



National

COMPREHENSIVE HOUSING MARKET ANALYSIS

U.S. Department of Housing and Urban Development,
Office of Policy Development and Research

As of January 1, 2023

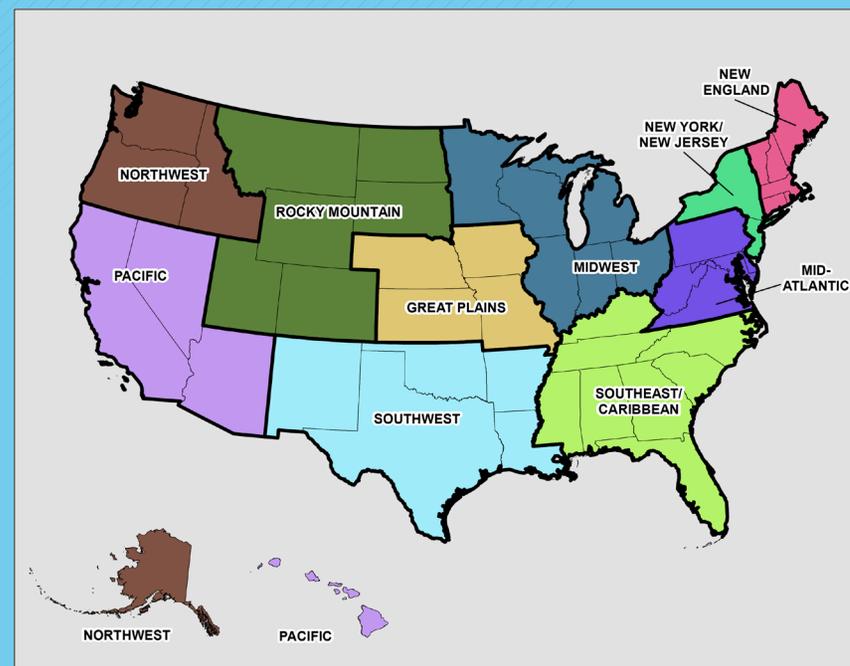


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Executive Summary

This report presents an analysis of the economic conditions, demographic trends, and housing markets in the United States from 2000 through the end of 2022. Forecasts of housing demand were made to bring the sales and rental markets into balance during the next 3 years. This report discusses select data for the 10 HUD regions defined in the “Terminology Definitions and Notes” section at the end of the report.

The population of the United States is currently estimated at 334.23 million.



Tools and Resources

Find interim updates for the United States, and select subnational geographies, at PD&R's [Market-at-a-Glance tool](#). Additional data for the United States can be found in the [supplemental tables](#) for this report. For information on HUD-supported activity throughout the country, see the [Community Assessment Reporting Tool](#).



Market Qualifiers

Economy



Strong: During 2022, nonfarm payrolls increased by 6.29 million jobs, or 4.3 percent, compared with 2021.

Total nonfarm payrolls in the United States exceeded prepandemic levels in 2022. During March and April of 2020, more than 20.7 million jobs, or 14 percent of total jobs, were lost in the country as policies enacted to slow the spread of COVID-19 had a significant negative impact on the economy. Over time, policies were relaxed or eliminated, vaccines and other treatments were introduced, and the government enacted monetary and fiscal policies to help the economy recover. Total nonfarm payrolls have increased since May 2020. As of April 2022, nonfarm payrolls surpassed the level of jobs that existed in February 2020, the last month before the COVID-19 impact (monthly data, not seasonally adjusted). Despite total jobs fully recovering, not all sectors have fully recovered the jobs lost because of the pandemic. During the next 3 years, nonfarm payrolls are expected to increase an average of 1.0 percent a year.

Sales Market



Tight: Home prices continued to increase in 2022, albeit at a slower rate than in 2021.

The national sales housing market is tight, with an estimated 1.0 percent vacancy rate, down from 2.4 percent in 2010 when the market was soft. A shortage of sales housing continued in 2022, although the market is less tight than it was during the previous year. In 2022, the supply of existing homes for sale increased to 2.7 months, up from 2.3 months in 2021 (National Association of REALTORS® [NAR]). During the same period, the total number of homes sold was down 18 percent (Census Bureau/HUD; NAR). Despite the decline in sales, home prices continued to increase by double-digits in 2022; the median existing home sales price increased 10 percent, and the median new home sales price increased 15 percent compared with 2021. During the next 3 years, demand is estimated for 2.90 million sales units. The 457,800 units already under construction will meet a portion of that demand.

Rental Market



Tight: The rental market eased slightly in 2022 as the pace of rental unit construction remained at high levels.

The national rental housing market is tight, with an estimated 5.4-percent vacancy rate, down from 9.2 percent in 2010 when the market was soft. The apartment market, which makes up more than one-half of the rental supply in the nation, is slightly tight with a 6.3-percent vacancy rate as of the fourth quarter of 2022. Year over year, the average monthly apartment rent increased 4 percent to \$1,612 as of the fourth quarter of 2022, which was a significant slowdown from the year-over-year increase of 12 percent measured in the fourth quarter of 2021 (CoStar Group). For the past 2 years, the pace of rental construction has been extremely high, and the completion of these units has helped relieve some of the rental housing shortage. Demand for rental units during the next 3 years is estimated at 2.15 million units. The 515,700 rental units already under construction will satisfy a portion of that demand.

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3-Year Housing Demand Forecast

	Sales Units	Rental Units
Nation	Total Demand	2,896,000
	Under Construction	457,800

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of January 1, 2023. The forecast period is January 1, 2023, to January 1, 2026.
Source: Estimates by the analyst



Economic Conditions

Largest Sector: Education and Health Services

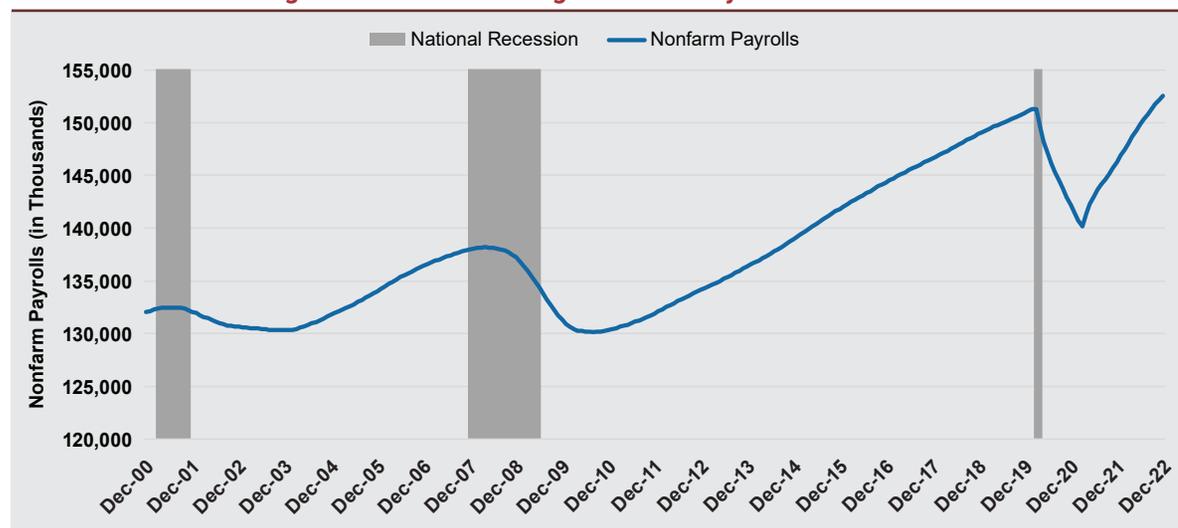
As of April 2022, the number of jobs in the U.S. economy surpassed the prepandemic level that existed in February 2020 (monthly data, not seasonally adjusted). Despite the total level of nonfarm jobs returning to their prepandemic levels, at the end of December 2022, the leisure and hospitality, the other services, and the government sectors remained below their prepandemic levels.

Long-Term Economic Trends

From 2001 through 2019, nonfarm payrolls in the nation grew an average of 0.7 percent, or 994,400 jobs, annually. Growth during that period was interrupted by two recessions: the dot-com recession from March through November 2001 and the Great Recession from December 2007 through June 2009. The years leading up to the Great Recession are often referred to as the housing boom; the economy received a boost from strong homebuilding and home sales activity. Although the Great Recession ended in June 2009, the U.S. economy continued to lose jobs through 2010. The economy then underwent a lengthy period of expansion, adding jobs every year from 2011 through 2019. With the impact of COVID-19 and the countermeasures implemented to contain the spread of the virus, the economy lost a

significant number of jobs in early 2020. As more of the population became vaccinated and most of the countermeasures were lifted, the economy gained jobs in 2021. During 2022, nonfarm payrolls increased significantly, and the annual average total number of jobs surpassed the average level of jobs that existed in 2019, the last year before the COVID-19 impact. Figure 1 shows the national 12-month average of nonfarm payrolls from December 2000 through December 2022.

Figure 1. 12-Month Average Nonfarm Payrolls in the Nation



Note: 12-month moving average.

Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research

Current Conditions

Job gains were strong during 2022. Total nonfarm payrolls increased 4.3 percent, or by 6.29 million jobs relative to 2021, which was the fastest rate of growth since the 4.7-percent rate during 1984 (Table 1). The total number of jobs averaged 152.58 million during 2022, a level that was 1.1 percent higher than the prepandemic total in 2019. Despite the recovery of the total number of jobs, 3 of the 11 job sectors during 2022 remained below their 2019 levels. The leisure and hospitality, other services, and government sectors were down 4.5, 3.1, and 2.0 percent, respectively, from 2019. The trade sector had a similar number of jobs to the 2019 level, with the retail trade subsector down 0.5 percent but the wholesale trade subsector up 1.3 percent.



For the second consecutive year, the leisure and hospitality sector led growth in the country, adding 1.68 million jobs, or 11.9 percent, during 2022, representing 10 percent of all nonfarm payroll jobs (Figure 2). The accommodation and food services industry accounted for nearly 81 percent of the new jobs in the sector as more restaurants, bars, hotels, and vacation destinations continued to move toward their prepandemic levels of activity. The professional and business services sector gained 1.19 million new jobs, or 5.5 percent, as companies across the country continued to reopen offices. E-commerce sales remained strong in 2022, representing 16 percent of total sales during the fourth quarter, relatively unchanged from the fourth quarter of 2021 (U.S. Census Bureau News, Quarterly Retail E-Commerce Sales, U.S. Department of Commerce, February 17, 2023), contributing to the 7.7-percent increase, or 514,700 new jobs, in the transportation and utilities sector. Other sectors with gains of 3.0 percent or more included information; mining, logging, and construction; manufacturing; education and health services; and other services.

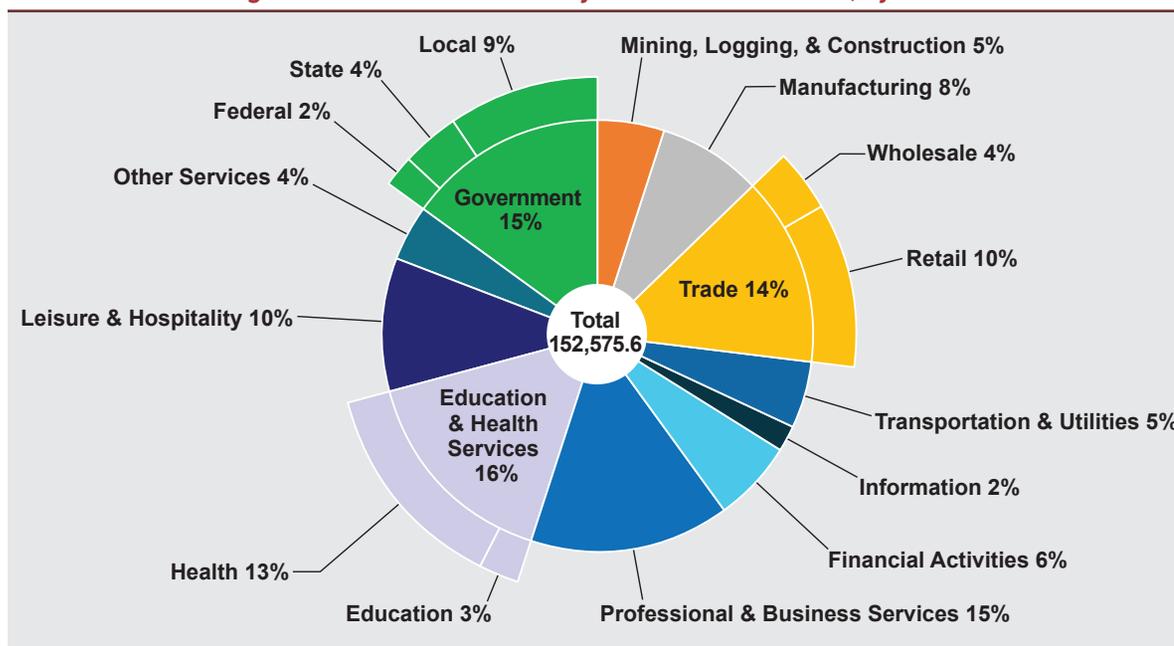
Real gross domestic product (GDP) increased 2.1 percent during 2022, which is slightly higher than the average pace from 2001 through 2019 of 2.0 percent but lower than the longer-term average trend of 3.0 percent since 1960 (U.S. Bureau of Economic Analysis). After declining by 1.6 and 0.6 percent during the first and second quarters of 2022, real GDP grew by 3.2 and 2.7 percent in the third and fourth quarters, respectively.

