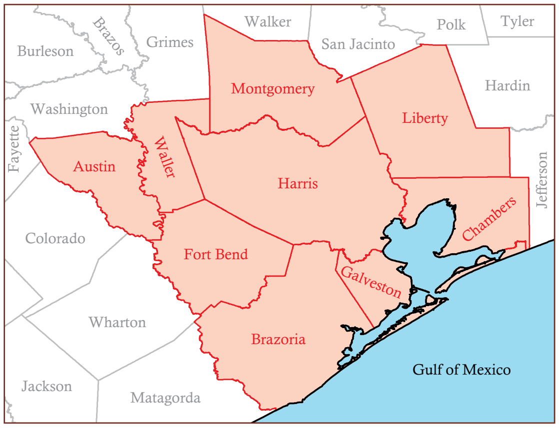
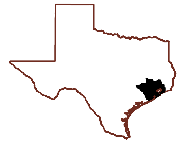
COMPREHENSIVE HOUSING MARKET ANALYSIS

Houston, Texas

U.S. Department of Housing and Urban Development | Office of Policy Development and Research | As of August 1, 2017





Housing Market Area

The Houston Housing Market Area (HMA) is coterminous with the Houston-The Woodlands-Sugar Land, TX Metropolitan Statistical Area (MSA), which is the fifth largest MSA in the nation. For purposes of this analysis, the HMA is divided into three submarkets: the Central submarket, which consists of Harris County and includes the central city of Houston; the Southern submarket, which consists of Brazoria, Fort Bend, and Galveston Counties; and the Northern submarket, which consists of Austin, Chambers, Liberty, Montgomery, and Waller Counties.

On August 25, 2017, Harvey, a category 4 hurricane, made landfall along the Texas coast approximately 150 miles southwest of the city of Houston. The hurricane stalled over the Houston HMA, and during the next several days rainfall totals exceeded 50 inches in many parts of the HMA. This report reflects economic and housing market conditions before the hurricane and subsequent flooding. The demand estimates reflect the market outlook prior to the hurricane and do not assess the impact of the disaster on expected demand. A followup report with a postdisaster analysis is forthcoming.

Summary

Economy

Despite continued job growth, economic conditions in the Houston HMA weakened relative to recent history. During the 12 months ending July 2017, nonfarm payrolls increased by 24,800 jobs, or 0.8 percent. By comparison, nonfarm payrolls grew by an average of 86,000 jobs, or 3.3 percent, annually from 2010 through 2015. The recent economic slowdown was concentrated in the goods-producing sectors and is a result of weakness among energy-related industries. Job growth is expected to partially recover during the next 3 years to an average of 1.5 percent annually, as job losses in these sectors subside.

Sales Market

The sales housing market in the HMA is currently balanced with an estimated 1.4-percent vacancy rate. In the HMA, 83,350 homes sold during the 12 months ending July 2017, an increase of 4,650 homes, or 6 percent, from the previous year. The average sales price of a home in the HMA increased by $10,250, or 4 percent, during the same time, to $288,500. Demand is expected for 103,250 new homes during the 3-year forecast period (Table 1). The 10,525 homes currently under construction in the HMA will satisfy some of the forecast demand.

Rental Market

The rental housing market in the HMA is soft with an estimated 11.3-percent vacancy rate. Nearly 75,000 multifamily units were permitted in the HMA from 2013 through 2015. These units entered the market as economic conditions in the HMA weakened, causing the

Market Details

rental market to soften. The large number of excess vacant units, many of which were recently completed and remain in initial lease-up, and the 6,650 units currently under construction should meet demand during the next 2 years. Demand is estimated for 22,175 new rental units in the third year of the forecast period (Table 1).

Table 1. Housing Demand in the Houston HMA During the Forecast Period

	Houston HMA		Central Submarket		Southern Submarket		Northern Submarket	
	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units
Total demand	103,250	22,175	54,250	18,450	34,000	1,025	15,000	2,700
Under construction	10,525	6,650	4,600	5,025	4,250	600	1,675	1,025

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of August 1, 2017. Sales demand includes an estimated demand for 1,400 mobile homes. The forecast period is August 1, 2017, to August 1, 2020.

Source: Estimates by analyst

Economic Conditions

Job growth continued in the Houston HMA during the most recent 12 months; however, the rate of growth slowed significantly from earlier in the decade when gains were boosted by large job increases among energy-related industries. During the 12 months ending July 2017, nonfarm payrolls increased by 24,800 jobs, or 0.8 percent (Table 2), after increasing by 10,900 jobs, or 0.4 percent, during the previous 12 months. Gains in most service-providing sectors more than offset job losses among the goods-producing sectors. The unemployment rate in the HMA also started to rise in response to labor force growth that outpaced employment growth. The rate is currently 5.4 percent, up from 5.0 percent a year earlier and a recent low of 4.6 percent in 2015 (Figure 1).

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

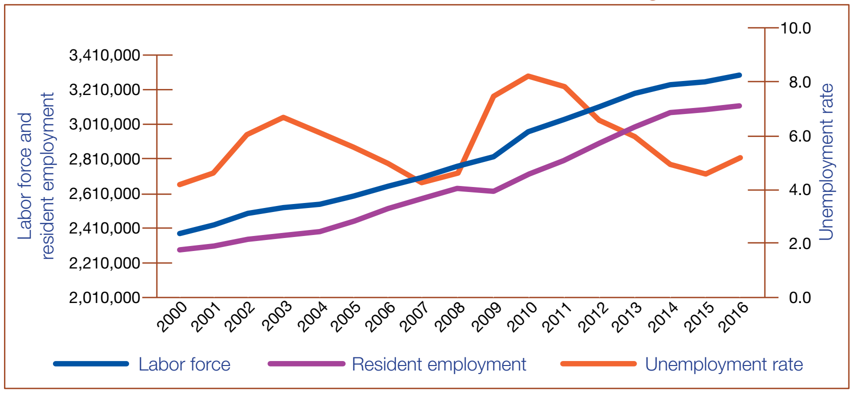
	12 Months Ending		Absolute Change	Percent Change
	July 2016	July 2017		
Total nonfarm payroll jobs	2,998,000	3,022,800	24,800	0.8
Goods-producing sectors	544,400	527,700	– 16,700	– 3.1
Mining, logging, & construction	313,600	302,300	– 11,300	– 3.6
Manufacturing	230,800	225,400	– 5,400	– 2.3
Service-providing sectors	2,453,600	2,495,100	41,500	1.7
Wholesale & retail trade	470,400	468,000	– 2,400	– 0.5
Transportation & utilities	140,200	139,900	– 300	– 0.2
Information	32,300	32,500	200	0.6
Financial activities	153,600	155,800	2,200	1.4
Professional & business services	469,700	474,600	4,900	1.0
Education & health services	375,000	387,100	12,100	3.2
Leisure & hospitality	307,900	318,600	10,700	3.5
Other services	108,300	109,200	900	0.8
Government	396,300	409,500	13,200	3.3

Notes: Numbers may not add to totals because of rounding. Based on 12-month averages through July 2016 and July 2017.

Source: U.S. Bureau of Labor Statistics

The city of Houston is known as the energy capital of the world. The HMA is home to 20 Fortune 500 companies and 41 companies on the Fortune 1000 list, with the largest being Phillips 66 Company, which is number 34 on the Fortune 500 list with $72 billion in revenue in 2016. Among the 20 Fortune 500 companies in Houston, the majority are involved in the energy industry. Of the 10 largest employers in the HMA, 2 are involved in the energy industry; the largest is Schlumberger Limited with 12,069 employees (Table 3). However, this number is down from 2013, when the energy industry was booming and 5 of the 10

Figure 1. Trends in Labor Force, Resident Employment, and Unemployment Rate in the Houston HMA, 2000 Through 2016



Source: U.S. Bureau of Labor Statistics

Table 3. Major Employers in the Houston HMA

Name of Employer	Nonfarm Payroll Sector	Number of Employees
Wal-mart Stores Inc.	Wholesale & retail trade	37,000
Memorial Hermann Health System	Education & health services	24,108
H-E-B	Wholesale & retail trade	23,732
The University of Texas MD Anderson Cancer Center	Government	21,086
McDonald's Corporation	Wholesale & retail trade	20,918
Houston Methodist	Education & health services	20,000
Kroger Co.	Wholesale & retail trade	16,000
United Airlines, Inc.	Transportation & utilities	14,941
Schlumberger Limited	Mining, logging, & construction	12,069
Shell Oil Company	Manufacturing	11,507

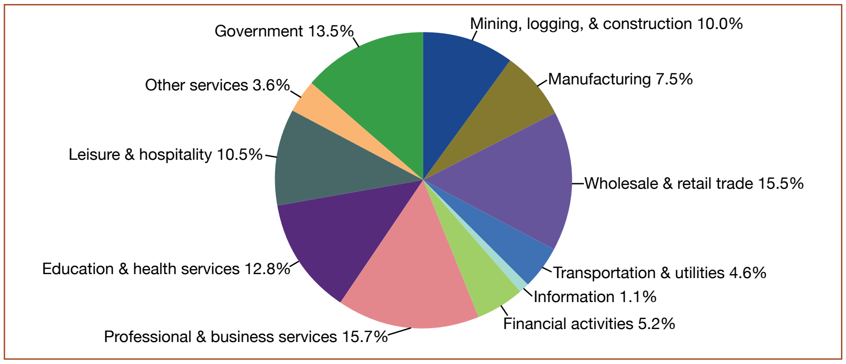
Note: Excludes local school districts.
Source: Houston Chronicle

largest employers in the HMA were in energy-related industries. With such a large concentration of energy firms, oil and natural gas prices significantly impact the economy of the HMA.

