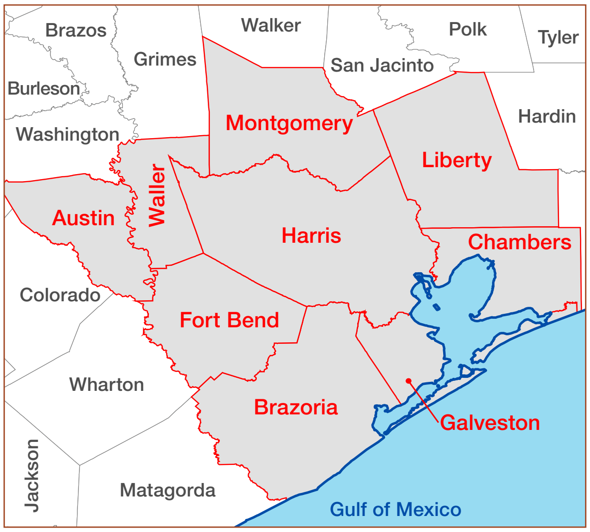
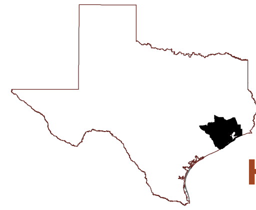
COMPREHENSIVE HOUSING MARKET ANALYSIS

Houston, Texas

U.S. Department of Housing and Urban Development | Office of Policy Development and Research | As of April 1, 2018





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, Galveston, and Fort Bend 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 for several days and rainfall totals exceeded 50 inches in many parts of the HMA. This report reflects economic and housing market conditions after the hurricane and subsequent flooding.

Summary

Economy

Despite accelerating job gains, economic growth in the Houston HMA remains moderate relative to past periods of growth. During the 12 months ending March 2018, nonfarm payrolls increased by 44,300 jobs, or 1.5 percent. By comparison, nonfarm payrolls grew by an average of 85,300 jobs, or 3.1 percent, annually from 2011 through 2015 before declining by 500 jobs, or less than 0.1 percent, in 2016. The recent slowdown in payroll growth 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 2.0 percent annually, as job growth in these sectors expands.

Sales Market

The sales housing market in the HMA is currently balanced with an estimated 1.9-percent vacancy rate. In the HMA, 85,500 homes sold during the 12 months ending March 2018, an increase of 2,525 homes, or 3 percent, from the previous year. The average sales price of a home in the HMA increased by $4,875, or 2 percent, during the same time, to $289,700. Demand is expected for 113,950 new homes during the 3-year forecast period (Table 1). The 10,275 homes currently under construction in the HMA will satisfy some of the forecast demand.

Rental Market

The rental housing market in the HMA is slightly soft with an estimated 9.0-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 rental market to soften significantly; however, market conditions have improved

Market Details

during the past year as building activity has slowed. The excess vacant units, many of which were recently completed and remain in initial lease-up, and the 6,715 units currently under construction should meet demand during the first year and a portion of the second year of the forecast. Demand is estimated for 36,100 new rental units during the next 3 years (Table 1).

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

	Houston, Texas 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	113,950	36,100	53,800	26,600	40,400	4,025	19,750	5,475
Under construction	10,275	6,715	4,250	6,075	4,175	390	1,850	250

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of April 1, 2018. Sales demand includes an estimated demand for 1,400 mobile homes. The forecast period is April 1, 2018, to April 1, 2021.

Source: Estimates by analyst

Economic Conditions

Job growth accelerated in the Houston HMA during the most recent 12 months; however, the rate of growth remains well below earlier in the decade when large job increases among energy-related industries boosted gains. During the 12 months ending April 2018, nonfarm payrolls increased by 44,300 jobs, or 1.5 percent (Table 2), after increasing by 400 jobs, or less than 0.1 percent, during the previous 12 months. Job growth resumed, albeit at a moderate pace, among the goods-producing sectors, and gains continued in most service-providing sectors. The unemployment rate in the HMA also began to fall in response to employment growth that outpaced labor force growth. The rate is currently 4.7 percent, down from 5.4 percent a year earlier, but still slightly above the recent low of 4.6 percent in 2015 (Figure 1).

