



**Table 1.** Housing Demand in the Denver HMA\* During the Forecast Period

	Denver HMA*		Denver County Submarket		Northwest Submarket		Southeast Submarket	
	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units
Total demand	34,850	20,900	8,400	9,675	13,950	5,550	12,500	5,675
Under construction	1,450	6,500	300	3,500	600	1,200	550	1,800

\* Denver-Aurora-Lakewood HMA.

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of October 1, 2016. A portion of the estimated 25,700 other vacant units in the HMA will likely satisfy some of the forecast demand. The forecast period is October 1, 2016, to October 1, 2019.

Source: Estimates by analyst

## Economic Conditions

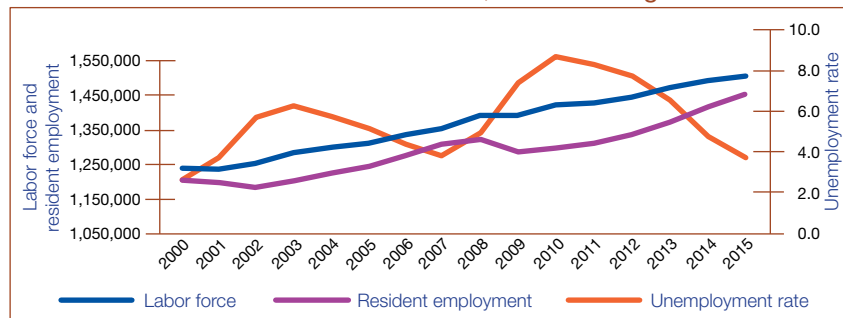
**Table 2.** 12-Month Average Nonfarm Payroll Jobs in the Denver HMA,\* by Sector

	12 Months Ending		Absolute Change	Percent Change
	September 2015	September 2016		
Total nonfarm payroll jobs	1,385,600	1,427,900	42,300	3.1
Goods-producing sectors	161,600	170,300	8,700	5.4
Mining, logging, & construction	94,100	100,400	6,300	6.7
Manufacturing	67,500	69,900	2,400	3.6
Service-providing sectors	1,224,000	1,257,600	33,600	2.7
Wholesale & retail trade	204,200	206,900	2,700	1.3
Transportation & utilities	52,000	52,100	100	0.2
Information	45,500	46,000	500	1.1
Financial activities	101,400	104,300	2,900	2.9
Professional & business services	249,600	258,600	9,000	3.6
Education & health services	174,600	179,800	5,200	3.0
Leisure & hospitality	153,200	161,000	7,800	5.1
Other services	53,400	54,700	1,300	2.4
Government	190,000	194,200	4,200	2.2

\* Denver-Aurora-Lakewood HMA.

Notes: Numbers may not add to totals because of rounding. Based on 12-month averages through September 2015 and September 2016.

Source: U.S. Bureau of Labor Statistics

**Figure 1.** Trends in Labor Force, Resident Employment, and Unemployment Rate in the Denver HMA,\* 2000 Through 2015

\* Denver-Aurora-Lakewood HMA.

Source: U.S. Bureau of Labor Statistics

Economic conditions in the Denver HMA are generally strong, and job growth has outpaced growth in the nation since 2010. Nonfarm payroll gains averaged 2.3 percent annually from 2010 through 2015 compared with a 1.8-percent annual growth rate nationally. During the 12 months ending September 2016, nonfarm payrolls averaged approximately 1.43 million jobs, an increase of 42,300 jobs, or 3.1 percent, from the previous 12 months (Table 2); payroll growth occurred in every sector. The recent job gains in the HMA contrast with average declines of 2.4 percent annually during 2009 and 2010, a consequence of the national recession. The current number of nonfarm payroll jobs is nearly 13 percent greater than the previous recent peak of 1.25 million jobs in 2008. The unemployment rate averaged 3.2 percent during the 12 months ending September 2016, down from 3.9 percent a year earlier as resident employment growth far exceeded labor force increases. Figure 1 shows trends in the labor force, resident employment, and the unemployment rate in the HMA from 2000 through 2015.

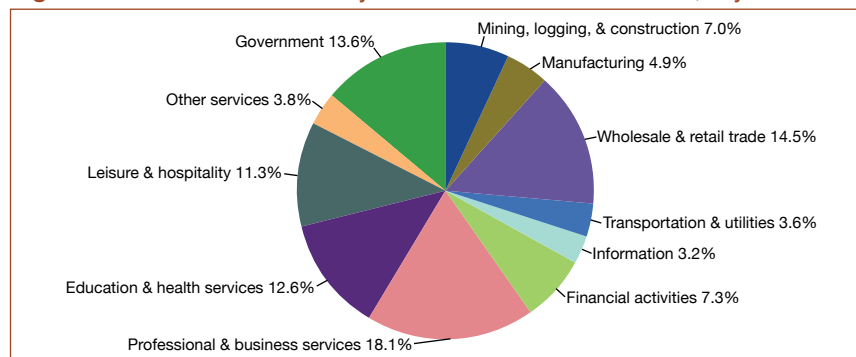
From 1994 through 2000, the HMA had unusually strong economic growth, with nonfarm payrolls increasing by an average of nearly 42,000 jobs, or 4.4 percent, annually, led by the rapid development of industries such as telecommunications and computer equipment manufacturing. By comparison, the national economy expanded 2.4 percent annually during the period. The bursting of the dot-com bubble in 2001 and the subsequent national economic recession affected the economy of the HMA particularly hard. From 2001 through 2003, nonfarm payrolls declined by an average of 17,700 jobs, or 1.5 percent, a year. From 2004 through 2008, the HMA economy expanded at a moderate rate of 19,000 jobs or 1.6 percent annually, recovering all of the jobs lost from 2000 to 2003.

The professional and business services sector, the largest employment sector in the HMA, accounts for 18 percent of all nonfarm payrolls (Figure 2). The sector increased by 9,000 jobs, or 3.6 percent, to an average of 258,600 jobs during the 12 months ending September 2016 compared with average annual increases of 9,400 jobs, or 4.2 percent, from 2011 through 2015. Job gains during the period were partly because of increased interest in renewable energy research. The HMA

is home to the National Renewable Energy Laboratory, which houses bioenergy, photovoltaic, and wind technology centers, employs more than 1,700 people, and hosts 1,100 visiting researchers and contractors. The sector mirrored overall economic growth in the HMA from 1994 through 2000, gaining an average of 4.8 percent annually. In response to the bursting of the dot-com bubble and the ensuing economic recession, the sector lost an average of 6,300 jobs, or 3.3 percent, a year from 2001 through 2003. From 2004 through 2008, the professional and business services sector increased by 7,500 jobs, or 3.9 percent, annually, far faster than the overall growth in the HMA economy. During the local economic downturn in 2009, the sector decreased by 12,700 jobs, or 5.9 percent, to average 204,300 jobs, and sector employment remained essentially unchanged during 2010.

The wholesale and retail trade sector, the second largest sector in the Denver HMA, increased by 2,700 payrolls, or 1.3 percent, during the 12 months ending September 2016 compared with the number of jobs a year earlier, to an average of 206,900 jobs. Sector payrolls have more than recovered the number of jobs lost during the recent recession. Wholesale and retail trade sector payrolls averaged 194,100 jobs in 2008, and then decreased by 6,000 jobs, or 3.1 percent, during 2009 and 2010. During the economic recovery from 2011 through 2015, jobs increased by an average of 4,300, or 2.3 percent, annually. On January 1, 2014, retail marijuana sales became legal in Colorado, after voter approval during the November 2013 elections. Statewide, the sales tax revenue from the first year of retail marijuana sales

**Figure 2. Current Nonfarm Payroll Jobs in the Denver HMA,\* by Sector**



\* Denver-Aurora-Lakewood HMA.

Note: Based on 12-month averages through September 2016.

Source: U.S. Bureau of Labor Statistics

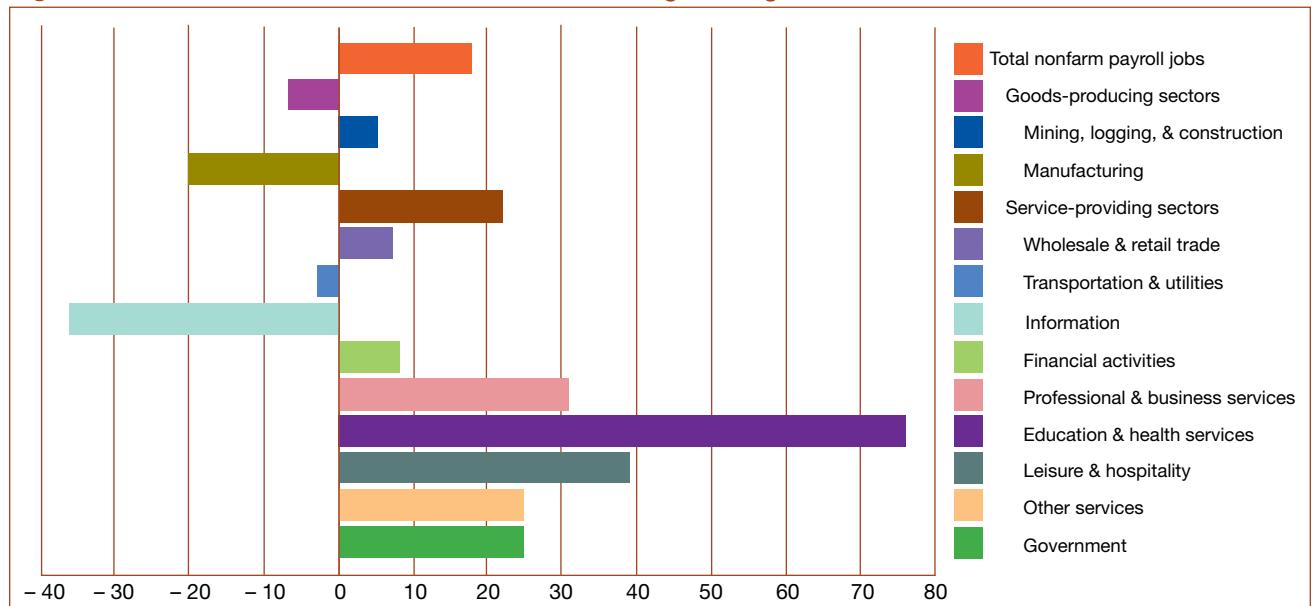
in 2014 exceeded \$25.3 million, and rose to \$50.4 million in 2015 (Colorado Department of Revenue).

