

Economic Conditions

The Riverside-San Bernardino HMA economy is supported by a prominent government sector, with foundations in military defense, and industries related to transportation and warehousing, trade, education, and health. The military presence in the HMA began with the establishment of the Alessandro Flying Training Field in 1918, known today as the March Air Reserve Base (hereafter, March ARB). The base was one of the few air training camps in the nation during World War I and remains one of the oldest airfields and largest reserve bases operated by the U.S. military. The HMA was selected partly because of the large amount of available land, 29 percent of which

the government currently manages as preserves or for military training and testing, and proximity to the Pacific coast. The March ARB is one of the largest employers in the HMA, with 1,275 civilian employees and 7,725 military reservists (Table 2) and had an annual economic impact of \$579 million on the HMA as of 2015 (Riverside County Economic Development Agency). The U.S. Marine Corps Air Ground Combat Center (MCAGCC) and Fort Irwin are also among the largest employers, with a combined 17,950 civilian and 12,150 military employees. Growth in the military has been moderated by budget restrictions since 2013, however. Despite the moderation, the government sector remains the largest sector in the HMA (Figure 1), mostly because of expansions in the local government subsector in response to greater industrial, commercial, and population growth in the HMA.

The amount of available land in the HMA has supported growth in the logistics industry, which has become increasingly prominent in the HMA following the Great Recession and a rise in e-commerce. The logistics industry, which is in the wholesale and retail trade sector, includes Amazon.com, Inc., and the United Parcel Service, Inc. (UPS). The lower cost of storage in the HMA is a significant advantage relative to adjacent Los Angeles County. Approximately 40 percent of the trade volume at the ports of Los Angeles and Long Beach go through the HMA, which is home to more than 510 million square feet of industrial space and 145 distribution centers, the largest concentrations on the west coast. The logistics industry had an economic impact of \$6.5 billion on the HMA in 2015, up

Table 2. Major Employers in the Riverside-San Bernardino HMA*

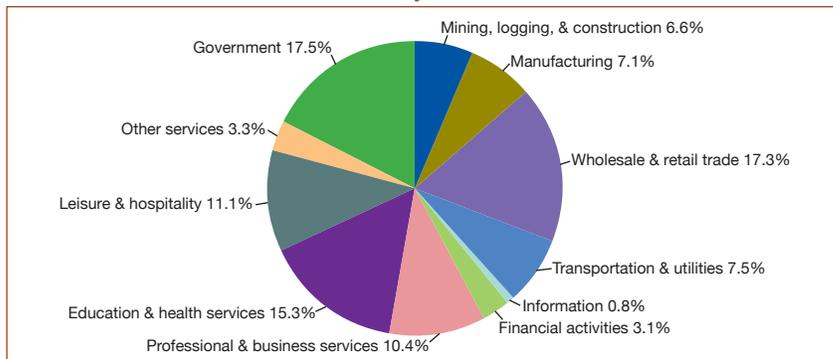
| Name of Employer | Nonfarm Payroll Sector | Number of Employees |
|--|----------------------------|---------------------|
| County of Riverside | Government | 22,000 |
| Arrowhead Regional Medical Center | Government | 18,000 |
| Stater Bros. Markets | Wholesale & retail trade | 18,000 |
| County of San Bernardino | Government | 17,350 |
| U.S. Marine Corps Air Ground Combat Center | Government | 16,300 |
| Fort Irwin | Government | 13,800 |
| Wal-Mart Stores, Inc. | Wholesale & retail trade | 12,300 |
| March Air Reserve Base | Government | 9,000 |
| United Parcel Service, Inc. | Transportation & utilities | 8,600 |
| University of California, Riverside | Government | 8,300 |

* Riverside-San Bernardino-Ontario HMA.

Notes: Excludes local school districts. Data include military personnel, who are generally not included in nonfarm payroll survey data.

Sources: Riverside County Economic Development Agency; San Bernardino County Economic Development Agency

Figure 1. Current Nonfarm Payroll Jobs in the Riverside-San Bernardino HMA,* by Sector



* Riverside-San Bernardino-Ontario HMA.

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

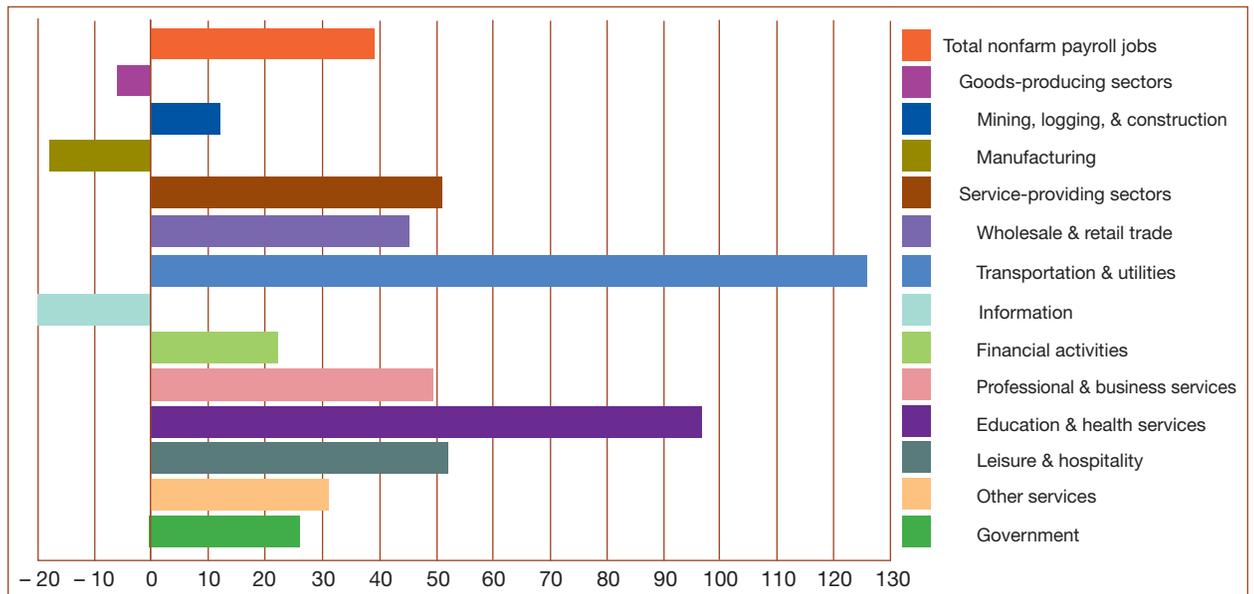
Source: U.S. Bureau of Labor Statistics

from the previous peak of \$4.2 billion in 2007 (Los Angeles Economic Development Corporation).

Since 2000, the HMA economy has expanded by an average of 24,400 jobs, or 2.1 percent, a year because of two periods of strong economic growth—one during the early-to-mid 2000s and another since 2010—that offset a contraction during the Great Recession. The first period of economic expansion occurred during 2001 through 2007, when payrolls were up by an average of 42,100 jobs, or 3.8 percent, a year. A significant influx of people moving to the HMA in response to relatively lower-priced housing compared with neighboring counties supported growth in many service-related industries and residential and commercial construction. More than 60 percent of the gain occurred in the construction subsector and in the wholesale and retail trade, the professional and business services, and the leisure and hospitality sectors. Job growth from 2001 through 2007 in the HMA exceeded the rate of job growth in both the southern California region, comprising the 10 most southern counties in the state, and the nation, which expanded by respective averages of 1.3 and 0.7 percent, a year. By the end of 2007, the Great Recession had begun, and from 2008 through 2010 payrolls in the HMA declined by an average of 46,400 jobs, or 3.7 percent, a year, in response to the housing and financial market contraction. The rate of job loss in the HMA was greater than rates in the southern California region and the nation, which were down by an average of 2.9 and 1.9 percent, respectively, a year. Nearly 40 percent of the losses occurred in the construction subsector, partly because of

reduced housing development. The employment services industry, which is a part of the professional and business services sector, and the retail trade subsector accounted for another 20 percent of the overall loss in jobs. Following the economic contraction, nonfarm payroll growth in the HMA averaged 39,300 jobs, or 3.2 percent, annually from 2011 through 2015. The HMA economy expanded, again at a faster pace than both the southern California region and the nation, which were up by an average of 2.1 and 1.7 percent a year, respectively. The pace of growth in the HMA led to the economy more than fully recovering the number of the jobs lost by the end of 2015. Growth during the period was predominately supported by expansion in four sectors: the education and health services, transportation and utilities, wholesale and retail trade, and leisure and hospitality sectors. These four sectors accounted for nearly two-thirds of the total job gain from 2011 through 2015. Along with the professional and business services sector, they are also the sectors that have added the most jobs in the HMA since 2000. Figure 2 shows nonfarm payroll growth by sector since 2000.

