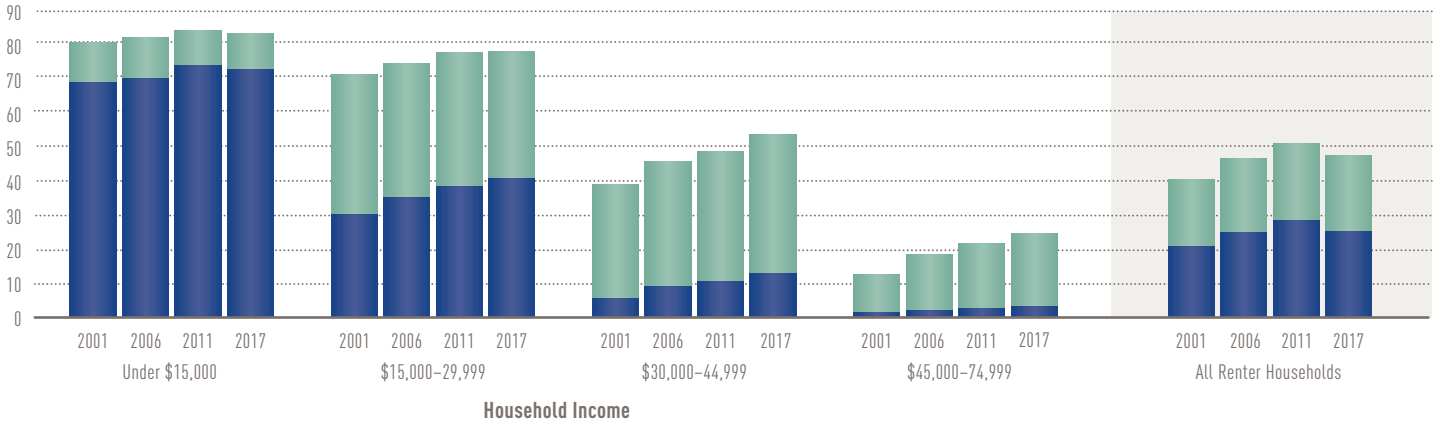


Note: Contract rents are adjusted to 2017 dollars using the CPI-U for All Items Less Shelter.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

FIGURE 4

Although Improving Nationally, Renter Cost-Burden Rates Are Still Rising Across Most Income Groups

Share of Renter Households with Cost Burdens (Percent)



Notes: Household incomes are adjusted to 2017 dollars using the CPI-U for All Items. Moderately (severely) cost-burdened households pay 30–50% (more than 50%) of income for housing. Households with zero or negative income are assumed to have severe burdens, while households paying no cash rent are assumed to be without burdens.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

compared with only 30 percent of same-income households across all 100 largest metros. Severe cost burdens are also more common in the 25 highest-rent markets, affecting 28 percent of renters with incomes of $30,000–44,999 and 7 percent of those with incomes of $45,000–74,999. The comparable shares across all 100 largest metros are substantially lower at 16 percent and 4 percent, respectively.

HOMELESSNESS ON THE RISE IN HIGH-COST STATES

There have been notable reductions in homelessness over the past decade. According to HUD's annual point-in-time counts, the number of people experiencing homelessness fell by 87,000 from 2008 to 2018 and by some 38,000 in the last five of those years. This progress reflects an expansion of permanent supportive housing and the widespread adoption of the "housing first" model that provides housing without preconditions for changes in behavior. The improvements have been most evident among populations that have received targeted efforts and resources—veterans, families, and the chronically homeless.

Despite this progress, however, the unsheltered population is on the increase—particularly in certain high-cost Western states. The problem is most acute in California, where the number of unsheltered homeless grew by 25 percent in 2014–2018, to 89,500. Other states with sharp increases in their unsheltered homeless populations are Washington (up 80 percent over this period, to 10,600), Colorado (up more than 100 percent, to 4,300, and Oregon (up nearly 50 percent, to 8,900).

With thousands more individuals living on the streets, the highly visible problem of homelessness has prompted significant commitments of state and local funds for new housing options. In California, voters passed a statewide proposition to provide $2 billion in funding for homelessness prevention initiatives for individuals with mental health issues. In addition, San Francisco raised taxes on the city's largest businesses to fund housing and social services for the homeless, and Berkeley voters approved a $135 million municipal bond to fund housing for both middle-income households and for those most at risk of homelessness.

Although these measures provide much-needed funds to get people off the streets and into stable housing, a near-record number of renters in these high-cost areas still face significant housing challenges. Meeting the need for decent, affordable housing in these markets will require a targeted and sustained strategy supported by both the public and private sectors.

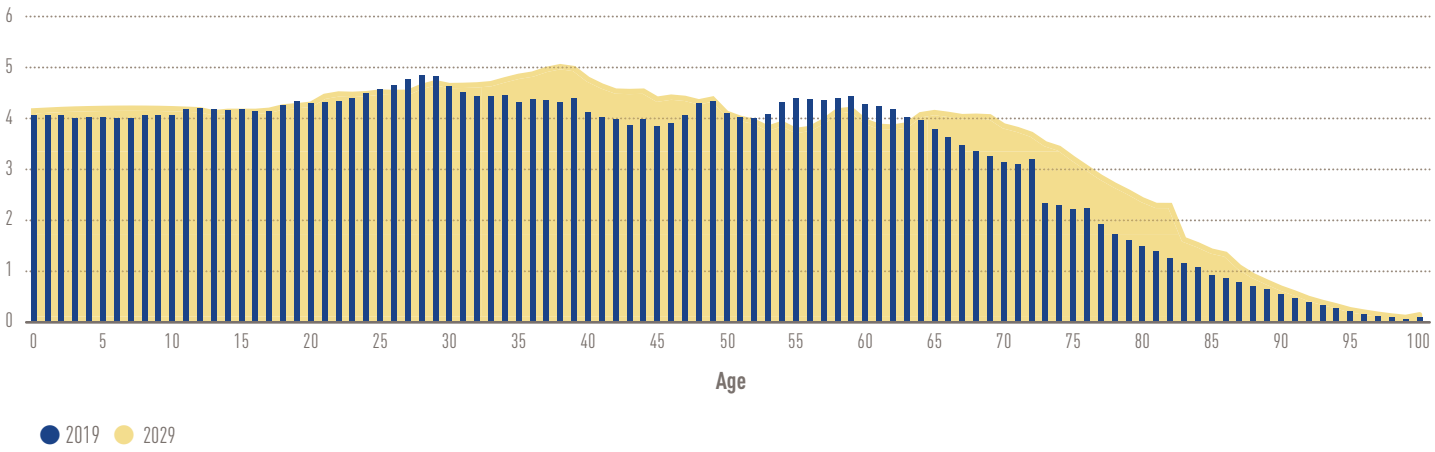
THE OUTLOOK

Although subject to short-term ups and downs in the economy, housing markets are largely shaped by longer-term demographic trends. Over the next decade, two generations will dominate population growth—the millennials (born 1985–2004), with members now clustered around age 28, and the baby boomers (born 1946–1964), with a leading edge now age 73 but with a large share still in their late 50s **(Figure 5).**

FIGURE 5

Over the Next Decade, the Millennial and Baby-Boom Generations Will Swell the Populations in Key Age Groups

US Population (Millions)



Source: JCHS tabulations of US Census Bureau, 2017 National Population Projections.

These two large generations will propel growth in 35–44 year-olds and lift the number of older adults to new heights. The Joint Center projects that the number of households in their mid-30s to mid-40s will increase by 2.9 million over the decade, while those age 65 and over should grow by an astounding 11.1 million. Meanwhile, the number of 45–64 year-old households will fall by 1.9 million as the smaller gen-X generation (born 1965–1984) replaces the baby boomers in this age range.

Under these assumptions, the aging baby boomers will add some 8.4 million households that are either single persons or married couples without children living at home. While this surge in one- and two-person households might imply strong demand for smaller homes, most older adults plan to remain in their current homes as they age. To do so, though, many of these households will need to modify their homes to accommodate the physical limitations of aging, fueling strong growth in the remodeling market. But even if a minority of this large age group does choose to relocate, demand for smaller, more accessible homes should also increase significantly.

Within the 35–44 year-old age group, nearly two-thirds of the growth in households over the next 10 years will be among families with children. Given high homeownership rates at this stage of life, demand for owner-occupied housing is projected to grow substantially over the decade. Since many of these households will be first-time buyers, demand for entry-level homes should be especially strong. But today's relatively low homeownership rates for this age group also imply continuing demand for rental housing, with overall growth in renters projected to average 400,000 per year in 2018–2028.

Whether these projections come to pass depends on a number of factors. Certainly, economic conditions will play a role, since the ability to form independent households is strongly associated with income. The pace of foreign immigration is also critical. As natural increase (births over deaths) in the native-born population declines over the decade, current projections call for the foreign-born population to drive an ever-larger share of household growth. If efforts to curtail immigration prevail, however, future housing demand will be much lower than projected.

Another big question is whether the market can supply housing that is within the financial reach of most households. If housing costs continue to rise faster than incomes, growth of households—and of housing demand—is likely to slow. As it is, the market has only produced enough homes to match the pace of household growth, let alone cover replacement and second-home demand and allow normal levels of vacancies.

If current housing supply trends persist, house prices and rents will continue to rise at a healthy clip, further limiting the housing options for many. To ensure that the market can produce homes that meet the diverse needs of the growing US population, the public, private, and nonprofit sectors must address constraints on the development process. And for the millions of families and individuals that struggle to find housing that fits their budgets, much greater public efforts will be necessary to close the gap between what they can afford and the cost of producing decent housing.

2 / HOUSING MARKETS

Housing markets lost steam at the end of 2018 as interest rates rose and new construction, home sales, and price appreciation all slowed. But even as rates came back down in early 2019 and helped to stabilize markets, the national housing supply remained constrained by more than 10 years of historically low production levels. The tight supply of homes for sale is keeping the pressure on prices in much of the country, while high land prices, labor shortages, and restrictive land use policies limit development of moderate-cost housing.

LATE-YEAR SLOWDOWN IN CONSTRUCTION

Housing construction grew modestly for the year in 2018, with starts increasing 3.9 percent to 1.25 million units. The number of completions totaled 1.18 million, a gain of only 2.8 percent from 2017—the slowest annual growth rate since the recovery began in 2012.

Although up 3.2 percent last year to 875,800 units, single-family housing starts remained below the 1.0 million mark for the 11th consecutive year **(Figure 6).** Until this cycle, single-family construction had been below current levels only once in the preceding 25 years. Moreover, single-family activity slowed sharply over the course of 2018, downshifting from an average of 6.2 percent year-over-year growth in the first nine months to 7.4 percent declines in the last three months. The slowdown continued in the first quarter of 2019.

Meanwhile, multifamily starts picked up after two years of decline, rising 5.6 percent to 374,100 units. With the exceptions of 2015 and 2016, multifamily construction was higher in 2018 than in any other year since 1988. Given the previous two-year dip in starts and the lengthy construction process for larger apartment buildings, the number of multifamily completions fell 3.6 percent last year, to 344,700 units, the first annual decline since 2012.

With the slow pace of single-family construction, real residential fixed investment (RFI) was down 0.3 percent in 2018. This was the first decline in RFI since 2011 and produced a slight drag on real GDP growth for the year. In addition, RFI accounted for only 3.9 percent of GDP, nearly a full percentage point lower than the annual average from 1987 to 2006. In fact, RFI's share was lower only once in the 20-year period preceding the housing bust.

Similarly, the 3.2 percent real increase in residential construction spending was the smallest gain since 2011. Combining Census Bureau estimates of the value of single-family and multifamily construction and Joint Center estimates of homeowner improvement and repair spending, construction spending totaled $658 billion in 2018. Single-family construction accounted for just 43 percent of this amount, well below the 57 percent share averaged in 1995–2006. In contrast, homeowner improvement and repair spending drove 48 percent of construction outlays last year, compared with 36 percent on average before the housing downturn.

THE LOCATION OF NEW CONSTRUCTION

The national numbers mask wide variation in homebuilding activity across regions in 2018. Relative to 2017, total starts increased in the West (up 7 percent) and South (up 5 percent), but declined in the Northeast (down less than 1 percent) and Midwest (down 4 percent). Single-family starts alone rose a solid 9 percent in the West and a more moderate 4 percent in the Northeast and 3 percent in the South, but fell 5 percent in the Midwest **(Figure 7).**

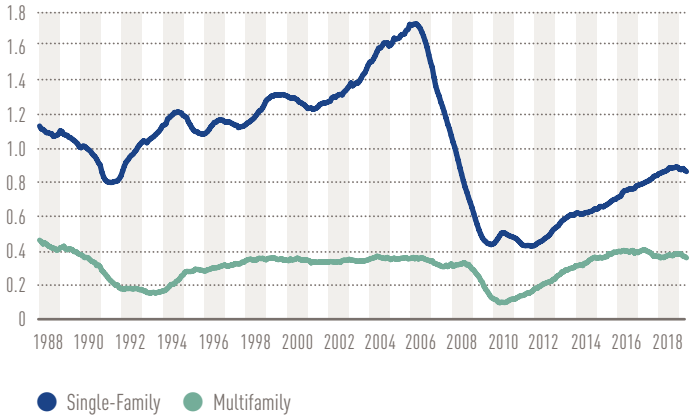
However, compared with annual averages in 1980–2016, production of single-family homes was down 13 percent nationally and in every region of the country last year, but especially in the Northeast (off 40 percent) and Midwest (off 35 percent). Construction levels were only 6 percent lower in the West and 2 percent lower in the South. In contrast, multifamily construction was significantly above long-run averages in the West (up 19 percent) and the Northeast (up 18 percent), and more modestly in the South (up 7 percent). In the Midwest, however, multifamily starts were 14 percent below historical averages.

Over the long run, residential construction should exceed household growth to provide some margin for replacement of older units, demand for second homes, geographic shifts in the population, and a normal amount of vacancies. But housing production, including manufactured housing placements, barely kept pace with household growth for most of the past decade. About 100 new units were added to the housing stock for every 100 new households formed in 2010–2018, compared with 146 units for every 100 households added on average in the 1990s and 2000s.

FIGURE 6

Although Slowing at the End of 2018, Housing Construction Was Up for the Year

Housing Starts (Millions of units)



Note: Housing starts are based on 12-month trailing averages.
Source: JCHS tabulations of US Census Bureau, New Residential Construction data.

A look at new construction in the nation's 50 largest markets in 2007–2017 provides some general insights about which markets have seen the biggest gap between demand and new supply. When measured by the ratio of housing permits to household growth, construction has lagged the most in Western metros and the least in Southern metros, even though production in both regions is near long-term averages.

In eight of the 50 metros, the growth in households exceeded the number of housing permits. San Francisco topped the list with only 79 permits issued for every 100 net new households, followed by San Antonio (80), Boston (82), Sacramento (88), Columbus (89), San Diego (94), Denver (97), and Phoenix (99). Vacancy rates in these markets fell about 2 percentage points on average over the decade, exacerbating already tight conditions in some areas.

LIMITED SUPPLY OF NEW MODEST-COST HOUSING

With millions of millennials moving into their prime homebuying years, demand for smaller, more affordable homes seems poised for a surge. So far, however, construction of modest-sized single-family homes has been particularly weak. Despite increases in 2017, small homes under 1,800 square feet represented just 22 percent of single-family completions, down from 32 percent on average in 1999–2011. Indeed, completions of large homes with more than 3,000 square feet outnumbered those of small homes for the first time in 2013 and have continued to do so for five straight years. The median sales price for small homes was $197,000 in 2017, less than half the price for large homes.

The addition of other lower-priced housing options has also been limited. Manufactured housing shipments increased 4 percent in 2018, to 96,600 units. Although the highest level since 2006, this is still less than half the 235,000 unit annual average in 1987–2006. In 2018, manufactured housing units sold for $78,600 on average, excluding land costs.

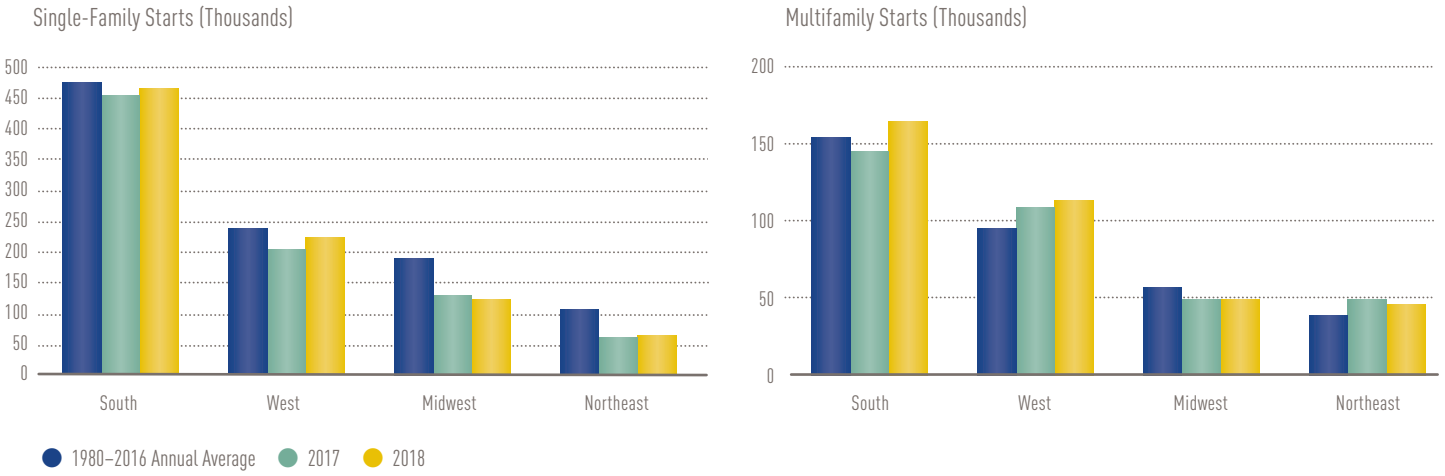
Construction of multifamily condominiums and co-operatives also held near post-recession lows last year, with completions of just 27,000 units. Moreover, many condos are even more expensive than single-family homes because of their locations, with a median asking price of $521,200 for units completed in 2017. At the same time, construction of townhomes (attached single-family units) rose significantly over the past year, up 8 percent to 108,000 units—nearly double the level in 2011. Again, though, the number of new townhomes was still well below levels in the early 2000s.

CONSTRAINTS ON NEW DEVELOPMENT

High land prices are one explanation for the lack of middle-market housing. Land costs rise when demand is strong and land use regulations limit the number of new units that can be built and/or impose significant costs on developers through fees and protracted approvals. According to Joint Center analyses of the Federal Housing Finance Agency (FHFA) data, the median price per acre of residen-

FIGURE 7

Single-Family Construction in the Midwest and Northeast Remains Particularly Weak



Source: JCHS tabulations of US Census Bureau, New Residential Construction data.

tial land used for existing single-family homes nationwide jumped from $159,800 in 2012 to $203,200 in 2017. Residential land values climbed in 80 percent of counties across the country, with the largest increases concentrated in the West **(Figure 8).**

Of the 46 states where land values per acre rose over this period, the largest increases were in Nevada (158 percent), Colorado (96 percent), California (88 percent), Arizona (81 percent), and Utah (81 percent). In contrast, land values in Delaware, North Carolina, and Wisconsin declined slightly, while those in Mississippi dropped 14 percent. Land values on much of the East Coast rose less rapidly but from already high levels, with prices reaching $487,000 per acre in Massachusetts and $641,000 in New Jersey.

