COMPREHENSIVE HOUSING MARKET ANALYSIS

Denver-Aurora-Lakewood, Colorado

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

As of September 1, 2023

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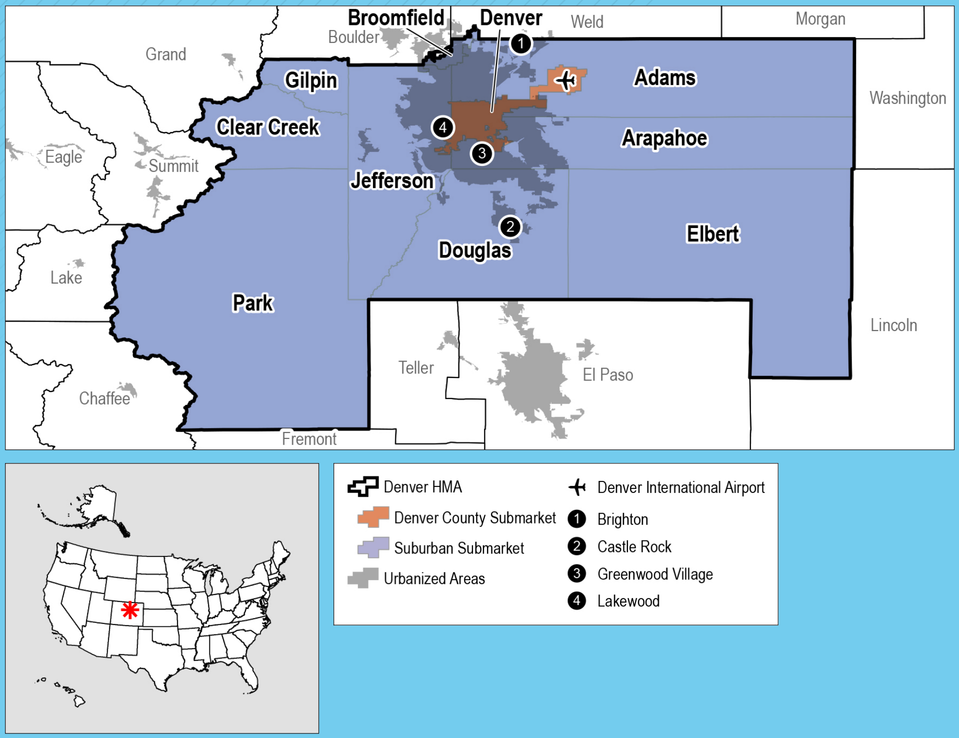
Executive Summary

Housing Market Area Description

The Denver-Aurora-Lakewood Housing Market Area (hereafter, Denver HMA) is coterminous with the Metropolitan Statistical Area of the same name and is in north-central Colorado at the eastern edge of the Rocky Mountains. For purposes of this analysis, the HMA is divided into two submarkets: (1) the Denver County submarket, which is coterminous with the city and county of Denver, and (2) the Suburban submarket, which includes nine counties surrounding the Denver County submarket: Adams, Arapahoe, Broomfield, Clear Creek, Douglas, Elbert, Gilpin, Jefferson, and Park.

The current HMA population is estimated at 3.03 million.

Located along the Front Range in the Rocky Mountains, the Denver HMA is a gateway to tourism in the central Colorado mountains. The city of Denver manages more than 200 parks, and there are eight state parks in or near the HMA. Twelve ski resorts are within an approximately 2-hour drive from the city of Denver. In 2022, the Denver HMA had a record 36.3 million visitors; tourism in 2022 generated $9.4 billion in revenue, which was 34 percent higher than the previous record set in 2019 (Longwoods International). More than 50.9 million passengers passed through Denver International Airport (DIA) year to date through August 2023, up 13 percent from the same period a year earlier and 11 percent higher than the same period in 2019 (DIA).



Tools and Resources

Find interim updates for this metropolitan area, and select geographies nationally, at PD&R's Market-at-a-Glance tool.
Additional data for the HMA can be found in this report's supplemental tables.
For information on HUD-supported activity in this area, see the Community Assessment Reporting Tool.

Market Qualifiers

Economy

Strong: During the 12 months ending August 2023, nonfarm payrolls were 3.8 percent above the level during 2019, before the pandemic, outpacing the national recovery of 2.8 percent.

Nonfarm payrolls increased by 23,400 jobs during the 12 months ending August 2023, a gain of 1.5 percent from a year earlier to 1.60 million jobs. Seven of the 11 payroll sectors contributed to the growth, led by government payrolls. The labor market is tight, with a low unemployment rate, which decreased from 3.6 percent a year earlier to 2.9 percent during the 12 months ending August 2023. During the next 3 years, nonfarm payrolls are expected to increase an average of 2.0 percent annually to 1.69 million jobs.

Sales Market

Slightly Tight: Despite increasing interest rates and decreasing home sales, the average home sales price increased 3 percent during the 12 months ending August 2023 compared with a year earlier (CoreLogic, Inc., with adjustments by the analyst), bolstered by a low inventory of 2.0 months of supply (CoreLogic, Inc.).

Market conditions are balanced in the Denver County submarket and tight in the Suburban submarket. In the HMA, home sales totaled 52,750 during the 12 months ending August 2023, down 28 percent from a year earlier, and the average price increased to $647,100. Rising interest rates and declining housing affordability hampered home sales. During the 3-year forecast, demand for 36,100 new homes is expected, and the 5,325 under construction will meet a portion of the demand. Demand is anticipated to be strongest in the Suburban submarket because of its larger share of the population and higher homeownership rate.

Rental Market

Soft: The overall rental vacancy rate is currently estimated at 7.9 percent, up from 7.6 percent in 2020 and 7.1 percent in 2010.

Apartment market conditions are soft in the Denver County submarket and slightly soft in the Suburban submarket. As of the third quarter of 2023, the average apartment vacancy rate in the HMA was 8.0 percent, up from 6.6 percent a year earlier, and the average rent increased less than 1 percent to $1,834 (CoStar Group). During the forecast period, demand is estimated for 30,450 additional rental units. The Denver County submarket, which accounts for 45 percent of the rental units under construction, is anticipated to account for 47 percent of the demand. The 38,000 rental units under construction in the HMA are expected to more than satisfy the demand in both submarkets.

TABLE OF CONTENTS

3-Year Housing Demand Forecast

	Sales Units			Rental Units		
	Denver-Aurora-Lakewood HMA Total	Denver County Submarket	Suburban Submarket	Denver-Aurora-Lakewood HMA Total	Denver County Submarket	Suburban Submarket
Total Demand	36,100	6,050	30,050	30,450	14,400	16,050
Under Construction	5,325	850	4,475	38,000	17,200	20,800

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

Economic Conditions

Largest Sector: Professional and Business Services

Nonfarm payroll growth slowed to a 1.5-percent gain during the 12 months ending August 2023, down from a 5.6-percent growth rate a year earlier because the economy transitioned from job recovery to expansion.

Primary Local Economic Factors

The Denver HMA includes the state capital and is the most populous metropolitan area in the state, accounting for approximately 51 percent of the statewide population. As such, the HMA has a concentration of healthcare services to address the medical needs of the rest of the state and surrounding areas. Six of the 10 largest employers in the HMA provide medical services (Table 1). The largest employer, University of Colorado Health, is affiliated with the University of Colorado School of Medicine and employs nearly 13,200 workers. The presence of the state capital supports a cluster of other government jobs and provides considerable economic stability in the HMA across departments, such as corrections, health care, higher education, legislative services, public services, and more (State of Colorado Workforce Report FY 2020–2021). The number of state employees working in the Denver HMA increased nearly 4 percent from a year earlier, accounting for 48 percent of all state government employees throughout Colorado.

Table 1. Major Employers in the Denver-Aurora-Lakewood HMA

Name of Employer	Nonfarm Payroll Sector	Number of Employees
University of Colorado Health	Government	13,190
Amazon.com, Inc.	Transportation & Utilities	12,360
HCS Healthcare, Inc.	Education & Health Services	12,160
Intermountain Healthcare	Education & Health Services	10,000
Centura Health Corporation	Education & Health Services	9,530
Lockheed Martin Corporation	Manufacturing	9,320
Comcast Corporation	Information	8,080
United Airlines Holdings, Inc.	Transportation & Utilities	7,130
Children's Hospital Colorado	Education & Health Services	7,000
Kaiser Foundation Health Plan Inc.	Education & Health Services	6,340

Note: Excludes local school districts.
Source: Development Research Partners, 2022

Current Conditions—Nonfarm Payrolls

The economy is strong in the Denver HMA, although job growth slowed during the past year when the economy transitioned from recovery to expansion. During the 12 months ending August 2023, nonfarm payrolls increased by 23,400 jobs, or 1.5 percent, from a year earlier to 1.60 million jobs (Table 2). Job growth occurring in the HMA during the past year was much slower than the national 2.9-percent annual increase. By comparison, during the 12 months ending August 2022, jobs in the HMA increased 5.6 percent annually, faster than the 4.6-percent national gain. During 2022, nonfarm payrolls in the Denver HMA and the nation recovered from the brief recession in early

Table 2. 12-Month Average Nonfarm Payroll Jobs (1,000s) in the Denver-Aurora-Lakewood HMA, by Sector

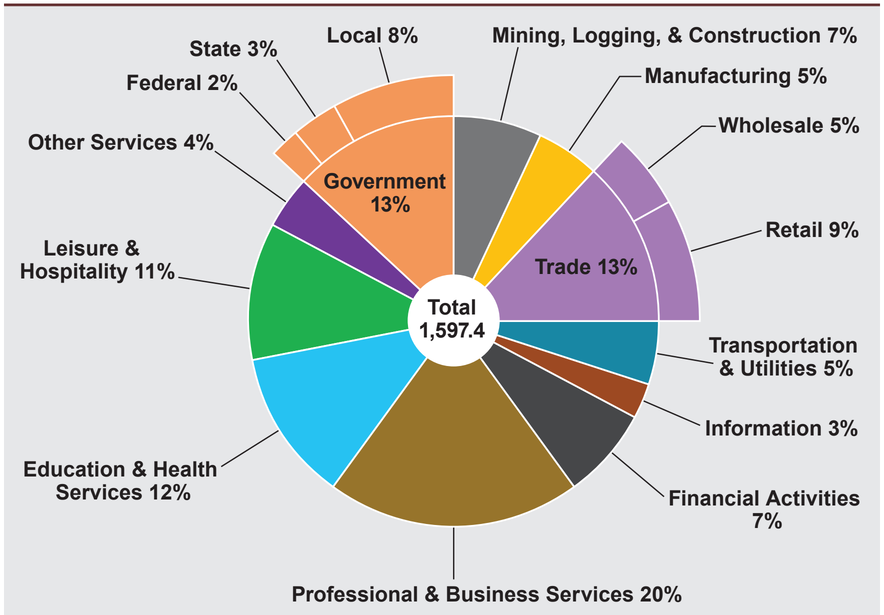
	12 Months Ending August 2022	12 Months Ending August 2023	Absolute Change	Percentage Change
Total Nonfarm Payroll Jobs	**1,574.0**	**1,597.4**	**23.4**	**1.5**
Goods-Producing Sectors	182.0	184.2	2.2	1.2
Mining, Logging, & Construction	110.6	112.1	1.5	1.4
Manufacturing	71.4	72.1	0.7	1.0
Service-Providing Sectors	1,392.0	1,413.1	21.1	1.5
Wholesale & Retail Trade	213.4	213.2	-0.2	-0.1
Transportation & Utilities	75.2	75.6	0.4	0.5
Information	53.9	52.3	-1.6	-3.0
Financial Activities	117.9	112.8	-5.1	-4.3
Professional & Business Services	306.0	314.3	8.3	2.7
Education & Health Services	194.2	194.0	-0.2	-0.1
Leisure & Hospitality	163.9	170.9	7.0	4.3
Other Services	65.0	68.3	3.3	5.1
Government	202.5	211.7	9.2	4.5

Notes: Based on 12-month averages through August 2022 and August 2023. Numbers may not add to totals due to rounding. Data are in thousands.
Source: U.S. Bureau of Labor Statistics

2020, and as of the 12 months ending August 2023, nonfarm payrolls in the HMA and nation were 3.8 and 2.8 percent, respectively, above the 2019 prepandemic peak.

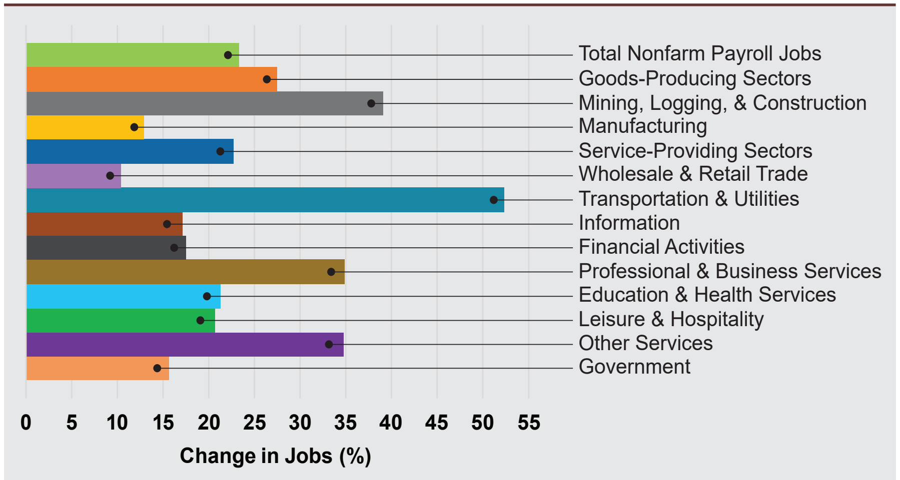
Seven of the eleven payroll sectors contributed to the increase in jobs during the 12 months ending August 2023. Government payrolls led job growth during the past year, increasing by 9,200 jobs, or 4.5 percent, during the 12 months ending August 2023 compared with the previous 12-month period. Approximately 79 percent of the gains occurred in the local government subsector. The professional and business services sector also had strong growth, adding 8,300 jobs, or 2.7 percent, year over year. The sector is 12 percent higher than 2019 levels, and is the largest in the HMA, accounting for 20 percent of nonfarm payrolls (Figure 1). During the 12 months ending August 2023, the transportation and utilities sector added 400 jobs, or 0.5 percent, from a year earlier, compared with growth of 5.2 percent year over year during the previous 12-month period. Despite the recent slowdown, the transportation and utilities sector has been the fastest growing sector since the mid-2010s, up 52 percent since 2014 (Figure 2), following the HMA recovery from the Great Recession. United Airlines, with a regional hub at DIA, added 1,800 jobs at the airport in 2022 and is in the process of adding 1,800 more jobs during 2023. Approximately 47 percent of passenger traffic in and out of Denver so far in 2023 flew with United Airlines (DIA). Partially offsetting job gains, the wholesale and retail trade, the information, the financial activities, and the education and health services sectors all declined. In the information sector, global layoffs in the high-tech industry impacted the HMA, with sector jobs decreasing by 1,600 jobs, or 3.0 percent, from the 12 months ending August 2022. The education and health services sector lost 200 jobs, down 0.1 percent from a year earlier, partly because demand for the medical labs

Figure 1. Share of Nonfarm Payroll Jobs in the Denver-Aurora-Lakewood HMA, by Sector



Notes: Total nonfarm payroll is in thousands. Percentages may not add to 100 percent due to rounding. Based on 12-month averages through August 2023.
Source: U.S. Bureau of Labor Statistics

Figure 2. Sector Growth in the Denver-Aurora-Lakewood HMA, 2014 to Current



Note: Current data are based on 12-month averages ending August 2023.
Source: U.S. Bureau of Labor Statistics

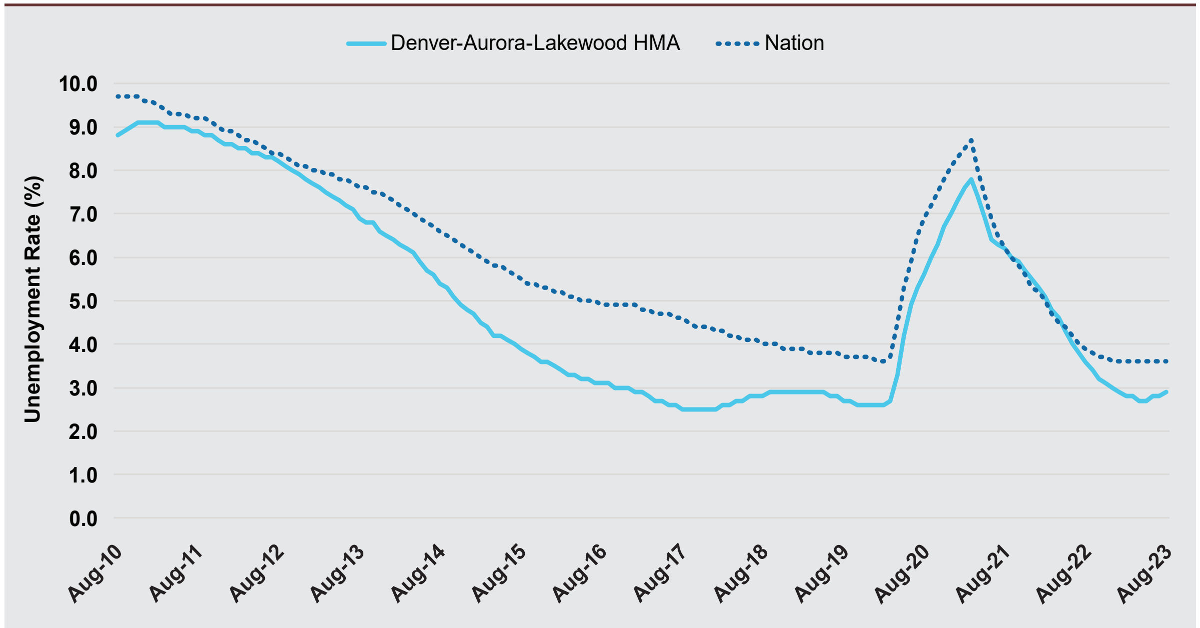
that increased during the pandemic for COVID-19 testing has decreased, as overall testing has waned and households use home test kits.