Table 1. Nonfarm Payroll Jobs (1,000s) in the Nation, by Sector

	2021	2022	Absolute Change	Percentage Change
Total Nonfarm Payroll Jobs	146,284.5	152,575.6	6,291.1	4.3
Goods-Producing Sectors	20,350.0	21,178.3	828.3	4.1
Mining, Logging, & Construction	7,995.9	8,353.5	357.6	4.5
Manufacturing	12,354.1	12,824.8	470.7	3.8
Service-Providing Sectors	125,934.5	131,397.3	5,462.8	4.3
Wholesale & Retail Trade	20,963.0	21,437.8	474.8	2.3
Transportation & Utilities	6,690.0	7,204.7	514.7	7.7
Information	2,856.3	3,074.1	217.8	7.6
Financial Activities	8,806.4	9,044.8	238.4	2.7
Professional & Business Services	21,385.8	22,571.3	1,185.5	5.5
Education & Health Services	23,651.6	24,350.0	698.4	3.0
Leisure & Hospitality	14,150.9	15,835.5	1,684.6	11.9
Other Services	5,457.1	5,707.8	250.7	4.6
Government	21,973.3	22,171.3	198.0	0.9

Notes: Based on 2021 and 2022 annual data. Numbers may not add to totals due to rounding. Data are in thousands.
Source: U.S. Bureau of Labor Statistics

Figure 2. Share of Nonfarm Payroll Jobs in the Nation, by Sector



Notes: Total nonfarm payroll is in thousands. Percentages may not add to 100 percent due to rounding. Based on 2022 annual data.
Source: U.S. Bureau of Labor Statistics

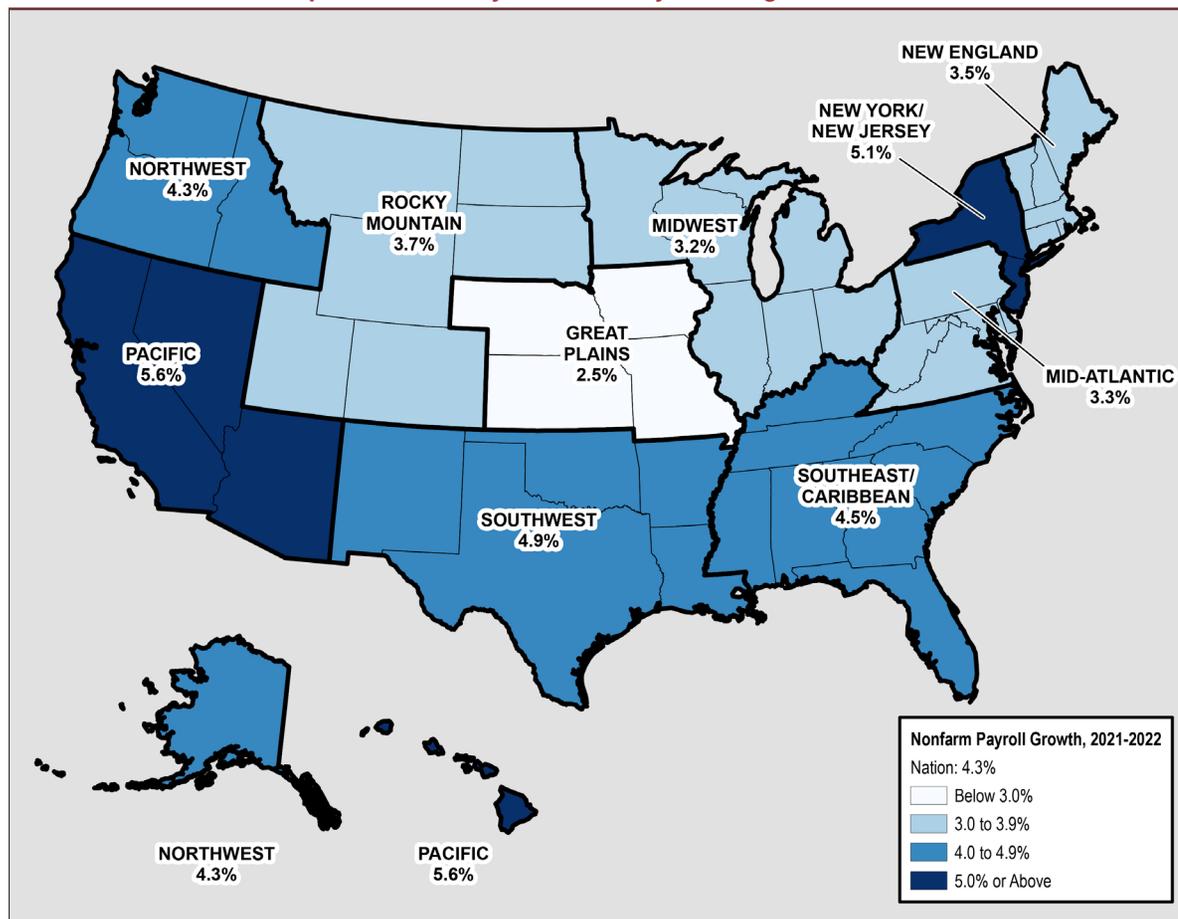


Although higher levels of inflation began during 2021, inflation became a significant issue for the economy during 2022. Price increases averaged 8.0 percent during 2022, up from 4.7 percent during 2021, and were at the highest level since the 10.3-percent increase in 1981 (Consumer Price Index for All Urban Consumers [CPI-U], Bureau of Labor Statistics). By comparison, the rate of inflation averaged 2.1 percent from 2000 through 2021, which is slightly higher than the 2.0-percent target rate for the Federal Reserve System (the Fed). In an effort to reduce the high inflation of the past 2 years, the Fed raised the effective federal funds rate in 2022 from 0.08 percent at the beginning of the year to 4.33 percent by the end of the year. The higher interest rate has made new loans, including mortgages, more expensive.

Current Conditions— Regional Nonfarm Payrolls

The number of jobs increased in all 10 HUD regions during 2022, ranging from 2.5 percent in the Great Plains region to 5.6 percent in the Pacific region (Map 1). The leisure and hospitality and professional and business services sectors added the most jobs in every region of the country. The leisure and hospitality sector, which lost the most jobs as a result of the COVID-19 pandemic, accounted for the most jobs added in every region during 2021. The trend nearly repeated in 2022, with the leisure and hospitality sector leading job gains in all regions except in the Southwest region, where the professional and business services sector added the most jobs. In the other

Map 1. Nonfarm Payroll Growth by HUD Region, 2021–22



Source: U.S. Bureau of Labor Statistics

nine regions, the professional and business services sector added the second largest number of jobs, and leisure and hospitality added the second most in the Southwest region. Gains in the leisure and hospitality sector ranged from 44,900 jobs, or 7.3 percent, in the Great Plains region to 379,000 jobs, or 16.2 percent, in the Pacific region. The gains in the Pacific region represented the second largest percentage gain in the sector among regions, behind the 17.9-percent increase, or 189,300 jobs, in the New York/New Jersey region. Additions in the professional and business services sector ranged from 30,700 jobs in the Great Plains region, or 3.8 percent, to 274,700 jobs, or 6.5 percent, in the Southeast/Caribbean region.

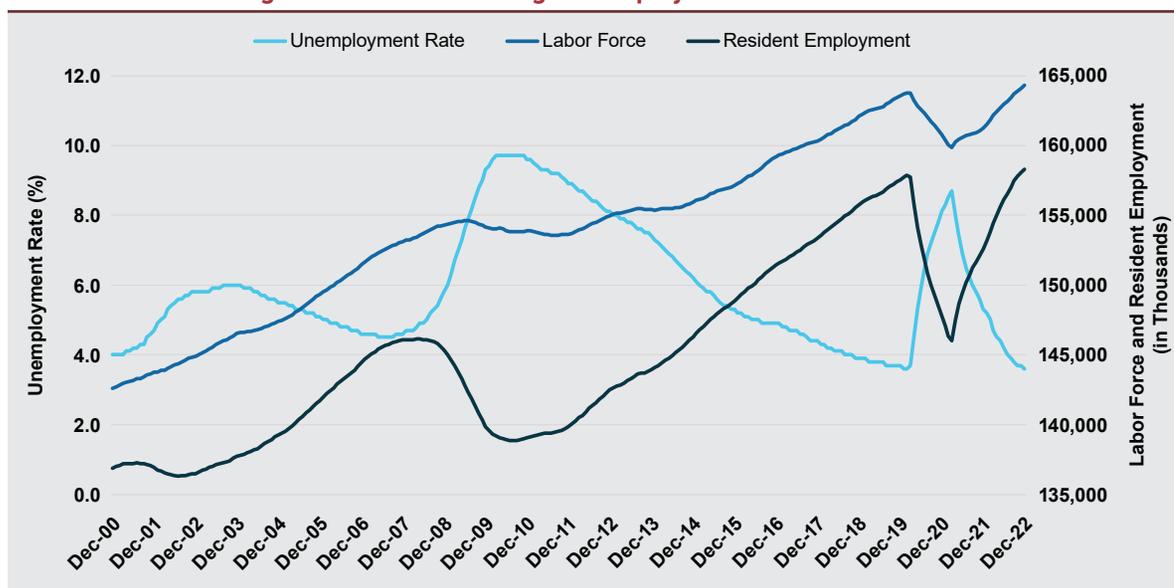
(including the District of Columbia). Seven states, along with the District of Columbia, had not returned to their pre-COVID-19 nonfarm payroll levels as of the end of December 2022. The remaining states have recovered at the total nonfarm payroll level, but some nonfarm payroll sectors within many states have still not returned to their pre-COVID-19 levels. In December 2022, 64 percent of the jobs that were lost in the District of Columbia had been recovered. On a state level, the lowest percentage recovered was in Hawaii at 82 percent. Vermont, North Dakota, West Virginia, and Rhode Island have all recovered more than 90 percent of the jobs lost, with Rhode Island at 99 percent.

Current Conditions— Unemployment

During 2022, the unemployment rate averaged 3.6 percent, down from an average of 5.3 percent in 2021 and equivalent to the rate prior to the COVID-19 impact. It was the lowest yearly rate since the 3.5-percent average in 1969. The 12-month average unemployment rate previously peaked at 9.7 percent during 2010, but it declined steadily through 2019, reaching a prepandemic average low of 3.6 percent during the 12 months ending February 2020. As a result of the COVID-19

recession, the unemployment rate rose to a high of 8.7 percent during the 12 months ending March 2021. The number of unemployed people rose from an average of 6.00 million in 2019 to an average of 12.95 million in 2020, the highest yearly total since an average of 13.75 million people were unemployed in 2011. During 2021, the number of unemployed people declined to an average of 8.62 million and further declined to an average of 6.00 million during 2022. Large fluctuations in the labor force have also occurred in the past couple of years. During 2020, the labor force declined by 2.80 million from 2019. Approximately 462,000 people returned to the labor force in 2021. During 2022, the labor force increased by 3.08 million people to an annual average of 164.29 million, the largest ever in the history of the country. Figure 3 shows the 12-month average unemployment rate in the nation from 2000 through 2022.

Figure 3. 12-Month Average Unemployment Rate in the Nation



Note: Based on the 12-month moving average.
Source: U.S. Bureau of Labor Statistics



Economic Periods of Significance

2000 Through 2004: Recession and Recovery

The recession in the early 2000s officially lasted 8 months, from March 2001 through November 2001 (National Bureau of Economic Research). During 2001, job growth in the nation was flat. The manufacturing sector experienced significant losses, declining by 822,000 jobs, or 4.8 percent. The wholesale trade subsector, the professional and business services sector, and the federal government subsector had significant declines of 160,400, 188,000, and 101,000 jobs, or 2.7, 1.1, and 3.5 percent, respectively. The education and health services sector grew by 562,000 jobs, or 3.7 percent, during the year, offsetting some of the losses in other sectors.

Although the recession was officially over in 2001, the impacts on the labor market continued for the next 2 years. During 2002 and 2003, nonfarm payrolls declined by an average of 871,500 jobs, or 0.7 percent, annually. Losses were widespread, with payrolls in 6 of the 11 nonfarm sectors declining. Declines in the manufacturing sector accelerated to an average of 966,000 jobs, or 6.1 percent, annually. Other sectors that lost an average of more than 200,000 jobs during those years were wholesale and retail trade, professional and business services, and information, which declined at average annual rates of 1.2, 1.5, and 6.3 percent, respectively. Growth continued, however, in the education and health services sector and returned to the government sector, with these sectors adding an average of 510,500 and 232,500 jobs, or 3.2 and 1.1 percent, annually, respectively.