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

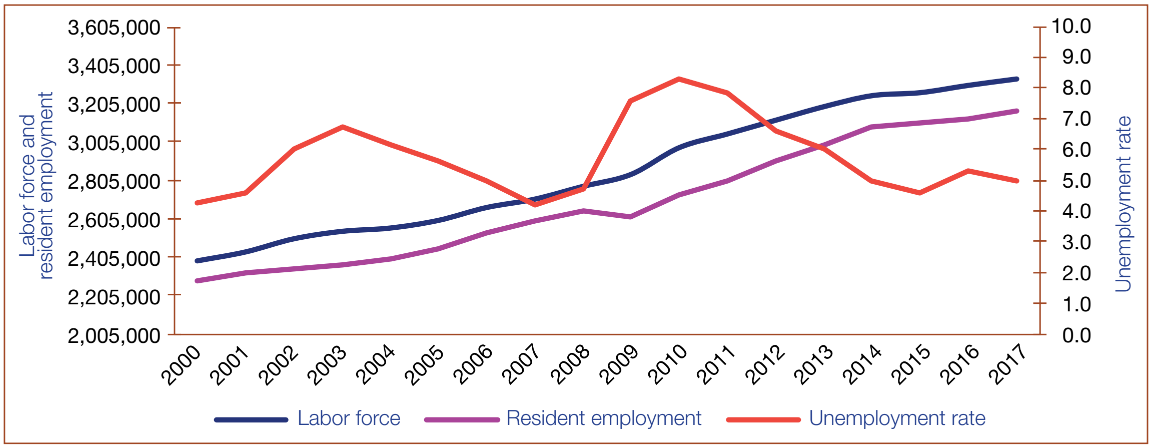
	12 Months Ending		Absolute Change	Percent Change
	March 2017	March 2018		
Total nonfarm payroll jobs	2,993,900	3,038,200	44,300	1.5
Goods-producing sectors	515,800	517,500	1,700	0.3
Mining, logging, and construction	295,900	297,100	1,200	0.4
Manufacturing	219,900	220,400	500	0.2
Service-providing sectors	2,478,100	2,520,700	42,600	1.7
Wholesale and retail trade	471,300	477,900	6,600	1.4
Transportation and utilities	140,600	142,700	2,100	1.5
Information	32,600	31,900	– 700	– 2.1
Financial activities	156,600	160,000	3,400	2.2
Professional and business services	472,800	487,600	14,800	3.1
Education and health services	379,700	384,600	4,900	1.3
Leisure and hospitality	313,100	318,800	5,700	1.8
Other services	108,700	109,700	1,000	0.9
Government	402,800	407,700	4,900	1.2

Notes: Numbers may not add to totals because of rounding. Based on 12-month averages through March 2017 and March 2018.

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 21 Fortune 500 companies and 44 companies on the Fortune 1000 list; the largest, at number 28 on the Fortune 500 list, is Phillips 66 Company, with $91.6 billion in revenue in 2017. Among the Fortune 500 companies in Houston, the majority are involved in the energy industry. Additionally, 9 of the 10 top performing, publicly traded companies in the Houston area based on revenue and annual

Figure 1. Trends in Labor Force, Resident Employment, and Unemployment Rate in the Houston HMA, 2000 Through 2017



Source: U.S. Bureau of Labor Statistics

growth are in the energy industry (*Houston Chronicle*). Of the 10 largest employers in the HMA, only 1 is directly involved in the energy industry; Exxon Mobil Corporation with 14,000 employees (Table 3). However, this number is down from 2013, when the energy industry was booming and 5 of the 10 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.

Table 3. Major Employers in the Houston HMA

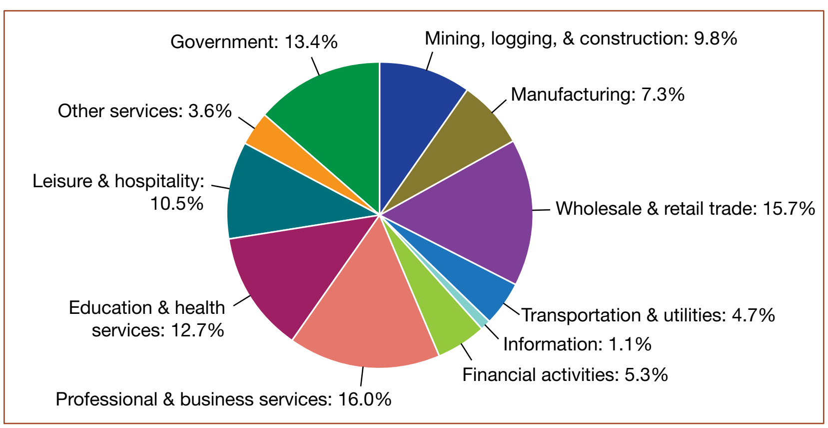
Name of Employer	Nonfarm Payroll Sector	Number of Employees
Walmart Stores, Inc.	Wholesale & retail trade	33,500
Memorial Hermann Health System	Education & health services	26,062
HEB Grocery Company, LP	Wholesale & retail trade	24,437
Houston Methodist	Education & health services	21,195
The Unversity of Texas MD Anderson Cancer Center	Government	20,778
The Kroger Co.	Wholesale & retail trade	16,643
McDonald's Corporation	Leisure & hospitality	16,545
United Airlines	Transportation & utilities	14,200
Exxon Mobil Corporation	Manufacturing	14,000
Texas Children's Hospital	Education & health services	12,545