In addition to rising land costs, labor shortages are a growing concern for housing developers. According to the latest National Association of Home Builders survey, 82 percent of respondents expect the cost and availability of workers will be among the most significant problems they face in 2019. On a 12-month rolling basis, the number of construction job openings topped 275,000 at the end of 2018, up 39 percent from a year earlier. With no discernible uptick in hiring, the unemployment rate for the industry fell from 6.0 percent in 2017 to 5.1 percent in 2018, its lowest level since at least 2000.

The construction industry relies on an increasingly limited labor pool where one out of three trades workers are immigrants and 11 out of 12 do not have bachelors degrees. Today, however, growing shares of both foreign- and native-born workers are college educated and choosing other occupations. Labor shortages are likely to continue unless developers, contractors, and others in the construction field find ways to appeal to workers who are not traditionally drawn to these jobs. For example, women comprise nearly half the nation's labor force but only 3 percent of the current construction workforce.

FOR-SALE INVENTORIES ON THE RISE

Home sales slowed last year after several years of moderate but steady growth. About 5.3 million existing homes were sold in 2018, down from 5.5 million in 2017. Sales of existing single-family homes fell 3.1 percent, to 4.7 million units, while sales of condos and co-ops dipped 2.9 percent, to 601,000 units.

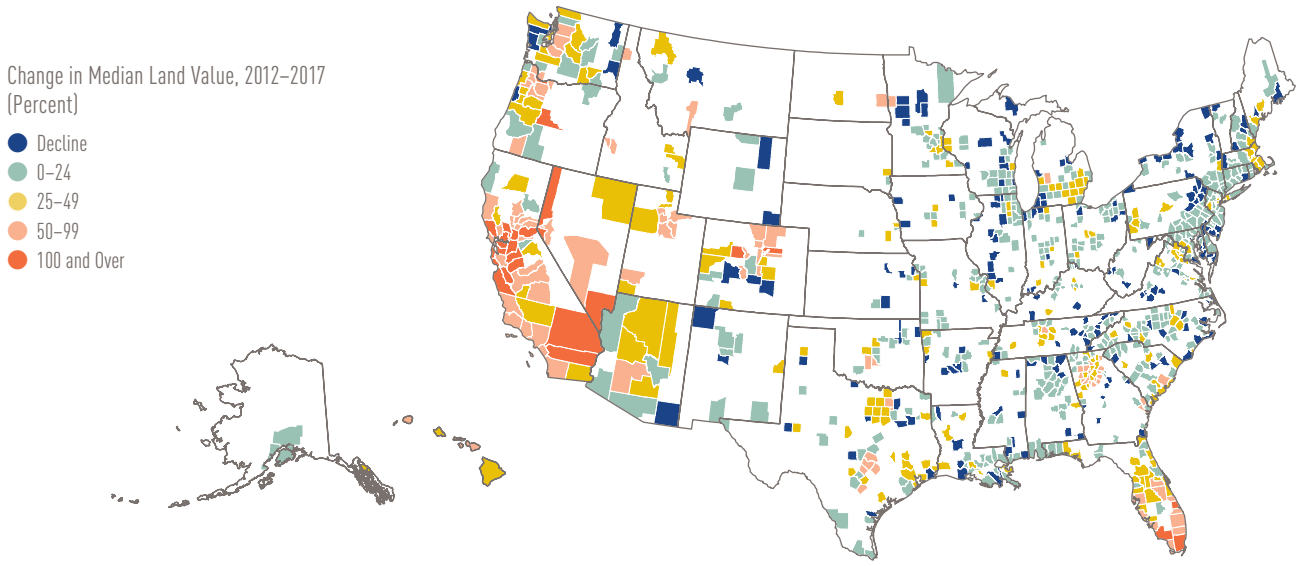
New single-family home sales rose to 617,000 units, or by just 0.7 percent in 2018—a fraction of the 12.0 percent gains averaged over the previous three years. Sales rose 5.6 percent in the Midwest and 2.7 percent in the South, partially offsetting the 20.0 percent drop in the Northeast and 1.8 percent decline in the West.

The slowdown reflects a shift in consumer confidence in the face of rising interest rates and a sharp stock market drop at the end of 2018. According to the University of Michigan Survey of Consumers, 32 percent of respondents thought that homebuying conditions were bad in the fourth quarter of 2018, up 5 percentage points from a year earlier and the highest levels since 2008. Sentiment was essentially unchanged in the first quarter of 2019, even after interest rates retreated.

With this softening, the inventory of existing homes on the market increased at the end of 2018 for the first time since 2015, to 1.53 million units—a jump of 4.8 percent from a year earlier. At the same time, the average months of supply edged up from 3.9

FIGURE 8

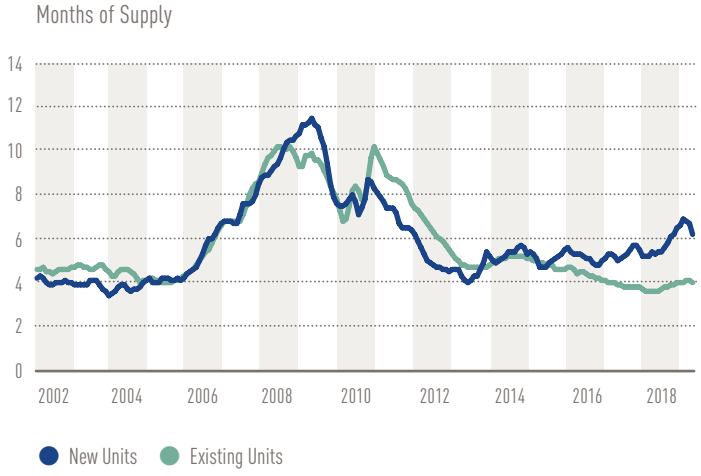
Residential Land Prices in Many Areas Have Risen Sharply Since 2012



Note: Prices are for land occupied by single-family homes.
Source: JCHS tabulations of Federal Housing Finance Agency (FHFA), The Price of Residential Land for Counties, ZIP Codes, and Census Tracts in the United States.

FIGURE 9

Despite Recent Increases, Inventories of Both New and Existing Homes for Sale Remain Tight



Notes: Months of supply are based on three-month trailing averages for single-family homes only. Months of supply measure how long it would take the number of homes on the market to sell at the current rate, where six months is typically considered a balanced market.
Sources: JCHS tabulations of NAR, Existing Home Sales; US Census Bureau, New Residential Sales.

in 2017 to 4.0 in 2018. The number of single-family homes for sale alone climbed from 1.29 million (3.9 months of supply) to 1.34 million units (4.0 months).

Even so, for-sale inventories remain historically low **(Figure 9)**. In fact, the number of existing single-family homes for sale never fell below its current level between 1982 and 2016. Tight inventories pushed the vacancy rate for the owner-occupied stock down again last year to just 1.5 percent, the lowest rate since the mid-1990s.

At the same time, however, the inventory of newly built homes for sale was up 18 percent year-over-year at the end of 2018, to 348,000 units. With sales slowing, the average months of supply of new homes was 6.1 through 2018, up from 5.4 in 2017 and the highest level since 2011. Although inventories declined somewhat in early 2019, the supply of newly built homes is still in line with or above average levels in the 1980s and 1990s.

According to Joint Center tabulations of Zillow data, 46 percent of the for-sale inventory at year's end was in the top third of homes by value within each market, while 31 percent was in the middle tier and only 23 percent was in the bottom tier. However, supplies of more affordable units may be turning a corner. After declining for four straight years, the number of homes for sale in the bottom and middle price tiers increased by 4 percent, while supply in the top tier continued to fall by 4 percent.

MODERATION IN HOME PRICE GROWTH

According to the FHFA All-Transactions Home Price Index, year-over-year home price growth slowed nationwide from 6.9 percent on average in the first three quarters of 2018 to 6.0 percent in the last quarter. Price appreciation was only 5.5 percent in the first quarter of 2019 **(Figure 10).** The S&P/Case-Shiller National Home Price Index shows an even sharper slowdown, with price increases falling from a high of 6.5 percent in early 2018 to 4.6 percent in December, and then to 4.0 percent in early 2019.

Nevertheless, home prices have risen year-over-year for more than 80 consecutive months. Nominal prices climbed 5.9 percent in 2018 as a whole, slightly faster than in 2016 and 2017. At the end of last year, nominal home prices stood 11.0 percent above the 2006 peak, 53.0 percent above the 2012 bottom, and 105.0 percent above the 2000 level. In inflation-adjusted terms, however, home price appreciation slowed from 4.9 percent to 3.8 percent in 2016–2018. As a result, real prices were 7.6 percent below the pre-crisis high at year end, but up 45.8 percent from the bottom and 44.4 percent from the level in 2000.

Home price growth decelerated in nearly two-thirds of the nation's 120 largest metro areas and divisions at the end of 2018, compared with a little over a quarter of markets a year earlier. In the nation's 10 most expensive housing markets, year-over-year home price appreciation slowed from 8.0 percent in the fourth quarter of 2017 to 6.7 percent at the end of 2018. Prices in these markets rose only 4.9 percent in early 2019. Price growth eased the most in Seattle, where appreciation fell from 14.4 percent at the end of 2017 to 6.8 percent at the end of 2018. Other high-cost metros where home price increases slowed include Sacramento (from 10.2 percent to 6.4 percent), New York (6.3 percent to 4.8 percent), and Los Angeles (8.5 percent to 7.6 percent).

Meanwhile, home prices in the 10 least expensive markets rose 4.3 percent on average in 2018, up slightly from 4.0 percent in 2017. Home price increases in non-metro areas also picked up pace from 4.4 percent to 4.8 percent at the end of last year.

Even with the slowdown in much of the country, nominal home prices at the end of 2018 were up more than 8.0 percent from a year earlier in nearly a quarter of all 404 US housing markets tracked by FHFA, and by double-digits in 10 percent of markets. Among the 100 largest markets, the biggest price increases last year were in the Western metros of Las Vegas (17.6 percent), Boise (16.7 percent), and Spokane (13.1 percent). In contrast, home price growth was under 2.0 percent in eight metro areas, primarily smaller markets including El Paso (0.4 percent), Hartford (0.5 percent), and Bridgeport (0.9 percent).

PERSISTENT AFFORDABILITY CHALLENGES

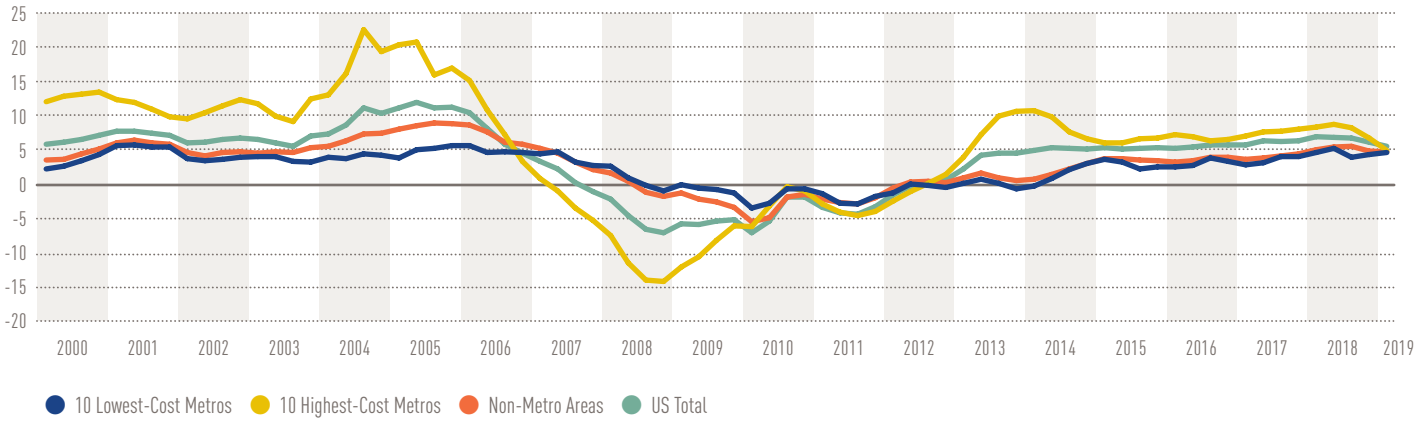
Slower home price appreciation did little to improve affordability. Prices for lowest-cost homes rose the fastest again last year. According to CoreLogic, prices for more affordable homes (priced at or below 75 percent of the metro area median) rose 6.9 percent on average in the last quarter of the year—nearly double the rate for more expensive homes (priced at or above 125 percent of the metro area median).

The National Association of Realtors reports that the median sales price of existing single-family homes rose from $253,800 in 2017 to

FIGURE 10

After Trending Up for Six Years, Home Price Appreciation Began to Slow Across Market Types in Late 2018

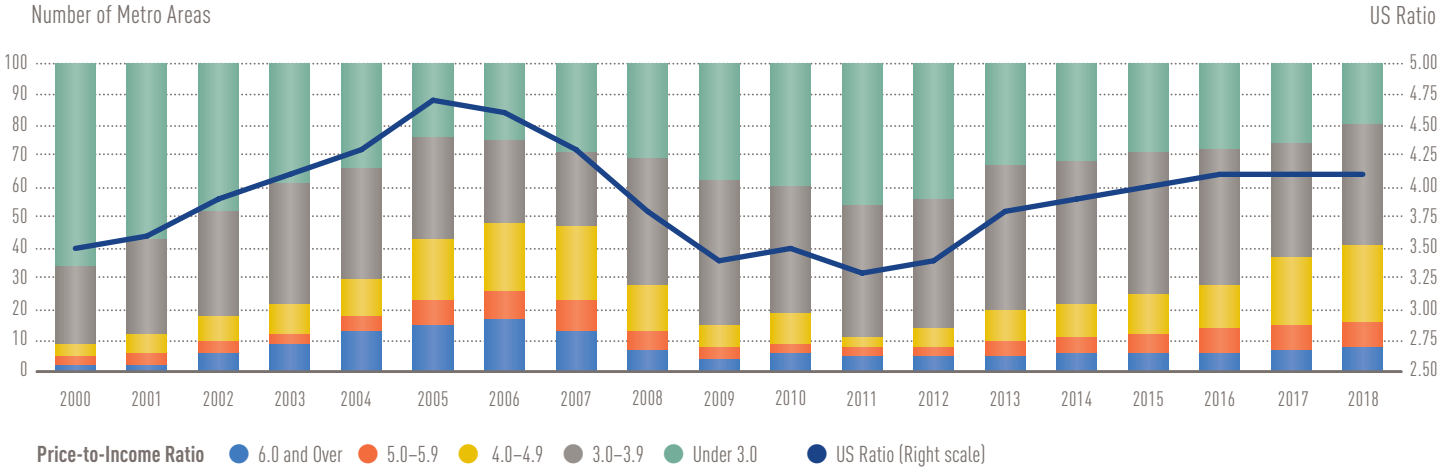
Year-over-Year Change in Home Prices (Percent)



Notes: The 10 lowest- (highest-) cost metros are in the bottom (top) decile of the 100 largest metros for median home values in 2018, based on Zillow estimates. Non-metro prices are weighted averages of all state non-metro prices, with each state's value weighted by the share of detached single-family homes.
Sources: JCHS tabulations of FHFA, All-Transactions House Price Index; Zillow median home values.

FIGURE 11

In Many Large Metro Areas, Home Price-to-Income Ratios Are Approaching Mid-2000s Levels



Note: Price-to-income ratios are for the 100 largest metro areas by population.
Sources: JCHS tabulations of NAR, Metropolitan Median Area Prices; Moody's Analytics Estimates.

$261,600 in 2018 after adjusting for inflation, outpacing growth in the median household income for the seventh straight year. Home price-to-income ratios, a key measure of affordability, indicate whether household incomes are in line with home values. In 2018, the national median sales price for an existing home in 2018 was more than 4.1 times the median household income—somewhat higher than the 3.7 ratio averaged in 1990–2018. Although low interest rates have kept monthly costs relatively manageable in many markets, buyers of higher-priced homes must have substantial incomes to cover downpayment and closing costs.

At the metro level, price-to-income ratios rose in 85 of the nation's 100 largest markets last year. Home prices were at least four times higher than incomes in 41 metros and six times higher than incomes in 8 **(Figure 11).** Ratios were highest in several Western metros, including San Jose (11.0), Honolulu (9.6), and Los Angeles (9.4), and lowest in parts of the Midwest and Northeast, including in Toledo (2.3), Syracuse (2.4), and Akron (2.4).

In a third of the top 100 metros, price-to-income ratios were even higher in 2018 than during the housing boom. This is true not only in places where ratios are consistently high, such as San Jose and Honolulu, but also in many fast-growing Southern and Western markets, such as Atlanta (3.2), Dallas (3.7), Nashville (3.9), Salt Lake City (4.4), and Denver (5.6). Price-to-income ratios also reached new peaks in traditionally low-cost markets in the Midwest, such as Grand Rapids (3.0), Indianapolis (3.0), and Kansas City (3.1). Although these markets remain relatively affordable, increases in price-to-income ratios have raised concerns that potential buyers are being priced out of homeownership in much of the country.

THE OUTLOOK

The housing market cooled nationwide in late 2018, with evidence of weaker prices, sales, and construction volumes in metros across the country. This slowdown is somewhat surprising given how the strong economy has fueled growth of both incomes and households. The primary culprit appears to be the lack of affordable housing. New additions to the housing stock are also concentrated at the higher end, reducing the options available to first-time buyers. The limited supply of smaller, more affordable homes is also a product of rising costs for land and labor in the construction industry.

Going forward, the strong economy and the aging of the millennial generation should support robust demand for both rental units and starter homes. To meet this demand, however, the supply of more affordable housing will have to increase significantly. But developers can only produce middle-market housing profitably if some of the restrictions on land use are relaxed and the construction sector is able to attract a larger labor force. Indeed, if the residential construction industry can overcome these constraints, it could help grow the economy at a time when other sectors are slowing.

3 / DEMOGRAPHIC DRIVERS

Supported by rising incomes, household growth is now back to levels more in keeping with adult population growth. Even so, high housing costs have prevented many young adults from living on their own, especially in expensive metros. Growing income inequality is another serious drag on household formations. Over the next decade, the fastest-growing household types will be younger families and older empty-nesters—households with very different housing needs. The growing share of foreign-born households will also add to the increasing diversity of demand.

PICKUP IN HOUSEHOLD GROWTH

All three Census Bureau surveys that provide household growth estimates point to an upturn. The Housing Vacancy Survey (HVS) puts the increase in the number of households in 2017–2018 at 1.5 million, while the Current Population Survey reports similarly strong growth of 1.4 million. Meanwhile, the American Community Survey shows a solid 1.2 million increase in 2017.

Given the volatility of annual data, averaging household growth over three years provides a more reliable picture of trends. Based on HVS estimates, the number of net new households slightly exceeds 1.2 million annually—in line with JCHS projections for 2018–2028 **(Figure 12).** While lower than the 1.4–1.5 million in 2005 and 2006, the current pace of household growth is comparable to annual averages in the 1990s and early 2000s.

With the aging of the US population, the number and share of older households have already set new records. The number of households headed by adults age 65 and over grew by more than 800,000 per year on average in 2012–2017. The 70–74 year-old age group led this growth with a 25 percent increase, while the number of households headed by 65–69 year olds rose by 20 percent. By comparison, the total number of households grew just 4 percent over this five-year period. As a result, more than a quarter of all US households were headed by adults age 65 and over in 2017.