During 2004, the economy added 1.44 million jobs, or 1.1 percent, despite small declines in the manufacturing and information sectors. The professional and business services, the education and health services, and the leisure and hospitality sectors led gains, adding 413,000, 395,000, and 320,000 jobs, or 2.6, 2.3, and 2.6 percent, respectively. Modest gains occurred in most other sectors, but the manufacturing sector was down by 194,000 jobs, or 1.3 percent, from a year earlier. The information sector lost 70,000 jobs, or 2.2 percent.

2005 Through 2006: The Housing Boom

The rate of job growth in the nation increased significantly in 2005 and 2006, averaging gains of 2.33 million jobs, or 1.8 percent, each year. During these years, the fastest growing sector was the mining, logging, and construction sector, which was up an average of 5.2 percent, or 404,000 jobs, annually. Nearly all the growth in that sector came from the construction subsector, which increased by 357,500 jobs each year. The nominal annual value of construction (residential and nonresidential) averaged \$1.14 trillion from 2005 through 2007—an increase of 26 percent compared with an average annual level of \$909 billion from 2002 through 2004 (Census Bureau). Other sectors with significant payroll gains during 2005 and 2006 were the professional and business services, education and health services, and leisure and hospitality sectors, with average annual gains of 591,000, 462,000, and 308,500 jobs, or 3.5, 2.6, and 2.4 percent, respectively. Declines continued in the manufacturing and the information sectors, but the rates of decline slowed. The manufacturing sector lost an average of 80,000 jobs, or 0.6 percent, annually, and the information sector was down an average of 40,000 jobs, or 1.3 percent, annually.

2007: The Slowdown

Nonfarm payrolls continued to grow through 2007, but the rate of growth slowed to 1.1 percent, or 1.55 million jobs added. Growth continued in 7 of the 11 sectors during 2007, led by the education and health services sector, up by 522,000 jobs, or 2.9 percent. The professional and business services sector continued to grow at a strong pace of 2.2 percent, or 382,000 jobs, which was a noticeable slowdown from growth during the previous 2 years. The leisure and hospitality sector also had significant gains of 317,000 jobs, or 2.4 percent, in 2007. The largest decline in jobs was in the manufacturing sector, down 276,000, or 1.9 percent. Small declines occurred in the mining, logging, and construction; the financial activities; and the information sectors,



with average decreases ranging from 0.2 to 0.3 percent. The construction subsector had a decline of 0.8 percent, or 61,000 jobs, during 2007, because the housing market began to soften following the bursting of the housing bubble. This decrease was partly offset by a gain of 40,000 jobs, or 5.8 percent, in the mining and logging subsector.

2008 Through 2010: The Great Recession

The Great Recession officially lasted from December 2007 through June 2009, or 18 months (National Bureau of Economic Research). It was the longest recession since the Great Depression, which lasted 43 months from 1929 to 1933. The impacts from the Great Recession on the labor market lasted well into 2010. From 2008 through 2010, nonfarm payrolls in the country declined by an average of 2.55 million, or 1.9 percent, annually, and the nation lost 7.6 million jobs. With the exceptions of the education and health services and the government sectors, every sector lost jobs. The education and health services sector increased by an average of 433,000 jobs annually, or 2.3 percent, and the government sector remained relatively stable, with modest growth averaging 90,700 new jobs, or 0.4 percent, annually. The most significant declines occurred in the goods-producing sectors. The manufacturing sector was down an average of 783,700 jobs, or 6.0 percent, annually, and the mining, logging, and construction sector lost an average of 710,300 jobs, or 9.3 percent, each year. Most notably, the construction subsector declined an average of 10.1 percent, or by 704,000 jobs, annually during this period because of significant declines in both residential and commercial construction. The nominal annual value of construction reached a trough from 2008 through 2011, when it averaged \$897 billion, down 21 percent from the 2005-through-2007 average. Most remaining sectors had average annual declines ranging from 2.3 to 3.7 percent, with even smaller declines in the leisure and hospitality and the other services sectors. The wholesale and retail trade sector was down by an average of 549,200 jobs, or 2.6 percent. The professional and business services sector declined by an average of 403,300 jobs, or 2.3 percent.

2011 Through 2016: Recovery and Expansion

Annual job gains resumed in 2011, and jobs were added in the nation every year through 2019. From 2011 through 2016, nonfarm payrolls increased by an average of 2.33 million jobs, or 1.7 percent, annually. Every sector except for the government sector added jobs during that period. The professional and business services sector led growth, with an average gain of 557,300 jobs, or 3.1 percent, a year. The leisure and hospitality and the education and health services sectors each increased by an average of more than 400,000 jobs, or 3.1 and 2.1 percent, a year, respectively. The construction subsector was slower to recover, but by 2014 and 2015, the subsector was averaging gains of 5.0 percent, or 303,000 jobs, a year. Not until 2014, however, did the economy recover all the jobs lost from 2008 through 2010.

2017 Through 2019: Continued Growth

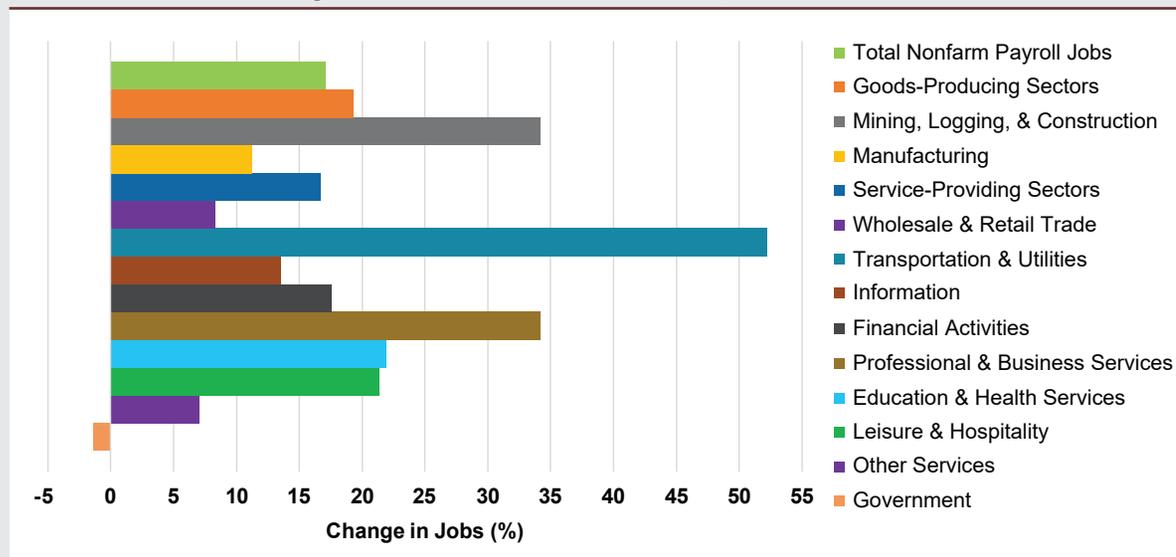
Job growth slowed slightly from 2017 through 2019, averaging gains of 2.19 million jobs annually, or 1.5-percent growth. Growth slowed partially because of fewer available workers; the nation had a historically low level of unemployment, averaging 4.0 percent during the period, and many job openings were harder to fill. Every sector added jobs during the 3 years except the wholesale and retail trade sector, which declined by an average of 38,700 jobs, or 0.2 percent, partly reflecting growth in e-commerce. Average losses of 72,600, or 0.5 percent, in the retail trade subsector more than offset the increase of 33,900, or 0.6 percent, in the wholesale trade subsector. The education and health services, the professional and business services, and the leisure and hospitality sectors led gains during the period—up by average annual rates of 2.2, 1.9, and 1.9 percent, or 508,000, 388,700, and 308,700 jobs, respectively. The fastest rate of growth was in the transportation and utilities sector, up 3.8 percent, or 218,000 jobs, a year, followed by the mining, logging, and construction sector, up 3.6 percent, or 274,700 jobs. The transportation and utilities sector has been the fastest growing sector since the end of 2010, with a total gain of 52.3 percent through 2022, also primarily because of the increase in e-commerce (Figure 4).



2020: COVID-19 and the Recession

Every nonfarm payroll sector declined during 2020 as countermeasures designed to reduce the spread of COVID-19 were put in place. While the recession officially only lasted during March and April, the impacts were significant. Nonfarm payrolls declined by 8.72 million, or 5.8 percent, during 2020. Approximately 39 percent of the total losses during the year were in the leisure and hospitality sector, which was down 3.44 million jobs, or 20.7 percent. This sector had the most job losses because of the closure or limited in-person availability of many restaurants and bars; reduced travel impacting hotels and places of recreation also contributed to losses in this sector. Within the sector, the accommodation and food services industry accounted for 80 percent of all the sector losses, with a decline of 2.80 million jobs. Although the leisure and hospitality sector accounted for 11 percent of all jobs in the nation during 2019, the sector accounted for only 9 percent of all jobs during 2020. The professional and business services sector was down by 958,000 jobs, or 4.5 percent, with many companies operating on full telework status. The education and health services sector lost 888,000 jobs, or 3.7 percent, with many nonessential services and surgeries canceled. The retail trade subsector lost 750,200 jobs, or 4.8 percent, with many stores facing temporary (or in some cases, permanent) closures. Manufacturing sector jobs were down 5.1 percent, or by 650,000 jobs. The

Figure 4. Sector Growth in the Nation, 2011 to Current



Note: Current data are 2022 annual data.
Source: U.S. Bureau of Labor Statistics

government sector also had significant declines of 627,000 jobs, or 2.8 percent, with all the losses at the state and local levels, whereas the federal subsector added 99,000 jobs, or 3.5 percent.

2021: Beginning of the Recovery

The recovery officially began in May 2020 after 2 months of extraordinary job losses in March and April. During 2021, total nonfarm payrolls increased 2.9 percent, or by 4.10 million jobs. The largest gain occurred in the professional and business services sector, which added 1.01 million jobs, or 5.0 percent, as many companies began to return to some form of in-person work, resulting in a greater demand for support services. The fastest rate of growth during 2021 occurred in the transportation and utilities sector, at 8.2 percent, or 508,000 new jobs. Included in this sector are distribution centers, which grew in number and size to support an increase in e-commerce that accelerated in response to the pandemic. E-commerce sales increased 47 percent during the first quarter of 2021 relative to the previous year (U.S. Census Bureau News, Quarterly Retail E-Commerce Sales, U.S. Department of Commerce, May 19, 2022). Gains in e-commerce sales ranged from 9 to 15 percent during the other quarters of 2021. By the

fourth quarter of 2021, e-commerce sales accounted for 16 percent of all retail sales, up from 12 percent in the fourth quarter of 2019.

The leisure and hospitality sector added 1.00 million jobs, or 7.6 percent, during 2021. Approximately 78 percent of the sector gains in 2021 were in the accommodation and food services industry; restaurants reopened and people began to resume travel. In 2021, there were 14.10 million jobs

in the leisure and hospitality sector, still down 2.44 million jobs, or 15 percent, from the recent high in 2019.

Real GDP increased 5.9 percent during 2021 after declining 2.8 percent in 2020. The annual rate of inflation averaged 4.7 percent during 2021 based on the CPI-U, which was the highest in the country since the 5.4-percent rate in 1990.

Forecast

During the next 3 years, nonfarm payroll jobs are anticipated to grow at an average of 1.0 percent annually. Growth is anticipated to be strongest in the first year and gradually slow in years 2 and 3. The Fed is likely to continue raising the federal funds rate during 2023, or at least keep it at an elevated level, to reduce inflation which will have a cooling effect on economic growth.

The leisure and hospitality sector is expected to have significant growth as it continues to recover the jobs lost during the COVID-19 pandemic. Growth is likely to continue to be strong in the professional and business services sector as well. The transportation and utilities sector is also expected to continue to have strong gains with the increasing popularity of e-commerce.



Population and Households

Current Population: 334.23 Million

Since 2021, the rate of population growth has nearly returned to the prepandemic rate of growth.

Population Trends

From 2000 to 2005, a period including the 2001 recession and the subsequent moderate economic expansion, the population of the United States grew by an average annual rate of 0.9 percent, or 2.69 million (Census Bureau decennial census counts and population estimates as of July 1). Net natural change accounted for 61 percent of the growth, or an average increase of 1.64 million people annually, and net in-migration to the United States averaged 1.05 million people, accounting for 39 percent of the population gain. Population growth increased from 2005 to 2008 to an average annual rate of 1.0 percent, or 2.86 million people. Net natural change increased significantly during the period to an average of 1.82 million people, accounting for 64 percent of population growth, and net in-migration averaged 1.04 million people, or 36 percent of the population gains.