The government sector is the third largest employment sector and has been a stable employment base in the HMA. The city of Denver is the state capital of Colorado, and the HMA is a regional center for federal agencies, with 42,300 state government employees and 28,500 federal government employees. The sector increased steadily from 2001 through 2015, rising an average of 2,400 jobs,

or 1.4 percent, annually, declining only during 2004, by 600 jobs, or 0.4 percent. During the 12 months ending September 2016, the government sector averaged 194,200 jobs, an increase of 4,200 jobs, or 2.2 percent, from the previous 12 months, with gains of 3,800 jobs in the state and local government subsectors adding to gains of 400 jobs in the federal government subsector.

The education and health services sector has recorded the strongest percentage growth since 2000 (Figure 3). During the 12 months ending

**Figure 3. Sector Growth in the Denver HMA,\* Percentage Change, 2000 to Current**



\* Denver-Aurora-Lakewood HMA.

Note: Current is based on 12-month averages through September 2016.

Source: U.S. Bureau of Labor Statistics

**Table 3. Major Employers in the Denver HMA\***

Name of Employer	Nonfarm Payroll Sector	Number of Employees
HealthONE LLC	Education & health services	8,360
CenturyLink, Inc.	Information	6,500
University of Colorado Health	Government	5,750
Children's Hospital Colorado	Education & health services	5,650
United Airlines, Inc.	Transportation & utilities	4,900
Centura Health Corporation	Education & health services	4,890
Lockheed Martin Corporation	Manufacturing	4,750
SCL Health	Education & health services	4,550
Kaiser Permanente®	Education & health services	4,380
Comcast Corporation	Information	4,370

\* Denver-Aurora-Lakewood HMA.

Notes: Excludes local school districts. Private, non-retail employers.

Source: Metro Denver Economic Development Corporation, 2014

September 2016, the sector averaged 179,800 jobs and grew 3.0 percent. Of the 10 largest employers in the HMA, 5 are in the education and health services sector (Table 3). The sector increased steadily during the previous decade, rising by an average of 4,000 jobs, or 3.4 percent, annually. From 2011 through 2013, jobs in the sector increased 3.9 percent annually, and the growth rate rose to 5.0 percent during 2014. The construction of new hospitals and expansions of current

healthcare facilities supported job growth in the education and health services sector. The 820,000-square-foot University of Colorado Anschutz Medical Campus opened in 2007. A second inpatient facility, which was completed in 2011, added another 276 patient beds. At the same location, the 1.4 million-square-foot Children's Hospital Colorado also opened in 2007. The combined facilities at the Anschutz Medical Campus employ 16,000 staff and receive more than 60,000 visitors daily. The Sky Ridge Medical Center, which opened in 2003 in the Southeast submarket, has 286 patient beds and employs about 1,225 people. The Sky Ridge facility completed a \$117 million expansion in 2014, creating 90 additional beds and 300 additional healthcare jobs.

The greatest percentage growth in HMA employment during the 12 months ending September 2016 occurred in the mining, logging, and construction sector, rising by 6,300 jobs, or 6.7 percent, to average 100,400 jobs. After the bursting of the tech bubble in 2000, sector employment declined by an average of 3,900 jobs, or 4.2 percent, annually from 2002 through 2004, as residential and nonresidential construction declined. Sector employment improved during 2005 and 2006, increasing by an average of 4,400 jobs, or 5.0 percent, annually, as residential building activity rose. During 2006, nonresidential construction was under way on the 300,000-square-foot U.S. Environmental Protection Agency regional headquarters in downtown Denver near Union Station. In addition, the Regional Transportation District (RTD) Southeast Corridor transit line connecting downtown and the Denver Tech Center (DTC) was completed

in November 2006. In response to declining economic conditions and the national recession, the mining, logging, and construction sector lost 5,800 jobs, or 7.0 percent, annually from 2008 through 2011, to a low of 69,600 jobs in 2011, with 70 percent of those losses concentrated in 2009. During the period, residential construction declined nearly 18 percent annually, with a low of 4,050 housing units constructed in the HMA during 2009. From 2012 through 2015, sector employment grew substantially, rising by 6,900 jobs, or 9.1 percent, annually, as residential construction recovered. Sector employment is now 6 percent higher than the most recent peak reached in 2006 and 3 percent higher than the peak reached during 2001.

In the Denver County submarket, the largest job center is downtown Denver, with total employment of more than 110,000 people. In the Southeast submarket, the largest job centers are DTC and nearby business parks along Interstate 25 (the Southeast Corridor), which collectively employ more than 130,000 workers. The DTC includes more than 1,000 firms, representing industries such as financial services, telecommunications, and scientific and engineering services. Job centers in the Northwest submarket, which are more dispersed, include the Denver Federal Center in the city of Lakewood and the adjacent St. Anthony Medical Campus, which combined have more than 11,000 employees. In addition, the Interlocken Business Park, in the city of Broomfield, has more than 15,000 workers and includes firms in industries such as telecommunications, software development, and high-tech manufacturing.

During the next 3 years, nonfarm payrolls are expected to increase an average of 2.9 percent a year, or approximately 40,800 jobs, annually. The financial activities sector is expected to contribute to job growth as PricewaterhouseCoopers LLP, a financial company, recently announced it will double employment in the HMA to 1,100 workers in the next 5 years. Continuing development around the National Western Stock Show complex, an event center in the city of Denver, and high levels of multifamily construction will support continued job growth in the construction subsector. In addition, work

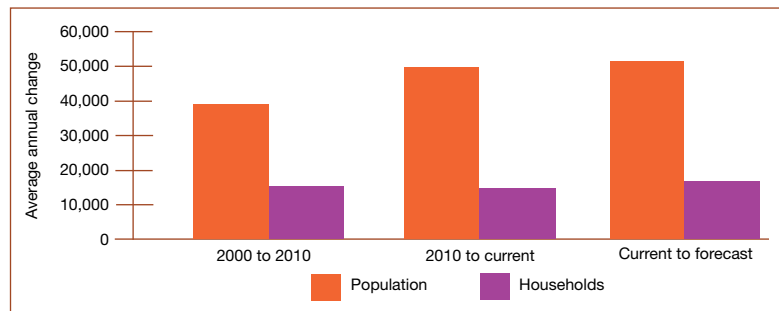
on the RTD FasTracks, a \$7 billion commuter and light-rail system, will continue through 2017. World Trade Center Denver has announced plans to build a new campus in the city of Denver's River North District. The first phase of development, which will begin in the fourth quarter of 2017, includes 250,000 square feet of office space and up to 40,000 square feet of conference center space and a 200-room business hotel. The University of Colorado Denver recently broke ground on a 92,000-square-foot center that will include student lounges, study spaces, gaming rooms, and a health clinic.

## Population and Households

The current population of the Denver HMA is estimated at 2.86 million, an increase of 49,300, or 1.8 percent, annually since 2010. From 2000 to 2004, population similarly increased 1.8 percent annually. During the period, net in-migration fell from 26,800 people during 2000 to an average of 4,950 people annually from 2001 through 2004, as the bursting of the dot-com bubble and

recession affected growth in the HMA (Colorado State Demography Office). Despite job losses during 2009 and 2010, overall economic and housing market conditions generally improved from mid-2005 through mid-2010, and population growth remained relatively strong, averaging 40,500 people, or 1.7 percent, annually. During the period, net in-migration increased, averaging 17,400 people annually, or more than 40 percent of total population growth. Since 2010, net in-migration has nearly doubled to 30,500 people, or 60 percent of population growth annually, as job gains increased dramatically during the recovery from the national recession. Figure 4 shows population and household growth in the HMA, and Figure 5 shows the components of population change in the HMA, from 2000 to the forecast date.