Since 2015, nonfarm payrolls in the HMA have continued to expand, increasing by 38,500 jobs, or 2.9 percent, to nearly 1.39 million jobs during 2016 (Table 3), higher than the increases of 2.3 and 1.7 percent for southern California and the nation, respectively. Nearly 60 percent of the gain in the HMA occurred in the government, the education and health services, and the transportation and utilities sectors, up by 8,900, 7,200, and 6,800 jobs, or 3.8, 3.5, and 7.0 percent, respectively. More than 80 percent of the increase in the

Figure 2. Sector Growth in the Riverside-San Bernardino HMA,* Percentage Change, 2000 to Current

* Riverside-San Bernardino-Ontario HMA.

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

Source: U.S. Bureau of Labor Statistics

Table 3. 12-Month Average Nonfarm Payroll Jobs in the Riverside-San Bernardino HMA,* by Sector

| | 12 Months Ending | | Absolute Change | Percent Change |
|----------------------------------|------------------|---------------|-----------------|----------------|
| | December 2015 | December 2016 | | |
| Total nonfarm payroll jobs | 1,347,400 | 1,385,900 | 38,500 | 2.9 |
| Goods-producing sectors | 182,100 | 189,100 | 7,000 | 3.8 |
| Mining, logging, & construction | 86,600 | 90,900 | 4,300 | 5.0 |
| Manufacturing | 95,600 | 98,200 | 2,600 | 2.7 |
| Service-providing sectors | 1,165,200 | 1,196,800 | 31,600 | 2.7 |
| Wholesale & retail trade | 235,200 | 240,000 | 4,800 | 2.0 |
| Transportation & utilities | 97,300 | 104,100 | 6,800 | 7.0 |
| Information | 11,300 | 11,400 | 100 | 0.9 |
| Financial activities | 43,200 | 43,400 | 200 | 0.5 |
| Professional & business services | 144,400 | 144,700 | 300 | 0.2 |
| Education & health services | 205,000 | 212,200 | 7,200 | 3.5 |
| Leisure & hospitality | 151,500 | 153,200 | 1,700 | 1.1 |
| Other services | 44,000 | 45,500 | 1,500 | 3.4 |
| Government | 233,400 | 242,300 | 8,900 | 3.8 |

* Riverside-San Bernardino-Ontario HMA.

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

Source: U.S. Bureau of Labor Statistics

government sector was attributed to growth in the local government sub-sector, which was up by 7,400 jobs, or 4.0 percent. Part of the gain resulted from nearly 800 jobs added by the County of Riverside, the largest employer in the HMA, including those in community planning, education, and health services in response to the

growing HMA economy and population. Arrowhead Regional Medical Center and the Riverside University Health System (RUHS), which are among the largest medical service providers in the HMA, are owned and operated by the governments of San Bernardino and Riverside Counties, respectively. During 2016,

RUHS added approximately 200 jobs, contributing to the overall gain in the government sector. The 410 jobs that Kaiser Permanente®, Maxim Healthcare Services Inc., and Dignity Health have added since early 2016, in response to greater demand for health services, supported growth in the education and health services sector during the past 12 months. The gain in the transportation and utilities sector was largely the result of 6,700 jobs added, or 7.3 percent, in the transportation and warehousing industry. The opening of a QVC, Inc. distribution facility in mid-2016 contributed to job gains; employment at the facility is expected to reach 500 jobs by 2018.

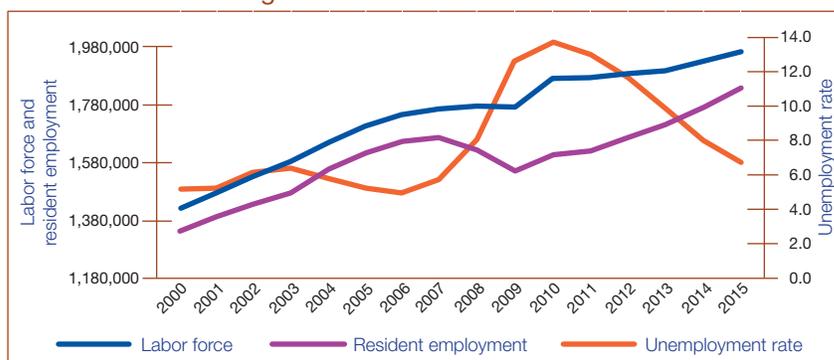
As economic conditions continued to strengthen during 2016, the average unemployment rate decreased to 5.9 percent, down from 6.6 percent during 2015. The current unemployment rate is above the 5.3-percent rate for the southern California region and the 4.9-percent rate for the nation. The unemployment rate in the HMA is higher because of slightly greater growth in the labor force in the HMA relative to resident employment. Figure 3 shows trends in the labor

force, resident employment, and the average unemployment rate in the HMA from 2000 through 2015.

During the 3-year forecast period, nonfarm payrolls are expected to increase an average of 2.9 percent, or by 40,200 jobs, annually. The majority of nonfarm payroll growth is anticipated to occur in the cities of Riverside, Ontario, and San Bernardino. Expansions in industries related to health, education, and logistics are expected to contribute to overall payroll growth during the forecast period. The 2017 opening of the \$400 million RUHS hospital expansion that began in 2013 will add 558 hospital beds and approximately 170 jobs. RUHS generates \$1.6 billion in economic impact in the Riverside submarket and employs 6,000 people (University of California, Riverside [UCR], 2016). The \$1.2 billion Loma Linda University Medical Center, Children's Hospital tower, and Center for Discovery and Wholeness Institute, an adult hospital with 288 beds, are expected to be complete by late 2019, as part of the Vision 2020 plan. Total jobs to be added have not been announced. In addition to these expansions, job announcements for registered nurses are the highest among all jobs types in the HMA, totaling approximately 1,850 jobs as of December 2016 (California Employment Development Department).

UCR is expected to add 300 faculty members to its baseline faculty of 680 by 2020. UCR currently employs 8,300 people. Job announcements at the largest universities in the HMA total approximately 730 jobs as of December 2016, up from 510 a year ago (California Employment Development Department).

Figure 3. Trends in Labor Force, Resident Employment, and Unemployment Rate in the Riverside-San Bernardino HMA,* 2000 Through 2015



* Riverside-San Bernardino-Ontario HMA.

Source: U.S. Bureau of Labor Statistics

In the logistics industry, the QVC distribution facility will continue to add jobs through 2018, and Amazon.com is expected to complete a third distribution center in the Riverside submarket, adding approximately

700 jobs by 2019. UPS will add a new sorting facility, expanding its existing building at Ontario International Airport, and add 500 new jobs, mostly in the logistics industry, from 2018 through 2021.

Population and Households

The population of the Riverside-San Bernardino HMA is estimated at 4.53 million (Table DP-1 at the end of this report) as of January 1, 2017, slightly more than one-half, or nearly 2.38 million, of which resides in the Riverside submarket. The cities of Riverside and San Bernardino are the largest cities in the HMA, with 324,696 and 215,491 residents, respectively, as of January 2016 (California Department of Finance). Other population centers in the HMA include the cities of Corona, Fontana, Moreno Valley, Rancho Cucamonga, and Ontario, with more than 150,000 residents each. Overall, the HMA accounts for approximately 20 percent of the population in the southern California region.