The location of the HMA on the Gulf of Mexico makes it a hub for international trade. The Port of Houston is the first ranked port in the United States in foreign tonnage and the third ranked port in terms of total foreign cargo value. Three other large port facilities in the HMA—the Port of Texas City, the Port of Freeport, and the Port of Galveston—also handle significant amounts of cargo each year. These ports contribute to jobs in the wholesale and retail trade sector, which is the second largest payroll sector in the HMA with 468,000 jobs, or 15.5 percent of all nonfarm payroll jobs (Figure 2).

Houston is also a major center for healthcare, both in the region and in the country, with several large medical facilities. The Texas Medical Center is the largest medical center in the world with more than 50 health-related institutions, including the largest children's hospital and the largest cancer hospital in the world. The center receives more than 10 million patient visits a year and has more than 100,000 employees. Two of the four largest employers in the HMA are Memorial Hermann Health System and The University of Texas MD Anderson Cancer Center, with

Figure 2. Current Nonfarm Payroll Jobs in the Houston HMA, by Sector

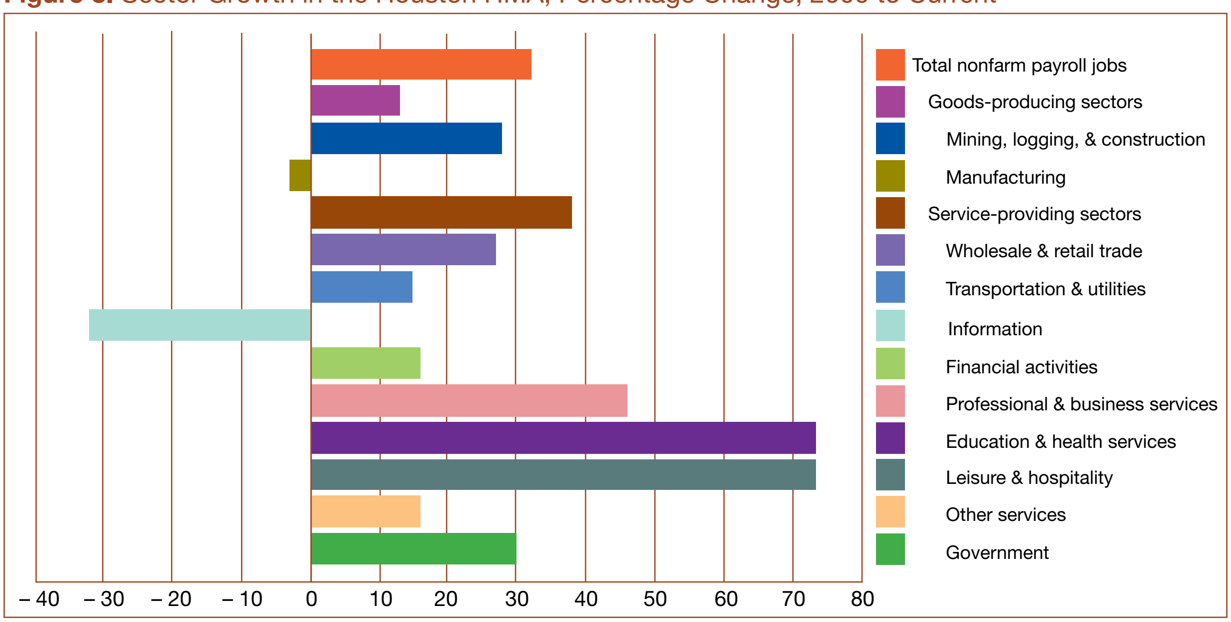


Note: Based on 12-month averages through July 2017.
Source: U.S. Bureau of Labor Statistics

24,108 and 21,086 employees, respectively. Since 2000, the education and health services sector has been the fastest-growing employment sector in the HMA, increasing more than 73 percent (Figure 3).

Since 2000, nonfarm payrolls in the HMA have grown by 741,400 jobs, or more than 32 percent; however, growth has not been steady, and some periods of job losses generally coincided with downturns in the national economy. During 2001, the price of oil dropped nearly 40 percent, from more than $25 a barrel in February to slightly below $16 a barrel in December, which severely hurt local energy companies. In addition to the declining oil prices and subsequent job losses, Continental Airlines was headquartered in Houston, and the September 11, 2001 attacks caused a severe decline in air travel. Immediately following the attacks, Continental Airlines announced it was reducing flights 20 percent and laying off more than 2,000 people in the HMA. Furthermore, in November of 2001, Enron Corporation announced

Figure 3. Sector Growth in the Houston HMA, Percentage Change, 2000 to Current



Note: Current is based on 12-month averages through July 2017.
Source: U.S. Bureau of Labor Statistics

layoffs of more than 4,200 employees in the HMA as the company went into bankruptcy. From 2002 through 2003, nonfarm payrolls declined by an average of 9,700 jobs, or 0.4 percent, annually. The largest declines occurred in the manufacturing, the professional and business services, and the transportation and utilities sectors, which declined by averages of 12,100, 6,200, and 4,700 jobs a year, respectively.

From 2004 through 2008, the economy of the HMA expanded by an average of 68,000 jobs, or 2.8 percent, annually. Job growth during these years was broad-based and led by the professional and business services sector, which increased by an average of 16,800 jobs, or 4.8 percent, annually. Several energy-related companies relocated to Houston during these years, including CITGO Petroleum Corporation, which moved its U.S. headquarters from Tulsa to Houston in 2004 and relocated 700 employees, and BP America, Inc., which brought nearly 3,000 jobs in 2007 when it consolidated its U.S. headquarters to Houston from Chicago. During this time, employment in the mining and logging subsector, which includes jobs in the oil and natural gas extraction industries, increased by an average of 4,700 jobs, or 6.4 percent, annually, in response to a sharp rise in the price of crude oil, which increased from approximately $29 a barrel in December 2003 to a peak of more than $128 a barrel during the summer of 2008.

In 2009, the economy of the HMA began to contract as the local housing market downturn began and the nation entered a recession. From 2009 through 2010, nonfarm payrolls in the HMA declined by an average of 37,400 jobs, or 1.4 percent, a year. During this time, the largest average decline of 19,900 jobs, or 7.0 percent, annually occurred in the mining, logging, and construction sector. Housing market conditions in the HMA worsened during this time, which negatively affected payrolls in the construction subsector. Additionally, jobs among energy-related industries also declined in the HMA during this time. After reaching a peak of $128 a barrel in the summer of 2008, the price of crude oil dropped below $37 a barrel by the end of 2008, leading to job declines in the mining and logging subsector as exploration for oil declined. Petrochemical manufacturing is also important to the economy of the HMA, and during the downturn, manufacturing payrolls declined by an average of 12,500 jobs, or 5.3 percent, annually.

Economic growth resumed in the HMA in 2011, and from 2011 through 2015, nonfarm payrolls grew by an average of 86,000 jobs, or 3.1 percent, a year. Gains during this time were widespread with most sectors growing more than 2 percent a year. By early 2012, the HMA was one of the first large metropolitan areas to recover all jobs lost during the economic downturn. The professional and business services, the wholesale and retail trade, and the mining, logging, and construction sectors added the most jobs from 2011 through 2015, increasing by respective averages of 19,100, 14,000, and 13,000 jobs, or 4.6, 3.3, and 4.6 percent, annually. Growth in the professional and business services sector was, in part, because of expansions at several corporate facilities. During this time, Houston was ranked either first or second by Site Selections magazine each year for securing the most corporate facility expansions.

Additionally, the local economy benefited from relatively high crude oil prices during much of this time, which peaked at $103 a barrel in August 2013 and averaged $84 a barrel throughout the period.

Since 2016, nonfarm payroll growth in the HMA has slowed significantly, in part, because of substantially lower crude oil prices that have led to weakness among the energy-related industries. The price of crude oil fell to a recent low of $26 a barrel in February 2016 and averaged $41 a barrel from January 2016 through June 2017, which is less than one-half the price averaged from 2011 through 2015. During the 12 months ending July 2017, nonfarm payrolls increased by 24,800 jobs, or 0.8 percent, after increasing by 10,900 jobs, or 0.4 percent, during the previous 12 months.

During the most recent 12 months, growth in several service-providing sectors offset job declines in the goods-producing sectors. In response to lower oil prices, payrolls in the mining, logging, and construction and the manufacturing sectors fell by 11,300 and 5,400 jobs, or 2.3 and 3.6 percent, respectively. Several energy-related firms began layoffs in 2016 that will continue throughout 2017, including Chevron USA, Inc., BP America, Inc., and Transocean Offshore Deepwater Drilling, with announced reductions of 655, 500, and 450 employees, respectively. These losses were partially offset by continued strong growth in the government, the education and health services, and the leisure and hospitality sectors that increased by 13,200, 12,100, and 10,700 jobs, or 3.3, 3.2, and 3.5 percent, respectively, during the past 12 months. The bulk of the increase in government payrolls occurred in local government educational services, which grew by 8,300 jobs, or 4.2 percent, as schools increased hiring in response to continued population growth. Education and health services and leisure and hospitality have been the two fastest-growing sectors since 2000 and the only two sectors to add jobs every year during that time. Several hospital expansions are currently under way or were recently completed, including a $50 million expansion of Texas Children's Hospital's West Campus, a new $697 million, 1 million-square-foot tower that Houston Methodist is building in the Texas Medical Center, and a $650 million renovation and expansion of Memorial Hermann's Texas Medical Center campus.