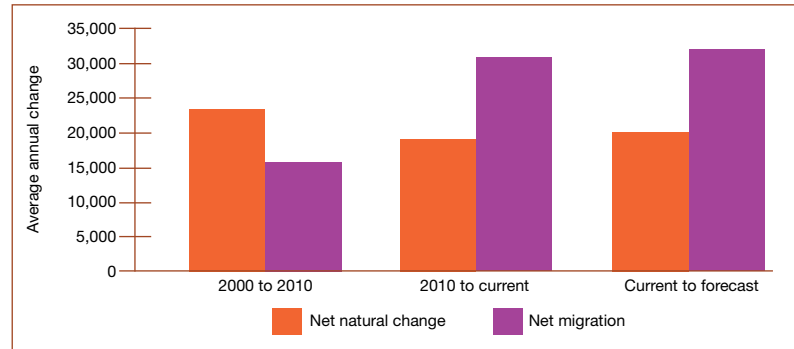
**Figure 4.** Population and Household Growth in the Denver HMA,\* 2000 to Forecast



\* Denver-Aurora-Lakewood HMA.

Notes: The current date is October 1, 2016. The forecast date is October 1, 2019.

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

**Figure 5. Components of Population Change in the Denver HMA,\* 2000 to Forecast**

\* Denver-Aurora-Lakewood HMA.

Notes: The current date is October 1, 2016. The forecast date is October 1, 2019.

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

The bursting of the dot-com bubble in 2000 significantly affected population growth in the Denver County submarket, whereas the recent national recession had a more moderate effect. Population growth in the submarket averaged 540 people, or 0.1 percent, annually from July 2000 to July 2005, with net out-migration averaging 5,275 people annually and more than 75 percent of out-migrants moving to the surrounding counties in the HMA (Colorado State Demography Office). As economic conditions improved and job gains increased in the HMA from 2005 to 2008, population growth in the submarket rose to 7,475 people, or 1.3 percent, annually, with net in-migration averaging 1,450 people annually. Despite the loss of nearly 60,000 jobs in the HMA during 2009 and 2010, net in-migration in the submarket increased to 3,250 people annually, boosting population growth to 1.6 percent a year. Since 2010, the population of the Denver County submarket has increased at an even higher rate, averaging 14,450 people, or 2.3 percent, annually, to a current level of 694,100, with net in-migration constituting nearly 65 percent of population growth, reflecting the

strong employment gains. The strong net in-migration since 2010 is more than triple the average annual net in-migration from 2005 to 2010. Net in-migration to the Denver County submarket is expected to slow during the next 3 years. New residents will likely be attracted to increased transit and housing options in the outer submarkets, and population growth in the Denver County submarket is expected to slow to 1.8 percent annually.

The population of the Northwest submarket is estimated at 1.18 million, an increase of 17,400, or 1.6 percent, since 2010. The recent growth is stronger than the average of 14,350 people, or 1.5 percent, annually during the previous decade, largely because of increased net in-migration. From April 2000 to July 2002, leading up to the tech bust, net in-migration in the submarket averaged 15,000 people annually, before falling to 1,800 people annually from 2002 to 2006. Despite the effects of the national recession, net in-migration increased to 3,875 people annually from 2006 through 2010. Net in-migration has nearly tripled to 10,750 people annually, or about 60 percent of population growth,

in the Northwest submarket since 2010 because of increased transit options and job opportunities in the Interlocken Business Park.

In the Southeast submarket, population growth averaged 19,700 people, or 2.6 percent, a year from 2000 to 2010 but has slowed to 17,400 people, or 1.9 percent, since 2010. The estimated population is currently 993,500. More than 50 percent of the growth in the submarket from 2000 through 2010 occurred in Douglas County, where the population increased by 10,650, or 4.8 percent, annually. Douglas County was the fastest growing county in Colorado from 2000 through 2010. From April 2000 to July 2002, net in-migration to the submarket averaged 18,200 people annually, as job growth in the DTC was substantial during the tech boom. Net in-migration declined to 10,150 annually from 2002 through 2006, but rose to 10,950 people annually from 2006 through 2008, partially because of the completion of the FasTracks light-rail line from downtown Denver south through the DTC along the Southeast Corridor that was completed in 2006. Local effects of the national recession slowed population growth, and net in-migration slowed to an average of 6,100 annually from 2008 to 2010. Since 2010, net in-migration has increased, to an average of 10,650 people annually, and has constituted 60 percent of overall population growth.

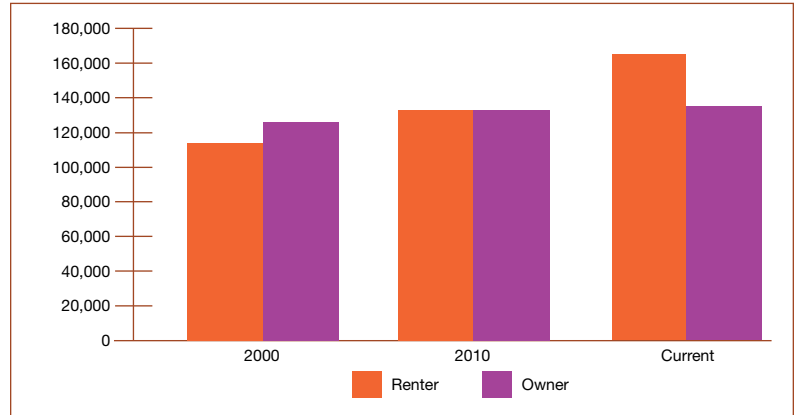
The number of households in the Denver HMA increased by 15,250, or 1.7 percent, a year from 2000 through 2010, to 1.0 million households. Approximately 50 percent of household growth during the period occurred in the Southeast submarket, which

benefited from the completion of the Southeast Corridor light-rail line, and grew by 7,575, or 2.6 percent, annually. By comparison, the Denver County submarket increased by 2,375, or 1.0 percent, annually during the decade as net out-migration in the early 2000s slowed household growth. Household growth in the Northwest submarket averaged 5,275, or 1.4 percent, during the period. Delayed household formation in the HMA because of the effects of the national recession has slowed the increase in the number of households to 1.4 percent, or 14,350, annually since 2010. Household growth in the Northwest and Southeast submarkets has slowed to 4,300 and 4,725, or 1.0 and 1.4 percent, annually, respectively, since 2010. On the other hand, household growth in the Denver County submarket has increased to 5,325, or 1.9 percent, annually, partly because of stronger job growth downtown.

During the next 3 years, the population of the HMA is expected to increase by an average of 51,650, or 1.8 percent, a year. Approximately 60 percent of the growth is anticipated to be from net in-migration, which is expected to average 32,000 people a year. Household growth is expected to average 16,650, or 1.5 percent, annually during the next 3 years. Population and household growth is expected to be greatest in the Northwest and Southeast submarkets, where more land is available for relatively affordable housing developments and new light-rail lines and expansions of existing lines will connect residential areas to job centers. Figures 6, 7, and 8 show the number of households by tenure in each submarket from 2000 to the current date.



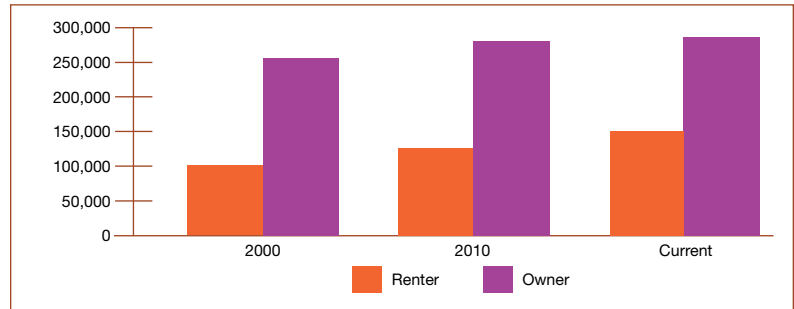
**Figure 6.** Number of Households by Tenure in the Denver County Submarket, 2000 to Current



*Note: The current date is October 1, 2016.*

*Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst*

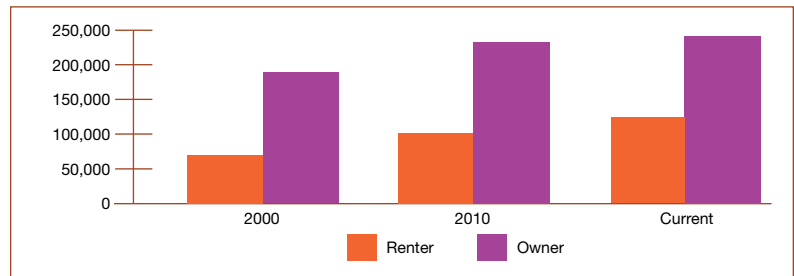
**Figure 7.** Number of Households by Tenure in the Northwest Submarket, 2000 to Current



*Note: The current date is October 1, 2016.*

*Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst*

**Figure 8.** Number of Households by Tenure in the Southeast Submarket, 2000 to Current



*Note: The current date is October 1, 2016.*

*Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst*

# Housing Market Trends

## Sales Market—Denver County Submarket

Sales housing market conditions in the Denver County submarket are tight, with an estimated 1.1-percent vacancy rate, down significantly from 3.6 percent in April 2010 (Table DP-2). During the 12 months ending August 2016 (the best representative data available), 16,575 new and existing single-family homes, townhomes, and condominiums sold, a decrease of 1 percent from a year earlier (CoreLogic, Inc., with adjustments by the analyst). Home sales reached a recent peak in 2005, totaling 18,250 sales, before beginning to decline precipitously in 2006 to a level of 11,200 sales during 2010, an average decline of 1,400 home sales, or 9 percent, annually. Home sales remained stagnant, increasing by only 60 sales during 2011. After 2 years of low home sales levels, however, the number of sales rose by an average of 2,550, or more than 18 percent, annually during 2012 and 2013, largely because of a gain in existing home sales on the heels of strong economic growth and increased access to credit. During the 12 months ending August 2016, home prices averaged \$415,700, up nearly 10 percent from a year earlier. By comparison, while home sales declined 9 percent annually from 2005 through 2010, home prices declined only slightly more than 1 percent annually during the period. Although the price declines were not as dramatic as in the rest of the nation, many households chose to remain in their homes instead of selling at the reduced prices.