In addition to being older on average, US households are becoming much more racially and ethnically diverse. The younger adults who are now forming households are much more likely to be minorities than their predecessors. In 2018, fully 46 percent of the 18–34 year-old population was Hispanic or nonwhite, compared with 37 percent of 35–64 year olds and just 24 percent of adults age 65 and over. Indeed, given strong growth among younger minority households and increasing losses among older, native-born white households, the minority share of US households is projected to rise from 34 percent in 2018 to 37 percent in 2028 and to 41 percent in 2038.

THE ROLE OF MILLENNIALS

Millennials, the largest generation in history, are moving steadily into their mid-20s and early 30s—the age groups most likely to

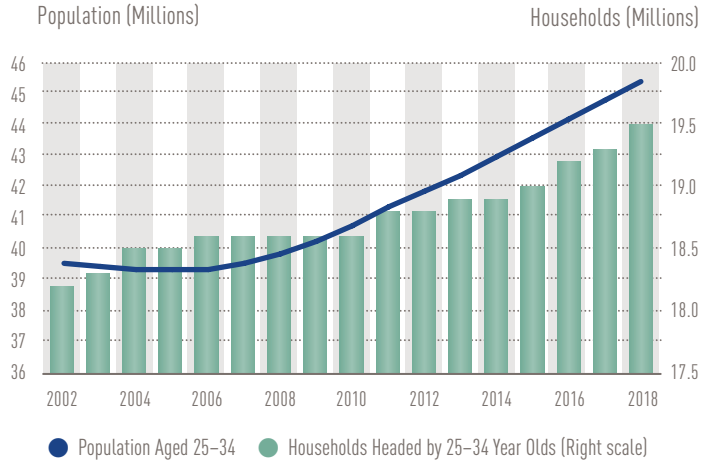
FIGURE 12

Household Growth Has Stabilized at Early 2000s Levels

Note: Household growth estimates are three-year trailing averages.
Sources: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys; JCHS 2018 Household Projections.

FIGURE 13

The Number of Young-Adult Households Is Finally Increasing in Line with Population Growth



Note: Population and household estimates are three-year trailing averages.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys and National Population Estimates.

form new households. Household growth among these young adults has recently begun to increase in line with population growth, with annual gains of nearly 200,000 on average since 2015 **(Figure 13).** Measured as a three-year moving average, the US population aged 25–34 grew by 14.7 percent in 2002–2018 to a record high of 45.3 million, while households headed by someone in this age group increased by just 1.3 million (7.1 percent) over this period—about half the number that population growth alone would imply.

The recent pickup in young-adult household growth reflects a firming of, but not a rebound in, the household headship rates of 25–34 year olds (the ratio of households to people), which have trended down since the mid-2000s. Census data indicate that their headship rates dipped again in 2018, down 0.1 percentage point to 43.1 percent. The Current Population Survey reports similarly low rates for both the 25–29 and 30–34 year-old age groups. And by the latest American Community Survey count, headship rates for 25–34 year olds hit a record low of 40.2 percent in 2017.

Part of the explanation for this decline is that more young adults still live at home. In absolute terms, 10.2 million adults aged 25–34 lived with their parents or grandparents in 2017, or more than twice the 4.8 million in 2000. The share living in their parents' or grandparents' homes also hit a new high of 22.8 percent in 2017, nearly double the 12.1 percent in 2000.

Their record-low headship rates put millennials on a much lower trajectory for forming independent households than previous generations. The question remains whether they will continue along this lower path as they age. If history is any guide, though, headship rates of generations that have been slow to form households eventually catch up to those of their predecessors by age 40. What is different today, however, is that housing in many areas has become so expensive.

THE HOUSING AFFORDABILITY BARRIER

Although down across the country, household formation rates for young adults have fallen the most in the nation's highest-cost markets. Between 2006 and 2017, headship rates for 25–29 year olds—the age group hardest hit by the Great Recession—dropped 9.1 percentage points in the 25 largest metros with the highest rents, but just 4.9

percentage points in the 25 largest metros with the lowest rents. By comparison, the average decline in headship rates for this age group was 6.4 percentage points across all 100 largest metros and 5.6 percentage points across all other metros. Even in non-metro areas, the drop in headship rates was still substantial at 4.1 percentage points.

The average household headship rate for the 25–29 year-old population ranges widely from just 31 percent in the 25 highest-rent metros up to 41 percent in the 25 lowest-rent metros **(Figure 14).** Headship rates for younger adults living in smaller metros (40 percent) and non-metro areas (39 percent) are comparable to those in lowest-cost large metros.

The differences in headship rates across high- and low-cost metros are smaller among older age groups, suggesting that affordability challenges may delay but not ultimately deter household formations among today's younger adults. Still, headship rates for all age groups are lower in high-cost metros than in less expensive markets. Indeed, doubling up in nontraditional households—such as multigenerational households or unrelated adults sharing space—is more common in expensive housing markets regardless of race, ethnicity, or nativity.

For example, 22 percent of native-born whites aged 25–34 living in high-cost metros reside with parents or grandparents, compared with 18 percent in low-cost metros. Individuals aged 35–44 of all races and ethnicities, whether native- or foreign-born, are also between 1 and 4 percentage points more likely to live with an unrelated adult if they reside in a high-cost metro. Shares of households with multiple workers, particularly lower-wage earners, are also higher in expensive metros. High housing costs thus have an impact not only on household growth rates but also on the types of housing that are in demand.

INEQUALITY RISING ALONG WITH INCOMES

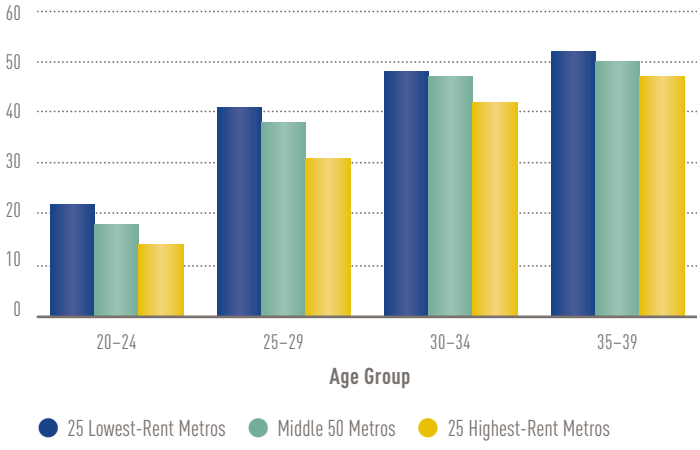
The Current Population Survey reports that median per capita income, measured as a three-year rolling average, rose 2.9 percent in real terms in 2016–2017. This marked the fifth consecutive year of growth. While all age groups posted gains during that period, the largest increases were for 25–34 year olds (up 11.3 percent) and 35–44 year olds (up 11.1 percent) **(Figure 15).**

As a result, incomes for younger households were close to or above previous highs in 2017. For example, the real median income for households headed by 25–34 year olds, at $60,800, stood just 2.5 percent below the peak in 2001, while the median for 35–44 year olds, at $75,800, was 1.1 percent above the previous peak. Although up by some 12.2 percent since 2012, to $78,400, the real median income of households aged 45–54 was still 5.0 percent below the peak in 2000. The real median income for households aged 55–64, at $66,500, is back within 1 percent of the previous peak. Meanwhile, incomes of older households remained on a steady upward trajectory. In fact, rising labor force participation rates boosted the median incomes of households age 65 and over to all-time highs.

FIGURE 14

High Rents Delay the Ability of Younger Adults to Form Independent Households

Average Household Headship Rates (Percent)

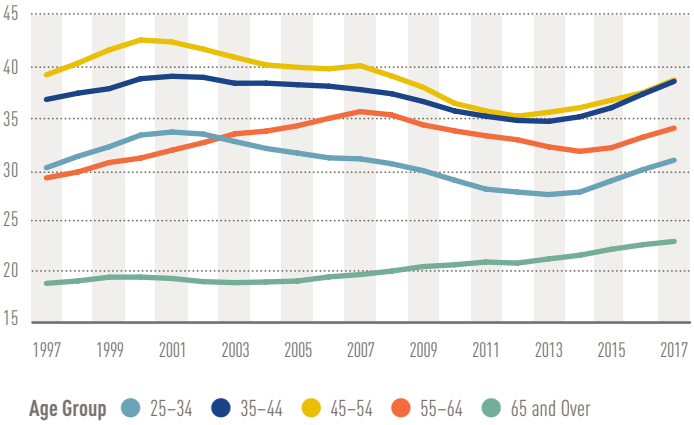


Note: Household headship rates are for the 100 largest metro areas by population in 2017, ranked by median rents.
Source: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates and Missouri Census Data Center data.

FIGURE 15

Income Growth Among Younger Adults Has Been Particularly Strong

Median Real Per Capita Income (Thousands of 2017 dollars)



Note: Incomes are based on three-year trailing averages, adjusted to 2017 dollars using the CPI-U for All Items.
Source: JCHS tabulations of US Census Bureau, Current Population Surveys via IPUMS CPS.

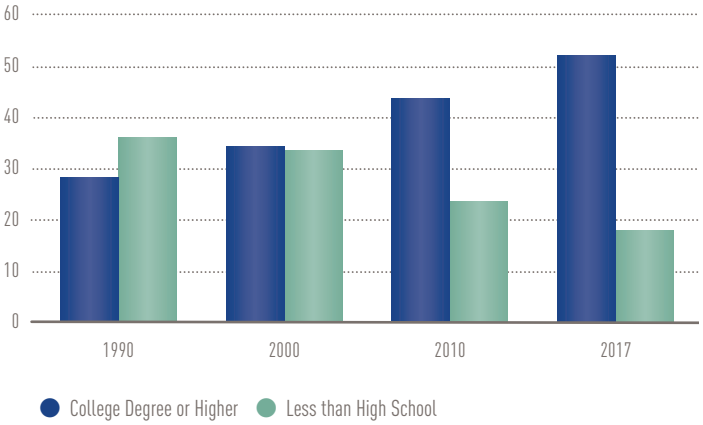
Measured on a three-year trailing basis, the real median household income increased 3.0 percent in 2016–2017 to a new high of $59,700. Broad-based gains since 2013 raised the number of households earning over $100,000 by 6.3 million and reduced the number earning under $25,000 by 1.7 million. The US median household income thus grew 9.8 percent in 2013–2017 while average household income rose 10.3 percent in real terms.

In sharp contrast, the average incomes of households in the bottom quartile have improved relatively little during the recent recovery—up just 8.0 percent in real terms from the 2014 low, compared with 12.1 percent among households in the top income quartile. Given this disparity in growth and the fact that bottom-quartile incomes fell more than top-quartile incomes during the downturn, the gap between high- and low-income households continued to widen.

FIGURE 16

Recent Immigrants Today Are Better Educated than Their Predecessors...

Share of Recent Immigrants by Educational Attainment (Percent)

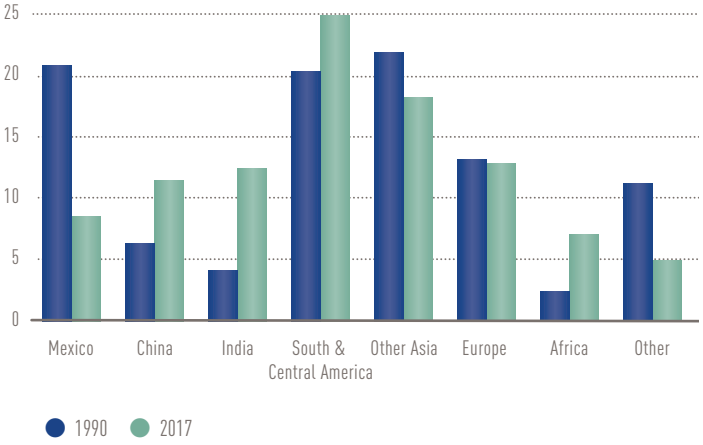


Notes: Recent immigrants in 1990 and 2000 entered the US within the previous five years. Recent immigrants in 2010 and 2017 arrived within the previous year. Data include only foreign-born adults age 25 and over.
Source: JCHS tabulations of US Census Bureau, Decennial Censuses and American Community Survey 1-Year Estimates via IPUMS USA.

FIGURE 17

...and Originated from a Different Mix of Countries

Share of Recent Immigrants by Birthplace (Percent)



Notes: Recent immigrants in 1990 and 2000 entered the US within the previous five years. Recent immigrants in 2010 and 2017 arrived within the previous year. Data include recent immigrants of all ages. South & Central American numbers include Cuban and Caribbean immigrants. Other birthplaces include Australia, New Zealand, Canada, Atlantic and Pacific Island countries, Puerto Rico, and other US territories.
Source: JCHS tabulations of US Census Bureau, Decennial Censuses and American Community Survey 1-Year Estimates via IPUMS USA.

Adjusting for inflation, the average income in the top quartile rose 38.5 percent between 1987 and 2017, while the average income in the bottom quartile increased just 2.3 percent. Over the three decades, the average top-quartile income therefore increased from 9.2 times the average bottom-quartile income to 12.4 times.

THE INCREASING CONCENTRATION OF POVERTY

Income inequality across neighborhoods is also increasing. Although down slightly in 2016–2017, the US population living below the official poverty line jumped by more than 35 percent between 2000 and 2017, to 44.8 million. The share of the population living in poverty also rose from 12 percent to 14 percent over this period.

At the same time, the number of poor people living in high-poverty census tracts (with poverty rates of 20 percent or more) increased by 8.3 million in 2000–2017, to 22.7 million. As a result, the share of the nation's poor living in high-poverty neighborhoods climbed from 43 percent to 51 percent. In addition, the number of high-poverty census tracts rose by 46 percent over this period, to 19,600—more than a quarter of all tracts in the country.

While the largest shares of both poor people and high-poverty tracts are in the highest-density neighborhoods of metro areas, the fastest growth in poverty is now occurring at the metropolitan fringe. Indeed, in the lowest-density third of all neighborhoods, both the number of high-poverty census tracts and the number of poor people living in high-poverty tracts doubled between 2000 and 2017.

The geographic concentration of poverty differs sharply by race and ethnicity. Fully 70 percent of poor blacks and 63 percent of poor Hispanics live in high-poverty neighborhoods, compared with just 35 percent of poor whites and 40 percent of poor Asians. But the overrepresentation of various racial/ethnic groups in high-poverty tracts is not confined to the poor. Some 48 percent of all blacks and 41 percent of all Hispanics live in high-poverty neighborhoods, compared with just 16 percent of all whites and 21 percent of all Asians.

THE CRITICAL CONTRIBUTION OF IMMIGRATION

The latest Census Bureau estimates show that net international immigration increased 2.7 percent in 2018, to 980,000—just shy of the 1.0 million average annual rate projected for the next 10 years. Although slightly below levels in 2015 and 2016, net annual inflows nevertheless remain well above the 2011 low of 790,000.

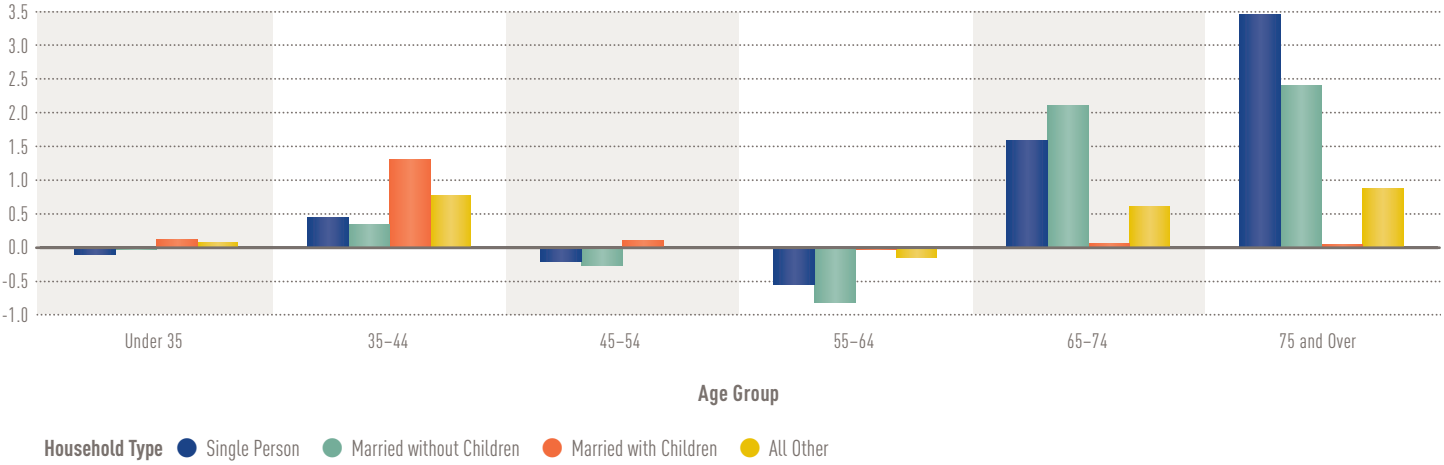
Immigrants are a major source of household growth and therefore of housing demand. Despite making up only 13.7 percent of the population in 2017, foreign-born households were responsible for 37 percent of household growth from 1990 to 2017. The immigrant share of homeowners increased from 7 percent to 12 percent over this period, while the immigrant share of renters increased from 12 percent to 20 percent.

The mix of immigrants continues to evolve. Recent arrivals are more likely to have advanced education, with the share over age

FIGURE 18

Over the Next Decade, the Fastest-Growing Household Types Will Be Younger Families with Children and Older Single Persons and Empty-Nesters

Projected Change in Households, 2018–2028 (Millions)



Note: Children are under age 18.
Source: JCHS 2018 Household Projections.

25 with college degrees nearly doubling from 28 percent in 1990 to 52 percent in 2017 **(Figure 16).** At the same time, the share with less than a high school education fell from 36 percent to just 18 percent. The main countries of origin have also shifted, with fewer new immigrants arriving from Mexico and more from China, India, South and Central America, and Africa **(Figure 17).**

As the native-born population ages over the coming decades, the number of deaths will rise faster than births and increasingly cut into adult population growth. Immigrants will therefore propel a larger and larger share of both population and household growth in the years ahead. Even assuming that immigration is unchanged, the foreign born are projected to account for a majority of household growth in 2018–2028 and a majority of population growth by 2030.

THE ADDED IMPACT OF DOMESTIC MIGRATION ON GROWTH

According to the American Community Survey, 7.5 million people made interstate moves in 2017, slightly higher than the 7.2 million annual average from 2010–2017. The number of households making those interstate moves totaled 2.5 million, also slightly above recent annual averages.

Like international immigration, domestic migration can contribute significantly to household growth in certain markets. Indeed, on average, interstate migrants accounted for at least half of household growth in six of the nation's ten highest-growth states in 2010–2017, with shares reaching as high as 63 percent in Colorado and 82 percent in Arizona.

Even in states with net domestic out-migration, the numbers of households moving in were still significant. For example, even though about 30,000 more households moved out of California each year in 2010–2017 than moved in, in-migration still averaged 165,000 households annually. This made California third only to Florida and Texas in terms of gross household moves into the state. In contrast, while 85,000 households moved to New York each year on average during this period, 148,000 households moved out, generating a large net domestic out-migration from the state.

Even so, both California and New York still gained households overall in 2010–2017 thanks to strong inflows of international migrants and household formations among their large resident populations. In fact, California had the third-highest level of household growth in the nation, with an average increase of 85,500 households per year during this period. Of that total, 62,900 resulted from household formations by current residents outnumbering losses of households through dissolutions. Given the aging of the population and the increasing losses of older households, California and other states will therefore have to rely more on domestic and international migrants to generate household growth in the decades ahead.