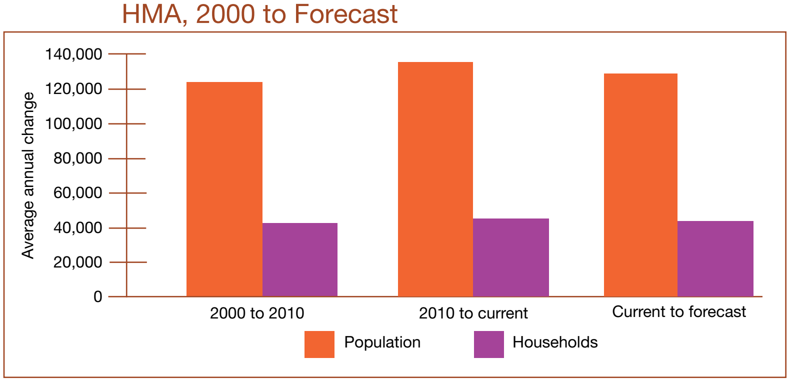
During the 3-year forecast period, nonfarm payrolls are expected to increase an average of 1.5 percent a year. As the energy industry begins to recover, payrolls in the mining, logging, and construction and the manufacturing sectors are expected to stabilize, although growth is not anticipated to return to the very high rates recorded during the previous expansion period. The service-providing sectors, particularly the education and health services and the leisure and hospitality, are expected to continue to add the bulk of new jobs.

Population and Households

The population of the Houston HMA is an estimated 6.9 million as of August 1, 2017, an average increase of 134,300, or 2.1 percent, annually since April 2010 (Figure 4). By comparison, population grew by an average of 122,700, or 2.4 percent, during the 2000s. Population growth is expected to slow to 128,000 people, or 1.8 percent, annually, during the next 3 years in response to relatively slower economic growth compared with previous periods.

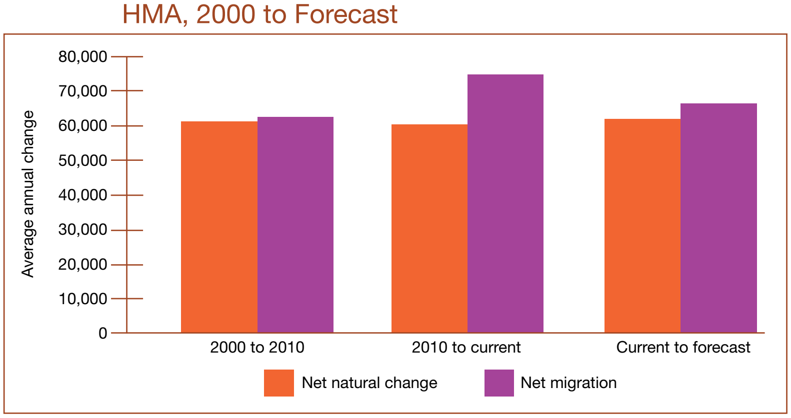
Net-in migration has accounted for approximately 55 percent of population growth since 2010, buoyed by high crude oil prices and strong job growth among energy-related industries during much of this time.

Figure 4. Population and Household Growth in the Houston HMA, 2000 to Forecast



Notes: The current date is August 1, 2017. The forecast date is August 1, 2020.
Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by analyst

Figure 5. Components of Population Change in the Houston HMA, 2000 to Forecast



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

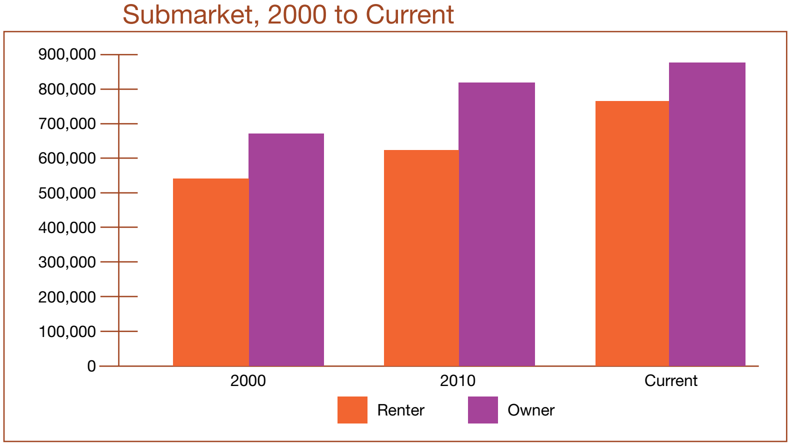
By comparison, net in-migration accounted for approximately 51 percent of population growth during the 2000s (Figure 5). Following Hurricane Katrina, which made landfall in August 2005, significant in-migration to the HMA occurred as many evacuees, mostly from New Orleans, relocated to the city of Houston and surrounding areas. From 2000 to 2005, net in-migration to the HMA averaged 46,200 people annually (U.S. Census Bureau population estimates as of July 1). From 2005 to 2006, following Hurricane Katrina, net in-migration to the HMA increased to 128,200 people. Net in-migration declined significantly the following year but remained at higher levels than pre-Katrina. In-migration averaged 66,350 people annually from 2006 to 2010 because of the relative strength of the HMA economy compared with other parts of the state and nation.

Trends in household growth in the HMA generally mirrored trends in population growth. Currently, 2.4 million households are in the HMA, which is an average annual increase of 44,300 households, or 2.0 percent, annually since 2010. By comparison, household growth averaged 41,450, or 2.3 percent, during the 2000s. During the 3-year forecast period households in the HMA are expected to increase by 42,250, or 1.7 percent, annually. Tables DP-1, DP-2, DP-3, and DP-4 at the end of this report provide population and household data for the HMA and each submarket.

The Central submarket includes the city of Houston and is the largest submarket in the HMA, accounting for approximately 68 percent of the total population. Harris County is the third most populous county in the nation with an estimated population of 4.7 million people as of August 1, 2017. Population growth in the submarket has averaged 78,300 people, or 1.8 percent, annually since 2010, representing the slowest rate of growth of any of the submarkets in the HMA. Net in-migration averaged 33,000 people annually during this time and accounted for 42 percent of the population growth in the submarket. By comparison, population grew by 69,200, or 1.9 percent, and net in-migration accounted for 32 percent of population growth during the 2000s. The Central submarket has the lowest homeownership rate in the HMA at an estimated 53.4 percent, down from 56.8 percent in 2010. Figure 6 shows the number of households by tenure in the Central submarket. The rate of population growth in the Central submarket is expected to slow to an average of 1.6 percent annually during the next 3 years, as job growth remains modest.

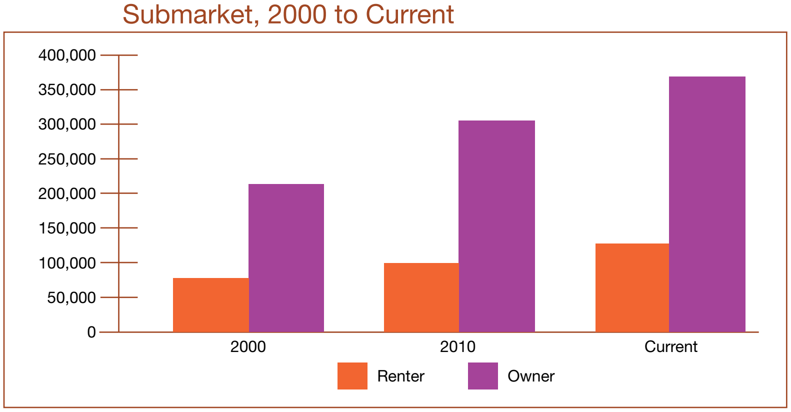
The Southern submarket consists of the coastal counties of Brazoria and Galveston, south and southeast of Harris County, and Fort Bend County, southwest of Harris County. It has been the fastest-growing submarket in the HMA since 2010, increasing by an average of 37,200 people, or 2.9 percent, annually, to 1.5 million people. Net in-migration averaged 27,050 during this time and accounted for 73 percent of population growth. By comparison, population grew by an average of 34,350, or 3.5 percent, annually during the 2000s, and net in-migration accounted for 73 percent of population growth. Fort Bend County is home to the city of Katy, which has been one of the fastest-growing cities in the United States since 2000. The Greater Katy area, as defined by the boundaries of Katy Independent School District, had a population of 140,000 in 2000 but grew an average of more than 5 percent a year to 309,600 people in 2015. The Greater Katy area provides close access to Houston's Energy Corridor, a major employment center within the HMA and the headquarters for several large corporations. The Southern submarket has the highest homeownership rate in the HMA at an estimated 74.5 percent, down slightly from 75.5 percent in 2010. Figure 7 shows the number of households by tenure in the Southern submarket. The Southern submarket is expected to remain the fastest-growing submarket during the forecast period; however, the rate of growth is expected to slow to 2.3 percent during the next 3 years.