From 2008 to 2010, when the United States lost jobs due to the Great Recession, population growth slowed to an average annual rate of 0.9 percent, or 2.66 million people. Net natural change declined to an average of 1.77 million people a year, partly

reflecting fewer births during the recession, but accounted for 67 percent of population growth, and net in-migration slowed significantly to an average of 890,000 people a year, or 33 percent of population growth.

The average level of net in-migration increased to 1.13 million people a year from 2010 to 2016 as the economy added jobs, accounting for 45 percent of population growth. Net natural change continued to decline at a significant rate, averaging 1.37 million people a year, or 55 percent of population growth. That decline was partly due to an aging population, with an increase in the number of deaths, along with birth rates remaining low following the recession. As a result, the total population increased by 2.50 million, or 0.8 percent, annually. Population growth continued to slow to an average annual rate of 0.5 percent, or 1.79 million people, from 2016 to 2020. Net in-migration slowed to an average of 836,400 people a year and accounted for 47 percent of the population gains during the period, and net natural change declined to an average of 957,600 people, or 53 percent of growth. As a result of the impacts of COVID-19 and the policies enacted to contain its spread, including policies that had the effect of restricting immigration to the United States, both net natural change and net in-migration slowed considerably from 2020 to 2021, resulting in the overall population growing 0.2 percent. Net in-migration declined to 376,000, and net natural change decreased to 144,000, largely because of the significant increase in COVID-19-related deaths. Since 2021, many of the COVID-19-related policies regarding immigration have been lifted, and population growth has increased by an average annual rate of 0.4 percent, with net in-migration averaging 1.11 million and net natural change averaging 363,400.

During the 3-year forecast period, the population is expected to increase at an average annual rate of 0.5 percent, or approximately 1.78 million people each year. Net natural change and net-in migration are expected to average 750,000 and 1.03 million people a year, respectively. The population is expected to total 339.57 million by the end of the forecast period (Table 2). Figure 5 shows the components of population change from 2000 through the forecast period.

Table 2. Population and Household Quick Facts for the Nation

	2010	Current	Forecast
Population Quick Facts	Population	308,745,538	334,234,000
	Average Annual Change	2,732,000	1,999,000
	Percentage Change	0.9	0.6
Household Quick Facts	Households	116,716,292	128,807,000
	Average Annual Change	1,124,000	948,300
	Percentage Change	1.0	0.8

Notes: Average annual changes and percentage changes are based on averages from 2000 to 2010, 2010 to the current date, and the current date to the end of the forecast period. The forecast period is from the current date (January 1, 2023) to January 1, 2026.

Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by the analyst



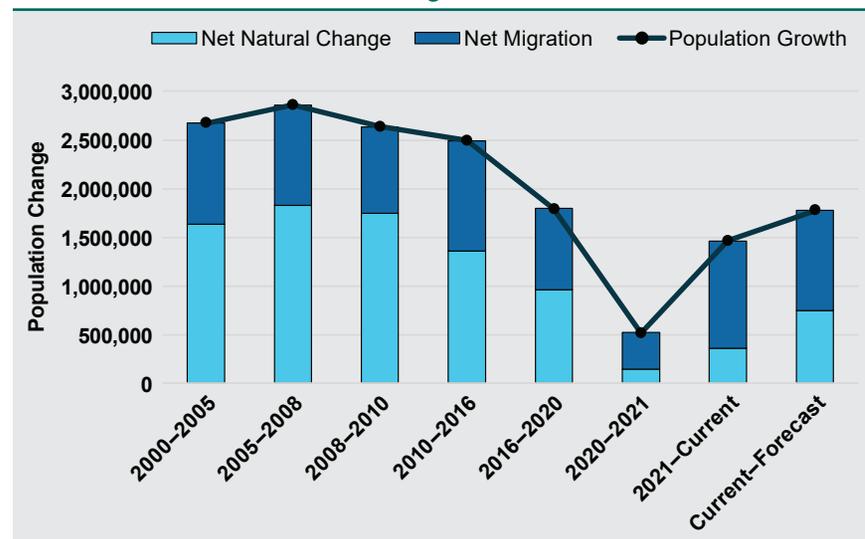
International Migration

When examining the country of origin for immigration to the United States, the largest percentage of immigrants during 2021 came from Mexico (14 percent), India (12 percent), and China (6 percent) (Department of Homeland Security, Office of Immigration Statistics). Mexico has consistently accounted for 14 percent of immigration each year since 2010. India accounted for a total of 6 percent of all immigration from 2010 to 2020, whereas China accounted for 7 percent of immigration from 2010 to 2019 and 6 percent during 2020. During 2021, approximately 8 percent of immigrants to the U.S. came from Europe, down from 10 percent in 2020. Approximately 38 percent of all immigrants came from Asia during 2021, a relatively unchanged percent since 2010. Immigrants from South America accounted for 9 percent of all immigrants during 2021, unchanged from 2020. Similarly, immigrants from Africa also accounted for 9 percent of immigrants, down from 11 percent in 2020.

Age Cohort Trends

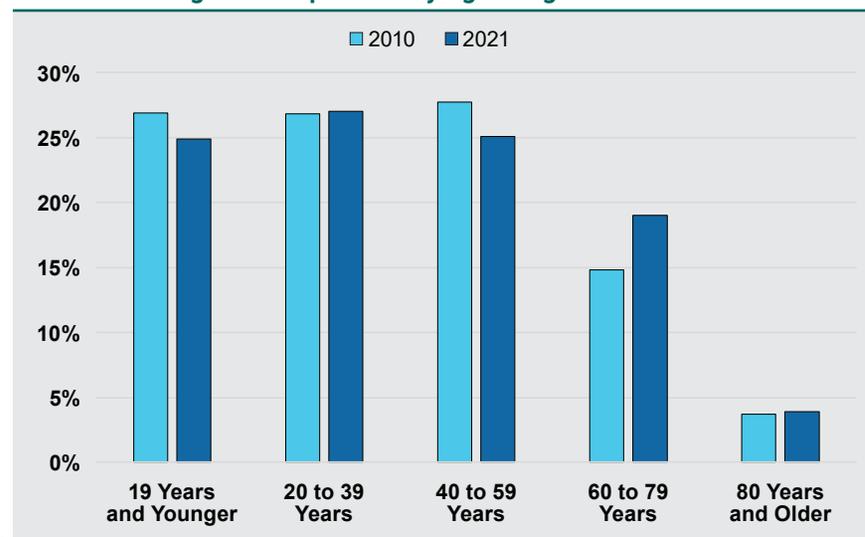
The median age in the United States in 2021 was 38.8 years, up from 37.2 years in 2010. The largest population by age range in the United States is the 20-to-39-year-old age cohort, which constituted 27.0 percent of the total population as of 2021, compared with 26.8 percent in 2010 (U.S. Census Bureau Population Estimates). The under-20 age cohort declined from 26.9 percent of the population in 2010 to 24.9 percent in 2021. In addition, the 40-to-59-year-old cohort also declined, from 27.7 percent of the total population to 25.1 percent during the same period. As the baby boom generation has aged, the 60-to-79-year-old age cohort has grown substantially. In 2010, this age group made up 14.8 percent of the total population, but by 2021 it had grown to 19.0 percent of the population. That increase helps explain the steady growth in healthcare-related jobs throughout the country, because this age group tends to be a major consumer of health services. The 80-and-older age group remained relatively stable during the period, accounting for 3.7 percent of the total population in 2010 and 3.9 percent in 2021. Figure 6 shows the population by age range in the United States for 2010 and 2021.

Figure 5. Components of Population Change in the Nation, 2000 Through the Forecast



Notes: Data are average annual totals. The forecast period is from the current date (January 1, 2023), to January 1, 2026.
Sources: U.S. Census Bureau; current and forecast—estimates by the analyst

Figure 6. Population by Age Range in the Nation



Source: 2010 and 2021 U.S. Census Bureau Population Estimates



Recent Regional Population Trends

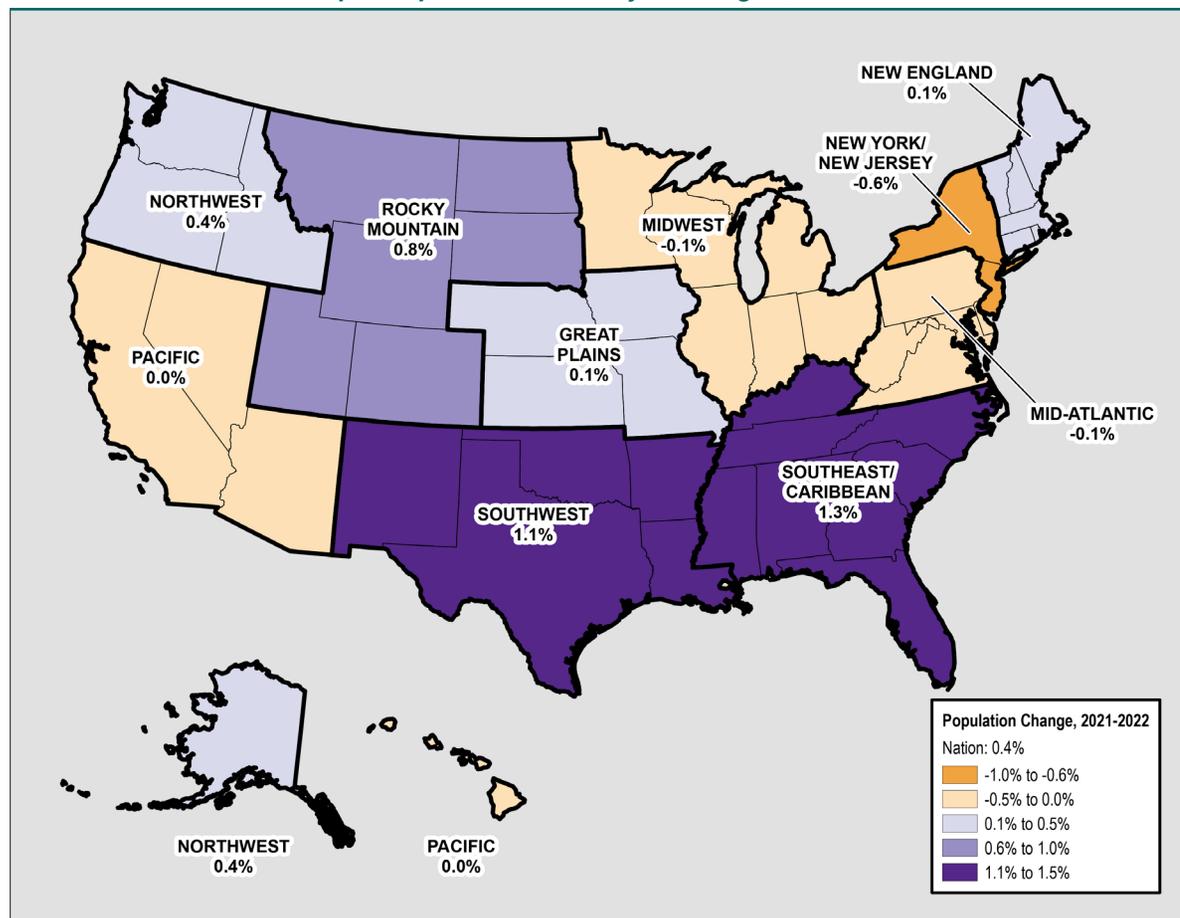
From 2021 to 2022, the population increased in 6 of the 10 HUD regions. Map 3 shows the population growth rates by region. The national population increased by 0.4 percent during that period. The highest rate of growth among the HUD regions occurred in the Southeast/Caribbean region, at 1.3 percent, followed by the Southwest region at 1.1 percent. The population increased 0.8 percent in the Rocky Mountain region, followed by a 0.4-percent increase in the Northwest region. The rate of population growth was 0.1 percent in both the New England and the Great Plains regions. In the Pacific region, the population remained relatively unchanged, but the population in both the Mid-Atlantic and Midwest regions declined slightly by 0.1 percent. The largest decline occurred in the New York/New Jersey region, which was down by 0.6 percent.

Household Trends

The number of households in the United States is currently estimated at 128.81 million, representing an average annual increase of 0.8 percent, or 948,300 households each year, since 2010. From 2000 to 2010, the number of households increased at a somewhat faster average annual rate of 1.0 percent, or 1.12 million households each year, due largely to higher population growth compared with the 2010s.

