Housing markets continued to strengthen in 2016, with new and existing home sales, prices, and construction levels all on the rise. Still, single-family construction, traditionally the largest source of residential investment, remains well below historical levels. As a result, low inventories of homes for sale are driving nominal prices above pre-recession peaks in many metros. In rental markets, low vacancy rates are pushing up rents and keeping multifamily construction relatively strong. Easing these tight conditions is especially difficult where labor shortages and limited land availability constrain new housing supply.

**SINGLE-FAMILY CONSTRUCTION ON THE INCREASE**

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

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

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

Given that multifamily production has been relatively strong across the country, regional differences in total housing production stem largely from the single-family side. Single-family construction has recovered most in the South, with starts up 84 percent from the 2011 low and back within 13 percent of their average annual rate in the 1990s. In contrast, single-family construction in the Northeast has bounced back just 46 percent from its low and is still fully 53 percent below the 1990s annual average. Multifamily construction in the Northeast, however, has been strong, with starts in 2016 running more than three times above the average annual rate in the 1990s.
PERMITTING ACTIVITY GENERALLY STRONG
With permitting increasing in 70 of the nation’s 100 largest metro markets last year, the outlook for housing construction activity is encouraging. The single-family segment is now driving most of the gains in overall permitting, with the multifamily segment responsible for most of the declines (Figure 8). Still, overall trends were generally positive as 49 of the 100 largest metros posted increases in both single-family and multifamily permitting, and just 10 metros posted declines in both.

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

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

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

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

TIGHTENING INVENTORIES OF HOMES FOR SALE
Residential construction in the past decade has added fewer units to the housing stock than in any 10-year period in records dating back to 1968. The number of housing completions between 2007 and 2016 totaled just 8.98 million units, far below...
As a result, vacancy rates and inventories of homes for sale have fallen sharply. The national vacancy rate has receded to its 2000 level, erasing all of the run-up at the height of the housing boom. The largest declines are on the rental side, where the vacancy rate was 6.9 percent in 2016—its lowest point since 1985. The vacancy rate for homes for sale, which had risen to 2.8 percent in 2008, was also back down to 1.7 percent last year. Adding to market tightness in many areas, the share of units held off market remains elevated, likely reflecting the continued fallout from the foreclosure crisis.

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

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

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

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

**PICKUP IN HOME SALES**

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

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

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

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

**HOME PRICES MOVING UP**

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

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

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

**VARIATION IN METRO AREA PRICE CYCLES**

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

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

Within metro areas, home prices in low-income neighborhoods have been slowest to bounce back (Figure 11). Nominal prices
exceeded their pre-recession peaks in only 22 percent of low-income neighborhoods, compared with 35 percent of moderate-income areas and 41 percent of high-income areas. Even in markets where metrowide prices were back above peak, home values in only 65 percent of low-income neighborhoods had rebounded fully by the end of 2016.

GROWING DISPARITIES ACROSS AND WITHIN METROS

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

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

Home price trends at the neighborhood level highlight the affordability crisis in the country’s most expensive markets.

NEGATIVE EQUITY DOWN, BUT NOT OUT

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

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

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

HOUSING’S SHARE OF ECONOMY STILL LAGGING

Residential fixed investment (RFI)—including housing construction, home improvements, expenditures on manufactured homes, and broker commissions on home sales—climbed for the sixth consecutive year, rising from $660.1 billion in 2015 to $706.1 billion in 2016. Spending on multifamily housing was at a 10-year
high of $60.4 billion while spending on homeowner improvements hit $154.4 billion, according to Census Bureau estimates.

However, real spending on single-family construction totaled a modest $243 billion last year, close to the level in 1996. Indeed, single-family construction spending accounted for only 34 percent of RFI in 2016, significantly less than the 49 percent share averaged in 1993–2006.

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

THE CONSTRUCTION LABOR FORCE SHORTAGE

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

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

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

THE OUTLOOK

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

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

Both land availability and labor market tightness make development of moderately priced housing difficult. Local land use regulations that favor low-density development, along with potential restrictions on immigrant workers, could further limit the ability of housing markets to meet growth in housing demand through new construction.