Since 2000, employment conditions and housing prices in major metropolitan areas in southern California have influenced migration trends and overall HMA population growth. Students moving to the HMA—mainly to attend UCR; California State University, San Bernardino (CSUSB); or University of Redlands—and changes in military personnel at both Fort Irwin and MCAGCC have also influenced population growth. From 2000 to 2007, housing prices in the HMA were relatively low, at least 20 percent less than prices in other parts

of southern California and 40 percent less than prices in Los Angeles, Orange, and San Diego Counties. Population growth in the HMA averaged 114,500 people, or 3.2 percent, annually during this time, the fastest rate of population growth since 2000. Net in-migration averaged 79,300 people a year, mainly from Los Angeles, Orange, and San Diego Counties (Internal Revenue Service migration data). Although relatively lower-priced housing was the main draw of residents to the HMA, enrollment at UCR, CSUSB, and University of Redlands also contributed to population growth; enrollment increased by a combined average of 1,050 a year, with approximately 15 to 35 percent of new students coming from outside the HMA. The number of active-duty military personnel at Fort Irwin and MCAGCC rose by an average of 330 a year during the period, the highest level of growth since 2000. Both the Riverside and San Bernardino submarkets had high levels of net in-migration, averaging 58,450 and 20,900 people a year, respectively. Population growth averaged 74,100 and 40,450 people, or 4.2 and 2.2 percent, a year respectively.

By the end of 2007, the draw of residents to the HMA to purchase homes halted with the contraction of the housing market and subsequent

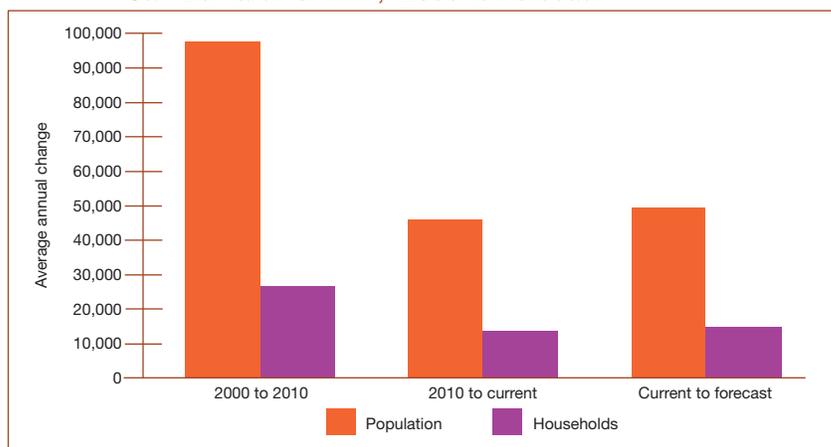
financial downturn of the late 2000s. From 2007 to 2015—a period that spans the housing market contraction, the Great Recession, and the subsequent economic recovery—net in-migration averaged 10,750 people annually, well below the average of 79,300 from 2000 to 2007. As a result, population growth slowed to an average of 46,750 people, or 1.1 percent, annually. The Riverside submarket continued to have net in-migration, but at significantly lower levels, averaging 14,200 people a year. The San Bernardino submarket had more years of net out-migration than in-migration, causing an overall net out-migration during the 2007-to-2015 period that averaged 3,450 people a year. Residents of the San Bernardino submarket were mostly moving to adjacent Los Angeles County to be closer to employment opportunities. Enrollment growth at UCR, CSUSB, and University of Redlands, which averaged a combined 950 students a year, and the reactivation of the March ARB in 2011 did little to support in-migration during this period. The number of active-duty military personnel declined by a combined

average of 220 people a year at both Fort Irwin and MCAGCC, contributing to the overall contraction.

By 2015, economic conditions strengthened in the southern California region, and housing prices began to surpass previous peaks in neighboring Los Angeles, Orange, and San Diego Counties. Net in-migration to the HMA rose to an average of 17,900 people a year from 2015 to the current date. As a result, population growth averaged 48,600 people, or 1.1 percent, a year. Both the Riverside and San Bernardino submarkets had net in-migration, averaging 17,350 and 1,250 a year, contributing to population growth in both submarkets that averaged 31,150 and 18,100 people, or 1.3 and 0.8 percent, respectively. Enrollment at UCR, which rose by 1,275 students from 2015 to 2016, supported in-migration during this period. The number of military personnel at both Fort Irwin and MCAGCC continued to decrease, down by an average of 240 people from 2015 to 2016. The March ARB expanded by 60 people from 2015 to 2016, despite budgetary cuts. Net natural change (resident births minus resident deaths) has accounted for 63 percent of population growth in the HMA since 2015 compared with 77 percent of overall growth from 2007 to 2015 and 31 percent of growth from 2000 to 2007.

During the next 3 years, the population of the HMA is expected to increase by an average of 49,000, or 1.1 percent, a year (Figure 4), reflecting continued net in-migration from economic growth. Figure 5 shows components of population change in the HMA from 2000 through the 3-year forecast period. The population of the HMA

Figure 4. Population and Household Growth in the Riverside-San Bernardino HMA,* 2000 to Forecast



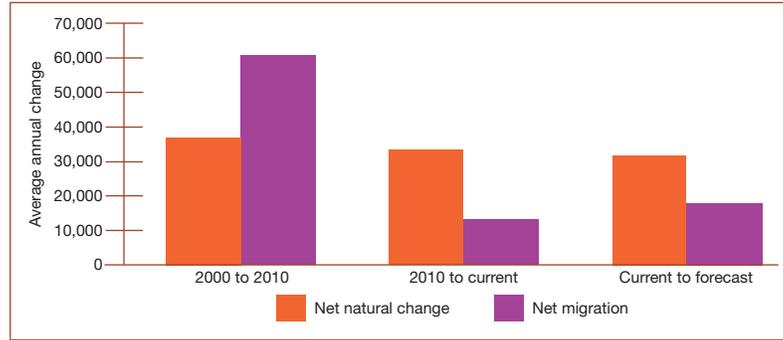
* Riverside-San Bernardino-Ontario HMA.

Notes: The current date is January 1, 2017. The forecast date is January 1, 2020.

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

Population and Households *Continued*

Figure 5. Components of Population Change in the Riverside-San Bernardino HMA,* 2000 to Forecast

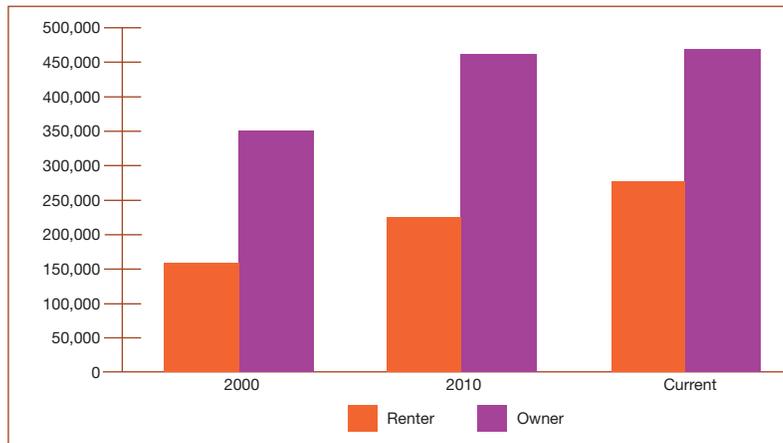


* Riverside-San Bernardino-Ontario HMA.

Notes: The current date is January 1, 2017. The forecast date is January 1, 2020.

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

Figure 6. Number of Households by Tenure in the Riverside Submarket, 2000 to Current



Note: The current date is January 1, 2017.

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

Figure 7. Number of Households by Tenure in the San Bernardino Submarket, 2000 to Current



Note: The current date is January 1, 2017.