Low levels of for-sale inventory hamper total existing home sales in the Denver County submarket. During September 2016, a 1.5-month supply of homes was for sale, equal the 1.5-month supply a year earlier and much less than

the 6.2-month supply during October 2007 (Denver Metro Association of Realtors®). During the 12 months ending August 2016, 15,100 existing homes sold, a 2-percent decrease from a year earlier (CoreLogic, Inc., with adjustments by the analyst). Existing home sales declined by 1,050 homes sold, or 8 percent, annually from 2006 through 2010. As a result of strong economic and population growth and increased access to loans, home sales grew by an average of 1,275, or nearly 13 percent, annually from 2011 through 2014. Existing home sales have nearly returned to the average of 15,200 homes sold annually in 2004 and 2005. The inventory of homes available, however, is not keeping up with the demand for homes. Despite existing home sales prices that rose more than 10 percent annually from 2009 through the 12 months ending August 2016, to \$404,600, existing homeowners are not listing homes for sale. Many existing homeowners are wary of selling their primary residence without an adequate supply of for-sale inventory to purchase (local real estate sources). This reluctance is limiting the number of single-family homes for sale throughout the Denver HMA, including the Denver County submarket.

The increase in home prices in the mid-2000s was not as pronounced in the HMA as in the rest of the nation, because the HMA was still recovering from the previous recession. As a result, the effects of the subsequent housing crisis also were less severe than they were in the nation. Of all home loans in the Denver County submarket, 0.8 percent were seriously delinquent (those 90 or more days delinquent

## Housing Market Trends

*Sales Market—Denver County Submarket Continued*

or in foreclosure) or had transitioned into real estate owned (REO) status as of September 2016, down from 1.1 percent a year ago and less than the peak of 6.2 percent reached during December 2009 (CoreLogic, Inc.). By comparison, the percentage of loans that were seriously delinquent or had transitioned into REO status in the submarket was much lower than the 2.6-percent national rate during September 2016. Strong employment growth and increasing home values during the past 12 months helped reduce seriously delinquent loans and REO properties in the submarket and the HMA.

The condominium market in the Denver County submarket is very tight, with a 0.9-month supply of for-sale inventory during September 2016, down from a 1.1-month supply a year earlier (Denver Metro Association of Realtors®). By comparison, the for-sale condominium inventory comprised a 4.8-month supply nationally in September 2016, essentially unchanged from a year earlier (National Association of Realtors®). Existing condominium sales prices in the submarket averaged \$353,100 during September 2016, up more than 10 percent, from \$320,100, a year earlier. Apartments have comprised over 95 percent of multifamily units built since 2010, spurred by strong demand for rental housing and by developers reportedly avoiding building condominiums because of concerns over potential construction defects litigation, spawned by a state law revised in 2007. Construction of condominiums, as measured by the number of homes permitted, averaged nearly 1,250 units annually in the Denver County submarket from 2000 through 2007 before declining rapidly to an average of 140 units

annually from 2008 through 2014. Demand for condominiums remains strong, however, as the high prices of detached single-family homes in the HMA are increasing demand for relatively affordable condominiums and attached single-family homes. Builders are beginning to respond to the increasing demand. The Coloradan, a 334-unit condominium project, located near Union Station, recently broke ground and is expected to be complete in September 2018. The project will offer 301 market-rate units ranging in price from the high \$200,000s to \$1.3 million. In addition, 33 income-restricted units will meet the City of Denver's affordability requirements, and be priced in the mid-to-high \$200,000s.

Improving economic conditions and net in-migration are encouraging household growth and demand for housing in the Denver County submarket. New home sales increased nearly 15 percent, to 1,475, during the 12 months ending August 2016 from a year ago, and the average new home sales price increased nearly 11 percent, to \$530,000 (CoreLogic, Inc., with adjustments by the analyst). From 2006 through 2008, new home prices increased 11 percent annually, to \$427,300, the highest rate in the Denver HMA. At the same time, however, home sales decreased an average of 24 percent annually, to 1,275 new single-family homes sold in 2008, during a period of moderate population growth and tightening lending requirements for mortgages. During the subsequent 2 years, the average price of a new home plummeted 13 percent annually, to \$317,000, in 2010. New home sales decreased less than 5 percent annually from 2008, to 1,150 homes

sold during 2010. From 2010 through 2014, despite strong population and economic growth, new home sales only rose 2 percent annually, to 1,250 sales, but the average price of a new home increased an average of 10 percent annually, to \$447,400.

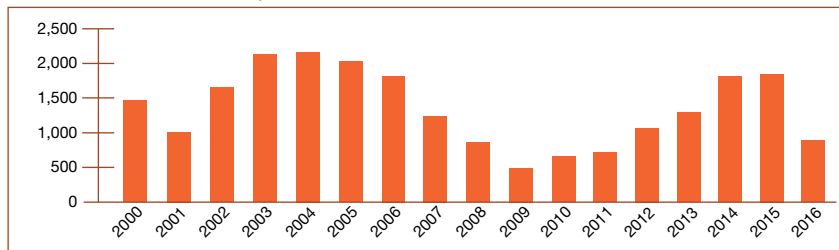
Moderate levels of net in-migration and household growth in the Denver County submarket from 2005 through 2010, coupled with the economic effects of the national recession and reduced availability of credit, discouraged homebuilding activity, as measured by the number of single-family homes permitted. Single-family permitting averaged 2,100 homes annually from 2003 through 2005 before averaging declines of more than 30 percent annually, to a low of 490 homes permitted during 2009 (Figure 9). Homebuilding activity began to recover in 2010,

and new home construction averaged gains of 29 percent annually, to 1,050 homes permitted in 2012. During the 12 months ending September 2016, 1,900 single-family homes were permitted in the submarket, a 14-percent increase from the 1,675 homes permitted during the previous 12 months, in response to improving sales market and economic conditions (preliminary data).

As the central city of the HMA, the Denver County submarket is largely built out, but areas of opportunity for development still exist. The site of the former Stapleton International Airport, which closed on the completion of Denver International Airport in 1995, is undergoing further development. Construction of new homes at the 4,700-acre site began in 2001. More than 6,700 of the 8,000 planned single-family homes have been built to date. Further development is expected at the Central Park Station in the city of Denver's Stapleton neighborhood, along the RTD light-rail line from downtown Denver to Denver International Airport, which will include 1,000 multifamily units. Initial construction began in 2016.

During the next 3 years, demand in the submarket is expected for 8,400 new single-family homes, townhomes, and condominiums (Table 1). The 300 homes currently under construction and a portion of the 5,800 other vacant units that may come back on the market will likely satisfy a portion of the forecast demand. Demand for new homes is anticipated to be strongest for new homes priced between \$325,000 and \$399,999 (Table 4).

**Figure 9.** Single-Family Homes Permitted in the Denver County Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts

**Table 4.** Estimated Demand for New Market-Rate Sales Housing in the Denver County Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
325,000	399,999	4,200	50.0
400,000	499,999	2,525	30.0
500,000	749,999	1,250	15.0
750,000	and higher	420	5.0

Notes: The 300 homes currently under construction and a portion of the estimated 5,800 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is October 1, 2016, to October 1, 2019.

Source: Estimates by analyst

## Rental Market—Denver County Submarket

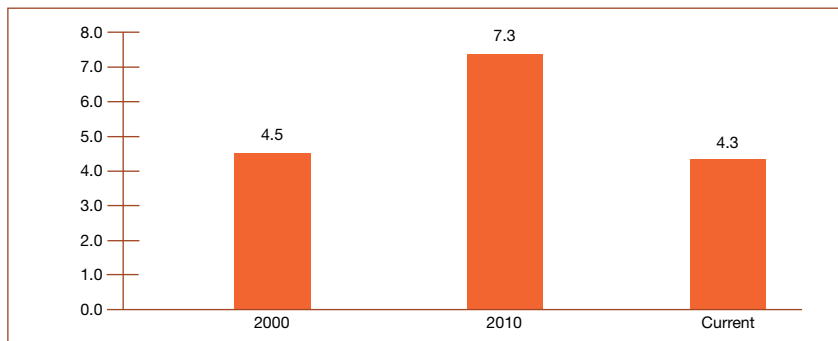
The rental housing market in the Denver County submarket is currently slightly tight, with an overall estimated vacancy rate of 4.3 percent, down from 7.3 percent during April 2010 (Figure 10). Approximately 21 percent of all occupied rental units in the submarket are single-family homes compared with 16 percent in 2000 (2015 American Community Survey [ACS] 1-year estimates; 2000 Decennial Census). The vacancy rate for conventional, stabilized apartments was 5.0 percent during the third quarter of 2016, up from 4.3 percent a year earlier (*Apartment Insights*). By comparison, the vacancy rate for all apartments, including those undergoing initial lease up, was 8.9 percent, down from 9.6 percent a year ago. Strong rental market demand from increased net

in-migration led builders to increase apartment construction in 2015 and 2016. The apartment market in the submarket has become balanced because the increased construction has outpaced absorption. As a result of the balanced market conditions, rent growth is slowing throughout the Denver HMA and the submarket. The average apartment rent for conventional, stabilized units in the submarket was \$1,386 in the third quarter of 2016, a 5-percent increase from a year ago. Average rents for all units grew more slowly, rising by less than 3 percent, to \$1,324. By comparison, the average conventional, stabilized apartment rent increased about 10 percent annually during 2014 and 2015. Monthly rents for conventional, stabilized units averaged \$1,145, \$1,239, \$1,550, and \$1,974 for studio, one-bedroom, two-bedroom, and three-bedroom units in the submarket, respectively.