Economic recovery from the COVID-19 pandemic has been unequal across sectors. The other services sector—which includes industries such as automotive repairs, hair and nail salons, and religious institutions—has had the strongest recovery, with levels 15.0 percent higher than 2019 levels during the 12 months ending August 2023. Likewise, the transportation and utilities sector is 14.3 percent above 2019 levels. A trend of increasing delivery services accelerated during the COVID-19 pandemic. Conversely, the leisure and hospitality sector, which was hit hardest during the temporary closures in early 2020, is 1.1 percent below 2019 levels. The financial activities sector initially recovered the jobs lost, but recent layoffs more than offset those gains. In 2021, the financial activities sector fully recovered the number of jobs lost during the early 2020 recession due to the rapid expansion among lending companies, which benefitted from increased mortgage applications and loan refinancing during the period of historically low interest rates; however, when interest rates increased dramatically and demand for loans diminished, the sector, led by real estate industry layoffs, declined by 5,100 jobs, or 4.3 percent, during the 12 months ending August 2023. The sector is currently 0.2 percent below 2019 levels.

Current Conditions—Unemployment

The labor market in the Denver HMA is tight. The unemployment rate decreased to 2.9 percent during the 12 months ending August 2023, down from 3.6 percent a year earlier and lower than the 3.6-percent rate in the nation (Figure 3). The unemployment rate in the HMA decreased in the past year because the 1.7-percent increase in resident employment outpaced the 1.0-percent gain in the labor force. The unemployment rate in the HMA peaked previously at 9.1 percent in 2010, which was a direct result of the local effects of the Great Recession, and decreased to a low of 2.5 percent in 2017. The unemployment rate increased to 7.8 percent during the 12 months ending March 2021 due to the recession that resulted from the countermeasures to slow the spread of COVID-19.

Figure 3. 12-Month Average Unemployment Rate in the Denver-Aurora-Lakewood HMA and the Nation



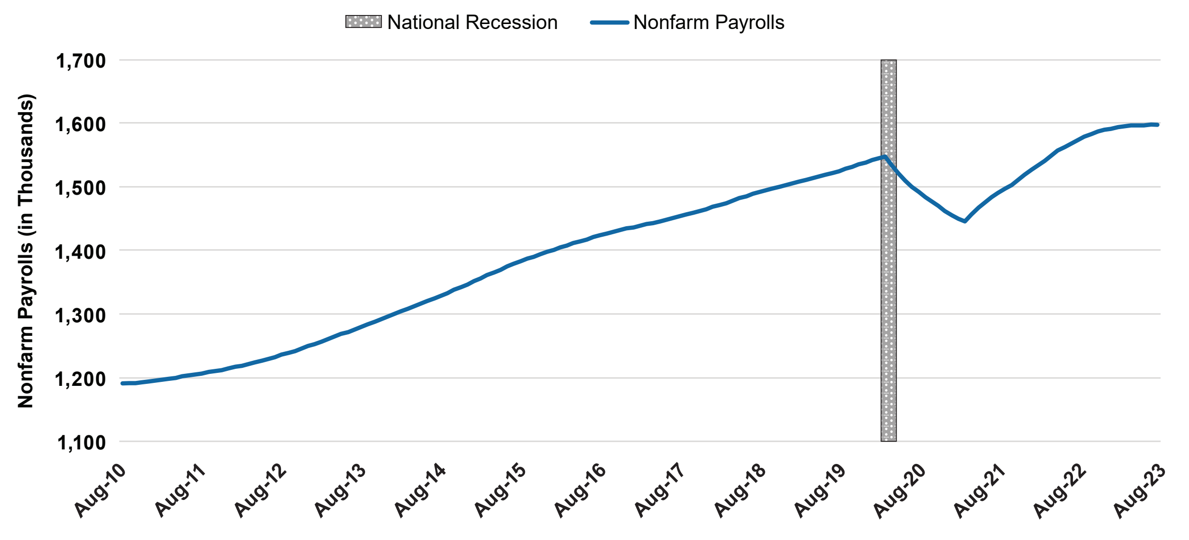
Note: Based on the 12-month moving average.
Source: U.S. Bureau of Labor Statistics

Economic Periods of Significance

2010 Through 2015

Recovery from the Great Recession started strong in the HMA, although job growth moderated during the latter part of the expansion period. In 2010, payrolls declined to a low point in the HMA at 1.19 million jobs because of the effects of the Great Recession. From 2011 through 2015, nonfarm payrolls increased by an average of 40,800 jobs, or 3.2 percent, a year to reach 1.40 million jobs (Figure 4). The number of nonfarm payrolls lost because of the Great Recession was recovered by the end of 2013. During the recovery and initial expansion phase, job growth occurred across all sectors; the professional and business services and the education and health services sectors led job growth, increasing by averages of 9,300 and 6,900 jobs, or 4.2 and 4.4 percent, respectively, each year. Contributing to the strong growth in the education and health services sector was a growing trend of localized urgent care centers and standalone emergency rooms that opened across neighborhoods in several communities throughout the HMA.

Figure 4. 12-Month Average Nonfarm Payrolls in the Denver-Aurora-Lakewood HMA



Note: 12-month moving average.
Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research

2016 Through 2019

Job growth slowed beginning in 2016. Tight labor market conditions and difficulty in finding enough workers constrained job growth from 2016 through 2019; during this period, the unemployment rate in the HMA averaged 2.7 percent. From 2016 through 2019, jobs increased by an average of 35,200 jobs, or 2.4 percent, a year. Again, all sectors contributed to the job gains; the strongest growth was in the professional and business services sector, in which the number of jobs increased by an average of 7,400, or 2.8 percent, annually. Jobs added by defense contractors supported job growth occurring in the sector. KPMG International Limited, a professional services company, added approximately 650 jobs from 2013 through 2019. From 2016 through 2018, the Ball Corporation Aerospace Manufacturing Center added nearly 1,000 employees.

2020 and 2021

Nine years of job gains ended in 2020 because countermeasures to slow the spread of the virus that causes COVID-19 led to temporary business closures. During 2020, jobs declined by 75,900, or 4.9 percent. The economy in the HMA fared better than the national economy, which decreased 5.8 percent in 2020. The leisure and hospitality sector had the steepest job losses in the Denver HMA, down by 40,900 jobs, or 23.7 percent, and accounted for 54 percent of the net losses during 2020. Although the government sector contributed to job loss, the federal government subsector added 600 jobs in 2020, primarily due to the need for workers to help conduct the 2020 Decennial Census, slightly offsetting sector job loss. The transportation and utilities sector was the only sector to gain jobs in 2020, adding 3,700 jobs, or 5.6 percent, when social distancing measures increased demand for the delivery of goods, particularly when in-store and in-restaurant visits were limited.

Job growth resumed in 2021. Nonfarm payrolls increased by 56,500 jobs, or 3.9 percent, year over year in 2021. Nevertheless, the gains did not recover all the losses in 2020, and payrolls were 1.3 percent below 2019 levels. Ten of the 11 sectors contributed to the economic recovery, with growth across all sectors except the government sector. Growth was led by gains of 16,600 jobs, or 6.1 percent, in the professional and business services sector. The sector includes many jobs conducive to working from home and building support and administrative services jobs, which increased in demand when companies established return-to-office policies. Losses of 1,100 jobs, or 0.5 percent, continued in the government sector, with losses occurring in all three subsectors.

Job Centers by Submarket

Jobs in the Denver County submarket account for approximately 35 percent of the total number of jobs in the HMA (Table 3). The Denver County submarket includes the state capital, the central business district in downtown Denver, the airport, and a portion of the Denver Technological Center. The remaining 65 percent of jobs are in the Suburban submarket. Centers of economic activity in the Suburban submarket include the Interlocken Business Park in Broomfield, with high-tech, information technology, and aerospace employment; the Denver Federal Center in Lakewood, with a significant amount of federal government employment; and portions of the Denver Technological Center, which has a large concentration of financial, insurance, and telecommunications services jobs in Greenwood Village.

Table 3. Current Estimated Percent Share of Nonfarm Payrolls in the Denver-Aurora-Lakewood HMA, by Submarket

Denver County Submarket	35
Suburban Submarket	65

Sources: U.S. Bureau of Labor Statistics; estimates by the analyst

Forecast

During the next 3 years, nonfarm payrolls are expected to increase an average of 2.0 percent each year to 1.69 million jobs. Job gains are expected in the transportation and utilities and the leisure and hospitality sectors, supported by visitors through the airport and to the HMA. In response to the robust growth in passengers through DIA, the airport announced plans to expand the airport with new concourses, gates, and walkways. Renovations at the airport are ongoing—with a new security checkpoint expected to be completed in early 2024—although the new plan is not expected to be complete until after the forecast period. Manufacturing is expected to grow through the renewable energy industry. During the next year, VSK Energy LLC plans to build a $250 million solar panel factory in the city of Brighton, creating 900 jobs during the next 8 years.

Population and Households

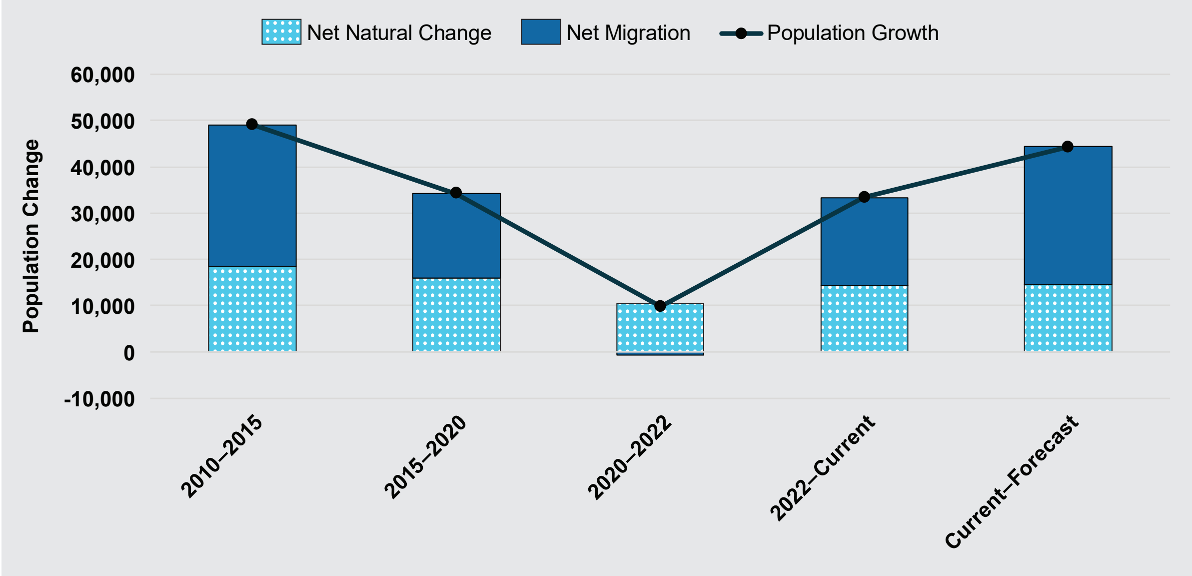
Current Population: 3.03 million

Population growth, which was slow from 2020 to 2022, has begun to increase because the increased number of deaths from the pandemic has become less prevalent, and in-migration to the HMA has strengthened.

Current Population Trends

Population trends changed significantly during the pandemic but have shown signs of returning to more historical trends in recent years. The already slowing net natural increase, which generally followed national trends in the 2010s, dropped further, in part due to an elevated number of deaths from the pandemic. From 2020 to 2022, the population increased by an average of 9,800, or 0.3 percent, annually (decennial census counts and population estimates as of July 1). Net natural increase accounted for all the population growth, averaging 10,400 a year, and more than offset the net out-migration that averaged 600 people a year (Figure 5). Remote work opportunities allowed some employees to live further from offices, including moving to more affordable areas of the country or attractive areas, such as the mountainous counties outside the HMA in Colorado that provide additional amenities, such as outdoor recreation. Since 2022, the population has increased at a stronger rate, bolstered by a rise in net natural increase and net in-migration when the effects of the pandemic began to become less prevalent—partly due to return-to-office initiatives requiring workers to be within a commutable distance of the office—and boosted international in-migration. Since 2022, the population has increased by an average of 33,500 a year, or 1.1 percent. Net natural increase averaged 14,500 people a year, and net in-migration strengthened to an average of 19,000 people annually, which accounted for 57 percent of the population growth.