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



Note: The current date is August 1, 2017.
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

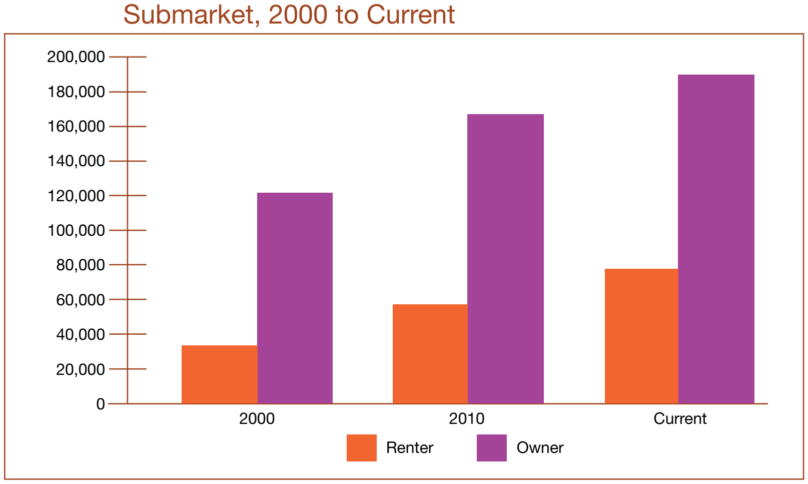
Figure 7. Number of Households by Tenure in the Southern Submarket, 2000 to Current



Note: The current date is August 1, 2017.
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

Montgomery County, to the north of Harris County, is the primary county in the Northern submarket, accounting for nearly 75 percent of the population in the submarket. Interstate 45 runs north from Houston through Montgomery County, and this area has accounted for most of the population growth in the submarket since 2000. The population in this submarket is currently estimated to be 775,900, an average increase of 18,800, or 2.7 percent, annually since 2010. Net in-migration averaged 14,350 people during this time and accounted for 76 percent of the population growth. By comparison, population growth slowed significantly from an average of 19,200 people, or 3.6 percent, annually during the 2000s, when net in-migration accounted for 79 percent of population growth. During the 2000s, the Northern submarket was the fastest-growing submarket in the HMA with the northern suburbs of Houston expanding rapidly; however, from 2009 to 2012, during and immediately following the housing market downturn, net in-migration to the HMA and the submarket fell significantly. As population growth throughout the HMA recovered from 2012 to 2015 in response to rapid economic growth, a larger portion of net in-migration shifted away from the Northern submarket to the Central submarket and closer to downtown Houston. Despite the recent slowdown in population growth, the submarket is home to Conroe, a northern Houston suburb in Montgomery County that is one of the fastest-growing cities in the United States. From 2015 to 2016, the population of Conroe grew 7.9 percent, the highest rate of growth for any city with a population greater than 50,000. The homeownership rate in the Northern submarket is currently estimated at 71.0 percent, down from 74.6 percent in 2010. Figure 8 shows the number of households by tenure in the Northern submarket. The rate of population growth in the Northern submarket is expected to slow to an average of 2.7 percent annually during the next 3 years.

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



Note: The current date is August 1, 2017.

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

Sales Market—Central Submarket

The sales housing market in the Central submarket is currently balanced with an estimated 1.4-percent vacancy rate, down from 2.3 percent in 2010. During the 12 months ending July 2017, a 3.5-months inventory of unsold homes was on the market, up slightly from 3.2 months a year earlier (Real Estate Center at Texas A&M University). The sales market was soft in 2010 as a result of the housing market downturn and corresponding period of job losses in the Houston HMA from 2009 through 2010. However, the market has improved significantly since that time in response to strong economic growth from 2011 through 2015.

New and existing home sales in the submarket, including single-family homes, townhomes, and condominiums, increased during the past year, but the rate of growth remains below the peak years when job growth was stronger. During the 12 months ending July 2017, 49,900 homes sold, an increase of 2,600 homes, or 6 percent, from the previous year. During the previous 12 months ending July 2016, homes sales had declined by 1,200, or 3 percent, from the previous year. This decline was caused, in part, by reduced demand stemming from slowing job growth and net in-migration to the submarket. By comparison, from 2012 through 2014 when job growth and net in-migration were stronger, home sales increased by an average of 4,450, or 12 percent, annually.

The average sales price for new and existing homes, including single-family homes, townhomes, and condominiums, also rose during the past year; however, the rate of growth remains below the peak years. During the 12 months ending July 2017, the average sales price increased by $12,400, or 5 percent, to $290,400. Home sales prices in the HMA are among the highest in the Southwest Region behind only Austin and Dallas, and sales prices in the submarket are the second highest among the three submarkets in the HMA. During the 12 months ending July 2016, the average sales price remained relatively unchanged from the previous year as slowing job growth dampened price gains. By comparison, from 2012 through 2014, when jobs were growing at a faster rate, prices rose by an average of $20,300, or 10 percent, annually.

In response to continued, although much reduced since 2015, economic growth, seriously delinquent loans (loans that are 90 or more days delinquent or in foreclosure) and real estate owned (REO) properties have become less significant than they were during the housing crisis and economic downturn from 2009 through 2010. During June 2017, 2.3 percent of mortgages in the submarket were seriously delinquent or in REO status, down from 2.6 percent in June 2016 (CoreLogic, Inc.). Although rates in the submarket remain the highest in the HMA and have yet to return to the very low levels recorded in the early 2000s, they are well below the peak of 6.9 percent in January 2010.

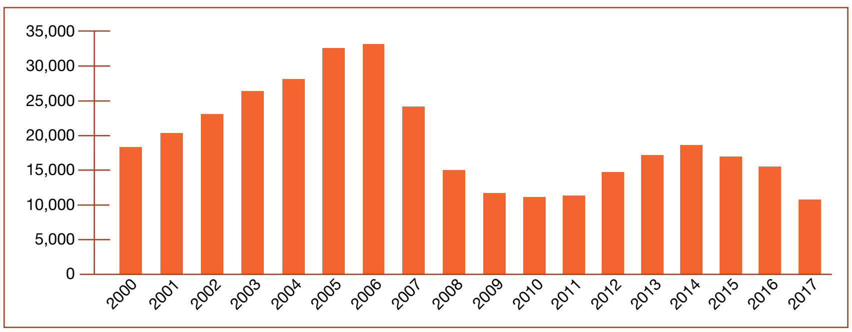
Building activity, as measured by the number of single-family homes permitted, increased during the past year after declining since 2014. During the 12 months ending July 2017, the number of single-family homes permitted increased by 1,500 homes, or 10 percent, to 16,950 compared with the number issued during the previous

12 months (preliminary data). Single-family building activity increased by an average of 1,875 homes, or 14 percent, annually from a recent low of 11,050 homes permitted in 2010 to a high of 18,550 homes permitted in 2014, as builders responded to strong employment and population growth that along with easing access to credit boosted demand for new homes (Figure 9). By comparison, single-family building activity remained well below the average of 27,850 homes permitted annually from 2002 through 2006, during the peak years before the start of the housing market downturn. From 2014 through 2016, as economic conditions in the HMA worsened, the number of homes permitted declined by an average of 1,500, or 9 percent, annually, to 15,500 homes.

New homes are being built throughout the submarket; however, much of the growth is to the north near the border with Montgomery County, to the southwest in the Greater Katy area along the border with Fort Bend County, and to the south near the borders with Brazoria and Galveston Counties. A 130-home subdivision along the banks of Buffalo Bayou immediately northeast of downtown, which will have homes ranging from 1,200 to 2,500 square feet, is among recently planned subdivisions. Additionally, the Bridgeland master-planned community in an unincorporated portion of northwestern Harris County was the 27th fastest-growing community in the nation in mid-2017 (Robert Charles Lesser & Co. [RCLCO]). The community had 225 sales through mid-2017, up 50 percent from mid-2016. New homes start at $230,000 and reach $1 million.

During the next 3 years, demand is estimated for 54,250 new homes, including single-family homes, townhomes, and condominium units. The 4,600 homes currently under construction will meet a portion of the forecast demand. Sales prices for new units start at $100,000, and demand is anticipated to be greatest for units priced under $250,000. Table 4 presents detailed information on the estimated demand for new market-rate sales housing, by price range, in the Central submarket during the 3-year forecast period.