Note: Excludes local school districts.

Source: Houston Chronicle

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 477,900 jobs, or 15.7 percent of all nonfarm payroll jobs (Figure 2).

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

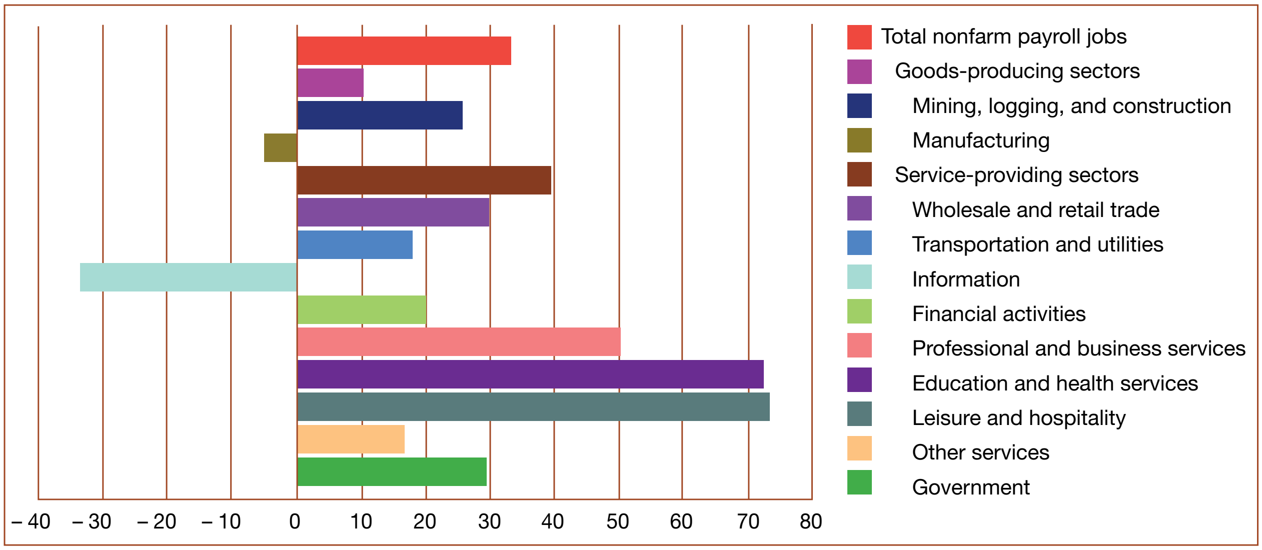


Notes: Based on 12-month averages through March 2018. Numbers may not add to 100 percent due to rounding.

Source: U.S. Bureau of Labor Statistics

Houston is also a major center for health care, 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

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



Note: Current is based on 12-month averages through March 2018.
Source: U.S. Bureau of Labor Statistics

world. The center receives more than 10 million patient visits a year and has more than 100,000 employees. Three of the four largest employers in the HMA are Memorial Hermann Health System, The University of Texas MD Anderson Cancer Center, and Texas Children's Hospital with 26,062, 20,778 and 12,545 employees, respectively. Since 2000, the education and health services sector has been the second fastest growing employment sector in the HMA, increasing 72 percent (Figure 3).

Since 2000, nonfarm payrolls in the HMA have grown by 756,800 jobs, or 33 percent; however, growth has not been steady, and periods of job losses have generally coincided with downturns in the national economy. During 2001, the price of oil dropped nearly 40 percent, from $30 a barrel in February to $19 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 20 percent of flights and laying off more than 2,000 people in the HMA. Furthermore, in November of 2001, Enron Corporation announced 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 respective averages of 12,100, 6,200, and 4,700 jobs, or 5.3, 1.9, and 3.9 percent a year.