Figure 5. Components of Population Change in the Denver-Aurora-Lakewood HMA, 2010 Through the Forecast



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

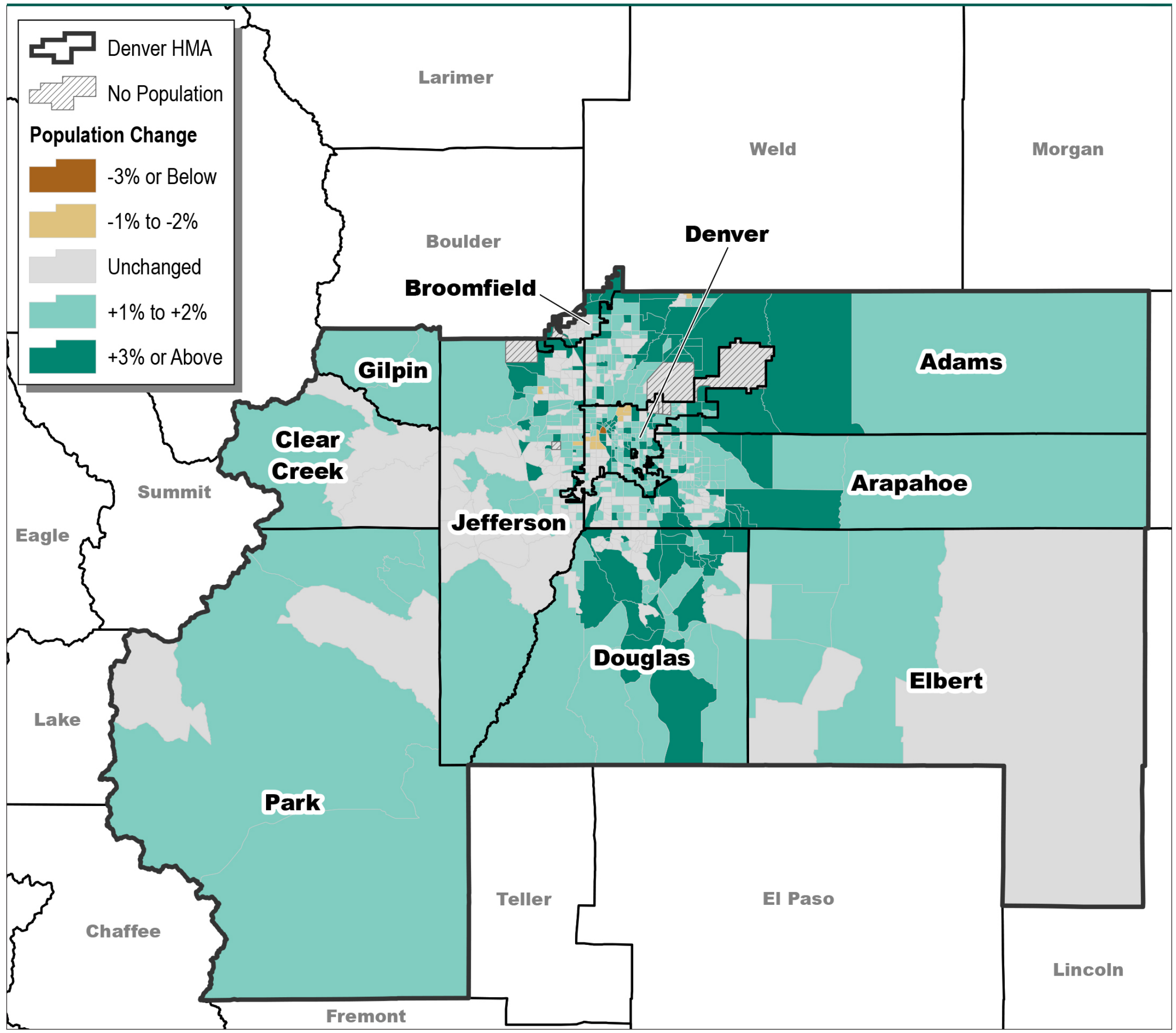
Historical Population Trends

The strongest period of population growth was from 2010 to 2015, which generally corresponds to the strong job growth that occurred during the economic recovery from the Great Recession that began in 2011 in the HMA and the initial expansion years. From 2010 to 2015, the population increased by an average of 49,100, or 1.9 percent, annually. During this period, both net natural increase and net in-migration were at their highest levels. Net natural increase averaged 18,550 people a year, and annual net in-migration averaged 30,550 people, or 62 percent of the total population growth. From 2015 to 2020, population growth slowed. Net natural increase was nearly 14 percent lower, averaging 16,000 people a year, and net in-migration decreased 40 percent to 18,250 people a year, or 53 percent of population growth. Federal policies in the late 2010s limited some international in-migration. Map 1 shows population trends in the HMA by census tract from 2010 to 2020.

Demographic Trends

Notable demographic changes in the Denver HMA since 2010 include an aging population, similar to national trends. From 2010 to 2022, people aged 25 to 44 increased 2.4 percentage points to 32.6 percent of the population, and those aged 65 and over increased 4.1 percentage points to 14.2 percent (American Community Survey [ACS] 1-year data; Figure 6). Although the increase among those aged 65 and older is the largest in the HMA, following the larger national trend of an aging population, the Denver HMA is younger on average than the national population. The median age of residents in the Denver HMA is 37.3 years, below the national median of 39.0 (Table 4). Although the HMA has a younger population, it has a lower percentage of households with children younger than 18. During 2022, 27.5 percent of all households in the HMA included at least one child younger than 18, compared with 29.1 percent nationally. This statistic decreased from 33.2 percent in the HMA and 33.1 percent nationally in 2010. During

Map 1. Population Change by Census Tract in the Denver-Aurora-Lakewood HMA, 2010 to 2020



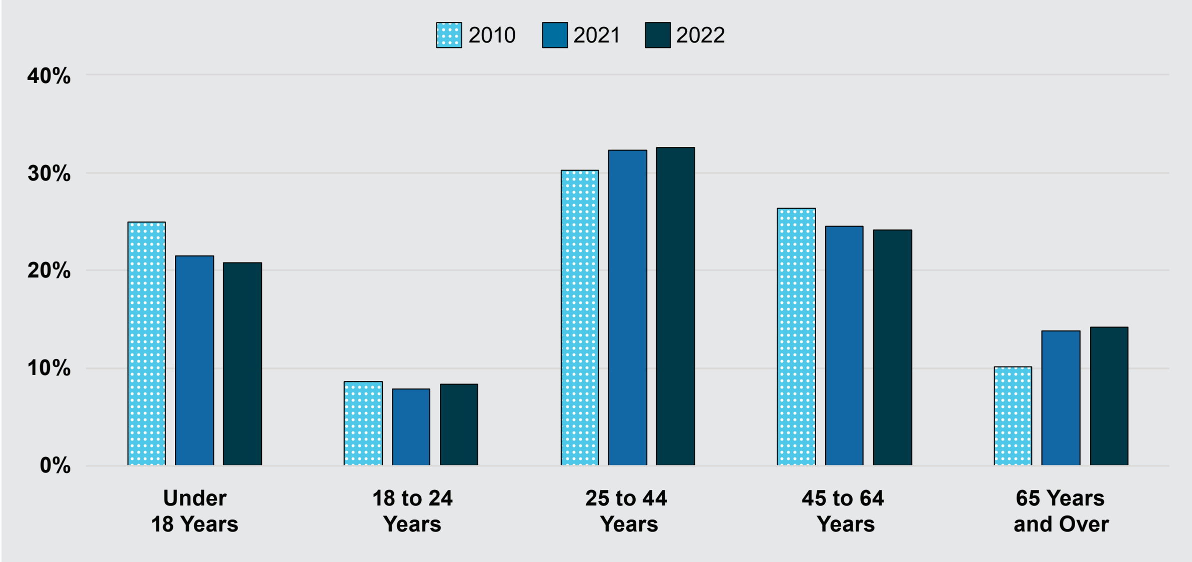
Source: 2010 and 2020 Decennial Census

that same period, the number of people living alone in the HMA increased slightly, from 29.2 percent in 2010 to 29.6 percent in 2022. Since 2020, declining birthrates following longer term national trends and elevated deaths from the pandemic have contributed to smaller households in the HMA.

Population by Submarkets

Population trends in the submarkets diverged from the overall Denver HMA trends, partly because of movement between the submarkets. As of September 1, 2023, the Denver County submarket has an estimated population of 725,400, or 24 percent of the total HMA population, compared with a population of 2.30 million in the Suburban submarket, which accounts for the remaining 76 percent of the population (Figure 7). Population growth in the Denver County submarket was relatively strong from 2010 to 2015; however, the Suburban submarket has added more people each year since the 2010s. In the Denver County submarket, the population increased by an average of 14,050, or 2.2 percent, annually from 2010 to 2015. Population growth in the Suburban submarket averaged 35,050, or 1.7 percent, each year. The share of net in-migration was similar in each submarket, accounting for 63 percent of the growth in the Denver County submarket and 62 percent in the Suburban submarket. In the late 2010s, population growth slowed in both submarkets. In the Denver County submarket,

Figure 6. Population by Age Range in the Denver-Aurora-Lakewood HMA



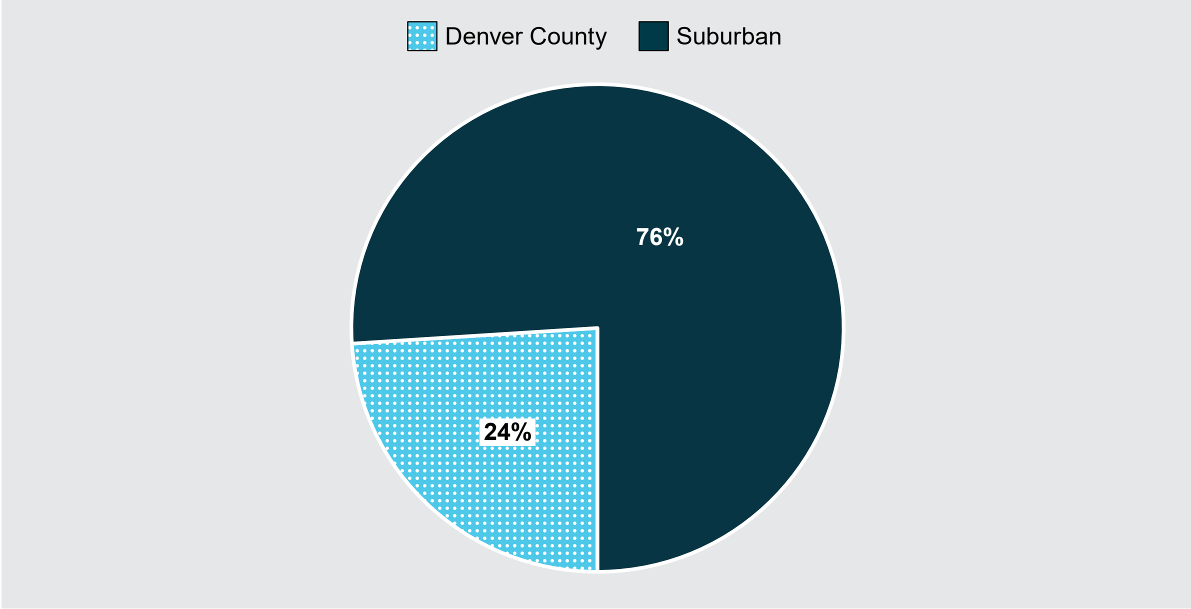
Source: 2010, 2021, and 2022 American Community Survey 1-year data

Table 4. Selected Population and Household Demographics

	Denver-Aurora-Lakewood HMA	Nation
Population Under Age 18	20.8%	21.7%
Population Age 65 and Over	14.2%	17.3%
Median Age	37.3	39.0
White	66.1%	60.9%
Black	5.7%	12.2%
Asian	4.5%	5.9%
Other Race	23.7%	21.0%
Hispanic	23.9%	19.1%
Non-Hispanic	76.1%	80.9%
Median Household Income	$98,975	$74,755
Households With One or More Children Under Age 18	27.5%	29.1%

Source: 2022 American Community Survey 1-year data population growth slowed to an average of 8,775, or 1.3 percent, a year, and net in-migration was 48 percent of the population growth, compared with 25,500, or 1.2-percent, average annual growth in the Suburban submarket, where net in-migration accounted for 55 percent of the growth. During the pandemic, the population shrank in the Denver County submarket, and the Suburban submarket accounted for all the HMA population growth, partly because of migration from the Denver County submarket to the Suburban submarket. Social distancing preferences during the pandemic, a surge in homebuying brought on by social distancing, increased savings from federal stimulus checks, student loan forbearance, and historically low interest rates influenced migration to the suburbs. From 2020 to 2022, the population in the Denver County submarket decreased by an average of 1,000, or 0.1 percent, with average net out-migration of 4,250 people a year, more than offsetting the average net natural increase of 3,250 people annually. In the Suburban submarket, the population increased by an average of 10,800 a year, or 0.5 percent, and net in-migration averaged 3,650 people a year, or 34 percent, of the submarket population growth. Since 2022, the strengthening population growth in the HMA has been pronounced in the Denver County submarket because of the reversal to net in-migration. The population in the Denver County submarket increased by an average of 10,450, or 1.5 percent, annually, and net

Figure 7. Current Population in the Denver-Aurora-Lakewood HMA, by Submarket



Source: Estimates by the analyst

in-migration accounted for 61 percent of the population growth. In the Suburban submarket, the population increased by an average of 23,100, or 1.0 percent, a year, and the net in-migration of 12,700 people a year accounted for 55 percent of the population growth.

Household Trends

The aging population and an increase in single-person households in the HMA have contributed to household growth that has been outpacing population growth since 2010, with a particularly notable difference since 2020. From 2010 to 2020, the number of households in the HMA increased by an average of 16,275, or 1.5 percent, a year (Table 5). The Denver County submarket had the fastest growth, increasing by an average of 5,425, or 1.9 percent, annually, although the Suburban submarket accounted for two-thirds of the growth, up an average of 10,850, or 1.4 percent, annually. Since 2020, household growth has increased slightly despite much slower population growth. Subsequently, when household savings increased through pandemic-related stimulus checks and historically low interest rates, more people could afford to establish new households. Since 2020, the number of households in the HMA increased by an average of

19,300, or 1.6 percent, annually. The distribution between submarkets was the same, with the Suburban submarket accounting for approximately two-thirds of the growth—an average of 12,850 households, or 1.5 percent, annually.

Households by Tenure

Declining affordability in the HMA has contributed to a decrease in the homeownership rate. The rate is currently estimated at 61.3 percent for the HMA, down from 62.3 percent in 2020 (Figure 8). The submarkets show differences. In the Denver County submarket, more households rent than own, and the homeownership rate is 44.9 percent. Conversely, homeownership is more prevalent in the Suburban submarket, accounting for 67.5 percent of households.

Forecast

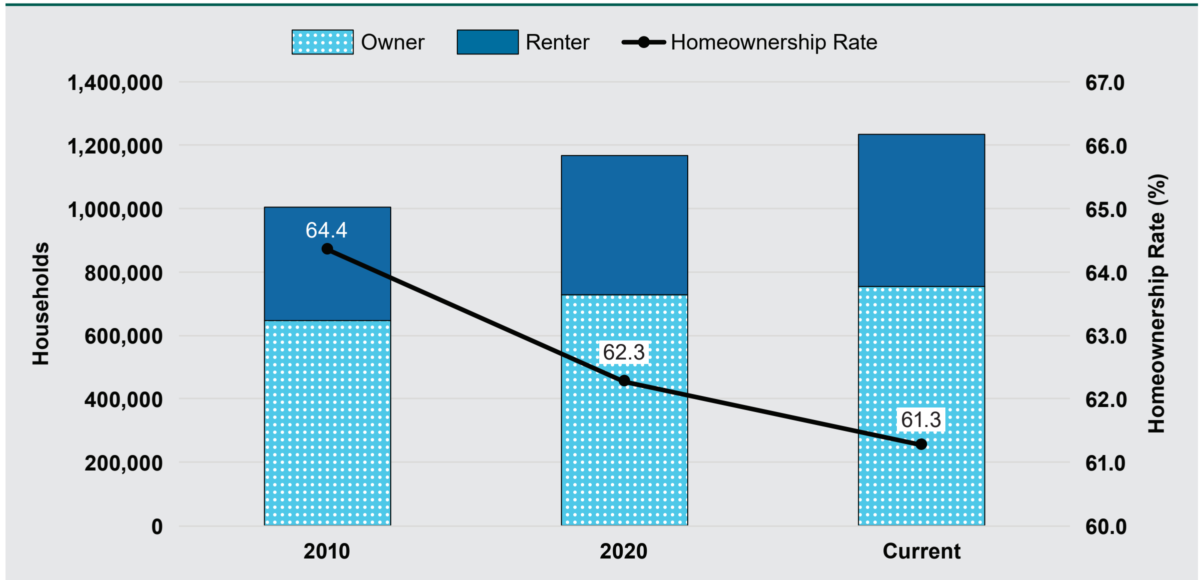
During the next 3 years, the population and the number of households in the Denver HMA are expected to increase an average of 1.4 and 1.6 percent annually, respectively, to 3.16 million and 1.29 million. The Denver County submarket is expected to increase by an average of 11,450 people and 6,025 households each year, or 1.6 and 1.7 percent, respectively, to a population of 759,800 and 357,500 households. In the Suburban submarket, the population and number of households are expected to increase by 32,900 and 13,400, or 1.4 and 1.5 percent each year to a population of 2.40 million and 934,300 households, respectively. During the forecast period, net in-migration is expected to rise, partly because international in-migration is expected to strengthen. Population growth in the HMA will likely not be as strong as during the early 2010s despite tighter labor market conditions anticipated to persist during the next 3 years. Tight labor market conditions will likely support stronger in-migration for workers to fill expected jobs; however, declining housing affordability is anticipated to pose a challenge for people wanting to move into the area.

