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).**

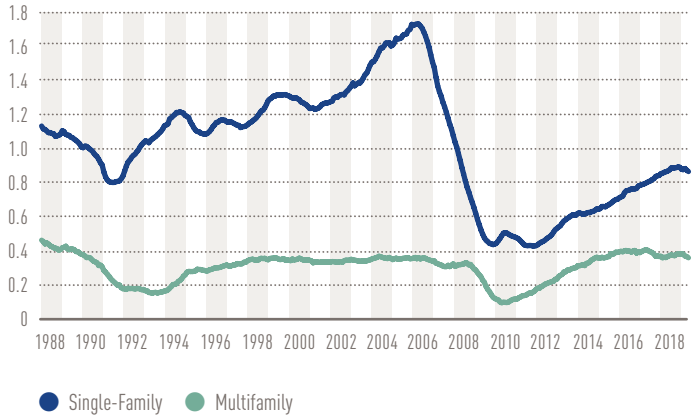
However, compared with annual averages in 1980–2016, production of single-family homes was down 13 percent nationally and in every region of the country last year, but especially in the Northeast (off 40 percent) and Midwest (off 35 percent). Construction levels were only 6 percent lower in the West 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.

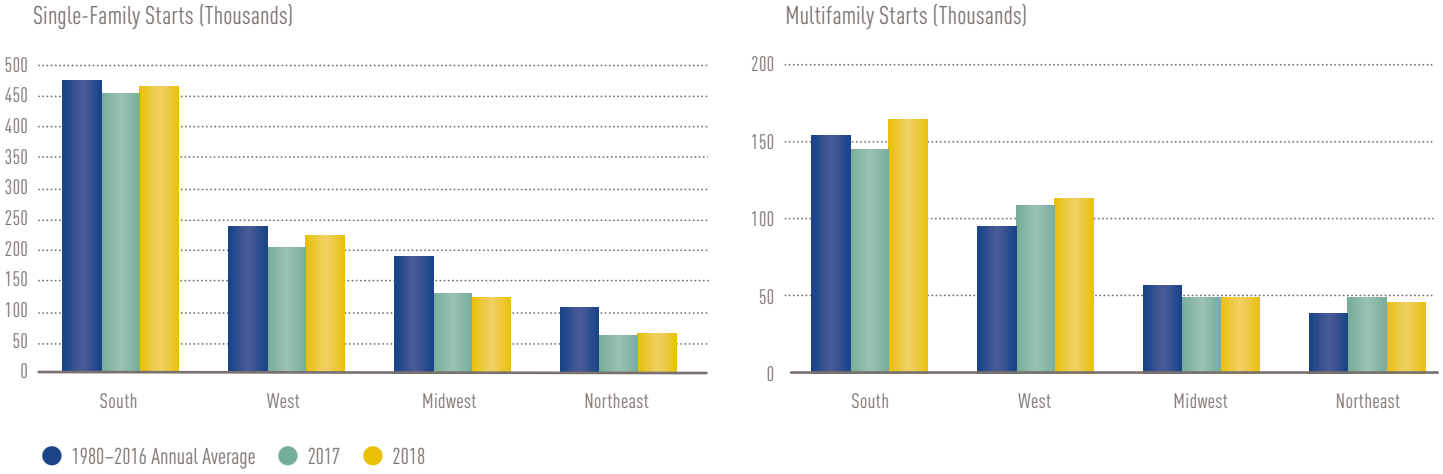
Construction of multifamily condominiums and co-operatives also held near post-recession lows last year, with completions of just 27,000 units. Moreover, many condos are even more expensive than single-family homes because of their locations, with a median asking price of $521,200 for units completed 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.