ONGOING SLOWDOWN IN RESIDENTIAL MOBILITY

Although the interstate migration rate was stable, within-state or local moves continued their long-term decline in 2017, reducing the US residential mobility rate by 0.2 percentage point, to 14.3 percent. With this latest drop, the national mobility rate now stands a full 2.5 percentage points below the level in 2006 when recordkeeping began.

Roughly 80 percent of all moves in a given year are in-state. According to the American Community Survey, the local mobility rate slipped from 11.5 percent in 2016 to 11.3 percent in 2017 because of fewer in-state moves by renters, who make up the majority of domestic migrants. The population living in rental housing that reported a local move within the previous year fell slightly from 24.8 percent in 2016 to 24.1 percent in 2017. Meanwhile, the domestic mobility rates of people living in owner-occupied housing increased modestly from 7.8 percent to 8.0 percent over the year.

Population aging explains some of the slowdown in domestic migration over the last 20 years, given that older adults are more likely to own homes and less likely to move. However, domestic mobility rates have dropped across all age groups, and particularly among young adults and renters. Moreover, despite relatively low mobility rates, older adults now account for a growing number of domestic migrants. Because of the strong growth in the population age 65 and over, the number of older-adult movers increased from 1.5 million in 1998 to 1.8 million in 2018, raising their share of all movers age 18 and over from 4.9 percent to 7.4 percent over the decade.

THE OUTLOOK

The latest JCHS projections, incorporating Census Bureau data through 2018, put average annual household growth in 2018–2028 at 1.2 million households, in line with recent averages. The aging of the population will lift the number of households age 65 and over by 11.1 million, which in turn will increase the number of households consisting of either single persons or married couples without children by 8.4 million over the decade **(Figure 18).** Some 2.9 million millennial households will move into the 35–44 year-old age group, contributing to the 1.6 million increase in the number of married couples with children and driving up demand for family housing. Factoring in replacement and second-home demand plus a minimum vacancy rate, these household growth projections imply baseline demand for new housing of 15.1 million units in 2018–2028.

In 2028–2038, however, current JCHS projections indicate that household growth will decline to 9.6 million, or less than 1.0 million per year. Nevertheless, new household formations among younger adults will remain strong, given that the generations following the millennials are nearly as large. This will help to offset growing losses of baby-boomer households over the decade.

The expected slowdown in natural increase (births over deaths) among the native-born population will make immigration an even more critical factor in future housing demand. But unlike natural increase, which tracks the aging of the current population, immigration flows are difficult to predict. Indeed, the Census Bureau's latest population projections cut net annual immigration by roughly 20 percent from previously projected levels, equivalent to 27 million fewer immigrants over the next ten years. Such large increases or decreases in immigration could dramatically alter the outlook for the quantity and diversity of housing demand in the United States.

4 / HOMEOWNERSHIP

The number of US homeowners increased again in 2018, lifting the national homeownership rate for the second consecutive year. With demand picking up, real home prices are approaching pre-crisis levels, helping to build substantial equity for current owners but also eroding affordability for first-time homebuyers. Indeed, affordability is an increasingly serious challenge for would-be homeowners in several high-priced metros.

UPTICK IN THE HOMEOWNERSHIP RATE

The US homeownership rate edged up again last year. After falling 5.6 percentage points between 2004 and 2016, the national rate increased 0.5 percentage point in 2017–2018, to 64.4 percent—roughly on par with the average rate in 1985–1995 before the latest housing boom and bust. After a robust fourth-quarter increase, however, the homeownership rate dipped slightly in early 2019 but still remained above the year-earlier level.

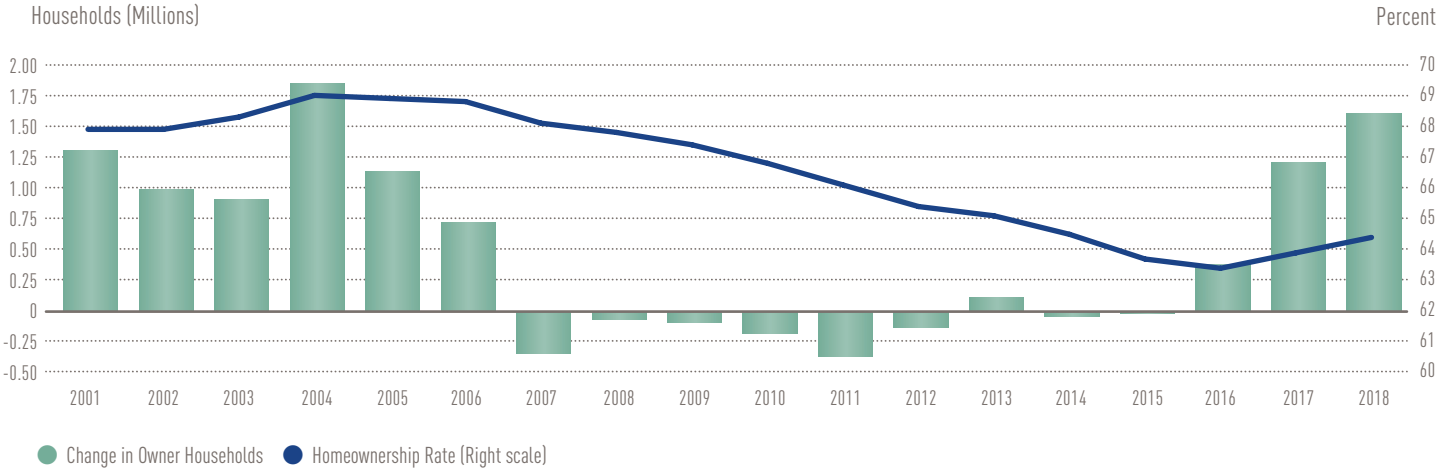
The rebound in homeownership reflects a substantial pickup in homeowner household growth and a slowdown in renter household growth. According to the Housing Vacancy Survey, the number of homeowner households was up by 1.6 million in 2017–2018 to a total of 78.2 million, while the number of renters fell by 110,000 to 43.2 million. This shift is a clear departure from the trend in 2007–2016, when renter household growth averaged 890,000 per year and homeowner household growth was negative **(Figure 19).**

The recent increases in homeownership rates are entirely among households under the age of 65. Between 2016 and 2018, the homeownership rate rose 1.7 percentage points among households under age 35, 1.5 percentage points among households aged 35–44, 0.8 percentage point among households aged 45–54, and 0.4 percentage point among households aged 55–64. Despite these gains, however, homeownership rates for all of these age groups are still below their levels 30 years ago. Indeed, the homeownership rate is down 3.0 percentage points for the under-35 age group, 6.8 points for 35–44 year-olds, 5.5 points for 45–54 year olds, and 4.2 points for 55–64 year-olds. In contrast, and despite a modest 0.3 percentage point decline in 2016–2018, the homeownership rate for households age 65 and over was 2.9 percentage points higher in 2018 than in 1988.

The recent upturn in homeownership rates occurred across all racial and ethnic groups. The rate for Asian/other households increased the most, up 2.6 percentage points in 2016–2018. The rates for both white and Hispanic households were up 1.1 percentage points, while the black homeownership rate rose just 0.7 percentage point. These increases narrowed the homeownership gap between white and Asian/other households, but left the

FIGURE 19

Homeownership Has Gained Some Upward Momentum



Note: Change in owner households is the year-over-year change in the number of homeowner households.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys.

white-Hispanic gap unchanged. The white-black homeownership gap, however, widened over the past two years.

Over the longer term, Asian and other minorities have made the most progress in narrowing the homeownership gap with whites. Between 1988 and 2018, the white homeownership rate increased 3.9 percentage points to 73.0 percent while the Asian/other homeownership rate increased 7.3 points to 57.0 percent, reducing the disparity from 19.4 percentage points to 16.0 points. Meanwhile, the Hispanic homeownership rate rose 6.5 percentage points to 47.1 percent, reducing the gap with whites from 28.6 percentage points to 26.0 points. In contrast, the black homeownership rate was unchanged over the past decade at 42.9 percent, widening the homeownership gap some 3.9 percentage points to 30.1 points.

FIRST-TIME BUYER CHARACTERISTICS

The pickup in homeownership has direct implications for the housing stock, which must accommodate the diverse housing needs of first-time homebuyers as well as repeat buyers. Indeed, the 3.1 million first-time buyers who purchased homes in 2016 and early 2017 vary widely in age, household composition, and other characteristics that imply different needs and preferences for housing.

Compared with all homeowners, first-time buyers are younger, more diverse, and more likely to have children **(Figure 20).** More than half (54 percent) of first-time buyers in 2017 were under age 35. While 65 percent of first-time buyers were white, 9 percent were black, 15 percent were Hispanic, and 11 percent were Asian/other. In addition, 26 percent were married with children present and 10 percent were single parents, while 23 percent were married without children present and 22 percent were single. Just under a fifth of first-time buyers in 2017 did not previously head a household.

When compared with repeat buyers, first-time buyers are more apt to choose smaller and less expensive homes. For example, 43 percent of first-time buyers in 2017 purchased homes with less than 1,500 square feet of living space, compared with 27 percent of repeat buyers. Just 6 percent of first-time buyers bought homes with 3,000 or more square feet, while 21 percent of repeat buyers chose homes of this size. Similarly, 58 percent of first-time buyers paid less than $200,000 for their homes and only 12 percent paid $400,000 or more. The comparable shares for repeat buyers are 37 percent and 24 percent, respectively.

More than three-quarters (77 percent) of first-time homebuyers in 2017 purchased detached single-family homes, slightly below the 81 percent share of repeat buyers. The share of first-time homebuyers that purchased attached single-family homes or units in multifamily structures (14 percent) was almost the same share of repeat buyers (13 percent). Just 9 percent of first-time buyers opted for mobile homes, manufactured units, or some other type of structure, compared with 6 percent of repeat homebuyers.

PRICE PRESSURES ON POTENTIAL BUYERS

According to the FHFA Purchase-Only House Price Index, nominal home prices climbed 5.7 percent last year on average, or 3.9 percent in real terms. With this increase, real home prices were up 41 percent from 2011 to 2018 and stood within 2 percent of the 2006 peak. The median price for homes in the lowest tier continued to rise more rapidly than those for higher-cost units last year.

The National Association of Realtors reports that the real median sales price of an existing home hit $259,300 in 2018, up from $177,400 in 2011. Adding to affordability pressures, the average rate on a 30-year fixed-rate mortgage also rose 55 basis points last year, to 4.54 percent—higher than any annual reading since 2010.

Largely because of this interest rate hike, real homeowner costs for the monthly mortgage payment, taxes, and insurance on a median-priced home jumped 8 percent from 2017 to 2018, to $1,775—a 47 percent increase from 2011. But because interest rates are lower than in prior decades, total homeowner costs in 2018 were down 17 percent from 2006 and 3 percent from 1990 **(Figure 21).** Although the average mortgage interest rate declined again in early 2019, future increases could add noticeably to homeowner costs. For example, a 1 percentage point rise in the interest rate for a loan on the median-priced home in 2018 would raise the monthly payment by 9 percent or $153.

Rising home prices not only determine the size of a mortgage but also the amount of savings required for a downpayment. To put down 20 percent on a median-priced home last year, a potential buyer would have to have saved almost $52,000. Even buyers qualifying for a 3.5 percent downpayment on an FHA mortgage would need more than $9,000 plus closing costs. Not surprisingly, more than 60 percent of home mortgages issued in the second half of 2018 involved downpayments of less than 20 percent, and more than 40 percent entailed downpayments of less than 10 percent.

Modest downpayment assistance programs can help many would-be owners buy homes, particularly in lower-cost markets. A recent JCHS analysis of the 2014 Survey of Income and Program Participation found that some 85 percent of renters and other potential homebuyers lacked the savings for a 3.5 percent downpayment on a median-priced home in their areas. In addition, 80 percent did not have sufficient income to meet a 31 percent payment-to-income ratio. However, downpayment assistance of just $3,500 would more than double the share of potential homebuyers with enough savings and income to buy homes from 7 percent to 17 percent.

AFFORDABILITY ACROSS GEOGRAPHIES

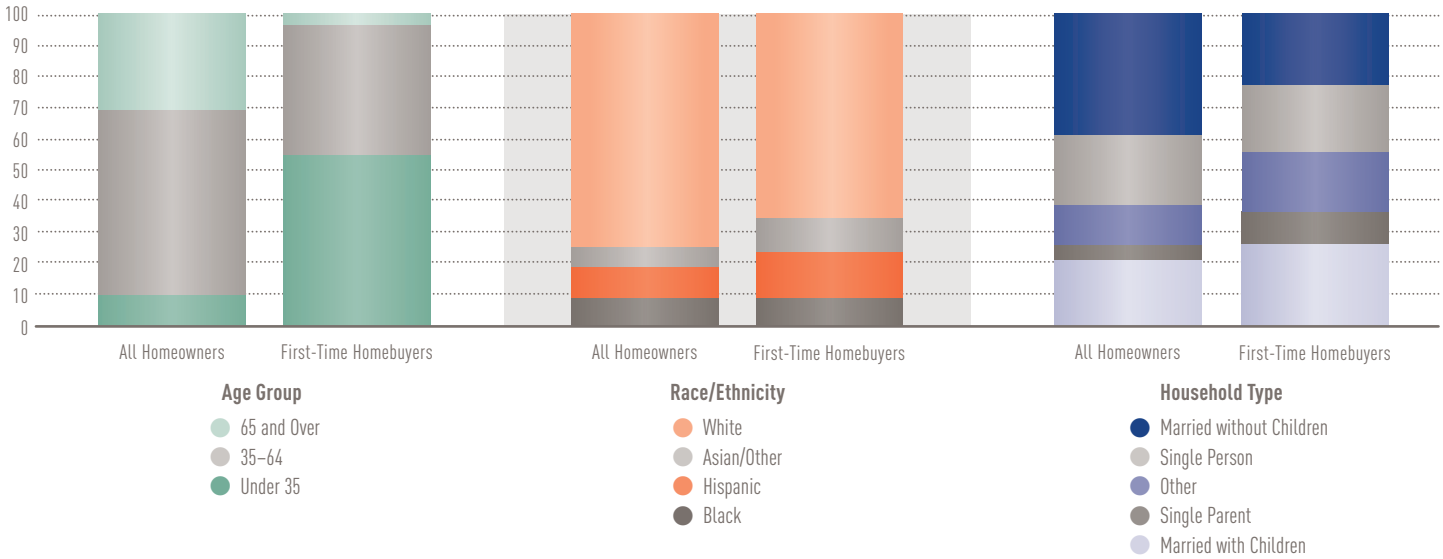
Housing affordability varies greatly across metropolitan regions. Nationally, a median-income household could afford the monthly payment for 63 percent of homes sold in 2017. And in 265 of the 300 metros with available data, a median-income household could afford the monthly payment for more than half of all recently sold homes **(Figure 22).** In those areas, that household would be able to search many neighborhoods for a suitably sized home, although it could face affordability constraints in some locations.

But in some high-cost areas, affordability challenges are acute. In nine metros, all of which are in California—Los Angeles, Oxnard, Salinas, San Diego, San Francisco, San Jose, San Luis Obispo, Santa Cruz, and Santa Rosa—a household with the median income could

FIGURE 20

First-Time Homebuyers Are Younger and More Diverse than Current Homeowners

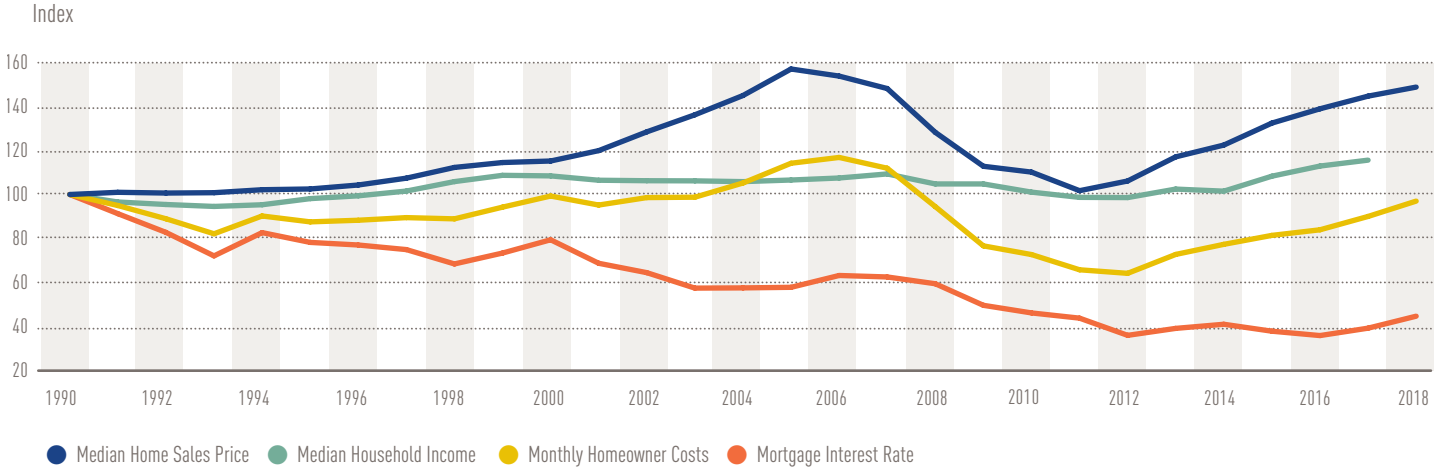
Share of Homeowners (Percent)



Notes: First-time homebuyers purchased homes in 2016 and early 2017 and did not previously own homes. Black, Asian/other, and white households are non-Hispanic. Other household types include all other family and non-family households.
Source: US Department of Housing and Urban Development (HUD), 2017 American Housing Survey.

FIGURE 21

With Low Interest Rates Offsetting the Rise in Home Prices, Real Homeowner Costs Are Still Lower than in 1990



Notes: House prices, household income, and monthly homeowner costs are adjusted to 2018 dollars using the CPI-U for All Items Less Shelter. Monthly homeowner costs assume a 3.5% downpayment on a median-priced, existing single-family home, condo, or co-op, with property taxes of 1.15%, property insurance of 0.35%, and mortgage insurance of 0.85%.

Sources: JCHS tabulations of NAR, Existing Home Sales; US Census Bureau, Current Population Surveys; Moody's Analytics Forecasts; Freddie Mac, Primary Mortgage Market Surveys (PMMS) data.

afford less than a quarter of homes sold in 2017. In another 26 metros—including Boston, Denver, New York, Portland, and Seattle—a median-income household could afford the monthly payments on only a quarter to a half of recently sold homes. In these areas, potential buyers would have to choose from only a limited set of neighborhoods or from units smaller than they might prefer for their families.

Rising home prices are increasing the number of areas facing severe affordability challenges. In 39 of the 100 metros tracked by FHFA, real home prices at the end of 2018 exceeded their peaks at the height of the housing boom. Indeed, real home prices in nine of these metros were more than 20 percent above their 2006 levels, with especially rapid price growth from 2006 to 2018 in Austin (55 percent), Denver (54 percent), San Francisco (53 percent), and Dallas (42 percent). Conversely, real home prices in six metros—Bakersfield, Bridgeport, Camden, Cape Coral, Elgin, and New Haven—remained more than 25 percent below their 2006 peaks last year.