Table 5. Denver-Aurora-Lakewood HMA Population and Household Quick Facts

		2020	Current	Forecast
Population Quick Facts	Population	2,963,821	3,025,400	3,157,800
	Average Annual Change	42,050	17,900	44,350
	Percentage Change	1.5	0.6	1.4
		2020	Current	Forecast
Household Quick Facts	Households	1,167,462	1,233,500	1,292,000
	Average Annual Change	16,275	19,300	19,425
	Percentage Change	1.5	1.6	1.6

Notes: Average annual changes and percentage changes are based on averages from 2010 to 2020, 2020 to current, and current to forecast. The forecast period is from the current date (September 1, 2023) to September 1, 2026.
Sources: 2010 and 2020—2010 Census and 2020 Census; current and forecast—estimates by the analyst

Figure 8. Households by Tenure and Homeownership Rate in the Denver-Aurora-Lakewood HMA



Note: The current date is September 1, 2023.
Sources: 2010 and 2020—2010 Census and 2020 Census; current—estimates by the analyst

Home Sales Market

Sales Market—Denver HMA

Market Conditions: Slightly Tight

The inventory of homes for sale remains low in the HMA, partly because many homeowners are reluctant to give up the low mortgage interest rates of their current mortgage for a purchase at a much higher rate.

Table 6. Home Sales Quick Facts in the Denver-Aurora-Lakewood HMA

		Denver-Aurora-Lakewood HMA	Nation
Home Sales Quick Facts	**Vacancy Rate**	1.1%	NA
	Months of Inventory	2.0	2.8
	Total Home Sales	52,750	5,262,000
	1-Year Change	-28%	-28%
	New Home Sales Price	$729,800	$495,900
	1-Year Change	9%	5%
	Existing Home Sales Price	$630,700	$388,200
	1-Year Change	1%	0%
	Mortgage Delinquency Rate	0.5%	1.0%

NA = data not available.
Notes: The vacancy rate is as of the current date; home sales and prices are for the 12 months ending August 2023; and months of inventory and mortgage delinquency data are as of August 2023. The current date is September 1, 2023.
Sources: Vacancy rate—estimates by the analyst; months of inventory and mortgage delinquency rate—CoreLogic, Inc.; home sales and prices—CoreLogic, Inc., with adjustments by the analyst

Current Conditions

The home sales market in the Denver HMA is slightly tight, with an estimated sales vacancy rate of 1.1 percent (Table 6), unchanged from 2020 but down from 2.3 percent in 2010, when the market was soft because of the Great Recession and the corresponding financial crisis. Conditions are balanced in the Denver County submarket and slightly tight in the Suburban submarket. Since 2022, rapidly rising mortgage interest rates have tempered home sales. In addition, the inventory of homes for sale remains low, in part because the swift rise in rates has effectively “locked in” would-be sellers with much lower interest rates, which discourages them from listing their homes because many are hesitant or unable to purchase another home at a higher interest rate. Nationwide, 82 percent of outstanding mortgages had an interest rate below 5.0 percent as of the fourth quarter of 2022, including 24 percent with rates below 3.0 percent (Redfin, a national real estate brokerage). Approximately 92 percent of mortgages in Colorado have interest rates below 5 percent, which is the second highest share in the nation. During August 2023, the 30-year fixed-rate mortgage interest rate averaged 7.1 percent (Freddie Mac). Following recovery from the Great Recession, very low levels of for-sale inventory have contributed to upward pressure on home sales prices, leading to housing affordability concerns. In August 2023, the HMA had approximately 2.0 months of inventory, down slightly from the 2.1-month supply a year earlier and below the 2.3-month supply in 2019 (CoreLogic, Inc.), before the effects of the COVID-19 pandemic. The supply of inventory has stayed below 3.0 months since reaching 3.1 months in August 2013. Total home sales—including new and existing single-family homes, townhomes, and condominiums—decreased 28 percent during the 12 months ending August 2023 to 52,750 homes sold, and the average home sales price increased 3 percent to $647,100.

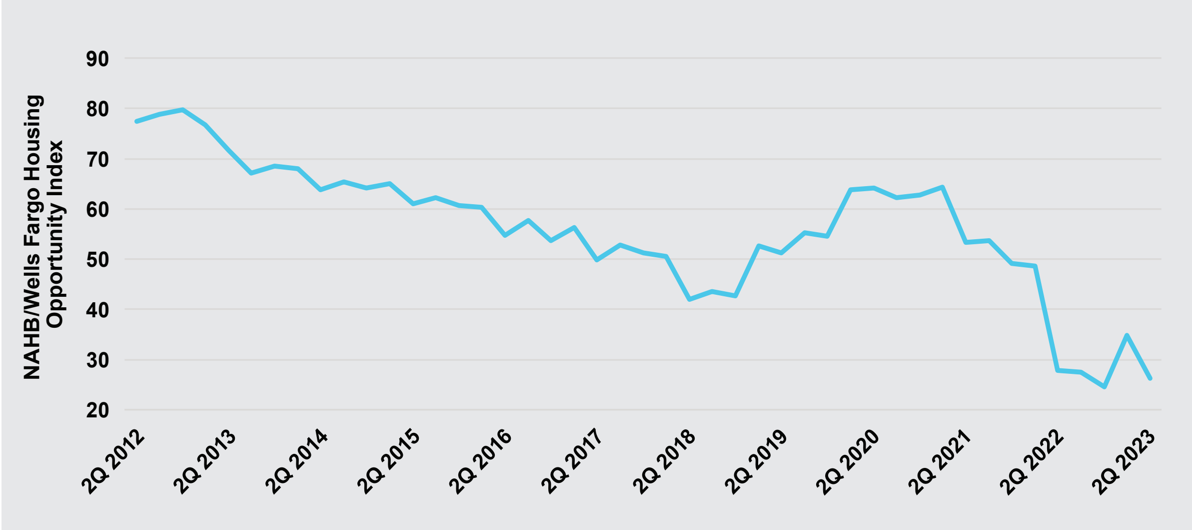
Seriously Delinquent Mortgages and Real Estate Owned Properties

The rate of seriously delinquent mortgages and real estate owned (REO) properties in the Denver HMA is near a historic low. In August 2023, 0.5 percent of mortgages in the HMA were seriously delinquent or had transitioned into REO status, down slightly from 0.6 a year earlier and one-half of the national rate of 1.0 percent (CoreLogic, Inc.). The rates and decline were the same in both submarkets. Previously, the rate was at a 20-year low of 0.4 percent in March 2020 before rising to 2.8 percent in August 2020 due to the economic downturn from the COVID-19 pandemic. The elevated rate has remained below the previous peak of 5.7 percent in February 2010 and the recent national peak of 4.4 percent in August 2020. The slight decline in the rate in the HMA during the past year occurred because a 20-percent decline in loans 90 or more days delinquent more than offset a 9-percent increase in foreclosures. Despite the increase in the past year, the number of foreclosures was very low at nearly 480; by comparison, approximately 10,100 loans were in foreclosure as of December 2010.

Housing Affordability in the Sales Market

Homeownership in the Denver HMA has become increasingly unaffordable. The expanding economy following the Great Recession, declining number of distressed mortgages, decreasing mortgage interest rates, and strong net in-migration in the early to mid-2010s have contributed to increasing home sales prices. The National Association of Home Builders (NAHB)/Wells Fargo Housing Opportunity Index (HOI) for the Denver HMA, which represents the share of homes sold that would have been affordable to a family earning the median income, was 26.3 during the second quarter of 2023, down from 27.8 a year ago and down dramatically from 77.5 during the second quarter of 2012 (Figure 9). A brief increase in affordability from approximately 2019 to 2021 corresponds to historically low mortgage interest rates, but because the interest rate has risen in recent years with increasing home prices,

Figure 9. Denver-Aurora-Lakewood HMA Housing Opportunity Index



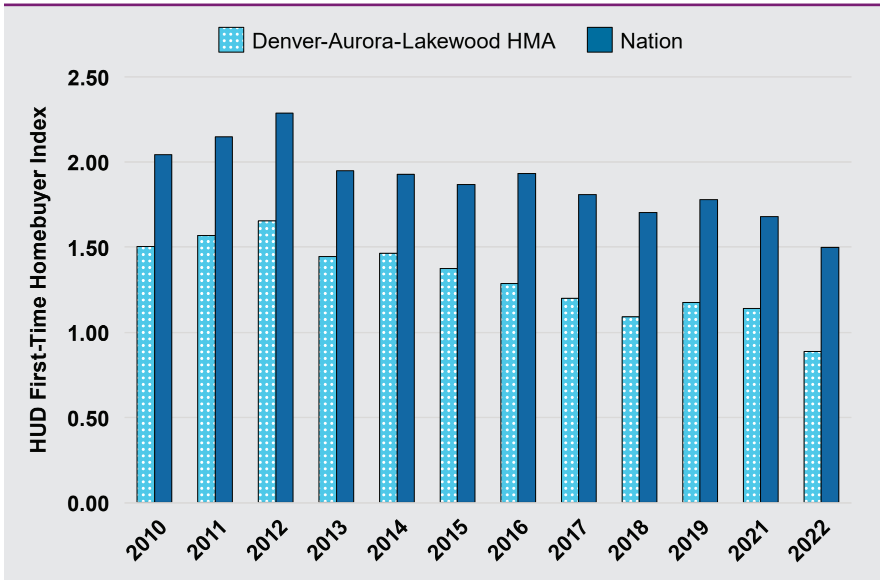
NAHB = National Association of Home Builders. 2Q = second quarter.
Source: NAHB/Wells Fargo

affordability has since fallen to record lows. For-sale housing in the Denver HMA is less affordable than in the nation. The national housing affordability index was 40.5 during the second quarter of 2023. Approximately 75 percent of ranked metropolitan areas are more affordable than the HMA as of the second quarter of 2023.

The declining affordability is notable for all potential homebuyers, including first-time homebuyers. The HUD First-Time Homebuyer Affordability Index measures the median household income for householders aged 25 to 44 relative to the income needed to purchase a 25th-percentile-priced home. The index has declined almost every year since reaching a peak of 1.65 in 2012 (Figure 10). The median income for householders aged 25 to 44 has been more than high enough to afford a 25th-percentile-priced home in all years since 2010; however, home prices have generally increased faster than median incomes since 2012. During 2022, the index dipped below 1.00 for the first time at 0.89, down from 1.14 a year earlier. Nationwide, the index also decreased: from 1.68 in 2021 to 1.50 in 2022.

Among young homeowners in the Denver HMA, those younger than 44—a prime age cohort for first-time homebuyers—diverging trends have emerged since 2020, mirroring the national trend. The overall homeownership rate declined from 2010 to 2019 among all households in the HMA and nation; however, from 2020 to 2022, the rate increased and reflected levels similar to 2010 by 2022 (Table 7). Among homeowners

Figure 10. Denver-Aurora-Lakewood HMA HUD First-Time Homebuyer Index



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

Table 7. Homeownership Rates by Age of Householder in the Denver-Aurora-Lakewood HMA

	Denver-Aurora-Lakewood HMA			Nation		
	2010	2020	2022	2010	2020	2022
Householder Aged 25 to 34 Years	42.9	35.6	34.8	42.0	38.3	36.6
Householder Aged 35 to 44 Years	64.9	61.7	65.5	62.3	57.3	61.1
Total Households	64.4	62.3	64.5	65.1	63.1	65.2

Sources: 2010 and 2020 Decennial Census; 2022 American Community Survey 1-year data

aged 35 to 44, the homeownership rate followed a similar trend as the overall homeownership rate for all households in 2022. In the Denver HMA, the homeownership rate in that age cohort surpassed the overall homeownership rate, whereas, on a national basis, homeowners in that cohort were below the national total homeownership rate. In this cohort, low interest rates and savings incurred during the pandemic supported the increase in homebuying. Among younger households, however, the trend reversed. The homeownership rate decreased starting in 2020 among homeowners aged 25 to 34 in the Denver HMA and the nation. Nationally, the unemployment rate among people aged 25 to 34 and 35 to 44 was higher than the overall unemployment rate; in addition, the unemployment rate in this cohort rose to a higher level because this age cohort is more likely to work in industries that endured steep layoffs, such as tourism, during the economic downturn of early 2020.

Forecast

During the 3-year forecast, demand is estimated for 36,100 new homes (Table 8). The 5,325 homes already under construction are expected to meet a portion of the demand in the first year. Approximately 83 percent of the demand is anticipated to occur in the Suburban submarket, which has a larger population and higher homeownership rate than the Denver County submarket.

Table 8. Demand for New Sales Units in the Denver-Aurora-Lakewood HMA During the Forecast Period

	Sales Units
Demand	36,100 Units
Under Construction	5,325 Units

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

Sales Market—Denver County Submarket

Market Conditions: Balanced

The Denver County submarket had 2.4 months of for-sale inventory as of August 2023, up from 1.9 months a year earlier (CoreLogic, Inc., with adjustments by the analyst).

Current Conditions

The sales market in the Denver County submarket is currently balanced, with an estimated sales vacancy rate of 1.5 percent (Table 9), unchanged from 2020 and down from 3.6 percent in 2010, when the financial crisis and Great Recession contributed to elevated foreclosures and a soft sales market. The supply of for-sale inventory in the Denver County submarket typically mirrors that of the HMA. In 2023, however, the for-sale inventory was slightly higher in the Denver County submarket than in the HMA; nevertheless, the inventory remains low. During August 2023, the submarket had a 2.4-month supply of homes for sale, up from 1.9 a year earlier (CoreLogic, Inc., with adjustments by the analyst). Although the market tightened throughout the 2010s, rising interest rates and relatively slow population growth in the submarket in the early 2020s contributed to conditions transitioning from tight to balanced. Home sales in the submarket decreased 30 percent, with 11,300 homes sold during the 12 months ending August 2023 compared with a year earlier because a sharp decline in existing home sales more than offset an increase in new home sales. Approximately 30 percent of the homes sold—the largest share—were in the $400,000-to-$599,999 range, and 25 percent—the second largest share—were priced at $800,000 or more (Zonda; Figure 11). The Denver County submarket is more expensive than the Suburban submarket, with an average sales price of $697,700, up 2 percent from the 12 months ending August 2022, and approximately 10 percent more expensive than the Suburban submarket (CoreLogic, Inc., with adjustments by the analyst).

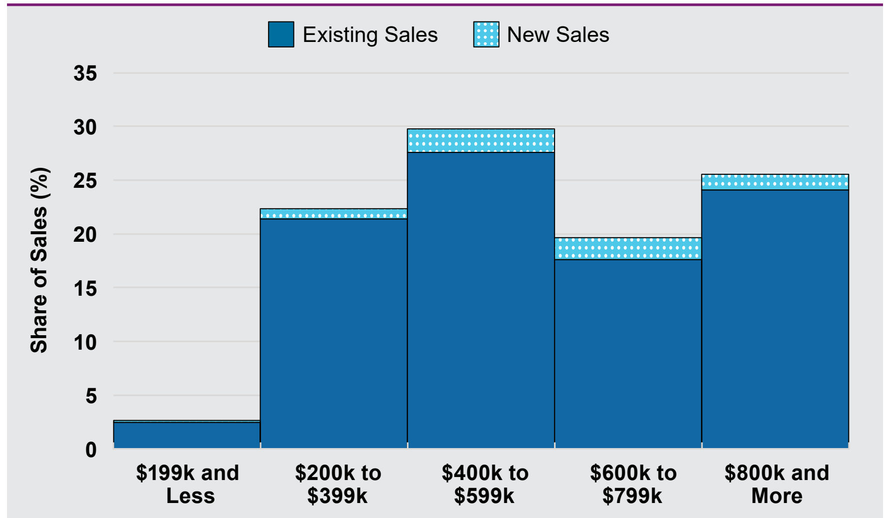
Table 9. Home Sales Quick Facts in the Denver County Submarket

Home Sales Quick Facts		Denver County Submarket	Denver-Aurora-Lakewood HMA
	Vacancy Rate	1.5%	1.1%
	Months of Inventory	2.4	2.0
	Total Home Sales	11,300	52,750
	1-Year Change	-30%	-28%
	New Home Sales Price	$760,600	$729,800
	1-Year Change	0%	9%
	Existing Home Sales Price	$693,100	$630,700
	1-Year Change	1%	1%
	Mortgage Delinquency Rate	0.5%	0.5%

Notes: The vacancy rate is as of the current date; home sales and prices are for the 12 months ending August 2023; and months of inventory and mortgage delinquency data are as of August 2023. The current date is September 1, 2023.