Since 2010, owner households have increased 0.7 percent a year, and renter households have

Map 3. Population Growth by HUD Region, 2021–22

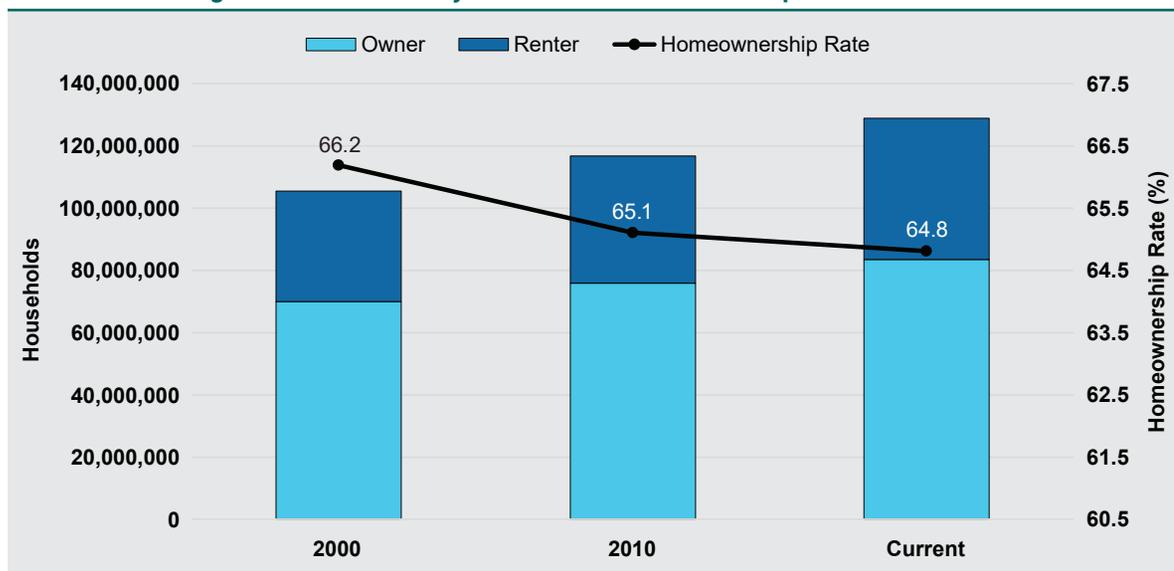


Source: U.S. Census Bureau Population Estimates Program

increased 0.8 percent a year, compared with respective rates of 0.9 and 1.3 percent from 2000 to 2010. During the housing boom of the 2000s, owner household growth was faster than renter household growth, increasing the homeownership rate significantly. After the housing bubble burst and the economy entered the Great Recession, renting became more common, and the homeownership rate declined. In part, that shift occurred because younger households have been delaying homeownership compared with previous generations. The homeownership rate in the country has declined to an estimated 64.8 percent, down

from 65.1 percent in 2010 and down from a peak of 69.0 percent in 2004. Currently, an estimated 83.47 million owner households and 45.38 million renter households reside in the United States. Figure 7 shows the homeownership rate and households by tenure for 2000, 2010, and the current date. During the next 3 years, households are expected to increase by an average of 871,700, or 0.7 percent, annually, with population growth slightly lower than the average annual rate from 2010 to the current date. From 2010 to the current date, it is estimated that approximately 30,400 households switched tenure from owner to renter status (household tenure shift) each year. During the forecast period, this trend is likely to continue but at a slightly reduced pace of 20,000 households per year. It is anticipated that future household formation will be influenced by rising international immigration and the growing younger age cohort of 20 to 39 year olds, of which both groups tend to have a stronger demand for rental rather than owner units.

Figure 7. Households by Tenure and Homeownership Rate in the Nation



Note: The current date is January 1, 2023.
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by the analyst



Home Sales Market

Market Conditions: Tight

In 2022, home sales declined as mortgage rates trended upward and financing a home became more expensive.

Current Conditions

The national home sales market eased somewhat in 2022 when a rapid increase in mortgage rates had a negative effect on the demand for sales housing. The market was still tight for the year, however, with an estimated sales vacancy rate of 1.0 percent. The inventory of existing homes for sale ticked up from a 2.3-month supply in 2021 to 2.7 months in 2022, but this figure remains below the 3.1-month supply in 2020 (NAR). Although the level of available housing inventory is still historically low, the number of homes for sale was up 10 percent from December 2021 to December 2022. New and existing home sales declined 16 and 18 percent, respectively, from 2021 to 2022 (Census Bureau/HUD; NAR). Along with declining inventory and home sales, home prices continued to rise in 2022 compared with the previous year. Median sales prices increased 10 percent for existing homes and 15 percent for new homes (Table 3). The effect of rising interest rates on the home sales market during 2022 was more evident toward the end of the year. From December 2021 to December 2022, new home sales declined 23 percent, and existing home sales declined 36 percent. During the same period, the median sales price increased 2 percent for existing homes and 8 percent for new homes.

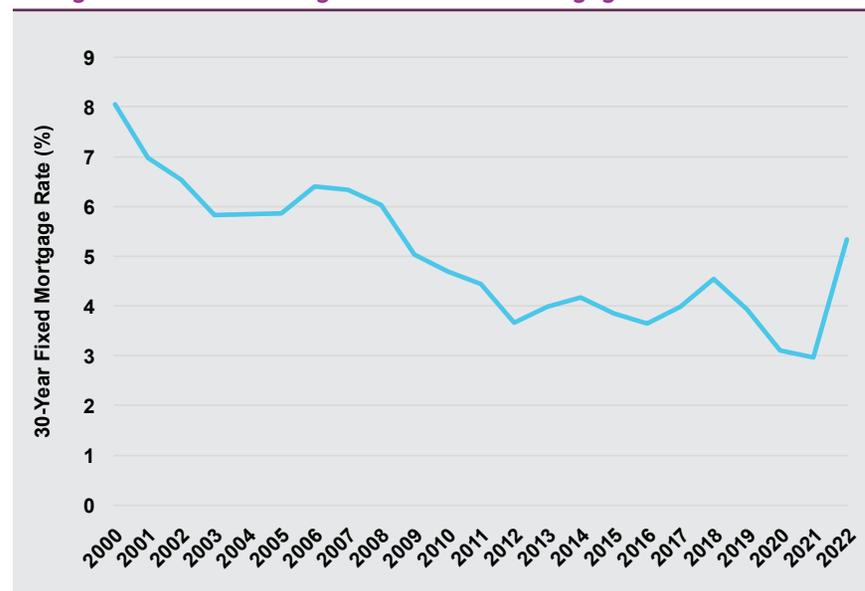
Mortgage rates increased substantially in 2022 after years of historical lows. According to Freddie Mac, the annual average interest rate for a 30-year fixed-rate mortgage was 5.34 percent in 2022, up from 2.96 percent in 2021—which was the lowest annual rate on record since Freddie Mac began tracking them in 1971 (Figure 8). The 2022 annual rate was the highest the 30-year fixed-rate mortgage has been in any year since 2008, but there was a lot of variability in the rate during 2022. During the first week of

Table 3. Home Sales Quick Facts for the Nation

	2021	2022
Months of Inventory	2.3	2.7
Existing Home Sales	6,120,000	5,030,000
1-Year Change		-18%
New Home Sales	771,000	644,000
1-Year Change		-16%
Existing Home Sales Price	\$350,700	\$386,300
1-Year Change		10%
New Home Sales Price	\$397,100	\$454,900
1-Year Change		15%
Mortgage Delinquency Rate	2.0%	1.2%

Notes: Months of supply, home sales, and prices are for the year shown; mortgage delinquency data are as of December of the year shown. Prices shown are the median for the year. Sources: National Association of REALTORS®; U.S. Census Bureau/HUD; CoreLogic, Inc.

Figure 8. Annual Average 30-Year Fixed Mortgage Rate in the Nation



Source: Freddie Mac

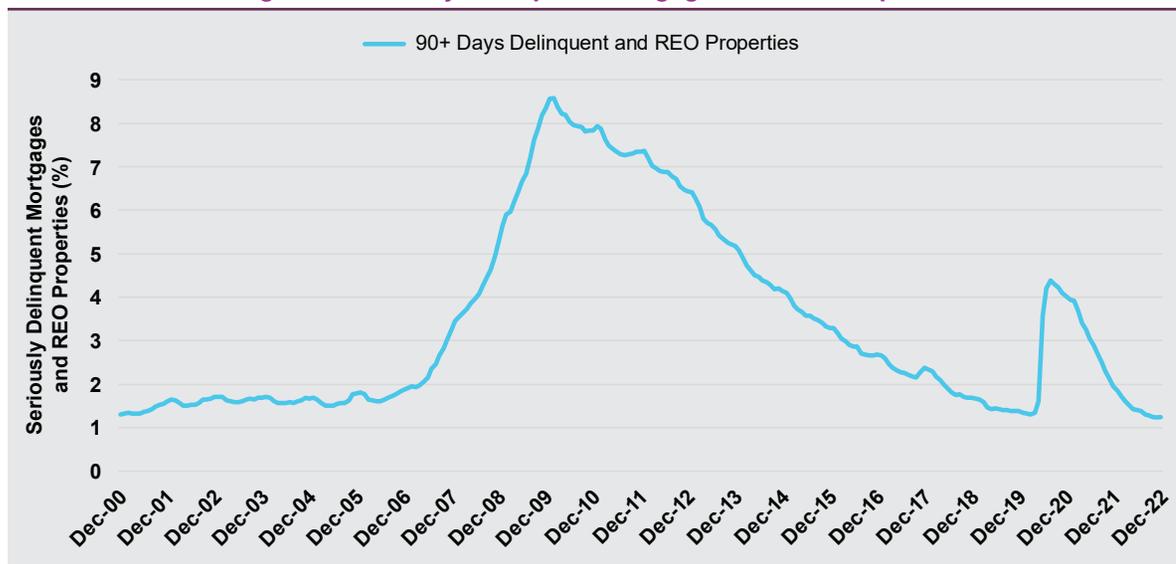


January 2022, the average 30-year fixed-rate mortgage was relatively low at 3.22 percent; by the last week of December, the rate averaged 6.42 percent. Mortgage rates briefly topped 7.00 percent in the fall of 2022, a level not reached since 2002.

Seriously Delinquent Mortgages and REO Properties

The severe economic shock to the nation at the beginning of the pandemic caused the percentage of seriously delinquent mortgages and real estate owned (REO) properties to increase rapidly. Since then, as the economy recovered, the share of mortgages in this category has declined at a steady pace. The percentage of seriously delinquent mortgages and REO properties peaked at 4.4 percent in August 2020 before declining to 1.2 percent in December 2022 (CoreLogic, Inc.; Figure 9). The latest rate is below the prepandemic low of 1.3 percent in February 2020. The increase in the share of seriously delinquent mortgages and REO properties in 2020 was steeper than the increase during the housing crisis of the late 2000s, but the 2020 peak was significantly lower than the high of 8.6 percent reached in January 2010. The substantial increase in the rate of seriously delinquent mortgages and REO properties in 2020 was due entirely to increases in mortgages that were 90 or more days delinquent and not increases of foreclosures and REOs. In December

Figure 9. Seriously Delinquent Mortgages and REO Properties



REO = real estate owned.

Note: Seriously delinquent mortgages are those that are 90 or more days delinquent or in foreclosure.

Source: CoreLogic, Inc.

2020, the number of mortgages that were 90 or more days delinquent was up 313 percent year over year, whereas foreclosures and REO properties were down 31 percent and 61 percent, respectively.

Current Regional Highlights

The sales housing markets in the 10 HUD regions had mixed conditions during the fourth quarter of 2022, ranging from balanced to tight. The Southeast, Rocky Mountain, and Pacific regions all had a mix of balanced to slightly tight markets. The Southwest region had a mix of balanced to tight markets, whereas the remaining HUD regions had varying degrees of tight conditions. During the past year, the easing of sales markets nationwide was evident in the state-level changes in average home sales prices. In 2021, there were 6 states where average home prices increased less than 10 percent year over year, whereas in 2022 there were 25 states where average home prices increased less than 10 percent. The Pacific region led home price growth in the past year, with price increases of 16 percent in Arizona and California, 13 percent in Hawaii, and 9 percent in Nevada. The states with the lowest price growth in 2022 were Wisconsin (Midwest region) and Wyoming (Rocky Mountain region), where the average home sales price



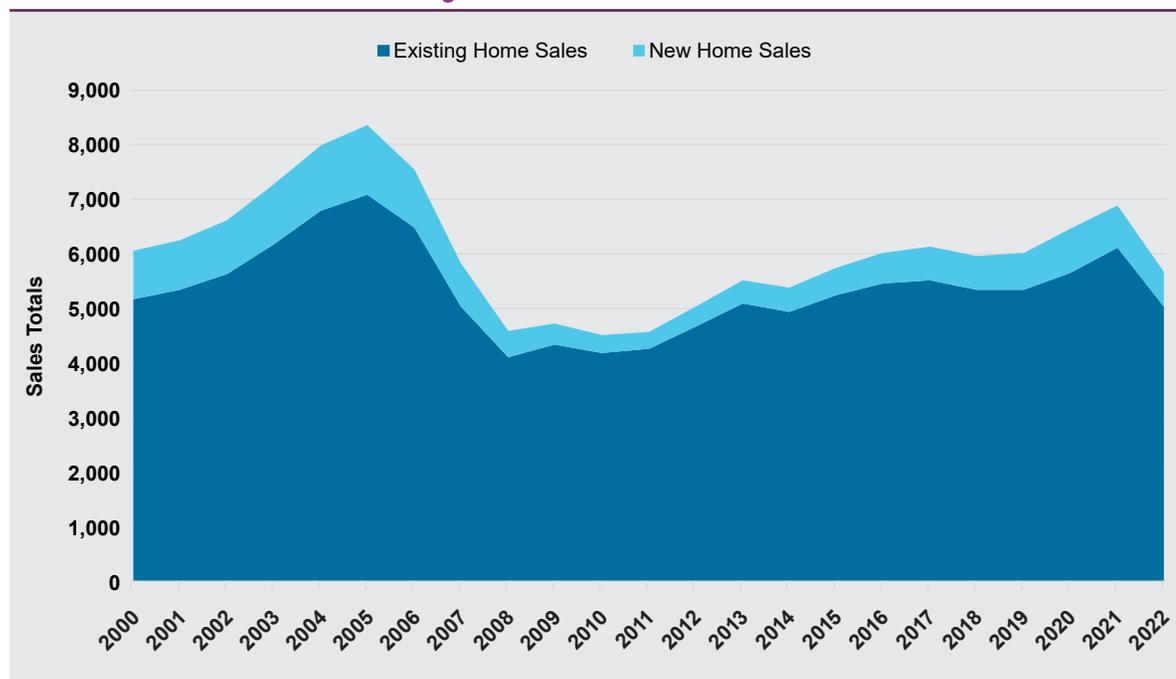
increased 2 percent. For additional home sales market data by HUD region, visit the [regional housing market information page](#) on the PD&R U.S. Housing Market Conditions website.