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

is estimated to reach nearly 4.68 million by the end of the forecast period. Growth in the Riverside submarket is expected to account for 61 percent of the HMA population growth during the forecast period, and the population in the Riverside and San Bernardino submarkets are expected to reach 2.47 and 2.21 million, respectively.

The number of households in the HMA has increased by 13,100, or 1.0 percent, annually since 2010, down from the average of 26,300, or 2.3 percent, annually during the 2000s as a result of slower population growth since 2007. Approximately 64 percent of the household growth in the HMA since 2010 was attributed to growth in the Riverside submarket compared with 68 percent during the 2000s. The number of renter households in the HMA since 2010 has risen, with less than 5 percent of that growth attributed to growth in student and military households in both the Riverside and San Bernardino submarkets. The proportion of renter households in the HMA is currently 39.5 percent, up from 34.8 percent in 2010 because of gains in the proportion of renter households in both the Riverside and San Bernardino submarkets. Figures 6 and 7 show the number of households by tenure in the Riverside and San Bernardino submarkets, respectively, since 2000.

During the forecast period, the number of households in the HMA is expected to increase by an average of 14,250, or 1.0 percent, annually. In the Riverside and San Bernardino submarkets, household growth is expected to average 9,100 and 5,000, or 1.2 and 0.8 percent, respectively. The proportion of renter households is expected

to remain at nearly 40 percent in the HMA from the current date to the end of the forecast period, up from 34.8 percent in 2010 and 33.4 percent in 2000. A greater proportion of renter households in both the Riverside and San Bernardino submarkets contributed to the overall increase in the HMA. Student and military household growth is expected to continue

to account for less than 5 percent of renter household growth during the forecast period. Household growth is expected to result in nearly 1.43 million households in the HMA, 770,900 and 657,700 households in the Riverside and San Bernardino submarkets, respectively, by the end of the forecast period.

Housing Market Trends

Sales Market—Riverside Submarket

The sales housing market in the Riverside submarket is balanced and, following the sales-market contraction that occurred from 2007 through 2011, has gradually improved every year since 2012. The estimated sales vacancy rate is currently 2.0 percent, down from 3.8 percent in 2010, when conditions were soft (Table DP-2). A 49-percent reduction in the inventory of homes for sale from a peak of 38,200 during 2008 to 19,350 during 2016 (CoreLogic, Inc.) contributed to the decrease in the vacancy rate. Inventory levels were reduced, in part, because of the reduction in home construction since the late 2000s. In addition, a strengthening of economic conditions throughout the southern California region enabled households to purchase homes in the relatively lower-priced Riverside submarket. The number of months homes remained on the market averaged 2.9 months during 2016 compared with 4.0 months during 2008, when market conditions were soft. Despite the improvement in the sales market, the homeownership rate has decreased by 4 percentage points since 2010, to 63.0 percent, because of greater renter household growth.

Both the Riverside and San Bernardino submarkets were among the hardest hit in the nation during the housing crisis. During the period of contraction from 2007 through 2011, an average of 44,150 new and existing single-family homes, townhomes, and condominiums sold annually in the Riverside submarket (CoreLogic, Inc., with adjustments by the analyst). The number of homes sold was down 39 percent from an average of 72,250 homes sold annually from 2002 through 2006, when market conditions were stronger. The decline in sales reflected reductions in regular resale and new home sales of 34,000 and 16,600, or 69 and 73 percent, respectively. These reductions were partly offset by growth in real estate owned (REO) home sales, mainly supported by investor purchases, which rose as the market weakened, from an average of 430 sold annually during 2002 through 2006 to an average of 22,500 sold annually during 2007 through 2011. The investor share of sales in the market rose between these two periods, from approximately 5 percent to 24 percent (Metrostudy, A Hanley Wood Company).

By 2012, the sales market began to improve as the economy continued to recover, but the slower pace of net in-migration kept sales at relatively lower levels. From 2012 through 2015, new and existing home sales averaged 42,650, supported by an annual gain of 13,850 homes, or 92 percent, in regular resales that offset an annual reduction of 13,050 homes, or 74 percent, in REO home sales. Home sales have continued to remain stable during 2016, nearly unchanged at 43,300 homes from the previous year. Gains in regular resales, which were up by 890 homes, or 5 percent, from a year earlier have continued to be nearly offset by a decline in REO sales, which were down by 600 homes, or 23 percent, and new home sales were unchanged. As market conditions improved, the investor share of total sales shrunk to approximately 9 percent. The share of condominiums to total sales has been low, averaging 10 percent of total sales since the mid-2000s (Metrostudy, A Hanley Wood Company). Overall, the sale of condominiums has been concentrated in the city of Riverside, in Coachella Valley, and areas in close proximity to Interstate 215, which connects the HMA to San Diego County.

The average new and existing home sales price rose 5 percent during 2016, to \$349,900, slowing slightly after 4 years of price growth that averaged 10 percent annually. The current average sales price in the submarket is greater than the \$278,600 averaged during the housing downturn from 2007 through 2011 and the \$341,800 averaged during the peak years from 2002 through 2006. Despite the recent gain, the current average sales price is at least 20 percent below the average price of homes in neighboring Los

Angeles, Orange, and San Diego Counties, and relatively lower prices have been a main draw of residents to the submarket and the HMA overall.

The improvement in the sales housing market since 2012 led to a reduction in the rate of seriously delinquent (90 or more days delinquent or in foreclosure) home loans and REO properties in the Riverside submarket. As of December 2016, 1.9 percent of home loans in the HMA were seriously delinquent or had transitioned into REO status, down from 2.4 percent in December 2015 (CoreLogic, Inc.) and a peak of 18.8 percent in January 2010. The current rate is above the 1.3-percent rate for California, but below the 2.6-percent rate for the nation.

Since 2000, nearly all single-family home construction in the Riverside submarket has occurred along the western portion of Riverside County, in close proximity to Los Angeles, Orange, and San Diego Counties. The development area includes the cities of Riverside and Moreno Valley in the northwestern portion of the submarket and areas located in the Elsinore, Perris, and Temecula Valleys in the southwestern portion of the submarket. Regional commuter rail in cities along the western portion of the submarket has facilitated access for residents to jobs in Los Angeles and parts of Orange and San Diego Counties, which has also helped spur development. Homebuilding activity, as measured by the number of single-family homes permitted, remains at low levels compared with levels in the early-to-mid 2000s (Figure 8). From 2000 through 2005, an average of 22,650 homes were permitted annually before permitting slowed 8 percent, to 20,900 homes, in 2006 despite relatively

Housing Market Trends

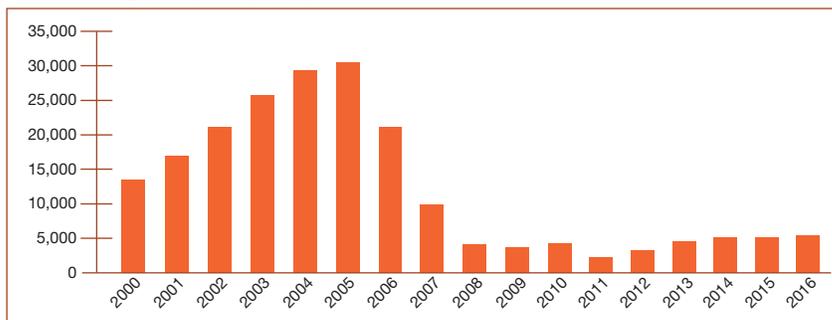
Sales Market—Riverside Submarket *Continued*

strong market conditions that year. By 2007, when the market began to soften, permitting had decreased an additional 53 percent, to 9,725 homes, and by 2008 economic and sales market conditions had weakened considerably. An average of 3,375 homes were permitted a year from 2008 through 2011. As the sales market began to improve, an average of 4,375 homes were permitted annually from 2012 through 2015. Lower levels of net in-migration and considerably less speculative building than in the early 2000s contributed to lower levels of development, despite continued improvement of the sales market. During 2016, permits were issued for 5,175 homes compared with 4,925 homes permitted during the same period a year earlier (preliminary data; analyst estimates).