Sources: Vacancy rate—estimates by the analyst; months of inventory and mortgage delinquency rate—CoreLogic, Inc.; home sales and prices—CoreLogic, Inc., with adjustments by the analyst

Figure 11. Share of Overall Sales by Price Range During the 12 Months Ending August 2023 in the Denver County Submarket



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

Existing Home Sales and Prices

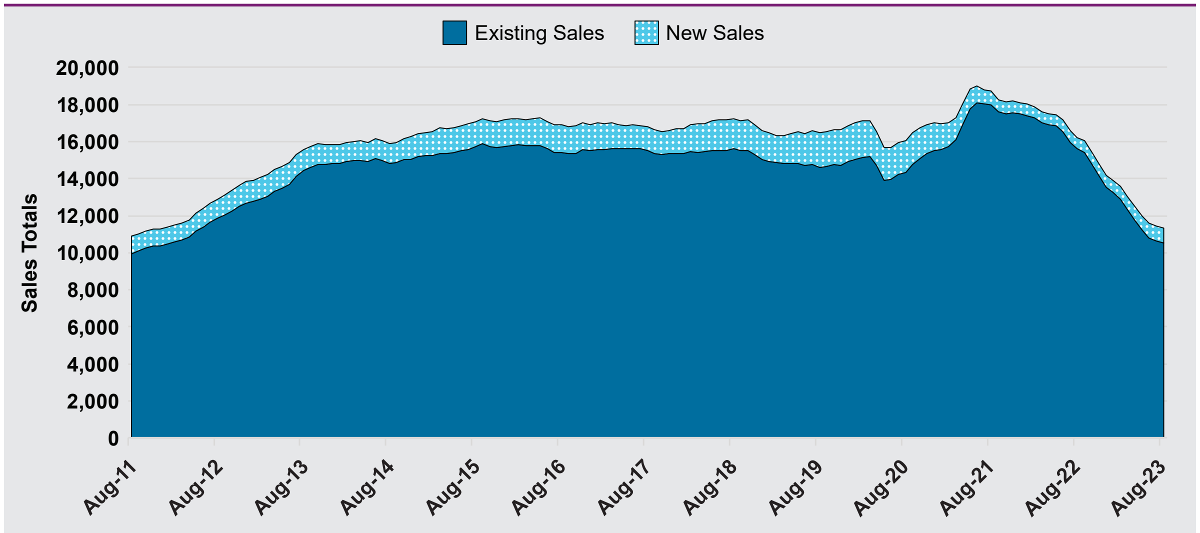
As the economy recovered from the Great Recession and mortgage interest rates decreased, demand for sales housing increased. From 2011 through 2019, existing home sales increased an average of 4 percent a year to 14,950 homes (Figure 12). From 2020 through 2022, existing home sales declined 3 percent a year because the generally slower population growth suppressed demand for sales. Rising interest rates further suppressed demand despite an increase in population growth, and during the 12 months ending August 2023, 10,550 existing homes sold, down 33 percent from a year earlier.

Opposing forces stemming from a low inventory of homes for sale and rising interest rates resulted in moderate price growth in the past year. During the 12 months ending August 2023, the average price of an existing home was $693,100, up 1 percent from a year earlier (Figure 13). From 2010 through 2019, the average price of an existing home increased an average of 8 percent a year before increasing to a 12-percent average annual increase from 2020 through 2022.

New Home Sales and Prices

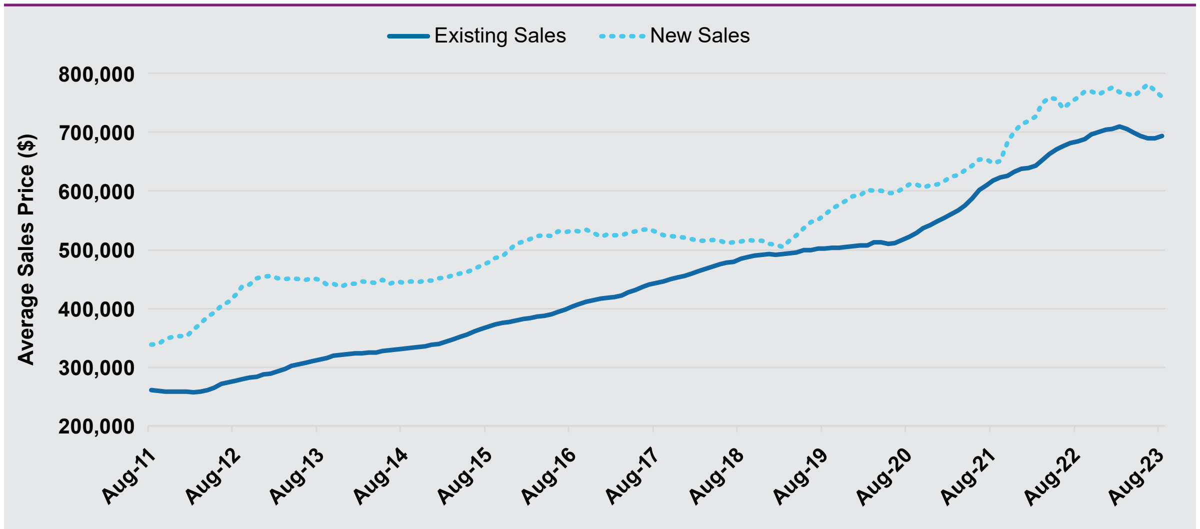
New home sales in the Denver County submarket increased 21 percent in the past year, with 780 new homes sold during the 12 months ending August 2023. Despite the increase during the past 12 months, new home sales are lower than in

Figure 12. 12-Month Sales Totals by Type in the Denver County Submarket



Source: CoreLogic, Inc., with adjustments by the analyst

Figure 13. 12-Month Average Sales Price by Type of Sale in the Denver County Submarket



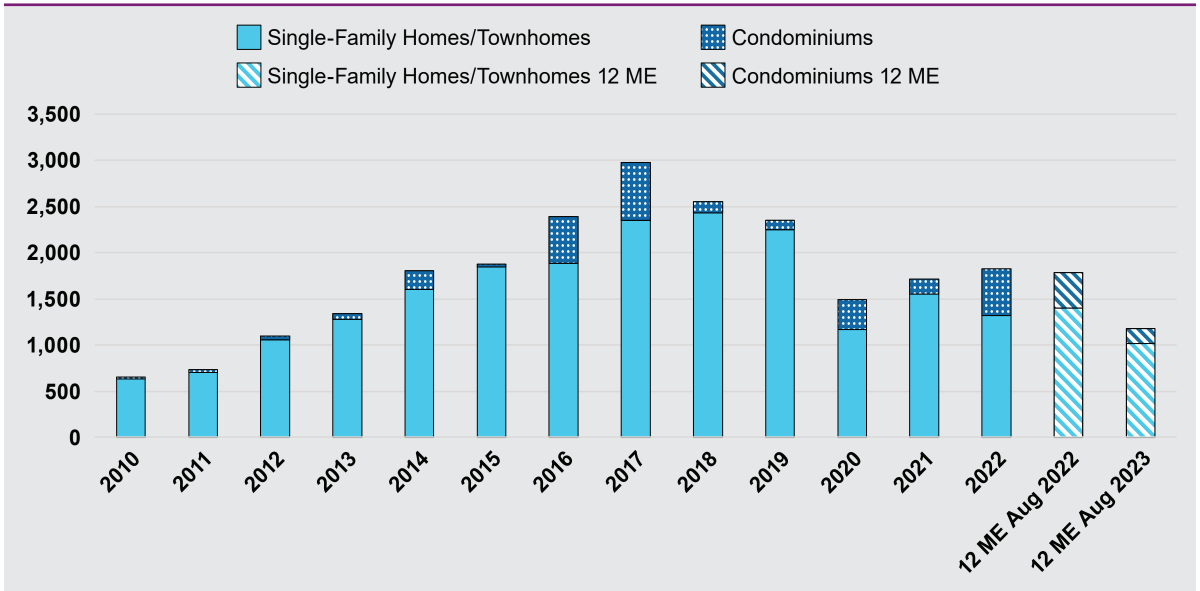
Source: CoreLogic, Inc., with adjustments by the analyst the 2010-to-2020 period. Limited land availability suppresses low-density home construction and constrains new home sales in the submarket. By comparison, new home sales activity was limited immediately following the Great Recession, but the number of new homes sold rose throughout much of the 2010s because the economy and in-migration to the submarket were strong. From 2011 through 2019, new home sales increased an average of 6 percent annually to 1,925 new home sales in 2019. Because of the strong demand for housing in 2019, supported by the opening of two luxury condominium developments and relatively low interest rates, new home sales accounted for 11 percent of total home sales, the largest share during the 2010 to current period. From 2020 to 2022, the dramatic slowdown in population growth, the desire of many people to move to the suburbs for space during the pandemic, and rising interest rates in 2022 resulted in new home sales declining an average of 30 percent annually to 650 new homes sold in 2022. New home sales during this period accounted for 7 percent of total sales.

The average price of a new home increased less than 1 percent in the past year to $760,600. The price growth was the slowest since at least 2010. From 2011 through 2019, the average price of a new home increased 7 percent annually and then accelerated from 2020 through 2022 to an average of 9 percent annually. Overall, the average price of a new home has more than doubled from the 2010 level.

Sales Construction Activity

Home sales construction activity, as measured by the number of single-family homes, townhomes, and condominiums permitted (building permits), in the Denver County submarket is at its lowest level since the early 2010s, when the submarket was recovering from the Great Recession and housing financial crisis, and construction levels were low. During a period of strong job and population growth from 2011 through 2017, homebuilding activity increased by 330 homes permitted a year, or 24 percent, to a peak of 2,975 (Figure 14), the highest level since before the Great Recession. Home sales construction activity has decreased recently because the submarket continues to be geographically constrained by the surrounding suburbs, land for development is limited, and population growth has been lower. From 2018 through 2020, construction activity decreased an average of 21 percent a year to 1,500 homes permitted, and then from 2021 to 2022, an average of 1,775 for-sale homes were permitted each year. During the 12 months ending August 2023, 1,175 homes were permitted, down 34 percent from a year earlier (preliminary data, with adjustments by the analyst).

Figure 14. Annual Sales Permitting Activity in the Denver County Submarket



12 ME = 12 months ending.
Sources: U.S. Census Bureau, Building Permits Survey; 2010–22—final data and estimates by the analyst; past 24 months of data—preliminary data and estimates by the analyst

Construction by Type in the Denver County Submarket

Sales construction in the Denver County submarket is limited severely by lot availability. The Denver County submarket is coterminous with the city limits of Denver, which limits expansion; therefore, construction of for-sale single-family homes increasingly occurs in infill lots and redeveloped areas. The 48th and Tower community in the Green Valley Ranch neighborhood in the northeast part of the Denver County submarket near DIA, was the most active subdivision during the past 12 months. Homebuilding for approximately 110 single-family homes started during the past 12 months in the subdivision, accounting for 47 percent of for-sale single-family home construction in the submarket (Zonda). Prices in the subdivision start at $349,000, making the area among the most affordable in the HMA.

Condominiums are generally perceived as an affordable entry into homeownership, and higher density construction is an opportunity to increase housing in the land-constrained submarket; however, multifamily-unit developers have generally preferred apartment construction, spurred by a strong demand for rental units in the submarket. From 2010 through 2015, condominiums accounted for approximately 5 percent of for-sale construction, which increased to nearly 14 percent from 2016 through 2021. Despite the increase in recent years, however, the condominiums being built were primarily high-priced luxury units or income- and deed-restricted, with extremely limited production of midmarket condominiums. In 2022, construction started on the 461-unit 18th and Glenarm condominiums in downtown Denver. Although prices have not yet been finalized, the development is expected to be complete in 2025.

Forecast

During the next 3 years, demand is expected for 6,050 new homes in the Denver County submarket (Table 10). The 850 homes under construction are expected to meet a portion of the demand in the first year of the forecast period. Continued headwinds for the sales market include land availability and a preference for high-density residential construction to be built for rent, which will likely keep unsold inventory subdued and price growth of for-sale housing increasing; however, elevated interest rates will likely suppress the magnitude of price increases.

Table 10. Demand for New Sales Units in the Denver County Submarket During the Forecast Period

Sales Units	
Demand	6,050 Units
Under Construction	850 Units

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

Sales Market—Suburban Submarket

Market Conditions: Slightly Tight

The inventory of for-sale housing decreased to 1.9 months as of August 2023, compared with 2.2 months a year earlier (CoreLogic, Inc., with adjustments by the analyst).

Current Conditions

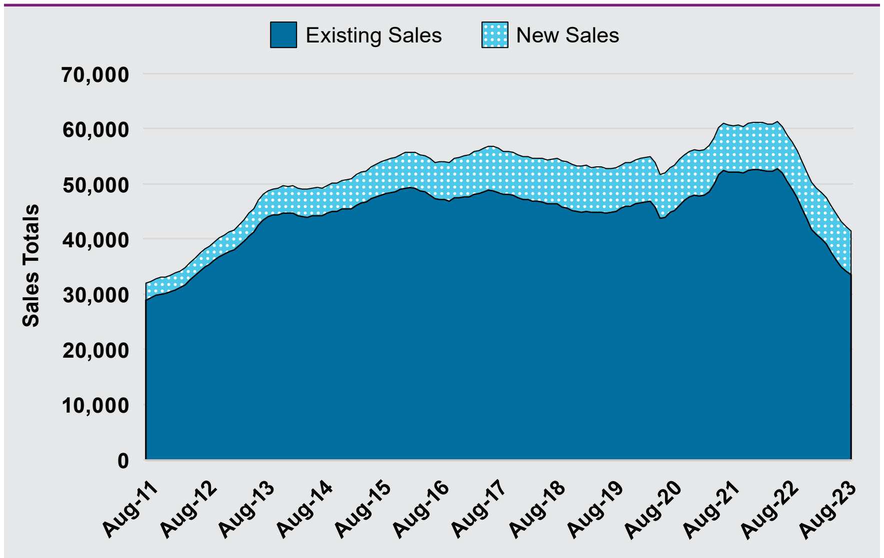
The sales market in the Suburban submarket is currently slightly tight, with an estimated sales vacancy rate of 1.0 percent (Table 11); the rate is up slightly from 0.9 in 2020 and down from 2.0 percent in 2010, when the market was soft. The for-sale inventory decreased in the past year, partly due to the number of homeowners locked into their mortgages with historically low rates. The 1.9-month supply of for-sale inventory in the Suburban submarket in August 2023 was down from 2.2 months a year earlier. Home sales in the submarket decreased 28 percent during the 12 months ending August 2023, with 41,450 homes sold (CoreLogic, Inc., with adjustments by the analyst; Figure 15). The average sales price increased 3 percent in the past year to $633,200 (Figure 16). Approximately 38 percent of homes sold in the submarket were in the $400,000-to-$599,000 range; only 1 percent of new homes sold were below $400,000 (Zonda; Figure 17).