MIXED SIGNALS ON CREDIT CONDITIONS

The credit environment for potential homebuyers in 2018 was mixed, with borrower credit scores and loan-to-value ratios indicating stable and tight conditions, but debt-to-income ratios pointing to some easing. According to the Federal Reserve Bank of New York, the median credit score for new mortgage originations was 758 in the fourth quarter of 2018, within the 750–765 range where it has held since 2014, although well above the 720 median at the end of 2005 and 715 at the end of 2000. The bottom decile credit score hovered between 640 and 660 throughout 2014–2018, still significantly higher than the 597 level at the end of 2005 and 574 at the end of 2000. The median loan-to-value ratio for purchase originations has also been largely stable in the post-crisis period, remaining near 95 percent at the end of 2018.

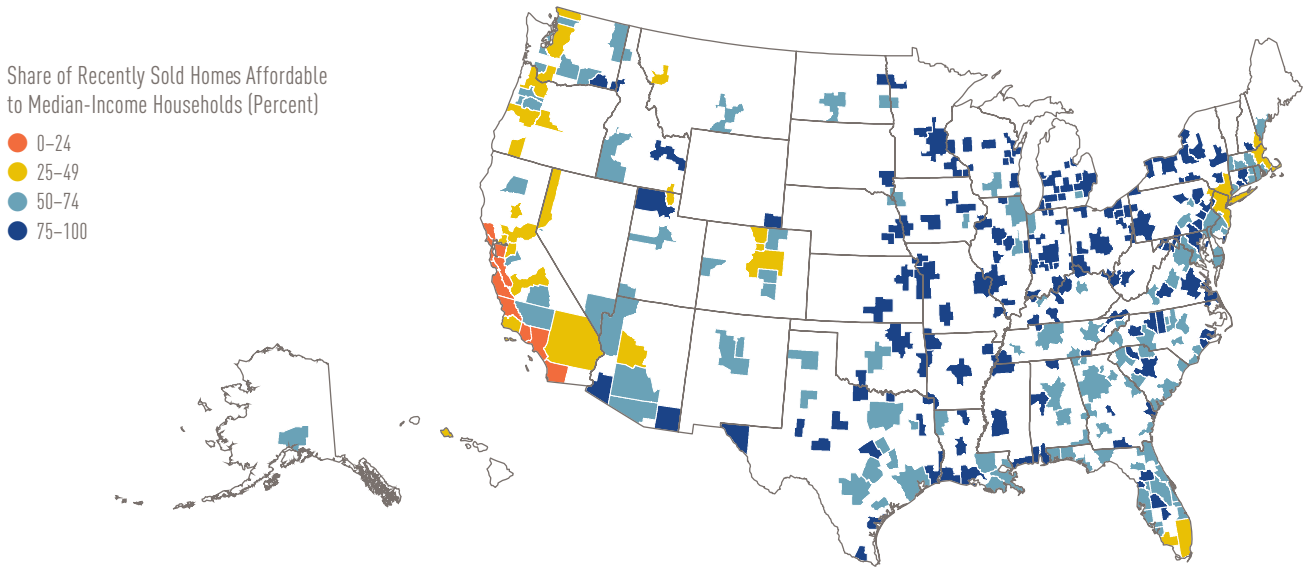
At the same time, however, the share of mortgage originations with total debt-to-income (DTI) ratios above 43 percent has increased sharply. According to a recent Urban Institute report, the share of Fannie Mae purchase loan originations with these high ratios more than doubled from 13 percent to 29 percent in 2013–2016. Similarly, the share of Freddie Mac originations with high DTI ratios rose from 14 percent to 25 percent, the share of FHA loans from 42 percent to 55 percent, and the share of VA loans from 33 percent to 46 percent. Both the Urban Institute and Mortgage Bankers Association indexes of mortgage credit availability reflect these increases, indicating that credit conditions eased somewhat over this period.

The growing share of loans with high debt-to-income ratios is also important because of the upcoming expiration of the "GSE patch." Under Dodd-Frank, the Consumer Financial Protection Bureau's qualified mortgage rule established 43 percent as the maximum debt-to-income ratio for new originations for the government sponsored enterprises (GSEs), but created an exemption through 2021 (or the end of conservatorship, whichever happens first) for loans eligible for purchase by Fannie Mae and Freddie Mac. Given the significant shares of GSE loans that currently exceed the DTI limit, expiration of this exemption could result in a substantial shift in lending volumes from the GSEs to FHA, which does not have the 43 percent DTI cap.

Meanwhile, the number of home purchase originations increased each year from 2011 to 2017, rising from 2.1 million to 3.7 million. In contrast, the number of refinances varied widely over this period in response to fluctuations in mortgage interest rates **(Figure 23).** The GSE share of home purchase originations rose from 50 percent in 2011 to 64 percent in 2017, while the FHA share fell from 35 percent to 23 percent. The VA share moved up from 9 percent in 2011 to 10 percent in 2017.

FIGURE 22

Affordability of Homeownership for Potential Buyers Varies Widely Across the Country



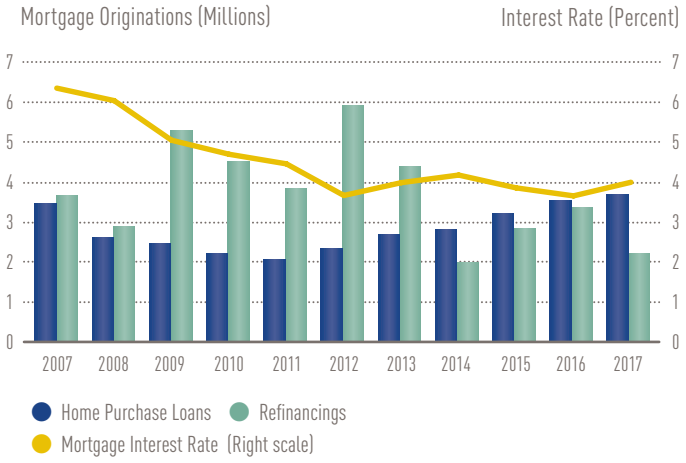
Notes: Median incomes are estimated at the core-based statistical area (CBSA) level. Only CBSAs with at least 30 home sales in 2017 are shown. Recently sold homes are defined as homes whose owners moved within the 12 months prior to the survey date. Monthly payments assume a downpayment of 3.5%, property taxes of 1.15%, property insurance of 0.35%, and mortgage insurance of 0.85%. Affordable payments are defined as requiring less than 31% of monthly household income.
Sources: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates; Freddie Mac, PMMS data.

Qualifying for one of these mortgage products, however, remains an obstacle for many potential homebuyers. According to the Survey of Consumer Expectations, 67 percent of renters in 2018 would prefer or strongly prefer to own homes, compared with 19 percent who would prefer or strongly prefer to rent. But 68 percent of renters also thought that it would be somewhat or very difficult to obtain a mortgage last year, while just 17 percent thought it would be somewhat or very easy.

For those who do qualify for mortgages, navigating the home purchase process can also be a challenge. The National Survey of Mortgage Originations found that while 77 percent of buyers that purchased homes in 2016 were very satisfied with their mortgage lenders, 28 percent were only somewhat or not at all satisfied that they received the lowest interest rate they could qualify for, and 45 percent were only somewhat or not at all satisfied that they paid the lowest possible closing costs. Moreover, significant numbers of respondents reported issues with the closing process. Fully 15 percent said that they faced an "unpleasant surprise" such as having the closing rescheduled, needing more cash than expected, having mortgage terms change, or being asked to sign blank documents.

FIGURE 23

Home Purchase Loans Have Increased Incrementally, While Refinancings Have Varied with Interest Rates



Note: Mortgage originations are for first-lien loans for home purchase or refinancing of one- to four-family, owner-occupied properties.
Sources: JCHS tabulations of Home Mortgage Disclosure Act (HMDA) data; Freddie Mac, PMMS data.

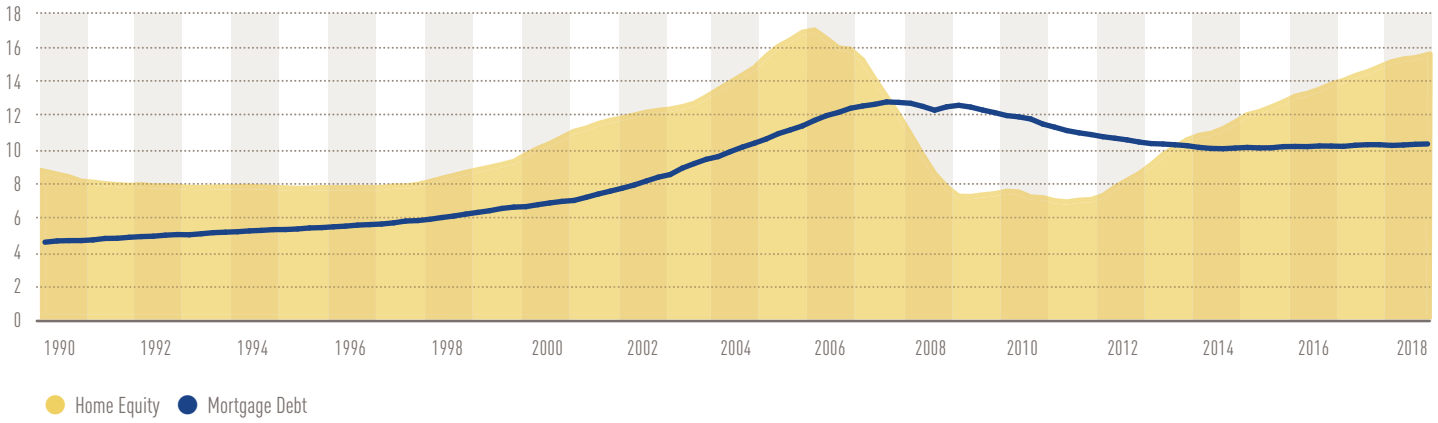
STRONG GROWTH IN HOME EQUITY BUT NOT EXTRACTIONS

Fueled by rapidly rising home prices and modest increases in mortgage debt, the aggregate value of home equity more than doubled between 2011 and 2018. According to the Federal Reserve's Flow

FIGURE 24

Home Equity Is Nearing Its Pre-Crisis Peak, Driven by Rising Home Prices

Trillions of 2018 Dollars



Note: Homeowner equity and mortgage debt are adjusted to 2018 dollars using the CPI-U for All Items.
Source: JCHS tabulations of Federal Reserve Board, Financial Accounts of the United States via FRED.

of Funds data, the total value of home equity held by households jumped from $7.0 trillion to $15.5 trillion over this period after adjusting for inflation. With this increase, home equity levels are approaching the pre-crisis peak of $17.0 trillion while aggregate mortgage debt remains closer to the post-crisis low **(Figure 24).**

As measured by the Survey of Consumer Finances, the median amount of homeowner equity fell in real terms from $121,600 in 2007 to $83,000 in 2010 before recovering to $100,000 in 2016. In that year, homeowner equity ranged from $43,000 or less in the bottom quartile to $212,000 or more in the top quartile. Some 86 percent of homeowners had equity of at least 20 percent of home value, and 61 percent had equity of at least 50 percent. CoreLogic reports that only 4 percent of mortgaged properties (2.2 million) had negative equity at the end of 2018, down from 23 percent (11.1 million) at the end of 2011.

Significant growth in home equity raises the potential for many owners to cash out some of their housing wealth. However, a 2018 report from the Federal Reserve Bank of New York concludes that there is no evidence so far of a substantial increase in risky equity extraction practices. Although the aggregate volume of cash-out refinances and home equity loans and lines of credit has risen slightly in recent years, withdrawals remain near their 2000 level and well below the peak during the housing boom. In addition, recent equity extractions have been concentrated among older borrowers and those with the strongest credit.

Results from the National Survey of Mortgage Originations indicate that homeowners that did tap their home equity in 2016 used the funds to pay down higher-cost debt (49 percent of extractions) or cover home repairs and improvements (40 percent). Smaller shares of respondents reported using all or part of the extracted equity for savings or business investment (23 percent), auto or other major purchases (11 percent), or college expenses (8 percent).

THE OUTLOOK

Although homeownership demand increased in 2018, the latest estimates show a reversal in the first quarter of 2019, underscoring the uncertain trajectory of the homeownership rate. In the near term, the strength of homebuying will likely depend on home prices and the direction of changes in employment, incomes, and interest rates. Over the longer term, though, homeownership trends will be shaped by a larger set of factors related to affordability, household demographics, tax law and the mortgage finance system, and the supply of homes for sale.

JCHS projections suggest that, at current homeownership rates, population growth alone will add about 8.0 million households to the ranks of homeowners in 2018–2028. Over the decade, the aging of the baby-boom generation is expected to boost the number of homeowners age 65 and over by some 8.4 million, lifting their share of all homeowners to 38.1 percent. Meanwhile, members of the millennial generation will drive up the number of homeowner households aged 30–49 by just under 1.9 million, to 30.2 percent. In contrast, the aging of generation-X will reduce the number of homeowners aged 50–64 by 2.1 million, to a share of 27.1 percent. These broad demographic shifts will bring substantial changes in the housing needs and preferences of homeowners that could, in turn, alter the configuration of the owner-occupied stock.

5 / RENTAL HOUSING

Rental markets are basically stable despite the upturn in homeownership. Demand from higher-income households is still on the rise, and construction of rental housing picked up again last year after a slight dip. Low vacancy rates across the board are pushing up the prices of multifamily properties, while also keeping the pressure on rents. Conditions at the lower end of the market are especially tight, with high demand for a shrinking supply of low-cost units adding to affordability concerns.

MODEST DECREASE IN RENTER HOUSEHOLDS

All three major annual household surveys show a decline in renter households, although the size of the decrease varies. According to the Housing Vacancy Survey, the share of renter households dropped a full percentage point from 2016 to 2018, to 35.6 percent **(Figure 25).** By the Current Population Survey's measure, the number of renter households fell by 460,000 in 2017–2018, while the Housing Vacancy Survey puts the decline at 110,000, with a slight rebound in the first quarter of 2019. Although a year behind, the latest American Community Survey also shows a drop of about 473,000 renter households in 2016–2017.

The modest downturn occurred across the country, with the number of renter households declining by an average of 2 percent in 32 states between 2016 and 2017. Similarly, just over half of all metros with populations above 50,000 and micropolitan areas with populations between 10,000 and 50,000 lost renters over this period. In general, the largest and most expensive metros posted the biggest decreases in renter households while smaller areas posted gains.

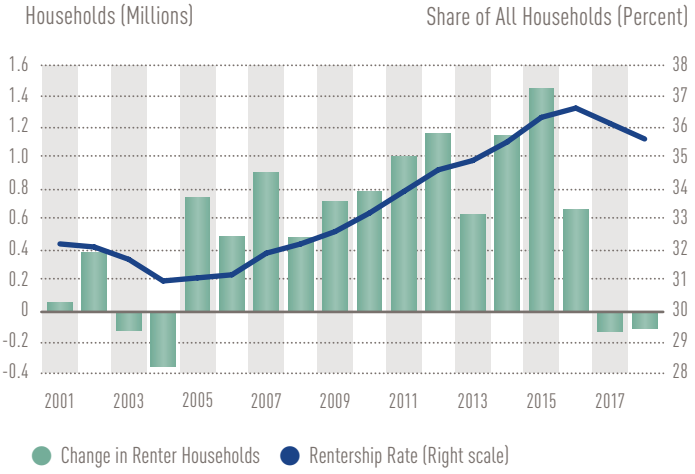
Despite the overall decline in renter households, there was strong growth in the numbers of older and higher-income households that now rent their housing. According to the Current Population Survey, the number of renter households headed by a person age 55 and over rose by about 189,000 in 2018, following gains of 343,000 on average in the prior two years. With these increases, older households now make up more than a quarter of renters. Households under age 35, however, still account for the largest share of renters at 38 percent.

Meanwhile, a growing number of higher-income households rent their homes. Consistent with nationwide growth in households with incomes of at least $75,000 in constant 2017 dollars, the number of renters in this income group rose by 311,000 from 2017 to 2018. This was the eighth consecutive annual increase in higher-income renters, lifting their numbers by 4.6 million, or 66 percent, since 2010 **(Figure 26).** The share of renter households earning at least $75,000 now exceeds 25 percent, up from 19 percent in 2008.

The uptick in higher-income renter households reflects a broader shift in renter incomes as the economy continues to improve.

FIGURE 25

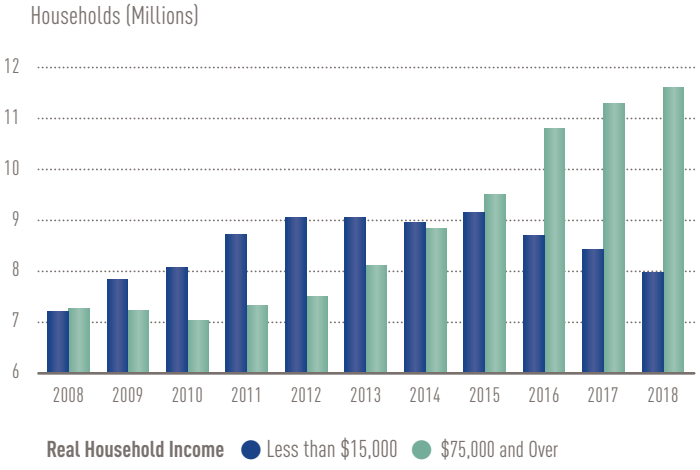
The Number and Share of Renter Households Declined Again in 2018



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

FIGURE 26

Growth in Higher-Income Renters Has Helped to Sustain Rental Demand



Note: Income categories are adjusted to 2017 dollars using the CPI-U for All items.
Source: JCHS tabulations of US Census Bureau, Current Population Surveys via IPUMS CPS.

Indeed, the number of renter households making less than $15,000 declined by 451,000 in 2017–2018. Despite these positive trends, though, more than half of all renter households still make less than $45,000. In fact, the real annual median renter income fell slightly from $40,850 in 2017 to $40,530 in 2018.

CONSTRUCTION STILL GOING STRONG

Whether measured by completions, starts, or permits, rental housing construction remained strong in 2018. Even after a 5 percent dip last year, the number of completed rentals was close to a 30-year high at 360,000 units, including 316,000 in multifamily buildings with at least two units. Rental starts were up 5 percent from 2017, to 392,000 units, with nearly 90 percent in multifamily buildings. Permits for new units in multifamily structures with at least five apartments totaled 427,400 units in 2018, a slight increase from the 424,800 permitted in 2017.

According to the Survey of Construction, 53 percent of new multifamily rentals completed in 2017 were in properties with at least 50 units, while only 6 percent were in buildings with less than 10 units. Many newly completed apartments offer added amenities. For example, 71 percent of the units that came on the market in 2017 had access to an on-site swimming pool and almost 90 percent had in-unit laundry.

While no doubt desirable, these amenities have helped to lift asking rents. The Survey of Market Absorption shows a median asking rent of $1,670 for new apartments in unsubsidized multifamily buildings completed in the first quarter of 2018. By comparison, the American Community Survey reported a median asking rent in 2017 of just $1,010 for apartments in buildings with at least five units. Nationwide, 29 percent of newly completed apartments in early 2018 had asking rents at or above $2,050 while another 35 percent had rents between $1,450 and $2,049. Median asking rents for new units were highest in the Northeast at $2,260—a full $1,000 above the median in the Midwest. Nearly three-quarters of multifamily rental units completed in 2018 were in the South (43 percent) and West (29 percent), where median asking rents topped $1,500.