Significant single-family developments are under construction in the cities of Lake Elsinore and Riverside. The Canyon Hills master-planned community began construction during the 1980s in the city of Lake Elsinore, with plans for 4,000 homes at buildout. Currently, 2,900 homes have been completed and approximately 200 homes are under way at the Aura and Viewpoint at Westridge communities in Canyon Hills. The Viewpoint at Westridge offers some of the lowest-priced new homes in the submarket, starting at \$296,000 for a three-bedroom single-family home. In the Aura community, prices start at \$338,000 for a three-bedroom single-family home. The Mission Gate and Presidio Point at Spring Mountain Ranch communities in the city of Riverside have 15 homes under construction, have 20 homes that have been completed, and will have 125 single-family homes at buildout by 2023. Prices start at \$386,000 for a three-bedroom single-family home.

During the next 3 years, demand is estimated for 21,350 new homes in the HMA (Table 1). Demand is expected to increase in the second and third years of the 3-year forecast period in response to continued economic and population growth. The 2,025 homes currently under construction will meet a portion of demand during the first year. In addition, some of the estimated 67,250 other vacant units in the HMA may return to the sales market and satisfy a portion of the demand. Table 4 shows estimated demand by price range.

Figure 8. Single-Family Homes Permitted in the Riverside Submarket, 2000 to Current



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

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

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

| Price Range (\$) | | Units of Demand | Percent of Total |
|------------------|------------|-----------------|------------------|
| From | To | | |
| 296,000 | 395,999 | 8,525 | 40.0 |
| 396,000 | 495,999 | 6,400 | 30.0 |
| 496,000 | 595,999 | 5,325 | 25.0 |
| 596,000 | and higher | 1,075 | 5.0 |

Notes: The 2,025 homes currently under construction and a portion of the estimated 67,250 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is January 1, 2017, to January 1, 2020.

Source: Estimates by analyst

Rental Market—Riverside Submarket

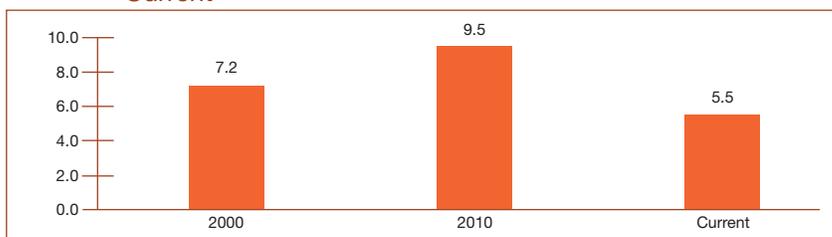
The rental housing market in the Riverside submarket is balanced. The overall rental vacancy rate currently is estimated at 5.5 percent, down from 9.5 percent in 2010 (Figure 9). The vacancy rate declined because renter household growth exceeded growth in the rental inventory from both reduced apartment construction and inventory of single-family homes for rental use.

Approximately 48 percent of occupied single-family homes in the HMA were rentals in 2015, the most recent data available, down slightly from 49 percent in 2010 (2015 and 2010 American Community Survey [ACS] 1-year data). The slight decline reflects improved sales market conditions. Homes that were once converted to rental use, mainly by investors during the sales market contraction, have shifted back to the sales market. Vacancy rates for single-family rental homes during December 2016 ranged from 1.4 percent for a four-bedroom home to 5.6 percent for a one-bedroom home (CoreLogic, Inc.), and had decreased in most categories by 0.3 percentage point or more from a year earlier. Average rents for one-, two-, and four-bedroom single-family homes increased from 1 to 7 percent compared with rents during the previous 12 months and ranged from \$1,275 for a one-bedroom home to \$2,525 for

a four-bedroom home. Average rents for three-bedroom homes remained at \$2,100, the same as a year earlier, however. The overall increase in rents and reduction in vacancy rates was in response to reduced available inventory of homes for rent.

Of the remaining rental housing in the Riverside submarket in 2015, an estimated 45 percent was apartments. As of the fourth quarter of 2016, the apartment vacancy rate was 2.5 percent, down from 3.3 percent a year ago and from 7.0 percent in 2010 (Reis, Inc.). Lower levels of apartment completions since 2010 led to a tightening in the apartment market. Average rents rose 6 percent in the fourth quarter of 2016, to \$1,239, from \$1,166 a year earlier, and were up an average of 4 percent a year since 2010. Rents and rent growth are highest in the Reis-defined Corona market area, which borders Orange County, with an average rent of \$1,458, up 10 percent from a year ago. The area is also among the tightest in the Riverside submarket, with a vacancy rate of 2.4 percent, down from 2.9 percent a year earlier. The tightest segment of the Riverside submarket is the University City/Moreno Valley market area, which includes the area surrounding UCR and the March ARB; this market area has a vacancy rate of 1.6 percent, down from 2.0 percent a year ago. Rent growth in the market area was the second highest in the HMA, up nearly 9 percent, to \$1,292, from \$1,188. Student households currently constitute approximately 3 percent of renter households in the Riverside submarket, and military households comprise less than 1 percent of renter households, many of which reside in the city of Moreno Valley, near the March ARB.

Figure 9. Rental Vacancy Rates in the Riverside Submarket, 2000 to Current



Note: The current date is January 1, 2017.

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

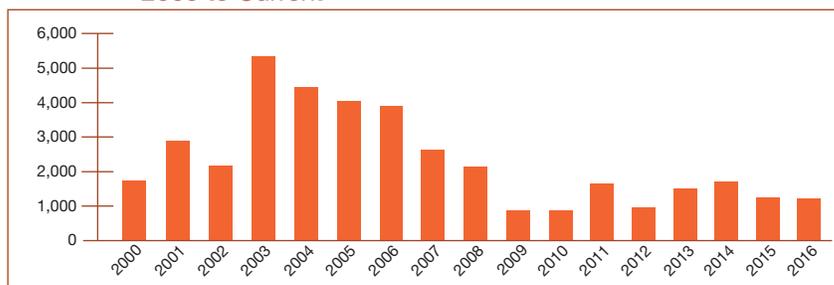
Whereas the number of military reserve personnel in the Riverside submarket has risen slightly since 2015, growth in student enrollment has been fairly steady since 2010. Of the 14 colleges and universities in the Riverside submarket, the largest and most significant in terms of rental market impact is UCR, with 22,921 students as of 2016. Approximately two-thirds of all students live either on campus or within a 3-mile radius of the campus (UCR data). Currently, the 6,700 student beds in 10 complexes at UCR meet some of the housing needs. Enrollment at UCS is expected to rise to 25,000 students by 2020, and the school is planning to add 3,700 beds by 2024, although specific start dates for construction are yet to be announced. One of the newest completed student-oriented apartments is the 62-unit LuxLiv at Tyler, which opened in 2013. Rents are by the bedroom and average \$892 a month.

Since 2000, more than one-half of all multifamily construction activity in the submarket has occurred in the cities of Corona and Riverside in the northwestern portion of the submarket and in the Elsinore, Perris, and Temecula Valleys in the southwestern portion of the submarket. Multifamily permitting activity, as measured by the number of multifamily units permitted, has generally been low during

most years since 2007 (Figure 10), and nearly comparable to the period during the early 2000s. From 2000 through 2002, multifamily permitting averaged 2,225 units a year. By 2003, net in-migration led to an increase in the number of multifamily units permitted, which averaged 4,425 units a year from 2003 through 2006. By 2007, net in-migration slowed, and from 2007 through 2008 multifamily units permitted decreased to an average of 2,350 units a year, before slowing further to an average of 1,250 units a year from 2009 through 2015. This 7-year period of lower levels of multifamily development, along with greater renter household growth, led to a tightening of apartment market conditions. Approximately 7 percent of the multifamily units constructed since 2009 have been condominiums, a proportion that has declined from 18 percent during 2000 through 2008 because of the contraction in the sales market and subsequent growth in renter households. During 2016, approximately 1,200 multifamily units were permitted compared with 1,225 units permitted during 2015 (CB Richard Ellis; U.S. Census Bureau; local planning offices).