From 2004 through 2008, the economy of the HMA expanded by an average of 68,000 jobs, or 2.8 percent, annually. The professional and business services sector, which increased by an average of 16,800 jobs, or 4.8 percent, annually, led job growth during these years, which was broad-based. 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 $32 a barrel in December 2003 to a peak of more than $134 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 the Great 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. After reaching a peak of $134 a barrel in the summer of 2008, the price of crude oil dropped to $39 a barrel by early 2009, 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 85,300 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 in the country to recover all jobs lost during the economic downturn of the late 2000s. The professional and business services; the wholesale and retail trade; the leisure and hospitality; and the mining, logging, and construction sectors added the most jobs from 2011 through 2015, increasing by respective averages of 19,600, 14,000, 12,900, and 12,100 jobs, or 4.7, 3.3, 5.0, and 4.3 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 $107 a barrel in August 2013 and averaged $86 a barrel throughout the period.

In 2016, nonfarm payrolls in the HMA briefly declined, by 500 jobs, or less than 0.1 percent, in part, because of substantially lower crude oil prices that led to weakness among the energy-related industries. The price of crude oil fell to a recent low of $30 a barrel in February 2016 and averaged $43 a barrel in the 12 months of 2016, which is approximately one-half the price averaged from 2011 through 2015. The manufacturing and the mining, logging, and construction sectors shed 23,100 and 16,700 jobs, or 9.4 and 5.3 percent, in 2016, respectively; a decline that was largely offset by continued, albeit reduced, growth among most service-providing industries. In addition to smaller layoffs of several hundred employees each at numerous energy-related companies, The University of Texas MD Anderson Cancer Center announced plans to lay off 800 to 900 workers with another 100 to 200 jobs expected to be reduced through retirement and attrition in response to operating losses of $111 million from September through November 2016.

During the 12 months ending March 2018, nonfarm payroll growth accelerated to 44,300 jobs, or 1.5 percent. Crude oil prices rose to $63 a barrel in March 2018—the highest price since late 2014. In response to increased prices, layoffs among energy-related companies slowed, and payrolls among goods-producing sectors in the HMA stabilized. The manufacturing sector increased by 500 jobs, or 0.3 percent, during the most recent 12 months and declines in the mining and logging subsector slowed to 400 jobs, or 0.6 percent. After shedding 700 jobs during the previous 12 months, the construction subsector grew by 1,600 jobs, or 0.7 percent, in part, because of increased rebuilding activity Hurricane Harvey caused. Approximately one-fourth of all homes in the city of Houston were either destroyed or received some level of damage caused by floodwater, and 1 in 10 households had flooding inside their home. Including both damage to buildings and personal property inside residential buildings, the hurricane and subsequent flooding is estimated to have caused nearly $16 billion in damage. Most of the flooding occurred outside of Federal Emergency Management Agency (FEMA) flood zones. Hurricane Harvey was the second costliest hurricane in American history with $125 billion in damage across parts of Texas and Louisiana—second only to Hurricane Katrina, which had an approximate cost of $161 billion. Nonfarm payrolls in the HMA declined by 5,700 jobs in September 2017 from the previous month, primarily because of businesses temporarily closed by the storm. By comparison, during the previous five Septembers, nonfarm payrolls grew by an average of 8,900 jobs from the previous month. However, by the next month this decline had reversed as employees displaced by Harvey returned to work and, in October 2017, payrolls increased by 33,800 jobs from the previous month—well above the monthly average of 17,900 jobs added during the previous five Octobers. Taken together, job gains in September and October 2017 averaged 14,100—very similar to the 13,400-job increase averaged during the same period in the previous 5 years.