In addition, American Community Survey 5-year estimates indicate that 92 percent of occupied rental units built between 2014 and 2017 were located in metropolitan areas with populations of 50,000 and above. Of these units, 56 percent were in suburban neighborhoods and the remainder in core cities. Meanwhile, only 6 percent of occupied rental units added in 2014–2017 were in smaller micropolitan areas and 2 percent in rural areas. Compared with the locations of existing rentals, the shares of new units built in urban, micropolitan, and rural areas are slightly lower while the share built in suburban areas is slightly higher.

Although the number of renter households declined in 2018, demand for newly constructed units remained steady with the growth in higher-income households. According to the Survey of Market Absorption, 79 percent of apartments completed in 2017 were rented before the second half of 2018—on par with absorption rates in the early 2000s before the housing market downturn. RealPage data for the first quarter of 2019 confirm that demand for professionally managed apartments is closely tracking new rentals **(Figure 27).** At the regional level, demand early this year modestly exceeded new supply in the Northeast and Midwest, while supply essentially matched demand in the South and West.

SHIFTS IN THE EXISTING RENTAL STOCK

The nationwide supply of occupied or vacant housing units for rent fell by 338,000 between 2016 and 2017—the first net reduction in the number of rental units since 2006 and the largest annual decline in the last 15 years. The decrease in rental housing was widespread, occurring in more than half (53 percent) of all 383 metro areas.

Single-family rentals accounted for the largest losses, falling by more than 250,000 units in 2017. Even with this sizable decline, though, single-family homes still make up about a third of the national rental stock, or about 15.8 million units. Moreover, since most of these lost single-family rentals were built between 2000 and 2009, it is likely that they were converted to owner occupancy rather than permanently removed from the housing stock. Just under half of the lost single-family rental units were in the South, where single-family homes make up 38 percent of the rental stock. Although the number of single-family rentals increased in the Northeast in 2017, single-family homes still represent only a fifth of the region's rental supply.

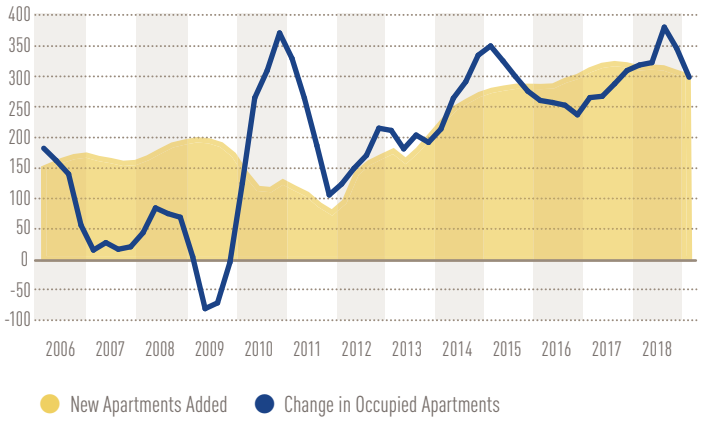
Some 142,000 rentals lost in 2017 were in multifamily buildings with two to four units. Like the drop in single-family rentals, conversions to owner occupancy likely explain some of the decline in rental units in smaller buildings. Indeed, the share of households living in these buildings that rented their apartments dropped slightly from 83.4 percent to 82.7 percent in 2017.

While rental losses have been concentrated in smaller structures, new construction has continued to add units in larger buildings. The number of rentals in buildings with 20 or more apartments rose by 201,000 from 2016 to 2017, with just over half of these additions in buildings with at least 50 apartments. While somewhat smaller than in previous years, the increase in rental units in buildings with 20 or more units in 2016–2017 was the fourth annual net gain in a row, bringing total additions from 2013 to 2017 in larger buildings to more than 1 million apartments.

FIGURE 27

Apartment Demand Continues to Grow in Line with Additions to Supply

Rental Units (Thousands)



Note: Change in occupied apartments, or net unit absorptions, is the change in physically occupied units from one period to the next.
Source: RealPage data.

CONTINUING TIGHTNESS OF RENTAL MARKETS

Rents nationwide continued to climb in 2018, up 3.6 percent for the year according to the Consumer Price Index. While this was a slight deceleration from 3.8 percent in 2017, rent growth picked up pace again in the first months of 2019. Year-over-year rent growth hit 3.8 percent in April, more than double the rate of inflation for other items. RealPage data for multifamily apartments in 150 metros also show an acceleration, with nominal rent growth increasing from 2.6 percent in the first quarter of 2018 to 3.3 percent in the first quarter of 2019. Meanwhile, CoreLogic data indicate that rent growth for single-family units increased from 2.7 percent in January 2018 to 3.2 percent in January 2019.

RealPage data also show that rents for multifamily units are rising fastest in the West, where year-over-year growth climbed from 3.5 percent at the beginning of 2018 to 3.7 percent in the first quarter of 2019. Rents were also up 3.2 percent in the South in early 2019, but less than 3.0 percent in the Midwest and Northeast.

Of the 150 metros tracked by RealPage, 87 posted nominal increases in rents for multifamily units above 3.0 percent from the first quarter of 2018 to the first quarter of 2019. In 25 of those metros (including Eugene, Gainesville, and Phoenix), rents rose by more than 5.0 percent. Nominal rents declined in only three metros (College Station, Fargo, and Santa Rosa) over this period.

Rent growth in all segments of the market continued in early 2019. With demand from higher-income households increasing, rent growth for higher-quality properties (with a CoStar rating of four or five stars) rose from 2.1 percent at the beginning of 2018 to 2.9 percent at the beginning of this year. At the same time, rent increases for lower-quality properties (with a CoStar rating of one or two stars) slowed slightly from 3.2 percent to 3.0 percent over this period. This is the weakest growth in that segment in the last four years, coinciding with the drop in the number of lowest-income renter households. Nevertheless, the persistent rise in rents for lower-quality units remains a cause for concern.

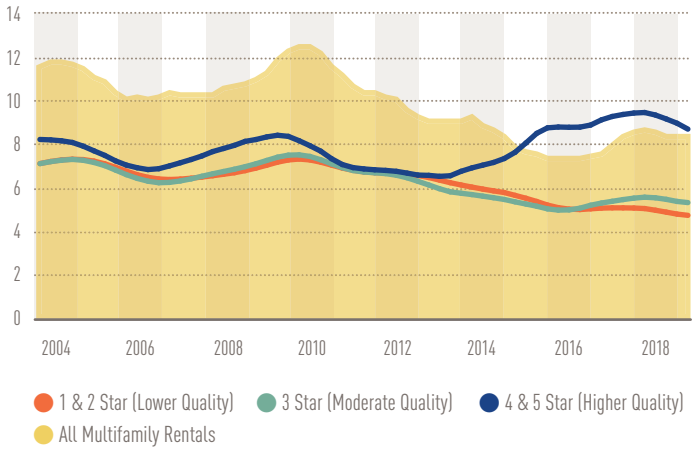
Low vacancy rates have kept the pressure on rents. The Housing Vacancy Survey reports a further decline in the annualized rental vacancy rate from 7.2 percent in the first quarter of 2018 to 6.9 percent in 2019. Annualized vacancy rates are lowest in the West (4.8 percent) and the Northeast (5.3 percent), although tightening is evident across all regions. In addition, rental vacancies in 94 of the 150 metros tracked by RealPage fell from the beginning of 2018 to the beginning of 2019.

Vacancy rates also dipped across property classes **(Figure 28).** Rates for CoStar's top-ranked properties declined through 2018 to 8.6 percent at the beginning of 2019 after several years of softening. At the same time, the rate for lower-quality properties fell from 5.0 percent in the first quarter of 2018 to just 4.8 percent in the first quarter of 2019, while that for moderate-quality properties edged down from 5.6 percent to 5.4 percent. The Housing Vacancy Survey also shows a year-over-year decline in single-family rental vacancies from 6.2 percent to 5.8 percent in the first quarter of 2019.

FIGURE 28

Rental Vacancy Rates Fell Across the Board in 2018

Share of Units Vacant (Percent)



Notes: Apartment quality is based on the CoStar Building Rating System. CoStar data include market-rate apartments in buildings with five or more units. Housing Vacancy Survey data include all apartments in buildings with five or more units. Vacancy rates are smoothed four-quarter trailing averages.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Surveys, and CoStar data.

HEALTHY RENTAL PROPERTY PERFORMANCE

With steady rent gains and low vacancy rates, net operating incomes for multifamily properties remained strong in 2018. The National Council of Real Estate Investment Fiduciaries reports that annualized growth of net operating income jumped from 3.4 percent in the first quarter of 2018 to 7.5 percent in the first quarter of 2019. At the same time, National Apartment Association data show a 2.1 percent nominal rise in operating expenses and an 11.3 percent increase in capital expenditures. As a result, annualized returns on investment held steady at 5.9 percent in early 2019—well below the 10.4 percent average in 2013–2016 but still far outstripping overall inflation.

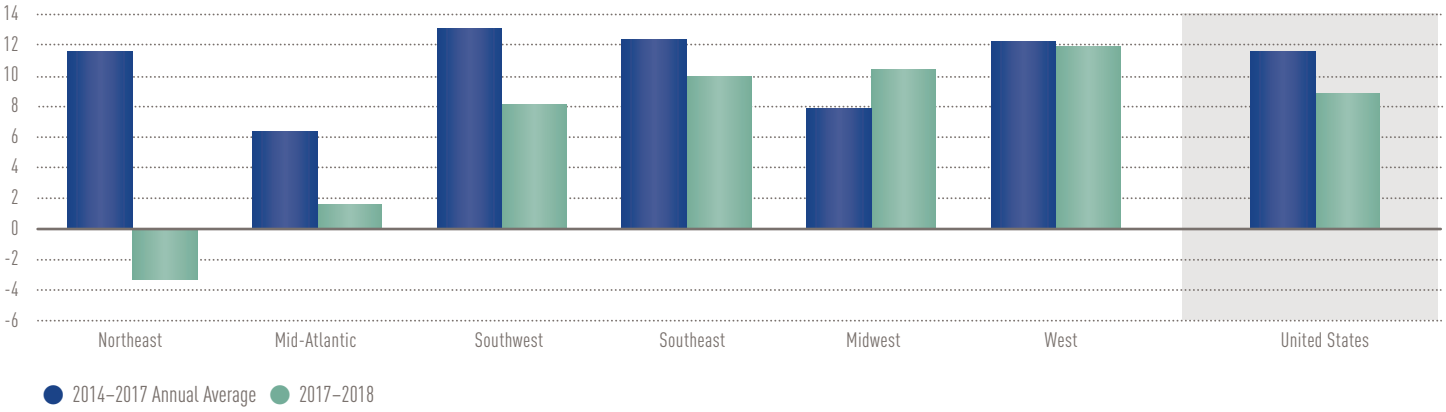
According to the Real Capital Analytics Commercial Property Price Index, apartment prices cooled at the end of 2018 but still posted year-over-year growth of 9.0 percent. Growth in rental property prices continued to slow through the beginning of 2019, but prices were still up 7.1 percent year-over-year in April. The largest price increases in 2018 were in the West at 11.9 percent **(Figure 29).** The Northeast was the only region where nominal property prices lost ground last year, declining 3.3 percent after averaging 11.6 percent fourth-quarter to fourth-quarter growth for the previous three years. Nationally, prices rose the most for properties in car-dependent suburbs and for garden-style apartment buildings.

The ongoing rise in property prices has increased the cost of investing. The Freddie Mac Apartment Investment Market Index, measuring the relative value of multifamily investments, dropped 7.5 per-

FIGURE 29

Despite Some Slowdown Last Year, Apartment Property Prices Continue to Climb in Most Regions

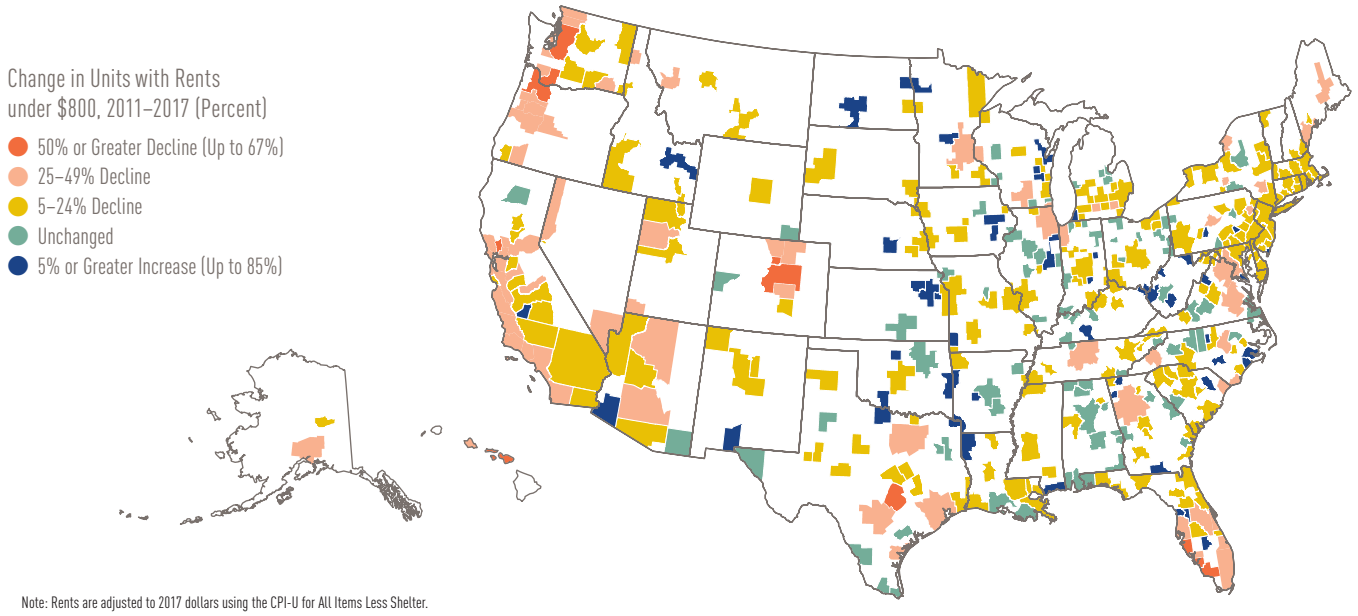
Year-over-Year Change in Prices (Percent)



Note: Price growth is calculated from fourth quarter to fourth quarter.
Source: JCHS tabulations of Real Capital Analytics data.

FIGURE 30

The Low-Rent Stock in Most Metros Has Declined Substantially Since 2011



Note: Rents are adjusted to 2017 dollars using the CPI-U for All Items Less Shelter.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates and Missouri Census Data Center data.

cent year-over-year at the end of 2018, indicating that growth in net operating incomes did not offset the rise in prices. Declines in all 13 metros covered by the index suggest that conditions are becoming less favorable for new multifamily investors.

The capitalization rate, or annual net operating income divided by property price or value, is an indicator of the rate of return investors can expect over one year. According to Real Capital Analytics, cap rates were largely unchanged from 2017, but stood at just 5.4 percent in the last quarter of 2018—their lowest point in a decade. Meanwhile, CoStar data indicate that cap rates averaged 5.0 percent for their highest-rated multifamily units in the first quarter of 2019 and 5.4 percent for mid- and lower-quality units. Across all property classes, cap rates are lowest in top-tier markets such as Boston, Los Angeles, and New York, and highest in bottom-tier markets such as Cleveland, Memphis, and Oklahoma City.

Rising property prices have not slowed transactions, however. Real Capital Analytics reports 9 percent year-over-year growth in apartment transaction volumes in the fourth quarter of 2018, following a slight dip in 2017. The mid- and high-rise segment led in deal volume with a 34 percent annual increase, while the garden apartment segment posted a relatively weak 2 percent uptick. Dallas and Los Angeles had the highest sales volumes in 2018, with transactions totaling more than $9.2 billion each.

Access to financing has been critical to these property purchases. The Mortgage Bankers Association Originations Index, which tracks origination volumes for multifamily properties, increased 32 percent year-over-year at the end of 2018—double the pace at the end of 2017. Multifamily mortgage debt outstanding was at a decade-long high of $1.4 trillion. With returns holding steady, delinquencies for multifamily debt last year were at their lowest level since the Federal Deposit Insurance Corporation began reporting these data in 1991. The noncurrent rate was just 0.14 percent in 2018, almost a full percentage point lower than in 2013.

Multifamily financing activity will likely remain stable this year, although credit conditions may tighten. A moderate net share of banks responding to the Federal Reserve's Senior Loan Officer Opinion Survey reported tightening lending standards. At the same time, a small net share of respondents also noted weakening demand for multifamily lending.

SHRINKING SUPPLY OF LOW-COST RENTALS

The supply of low-rent housing continues to decline in metro markets across the country **(Figure 30).** In 2016–2017 alone, the stock of units renting for less than $800 fell by 1 million or 4.9 percent. Moreover, the number of units in this rent range decreased every year since 2011, bringing the total net decline to four million (17 percent). Just over three-quarters of all 383 metros with populations of at least 50,000 lost nearly 20 percent of their low-cost stocks on average in 2011–2017.

New construction has not made up for these declines. According to the Survey of Market Absorption, only 9 percent of apartments in

unsubsidized multifamily buildings completed in the first quarter of 2018 had asking rents below $1,050, and only 4 percent rented for less than $850. The National Multifamily Housing Council also notes that new construction has not even served the middle of the market, with the share of new apartments affordable to median-income renter households dropping to less than 3 percent annually over the last decade. The focus of new construction on higher-cost units has thus shifted the overall distribution of rents upward.

Meanwhile, low-rent units are increasingly concentrated in older buildings, which puts them at a greater risk of loss from the stock and their residents at greater risk of displacement. Indeed, the share of units renting for under $800 that are at least 50 years old increased from 35 percent in 2007 to 43 percent in 2017. About half of the households living in low-rent units built before 1970 are single persons, while another 26 percent are families with children. About a fifth are headed by an adult age 65 and over. Moreover, nearly half of these tenants spend more than 30 percent of their incomes on rent and utilities, despite living in the lowest-cost housing that the market has to offer.

THE OUTLOOK

The modest decline in the number of renter households over the last two years may deliver some short-term relief from rising rents. Thus far, however, any positive impact of the decline has been offset by the ongoing increase in higher-income renters, who drive a growing share of market activity, and by low vacancy rates, which are keeping overall conditions tight.

Going forward, demographic trends should support strong rental demand. The Joint Center estimates that renter household growth will total 4.2 million by 2028 if homeownership rates remain near their current levels. And even if the homeownership rate rises by 1.6 percentage points over the decade, the high-end projection indicates that renter household growth will still total at least 2.1 million given expected increases in the adult population. On the supply side, however, conditions at the lower end of the market will remain challenging as millions of low-income households compete for an already insufficient number of affordable rental units.

6 / HOUSING CHALLENGES

Despite signs of progress, the shortage of affordable housing remains acute, especially for lowest-income households. While the number of cost-burdened homeowners has fallen substantially since the peak of the housing crisis, the number of cost-burdened renters is still near record highs. After years of declines, homelessness increased slightly in 2018, reflecting widespread housing insecurity. In the absence of any meaningful increase in federal funding for affordable housing, some states and localities are acting to expand the supply and provide new protections for tenants.

LITTLE RELIEF FOR COST-BURDENED RENTERS

At last measure in 2017, the number and share of households paying more than 30 percent of their incomes for housing—the traditional measure of cost burdens—continued to decline. In that year alone, the number of cost-burdened households fell by 260,000, to 37.8 million, bringing the total drop since the 2010 peak to nearly 5.0 million. The overall burden rate also fell to 31.5 percent in 2017, down 5.7 percentage points from the 2010 peak.