Market-rate apartments that were recently completed or under construction are concentrated in the cities of Corona, Murrieta, and Temecula, and market-rate rents start at \$1,100, \$1,200, and \$1,300 for one-, two-, and three-bedroom units, respectively. The 467-unit Artisan at Main Street Metro in the city of Corona and the 325-unit Pacific Landing Apartments in the city of Murrieta both opened in 2016. Rents at both properties range from \$1,450 to \$1,550 for one-bedroom units, from \$1,625 to \$1,800 for two-bedroom units, and from \$2,050 to \$2,200 for

Figure 10. Multifamily Units Permitted in the Riverside Submarket, 2000 to Current



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

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

Housing Market Trends

Rental Market—Riverside Submarket *Continued*

three-bedroom units. The 84-unit Highgate at Temecula is currently under way, with anticipated opening by early 2017. Rents have yet to be announced.

During the 3-year forecast period, demand is estimated for 7,425 new rental units in the Riverside submarket (Table 1). Similar to the sales market, demand is expected to increase in

the second and the third year of the forecast as job growth continues to support more net in-migration. The 690 units currently under construction will satisfy a portion of the rental housing demand during the first year of the forecast period. Table 5 shows estimated demand for new market-rate rental housing in the HMA by rent level and number of bedrooms.

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

| 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 |
| 1,100 to 1,299 | 2,075 | 1,200 to 1,399 | 2,075 | 1,300 to 1,499 | 1,050 |
| 1,300 to 1,499 | 740 | 1,400 to 1,599 | 590 | 1,500 to 1,699 | 300 |
| 1,500 or more | 150 | 1,600 or more | 300 | 1,700 or more | 150 |
| Total | 2,975 | Total | 2,975 | Total | 1,475 |

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 690 units currently under construction will likely satisfy some of the estimated demand. The forecast period is January 1, 2017, to January 1, 2020.

Source: Estimates by analyst

Sales Market—San Bernardino Submarket

The sales housing market in the San Bernardino submarket is balanced, and has improved from soft conditions that began during 2007. The market began to improve by 2013 and, after 2 years of continual improvement, returned to balanced conditions in 2015. The current estimated sales vacancy rate is 2.1 percent, down from 3.1 percent in 2010. The inventory of homes for sale decreased 52 percent from a peak of 28,100 homes during 2008 to 13,400 homes during 2016 and contributed to the improvement in the market (CoreLogic, Inc.). The number of months that homes remain on the market averaged 2.7 months during 2016 compared with 3.9 months during 2008, slightly lower than the respective levels in the Riverside submarket. The contraction in the sales market resulted in

a 5-percentage point decline in the homeownership rate since 2010, to 57.7 percent (Table DP-3).

Sales market conditions in the San Bernardino submarket were weakest from 2007 through 2012, when an average of 27,550 new and existing single-family homes, townhomes, and condominiums sold annually (CoreLogic, Inc., with adjustments by the analyst). The number of homes sold was down from an average of 52,600 homes sold annually from 2002 through 2006, when lenient lending standards and relatively lower-priced homes in the submarket supported higher level of sales. Regular resale and new home sales contributed to the decrease in sales, which were down 31,000 and 4,975, or 71 and 67 percent, respectively. REO home sales escalated as the sales market

contracted, up from an average of 1,825 a year from 2002 through 2006, to an average of 12,750 a year from 2007 through 2012. Similar to the Riverside submarket, the investor share of sales in the market rose from approximately 3 percent to 22 percent (Metrostudy, A Hanley Wood Company).

Sales market conditions began to improve by 2013, lagging many MSAs in the southern California region and the nation because of the slower pace of absorption of available inventory. The areas in the submarket that supported higher levels of sales growth during the early-to-mid 2000s and that accounted for much of the available inventory of homes for sale since the mid-2000s are more removed from job centers in Los Angeles County.

Despite the improvement of economic conditions by 2011, households were less inclined to move to areas that required longer commute times to work. From 2013 through 2015, new and existing home sales averaged 27,700, 1 percent above the average from 2007 through 2012, mostly because a 76-percent decrease in REO sales nearly offset an 84-percent gain in regular resales. During 2016, home sales increased 1 percent, or by 300 homes, because of gains in regular resales and new home sales of 4 and 9 percent, respectively. Partly offsetting the gain was a 26-percent reduction in REO sales to 1,675, lower than the average during the early 2000s. The reduction in distressed properties contributed to a decline in the investor presence in the submarket, which was down to 7 percent during 2016. The share of condominiums to total sales has averaged less than 10 percent of total sales in the San Bernardino submarket since the mid-2000s

(Metrostudy, A Hanley Wood Company), similar to the Riverside submarket. Condominium sales have generally been concentrated in the cities of Rancho Cucamonga and Ontario, in closer proximity to Los Angeles County.

The average new and existing home sales price increased 5 percent during 2016, to \$308,600, after 3 years of price growth averaging 14 percent a year. The current average sales price is greater than the \$226,200 averaged when the market was weak from 2007 through 2012, and is above the \$229,400 averaged during the peak years from 2002 through 2006. Despite the continual gain since 2013, prices are approximately 13 percent lower than the Riverside submarket and nearly 30 percent lower than the average for the southern California region.

As sales housing market conditions improved since 2013, the rate of seriously delinquent home loans and REO properties in the San Bernardino submarket declined. As of December 2016, 2.0 percent of home loans were seriously delinquent or had transitioned into REO status, slightly higher than the Riverside submarket, but down from 2.6 percent in December 2015 (CoreLogic, Inc.). The rate reached a high of 18.1 percent in December 2009 during the housing contraction. The peak in the nation was 8.6 percent in February 2010.

More than one-half of all single-family home construction in the San Bernardino submarket since 2000 has been in the cities of Chino, Fontana, Ontario, Rancho Cucamonga, and Victorville, because of either the proximity to Los Angeles and Orange Counties or the amount of developable land for relatively lower-priced

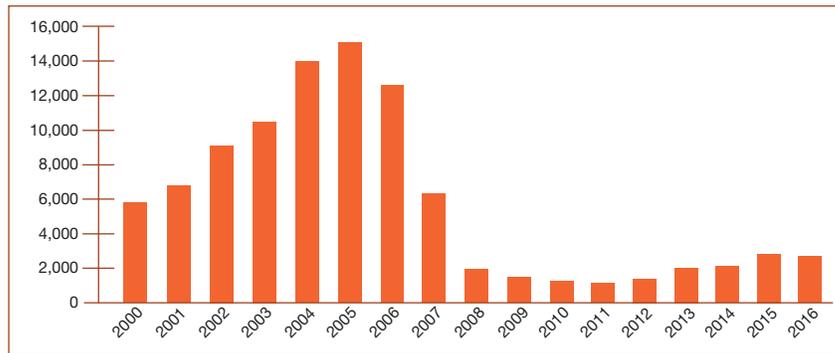
housing. Homebuilding activity has remained at low levels compared with permitting during the early-to-mid 2000s (Figure 11). From 2000 through 2006, an average of 10,550 homes were permitted annually before permitting slowed 40 percent to 6,300 homes in 2007, as market conditions weakened. Permitting slowed further from 2008 through 2012, as economic and sales market conditions weakened considerably during most of the period, and an average of 1,450 homes were permitted a year. As the sales market began to improve, an average of 2,350 homes were permitted annually from 2013 through 2015, much lower than the earlier part of the 2000s because of significantly less in-migration to the San Bernardino submarket and less speculative building. During 2016, permits were issued for 2,700 homes compared with

2,875 homes permitted during 2015 (preliminary data; analyst estimates).