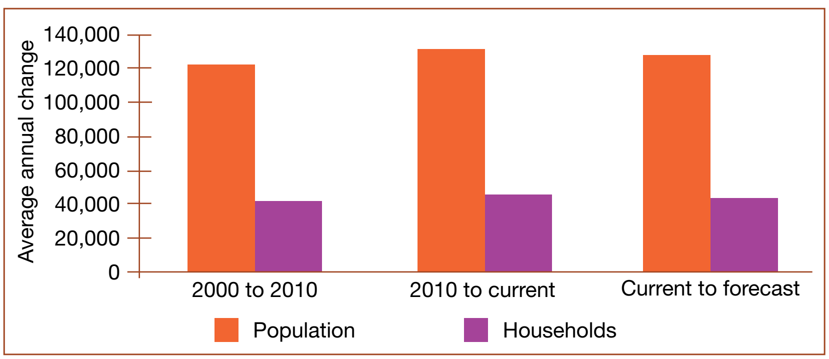
Growth continued among most service-providing industries during the 12 months ending March 2018 with the largest gains in the professional and business services, wholesale and retail trade, and leisure and hospitality sectors, which increased by 14,800, 6,600, and 5,700 jobs, or 3.1, 1.4, and 1.8 percent, respectively. More than one-half of the increase in the professional and business services sector was a result of gains in the employment services industry, which includes temporary workers. As local economic conditions improve, many companies bring on temporary workers either prior to or instead of hiring permanent full-time employees, particularly energy-related companies in the mining, logging, and construction and manufacturing sectors. The leisure and hospitality sector has added the most jobs of any sector in the HMA since 2000 and, along with education and health services, is one of only two sectors to add jobs every year during the period. Virtually all the increase during the most recent 12 months and since 2000 is a result of gains in the food service and drinking places industry. Houston is home to more than 10,000 restaurants and, according to *Zagat's 2018 Dining Trends Survey*, Houstonians dine out an average of 6.9 times per week; more than residents of any other city in the nation and well above the national average of 4.9 times per week.

During the 3-year forecast period, nonfarm payrolls are expected to increase an average of approximately 2.0 percent a year. As the energy industry continues to recover, payrolls in the mining, logging, and construction and the manufacturing sectors are expected to increase, although growth is not anticipated to return to the very high rates recorded during the previous expansion period. The service-providing sectors, particularly professional and business services and 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 7.0 million as of April 1, 2018, an average increase of 131,900, 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 127,300 people, or 1.8 percent, annually, during the next 3 years in response to relatively slower economic growth compared with previous periods.

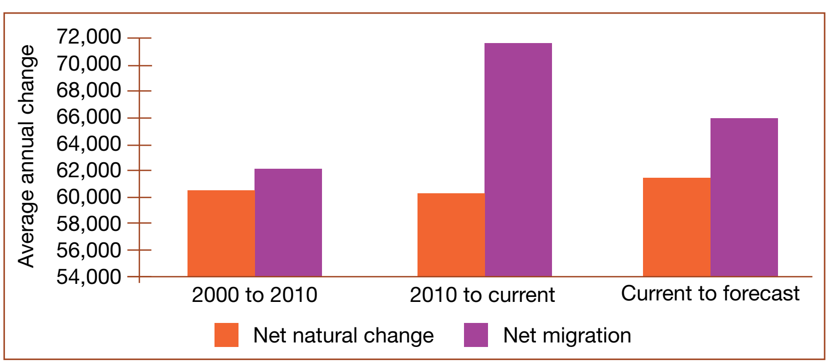
Figure 4. Population and Household Growth in the Houston HMA, 2000 to Forecast



Notes: The current date is April 1, 2018. The forecast date is April 1, 2021.

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



Notes: The current date is April 1, 2018. The forecast date is April 1, 2021.

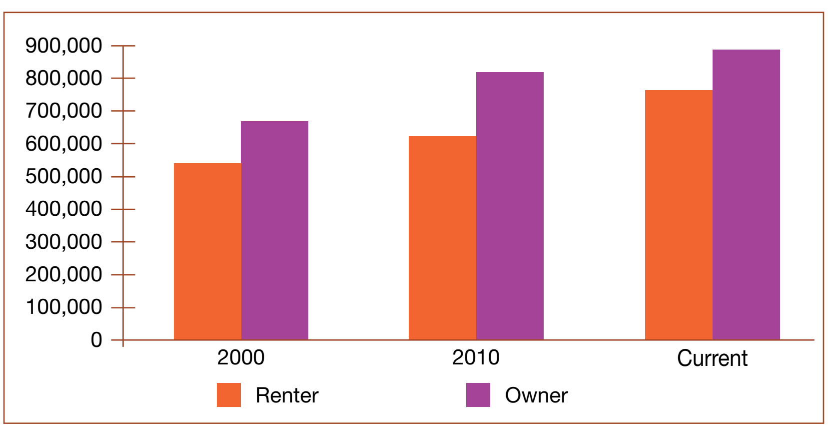
Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by analyst