Figure 9. Single-Family Homes Permitted in the Central Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

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

Price Range ($)		Units of Demand	Percent of Total
From	To		
100,000	199,999	13,400	25.0
200,000	249,999	11,250	21.0
250,000	299,999	7,525	14.0
300,000	349,999	5,900	11.0
350,000	399,999	4,300	8.0
400,000	499,999	5,900	11.0
500,000	and higher	5,375	10.0

Notes: The 4,600 homes currently under construction in the submarket will likely satisfy some of the forecast demand. Demand for 600 mobile homes during the forecast period is excluded from this table. The forecast period is August 1, 2017, to August 1, 2020.
Source: Estimates by analyst

Rental Market—Central Submarket

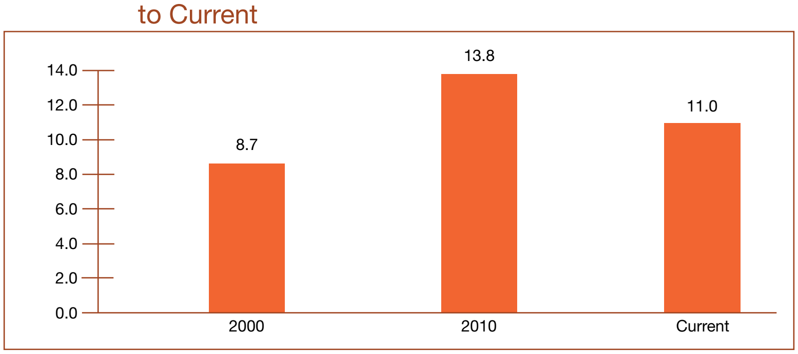
The rental housing market in the Central submarket is currently soft with an estimated 11.0-percent vacancy rate, down from 13.8 percent in 2010 (Figure 10). Traditional apartments with five or more units are estimated to account for 45 percent of all rental units in the submarket. Single-family homes are estimated to account for another 40 percent of all rental units, with the remaining rental units consisting primarily of duplexes, triplexes, quadplexes, and mobile homes. The apartment market is also soft in the submarket with a July 2017 vacancy rate of 10.9 percent, including units in initial lease-up, up slightly from 10.2 percent a year earlier (ALN Apartment Data). Asking rents increased less than 1 percent during this time to $1,028, and effective rents, which include concessions, declined less than 1 percent to $997. The gap between asking and effective rents in the submarket is currently more than 3 percent, an indicator of softening market conditions.

The apartment market in the submarket was very soft following the housing market downturn and period of job losses that occurred in the Houston HMA from 2009 through 2010. The apartment vacancy rate peaked at 15.2 percent in 2009, up from 12.0 percent a year earlier. Asking rents increased less than 2 percent during this time, and in 2009, the gap between asking and effective rents was nearly 6 percent. As a result of increased demand caused by strong job growth and relatively limited building activity, the apartment market steadily improved from 2010 through 2014, when the vacancy rate, including units in initial lease-up, fell to 8.1 percent. The apartment market was generally balanced throughout the latter part of this period, and asking rents increased an average of 7 percent a year from 2012 through 2014, after increasing by an average of less than 1 percent a year in 2010 and 2011.

Since 2015, apartment market conditions have softened as a result of weakening economic conditions and a sharp increase in building activity. Despite weakening conditions, the apartment market generally remained balanced in 2015 as the vacancy rate rose to 8.8 percent, but asking rents increased nearly 5 percent from the previous year, and the gap between asking and effective rents fell to barely more than 1 percent. In 2016, as the bulk of new units entered the market, the vacancy rate spiked to 11.2 percent, asking rent growth slowed to 2 percent, and the gap between asking and effective rents increased to more than 3 percent.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to softening apartment market conditions caused by slow employment growth and a large number of new units

Figure 10. Rental Vacancy Rates in the Central Submarket, 2000 to Current



Note: The current date is August 1, 2017.

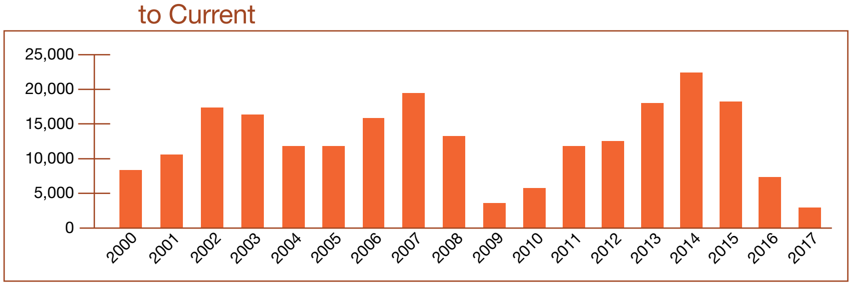
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

entering the market. During the 12 months ending July 2017, the number of multifamily units permitted declined by 5,400 units, or 51 percent, to 5,200 compared with the number permitted during the previous 12 months (preliminary data). Multifamily building activity averaged 19,450 units annually from 2013 through 2015, as builders responded to strong employment and population growth along with limited production following the housing market downturn that led to balanced market conditions (Figure 11). By comparison, from 2002 through 2007, during the previous period of strong economic growth prior to the housing downturn, multifamily production averaged 15,350 a year before declining to an average of 9,325 annually from 2008 through 2012 in response to soft market conditions.

Condominium building activity in the HMA was limited compared with many other similarly sized metropolitan areas; however, the activity that occurred was primarily in the submarket. From 2000 through 2007, an average of 1,275 condominiums were permitted annually in the submarket, accounting for approximately 10 percent of multifamily units. As the housing downturn began, condominium activity declined substantially to an average of 130 units annually from 2008 through 2012, or approximately 1 percent of multifamily building activity. As economic conditions improved and access to credit become less restrictive, condominium activity increased, although it remains below the level recorded throughout most of the 2000s. Since 2013, an average of 480 condominium units have been permitted annually in the submarket, accounting for approximately 3 percent of all multifamily building activity.

During the next 3 years, demand is estimated for 18,450 additional market-rate rental units in the submarket. Demand for new units is not expected until the third year of the 3-year forecast period in order to allow time for the market to come into balance. The large number of excess vacant units, many of which were completed during the past 3 years and remain in initial lease-up, and the 5,025 units currently under construction should be sufficient to meet all of the demand during the first 2 years of the forecast period. Rents for new units are projected to start at $960 for efficiency units, $860 for one-bedroom units, $1,125 for two-bedroom units, and $1,450 for three-bedroom units. Starting rents are higher for efficiencies than for one-bedroom units, because virtually all efficiency units are in and around the central business district of downtown Houston where starting rents are higher. Table 5 provides the estimated demand for new market-rate rental housing by number of bedrooms and rent level during the forecast period.

Figure 11. Multifamily Units Permitted in the Central Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Table 5. Estimated Demand for New Market-Rate Rental Housing in the Central 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
960 to 1,159	190	860 to 1,059	3,150	1,125 to 1,324	1,225	1,450 to 1,649	320
1,160 to 1,359	330	1,060 to 1,259	2,625	1,325 to 1,524	2,000	1,650 to 1,849	390
1,360 or more	30	1,260 to 1,459	2,325	1,525 to 1,724	1,575	1,850 to 2,049	260
		1,460 to 1,659	1,575	1,725 to 1,924	790	2,050 to 2,249	190
		1,660 to 1,859	530	1,925 to 2,124	300	2,250 to 2,449	90
		1,860 or more	320	2,125 or more	180	2,450 or more	40
Total	550	Total	10,500	Total	6,100	Total	1,300

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 5,025 units currently under construction will likely satisfy some of the estimated demand. The forecast period is August 1, 2017, to August 1, 2020.

Source: Estimates by analyst

Sales Market—Southern Submarket

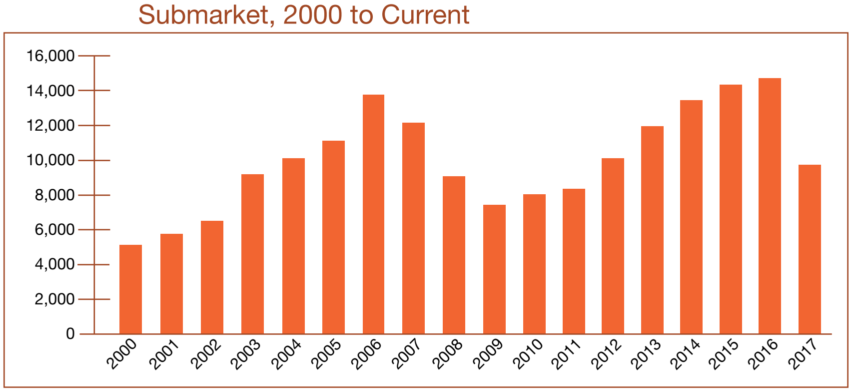
The sales housing market in the Southern submarket is currently balanced with an estimated 1.4-percent vacancy rate, down from 2.2 percent in 2010. The sales market was soft in 2010 as a result of the housing market downturn and corresponding period of job losses in the Houston HMA from 2009 through 2010. However, the market has improved significantly since that time in response to strong economic growth from 2011 through 2015. During the 12 months ending July 2017, the inventory of unsold homes on the market ranged from 2.8 months in Brazoria County, the lowest level among all major counties in the HMA, to 4.0 months in Galveston County, up from 2.5 and 3.8 months a year earlier, respectively (Real Estate Center at Texas A&M University).

New and existing home sales in the submarket, including single-family homes, townhomes, and condominiums, increased during the past year, but the rate of growth remains below the peak years when job growth was stronger. During the 12 months ending July 2017, 21,500 homes sold, an increase of 1,000 homes, or 5 percent, from the previous year. During the previous 12 months ending July 2016, homes sales declined by 230, or 1 percent, from the previous year. This decline was caused, in part, by reduced demand stemming from slowing job growth and net in-migration to the submarket. By comparison, from 2012 through 2014 when job growth and net in-migration were stronger, home sales increased by an average of 2,175, or 15 percent, annually.

The average sales price for new and existing homes, including single-family homes, townhomes, and condominiums, also rose during the past year; however, the rate of growth remains below the peak years. During the 12 months ending July 2017, the average sales price increased by $6,300, or 2 percent, to $283,900. During the previous 12 months, the average sales price increased by $3,250, or 1 percent, as slowing job growth dampened price gains. By comparison, from 2012 through 2014 when economic conditions were more favorable, prices rose by an average of $17,750, or 8 percent, annually. The submarket has the lowest average home sales price in the HMA; however, prices vary widely within the submarket. Of the five largest counties in the HMA, Brazoria and Galveston Counties are the least expensive with average home sales prices of $248,650 and $254,400, respectively, during the 12 months ending July 2017. Fort Bend County had the highest home sales price in the HMA during the same time, averaging $310,100, but was the only county in which home sales prices remained relatively unchanged during the past 12 months.