At the same time, however, 18.2 million severely burdened households were paying more than 50 percent of their incomes for housing. Although the number of these severely burdened households also fell by 255,000 in 2016–2017, the share was unchanged at 15.2 percent—just 2.6 percentage points lower than in 2010.

Homeowners have accounted for much of the reduction in cost-burdened households, in part because many financially stretched owners lost their homes to foreclosure, managed to refinance into lower-cost mortgages, or benefited from the recent growth in incomes. The number of cost-burdened owners stood at 17.3 million in 2017, down nearly 5.5 million from the 2010 peak **(Figure 31).** With the recent rebound in homebuying, the share of owners with cost burdens fell to 22.5 percent and the severely burdened share fell to 9.7 percent.

For renters, however, there are only small signs of improvement **(Figure 32).** The number of cost-burdened renter households stood at 20.5 million in 2017, just 770,000 below the peak in 2014 and 5.7 million above the level in 2001. As a result, renter households with cost burdens continued to outnumber homeowners with cost burdens, as they have since 2012. The cost-burdened share of renter households inched down to 47.4 percent in 2017, 3.4 percentage points below the 2011 high but up 6.8 percentage points from 2001. About a quarter of all renters—some 10.7 million households—faced severe housing cost burdens in 2017.

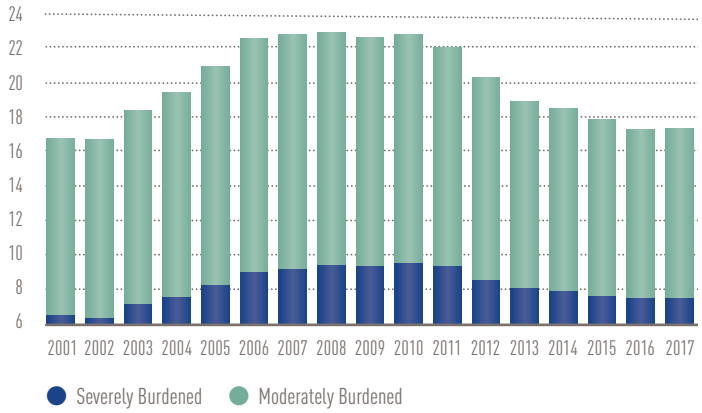
LOW-INCOME AND MINORITY HOUSEHOLDS ESPECIALLY BURDENED

Not surprisingly, households with the lowest incomes have the highest cost-burden rates. Indeed, the share of cost-burdened renter households earning less than $15,000 held at 82.8 percent in 2017, down only 0.5 percentage point from 2016. Almost three-quarters

FIGURE 31

While the Number of Cost-Burdened Homeowners Has Receded...

Owners with Cost Burdens (Millions)

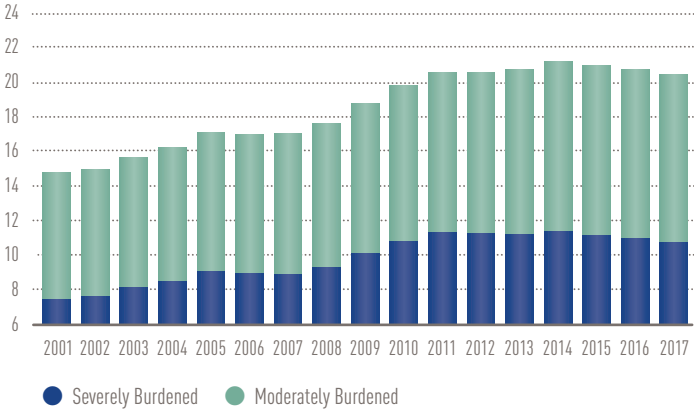


Notes: Cost-burdened (severely cost-burdened) households pay more than 30% (more than 50%) of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

FIGURE 32

...The Number of Cost-Burdened Renters Remains Close to Peak Levels

Renters with Cost Burdens (Millions)



Notes: Cost-burdened (severely cost-burdened) households pay more than 30% (more than 50%) of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

(71.9 percent) of these renters were severely burdened. Similarly large shares of same-income homeowners were cost burdened (83.8 percent) or severely burdened (67.9 percent).

Cost-burden rates are also rising rapidly among renters higher up the income scale. The share of burdened renters with incomes in the $30,000–44,999 range increased 2.3 percentage points in 2016–2017, to 53.3 percent—up sharply from 39.0 percent in 2001. Meanwhile, the cost-burdened share of households with incomes in the $45,000–74,999 range increased 1.1 percentage points over the year, to 24.8 percent, or nearly double the 13.0 percent share in 2001.

Affordability is particularly challenging in the nation's 25 highest-cost metros, where over three-quarters of renters making $30,000–44,999 were cost burdened in 2017, compared with just one-third of same-income renters in lowest-cost metros **(Figure 33).** In addition, more than two-fifths of renters in highest-cost metros earning $45,000–74,999 were cost burdened, compared with less than a tenth of same-income renters in the lowest-cost metros. Note, however, that households in this income range would be considered very low income in some high-cost areas such as San Francisco, where 50 percent of the HUD area median income for a family of four is $80,600.

Although declining in 2017, cost-burden rates for minority households were significantly higher than for white households whether they own or rent their housing. The cost-burdened share is highest among black renters at 54.9 percent, followed closely by Hispanics at 53.5 percent. The rates for Asians and other minorities are noticeably lower at 45.7 percent, but still above the white share of 42.6 percent. Among homeowners, 30.2 percent of blacks, 29.6 percent of Hispanics, and 27.3 percent of Asian/others were cost burdened in 2017, compared with 20.4 percent of white homeowners. The lower average incomes of blacks and Hispanics contribute to, but do not fully explain, this racial/ethnic disparity since black and Hispanic households earning less than $15,000 are still more likely to be cost burdened than whites at that income level.

TRADEOFFS FORCED BY HIGH HOUSING COSTS

Especially for low-income households, spending an outsized share of income on housing cuts into spending on other basic needs. The 2017 Consumer Expenditure Survey indicates that households with moderate cost burdens (30–50 percent of total expenditures) in the bottom expenditure quartile had just $890 in non-housing expenditures each month. Severely cost-burdened households in the bottom quartile spent only $540 each month on all other necessities.

Compared with households with housing they could afford, moderately cost-burdened households in the lowest expenditure quartile spent 13 percent less on food, 40 percent less on healthcare, and 23 percent less on transportation in 2017. The differences are even starker for severely burdened households, who spent 37 percent less on food, 77 percent less on healthcare, and 60 percent less on transportation.

Severe housing cost burdens have serious consequences for health and well-being, particularly for young children or older adults, who especially need adequate nutrition and medical care. Indeed, fami-

lies with children in the bottom expenditure quartile with severe cost burdens spent less than $700 on average for all non-housing costs per month in 2017, including just $310 for food—well under the $570 lowest-cost plan recommended by the US Department of Agriculture for a family of four. These families spent 35 percent less on food, 46 percent less on clothes, and 74 percent less on healthcare than unburdened households in the bottom expenditure quartile **(Figure 34).**

Similarly, severely cost-burdened households headed by adults age 65 and over in the bottom expenditure quartile spent about $500 each month on all non-housing expenditures. Compared with same-age adults in the bottom expenditure quartile without housing cost burdens, these older households with severe burdens spent 44 percent less on food and 75 percent less on healthcare.

THE SQUEEZE ON THE AFFORDABLE STOCK

Whether privately owned or subsidized, affordable housing is in short supply. According to the National Low Income Housing Coalition 2019 Gap Report, the biggest shortfall is in housing affordable to extremely low-income renter households (earning up to 30 percent of area median income). In 2017, only 4 million rental units were affordable and available to the nation's 11 million renters in this income group. This translates to 37 affordable and available units for every 100 extremely low-income renters—a slight improvement from 35 units per 100 renters in 2016, but still a substantial shortage.

Affordable housing opportunities hardly improve when expanding the group to include very low-income renters (earning less than 50 percent of the area median). The 17.6 million households in this income range make up 40 percent of renters. In this case, the housing shortfall is 7.4 million units, with 58 units affordable and available for every 100 households.

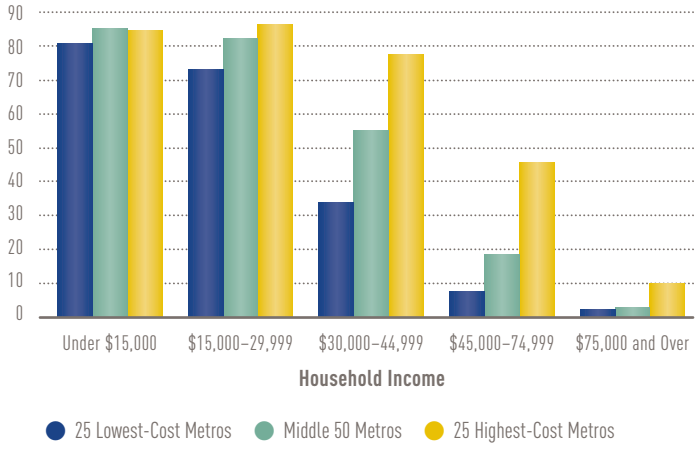
These shortages put a strain on the subsidized housing stock. HUD's 2018 Picture of Subsidized Households data indicate that there were 955,000 occupied public housing units, 1.2 million occupied Section 8 project-based units, and 2.2 million Housing Choice Vouchers in use last year. Compared with 2010, the number of voucher-supported units was up by about 82,000 and the number of project-based Section 8 units was up by about 28,000. The stock of public housing fell by more than 100,000 units over this period, although a portion of these were converted to Section 8 contracts through the Rental Assistance Demonstration (RAD) program.

Meanwhile, the Low-Income Housing Tax Credit (LIHTC) program added 570,000 affordable units between 2010 and 2018, bringing total production of low-income units since 1987 under this program to 2.5 million. However, there is a significant overlap of LIHTC and other subsidy programs, given that the tax credits are often used to help preserve existing subsidized developments. In addition, large shares of extremely low-income LIHTC residents receive additional rental assistance to help make their units affordable.

FIGURE 33

In Expensive Rental Markets, Even Higher-Income Households Face Cost Burdens

Share of Cost-Burdened Renters (Percent)

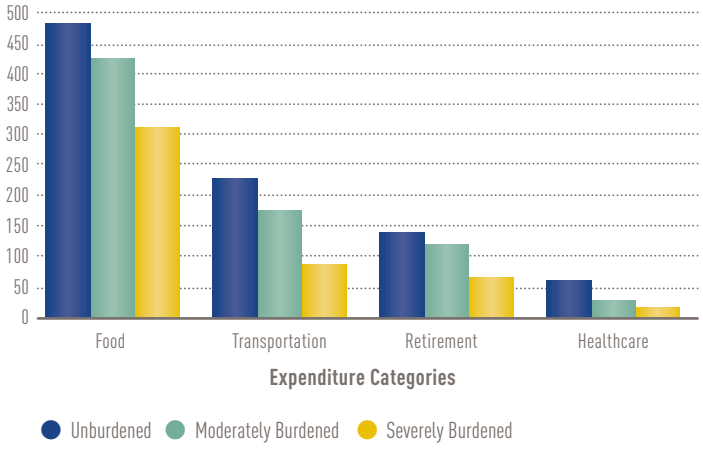


Notes: Cost-burdened households pay more than 30% of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens. The 25 lowest- (highest-) cost metros are in the bottom (top) quartile of the 100 largest markets for median gross rent.
Source: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates and Missouri Census Data Center data.

FIGURE 34

When Burdened with High Housing Costs, Lowest-Income Families with Children Spend Little on Other Basic Needs

Monthly Expenditures (Dollars)



Notes: Expenditures are averages for households with children under age 18. Low-income families with children are in the bottom quartile of families with children ranked by total spending. Households allocating more than 30% (more than 50%) of expenditures to housing are moderately (severely) cost burdened.
Source: JCHS tabulations of Bureau of Labor Statistics, 2017 Consumer Expenditure Survey.

The 2019 Consolidated Appropriations Act increased HUD funding by nearly 2 percent, to $53.8 billion. This included an additional $583 million for Housing Choice Vouchers (for a total budget of $22.6 billion), $232 million for Section 8 Project-Based Rental Assistance (for a total budget of $11.7 billion), and sustained funding for several other programs. Notably, the spending bill provided new funding for initiatives such as the Housing Mobility Demonstration program, which helps voucher-holders move to opportunity-rich neighborhoods with high-quality schools.

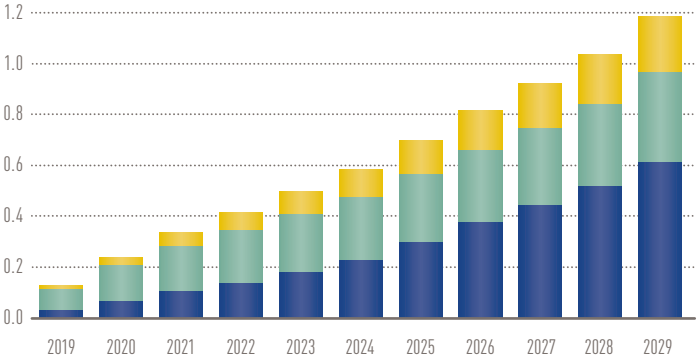
However, some of these budget increases only help programs keep up with inflation and do not go far enough to close gaps in need. Funding for public housing is a case in point. Operating funds for public housing were increased by $103 million to just under $4.7 billion, and capital funds were raised by $25 million to roughly $2.8 billion. According to a 2010 study, however, the capital spending backlog at that time was already $26 billion and expected to grow by $3.4 billion annually, bringing the projected backlog to $56.6 billion by 2019. Even this high number is likely an underestimate, given that the New York City Housing Authority alone assessed its five-year capital spending need at $31.8 billion in 2017.

In addition to rising operating costs and inadequate federal funding, a significant number of housing units are at risk of loss from the affordable stock. According to JCHS tabulations of the National Housing Preservation database, affordability restrictions could expire on about 1.2 million rental units by 2029 **(Figure 35).** This includes 611,000 units added through the LIHTC program, 352,000 units of Section 8 project-based housing, and 221,000 units under other programs.

FIGURE 35

Affordability Restrictions on Nearly 1.2 Million Rental Units Are Set to Expire by 2029

Cumulative Units with Expiring Affordability Periods (Millions)



Notes: Data include properties with active subsidies as of January 1, 2019. Other includes units funded by HOME Rental Assistance, FHA Insurance, Section 236 Insurance, Section 202 Direct Loans, USDA Section 515 Rural Rental Housing Loans, and units in properties with more than one subsidy type expiring on the same day. Estimates for properties with multiple subsidies with different expiration dates are conservative. The NHPD does not account for state incentives to extend affordability restrictions or for potential early departures from the programs.

Source: JCHS tabulations of Public and Affordable Housing Research Corporation and National Low Income Housing Coalition, National Housing Preservation Database.

A recent study by the National Low Income Housing Coalition concluded that the LIHTC units most at risk of leaving the subsidized stock are located in desirable neighborhoods where rents are high. In addition, the report pointed out that LIHTC units in less desirable neighborhoods may remain affordable in the short term but will need more resources than just their rents to cover the costs of necessary repairs and capital improvements.

UPTURN IN HOMELESSNESS

Although difficult to measure, housing insecurity—whether caused by cost burdens, overcrowding, inadequate housing quality, or other conditions that leave households with only tentative shelter—is all too common in the United States. Over 805,000 renter households were threatened with eviction in 2017, according to American Housing Survey data. When all renter respondents were asked where they would go if evicted, 60 percent said that they would move to a new home, but 34 percent said they would have to move in with family or friends. Another 5 percent said that they would either have to split up their households and move to different places or go to a homeless shelter.

And despite considerable progress over the previous decade, homelessness edged up 0.3 percent in 2018, to 552,830. While the number of people in shelters (65 percent of the homeless population) dropped slightly, the number of unsheltered homeless people rose by 2.3 percent **(Figure 36).** The most notable increases were in South Dakota (up 23.0 percent), Connecticut (up 17.4 percent), and Massachusetts (up 14.2 percent), compared with an average rise of 7.7 percent in states with increases.

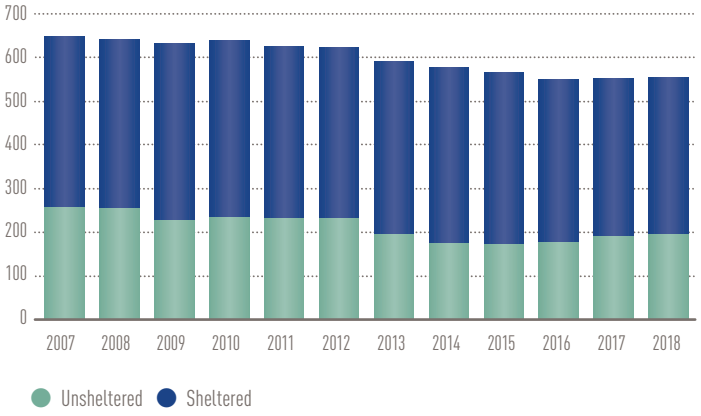
Rates of homelessness vary dramatically across states. New York is at the top of the list with 47 people experiencing homelessness per 10,000 residents, compared with an average of 14 per 10,000 across all states. At the same time, however, New York has one of the lowest shares of unsheltered homelessness, with less than 5 percent of its total homeless population living outside of shelters. Homelessness rates are also unusually high in Hawaii (46 per 10,000), Oregon (35 per 10,000), and California (33 per 10,000), as are their unsheltered shares (53 percent in Hawaii, 62 percent in Oregon, and nearly 70 percent in California). At the other extreme, Louisiana, Mississippi, and West Virginia all had homelessness rates under 7 per 10,000 in 2018.

Among several states and localities working to reduce homelessness, California voters stand out for voting for an initiative allocating $2 billion toward homelessness prevention. In San Francisco, voters also supported a tax on larger businesses (with over $50 million in revenues) to generate $250–300 million per year for homelessness prevention and services. Ballot measures also passed in Berkeley and Oakland that increased or instituted new taxes to generate additional revenue for this purpose.

FIGURE 36

Although Homelessness Is Down Overall, the Unsheltered Population Began to Rise in 2015

Homeless Population (Thousands)



Note: Homeless persons are considered sheltered if they are staying in emergency shelters, transitional housing, or safe havens.
Source: JCHS tabulations of HUD, 2018 Annual Homeless Assessment Report, Point-in-Time Estimates of Homelessness.

At the federal level, the 2019 appropriations act raised homeless assistance grants by $123 million, to a total of $2.6 billion. This includes $80 million for demonstration programs to address youth homelessness, $50 million for domestic violence and homelessness programs, and $40 million for HUD-VASH, a partnership between HUD and the Department of Veterans Affairs that provides services and housing vouchers to homeless veterans. After several years of annual reauthorizations, the US Interagency Council on Homelessness—the federal agency charged with coordinating efforts to reduce homelessness—also received authorization to continue its work through 2028.

STATE AND LOCAL EFFORTS TO EXPAND THE AFFORDABLE SUPPLY

With federal support falling far short of need, some state and local governments raised funds for affordable housing through ballot initiatives. Among the largest increases in state funding was again in California, where voters authorized $4 billion in bonds for affordable housing in 2018. In addition, voters in the Portland metropolitan area passed a measure allocating $653 million for this purpose. Voters in Austin, Berkeley, and Charlotte also approved ballot measures providing substantial funds for affordable housing last year. Meanwhile, new legislation in Massachusetts authorized $1.8 billion in new capital spending for affordable housing, in addition to $650 million for modernizing and redeveloping public housing.