Table 11. Home Sales Quick Facts in the Suburban Submarket

		Suburban Submarket	Denver-Aurora-Lakewood HMA
Home Sales Quick Facts	**Vacancy Rate**	1.0%	1.1%
	Months of Inventory	1.9	2.0
	Total Home Sales	41,450	52,750
	1-Year Change	-28%	-28%
	New Home Sales Price	$726,800	$729,800
	1-Year Change	10%	9%
	Existing Home Sales Price	$611,200	$630,700
	1-Year Change	1%	1%
	Mortgage Delinquency Rate	0.5%	0.5%

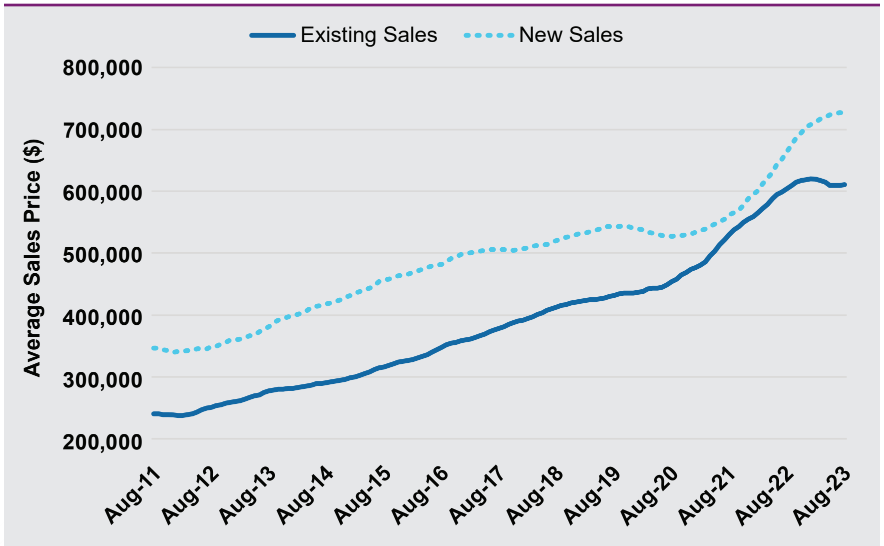
Notes: The vacancy rate is as of the current date; home sales and prices are for the 12 months ending August 2023; and months of inventory and mortgage delinquency data are as of August 2023. The current date is September 1, 2023.
Sources: Vacancy rate—estimates by the analyst; months of inventory and mortgage delinquency rate—CoreLogic, Inc.; home sales and prices—CoreLogic, Inc., with adjustments by the analyst

Figure 15. 12-Month Sales Totals by Type in the Suburban Submarket



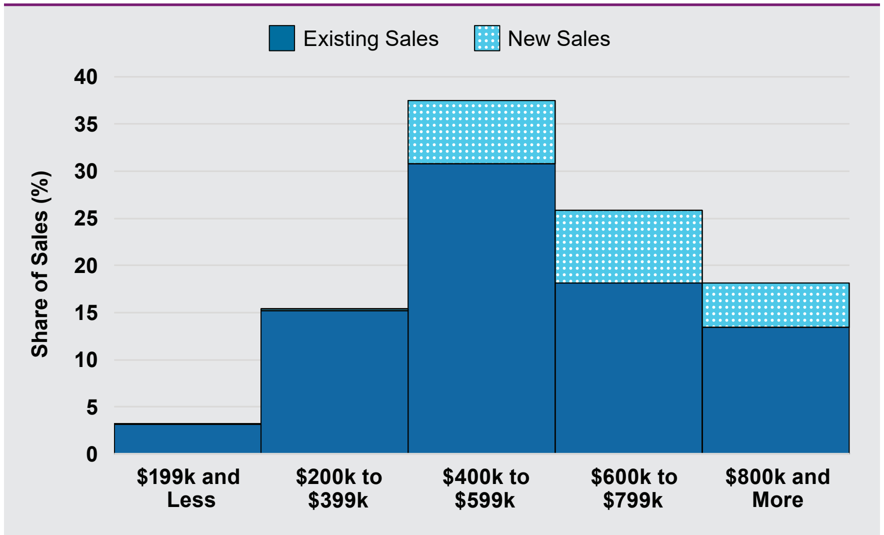
Source: CoreLogic, Inc., with adjustments by the analyst

Figure 16. 12-Month Average Sales Price by Type of Sale in the Suburban Submarket



Source: CoreLogic, Inc., with adjustments by the analyst

Figure 17. Share of Sales by Price Range During the 12 Months Ending August 2023 in the Suburban Submarket



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

Existing Home Sales and Prices

Existing home sales in the Suburban submarket increased rapidly in the early 2010s, coinciding with the recovering economy following the Great Recession. Home sales were generally stable from the mid-2010s through 2019, when the home sales market tightened and the inventory of for-sale homes declined. From 2011 through 2013, existing home sales increased an average of 15 percent annually to 44,650 homes sold. From 2014 through 2019, existing home sales were relatively unchanged, averaging 46,800 sales each year. Low interest rates continued until 2022, and the pandemic contributed to some households reevaluating their housing preferences. From 2020 through 2021, existing home sales increased an average of 6 percent each year to 52,550 homes sold. In 2022, however, existing home sales decreased 20 percent to 41,800 homes sold. Rising interest rates further hampered home sales, and existing home sales decreased 32 percent from a year earlier to 33,550 homes sold during the 12 months ending August 2023.

The low inventory of for-sale housing contributed to price growth in the past year, but moderating demand associated with the rising interest rates limited the gains. During the 12 months ending August 2023, the average price of an existing home increased 1 percent from a year earlier to $611,200. The average price for an existing home increased 5 percent annually from 2011 through 2013. Price growth was moderate during the early 2010s because the economy was still recovering from the Great Recession, and the sales market was soft, with a large inventory of homes for sale. When sales market conditions transitioned to balanced and then tightened, price growth increased to an average of 8 percent annually from 2014 through 2019 and rose to an average of 13 percent annually in 2020 and 2021, when the market was tight. In 2022, the average annual price increase slowed to 11 percent.

New Home Sales and Prices

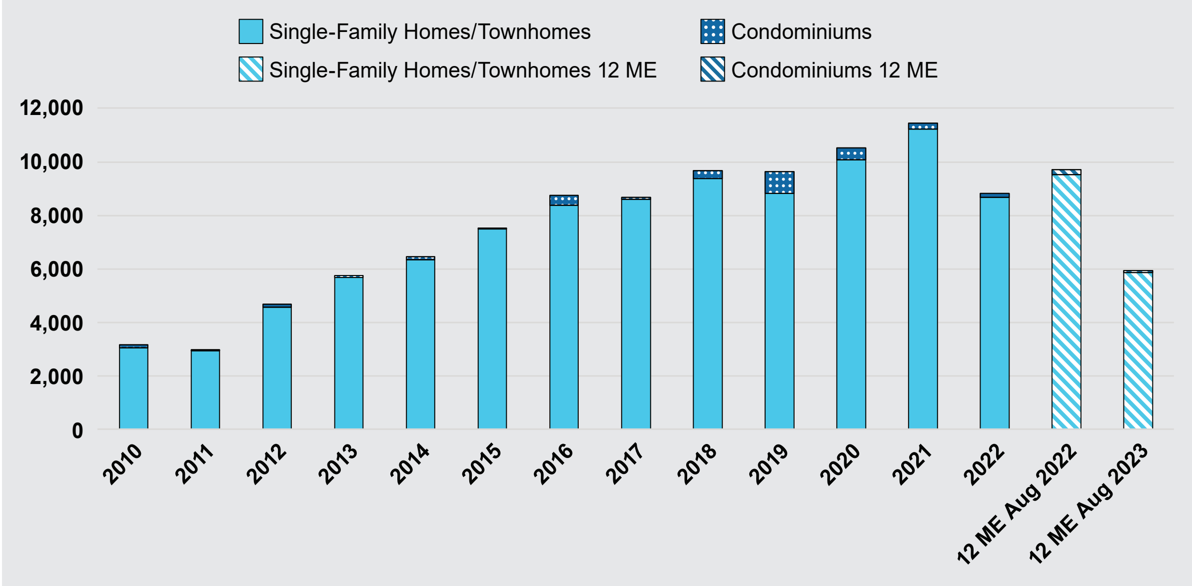
New home sales in the Suburban submarket decreased 6 percent in the past year, with 7,925 new homes sold during the 12 months ending August 2023. New home sales were weak during the period surrounding the Great Recession, but when the economy strengthened and in-migration to the submarket increased, so did demand for new sales housing. Demand for additional housing strengthened in 2013 and 2014 before moderating through 2019. In 2013 and 2014, new home sales increased an average of 23 percent each year and slowed to a 9-percent average annual increase from 2015 through 2019, when 7,575 new homes sold.

New home sales prices increased at a moderate pace through 2021 but have since accelerated. From 2011 through 2019, the price of a new home increased an average of 5 percent each year, which slowed slightly to a 4-percent average annual increase through 2021. In 2022, however, the average new home sales price increased 20 percent from a year earlier. New home sales have become increasingly concentrated at higher price ranges because rising interest rates have limited purchases by price-sensitive buyers. Despite the slowdown in sales in the past year, the average price of a new home increased 10 percent year over year to $726,800 during the 12 months ending August 2023. Attempting to bolster new home sales during the past year, several homebuilding companies with affiliated mortgage companies or their own financing departments offered lower interest rates to buyers through rate buydown concessions. Nevertheless, the offered interest rates, typically a reduction of 1.0 to 1.5 percentage points, were still generally higher than the rates most current homeowners have on their loans.

Sales Construction Activity

Sales construction activity in the Suburban submarket, as measured by the number of single-family homes, townhomes, and condominiums permitted, has been generally increasing since the end of the Great Recession, although construction decreased in the past year. Despite the slowdown in population growth beginning in 2015, homebuilding activity continued to increase, with builders responding to tightening housing market conditions. From 2011 through 2021, permitting of homes for sale increased by an average of 750 homes, or 12 percent, annually to 11,450 homes in 2021 (Figure 18). Homebuilding activity decreased 23 percent in 2022, partly because of increasing interest rates. During the 12 months ending August 2023, permitting of for-sale homes decreased 39 percent to 5,925 homes (preliminary data, with adjustments by the analyst)—the lowest level in the submarket since 2013, when 5,750 homes were permitted. Condominium construction is a minimal part of construction in the submarket, accounting for approximately 3 percent of for-sale construction since 2010, partly because the submarket has a ready supply of developable land. The low-density housing in the Suburban submarket was one of the reasons for out-migration from the Denver County submarket to the suburbs during the COVID-19 pandemic.

Figure 18. Annual Sales Permitting Activity in the Suburban Submarket



12 ME = 12 months ending.
Sources: U.S. Census Bureau, Building Permits Survey; 2010–22—final data and estimates by the analyst; past 24 months of data—preliminary data and estimates by the analyst

Since 2020, Arapahoe and Douglas Counties have accounted for an estimated 57 percent of single-family construction in the Suburban submarket, with Jefferson and Adams Counties accounting for another 36 percent. Sterling Ranch in northern Douglas County is one of the largest and newer communities in the submarket. Construction began in 2016, and approximately 340 homes were started during the past 12 months (Zonda). The community is approximately 17 percent complete, and additional phases for a total of 12,000 homes are planned through at least 2036. The price for a single-family detached home in the community starts at $556,000, and duplexes and townhomes start at approximately $474,000.

Forecast

During the next 3 years, demand is expected for 30,050 new homes in the Suburban submarket (Table 12). The 4,475 homes under construction are expected to meet a portion of the demand in the first year. In general, this submarket has ample land for development. Adams, Arapahoe, Douglas, and Jefferson Counties have access to job hubs, public transit options, and available developable land; these counties will account for most for-sale home construction in the HMA. Clear Creek, Gilpin, and Park are rural and mountainous counties with limited residential construction, partly because the areas are farther from the job centers. Elbert County is also rural and has minimal transit access to Denver. Like Denver, the City and County of Broomfield is constrained by its small geographic size and limited developable land.

Table 12. Demand for New Sales Units in the Suburban Submarket During the Forecast Period

	Sales Units
Demand	30,050 Units
Under Construction	4,475 Units

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

Rental Market

Rental Market—Denver HMA

Market Conditions: Soft

Strong rental construction in 2021 and 2022 contributed to the apartment vacancy rate increasing to 8.0 percent as of the third quarter of 2023, compared with 6.6 percent a year earlier (CoStar Group).

Current Conditions and Recent Trends

The overall rental market in the Denver HMA—including apartments, single-family homes, and other housing options available for rent—is soft. The estimated 7.9-percent vacancy rate is up from 7.1 percent in 2010 and 7.6 percent in 2020 (Table 13). Rental market conditions are slightly soft in the Suburban submarket and soft in the Denver submarket.

The apartment market in the HMA is also soft, with rising vacancy rates suppressing rent growth. The average apartment vacancy rate was 8.0 percent as of the third quarter of 2023, up from 6.6 percent a year earlier. The average rent increased less than 1 percent year over year to $1,834. Maps 2 and 3 show the current vacancy rates and average rents by respective CoStar Group-defined market area. Years of elevated apartment construction coupled with slower population growth during the pandemic in the early 2020s contributed to the softening apartment market. Conditions are softer in the Denver County submarket than in the Suburban submarket because the Denver County submarket has a larger share of apartment inventory in lease up or under construction and had slower population growth in the early 2020s.

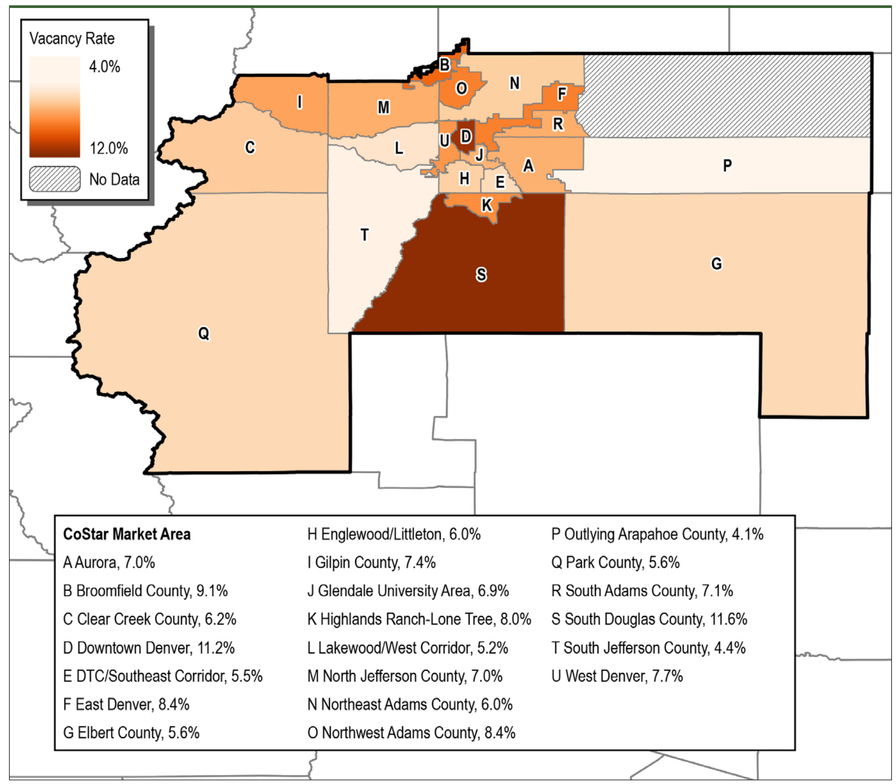
Table 13. Rental and Apartment Market Quick Facts in the Denver-Aurora-Lakewood HMA

		2020 (%)	Current (%)
Rental Market Quick Facts	Rental Vacancy Rate	7.6	7.9
			2022 (%)
	Occupied Rental Units by Structure		
	Single-Family Attached & Detached		25
	Multifamily (2–4 Units)		8
	Multifamily (5+ Units)		66
	Other (Including Mobile Homes)		1

		3Q 2023	YoY Change
Apartment Market Quick Facts	Apartment Vacancy Rate	8.0	1.4
	Average Rent	$1,834	1%
	Studio	$1,468	0%
	One-Bedroom	$1,636	0%
	Two-Bedroom	$2,057	1%
	Three-Bedroom	$2,615	2%