Home Sales Trends: 2000 to Current

Before the housing crisis during the latter half of the 2000s, [home sales](#) growth in the nation was rapid, with home sales reaching a peak of 8.36 million in 2005 (Census Bureau/HUD; NAR; Figure 10). During that period, home sales rose because mortgage lending standards were more relaxed and more mortgages were issued to riskier borrowers, which helped to inflate home sales and prices. From 2001 through 2006, subprime and near-prime loans increased from 9 to 40 percent of all mortgage originations (U.S. Economics Analyst, Goldman Sachs). During roughly the same period, from 2001 through their peak in 2005, existing home sales increased an average of 6 percent a year, and new home sales increased an average of 8 percent a year (Census Bureau/HUD; NAR). As mortgage interest rates increased in 2006, new and existing home sales declined 18 and 8 percent, respectively, with the decrease accelerating in 2007 after the housing bubble began to burst.

For the next few years, the home sales market in the United States was extremely soft. As a result, new and existing home sales continued to

Figure 10. National Home Sales



Sources: National Association of REALTORS®; U.S. Census Bureau/HUD

decline, with existing home sales bottoming out in 2008 and new home sales bottoming out in 2011. From peak to trough, new home sales declined at an average annual rate of 21 percent, and existing home sales declined at an average annual rate of 17 percent. After their respective lows, new and existing home sales trended upward as the economy improved and sales market conditions tightened. From 2009 through 2016, existing home sales increased at an average annual rate of 4 percent before declining from 2017 through 2019 at an average annual rate of 1 percent. New home sales also had faster growth during the earlier years of the recovery from the housing crisis, increasing at an average annual rate of 13 percent from 2012 through 2016 and slowing to an average annual rate of 7 percent from 2017 through 2019. As the COVID-19 pandemic began, existing home sales increased at a faster rate from 2020 through 2021, averaging 7 percent a year, whereas new home sales slowed slightly to an average increase of 6 percent a year. Sales of both new and existing homes dropped in 2022, decreasing 18 and 16 percent, respectively.

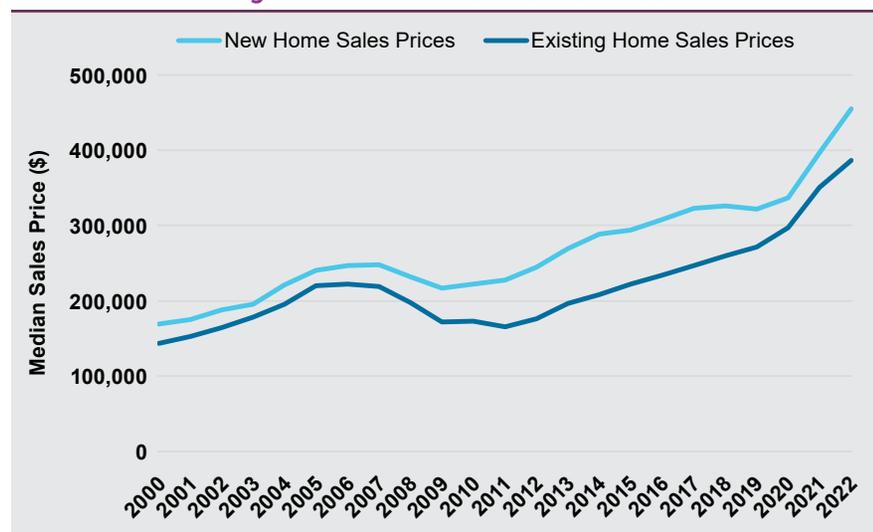
Home Sales Price Trends: 2000 to Current

Sales prices for new and existing homes have followed similar trajectories since 2000: increasing in the first half of the 2000s, declining during the housing crisis, and gradually increasing before gaining momentum in 2020 (Figure 11). The median existing home sales price increased an average of 8 percent a year from 2001 through the peak in 2006, while the median new home sales price peaked a year later, increasing an average of 6 percent a year from 2001 through 2007 (Census Bureau/HUD; NAR). Sales prices declined for both new and existing home sales in the years that followed; however, the peak-to-trough decline in existing home sales prices (25 percent) was more severe than the decline in new home sales prices (13 percent) and lasted nearly twice as long. From 2008 through 2009, the median price for new homes sold declined an average of 7 percent a year, and from 2007 through 2011, the median price for existing homes sold decreased an average of 6 percent a year. In large part, the extended decline in existing home sales prices compared to new home sales prices was because the proportion of existing sales that were REO properties

swelled during this time, and the relatively low prices for REO home sales created downward pressure on overall existing home sales prices. REO sales constituted a small proportion of existing home sales from 2000 through 2007, averaging around 3 percent (CoreLogic, Inc.). With the onset of the Great Recession, that percentage skyrocketed to 32 percent in 2009, a year when the average sales price for an REO home was nearly 50 percent below the price of a regular resale home.

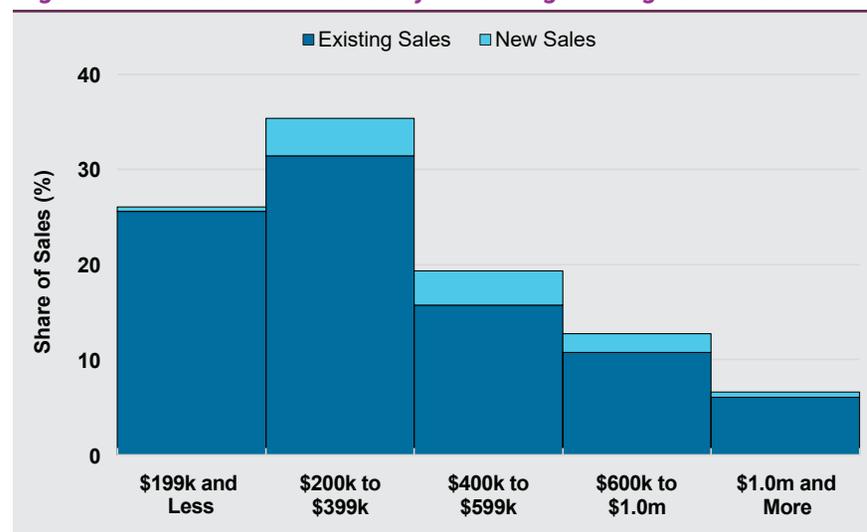
After median sales prices reached lows of \$216,700 for new homes in 2009 and \$166,100 for existing homes in 2011, price growth was relatively steady through the 2010s (Census Bureau/HUD; NAR). The median sales price for new homes increased an average of 4 percent a year from 2010 through 2019. Price growth for existing homes was also steady from 2012 through 2019, with the median sales price increasing an average of 6 percent a year. As the COVID-19 pandemic began and the housing market tightened, home price growth accelerated. From 2020 through 2022, the median price for new and existing home sales each increased an average of 12 percent annually. During 2022, the plurality of new and existing homes sold were priced between \$200,000 and \$399,999 (Figure 12).

Figure 11. National Home Sales Prices



Sources: National Association of REALTORS®; U.S. Census Bureau/HUD

Figure 12. Share of Overall Sales by Price Range During 2022 in the Nation



Note: New and existing sales include single-family homes, townhomes, and condominium units.
Source: Zonda



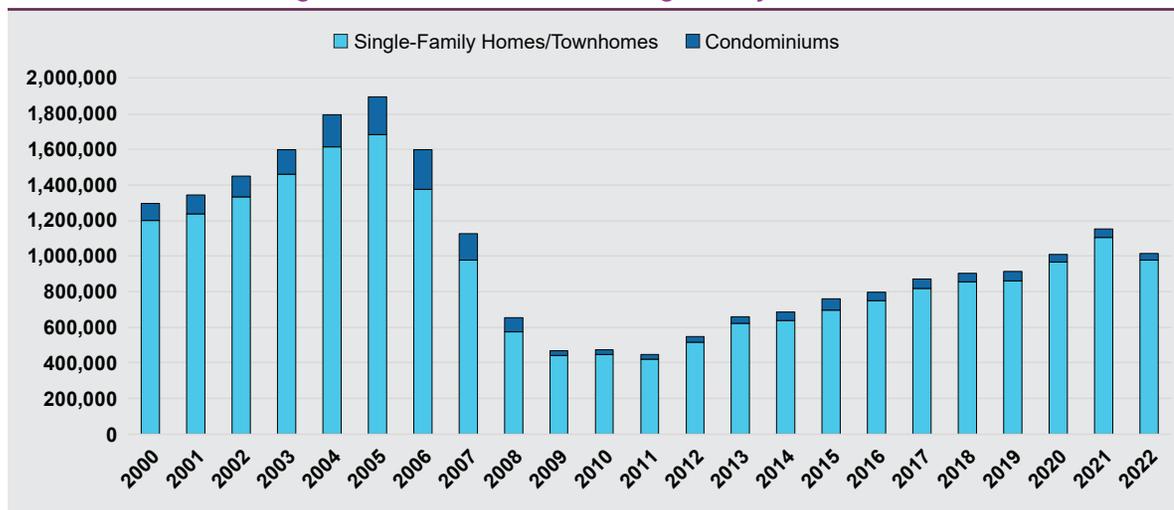
Sales Construction Activity

Since 2010, sales construction, as measured by the number of sales units permitted, has trended upward for the nation, but sales construction activity remained well below the construction levels throughout much of the 2000s, when the home sales market was overbuilding (Figure 13). From 2000 through 2005, when home sales and prices increased, the number of sales units permitted averaged 1.56 million units a year. During the next 4 years, the number of sales units permitted dropped precipitously, averaging 963,400 units permitted a year, representing a decline of 38 percent from the previous period. Sales building activity stabilized at low levels from 2009 through 2011, with 463,400 sales units permitted annually as the housing market worked to absorb an excess supply of sales inventory. In the years that followed, the number of sales units permitted increased at a steady rate of 9 percent a year to approximately 913,900 in 2019. For the next 2 years, sales construction increased by an average of 12 percent a year to approximately 1.15 million sales units permitted in 2021, the highest level since 2006. As home sales declined from 2021 through 2022, the number of sales units permitted decreased 12 percent.

Housing Affordability: Sales

The affordability of owning a home in the United States varies significantly depending on geography, but homeownership in general has become less affordable during the past decade.

Figure 13. Annual Sales Permitting Activity in the Nation

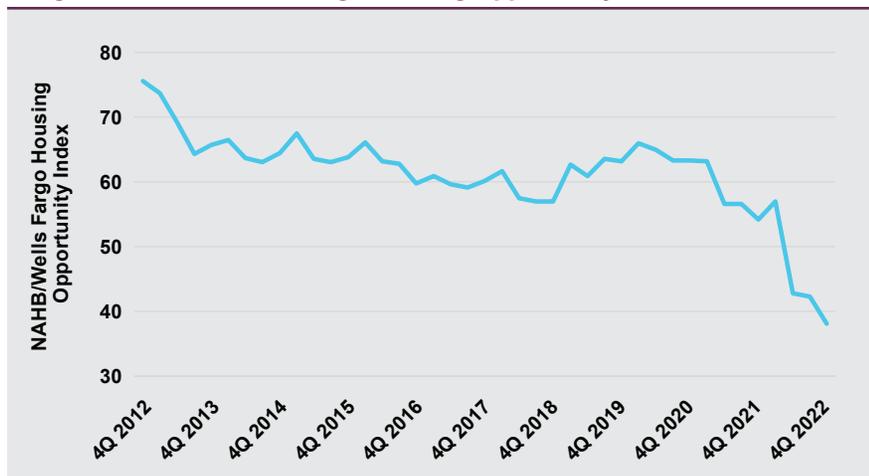


Sources: U.S. Census Bureau, Building Permits Survey; 2000–21—final data and estimates by the analyst; 2022—preliminary data and estimates by the analyst

The National Association of Home Builders (NAHB)/Wells Fargo Housing Opportunity Index (HOI) for the United States, which represents the share of homes sold that would have been affordable to a family earning the median income, was 38.1 during the fourth quarter of 2022, down from 75.6 during the fourth quarter of 2012 (Figure 14). The HOI declined by 16.1 percentage points in the past year alone because of higher mortgage rates and home prices.