Net-in migration has accounted for approximately 54 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. 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. Net in-migration averaged 66,150 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, the result of an average annual increase of 45,150 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 43,400, or 1.8 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 67 percent of the total population. Harris County is the third most populous county in the nation with an estimated population of 4.7 million as of April 1, 2018. Population growth in the submarket has averaged 74,950 people, or 1.7 percent, annually since 2010, representing the largest growth but the slowest rate of growth of any of the submarkets in the HMA. Net in-migration averaged 29,400 people annually during this time and accounted for 39 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 53.7 percent, down from 56.8 percent in 2010; approximately 76 percent of all rental housing permitted in the HMA since 2010 has been in this submarket. 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 1.4 percent annually during the next 3 years, as job growth remains modest.

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



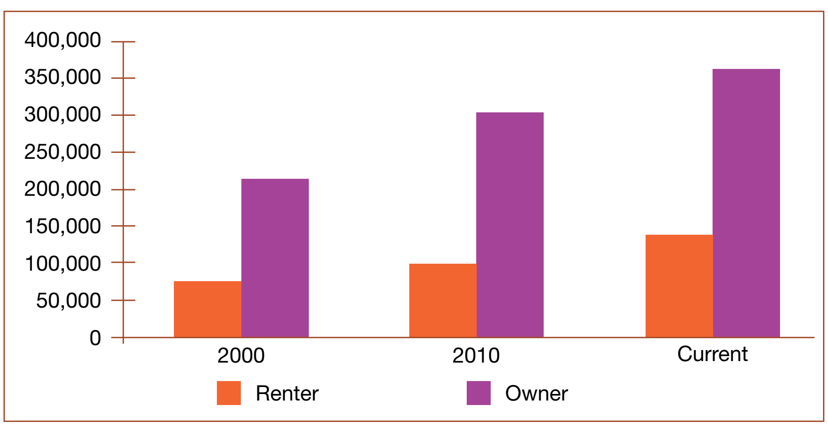
Note: The current date is April 1, 2018.

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

The Southern submarket consists of the coastal counties of Brazoria and Galveston, south and southeast of Harris County, respectively, 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 37,650 people, or 2.9 percent, annually, to 1.6 million people. Net in-migration averaged 27,300 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 the 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 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 72.5 percent, down 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 2.6 percent during the next 3 years.

Montgomery County, to the north of Harris County, is the primary county in the Northern submarket, accounting for approximately 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 793,400, an average increase of 19,400, or 2.8 percent, annually since 2010. Net in-migration averaged 14,350 people during this time and accounted for 77 percent of the population growth. By comparison, population growth slowed 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

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



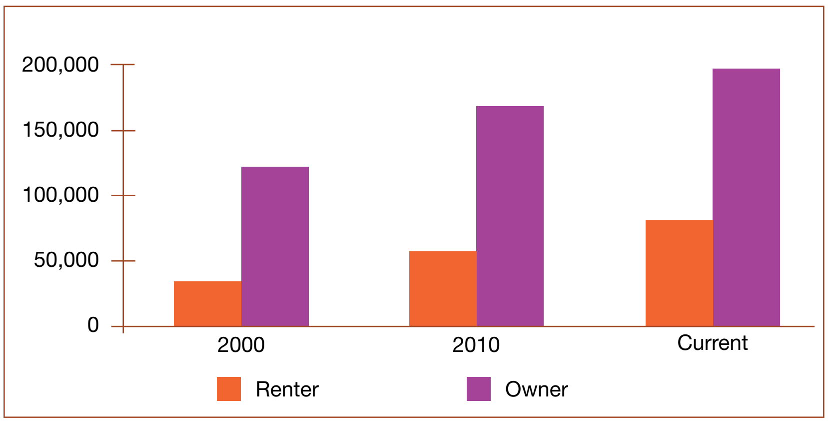
Note: The current date is April 1, 2018.

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

Because of the damage caused by Hurricane Harvey and the subsequent flooding, a large number of individuals throughout Texas were forced to evacuate their homes and move to temporary shelters. At the peak on August 31, 2017, 34,575 evacuees were in shelters across Texas. However, within a month, by September 22, 2017, only 1,464 evacuees were housed in 13 shelters within the HMA. Excluding the HMA, 647 evacuees were in eight shelters elsewhere in the state.