In response to continued, but much slower, economic growth since 2015, seriously delinquent loans and REO properties have become a less significant part of the sales market than they were during the housing crisis and economic downturn from 2009 through 2010. During June 2017, the percentage of mortgages in the submarket that were seriously delinquent or in REO status ranged from 1.8 percent in Galveston County to 2.0 percent in Brazoria County, down from 2.1 and 2.4 percent, respectively, in June 2016. Although rates in the submarket have yet to return to the very low levels recorded in the early 2000s, they are well below the January 2010 rate of 6.0 percent in Fort Bend County, the highest county-level rate recorded in the submarket (CoreLogic, Inc.).

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



Notes: Includes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Building activity, as measured by the number of single-family homes permitted, increased during the past year and is at the highest level since at least 2000. During the 12 months ending July 2017, the number of single-family homes permitted increased by 1,250 homes, or 9 percent, to 15,850 compared with the number permitted during the previous 12 months (preliminary data). Single-family building activity increased by an average of 1,050 homes, or 14 percent, annually from a recent low of 7,475 homes permitted in 2009 to 14,900 homes permitted in 2016, as builders responded to continued employment and population growth that along with easing access to credit boosted demand for new homes (Figure 12). By comparison, single-family building activity averaged 11,900 homes annually from 2004 through 2007, the peak years prior to the housing downturn.

New home construction in the submarket is concentrated primarily near the border with Harris County. Several fast-growing master-planned communities are located throughout Fort Bend County, including 5 of the 50 fastest-growing communities in the nation (RCLCO). Riverstone in unincorporated Fort Bend County is among these communities. It is the 16th fastest-growing community in the nation and had 276 sales through mid-2017, up 19 percent from mid-2016. More than 4,000 homes are complete in the 3,700-acre Riverstone community, with plans for 2,000 more homes to be built within the next 4 years. Prices are expected to range from more than $200,000 to greater than $1 million. The other four ranked communities had a combined 825 sales through mid-2017, up 7 percent from mid-2016.

During the next 3 years, demand is estimated for 34,000 new homes, including single-family homes, townhomes, and condominium units. The 4,250 homes currently under construction will meet a portion of the forecast demand. Sales prices for new units start at $140,000, and demand is anticipated to be greatest for units priced between $200,000 and $349,999. Table 6 presents detailed information on the estimated demand for new market-rate housing sales, by price range, in the submarket during the 3-year forecast period.

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

Price Range ($)		Units of Demand	Percent of Total
From	To		
140,000	199,999	3,700	11.0
200,000	249,999	5,400	16.0
250,000	299,999	6,075	18.0
300,000	349,999	5,725	17.0
350,000	399,999	3,700	11.0
400,000	499,999	5,050	15.0
500,000	and higher	4,050	12.0

Notes: The 4,250 homes currently under construction in the submarket will likely satisfy some of the forecast demand. Demand for 300 mobile homes during the forecast period is excluded from this table. The forecast period is August 1, 2017, to August 1, 2020.

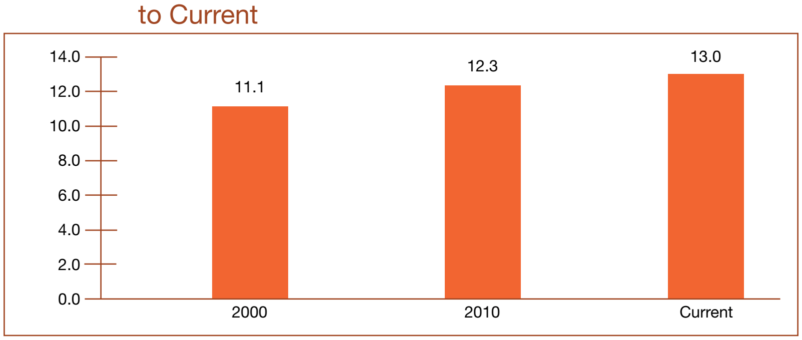
Source: Estimates by analyst

Rental Market—Southern Submarket

The rental housing market in the Southern submarket is currently soft with an estimated 13.0-percent vacancy rate, up from 12.3 percent in 2010 (Figure 13). Similar to the Central submarket, traditional apartments with five or more units are estimated to account for 45 percent of all rental units in the Houston HMA, and single-family homes are estimated to account for another 40 percent of all rental units. The remaining rental units consist primarily of duplexes, triplexes, quadplexes, and mobile homes.

The apartment market is also soft in the Southern submarket. In July 2017, vacancy rates, including units in initial lease-up, averaged 9.5 percent in Galveston County, 11.1 percent in Fort Bend County, and 13.6 percent in Brazoria County (ALN Apartment Data). Vacancy rates increased 6.7 and 3.7 percentage points from the previous year in Brazoria and Galveston Counties, respectively, and declined 1.8 percentage points in Fort Bend County. The large vacancy rate increase in Brazoria County is, in part, the result of a large number of units permitted in 2014 entering the market just as economic conditions began to weaken. Whereas, in Fort Bend County, permitting peaked a year earlier, and most of these units had already been

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



Note: The current date is August 1, 2017.

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

completed before employment growth began to slow. During the past year, asking rents increased 4 and 3 percent in Brazoria and Galveston counties to $1,074 and $999, respectively, and effective rents increased 2 percent each to $1,051 and $990, respectively. The gap between asking and effective rents in these counties are currently 2 and 1 percent, respectively. Despite being the only county in the submarket to have vacancy rates decline during the past year, asking and effective rents in Fort Bend County each declined 1 percent to $1,192 and $1,160, respectively, and the gap between asking and effective rents was 3 percent.

The apartment market in the submarket was very soft following the housing market downturn and period of job losses that occurred in the HMA from 2009 through 2010. In Brazoria and Fort Bend counties, the apartment vacancy rates peaked in 2009 at 13.7 and 9.3 percent, respectively. Asking rents increased 2 and 1 percent, respectively from the previous year and, in 2009, the gaps between asking and effective rents were 7 and 4 percent, respectively. The vacancy rate did not peak in Galveston County until 2010. In addition to market and economic factors affecting the rest of the HMA, also Hurricane Ike, which made landfall in September 2008 and caused significant damage on Galveston Island and along the coastal portions of the county, impacted Galveston County. Partially in response to rebuilding efforts, a large number of units were permitted in the county in 2009, and in 2010, the vacancy rate in Galveston County rose to 14.8 percent while asking rents declined 2 percent from the previous year, and the gap between asking and effective rents increased to 4 percent.

As a result of increased demand caused by strong job growth and relatively limited building activity, the apartment market steadily improved through 2013, when the vacancy rate, including units in initial lease-up, fell to 6.8, 6.5, and 7.5 percent, respectively, in Brazoria, Fort Bend, and Galveston Counties. The apartment market in the submarket was generally balanced throughout the latter half of this period, and asking rents in Brazoria, Fort Bend, and Galveston Counties increased averages of 7, 6, and 2 percent a year, respectively, in 2012 and 2013. By comparison, asking rents increased averages of 2 and 1 percent a year, respectively, in Brazoria and Fort Bend Counties in 2010 and 2011. Asking rents declined an average of 1 percent a year in Galveston County during the same time.

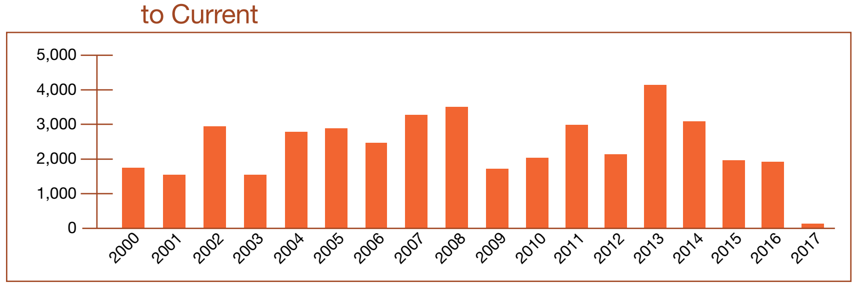
In 2014 and 2015, apartment market conditions began to soften in much of the submarket as a result of weakening economic conditions and a sharp increase in building activity. Despite weakening conditions, the apartment market generally remained balanced in 2014 and 2015 as the vacancy rate rose to 11.8 percent in Brazoria County and 12.0 percent in Fort Bend County, but asking rents increased 7 percent each from the previous year and the gap between asking and effective rents fell to 1 and 2 percent, respectively. In Galveston County, where building activity was more limited than elsewhere in the submarket, the vacancy rate declined further to 7.1 percent, asking rents increased an average of 8 percent a year, and the gap between asking and effective rents nearly disappeared.