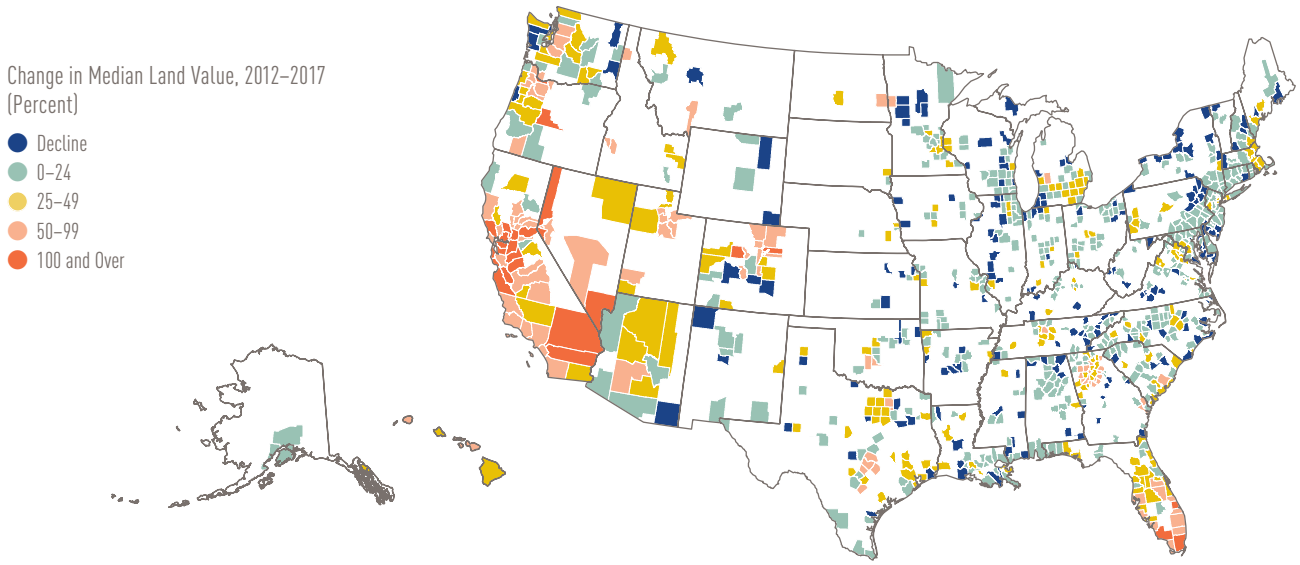
New single-family home sales rose to 617,000 units, or by just 0.7 percent in 2018—a fraction of the 12.0 percent gains averaged over the previous three years. Sales rose 5.6 percent in the Midwest and 2.7 percent in the South, partially offsetting the 20.0 percent drop in the Northeast and 1.8 percent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

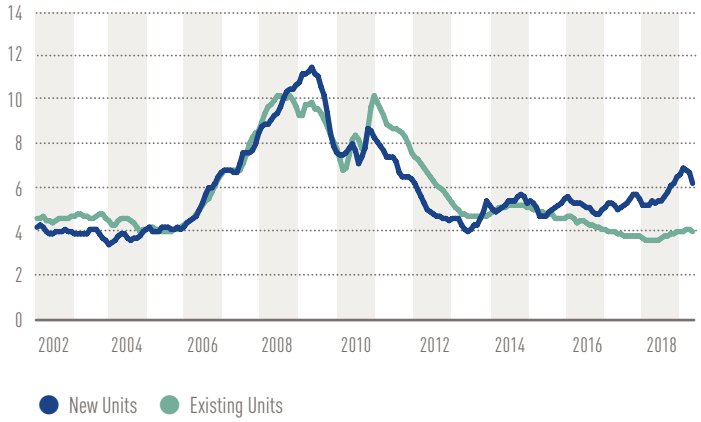


Note: Prices are for land occupied by single-family homes.
Source: JCHS tabulations of Federal Housing Finance Agency (FHFA), The Price of Residential Land for Counties, ZIP Codes, and Census Tracts in the United States.