Builders increased multifamily construction, as measured by the number of multifamily units permitted, to an average of 5,475 units annually from 2012 through 2015 and further increased construction to 6,650 units permitted during the 12 months ending September 2016 (preliminary data).

This activity is more than double the average of 2,500 units permitted annually from 2005 through 2008 and much more than the average of 680 units permitted annually during 2009 and 2010. This dramatic increase is partly in response to average annual net in-migration since 2010 that has been nearly triple the average of 2,550 annually from 2005 to 2010. Figure 11 shows the number of multifamily units permitted in the Denver County submarket from 2000 to the current date.

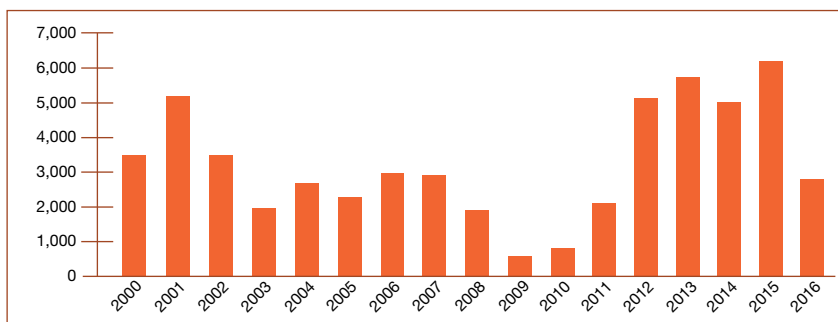
**Figure 10.** Rental Vacancy Rates in the Denver County Submarket, 2000 to Current



Note: The current date is October 1, 2016.

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

**Figure 11.** Multifamily Units Permitted in the Denver County Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts

## Housing Market Trends

Rental Market—Denver County Submarket *Continued*

In conjunction with the redevelopment and transit expansion surrounding Union Station, in downtown Denver, a concentration of new apartment developments emerged. Recent completions and developments under way in the submarket include Alexan Uptown Apartments, a 372-unit project located in the Denver Central Business District. The project is pre-leasing units, and rents for the studio, one-bedroom, and two-bedroom units start at \$1,550, \$1,675, and \$2,250, respectively. Nearby, the 321-unit Crossing at Denargo Market is expected to be complete in the winter of 2016. Rents for the one- and two-bedroom units start at \$1,490 and \$2,000 a month, respectively. The 224-unit 1000 Speer by Windsor recently completed construction, and has been leasing approximately 15 units monthly. Average rents for studio, one-bedroom,

two-bedroom, and three-bedroom units start at \$1,360, \$1,600, \$2,600, and \$5,400 monthly, respectively.

During the next 3 years, demand is estimated for 9,675 new market-rate rental units in the submarket (Table 1). The estimated 3,500 units currently under construction will meet a portion of the expected demand. In addition, projects in planning with construction scheduled or with final plan approval are expected to add another 2,200 units during the next 3 years. Any additional construction in the submarket, including many projects in various stages of planning, should be timed to enter the submarket during the third year of the forecast period. Table 5 shows the forecast demand for new market-rate rental housing in the submarket by rent level and number of bedrooms.

**Table 5.** Estimated Demand for New Market-Rate Rental Housing in the Denver County Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
1,350 to 1,549	440	1,490 to 1,689	3,725	2,000 to 2,199	2,400	2,900 to 3,099	95
1,550 to 1,749	340	1,690 to 1,889	1,325	2,200 to 2,399	480	3,100 or more	95
1,750 or more	190	1,890 or more	270	2,400 or more	320		
<b>Total</b>	<b>970</b>	<b>Total</b>	<b>5,325</b>	<b>Total</b>	<b>3,200</b>	<b>Total</b>	<b>190</b>

*Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 3,500 units currently under construction will likely satisfy some of the estimated demand. The forecast period is October 1, 2016, to October 1, 2019.*

*Source: Estimates by analyst*

## Sales Market—Northwest Submarket

Sales housing market conditions in the Northwest submarket are tight, with an estimated 1.0-percent vacancy rate, a decrease from 1.9 percent in April 2010 (Table DP-3). During the 12 months ending August 2016, 27,400 new and existing single-family homes, townhomes, and condominiums sold, unchanged from the previous 12 months (CoreLogic, Inc., with adjustments by the analyst). Home sales fell sharply

to 16,800 sales during 2010, from a recent peak of 31,200 homes sold during 2004, an average decline of 2,400 home sales, or 10 percent, annually. Home sales remained sluggish during 2011, increasing by only 20 sales. After 2 years of low home sales levels, however, the number of sales increased by an average of 3,025, or 18 percent, annually from 2012 through 2014, largely driven by a rise in existing

home sales. Existing home sales accounted for 90 percent of total home sales compared with an average of 78 percent of total home sales from 2002 through 2005. During the 12 months ending August 2016, home prices averaged \$346,400, up more than 11 percent from a year earlier. By comparison, home sales declines averaged 10 percent annually from 2004 through 2010, while home prices declined only slightly more than 1 percent annually. Although home prices did not decrease much, uncertain economic conditions and limited access to lending resulted in the sales level decreases described above.

Low levels of for-sale inventory in the submarket are putting upward pressure on home prices. During September 2016, a 1.3-month supply of single-family homes was for sale, down slightly from a 1.4-month supply a year earlier (Denver Metro Association of Realtors®). Despite existing home sales prices that rose more than 8 percent annually from 2009 through the 12 months ending September 2016, to \$329,500, existing homeowners are not listing homes for sale. During the 12 months ending September 2016, 24,200 existing homes sold, down approximately 1 percent from a year earlier (CoreLogic, Inc., with adjustments by the analyst). Potential sellers remain concerned about the limited availability of replacement housing, keeping the overall supply of for-sale homes low.

As in the Denver County submarket, the increase in home prices before the housing crisis was not as pronounced in the Northwest submarket as in the rest of the nation, because the Denver HMA was still recovering from the previous recession. As a result, the effects of the housing crisis were also less severe than in the nation. As of

September 2016, 0.8 percent of home loans in the Northwest submarket were seriously delinquent or had transitioned into REO status, down from 1.2 percent a year ago and less than the peak of 6.0 percent during January 2010 (CoreLogic, Inc.). By comparison, the percentage of loans that were seriously delinquent or had transitioned into REO status in the submarket was far lower than the 2.6-percent national rate during September 2016. Strong employment growth and increasing home values during the past 12 months helped reduce seriously delinquent loans and REO properties in the Northwest submarket and the HMA.

The condominium market in the Northwest submarket is very tight, with a 0.6-month supply of for-sale inventory during September 2016 (Denver Metro Association of Realtors®). Developers reportedly limited condominium construction because of potential construction defects litigation concerns. Construction of condominiums, as measured by the number of homes permitted, averaged 820 units annually from 2000 through 2007 in the submarket before declining rapidly to an average of 40 units annually from 2008 through 2014. During September 2016, 280 condominiums were available for sale in the submarket, up slightly from 250 a year earlier. Because of strong demand for entry-level homes and high levels of net in-migration, nearly 450 condominiums sold in the submarket during September 2016, more than the number of new active listings, putting upward pressure on prices. Existing condominium sales prices in the Northwest submarket averaged \$243,000 during September 2016, up 17 percent from \$207,700

a year earlier (Denver Metro Association of Realtors®). The relatively affordable condominiums for sale in the submarket, compared with single-family home prices, are attractive to first-time homebuyers in the HMA. Builders increased the construction of multifamily rental housing, in part, to meet the demand for households that cannot purchase homes because of low levels of entry-level home supply.

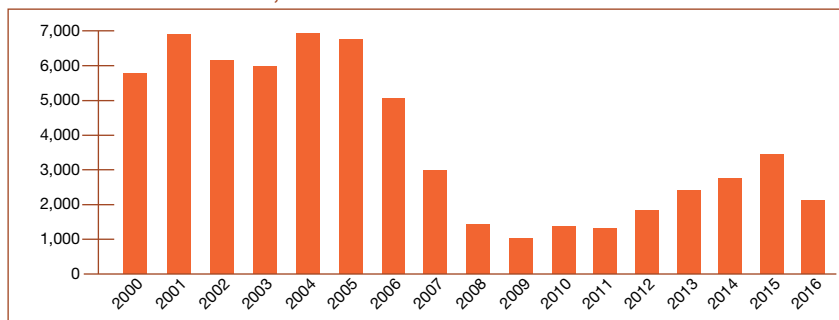
Improving economic conditions and household growth have led to increased new home sales in the Northwest submarket. New home sales rose nearly 14 percent, to 3,200, during the 12 months ending August 2016 from a year ago (CoreLogic, Inc., with adjustments by the analyst). During the period, new home sales prices rose nearly 9 percent, to average \$475,200, as household formation in the submarket increased demand for new housing. From 2005 through 2008, the average price of a new home increased more than 4 percent annually, to \$334,800, but home sales plummeted 30 percent annually, from 6,750 sales in 2005 to 2,300 sales in 2008. Whereas the other submarkets in the HMA had sharp declines in new home prices from 2008 through 2011, the average price of a new home in the Northwest submarket decreased less than 1 percent annually, to \$328,100, in 2011.