In 2016, apartment conditions continued to soften throughout the submarket and rent growth slowed significantly. In Brazoria County, the vacancy rate spiked to 15.3 percent, an increase of 3.5 percentage points from the previous year, and asking rent growth slowed to 3 percent as a result of a large number of units permitted in 2014 that entered the market. In Fort Bend County, the vacancy rate increased 0.1 percentage point from the previous year to 12.1 percent, and asking rents declined 3 percent. The apartment market in Galveston County began to soften in 2016 as the nearly 400 units permitted in 2014, the largest annual number of units permitted in the county in more than a decade, entered the market. The vacancy rate rose 1.3 percentage points to 8.4 percent, and growth in asking rents slowed to 2 percent.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to softening apartment market conditions caused by slow employment growth and a large number of new units entering the market. During the 12 months ending July 2017, the number of multifamily units permitted declined to 600 units from 2,650 units during the previous 12 months (preliminary data). Multifamily building activity averaged 3,600 units annually in 2013 and 2014, as builders responded to strong employment and population growth that along with limited production following the housing market downturn led to balanced market conditions (Figure 14). By comparison, from 2004 through 2008, during the previous period of strong economic growth prior to the housing downturn, multifamily production averaged 2,975 a year before declining to an average of 2,200 annually from 2009 through 2012 in response to soft market conditions.

During the next 3 years, demand is estimated for 1,025 additional market-rate rental units in the submarket. Demand for new units is not expected until the third year of the 3-year forecast period, in order to allow time for the market to come into balance. The large number of excess vacant units, many of which were completed during the past 3 years and remain in initial lease-up, and the 600 units currently under construction should be sufficient to meet all of the demand during the first 2 years and a portion of the demand during the third year of the forecast period. Rents for new units are projected to start at $840, $1,075, and $1,450 for one-, two-, and three-bedroom units, respectively. Table 7 provides the estimated demand for new market-rate rental housing by number of bedrooms and rent level during the forecast period.

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



Notes: Excludes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Table 7. Estimated Demand for New Market-Rate Rental Housing in the Southern 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
840 to 1,039	290	1,075 to 1,274	230	1,450 to 1,649	40
1,040 to 1,239	130	1,275 to 1,474	90	1,650 to 1,849	30
1,240 to 1,439	70	1,475 to 1,674	40	1,850 or more	25
1,440 or more	35	1,675 or more	30		
Total	530	Total	390	Total	100

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 600 units currently under construction will likely satisfy some of the estimated demand. The forecast period is August 1, 2017, to August 1, 2020.
Source: Estimates by analyst

Sales Market—Northern Submarket

The sales housing market in the Northern submarket is currently balanced with an estimated 1.5-percent vacancy rate, down from 1.9 percent in 2010. Montgomery County is the primary county in the submarket, containing nearly 75 percent of the population and single-family homes in the submarket. The sales market was soft in 2010 as a result of the housing market downturn and corresponding period of job losses in the Houston HMA from 2009 through 2010. However, the market has improved significantly since that time in response to strong economic growth from 2011 through 2015. During the 12 months ending July 2017, a 4.8-month inventory of unsold homes was on the market in Montgomery County, up only slightly from 4.6 months a year earlier (Real Estate Center at Texas A&M University). Despite remaining relatively low compared to historical levels, Montgomery County currently has the highest number of months of unsold inventory of all major counties in the HMA, in part, because the Northern submarket has received a smaller percentage of net in-migration to the HMA since 2012.

New and existing home sales in the submarket, including single-family homes, townhomes and condominiums, increased during the past year, but the rate of growth remains below the peak years when job growth was stronger. During the 12 months ending July 2017, 10,100 homes sold in Montgomery County, an increase of 870 homes, or 9 percent, from the previous year. During the 12 months ending July 2016, homes sales declined by 110, or 1 percent, from the previous year. This decline was caused, in part, by reduced demand stemming from slowing job growth and net in-migration to the submarket. By comparison, from 2012 through 2014 when job growth and net in-migration were stronger, home sales increased by an average of 1,025, or 17 percent, annually.

The average sales price for a new and existing home, including single-family homes, townhomes, and condominiums, also rose during the past year; however, price increases remain below the peak years. During the 12 months ending July 2017, the average sales price in Montgomery County increased by $7,800, or 3 percent, to $300,800. Of the five largest counties in the HMA, Montgomery County has the second highest average home sales price, behind only Fort Bend

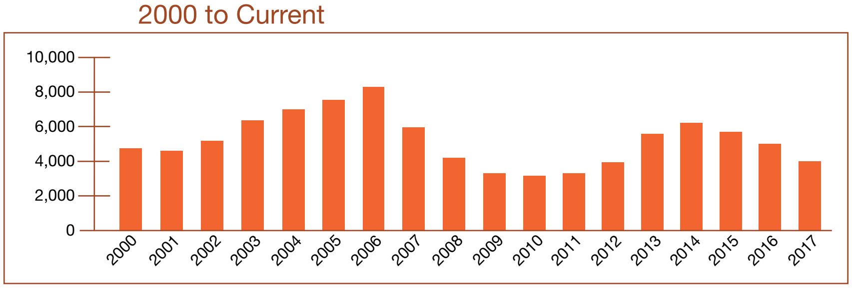
County. Both counties border Harris County and contain relatively affluent suburbs that are in close proximity to the city of Houston. During the previous 12 months ending July 2016, the average sales price declined by $8,725, or 3 percent, as slowing job growth temporarily stalled price gains. By comparison, from 2012 through 2014, when economic conditions were more favorable, prices rose by an average of $14,900, or 6 percent, annually.

In response to slower, but continued, economic growth since 2015, seriously delinquent loans and REO properties have become a less significant part of the sales market than they were during the housing crisis and economic downturn from 2009 through 2010. During June 2017, 1.6 percent of mortgages in Montgomery County was seriously delinquent or in REO status, unchanged from a year earlier. Although Montgomery County was the only one of the five largest counties in the HMA in which rates did not decline during the past year, it also currently has the lowest rate in the HMA. Rates have yet to return to the very low levels recorded in the early 2000s, but they are well below the county-level peak of 4.7 percent in January 2010 (CoreLogic, Inc.).

Building activity, as measured by the number of single-family homes permitted, increased during the past year after declining since 2014. During the 12 months ending July 2017, the number of single-family homes permitted increased by 750 homes, or 15 percent, to 5,850 compared with the number issued during the previous 12 months (preliminary data). Single-family homebuilding increased by an average of 760 homes, or 24 percent, annually from a recent low of 3,175 homes permitted in 2010 to a high of 6,225 homes permitted in 2014, as builders responded to strong employment and population growth that along with easing access to credit boosted demand for new homes (Figure 15). Single-family building activity remained well below the average of 7,250 homes permitted annually, from 2003 through 2006, during the peak years before the start of the housing market downturn. From 2014 through 2016, as economic conditions in the HMA worsened, the number of homes permitted declined by an average of 630, or 10 percent, annually, to 4,950 homes.

New home construction in the submarket is concentrated primarily along Interstate 45 that runs north from Houston through Montgomery County. Several fast-growing master-planned communities are in this portion of Montgomery County, including 2 of the 50 fastest-growing communities in the nation (RCLCO). The Woodlands community, along interstate 45 approximately 30 miles north of downtown Houston, sold 174 units through mid-2017, up 45 percent from mid-2016. Beginning in the 1970s as a bedroom community of Houston, The Woodlands is now a secondary employment base in the HMA with more than 21 million square feet of office, research, institutional, and industrial space and is home to multiple corporate campuses. Exxon

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



Notes: Includes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Mobil Corporation has a 385-acre campus that opened in 2015 and is designed to accommodate 10,000 employees, including 1,600 jobs that will move between 2018 and 2020 from XTO Energy Inc., an Exxon subsidiary in Fort Worth. Woodforest master-planned community, 7 miles west of Interstate 45 and 5 miles north of The Woodlands, sold 183 homes through mid-2017 and was the 37th fastest-growing community in the nation during this time. New single-family homes at Woodforest are priced from $190,000 to more than $1 million.

During the next 3 years, demand is estimated for 15,000 new homes, including single-family homes, townhomes, and condominium units. The 1,675 homes currently under construction will meet a portion of the forecast demand. Sales prices for new units start at $130,000, and demand is anticipated to be greatest for units priced between $200,000 and $349,999. Table 8 presents detailed information on the estimated demand for new market-rate sales housing, by price range, in the submarket during the 3-year forecast period.

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

Price Range ($)		Units of Demand	Percent of Total
From	To		
130,000	199,999	1,750	12.0
200,000	249,999	2,750	19.0
250,000	299,999	3,050	21.0
300,000	349,999	2,625	18.0
350,000	399,999	1,450	10.0
400,000	499,999	1,750	12.0
500,000	and higher	1,150	8.0

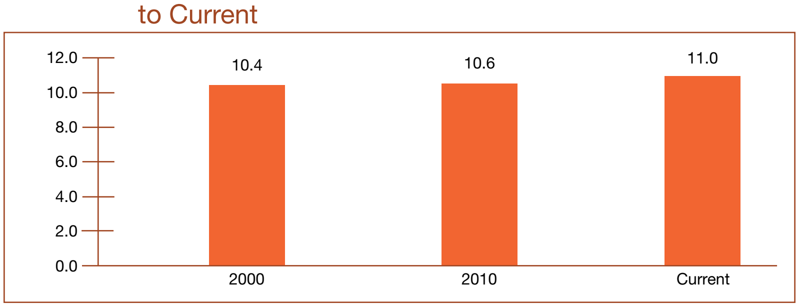
Notes: The 1,675 homes currently under construction in the submarket will likely satisfy some of the forecast demand. Demand for 500 mobile homes during the forecast period is excluded from this table. The forecast period is August 1, 2017, to August 1, 2020.