Notable single-family developments under construction are concentrated in the cities of Ontario, Rialto, and Victorville. The Ontario Ranch master-planned community in the city of Ontario has seven neighborhoods currently under way, 41 homes under construction, 800 homes that have been completed, and 10,230 homes expected at buildout. Prices start at \$407,900 for a three-bedroom single-family home. In the city of Rialto, construction has begun on three neighborhoods in the Rosena Ranch master-planned community, with 50 homes under construction and 290 homes completed of the 8,400 homes at buildout. Prices start at \$351,500 for a three-bedroom single-family home. Anticipated completion of both Ontario Ranch and Rosena Ranch are expected beyond the 3-year forecast period. In Victorville, Wildflower at Las Haciendas and Springfield have 10 homes currently under construction, have 100 homes completed, and will have 180 homes at buildout. Prices start at \$234,900 for a three-bedroom home. Completion of both communities is expected by the end of the forecast period.

Demand in the San Bernardino submarket is estimated for 12,400 new homes during the next 3 years (Table 1), increasing in the second and third years of the forecast period in response to continued economic growth and net in-migration. The 900 homes currently under construction will meet a portion of demand during the first year, and some of the estimated 50,150 other vacant units may return to the sales market and satisfy a portion of the demand. Table 6 shows estimated demand by price range.

Figure 11. Single-Family Homes Permitted in the San Bernardino Submarket, 2000 to Current



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

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

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

| Price Range (\$) | | Units of Demand | Percent of Total |
|------------------|------------|-----------------|------------------|
| From | To | | |
| 234,900 | 294,899 | 1,850 | 15.0 |
| 294,900 | 354,899 | 1,850 | 15.0 |
| 354,900 | 414,899 | 4,350 | 35.0 |
| 414,900 | 474,899 | 2,475 | 20.0 |
| 474,900 | and higher | 1,850 | 15.0 |

Notes: The 900 homes currently under construction and a portion of the estimated 50,150 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is January 1, 2017, to January 1, 2020.

Source: Estimates by analyst

Rental Market—San Bernardino Submarket

The rental housing market in the San Bernardino submarket is balanced. The overall rental vacancy rate currently is estimated at 5.7 percent, down from 8.8 percent in 2010 (Figure 12). Lower levels of apartment development since the late 2000s and greater renter household growth, despite periods of net out-migration since 2010, have helped improve rental market conditions.

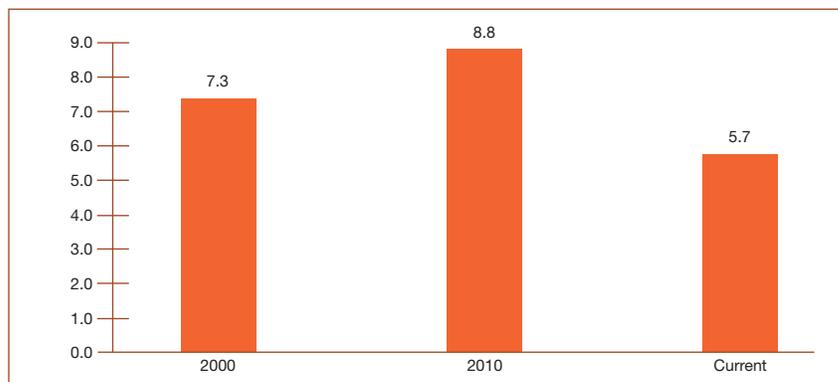
Approximately 51 percent of occupied single-family homes were rentals in 2015, up from 46 percent in 2010 (2015 and 2010 ACS 1-year data). The increase reflects investor purchases of distressed homes throughout the San Bernardino submarket, which were converted to rental use. During December 2016, vacancy rates for single-family homes ranged from 1.5 percent for a four-bedroom home to 6.0 percent for a one-bedroom home (CoreLogic, Inc.). Vacancy rates were down at least 0.1 percentage point across bedroom sizes from a year ago, and average rents rose at rates between 3 and 9 percent from a year ago. Average rents for single-family homes range from \$1,052 for a one-bedroom home to \$1,990 for a four-bedroom home.

Approximately 45 percent of the remaining rental housing in 2015

were apartments. Lower levels of apartment development since the late 2000s have tightened the apartment market. The apartment vacancy rate was 5.9 percent in 2010 and declined every year to a low of 2.4 percent by the fourth quarter of 2016 (Reis, Inc.). The fourth quarter 2016 rate is slightly below the 2.5-percent rate in the fourth quarter of 2015, and average rents rose 4 percent, to \$1,275 from \$1,230 a year ago. The apartment market is tightest in areas that are closer to Los Angeles or Orange Counties, which also tend to command the highest rents. The Reis-defined Rancho Cucamonga market area is the tightest segment of the San Bernardino submarket, with a vacancy rate of 1.6 percent, and has the highest average rent at \$1,562, up 1 percent from \$1,545 a year ago. The Upland market area is directly adjacent to Los Angeles County and has a vacancy rate of 1.9 percent, with rents that rose 8 percent to \$1,282 from \$1,189 a year earlier. Generally, lower-priced apartments are located farther away from Los Angeles or Orange Counties, including in the cities of San Bernardino and Victorville, and often entail a longer commute to work. The average rent in the San Bernardino market area was unchanged at \$946 from a year ago, and in the Victorville market area rents averaged \$917 compared with \$872 a year ago. Vacancy rates in the Victorville area were 2.9 percent as of the fourth quarter of 2016. In the San Bernardino market area, vacancy rates are low, at 1.8 percent, partly because of student housing demand at CSUSB.

Student households currently constitute approximately 1 percent of renter households in the San Bernardino submarket, and 3 percent in the cities

Figure 12. Rental Vacancy Rates in the San Bernardino Submarket, 2000 to Current



Note: The current date is January 1, 2017.

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

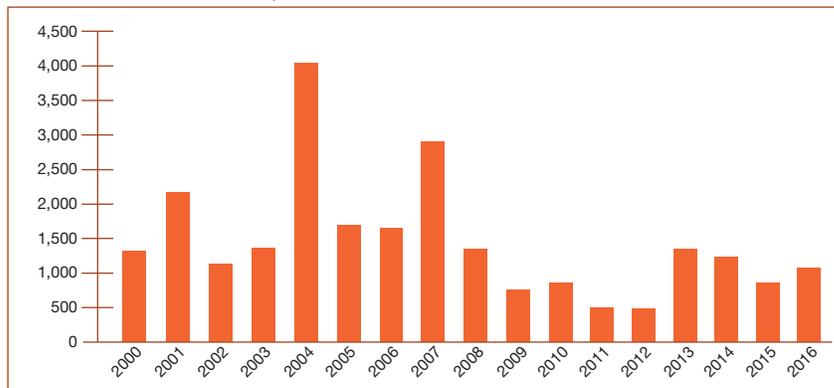
of San Bernardino and Redlands. The largest and most significant school in terms of rental market impact is CSUSB, with 20,024 students as of 2015, followed by the University of Redlands, with 3,450 students. Approximately 15 to 35 percent of all new students come from outside the HMA. CSUSB houses 1,500 students in 2 apartment-style complexes and 8 residence halls. Since 2011, enrollment at CSUSB has risen by an average of 720 students a year, approximately 110 of which were students coming from outside the HMA. To meet the greater need for student housing, CSUSB began construction on a 416-bed dormitory in 2016, which is expected to be complete by the fall of 2018. At the University of Redlands, 1,400 students are housed in 9 residence halls and 2 apartment-style complexes. Student-oriented apartments under way include the 340-unit Crossing at Redlands, which will open in early 2017. Recently completed student apartments include Circa 2020, which opened near the University of Redlands in 2016. Rents at both properties are by the room and range from \$770 to \$1,170 a month.

Military households comprise approximately 2 percent of total renter

households in the San Bernardino submarket, but nearly all are located in the city of Twentynine Palms, where the MCAGCC is located, and in the unincorporated area of Fort Irwin. Military housing is privatized throughout the San Bernardino submarket. Lincoln Military Housing offers 1,575 homes in 13 communities for those based at MCAGCC, and The Villages at Fort Irwin offers 2,475 homes and 220 unaccompanied suites at Fort Irwin. No plans currently exist to add additional housing near both bases because of a reduction in military households since 2007.