FIGURE 9

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

Months of Supply



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

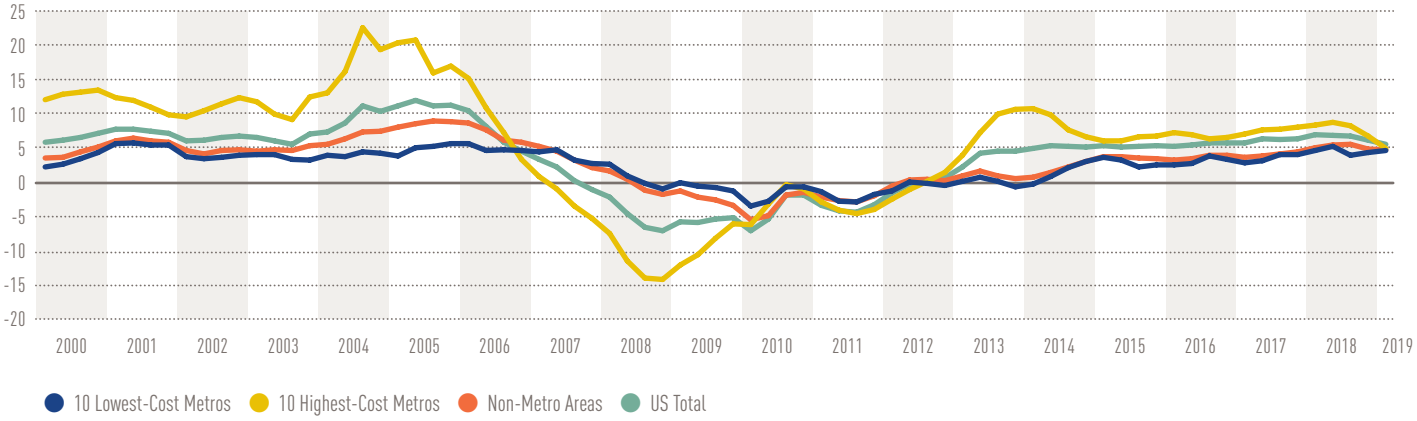
Slower home price appreciation did little to improve affordability. Prices for lowest-cost homes rose the fastest again last year. According to CoreLogic, prices for more affordable homes (priced at or below 75 percent of the metro area median) rose 6.9 percent on average in the last quarter of the year—nearly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

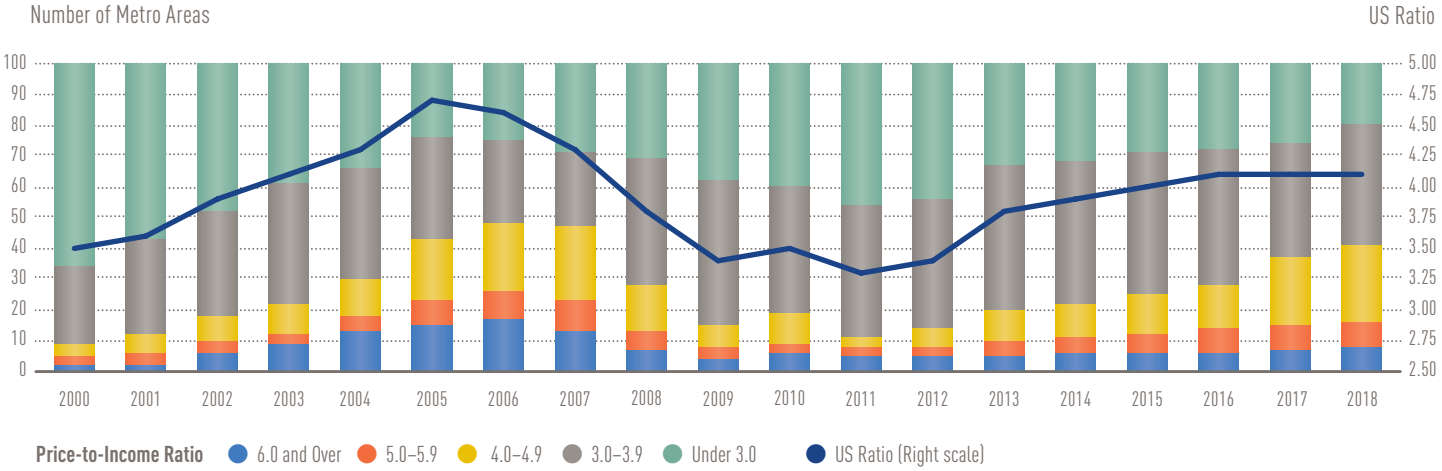
Year-over-Year Change in Home Prices (Percent)



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.