Source: Estimates by analyst

Rental Market—Northern Submarket

The rental housing market in the Northern submarket is currently soft with an estimated 11.0-percent vacancy rate, up from 10.6 percent in 2010 (Figure 16). Traditional apartments with five or more units are estimated to account for a smaller percentage of all rental units, at 35 percent, than in the other submarkets, in part, because of the more rural nature of the outlying counties included in this submarket. Single-family homes are estimated to account for 40 percent of all rental units, similar to the other two submarkets, with the remaining rental units consisting primarily of duplexes, triplexes, quadplexes, and mobile homes. Montgomery County is the primary county in the submarket and accounts for approximately 75 percent of rental units and nearly 90 percent of apartment units in the submarket. The apartment market is soft in Montgomery County with a July 2017 vacancy rate of 12.1 percent, including units in initial lease-up, down from 17.5 percent a year earlier (ALN Apartment Data). Asking rents declined 4 percent during this time to $1,109, and effective rents declined 4 percent to $1,065. The gap between asking and effective rents in the submarket is currently 4 percent.

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



Note: The current date is August 1, 2017.

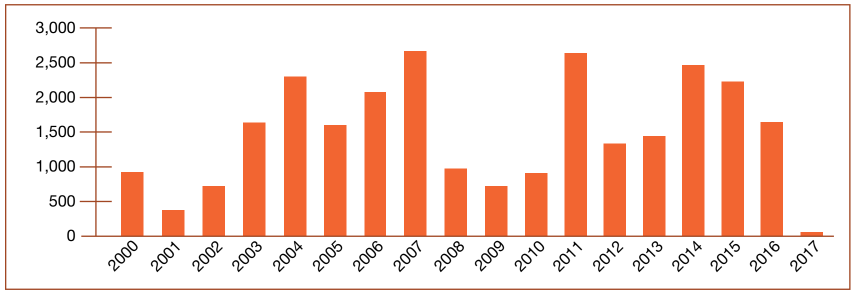
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

The apartment market in the submarket was very soft following the housing market downturn and subsequent period of job losses that occurred in the Houston HMA from 2009 through 2010. The apartment vacancy rate peaked at 15.2 percent in 2009, up from 13.0 percent a year earlier. Asking rents increased less than 1 percent during this time, and in 2009, the gap between asking and effective rents was nearly 7 percent. As a result of increased demand caused by strong job growth and relatively limited building activity, the apartment market steadily improved from 2010 through 2013, when the vacancy rate, including units in initial lease-up, fell to 5.9 percent, the lowest rate among all major counties in the HMA during this time. The apartment market was generally balanced throughout the latter half of this period and asking rents increased an average of more than 8 percent a year in 2012 and 2013 after increasing by an average of less than 1 percent a year in 2010 and 2011.

Building activity in the submarket spiked earlier than in the other submarkets, and since 2014, apartment market conditions have generally softened. The earlier rise in building activity was, in part, in anticipation of Exxon Mobil opening a new 385-acre campus in the submarket that employed more than 3,000 workers during construction, which began in 2011, and was estimated to house more than 10,000 employees on completion in 2015. Despite weakening conditions, the apartment market generally remained balanced in 2014 as the vacancy rate rose to 10.9 percent, but asking rents increased nearly 6 percent from the previous year, and the gap between asking and effective rents fell to barely more than 1 percent. In 2015 and 2016, as the bulk of new units entered the market and employment growth slowed significantly, the vacancy rate spiked to a peak of 17.5 percent in July 2016 and ended 2016 at 14.2 percent. Asking rent growth slowed to 1 percent during these 2 years, and the gap between asking and effective rents increased to more than 4 percent. Soft conditions are, in part, a result of the large number of new units that entered the market at nearly the same time and weakening economic conditions that led to fewer than expected new jobs in the submarket.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to softening apartment market conditions caused by slow employment growth and a large number of new units entering the market. During the 12 months ending July 2017, the number of multifamily units permitted declined by 150 units, or 13 percent, to 1,050 compared with the number permitted during the previous 12 months (preliminary data). Multifamily building activity averaged 2,000 units annually from 2011 through 2015, as builders responded to strong employment and population growth that along with limited production following the housing market downturn led to balanced market conditions (Figure 17). By comparison, from 2003 through 2007, during the previous period of strong economic growth prior to the housing downturn, multifamily production averaged 2,050 a year before declining to an average of 860 annually from 2008 through 2010 in response to soft market conditions.

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



Notes: Excludes townhomes. Current includes data through July 2017.
Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

During the next 3 years demand is estimated for 2,700 additional market-rate rental units in the submarket. Demand for new units is not expected until the third year of the 3-year forecast period in order to allow time for the market to come into balance. The large number of excess vacant units, many of which were completed during the past 3 years and remain in initial lease-up, and the 1,025 units currently under construction should be sufficient to meet all of the demand during the first 2 years of the forecast period. Rents for new units are projected to start at $820 for one-bedroom units, $1,150 for two-bedroom units, and $1,375 for three-bedroom units. Table 9 provides the estimated demand for new market-rate rental housing by number of bedrooms and rent level during the forecast period.

Table 9. Estimated Demand for New Market-Rate Rental Housing in the Northern 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
820 to 1,019	580	1,150 to 1,349	250	1,375 to 1,574	110
1,020 to 1,219	440	1,350 to 1,549	410	1,575 to 1,774	130
1,220 to 1,419	220	1,550 to 1,749	160	1,775 to 1,974	50
1,420 to 1,619	160	1,750 to 1,949	75	1,975 or more	30
1,620 or more	60	1,950 or more	30		
Total	1,450	Total	910	Total	320

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 1,025 units currently under construction will likely satisfy some of the estimated demand. The forecast period is August 1, 2017, to August 1, 2020.
Source: Estimates by analyst

Data Profiles

Table DP-1. Houston HMA Data Profile, 2000 to Current

				Average Annual Change (%)	
	2000	2010	Current	2000 to 2010	2010 to Current
Total resident employment	2,282,357	2,724,782	3,130,000	1.8	2.1
Unemployment rate	4.2%	8.3%	5.4%		
Nonfarm payroll jobs	2,281,400	2,566,100	3,023,000	1.2	2.5
Total population	4,693,161	5,920,416	6,905,000	2.4	2.1
Total households	1,648,148	2,062,529	2,387,000	2.3	2.0
Owner households	1,001,101	1,286,423	1,425,000	2.5	1.4
Percent owner	60.7%	62.4%	59.7%		
Renter households	647,047	776,106	962,000	1.8	3.0
Percent renter	39.3%	37.6%	40.3%		
Total housing units	1,788,107	2,295,018	2,605,000	2.5	1.7
Owner vacancy rate	1.6%	2.2%	1.4%		
Rental vacancy rate	9.1%	13.4%	11.3%		
Median Family Income	NA	NA	$69,300	NA	NA

NA = data not available.

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

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

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

				Average Annual Change (%)	
	2000	2010	Current	2000 to 2010	2010 to Current
Total population	3,400,578	4,092,459	4,667,000	1.9	1.8
Total households	1,205,516	1,435,155	1,630,500	1.8	1.8
Owner households	666,940	814,810	870,900	2.0	0.9
Percent owner	55.3%	56.8%	53.4%		
Renter households	538,576	620,345	759,600	1.4	2.8
Percent renter	44.7%	43.2%	46.6%		
Total housing units	1,298,130	1,598,698	1,775,000	2.1	1.4
Owner vacancy rate	1.5%	2.3%	1.4%		
Rental vacancy rate	8.7%	13.8%	11.0%		

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

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

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

	2000	2010	Current	Average Annual Change (%) 2000 to 2010	Average Annual Change (%) 2010 to Current
Total population	846,377	1,189,850	1,463,000	3.5	2.9
Total households	287,651	402,942	489,700	3.4	2.7
Owner households	213,072	304,170	364,800	3.6	2.5
Percent owner	74.1%	75.5%	74.5%		
Renter households	74,579	98,772	124,900	2.8	3.3
Percent renter	25.9%	24.5%	25.5%		
Total housing units	318,352	447,858	539,000	3.5	2.6
Owner vacancy rate	2.0%	2.2%	1.4%		
Rental vacancy rate	11.1%	12.3%	13.0%		

Notes: Numbers may not add to totals because of rounding. The current date is August 1, 2017.
Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

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

	2000	2010	Current	Average Annual Change (%) 2000 to 2010	Average Annual Change (%) 2010 to Current
Total population	446,206	638,107	775,900	3.6	2.7
Total households	154,981	224,432	267,150	3.8	2.4
Owner households	121,089	167,443	189,700	3.3	1.7
Percent owner	78.1%	74.6%	71.0%		
Renter households	33,892	56,989	77,450	5.3	4.3
Percent renter	21.9%	25.4%	29.0%		
Total housing units	171,625	248,462	291,100	3.8	2.2
Owner vacancy rate	1.8%	1.9%	1.5%		
Rental vacancy rate	10.4%	10.6%	11.0%		

Notes: Numbers may not add to totals because of rounding. The current date is August 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: 8/1/2017—Estimates by the analyst
Forecast period: 8/1/2017–8/1/2020—Estimates by the analyst

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_HoustonTX_17.pdf.

Contact Information

Robert Stephens, Economist
Fort Worth, Texas HUD Regional Office
817–978–9412
robert.p.stephens@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 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.