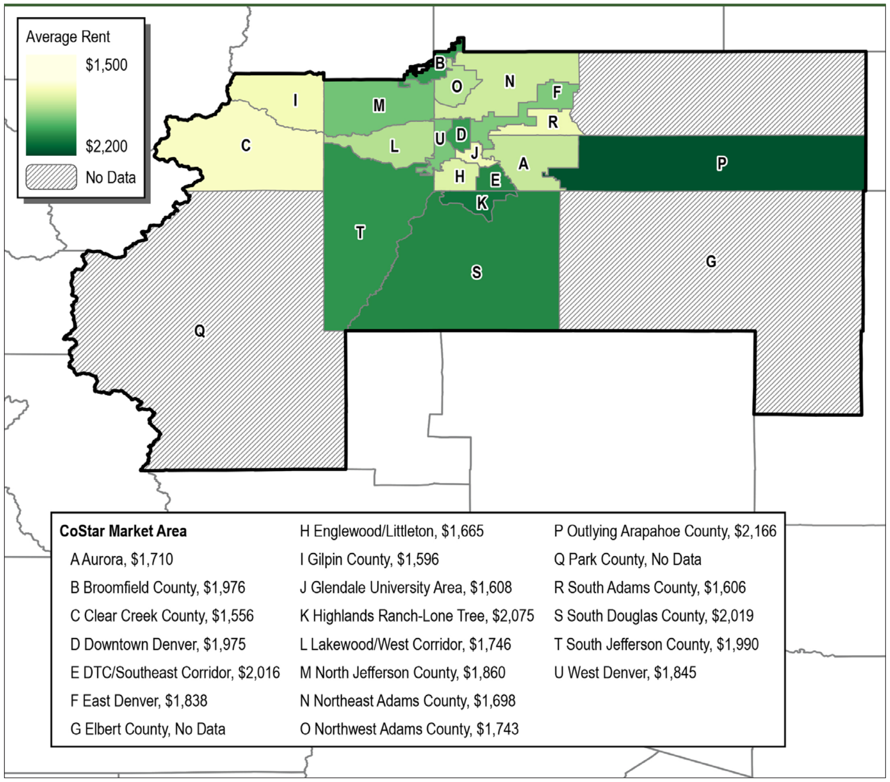
3Q = third quarter. YoY= year-over-year.
Notes: The current date is September 1, 2023. Percentages may not add to 100 due to rounding.
Sources: 2020 vacancy rate—2020 Census; current vacancy rate—estimate by the analyst; occupied rental units by structure—2022 American Community Survey 1-year data; apartment data—CoStar Group

Map 2. Average Vacancy Rates as of the Third Quarter of 2023 in the Denver HMA, by Market Area



Source: CoStar Group

Map 3. Average Rents as of the Third Quarter of 2023 in the Denver HMA, by Market Area

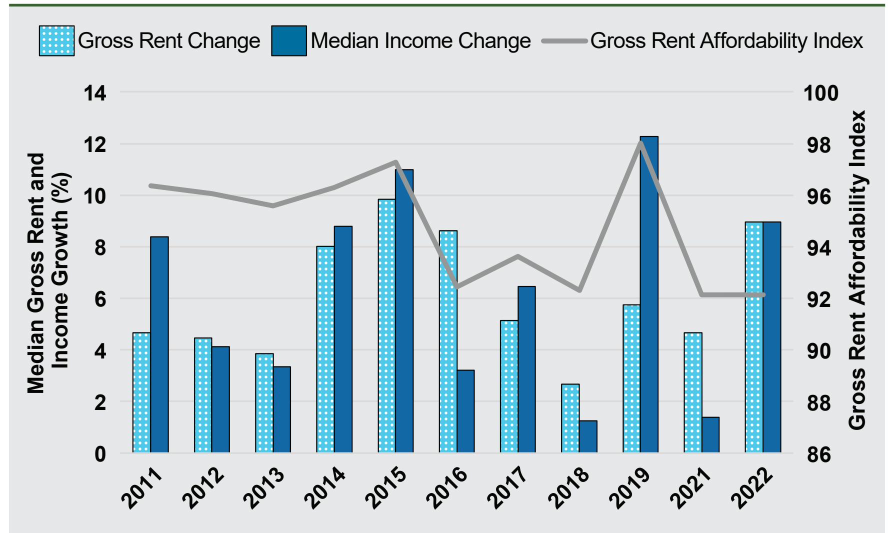


Source: CoStar Group

Housing Affordability in the Rental Market

Rental housing is gradually becoming less affordable in the Denver HMA and is less affordable than in the nation. Renter household income and gross rents have typically grown at differing rates except during 2022. During 2022, the median gross monthly rent and the median income among renters in the HMA rose 9 percent each, and the Gross Rent Affordability Index, a measure of median renter household income relative to qualifying income for a median-priced rental unit, was unchanged at 92 in 2022. The index has been in the 90s since 2011, when it reached approximately 96 (Figure 19). Affordability

Figure 19. Denver-Aurora-Lakewood HMA Gross Rent Affordability Index



Notes: Rental affordability is for the larger Denver-Aurora-Lakewood metropolitan statistical area. 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

in the nation has gradually increased compared with the overall decline of affordability in the Denver HMA. The national Gross Rent Affordability Index increased from approximately 90 in 2011 to 95 in 2022.

Renter Cost Burdens

Although overall rental housing is only slightly unaffordable in the Denver HMA, the HMA is more cost burdened than the nation, contributing to increased affordability concerns among certain households, particularly those with lower incomes. In general, renters in the HMA are more likely to be cost burdened or severely cost burdened than renters in the nation (Table 14). Households in the HMA earning up to 50 percent of the area median family income (AMFI) are even more likely to be cost burdened than the national average and considerably more likely to be severely cost burdened. Households earning up to 50 percent of AMFI are more than twice as likely to be severely cost burdened in both the HMA and the nation.

Table 14. Percentage of Cost-Burdened Renter Households by Income, 2020

	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	
	Denver-Aurora-Lakewood HMA	Nation	Denver-Aurora-Lakewood HMA	Nation
Renter Households with Income <50% HAMFI	29.2	27.1	51.8	47.9
Total Renter Households	24.5	21.6	21.7	22.0

HAMFI = HUD area median family income.
Sources: Consolidated Planning/Comprehensive Housing Affordability Strategy (CHAS) Data; 2016–2020 American Community Survey 5-year estimates (huduser.gov)

Current Affordable Housing Options: LIHTC, PBRA, HCV

The Low-Income Housing Tax Credit (LIHTC) is the primary source of funding for new affordable rental housing in the nation. Approximately 32,500 LIHTC units exist in the Denver HMA. From 2010 to 2021, 14,800 LIHTC units were placed in service in the HMA. Approximately 52 percent of all LIHTC units placed in service in the HMA since 2010 have been in the Denver County submarket. Recently completed LIHTC apartments in the HMA include the 210-unit Denver Metro Village in the Denver County submarket and the 216-unit St Mark Village Apartments in the Suburban submarket. Placed in service in 2021, both properties are restricted to households earning up to 60 percent of Area Median Income (AMI).

In addition to LIHTC, income-eligible residents may qualify for project-based rental assistance (PBRA) or housing choice vouchers (HCV) through local public housing authorities (PHAs). The PHAs in the HMA administered approximately 20,800 HCVs in 2022, of which nearly 18,700 are being used by households (Table 15), with the rest awaiting allocation or held by households seeking an acceptable unit (HUD Picture of Subsidized Households). Some HCV holders report difficulty obtaining a suitable unit at an affordable rent; not obtaining a unit can result in losing the voucher, and the average reported wait time to obtain an HCV is nearly 1.5 years.

Table 15. Picture of Subsidized Households, 2022

	Denver-Aurora-Lakewood HMA	HMA Change Since 2010	National Total	National Change Since 2010
Total Assisted Households (2022)	31,517	3.2%	4,537,614	2.5%
Total Housing Voucher Households (2022)	18,683	22.0%	2,350,366	15.2%
Average HCV Tenant Monthly Contribution	$411	-1.1%	$420	-4.0%
Average Monthly HUD Subsidy	$1,255	22.5%	$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

In the Denver HMA, an additional 9,450 subsidized units available through PBRA are more than 95 percent occupied (HUD Picture of Subsidized Households). The number of households receiving federal rental assistance and those with HCVs in the HMA has increased 3.2 and 22.0 percent, respectively, since 2010 because of rising household costs. To address the growing number of assisted households with rising costs, HUD has increased the (inflation-adjusted) rent subsidy 23 percent in the HMA since 2010; during the same time, the (inflation-adjusted) tenant contribution for an HCV decreased 1 percent. By comparison, the total number of assisted and voucher households increased by respective averages of 2.5 and 15.2 percent nationwide, whereas the inflation-adjusted HUD subsidy has increased slightly, up 0.9 percent, and the inflation-adjusted tenant contribution has decreased 4.0 percent since 2010.

Homelessness

In the Denver HMA, approximately 6,875 people experienced homelessness in 2022, and 30 percent were unsheltered (2022 Point-in-Time Count). By comparison, approximately 30 percent and 40 percent of people experiencing homelessness in Colorado and the nation, respectively, were unsheltered. Beginning in October 2022, the Denver Basic Income Project gave selected unhoused populations in Denver different amounts of money, ranging from $50 to $1,000 a month. Interim results indicate that after 6 months, employment among participants rose, and unsheltered and sheltered nights decreased. The study is expected to continue for 12 months, with the final report anticipated in June 2024.

Policy Initiatives

Policy initiatives to address affordability concerns are in place, particularly among those lower income households more likely to be cost burdened. In 2018, the city of Denver increased the cannabis sales tax 2 percent, resulting in more than $38.8 million of cannabis tax revenue dedicated to an affordable housing fund between 2018 and 2022. In July 2022, the City and County of Denver enacted the Expanding Housing Affordability Policy, which requires that 2 to 12 percent of housing units be designated as affordable, with the exact amount depending on the sales price or rent and location in the county or a fee-in-lieu for the affordable units that the developer opted out of, ranging from $250,000 to $478,000 a unit.

Forecast

During the 3-year forecast period, demand is estimated for 30,450 additional rental units (Table 16). The 38,000 units under construction are expected to more than meet demand. Because of the elevated construction levels and soft market conditions, builders may consider refraining from adding more units to the supply during the forecast to allow the units currently in lease up and under construction to be absorbed. Approximately 47 percent of rental demand is expected to occur in the Denver County submarket due to a high propensity to rent and strong expected population growth despite accounting for only 26 percent of the expected HMA population growth.

Table 16. Demand for New Rental Units in the Denver-Aurora-Lakewood HMA During the Forecast Period

	Rental Units
Demand	30,450 Units
Under Construction	38,000 Units

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

Rental Market—Denver County Submarket

Market Conditions: Soft

The apartment vacancy rate increased from 7.0 percent a year earlier to 9.2 percent as of the third quarter of 2023, and the average rent was largely unchanged at $1,864 (CoStar Group).

Current Conditions and Recent Trends

Rental market conditions in the Denver County submarket are soft, following slow population growth since 2020 and high levels of apartment construction, particularly in the downtown Denver area, since the late 2010s. The overall rental vacancy rate is currently estimated at 8.5 percent, down from 8.8 percent in 2020 (Table 17) but up from the 7.3-percent rate in 2010. Approximately 72 percent of renter households in the Denver County submarket live in multifamily

Table 17. Rental and Apartment Market Quick Facts in the Denver County Submarket

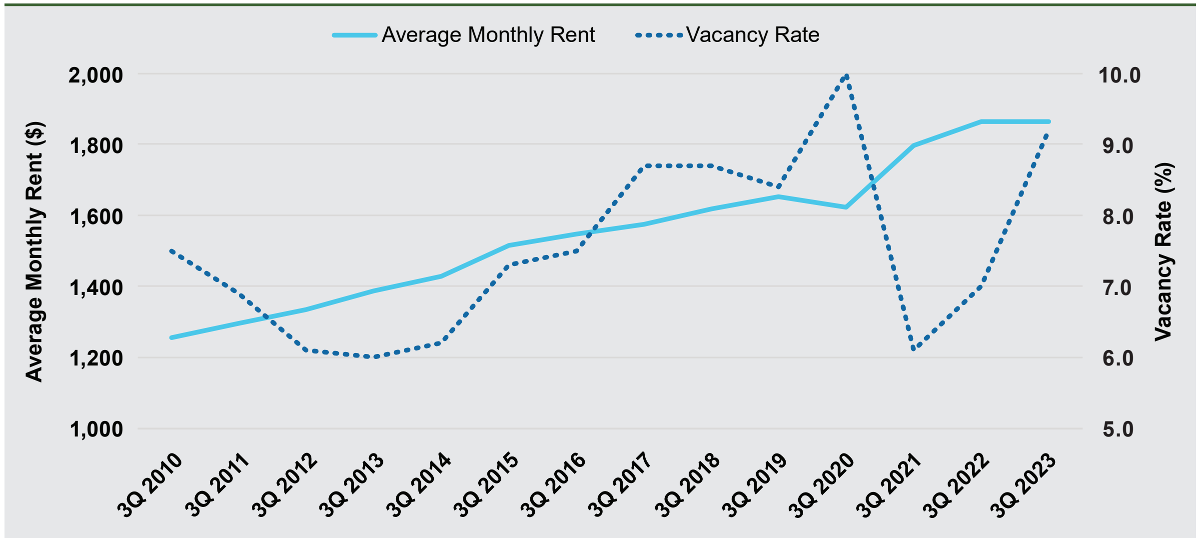
		2020 (%)	Current (%)
Rental Market Quick Facts	**Rental Vacancy Rate**	8.8	8.5
			2022 (%)
	Occupied Rental Units by Structure		
	Single-Family Attached & Detached		20
	Multifamily (2–4 Units)		7
	Multifamily (5+ Units)		72
	Other (Including Mobile Homes)		1

		3Q 2023	YoY Change
Apartment Market Quick Facts	**Apartment Vacancy Rate**	9.2	2.2
	Average Rent	$1,864	0%
	Studio	$1,482	-1%
	One-Bedroom	$1,687	-1%
	Two-Bedroom	$2,230	0%
	Three-Bedroom	$2,833	4%

3Q = third quarter. YoY= year-over-year.
Notes: The current date is September 1, 2023. Percentages may not add to 100 due to rounding.
Sources: 2020 vacancy rate—2020 Census; current vacancy rate—estimate by the analyst; occupied rental units by structure—2022 American Community Survey 1-year data; apartment data—CoStar Group

buildings with five or more units, typically apartments, which is a notably higher share than the 62 percent share in the Suburban submarket (2022 ACS 1-year data). The apartment vacancy rate is higher than the overall rental vacancy rate, and apartment market conditions are also soft. As of the third quarter of 2023, the average apartment vacancy rate was 9.2 percent, up from 7.0 percent a year earlier, and the average rent was unchanged at $1,864 (Figure 20; CoStar Group). The recent rate is the second highest third quarter vacancy rate since 2010; the vacancy rate peaked at 10.0 percent in 2020. From 2010 through 2013, the third quarter rent increased an average of 2 percent annually, and market conditions transitioned from soft to balanced during the economic recovery, stronger population growth, and relatively low levels of rental construction. The vacancy rate decreased from 7.5 to 6.0 percent during that time. The vacancy rate subsequently increased during 4 of the next 6 years to 8.4 percent in 2019, as rental construction trended upward. The average rent rose 4 percent annually from 2014 to 2019. The pandemic impacted the rental market in 2020 when residents migrated out of the Denver submarket. The vacancy rate increased to 10.0 percent, and the rent decreased 2 percent, which was the only period during which the average rent in the submarket has decreased since at least 2010. Following a modest decline in rental permitting in 2020, the apartment vacancy rate dipped in 2021 before rising sharply in 2022, when a significant wave of new developments began to enter lease up. The average rent increased 7 percent annually during 2021 and 2022.