Since 2000, more than one-half of all multifamily construction activity in the San Bernardino submarket has occurred in the cities of Ontario and Rancho Cucamonga. Multifamily permitting activity, as measured by the number of multifamily units permitted, has generally been low during most of the period since 2007 (Figure 13). From 2000 through 2003, multifamily permitting averaged 1,500 units a year before increasing to 4,050 units in 2004. By 2005, the number of multifamily units permitted slowed to an average of 1,700 units a year from 2005 through 2006 before increasing again to 2,900 units in 2007. The surge in development during both 2004 and 2007 resulted from greater apartment development in the city of Ontario, which is situated west of the largest concentration of distribution centers in the submarket and also in close proximity to Los Angeles County. A higher level of development in 2007, along with net out-migration, contributed to soft rental market conditions, and development adjusted in response to those conditions. The number of multifamily units permitted decreased to an average of 810 units a year from

Figure 13. Multifamily Units Permitted in the San Bernardino Submarket, 2000 to Current



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

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

Housing Market Trends

Rental Market—San Bernardino Submarket *Continued*

2008 through 2012. By 2013, lower levels of development contributed to a tightening of the rental market and developers began to respond. The number of units permitted rose to an average of 1,175 units a year from 2013 through 2015. Less than 5 percent of the multifamily units constructed since 2008 have been condominiums, similar to the period from 2000 through 2002, but below the 22 percent of multifamily units constructed during 2003 through 2007, when sales market conditions were relatively stronger. During 2016, 1,100 multifamily units were permitted compared with 890 units permitted in 2015 (CB Richard Ellis; U.S. Census Bureau; local planning offices).

Market-rate apartments that were recently completed or under construction are concentrated in the cities of Chino, Ontario, and Rancho Cucamonga. The 298-unit Vistara in Ontario was completed in 2016 with rents for one-, two-, and three-bedroom units that start at \$1,757, \$2,336, and \$2,548, respectively. The 799-unit Homecoming at the Preserve in Chino will open

in 2017. Preleasing has begun with rents that start at \$1,600 for one-bedroom units, \$1,800 for two-bedroom units, \$2,486 for three-bedroom units, and \$3,040 for four-bedroom units. The Vintner, with 183 units, in the city of Rancho Cucamonga is expected to open in the fall of 2017 with rents that have yet to be announced. For newly completed market-rate studio and one-, two-, and three-bedroom units in the San Bernardino submarket, rents start at \$1,350, \$1,600, \$1,800 and \$2,300, respectively.

During the 3-year forecast period, demand is estimated for 3,850 new rental units in the San Bernardino submarket (Table 1), with greater demand in the second and third years of the forecast period, as job growth continues to support more net immigration. The 910 units currently under construction will satisfy a portion of demand during the first year of the forecast period. Table 7 shows estimated demand for new market-rate rental housing in the San Bernardino submarket by rent level and number of bedrooms.

Table 7. Estimated Demand for New Market-Rate Rental Housing in the San Bernardino 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 | 170 | 1,600 to 1,799 | 1,150 | 1,800 to 1,999 | 1,475 | 2,300 to 2,499 | 490 |
| 1,550 or more | 20 | 1,800 or more | 200 | 2,000 or more | 260 | 2,500 or more | 85 |
| Total | 190 | Total | 1,350 | Total | 1,725 | Total | 580 |

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 910 units currently under construction will likely satisfy some of the estimated demand. The forecast period is January 1, 2017, to January 1, 2020.

Source: Estimates by analyst

Data Profiles

Table DP-1. Riverside-San Bernardino HMA,* Data Profile, 2000 to Current

| | 2000 | 2010 | Current | Average Annual Change (%) | |
|---------------------------|-----------|-----------|-----------|---------------------------|-----------------|
| | | | | 2000 to 2010 | 2010 to Current |
| Total resident employment | 1,349,142 | 1,611,175 | 1,868,000 | 1.8 | 2.5 |
| Unemployment rate | 5.1% | 13.7% | 5.9% | | |
| Nonfarm payroll jobs | 994,900 | 1,150,700 | 1,386,000 | 1.5 | 3.1 |
| Total population | 3,254,821 | 4,224,851 | 4,532,000 | 2.6 | 1.0 |
| Total households | 1,034,812 | 1,297,878 | 1,386,300 | 2.3 | 1.0 |
| Owner households | 689,465 | 845,785 | 839,300 | 2.1 | - 0.1 |
| Percent owner | 66.6% | 65.2% | 60.5% | | |
| Renter households | 345,347 | 452,093 | 547,000 | 2.7 | 2.9 |
| Percent renter | 33.4% | 34.8% | 39.5% | | |
| Total housing units | 1,186,043 | 1,500,344 | 1,554,000 | 2.4 | 0.5 |
| Owner vacancy rate | 2.8% | 3.5% | 2.1% | | |
| Rental vacancy rate | 7.3% | 9.1% | 5.6% | | |
| Median Family Income | \$47,200 | \$64,500 | \$60,500 | 3.2 | - 1.1 |

* Riverside-San Bernardino-Ontario HMA.

Notes: Numbers may not add to totals because of rounding. Employment data represent annual averages for 2000, 2010, and the 12 months through December 2016. Median Family Incomes are for 1999, 2009, and 2015. The current date is January 1, 2017.

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

Table DP-2. Riverside Submarket Data Profile, 2000 to Current

| | 2000 | 2010 | Current | Average Annual Change (%) | |
|---------------------|-----------|-----------|-----------|---------------------------|-----------------|
| | | | | 2000 to 2010 | 2010 to Current |
| Total population | 1,545,387 | 2,189,641 | 2,376,000 | 3.5 | 1.2 |
| Total households | 506,218 | 686,260 | 743,600 | 3.1 | 1.2 |
| Owner households | 348,532 | 462,212 | 468,500 | 2.9 | 0.2 |
| Percent owner | 68.9% | 67.4% | 63.0% | | |
| Rental households | 157,686 | 224,048 | 275,100 | 3.6 | 3.1 |
| Percent renter | 31.1% | 32.6% | 37.0% | | |
| Total housing units | 584,674 | 800,707 | 836,400 | 3.2 | 0.6 |
| Owner vacancy rate | 2.5% | 3.8% | 2.0% | | |
| Rental vacancy rate | 7.2% | 9.5% | 5.5% | | |

Notes: Numbers may not add to totals because of rounding. The current date is January 1, 2017.

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

Table DP-3. San Bernardino Submarket Data Profile, 2000 to Current

| | 2000 | 2010 | Current | Average Annual Change (%) | |
|---------------------|-----------|-----------|-----------|---------------------------|-----------------|
| | | | | 2000 to 2010 | 2010 to Current |
| Total population | 1,709,434 | 2,035,210 | 2,157,000 | 1.8 | 0.9 |
| Total households | 528,594 | 611,618 | 642,700 | 1.5 | 0.7 |
| Owner households | 340,933 | 383,573 | 370,800 | 1.2 | - 0.5 |
| Percent owner | 64.5% | 62.7% | 57.7% | | |
| Rental households | 187,661 | 228,045 | 271,900 | 2.0 | 2.6 |
| Percent renter | 35.5% | 37.3% | 42.3% | | |
| Total housing units | 601,369 | 699,637 | 717,500 | 1.5 | 0.4 |
| Owner vacancy rate | 3.1% | 3.1% | 2.1% | | |
| Rental vacancy rate | 7.3% | 8.8% | 5.7% | | |

Notes: Numbers may not add to totals because of rounding. The current date is January 1, 2017.

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: 1/1/2017—Analyst’s estimates
 Forecast period: 1/1/2017–1/1/2020—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 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 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_Riverside_SanBernardino_OntarioCA_17.pdf.

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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 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.

For additional reports on other market areas, please go to huduser.gov/portal/ushmc/chma_archive.html.