From 2012 through 2014, the average price increased nearly 12 percent annually, to \$412,500, surpassing the previous peak during 2007 by nearly 25 percent. Sales began to rebound in 2011, increasing an average of nearly 23 percent annually to approximately 2,375 in 2014, but remain much less than the sales average of 5,450 annually from 2005 through 2007.

Demand for new homes decreased from the peak during 2005 to a low during 2010, and builders responded by decreasing homebuilding activity, as measured by the number of single-family homes permitted. Single-family permitting averaged 6,600 homes annually from 2003 through 2005 before declining an average of nearly 37 percent annually to a low of 1,050 homes permitted during 2009 (Figure 12). Single-family permitting has since recovered. During the 12 months ending September 2016, 3,900 single-family homes were permitted in the submarket, up more than 16 percent from the 3,350 homes permitted during the previous 12 months, in response to improving sales market and economic conditions (preliminary data).

Current single-family developments under way in the Northwest submarket include Table Rock Ridge in Golden. Construction began in 2014, and new homes are offered beginning at \$535,000. Anthem Ranch, a community for households ages 55 and older, and Anthem Highlands are both part of Anthem Colorado, a 735-acre master-planned community in Broomfield. Anthem Highlands and Anthem Ranch offer two- to five-bedroom homes with prices beginning at \$420,000.

**Figure 12.** Single-Family Homes Permitted in the Northwest Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts



## Housing Market Trends

Sales Market—Northwest Submarket Continued

During the next 3 years, demand is expected for 13,950 new single-family homes, townhomes, and condominiums (Table 1). The 600 homes currently under construction and a portion of the 14,000 other vacant units that may re-enter the market will likely meet a portion of the demand. The number of other vacant units is much larger in

the Northwest submarket than in the other two submarkets because of its location near the mountains, resulting in a higher volume of vacation and second homes. Demand is anticipated to be strongest for new homes priced between \$210,000 and \$399,999 (Table 6).

**Table 6.** Estimated Demand for New Market-Rate Sales Housing in the Northwest Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
210,000	399,999	9,075	65.0
400,000	499,999	2,800	20.0
500,000	749,999	1,825	13.0
750,000	and higher	280	2.0

Notes: The 600 homes currently under construction and a portion of the estimated 14,000 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is October 1, 2016, to October 1, 2019.

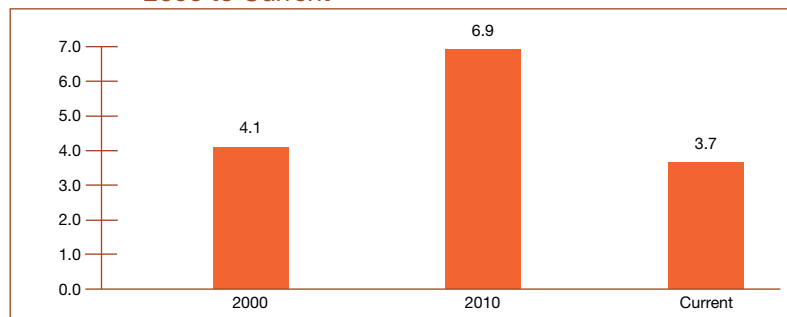
Source: Estimates by analyst

## Rental Market—Northwest Submarket

The rental housing market in the Northwest submarket is slightly tight, with an overall estimated vacancy rate of 3.7 percent, down from 6.9 percent during April 2010 (Figure 13). More than 40 percent of all occupied rental units in the submarket are single-family homes and structures of 1 to 4 units, offering alternatives to apartments (2015 ACS 1-year estimates). Apartment market conditions followed a similar trend to the Denver County

submarket. Strong population and household growth, and limited for-sale housing inventory, led to increased rental market demand in the Northwest submarket. During 2015 and 2016, builders increased apartment construction in response to the increased demand. Consequently, apartment market conditions have become balanced because the recent surge of construction has outpaced absorption. The vacancy rate for conventional, stabilized apartments was 4.6 percent during the third quarter of 2016, up from 4.0 percent a year earlier (*Apartment Insights*). By comparison, the vacancy rate for all apartments, including those undergoing initial lease up, was 6.3 percent, up slightly from 6.2 percent a year ago. Following similar trends as the Denver HMA and the Denver County submarket, the balanced market conditions are leading to slower rent growth in the Northwest submarket. The average apartment rent in the

**Figure 13.** Rental Vacancy Rates in the Northwest Submarket, 2000 to Current



Note: The current date is October 1, 2016.

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

submarket for conventional, stabilized apartments was \$1,297 in the third quarter of 2016, up 3 percent from a year ago. By comparison, the average conventional, stabilized apartment rent increased an average of nearly 12 percent annually from 2013 through 2015. Monthly rents averaged \$912, \$1,123, \$1,375, and \$1,747 for studio, one-bedroom, two-bedroom, and three-bedroom units, respectively.

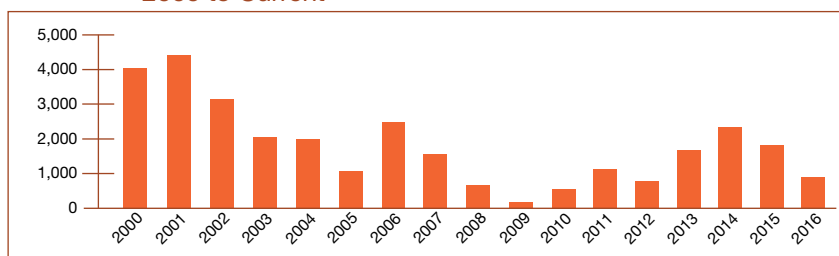
Multifamily construction increased during the past year. During the 12 months ending September 2016, 1,250 multifamily units were permitted, up from 730 units permitted a year earlier (preliminary data). Builders increased multifamily construction, as measured by the number of units permitted, in recent years to an average of 2,025 units annually during 2013 and 2014, more than double the average of 680 units annually from 2008 through 2012 (Figure 14). This dramatic increase is in response to average annual net in-migration of 10,750 people since 2010 that has nearly doubled the average of 5,575 annually from 2000 through 2010. Increased net in-migration and multifamily construction are partly in response to the construction of two light-rail lines from the city of Denver through the western suburbs. The 12.1-mile West Line, completed in 2013, connects the city of Denver to

the Federal Center and terminates at the Jefferson County Government Center in Golden. The 11.2-mile Gold Line commuter light rail from the city of Denver's Union Station west to Wheat Ridge began construction in late 2011 and is expected to open to the public in late 2016. Transit-oriented developments within 1/4 mile of transit stations, primarily marketed to low-income or senior households, are in various stages of planning along both light-rail lines.

Current developments under way in the Northwest submarket include the 360-unit 8000 Uptown Apartments in Broomfield. The project is nearing completion, and rents for one-, two-, and three-bedroom units begin at \$1,300, \$1,600 and \$2,000, respectively. The Ridge at Broomfield, a 292-unit project, began construction in late 2015, with expected rents of \$1,200, \$1,450, \$1,700, and \$2,000 for studio, one-, two-, and three-bedroom units, respectively.

During the next 3 years, demand is estimated for 5,550 new market-rate rental units in the submarket (Table 1). The estimated 1,200 units currently under construction will meet a portion of the expected demand. Projects in planning with construction scheduled are expected to add another 800 units during the next 3 years. Any additional construction in the submarket, including many projects in various stages of planning, should be timed to enter the submarket during the second and third years of the forecast period. Table 7 shows the forecast demand for new market-rate rental housing in the Northwest submarket by rent level and number of bedrooms.

**Figure 14.** Multifamily Units Permitted in the Northwest Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts

## Housing Market Trends

Rental Market—Northwest Submarket Continued

**Table 7.** Estimated Demand for New Market-Rate Rental Housing in the Northwest Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
1,200 or more	110	1,250 to 1,449	2,400	1,625 to 1,824	1,625	1,900 to 2,099	310
		1,450 to 1,649	280	1,825 to 2,024	320	2,100 to 2,299	90
		1,650 or more	140	2,025 or more	220	2,300 or more	45
<b>Total</b>	<b>110</b>	<b>Total</b>	<b>2,825</b>	<b>Total</b>	<b>2,150</b>	<b>Total</b>	<b>440</b>

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 1,200 units currently under construction will likely satisfy some of the estimated demand. The forecast period is October 1, 2016, to October 1, 2019.