Approximately 208,500 households in the city of Houston sustained some form of damage to their home or personal property because of the storm, including 112,600 owner households and 95,900 renter households. Approximately one-half of the affected households in the city earned less than 80 percent of the Area Median Income (AMI). In the broader HMA, 632,388 individuals or households had submitted valid registrations for FEMA's Individual and Households Program (IHP), and 249,259 registrations were approved for $1.0 billion in assistance as of December 5, 2017. Approximately 71 percent of valid registrations were in the Central submarket—which includes the city of Houston, 23 percent were in the Southern submarket—which contains counties on or near the coast, and 6 percent were in the Northern submarket—which received the least damage from Hurricane Harvey.

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



Note: The current date is April 1, 2018.

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

Housing Market Trends

Sales Market—Central Submarket

The sales housing market in the Central submarket is currently balanced with an estimated 1.9-percent vacancy rate, down from 2.3 percent in 2010. During the 12 months ending March 2018, a 3.4-months inventory of unsold homes was on the market, unchanged from a year earlier (Real Estate Center at Texas A&M University). The sales market was soft in 2010 because of the housing market downturn and the 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 has slowed significantly. During the 12 months ending March 2018, 49,250 homes sold, an increase of

40 homes, or less than 1 percent, from the previous year. During the previous 12 months ending March 2017, homes sales increased by 1,575, or 3 percent, from the previous year. The recent slowdown was caused, in part, by slower job growth and reduced net in-migration to the submarket. By comparison, from 2012 through 2015, when job growth and net in-migration were stronger, home sales increased an average of 8 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 of 2012 through 2015. During the 12 months ending March 2018, the average sales price increased by $7,150, or 3 percent, to $293,200. 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 March 2017, the average sales price increased by $8,225, or 3 percent, from the previous year. Despite continued increases, slower job growth has dampened price gains. By comparison, from 2012 through 2015, when jobs were growing at a faster rate, prices rose by an average of $17,350, or 8 percent, annually.

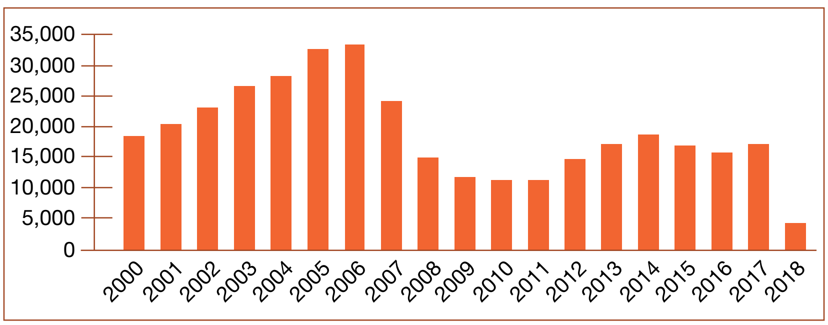
In response to continued, although much reduced since 2015, economic growth, seriously delinquent home loans (loans that are 90 or more days delinquent or in foreclosure) and real estate owned (REO) properties have become less significant than they were during the housing crisis and economic downturn in 2009 and 2010. As of April 2018, 4.6 percent of mortgages in the submarket were seriously delinquent or in REO status, up from 2.4 percent in April 2017 (CoreLogic, Inc.). Although rates in the submarket increased during the past year and remain the highest in the HMA, they are still below the peak of 6.9 percent in January 2010. The rate increase during the past year was almost entirely the result of a spike in the number of home loans that were seriously delinquent because of Hurricane Harvey. In August 2017, prior to Hurricane Harvey, approximately 11,000 loans were seriously delinquent. The number of seriously delinquent loans peaked in December 2017, at 26,600, an average monthly increase of 3,900 loans, or nearly 35 percent. The rate of seriously delinquent loans and REO properties also peaked in December 2017 at 5.8 percent. Since December 2017, the number of seriously delinquent loans has fallen each month, by an average of 1,425 loans, or 5 percent, a month, to 20,900.