Figure 20. Apartment Rents and Vacancy Rates in the Denver County Submarket



3Q = third quarter.
Source: CoStar Group

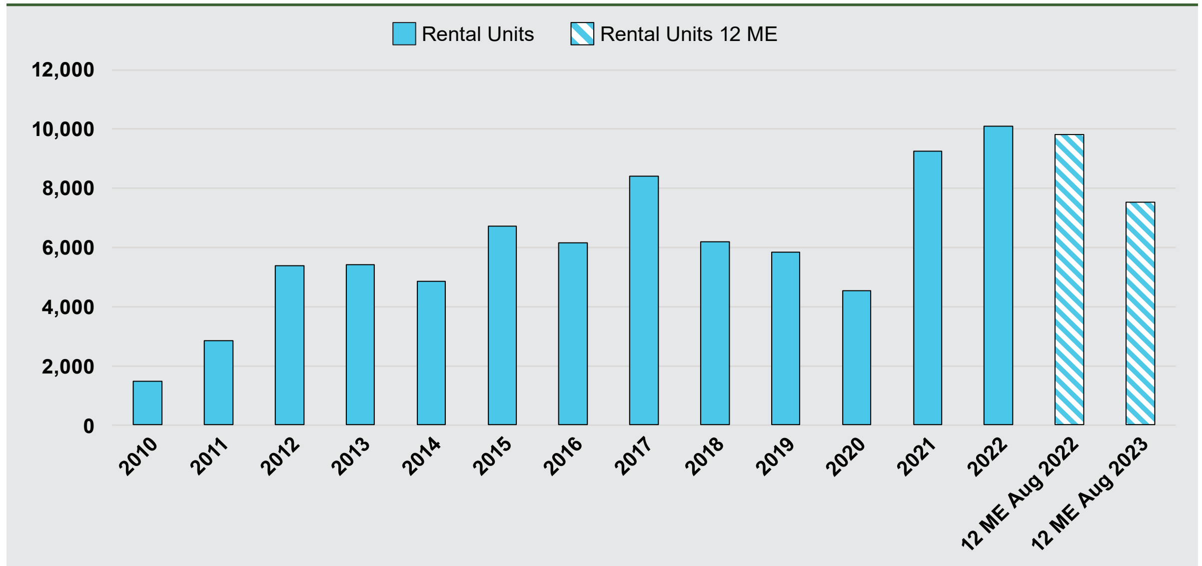
Market Conditions by Geography

Market conditions vary throughout the Denver County submarket. Of the four CoStar Group-defined market areas in the submarket, the Downtown Denver market area has the largest inventory, accounting for approximately 48 percent of the units in the submarket. This market area has both the highest rent and the highest vacancy rate at $1,975 and 11.2 percent, respectively, as of the third quarter of 2023. The average rent, however, is down 1 percent from a year earlier. Despite notably soft conditions, apartment construction remains strong, with approximately 55 percent of the units under construction in the submarket located in this market area. In April 2023, the 483-unit NOVEL RiNo opened with rents for studio, one-bedroom, and two-bedroom units starting at $1,879, $2,402, and $3,987, respectively. The Glendale University market area is balanced, with the lowest average rent and vacancy rate. As of the third quarter of 2023, the vacancy rate was 6.9 percent, up from 5.3 percent a year earlier, and the average rent increased nearly 1 percent to $1,608. The East Denver market area, which includes the area around DIA, has had significant rental construction in recent years, similar to sales construction trends; the apartment inventory increased 10 percent from the third quarter of 2022 to the third quarter of 2023. Rent growth was strongest in this market area, up 2 percent from a year earlier to $1,838, and the vacancy rate was 8.4 percent as of the third quarter of 2023, up from 6.7 percent a year earlier. In the West Denver market area, the vacancy rate increased to 7.7 percent as of the third quarter of 2023, up from 6.2 percent a year earlier, and the average rent was unchanged at $1,845.

Rental Construction Activity

Rental construction activity in the Denver County submarket, as measured by the number of rental units permitted, primarily includes apartments. Construction has generally trended upward since the early 2010s, including very high levels since 2021. Rental construction increased because the expanding economy following the Great Recession supported population growth. From 2011 to 2012, rental permitting increased 91 percent to 5,375 units (Figure 21). From 2013 through 2019, rental permitting averaged 6,225 units annually. In 2020, rental construction dipped to 4,525 units because the vacancy rate among the current inventory peaked amid economic uncertainty in the submarket and net out-migration during the COVID-19 pandemic. Rental permitting rose in 2021 and 2022 to record levels of 9,250 and 10,100 units, respectively, contributing to the large number of units currently under construction. Builders have begun to slow production. During the 12 months ending August 2023, 7,550 rental units were permitted, down 23 percent from a year earlier (preliminary data, with adjustments by the analyst). The 344-unit Tripoint Apartments in the Downtown Denver market area started construction in October 2022 and is expected to be complete in early 2024.

Figure 21. Annual Rental Permitting Activity in the Denver County Submarket



12 ME = 12 months ending.
Note: Includes apartments and units intended for rental occupancy.
Sources: U.S. Census Bureau, Building Permits Survey; 2010–22—final data and estimates by the analyst; past 24 months of data—preliminary data and estimates by the analyst

Forecast

During the next 3 years, demand is estimated for 14,400 rental units (Table 18). The 17,200 units under construction are expected to meet all demand during the forecast. To prevent further softening in the submarket, developers might consider not planning for additional units during the forecast period and allowing only current construction to enter the submarket.

Table 18. Demand for New Rental Units in the Denver County Submarket During the Forecast Period

	Rental Units
Demand	14,400 Units
Under Construction	17,200 Units

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

Rental Market—Suburban Submarket

Market Conditions: Slightly Soft

The apartment vacancy rate was 7.2 percent as of the third quarter of 2023, up from 6.3 percent a year earlier, and the average rent increased 1 percent to $1,812 (CoStar Group).

Current Conditions and Recent Trends

Rental market conditions in the Suburban submarket are slightly soft, with an estimated 7.5-percent rental vacancy rate, up from 6.9 percent in both 2020 (Table 19) and 2010. Approximately 62 percent of all renter households reside in multifamily buildings with five or more units per building, typically apartments (2022 ACS 1-year data). The apartment market is also slightly soft, with an increasing vacancy rate and slow rent growth during the past year. As of the third quarter of 2023, the apartment vacancy rate was 7.2 percent, up from 6.3 percent a year earlier, and the average rent increased a modest 1 percent to $1,812 (CoStar Group; Figure 22). The gap between the rents in the Denver County and Suburban submarkets has narrowed. The average rent in the Suburban submarket was less than 3 percent lower as of the third quarter of 2023, compared with 18 percent lower as of the same period in 2010. Although the trend occurred because the

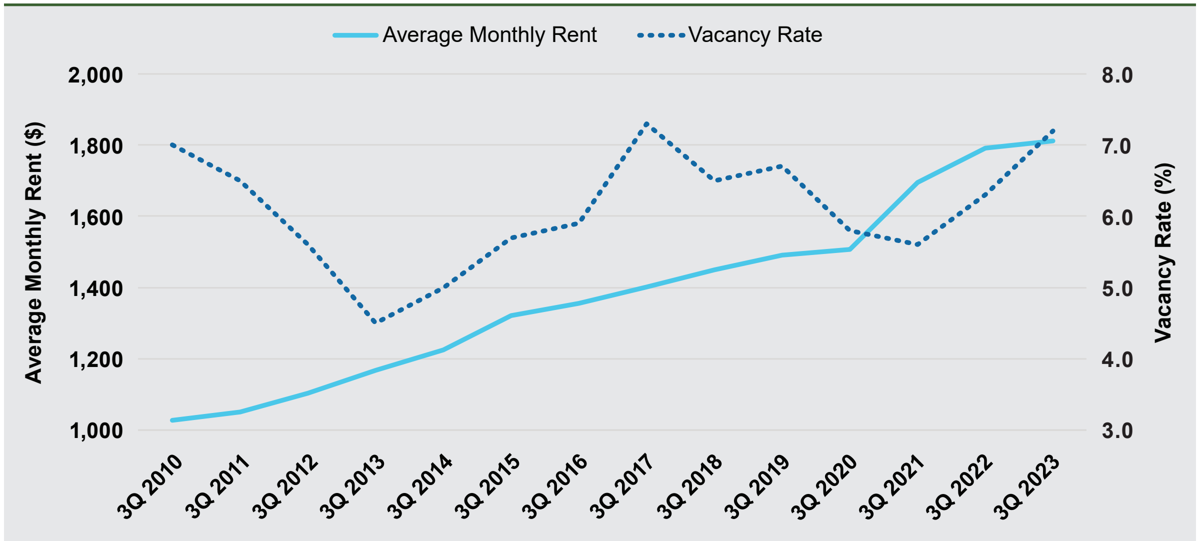
Table 19. Rental and Apartment Market Quick Facts in the Suburban Submarket

		2020 (%)	Current (%)
Rental Market Quick Facts	**Rental Vacancy Rate**	6.9	7.5
			2022 (%)
	Occupied Rental Units by Structure		
	Single-Family Attached & Detached		28
	Multifamily (2–4 Units)		9
	Multifamily (5+ Units)		62
	Other (Including Mobile Homes)		0

		3Q 2023	YoY Change
Apartment Market Quick Facts	**Apartment Vacancy Rate**	7.2	0.9
	Average Rent	$1,812	1.1%
	Studio	$1,414	1.1%
	One-Bedroom	$1,595	0.4%
	Two-Bedroom	$1,968	1.5%
	Three-Bedroom	$2,540	1.7%

3Q = third quarter. YoY= year-over-year.
Notes: The current date is September 1, 2023. Percentages may not add to 100 percent due to rounding.
Sources: 2020 vacancy rate—2020 Census; current vacancy rate—estimate by the analyst; occupied rental units by structure—2022 American Community Survey 1-year data; apartment data—CoStar Group

Figure 22. Apartment Rents and Vacancy Rates in the Suburban Submarket



3Q = third quarter.
Source: CoStar Group

average rent in the Suburban submarket increased slightly faster than the Denver County submarket over time, the largest shift occurred in 2020, when rents declined in the Denver County submarket and increased in the Suburban submarket.

The average third quarter apartment rent in the Suburban submarket has increased since the early 2010s. From 2011 to 2013, the average rent increased 4 percent annually, and the vacancy rate decreased to 4.5 percent. From 2014 to 2019, despite the vacancy rate generally increasing each year to 6.7 percent in 2019, rent growth continued at an average of 4 percent annually. Because of the shift in population growth during the pandemic, the rental market in the Suburban submarket tightened in 2020 and 2021, leading to stronger rent growth. The vacancy rate decreased to 5.6 percent in 2021, and the average rent increased 7 percent before slowing slightly to 6 percent rent growth year over year as of the third quarter of 2022.

Market Conditions by Geography

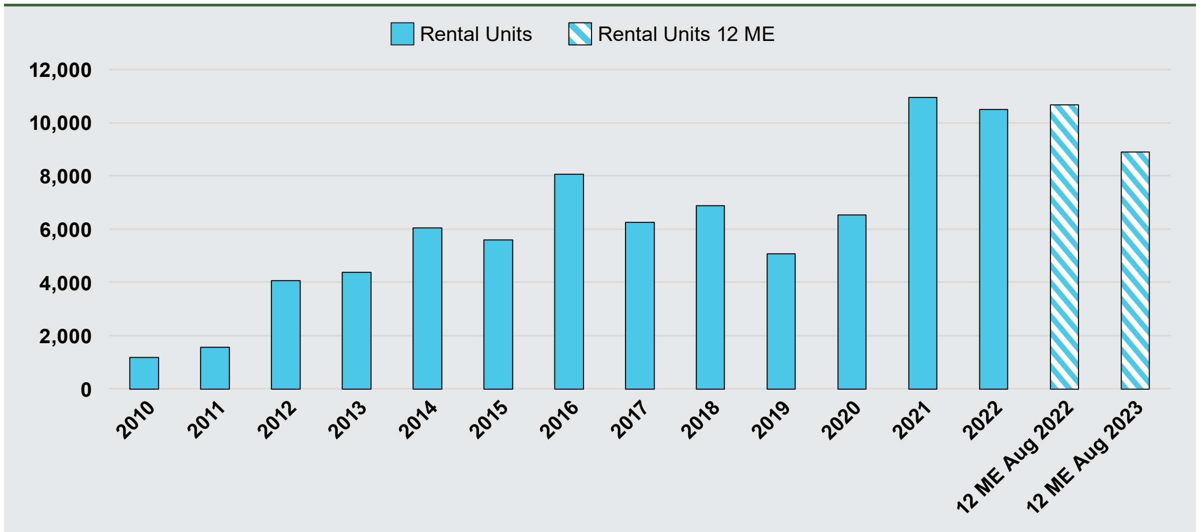
In the Suburban submarket, apartment conditions vary among the 17 CoStar Group-defined market areas. Third quarter vacancy rates in the submarket as of 2023 ranged from 4.1 percent in the Outlying Arapahoe County area to 11.6 percent in South Douglas County, where significant new apartment construction is occurring. The Aurora market area east of Denver has the largest inventory, accounting for approximately 21 percent of apartment units in the Suburban submarket.

As of the third quarter of 2023, the average rent in the market area increased 1 percent from a year earlier to $1,710, and the vacancy rate increased from 6.4 to 7.0 percent. In addition to having the highest vacancy rate, the South Douglas County market area has the largest number of units under construction, accounting for approximately 14 percent of the submarket apartment construction. In South Douglas County, 332-unit Broadstone Sterling Ranch at Prospect Village is expected to open in September 2023, with rents for studio and one-, two-, and three-bedroom units starting at $1,694, $1,735, $2,327, and $3,324, respectively. The Outlying Arapahoe County market area had the highest rent in the submarket at $2,166 as of the third quarter of 2023, and the Clear Creek County market area had the lowest rent at $1,566. The average rent changes ranged from a 1-percent decline in Northwest Adams County to a 21-percent increase in Gilpin County; most market areas, 11 of 17, had rents ranging from no change to a 2-percent increase year over year.

Rental Construction Activity

Rental construction activity, as measured by rental units permitted, generally increased in the Suburban submarket from low levels in the early 2010s, at the end of the Great Recession, to record levels in 2021 and 2022. From 2011 through 2016, rental permitting increased an average of 38 percent annually to 8,075 units and then moderated to an average of 6,175 rental units permitted each year from 2017 through 2020 (Figure 23). Permitting rose to an average of 10,750 units each year in 2021 and 2022, contributing

Figure 23. Annual Rental Permitting Activity in the Suburban Submarket



12 ME = 12 months ending.
Note: Includes apartments and units intended for rental occupancy.
Sources: U.S. Census Bureau, Building Permits Survey; 2010–22—final data and estimates by the analyst; past 24 months of data—preliminary data and estimates by the analyst

to an increasing vacancy rate and slow rent growth in 2023, when many developments entered lease up. Builders have slowed construction in 2023 in response to the large number of units under construction; nevertheless, permitting levels are still elevated compared with 2010 through 2019. During the 12 months ending August 2023, 8,900 rental units were permitted in the submarket, down 16 percent from a year earlier. In the city of Castle Rock, construction began on The View apartments in December 2022, a 221-unit development that is expected to be complete in the summer of 2024.

Forecast

During the next 3 years, demand is estimated for 16,050 rental units in the Suburban submarket (Table 20). Despite the increase in demand due to anticipated stronger population growth, the 20,800 units under construction are expected to meet all demand during the forecast. Builders might consider not planning for additional units to enter the market until beyond the 3-year forecast period to allow the units under construction to be absorbed and to avoid contributing to softening in the market. Similar to sales construction in the Suburban submarket, most of the demand is expected in the inner counties in communities near transit lines and access to job centers.

Table 20. Demand for New Rental Units in the Suburban Submarket During the Forecast Period

Rental Units	
Demand	16,050 Units
Under Construction	20,800 Units

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

Terminology Definitions and Notes

A. Definitions

Apartment Market	Includes multifamily units for rent with five or more units per building, excluding student, senior, and vacation rentals.
Building Permits	Building permits do not necessarily reflect all residential building activity that occurs in a housing market area (HMA). 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 under construction or units in the development pipeline.
Existing Home Sales	Includes resale sales, short sales, and real estate owned (REO) sales.
Forecast Period	9/1/2023–9/1/2026—Estimates by the analyst.
Home Sales/ Home Sales Prices	Includes single-family home, townhome, and condominium sales.
Net Natural Increase	Resident births are greater than resident deaths.

Other Vacant Units	**In this analysis conducted by the U.S. Department of Housing and Urban Development (HUD), other vacant units include all vacant units that are not available for sale or for rent. The term, therefore, includes units rented or sold but not occupied; held for seasonal, recreational, or occasional use; used by migrant workers; and the category specified as "other" vacant by the U.S. Census Bureau.**
Rental Market/ Rental Vacancy Rate	**Includes apartments and other rental units, such as single-family, multifamily, and mobile homes.**
Resale Sales	**These are home closings that have no ties to either new home closings (builders) or foreclosures. They are homes that were previously constructed and sold to an unaffiliated third party.**
Seriously Delinquent Mortgages	**Mortgages 90 or more days delinquent or in foreclosure.**

B. Notes on Geography

1.	**The metropolitan statistical area definition noted in this report is based on the delineations established by the Office of Management and Budget (OMB) in the OMB Bulletin dated April 10, 2018.**
2.	**Urbanized areas are defined using the U.S. Census Bureau's 2020 Census Urban and Rural Classification and the Urban Area Criteria.**
3.	**The census tracts referenced in this report are from the 2020 Census.**

C. Additional Notes

1.	**The National Association of Home Builders/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.**

2.	**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 local 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.**
3.	**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. HUD expresses its appreciation to those industry sources and state and local government officials who provided data and information on local economic and housing market conditions.**

D. Photo/Map Credits

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