State and local jurisdictions are also finding new ways to leverage private sector resources. For example, Oregon voters recently passed a measure enabling municipalities to use bond revenue to invest in affordable housing owned by public-private partnerships. Some private sector actors are also launching their own initiatives. For example, a consortium of businesses and philanthropic organizations in San Francisco, Partnership for the Bay, plans to raise $540 million to fund affordable housing development. Microsoft also announced a $500 million program to build and preserve low- and middle-income housing in the Seattle area, as well as to fund eviction prevention and homelessness services. Whether these are one-time events or an emerging trend in corporate support remains to be seen.

Local governments have also made zoning and other regulatory reforms to help reduce the cost of building affordable housing. For example, Minneapolis passed a plan to allow construction of duplexes and triplexes in areas zoned for single-family homes and to eliminate parking requirements for new housing. Other cities have focused on legalizing and enabling the addition of accessory dwelling units (ADUs), small units located on the same lots as single-family homes. Portland has been a frontrunner in these efforts, issuing permits for over 3,200 ADUs in 2008–2018. While these efforts to expand the supply of affordable housing do not require public funding, their passage is often protracted and contentious, explaining in part why more localities do not make these types of regulatory changes.

In the face of the ongoing affordability crisis, renter protection laws have gained some traction. In 2019, Oregon enacted legislation capping annual rent increases at 7 percent plus inflation and mandating payments to tenants for no-fault evictions after 12 months of occupancy. However, a ballot measure to repeal California's restrictions on rent control was soundly defeated.

At the same time, voters in Oakland made evictions more difficult by no longer exempting owner-occupied, two- and three-unit buildings from the city's just-cause eviction law. The US Marshals Service in Washington, DC, and the DC City Council both added new tenant eviction protections, including requiring more advance notice and not removing tenant possessions during evictions. Portland also passed a law requiring landlords to pay relocation costs for tenants in the case of no-cause evictions or large rent increases that lead to tenant departures. In general, though, most jurisdictions do not have these types of renter protection laws.

CONTINUED IMPROVEMENTS IN ENERGY EFFICIENCY

The latest data from the US Energy Information Administration (EIA) show that home energy consumption declined from 2005 to 2015, with average energy use per household falling from 95 million Btus to 77 million Btus. In addition, energy use per square foot dropped from nearly 46,000 Btus in 2009 to 38,400 Btus in 2015. As a result, total residential energy consumption was relatively steady for the decade despite growth in the number of households and in the average size of homes.

These trends reflect the greater efficiency of newly built housing and energy-related updates to the existing stock, including upgrades of heating and cooling systems, addition of insulation, and replacement of older, less efficient appliances. With these improvements, US residential energy consumption fell in 2009–2015

even though use of air conditioning increased substantially in the Northeast and Midwest.

Despite the reductions in residential energy use, expenditures for utilities still add to the housing cost burdens of low-income households. According to the 2017 American Community Survey, the typical household earning less than $15,000 per year spent 17.5 percent of that income on energy costs, with shares slightly higher for homeowners (20.6 percent) than for renters (15.3 percent). Even households earning between $15,000 and $29,999 dedicated 8 percent of incomes to utility costs, well above the 3.1 percent median for all households. Indeed, the EIA reports that nearly a third of US households faced energy insecurity in 2015, whether because they had difficulty paying their bills, received disconnection notices, or had to keep their homes at unhealthy or unsafe temperatures for at least one month.

RISING THREAT OF NATURAL DISASTERS

The frequency and intensity of natural disasters are increasing. By the National Oceanic and Atmospheric Administration's count, 14 events in 2018 caused at least $1 billion in damage, with costs for the year amounting to nearly $92 billion. In the 1980s, however, disasters of that magnitude averaged less than three per year while the costs of damage were on the order of $17 billion **(Figure 37).**

The destructive impacts on the nation's housing stock have been profound. The CoreLogic 2018 Natural Hazard Report found that flooding and wind from Hurricane Florence alone damaged some 700,000 residential and commercial properties in North Carolina, South Carolina, and Virginia. In California, last year's wildfires destroyed over 18,800 structures in Paradise and another 1,600 in Malibu.

In the aftermath of these events, a growing number of homeowners have had to spend ever-larger sums to restore their homes. According to the American Housing Survey, real homeowner outlays for disaster-related improvements have doubled from $7 billion annually in the late 1990s to $14 billion so far in the 2010s.

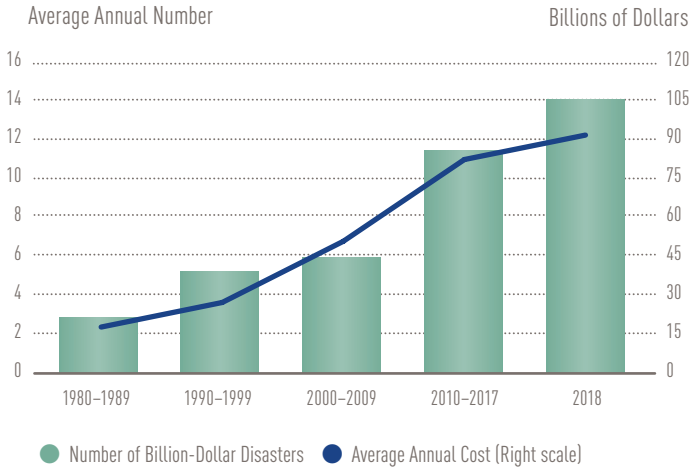
THE OUTLOOK

After five straight years of income growth, there are signs that housing affordability has improved. The share of cost-burdened homeowners has retreated to the lowest levels this century, while the share of cost-burdened renters has continued to edge down from its peak in 2011. Compared with a decade ago, the incidence of homelessness has also declined.

Still, overall progress since the housing market crash has been modest, particularly in light of the strong economy. With rental demand on the rise, the number of cost-burdened renters is just short of record levels and millions higher than in 2001. And while the overall homeless population has fallen for five years, unsheltered homelessness has ticked up, especially in the Western states with the highest housing costs.

FIGURE 37

Highly Damaging Natural Disasters Have Become Much More Frequent and Costly



Note: Values are adjusted to March 2019 dollars using the CPI-U for All Items
Source: JCHS tabulations of National Oceanic and Atmospheric Administration, Billion-Dollar Weather and Climate Disasters: Time Series.

The inability of so many individuals and families to secure affordable housing reflects the fact that increases in rents and existing home prices have continued to outrun income growth. In addition, the prices of new housing are largely affordable only to households with substantial incomes. Today's tight housing market conditions also represent the cumulative impact of years of inadequate federal funding for rental assistance. While states and localities have begun to devote more (and, in some cases, considerably more) resources to affordable housing, their efforts do not come close to the scale of the problem.

Second only to affordability, climate change is an urgent housing-related issue. Natural disasters displace hundreds of thousands of people each year and inflict billions of dollars of damage on the housing stock. In addition to developing disaster response systems that provide timely and effective assistance to affected households, there must be a national commitment to making housing more resilient as well as more energy efficient and carbon neutral.

Perhaps now, more than ever, it is time to take decisive steps to meet these challenges. Indeed, private industry is now pursuing innovative solutions with the goal of revolutionizing the design, construction, and financing of housing. For its part, the public sector is seeking out new sources of revenue for housing programs and making regulatory reforms to help expand the supply of affordable housing. Still, further efforts by both the public and private sectors are essential to make development of moderate-cost housing more feasible and to finally fulfill the nation's promise of decent, affordable homes for all.

7 / ADDITIONAL RESOURCES

The following interactive maps and data tables are a sample of the additional resources available at www.jchs.harvard.edu.

INTERACTIVE MAPS

Shares of Cost-Burdened Homeowners and Renters by Metro Area: 2017

Changes in the Low-Cost Rental Supply by Metro Area: 2011–2017

Shares of Recently Sold Homes Affordable by Metro Area: 2017

Changes in Residential Land Values by County: 2012–2017

DATA TABLES

Cost-Burden Rates by Tenure for States and Metro Areas: 2017

Cost-Burden Rates by Household Income for States and Metro Areas: 2017

Ratios of Median Home Prices to Median Incomes by Metro Area: 1990–2018

Household Headship Rates by Age Group for Metro Areas: 2006 and 2017

Household Growth and Net Domestic Migration by State: 2010–2017

Rental Units by Real Contract Rent for States: 2011 and 2017

TABLE A-1

Housing Market Indicators: 1980–2018

Year	Permits [1] (Thousands)		Starts (Thousands)			Size [4] (Median sq. ft.)		Median Sales Price of Single-Family Homes (Thousands of 2018 dollars)	
	Single-Family	Multifamily	Single-Family [2]	Multifamily [2]	Manufactured [3]	Single-Family	Multifamily	New [5]	Existing [6]
1980	710	480	852	440	222	1,595	915	180.5	n/a
1981	564	421	705	379	241	1,550	930	175.4	n/a
1982	546	454	663	400	240	1,520	925	166.9	n/a
1983	901	704	1,068	635	296	1,565	893	174.8	n/a
1984	922	759	1,084	665	295	1,605	871	178.2	n/a
1985	957	777	1,072	669	284	1,605	882	182.6	n/a
1986	1,078	692	1,179	626	244	1,660	876	197.4	n/a
1987	1,024	510	1,146	474	233	1,755	920	217.0	n/a
1988	994	462	1,081	407	218	1,810	940	225.0	n/a
1989	932	407	1,003	373	198	1,850	940	228.8	180.3
1990	794	317	895	298	188	1,905	955	222.3	176.0
1991	754	195	840	174	171	1,890	980	208.4	178.4
1992	911	184	1,030	170	211	1,920	985	205.1	178.1
1993	987	213	1,126	162	254	1,945	1,005	207.4	178.9
1994	1,068	303	1,198	259	304	1,940	1,015	208.1	181.7
1995	997	335	1,076	278	340	1,920	1,040	208.8	182.5
1996	1,069	356	1,161	316	363	1,950	1,030	212.4	186.0
1997	1,062	379	1,134	340	354	1,975	1,050	217.0	191.7
1998	1,188	425	1,271	346	373	2,000	1,020	224.8	200.5
1999	1,247	417	1,302	339	348	2,028	1,041	232.9	204.3
2000	1,198	394	1,231	338	250	2,057	1,039	236.4	206.0
2001	1,236	401	1,273	329	193	2,103	1,104	239.2	213.8
2002	1,333	415	1,359	346	169	2,114	1,070	254.6	227.4
2003	1,461	428	1,499	349	131	2,137	1,092	258.9	239.2
2004	1,613	457	1,611	345	131	2,140	1,105	285.7	252.4
2005	1,682	473	1,716	353	147	2,227	1,143	300.1	272.8
2006	1,378	461	1,465	336	117	2,248	1,172	297.7	268.0
2007	980	419	1,046	309	96	2,277	1,197	292.2	256.9
2008	576	330	622	284	82	2,215	1,122	261.9	221.8
2009	441	142	445	109	50	2,135	1,113	247.1	196.2
2010	447	157	471	116	50	2,169	1,110	246.4	192.3
2011	418	206	431	178	52	2,233	1,124	242.6	177.5
2012	519	311	535	245	55	2,306	1,098	256.7	185.5
2013	621	370	618	307	60	2,384	1,059	278.5	204.4
2014	640	412	648	355	64	2,453	1,073	295.6	214.1
2015	1,183	487	715	397	71	2,467	1,074	305.4	232.4
2016	1,207	456	782	392	81	2,422	1,101	318.8	243.9
2017	1,282	462	849	354	93	2,426	1,094	329.6	253.8
2018	1,318	465	876	374	97	2,386	1,097	326.4	261.6

Notes: All construction values are adjusted to 2018 dollars by the CPI-U for All Items, while the median sales price for new and existing single-family homes are adjusted to 2018 dollars using the CPI-U for All Items Less Shelter. All links are as of May 2019. n/a indicates data not available.

Sources

1. US Census Bureau, New Privately Owned Housing Units Authorized by Building Permits in Permit-Issuing Places, http://www.census.gov/construction/nrc/xls/permits_cust.xls.
2. US Census Bureau, New Privately Owned Housing Units Started, https://www.census.gov/construction/nrc/xls/starts_cust.xls.
3. US Census Bureau, Shipments of New Manufactured Homes, https://www.census.gov/data/tables/time-series/econ/mhs/shipments.html and JCHS historical tables.
4. US Census Bureau, New Privately Owned Housing Units Completed in the United States by Intent and Design, http://www.census.gov/construction/nrc/xls/quar_co_purpose_cust.xls.
5. US Census Bureau, Median and Average Sales Price of New One-Family Houses Sold, www.census.gov/construction/nrs/xls/usprice_cust.xls.
6. National Association of Realtors® (NAR), Median National Sales Price of Existing Single-Family Homes, obtained from NAR and Economy.com.
7. US Census Bureau, Housing Vacancy Survey, https://www.census.gov/housing/hvs/data/ann18ind.html.
8. US Census Bureau, Annual Value of Private Construction Put in Place, http://www.census.gov/construction/c30/historical_data.html and JCHS historical tables. Single-family and multifamily are new construction. Owner improvements do not include expenditures on rental, seasonal, and vacant properties.
9. Joint Center for Housing Studies, Leading Indicator of Remodeling Activity, https://www.jchs.harvard.edu/research-areas/remodeling/lira.
10. US Census Bureau, Houses Sold by Region, http://www.census.gov/construction/nrs/xls/sold_cust.xls.
11. National Association of Realtors®, Existing Single-Family Home Sales obtained from and annualized by Economy.com, and JCHS historical tables.

Vacancy Rates [7] (Percent)		Value Put in Place [8] (Millions of 2017 dollars)			Remodeling Expenditures[9] (Millions of 2018 dollars)	Single-Family Home Sales (Thousands)	
For Sale	For Rent	Single-Family	Multifamily	Homeowner Improvements	Homeowner Improvements and Repairs	New [10]	Existing [11]
1.4	5.4	161,257	50,911	n/a	n/a	545	2,973
1.4	5.0	143,511	48,219	n/a	n/a	436	2,419
1.5	5.3	107,890	40,432	n/a	n/a	412	1,990
1.5	5.7	182,819	56,592	n/a	n/a	623	2,697
1.7	5.9	208,835	68,216	n/a	n/a	639	2,829
1.7	6.5	203,912	66,622	n/a	n/a	688	3,134
1.6	7.3	238,559	71,107	n/a	n/a	750	3,474
1.7	7.7	259,043	56,248	n/a	n/a	671	3,436
1.6	7.7	255,003	47,347	n/a	n/a	676	3,513
1.8	7.4	244,953	45,179	n/a	n/a	650	3,010
1.7	7.2	216,952	36,996	n/a	n/a	534	2,917
1.7	7.4	183,321	27,929	n/a	n/a	509	2,886
1.5	7.4	218,285	23,433	n/a	n/a	610	3,155
1.4	7.3	243,572	18,752	99,549	n/a	666	3,429
1.5	7.4	274,967	23,855	109,511	n/a	670	3,542
1.5	7.6	252,972	29,479	93,462	181,376	667	3,523
1.6	7.8	273,424	32,537	106,272	185,777	757	3,795
1.6	7.7	274,044	35,797	104,240	195,415	804	3,963
1.7	7.9	307,181	37,855	111,468	199,134	886	4,496
1.7	8.1	337,428	41,356	113,107	212,775	880	4,650
1.6	8.0	345,291	41,208	118,249	235,020	877	4,602
1.8	8.4	353,241	42,977	120,575	239,850	908	4,732
1.7	8.9	371,183	46,001	136,606	230,201	973	4,974
1.8	9.8	423,942	47,934	136,972	238,409	1,086	5,444
1.7	10.2	501,936	53,103	153,415	292,314	1,203	5,958
1.9	9.8	557,408	60,815	184,856	308,616	1,283	6,180
2.4	9.7	518,174	65,772	173,130	344,664	1,051	5,677
2.7	9.7	369,601	59,293	163,136	322,470	776	4,398
2.8	10.0	216,670	51,711	150,520	290,229	485	3,665
2.6	10.6	123,292	33,403	133,025	260,319	375	3,870
2.6	10.2	129,631	16,912	132,177	258,922	323	3,708
2.5	9.5	120,763	16,786	134,973	259,017	306	3,786
2.0	8.7	144,385	24,619	126,060	256,824	368	4,128
2.0	8.3	184,073	33,954	130,549	269,137	429	4,484
1.9	7.6	205,352	44,075	142,812	281,023	437	4,344
1.8	7.1	234,273	55,654	157,311	294,082	501	4,646
1.7	6.9	253,690	63,923	171,166	288,422	561	4,838
1.6	7.2	276,762	61,409	199,598	299,607	613	4,892
1.5	6.9	284,295	60,117	195,388	313,943	617	4,742

TABLE A-2

Housing Cost-Burdened Households by Tenure and Income: 2001, 2016 and 2017

Households (Thousands)

Tenure and Income	2001				2016				2017			
	Not Burdened	Moderately Burdened	Severely Burdened	Total	Not Burdened	Moderately Burdened	Severely Burdened	Total	Not Burdened	Moderately Burdened	Severely Burdened	Total
Owners												
Under $15,000	902	787	2,600	4,289	762	773	3,290	4,825	790	775	3,303	4,868
$15,000–29,999	4,058	1,731	1,806	7,595	3,839	1,960	2,081	7,881	3,854	1,972	2,071	7,897
$30,000–44,999	5,550	1,997	1,024	8,571	5,676	2,174	1,087	8,937	5,675	2,116	1,080	8,871
$45,000–74,999	12,489	3,260	754	16,503	12,750	2,802	739	16,291	13,013	2,816	731	16,559
$75,000 and Over	30,232	2,496	301	33,029	34,782	2,093	294	37,169	36,141	2,159	285	38,584
Total	53,231	10,270	6,485	69,986	57,809	9,802	7,492	75,103	59,472	9,837	7,469	76,779
Renters												
Under $15,000	1,389	854	4,752	6,995	1,458	973	6,279	8,710	1,449	930	6,038	8,416
$15,000–29,999	2,193	3,066	2,217	7,476	2,022	3,434	3,536	8,991	1,952	3,251	3,493	8,696
$30,000–44,999	4,048	2,228	363	6,640	3,675	2,941	885	7,501	3,406	2,966	927	7,299
$45,000–74,999	7,228	975	109	8,312	7,032	1,895	289	9,216	7,063	2,026	302	9,391
$75,000 and Over	6,800	212	15	7,027	8,797	518	24	9,339	8,914	547	21	9,482
Total	21,658	7,335	7,457	36,450	22,984	9,761	11,013	43,758	22,784	9,720	10,780	43,284
All Households												
Under $15,000	2,290	1,641	7,352	11,284	2,220	1,746	9,569	13,536	2,239	1,705	9,340	13,284
$15,000–29,999	6,251	4,797	4,023	15,071	5,861	5,394	5,617	16,872	5,805	5,223	5,565	16,592
$30,000–44,999	9,599	4,225	1,387	15,210	9,350	5,115	1,972	16,438	9,082	5,081	2,007	16,170
$45,000–74,999	19,717	4,235	863	24,815	19,782	4,697	1,028	25,507	20,076	4,842	1,032	25,950
$75,000 and Over	37,032	2,707	317	40,056	43,579	2,610	318	46,507	45,055	2,706	305	48,066
Total	74,889	17,605	13,942	106,436	80,793	19,563	18,505	118,860	82,257	19,557	18,250	120,063

Notes: Moderate (severe) cost 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 2017 dollars using the CPI-U for all items.

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

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