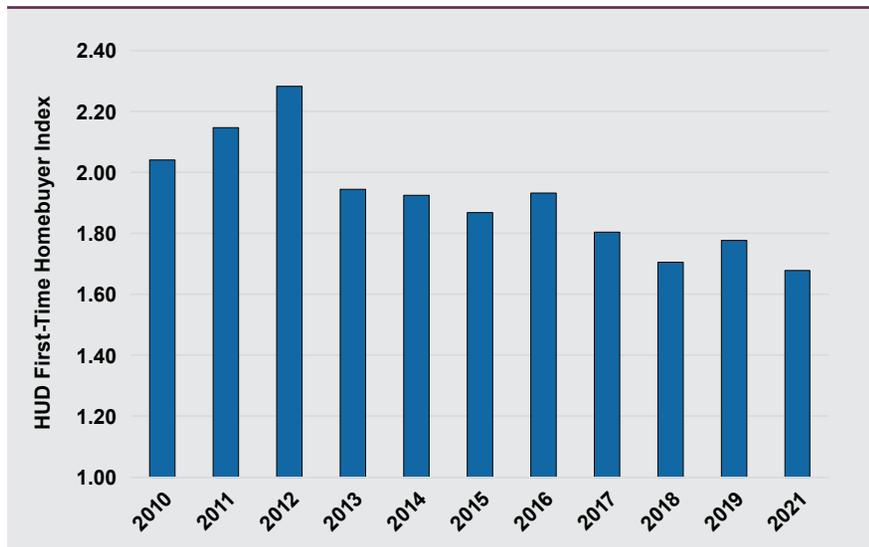
First-time homebuyers face many affordability challenges when it comes to purchasing a home, regardless of where they live. For the nation, homeownership has become less affordable for households in the 25-to-44-year age cohort, a prime group for first-time homebuyers. The HUD First-Time Homebuyer Affordability Index measures the median household income for householders aged 25 to 44 years old relative to the income needed to purchase a 25th percentile-priced home. After peaking in 2012 at 2.3, the index averaged 1.9 from 2013 through 2016 (Figure 15). Since then, the index has declined, with a slight increase to 1.8 in 2019 due to low interest rates and increased household income. Calculating the 2020 index is not possible because of data limitations with the 2020 ACS; however, 2021 data show a decline in the HUD First-Time Homebuyer Affordability Index, in part because of the strong home price increases since 2019. It is likely that housing affordability for first-time homebuyers in 2022 declined further because of higher interest rates and home prices.

Figure 14. NAHB/Wells Fargo Housing Opportunity Index for the Nation



NAHB = National Association of Home Builders. 4Q = fourth quarter.
Source: NAHB/Wells Fargo

Figure 15. HUD First-Time Homebuyer Affordability Index for the Nation



Note: Data for 2020 are not available.
Sources: American Community Survey 1-year data; Freddie Mac; Zonda

Forecast

During the forecast period, housing demand is expected to be relatively strong, totaling 2.90 million sales units during the 3-year forecast period (Table 4). This represents 57.4 percent of the overall demand for housing during the forecast period. Despite a high level of sales demand, this share is estimated to be smaller than the share of overall housing absorption in the sales market during the past few years because rapid home price growth and higher mortgage interest rates have pushed the cost of homeownership to new highs. More than one-half of the demand during the first year will be met by units already under construction. Given the current economic and demographic forecast, the number of homes demanded should be relatively constant through the next 3 years. If mortgage rates continue to rise during this period, the demand for sales housing will be lower. This demand forecast does not take into account investor demand for homes, which has risen dramatically in recent years. According to Redfin, a national real estate brokerage, 17.8 percent of home sales during the fourth quarter of 2022 were investor purchases. As a result, the demand forecast in this report is lower than recent levels of home construction.

Table 4. Demand for New Sales Units in the Nation During the Forecast Period

	Sales Units
Forecast Household Change	1,694,500
Household Tenure Shift Adjustment	(60,000)
Inventory Tenure Shift Adjustment	300,000
Forecast Replacement Demand	538,850
Adjustment for Frictional Vacancies	37,650
Adjustment for Housing Deficit	385,000
Net Quantitative Demand	2,896,000
Under Construction	457,800

Note: The forecast period is from January 1, 2023, to January 1, 2026.
Source: Estimates by the analyst



Rental Market

Market Conditions: Tight

After record-breaking levels of rental units permitted during the past 2 years, the rental housing market eased in 2022.

Current Conditions and Recent Trends

The national rental market is tight, with an estimated vacancy rate of 5.4 percent—down from 9.2 percent in 2010 when the market was soft (Table 5). The majority of the rental supply in the nation consists of apartments. In 2021, 63 percent of occupied rental units were in multifamily structures with two or more units, typically apartment properties (ACS 1-year data). Attached and detached single-family homes are also an important source of rental supply in the nation, with 32 percent of renters residing in that type of unit as of 2021, down 2 percentage points from 2010. During December 2022, the vacancy rate for professionally managed single-family rental units was 2.5 percent, down 0.1 percentage point from December 2021 (CoreLogic, Inc.). At the same time, the median rent for three-bedroom single-family homes that were professionally managed increased 8 percent to \$1,950. During a similar period, from the fourth quarter of 2021 to the fourth quarter of 2022, the average monthly effective rent for apartment units increased 4 percent, and the apartment vacancy rate increased 1.5 percentage points to 6.3 percent (CoStar Group).

Table 5. Rental and Apartment Market Quick Facts for the Nation

Rental Market Quick Facts	2010 (%)	Current (%)
	Rental Vacancy Rate	9.2
Rental Market Quick Facts	2010 (%)	2021 (%)
	Occupied Rental Units by Structure	
	Single-Family Attached & Detached	32
	Multifamily (2–4 Units)	17
	Multifamily (5+ Units)	46
Other (Including Mobile Homes)	4	
Apartment Market Quick Facts	4Q 2022	YoY Change
	Apartment Vacancy Rate	1.5
	Average Rent	4%

4Q = fourth quarter. YoY= year-over-year.

Notes: The current date is January 1, 2023. Percentages may not add to 100 due to rounding.

Sources: 2010 vacancy rate—2010 Census; current vacancy rate—estimate by the analyst; occupied rental units by structure—2010 and 2021 American Community Survey 1-year data; apartment data—CoStar Group

Current Regional Highlights

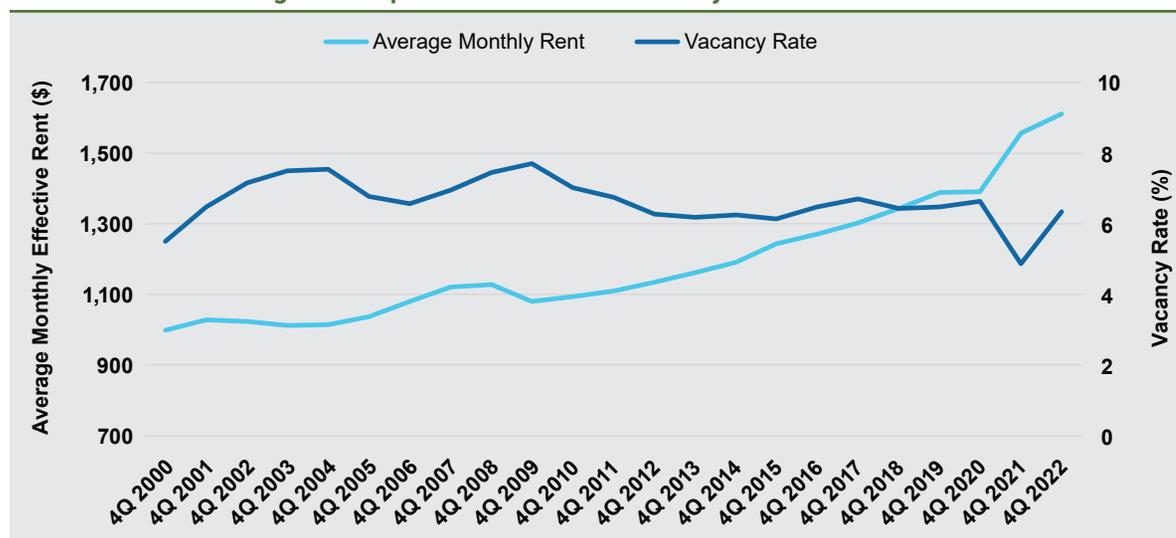
Apartment markets throughout the 10 HUD regions ranged from soft to tight during the fourth quarter of 2022, compared with a mix of balanced to very tight conditions during the fourth quarter of 2021. All regions had softening or easing of apartment markets in the past year, except for the New England region, which continued to have a mix of balanced to tight markets. Six regions had apartment markets with varying degrees of softness during the fourth quarter of 2022, compared with no markets in the country having this classification the previous year. Rent growth during the past year slowed significantly. Although double-digit rent growth was widespread throughout the country from the fourth quarter of 2020 to the fourth quarter of 2021, only one market with a population greater than 500,000, Northwest Arkansas, had double-digit rent growth during the past year, with rent growth of 11 percent (CoStar Group). During the fourth quarter of 2022, year-over-year rent growth was also high in Knoxville, Tennessee, and Fort Myers, Florida, each with 9-percent increases in the average rent. Rents were down in only three markets with a population greater than 500,000: Reno, Nevada; Las Vegas, Nevada; and Phoenix, Arizona. Additional apartment market data by HUD region are available at the [regional housing market information page](#) on the PD&R U.S. Housing Market Conditions website.



Apartment Vacancy Rates and Rents Since 2000

During the 2010s, the national apartment market steadily tightened, whereas the market went through both tightening and softening during the 2000s. The apartment vacancy rate for the nation was a low 5.5 percent during the fourth quarter of 2000 before increasing to 7.6 percent by the fourth quarter of 2004 (CoStar Group; Figure 16). During this period, the average monthly effective apartment rent was relatively unchanged. The rental market softened during this time because of an increased number of households shifting from renting to owning homes and an increased supply of single-family rentals that investors added to the market. The market tightened somewhat in 2005 and 2006, with the vacancy rate declining by an average of 0.5 percentage point a year and the average monthly effective rent increasing 3 percent a year. In the years that followed, the apartment vacancy rate increased by an average of 0.4 percentage point annually, and the average monthly effective rent during the fourth quarter of 2009 was unchanged from the fourth quarter of 2006. As was the case for the sales market during that period, the national apartment market was soft in 2009, in part because apartments faced increased competition from investor-owned condominiums and single-family homes entering the rental market. During the housing crisis, the increase in condominium and single-family rentals came from two main

Figure 16. Apartment Rents and Vacancy Rates in the Nation



4Q = fourth quarter.
Source: CoStar Group

sources: (1) investors buying foreclosed properties and offering them for rent and (2) households needing to relocate and move out of their homes but lacking enough equity to sell.

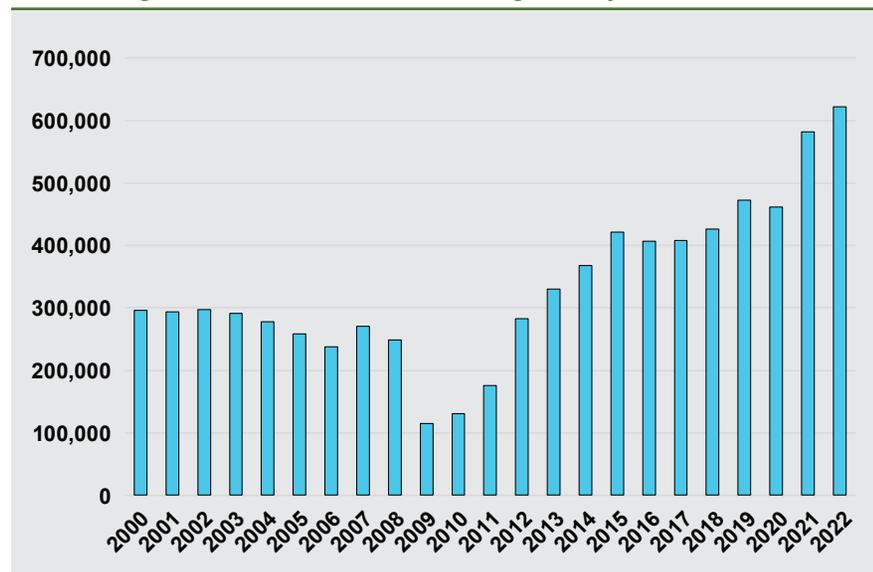
In the years immediately after the Great Recession, the average apartment vacancy rate declined slightly, and the average monthly effective rent in the nation increased at a steady rate. From the fourth quarter of 2009 through the fourth quarter of 2012, the average vacancy rate declined by 0.5 percentage point a year. For the next several years, the apartment market was balanced, with the vacancy rate averaging 6.4 percent from the fourth quarter of 2012 through the fourth quarter of 2020 (CoStar Group). The average effective monthly rent increased an average of 3 percent annually, from \$1,081 in the fourth quarter of 2009 to \$1,389 in the fourth quarter of 2019. The COVID-19 pandemic and 2020 recession led to a brief softening of the apartment market, and the average monthly effective rent remained unchanged from the fourth quarter of 2019 to the fourth quarter of 2020. The slowdown in rental demand was short-lived, however, and by the fourth quarter of 2021, the average rent for apartments was up 12 percent, year over year, and the average vacancy rate was down by 1.8 percentage points. The fourth quarter of 2021 had the lowest apartment vacancy rate and the highest year-over-year increase in the average apartment rent in more than 20 years. Since the fourth quarter of 2021, the apartment market has eased somewhat, with the

average monthly effective rent increasing 4 percent and the average vacancy rate increasing by 1.5 percentage points in the fourth quarter of 2022.