Source: Estimates by analyst

## Sales Market—Southeast Submarket

Sales housing market conditions in the Southeast submarket are tight, with an estimated 1.1-percent vacancy rate, down from 2.1 percent in April 2010 (Table DP-4). During the 12 months ending August 2016, 25,450 new and existing single-family homes, townhomes, and condominiums sold, down less than 1 percent from the 25,600 homes sold a year earlier (CoreLogic, Inc., with adjustments by the analyst). Following a recent peak of 30,300 home sales in 2005, total home sales declined to 15,800 sales during 2010, an average decline of 2,900 home sales, or more than 12 percent, annually. Home sales rose slightly, averaging about 3 percent annually, during 2011. After 2 years of moderately increasing home sales, however, the number of sales increased by 2,300, or more than 11 percent, annually from 2012 through 2014, largely because of growth in existing home sales. Existing home sales accounted for 89 percent of total home sales from 2012 through 2014, up from an average of 72 percent annually from 2000 through 2006. During the 12 months ending August 2016, home prices averaged \$386,500, up 8 percent from a year earlier. By comparison, from 2005 through 2010,

home prices declined only 2 percent annually although home sales declined 10 percent annually.

During September 2016, a 2.0-month supply of single-family homes was for sale in the Southeast submarket, down slightly from a 2.2-month supply a year earlier (Denver Metro Association of Realtors®). Despite existing home sales prices that rose nearly 7 percent annually from 2009 through the 12 months ending August 2016, to \$370,700, many existing homeowners are not selling homes because the low inventory means replacement homes are scarce (CoreLogic, Inc., with adjustments by the analyst). This scarcity is limiting the availability of homes in the Denver HMA. Approximately 22,050 existing homes sold in the submarket during the 12 months ending August 2016, down approximately 2 percent from the number of homes sold during the previous 12 months. By comparison, existing home sales increased 13 percent annually, from 14,150 in 2010 to 21,700 in 2014, and existing home sales have reached the average of 22,000 homes sold annually in 2004 and 2005.

As of September 2016, 0.9 percent of home loans in the Southeast

submarket were seriously delinquent or had transitioned into REO status, down from 1.2 percent a year earlier and less than the peak of 5.7 percent during January 2010 (CoreLogic, Inc.). By comparison, the rate of seriously delinquent loans and REO properties in the submarket was far lower than the than the 2.6-percent national rate during September 2016. The strengthening job market and rising home prices during the past 12 months helped reduce seriously delinquent loans and REO properties in the HMA at a higher rate than in the nation.

The Southeast submarket condominium market mirrors the markets in the Denver County and Northwest submarkets, with a 0.8-month supply of for-sale inventory during September 2016 (Denver Metro Association of Realtors®). Builders constructed an average of 1,650 condominiums in the Southeast submarket from 2000 through 2007 in response to the completion of the mass transit FasTracks Southeast corridor. During this period, population growth in the HMA was strongest in the Southeast submarket, in response to the new transit options and employment opportunities around DTC. From 2008 through 2014, the number of condominiums constructed declined to an average of 80 units annually, partly because of reported concerns about potential construction defects litigation. Existing condominium sales prices in the submarket averaged \$247,900 during September 2016, up nearly 17 percent from \$212,500 a year ago (Denver Metro Association of Realtors®). The relatively affordable condominiums for sale in the submarket are attractive to first-time homebuyers in the HMA, but the lack of new inventory is keeping upward pressure on prices.

Strong demand from improving economic conditions and net in-migration are encouraging household growth and increasing new home sales in the Southeast submarket. New home sales increased 10 percent, to 3,400 sales, during the 12 months ending August 2016 compared with 3,100 sales a year ago. During the period, new home sales prices rose more than 2 percent, to an average of \$488,100 (CoreLogic, Inc., with adjustments by the analyst). Reflecting economic conditions, home sales in the submarket decreased an average of 28 percent annually from 2005 to average about 1,600 new homes sold during 2010. As economic conditions improved beginning in 2011, new home sales increased an average of 20 percent annually, to 2,850 in 2014. From 2005 through 2007, the average price of a new single-family home rose more than 10 percent, to \$418,800. From 2007 through 2011, prices decreased an average of 4 percent annually, to \$325,600, in part because builders responded to changes in population growth and access to credit by decreasing the average square footage of a new home nearly 4 percent annually, to 2,770 square feet. From 2012 through 2014, the average sales price of a new home increased 9 percent annually, to \$441,700 and average home square footage also increased by approximately 1 percent annually, to 2,800 (Metrostudy, A Hanley Wood Company).

Net in-migration in the Southeast submarket declined from an average of 12,600 people annually from 2000 to 2005 to an average of 8,800 people annually from 2007 to 2009, as economic growth slowed. As a result of the slower population and economic growth, builders decreased the level of homebuilding activity, as

## Housing Market Trends

Sales Market—Southeast Submarket Continued

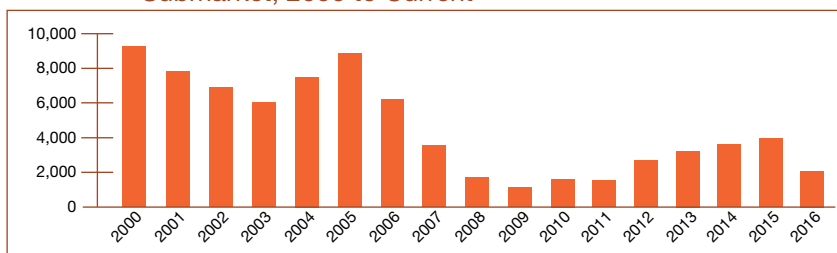
measured by the number of homes permitted. Single-family permitting averaged 8,225 homes annually during 2004 and 2005 before declining 40 percent annually to a low of 1,175 homes permitted during 2009 (Figure 15). Single-family permitting has since recovered but remains less than one-half of the previous peak during 2004 and 2005. During the 12 months ending September 2016, 4,050 single-family homes were permitted in the submarket, up from 3,825 homes permitted a year earlier, in response to improving sales market and economic conditions (preliminary data).

Since 2010, nearly 60 percent of single-family home development in the Southeast submarket has

occurred in Douglas County. In 2016, *Money* magazine ranked the town of Highlands Ranch in Douglas County as the sixth best place to live in the nation. Current single-family developments under way in the Southeast submarket include Littleton Village, a mixed-use development to the northwest of Highlands Ranch. The 77-acre site is expected to include up to 230 single-family homes and 300 multifamily units. Construction began in 2015, and builders are offering townhomes beginning at \$331,000, and single-family homes starting at \$410,000. In addition, the Sterling Ranch community in unincorporated Douglas County is expected to break ground in October 2016. Providence Village will be the first of nine “villages” built within the Sterling Ranch master planned community. Seven builders will offer new townhomes beginning at \$380,000 and single-family homes starting at \$500,000.

During the next 3 years, demand is expected for 12,500 new single-family homes, townhomes, and condominiums (Table 1). This demand is a response to stronger net in-migration supporting household growth in the submarket during the forecast period. The 550 homes currently under construction and a portion of the estimated 5,900 other vacant units that may return to the market will meet a portion of the demand. Demand is anticipated to be strongest for new homes priced between \$260,000 and \$399,999 (Table 8).

**Figure 15.** Single-Family Homes Permitted in the Southeast Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts

**Table 8.** Estimated Demand for New Market-Rate Sales Housing in the Southeast Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
260,000	399,999	7,250	58.0
400,000	499,999	2,750	22.0
500,000	749,999	1,500	12.0
750,000	and higher	1,000	8.0

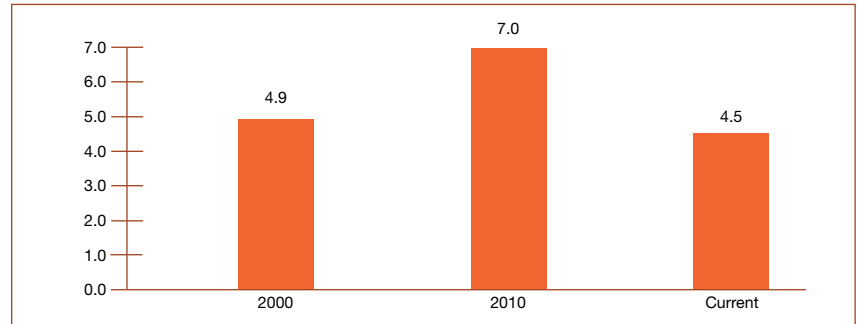
Notes: The 550 homes currently under construction and a portion of the estimated 5,900 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is October 1, 2016, to October 1, 2019.

Source: Estimates by analyst

## Rental Market—Southeast Submarket

The rental housing market in the Southeast submarket is currently balanced, with an overall estimated vacancy rate of 4.5 percent, down

from 7.0 percent during April 2010 (Figure 16). Strong net in-migration and low inventories of reasonably priced for-sale housing contributed to

**Figure 16.** Rental Vacancy Rates in the Southeast Submarket, 2000 to Current

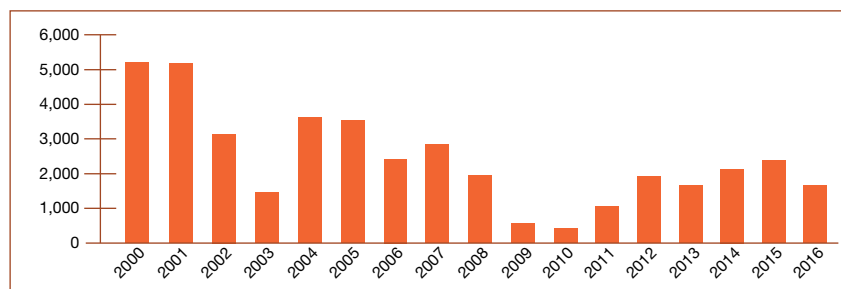
Note: The current date is October 1, 2016.