Rental Construction Activity

Rental building activity (see [Rental Construction](#)), as measured by the number of rental units permitted, averaged much higher levels since 2010 in response to stronger growth in rental demand and tighter rental market conditions compared with the 2000s. From 2000 through 2008, an average of 274,600 rental units were permitted annually (Figure 17). As the rental market softened considerably in 2009, rental permitting dropped and remained at relatively low levels for 3 years, averaging 140,500 units permitted annually through 2011, or nearly half the average annual level during the previous 9 years. Rental building activity began to recover in earnest from 2012 through 2015, increasing at an average annual rate of 24 percent. For the next 5 years,

Figure 17. Annual Rental Permitting Activity in the Nation



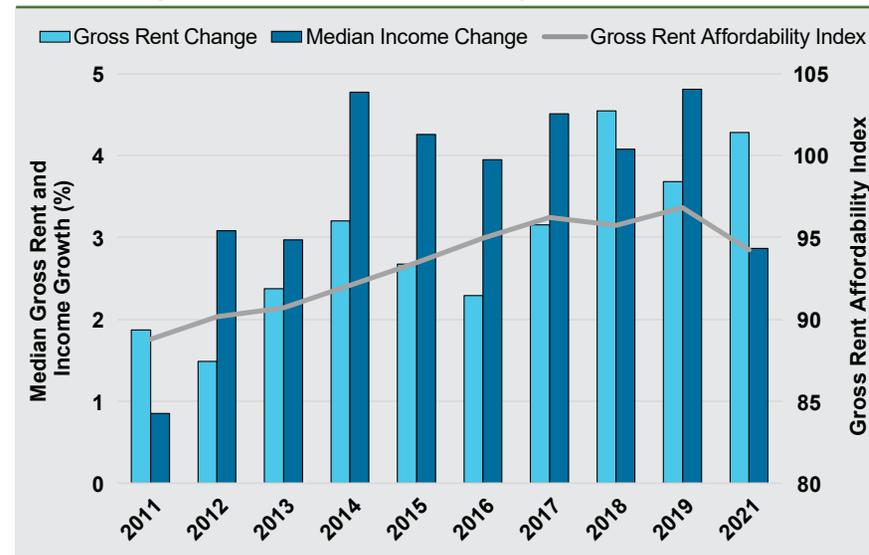
Note: Includes apartments and units intended for rental occupancy.
Sources: U.S. Census Bureau, Building Permits Survey; 2000–21—final data and estimates by the analyst; 2022—preliminary data and estimates by the analyst

the number of rental units permitted was fairly steady, averaging 434,900 units per year. As the rental market tightened and rents rose rapidly in 2021, the number of rental units permitted increased an average of 16 percent a year through 2022.

Housing Affordability: Rental

Rental affordability across the nation increased through the 2010s, with the median income for renter households increasing at a faster rate than the median gross rent. From 2011 to 2021, the median income for renter households increased 45 percent, whereas the median gross rent increased 37 percent. As a result, the HUD Gross Rent Affordability Index for the nation, a measure of median renter household income relative to qualifying income for the median-priced rental unit, increased from 88.8 in 2011 to 94.3 in 2021 (Figure 18). Despite increased rental affordability since 2011, affordability

Figure 18. Gross Rent Affordability Index for the Nation



Notes: The Gross Rent Affordability Index differs from the HUD Rental Affordability Index published on the U.S. Housing Market Conditions website in that it is based on combined rent and utilities expenditure. Data for 2020 are not available.
Source: American Community Survey 1-year data



declined significantly from 2019 through 2021 because of a slowdown in income growth and a higher increase in the median gross rent.

Many renter households in the United States face some degree of cost burden, meaning they pay more than 30 percent of their income on rent. During the 2015-through-2019 period, an estimated 21.7 percent of all renter households in the nation had moderate to high cost burdens, spending between 31 and 50 percent of their income on rent, whereas 22.2 percent were severely cost-burdened, spending more than 50 percent of income toward rent (Table 6). Very low-income renter households face significantly higher cost burdens. For renter households with incomes less than 50 percent of the Area Median Family Income, 27.5 percent experienced moderate to high cost burden, and 47.4 percent were severely cost-burdened.

Income-eligible residents may qualify for project-based rental assistance (PBRA) or housing choice vouchers (HCV) through their local public housing authority (PHA). Nationwide, PHAs administered approximately 2.4 million HCVs in 2022, representing an increase of more than 15 percent from 2010 (HUD's Picture of Subsidized Households). The average monthly subsidy has increased 0.9 percent since 2010, whereas the monthly tenant contribution has decreased 4.0 percent (Table 7). Despite more than 4.5 million American households receiving rental assistance, funding limitations prevent three out of four eligible households from receiving housing assistance.

In the United States, approximately 582,500 people were homeless in 2022, and 40 percent were unsheltered homeless (2022 Point-in-Time Count). The two states with the highest populations, California and New York, accounted for 42 percent of the homeless population in the nation. Although 67 percent of the homeless population in California were unsheltered, only 5 percent of the homeless population in New York were unsheltered.

Forecast

During the 3-year forecast period, rental demand is expected to remain strong, especially if mortgage rates continue to rise and increase the cost of homeownership. Demand for approximately 2.15 million rental units is expected nationwide for the next 3 years (Table 8). This level of demand

Table 6. Percentage of Cost Burdened Renter Households by Income in the Nation, 2015–19

	Moderate to High Cost Burden: 31–50 Percent of Income Toward Housing Costs	Severe Cost Burden: 51 Percent or More of Income Toward Housing Costs
Renter Households with Income <50% HAMFI	27.5	47.4
Total Renter Households	21.7	22.2

CHAS = Comprehensive Housing Affordability Strategy. HAMFI = HUD Area Median Family Income.
Sources: Consolidated Planning/CHAS Data; American Community Survey 5-year estimates

Table 7. National Picture of Subsidized Households, 2022

	Total	Change Since 2010
Total Assisted Households (2022)	4,537,614	2.5%
Total Housing Voucher Households (2022)	2,350,366	15.2%
Average HCV Tenant Monthly Contribution	\$420	-4.0%
Average Monthly HUD Subsidy	\$948	0.9%

HCV = Housing Choice Voucher.

Note: Dollar changes are inflation-adjusted using the Consumer Price Index for All Urban Consumers (CPI-U).
Source: HUD Picture of Subsidized Households

Table 8. Demand for New Rental Units in the Nation During the Forecast Period

Rental Units	
Forecast Household Change	920,500
Household Tenure Shift Adjustment	60,000
Inventory Tenure Shift Adjustment	(300,000)
Forecast Replacement Demand	879,200
Adjustment for Frictional Vacancies	82,100
Adjustment for Housing Deficit	507,200
Net Quantitative Demand	2,149,000
Under Construction	515,700

Note: The forecast period is from January 1, 2023, to January 1, 2026.
Source: Estimates by the analyst

is lower than the pace of rental unit construction during the past few years after accounting for nonpermitted additions to the rental supply. The 515,700 rental units already under construction will satisfy nearly all of the estimated demand during the first year of the forecast period. Demand is expected to remain relatively constant during the 3-year period, given the economic and demographic outlook presented in this report.



Terminology Definitions and Notes

A. Definitions

Balanced Market	The supply of vacant available housing equals demand.
Building Permits (Rental/Sales Construction)	Building permits do not necessarily reflect all residential building activity. Some units are constructed or created without a building permit or are issued a different type of building permit. For example, some units classified as commercial structures are not reflected in the residential building permits. As a result, the analyst, through diligent fieldwork, makes an estimate of this additional construction activity. Some of these estimates are included in the discussions of single-family and multifamily building permits.
Cost Burdened	Spending more than 30 percent of household income on housing costs. Moderate to high-cost burden refers to households spending 31 to 50 percent of income on housing costs. Severe cost burden refers to households spending 51 percent or more of income on housing costs.
Demand	The demand estimates in the analysis are not a forecast of building activity. They are the estimates of the total housing production needed to achieve a balanced market at the end of the 3-year forecast period given conditions on the as-of date of the analysis, growth, losses, and excess vacancies. The estimates do not account for units currently under construction or units in the development pipeline.
Effective Rent	The cost to rent an apartment, less concessions.
Forecast Period	January 1, 2023–January 1, 2026—Estimates by the analyst.
Frictional Vacancies	The minimum level of vacancies needed in the housing market for existing households to easily move from one housing unit to another.
Home Sales/ Home Sales Prices	Includes single-family home, townhome, and condominium sales.



Household Tenure Shift	This shift reflects changes in the tenure of households. A household tenure shift from renter to owner causes an increase in the homeownership rate; a shift from owner to renter causes a decrease in the rate.
Housing Deficit	Also known as a housing shortage, the number of additional housing units needed to achieve a balanced market.
Inventory Tenure Shift	This shift reflects changes in the tenure of units already in the housing inventory. An inventory tenure shift from owner to renter would reflect owner occupied units offered for rent, either by the present owner who moves to another residence or after sale to an investor owner. In contrast, an inventory tenure shift from renter to owner would reflect the sale of units previously for rent that are purchased by owner occupants. When this happens to an entire apartment development, it is typically referred to as a “condominium conversion”.
Net Natural Change	The difference between resident births and resident deaths.
Rental Market/ Rental Vacancy Rate	Includes apartments and other rental units such as single-family, multifamily, and mobile homes.
Replacement Demand	The number of anticipated net losses from the housing inventory that need to be replaced in order to maintain a balanced market. Net losses include demolitions, conversions of residential property to commercial use, mergers, and other causes.
Seriously Delinquent Mortgages	Mortgages 90+ days delinquent or in foreclosure.

B. Notes on Geography

1.	Puerto Rico, U.S. Virgin Islands, and Guam are served by HUD programs but are not included in this analysis due to data limitations.
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2.	<p>HUD is organized into 10 regions:</p> <p>New England (Region I): Connecticut, Vermont, Massachusetts, Maine, New Hampshire, Rhode Island</p> <p>New York/New Jersey (Region II): New York, New Jersey</p> <p>Mid-Atlantic (Region III): Pennsylvania, Virginia, West Virginia, Maryland, Delaware, Washington, D.C.</p> <p>Southeast/Caribbean (Region IV): Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, U.S. Virgin Islands</p> <p>Midwest (Region V): Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin</p> <p>Southwest (Region VI): Arkansas, Louisiana, New Mexico, Oklahoma, Texas</p> <p>Great Plains (Region VII): Kansas, Iowa, Missouri, Nebraska</p> <p>Rocky Mountain (Region VIII): Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming</p> <p>Pacific (Region IX): California, Arizona, Hawaii, Nevada</p> <p>Northwest (Region X): Washington, Alaska, Idaho, Oregon</p>
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C. Additional Notes

1.	<p>This analysis has been prepared for the assistance and guidance of HUD in its operations. The factual information, findings, and conclusions may also be useful to builders, mortgagees, and others concerned with housing market conditions and trends. The analysis does not purport to make determinations regarding the acceptability of any mortgage insurance proposals that may be under consideration by the Department.</p>
2.	<p>The factual framework for this analysis follows the guidelines and methods developed by the Economic and Market Analysis Division within HUD. The analysis and findings are as thorough and current as possible based on information available on the as-of date from local and national sources. As such, findings or conclusions may be modified by subsequent developments.</p>



3.	The NAHB/Wells Fargo Housing Opportunity Index represents the share of homes sold in the HMA that would have been affordable to a family earning the local median income, based on standard mortgage underwriting criteria.
4.	The national HUD First-Time Homebuyer Affordability Index is a weighted average of the index for each metropolitan area, weighted by the total number of sales.

D. Photo/Map Credits

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