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

rising rental demand and increased apartment construction since 2011. The apartment market in the submarket is balanced because new construction has outpaced absorption. The vacancy rate for conventional, stabilized apartments was 5.3 percent during the third quarter of 2016, up from 4.3 percent a year earlier (*Apartment Insights*). By comparison, the vacancy rate for all apartments, including those undergoing initial lease up, was 7.1 percent, down from 7.7 percent a year ago. Following similar trends as the other submarkets, the Southeast submarket is experiencing slower rent growth because of balanced market conditions. The average apartment rent in the submarket for conventional, stabilized apartments was \$1,305 in the third quarter of 2016, up 3 percent from a year ago. By comparison, the average conventional, stabilized apart-

ment rent increased about 11 percent annually from 2013 through 2015. Monthly rents during the third quarter of 2016 averaged \$932, \$1,126, \$1,400, and \$1,858 for studio, one-bedroom, two-bedroom, and three-bedroom units, respectively.

Builders increased multifamily construction, as measured by the number of multifamily units permitted, to an average of 1,925 units annually from 2012 through 2014, more than double the average of 690 units annually from 2009 through 2011 (Figure 17). This dramatic growth was partly in response to improving economic conditions, tight mortgage lending standards, and an increased preference toward rental housing. In addition, with limited availability of entry-level home inventory for first-time homebuyers, many would-be owner households are remaining in rental units. Builders responded to the increased demand for multifamily rental units from such households and stronger net in-migration by increasing multifamily construction. Permitting increased during the past year because builders have been encouraged by low vacancy rates and strong rent growth, although the trends have weakened in the past two quarters. During the 12

**Figure 17.** Multifamily Units Permitted in the Southeast Submarket, 2000 to Current

Notes: Excludes townhomes. Current includes data through September 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analysts

months ending September 2016, 2,450 multifamily units were permitted, an increase from 1,900 units permitted a year earlier (preliminary data).

The construction of RTD FasTracks transit corridors, linking the submarket to downtown Denver, has encouraged strong net in-migration and household growth in the Southeast submarket.

The 19-mile Southeast Corridor Light Rail line runs south from downtown Denver to Lincoln Avenue. Construction began on the Southeast Corridor in 2004 and was completed in 2006. After the light-rail line was complete, an average of 2,425 apartments were built annually in the submarket from 2006 through 2008, and net in-migration averaged 10,950 people annually.

Recent developments under way in the Southeast submarket include the 385-unit HiLine at Littleton Commons in Littleton. The project began construction in the summer of 2014 and is expected to be complete in late 2016. Asking rents are expected to be

\$1,250, \$1,550, and \$2,150 for one-, two-, and three-bedroom units. Construction of the Elevation at County Line Station Apartments began in April 2014 and was completed in early 2016. Rents at the 265-unit property range from \$1,175 for one-bedroom units to \$2,350 for three-bedroom units.

During the next 3 years, demand is estimated for 5,675 new market-rate rental units in the submarket (Table 1). The estimated 1,800 units currently under construction will meet a portion of the expected demand. Projects in planning and with construction scheduled are expected to add another 1,325 units during the next 3 years. Any additional construction in the submarket, including many projects in various stages of planning, should be timed to enter the submarket during the third year of the forecast period. Table 9 shows the forecast demand for new market-rate rental housing in the Southeast submarket by rent level and number of bedrooms.

**Table 9.** Estimated Demand for New Market-Rate Rental Housing in the Southeast Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
1,100 or more	170	1,175 to 1,374	2,400	1,550 to 1,749	1,650	2,150 to 2,349	140
		1,375 or more	270	1,750 to 1,949	510	2,350 or more	140
				1,950 or more	380		
<b>Total</b>	<b>170</b>	<b>Total</b>	<b>2,650</b>	<b>Total</b>	<b>2,550</b>	<b>Total</b>	<b>280</b>

*Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 1,800 units currently under construction will likely satisfy some of the estimated demand. The forecast period is October 1, 2016, to October 1, 2019. Source: Estimates by analyst*

# Data Profiles

**Table DP-1. Denver HMA\* Data Profile, 2000 to Current**

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total resident employment	1,208,565	1,299,725	1,470,000	0.7	2.2
Unemployment rate	2.6%	8.7%	3.3%		
Nonfarm payroll jobs	1,211,200	1,193,600	1,416,000	-0.1	3.0
Total population	2,157,756	2,543,482	2,864,000	1.7	1.8
Total households	852,153	1,004,696	1,098,100	1.7	1.4
Owner households	570,232	646,530	660,800	1.3	0.3
Percent owner	66.9%	64.4%	60.2%		
Renter households	281,921	358,166	437,300	2.4	3.1
Percent renter	33.1%	35.6%	39.8%		
Total housing units	891,007	1,078,837	1,150,000	1.9	1.0
Owner vacancy rate	1.1%	2.3%	1.0%		
Rental vacancy rate	4.4%	7.1%	4.1%		
Median Family Income	\$58,600	\$76,000	\$85,344	2.6	2.0

\* Denver-Aurora-Lakewood HMA.

Notes: Numbers may not add to totals because of rounding. Employment data represent annual averages for 2000, 2010, and the 12 months through September 2016. Median Family Incomes are for 1999, 2009, and 2015. The current date is October 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

**Table DP-2. Denver County Submarket Data Profile, 2000 to Current**

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	554,636	600,158	694,100	0.8	2.3
Total households	239,235	263,107	297,800	1.0	1.9
Owner households	125,539	131,529	134,100	0.5	0.3
Percent owner (%)	52.5%	50.0%	45.0%		
Renter households	113,696	131,578	163,700	1.5	3.4
Percent renter (%)	47.5%	50.0%	55.0%		
Total housing units	251,435	285,797	312,400	1.3	1.4
Sales vacancy rate (%)	1.7%	3.6%	1.1%		
Rental vacancy rate (%)	4.5%	7.3%	4.3%		
Median Family Income	\$48,195	\$58,593	\$72,455	2.0	3.6

Notes: Median Family Incomes are for 1999, 2009, and 2015. The current date is October 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

**Table DP-3. Northwest Submarket Data Profile, 2000 to Current**

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	919,515	1,062,770	1,176,000	1.5	1.6
Total households	354,315	407,180	435,100	1.4	1.0
Owner households	255,274	281,869	285,800	1.0	0.2
Percent owner (%)	72.0%	69.2%	65.7%		
Renter households	99,041	125,311	149,300	2.4	2.7
Percent renter (%)	28.0%	30.8%	34.3%		
Total housing units	372,291	438,941	457,500	1.7	0.6
Sales vacancy rate (%)	0.8%	1.9%	1.0%		
Rental vacancy rate (%)	4.1%	6.9%	3.7%		

Note: The current date is October 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst



**Table DP-4. Southeast Submarket Data Profile, 2000 to Current**

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	683,605	880,554	993,500	2.6	1.9
Total households	258,603	334,409	365,100	2.6	1.4
Owner households	189,419	233,132	240,800	2.1	0.5
Percent owner (%)	73.2%	69.7%	66.0%		
Renter households	69,184	101,277	124,300	3.9	3.2
Percent renter (%)	26.8%	30.3%	34.0%		
Total housing units	267,281	354,099	379,600	2.9	1.1
Sales vacancy rate (%)	1.0%	2.1%	1.1%		
Rental vacancy rate (%)	4.9%	7.0%	4.5%		

*Note: The current date is October 1, 2016.*

*Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst*

## Data Definitions and Sources

2000: 4/1/2000—U.S. Decennial Census  
 2010: 4/1/2010—U.S. Decennial Census  
 Current date: 10/1/2016—Analyst’s estimates  
 Forecast period: 10/1/2016–10/1/2019—  
 Analyst’s estimates

The metropolitan statistical area definition in this report is based on the delineations established by the Office of Management and Budget (OMB) in the OMB Bulletin dated February 28, 2013.

**Demand:** The demand estimates in the analysis are not a forecast of building activity. They are the estimates of the total housing production needed to achieve a balanced market at the end of the 3-year forecast period given conditions on the as-of date of the analysis, growth, losses, and excess vacancies. The estimates do not account for units currently under construction or units in the development pipeline.

**Other Vacant Units:** In the U.S. Department of Housing and Urban Development’s (HUD’s) analysis, 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 Census Bureau.

**Building Permits:** Building permits do not necessarily reflect all residential building activity that occurs in an 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.

For additional data pertaining to the housing market for this HMA, go to [huduser.gov/publications/pdf/CMARtables\\_Denver\\_Aurora\\_LakewoodCO\\_17.pdf](http://huduser.gov/publications/pdf/CMARtables_Denver_Aurora_LakewoodCO_17.pdf).

## Contact Information

Sam Young, Senior Economist  
 Chicago HUD Regional Office  
 312-913-8541  
[samuel.d.young@hud.gov](mailto:samuel.d.young@hud.gov)

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.

The factual framework for this analysis follows the guidelines and methods developed by HUD’s Economic and Market Analysis Division. 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.

For additional reports on other market areas, please go to [huduser.gov/portal/ushmc/chma\\_archive.html](http://huduser.gov/portal/ushmc/chma_archive.html).