Building activity, as measured by the number of single-family homes permitted, increased during the past year after declining from 2014 through 2016. A portion of this increase is likely attributable to rebuilding activity following Hurricane Harvey. It is estimated that approximately 97,200 single-family homes were damaged or destroyed in the HMA. Of these homes, approximately 66 percent were in the Central submarket. Among all housing units in the HMA (including single-family homes, mobile homes, and multifamily units), it is estimated that approximately 0.2 percent, or 3,625, were destroyed and 1.6 percent, or 37,750, received major damage. During the 12 months ending March 2018, the number of single-family homes permitted increased by 1,100 homes, or 7 percent, to 17,050 compared with the number issued during the previous 12 months (preliminary data and estimates by the analyst). 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 (Figure 9), as builders responded to strong employment and population growth that, along with easing access to credit, boosted demand for new homes. By comparison, single-family building activity was well below the average of 30,000 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 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. The Bridgeland master-planned community (MPC), an 11,400-acre community in an unincorporated portion of northwestern Harris County, was the 29th fastest growing community in the nation in 2017 (Robert Charles Lesser & Co. [RCLCO]). The community had 423 sales in 2017, up 27 percent from 2016. New homes start at approximately $275,000 and reach nearly $1 million. Additionally, several townhome and condominium properties are currently under construction in the Downtown Houston area. Among these is Fulton Station, a transit-oriented development that will have 39 townhomes starting at $349,000 currently under construction near the METRO Rail Red Line. Also, The River Oaks, a redevelopment of a 1960s apartment complex into a luxury condo building with 79 homes is under way with prices ranging from $1.8 million to $7.5 million.

During the next 3 years, demand is estimated for 53,800 new homes, including single-family homes, townhomes, condominium units, and mobile homes. The 4,250 homes currently under construction will meet a portion of the demand during the first year of the forecast period. 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 March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates

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	13,300	25.0
200,000	249,999	11,150	21.0
250,000	299,999	7,450	14.0
300,000	349,999	5,850	11.0
350,000	399,999	4,250	8.0
400,000	499,999	5,850	11.0
500,000	and higher	5,325	10.0

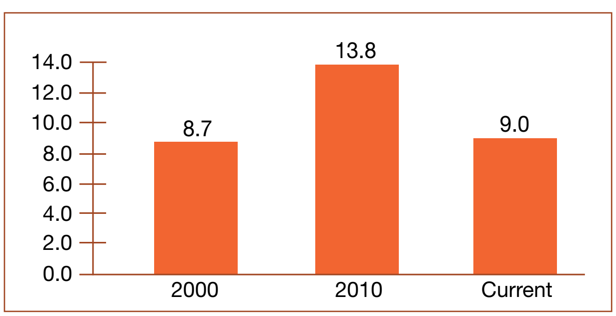
Notes: Numbers may not add to totals because of rounding. The 4,250 homes currently under construction in the submarket will likely satisfy some of the forecast demand. Demand for 600 mobile homes during the forecast period is excluded from this table.

Source: Estimates by analyst

Rental Market—Central Submarket

The rental housing market in the Central submarket is currently slightly soft with an estimated 9.0-percent vacancy rate, down from 13.8 percent in 2010 (Figure 10). On August 1, 2017, prior to Hurricane Harvey, the renter vacancy rate was estimated to be 11.0 percent. 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 slightly soft in the submarket with a current vacancy rate of 10.0 percent, including units in initial lease-up, down slightly from 11.0 percent a year earlier (ALN Apartment Data and estimates by the analyst). Weakness in the market is primarily a result of many recently completed apartment units that remain in initial lease-up. Excluding these units, the apartment vacancy rate is currently 9.0 percent. Market rents increased nearly 5 percent during the past year to $1,075, and effective rents, which include concessions, increased 6 percent to $1,050. The gap, or difference, between market and effective rents in the submarket is currently at approximately 2 percent. A relatively narrow gap between market and effective rents, such as during the current period, is often an indicator of improving market conditions.

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



Note: The current date is April 1, 2018.

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

The relatively large number of recently completed and excess vacant units available in the market prior to Hurricane Harvey lessened the immediate effect of the hurricane on the rental housing market because displaced renters were able to move into vacant units elsewhere in the submarket or the HMA rather than relocating outside the HMA. Within the HMA, approximately 15,650 apartment units in 215 properties, or 2.4 percent of the apartment inventory, suffered some form of water damage (Apartment Data Services), although it is likely that many of these units were able to be repaired and brought back online relatively quickly. Approximately 590 multifamily units were estimated to be destroyed by the hurricane (Texas Department of Public Safety). As of August 1, 2017, prior to Hurricane Harvey, it was estimated that approximately 33,800 vacant rental units were in the HMA, including recently completed apartment units still in initial lease-up, above the amount required for a balanced rental market. Of these units, 25,000, or nearly 75 percent, were in the Central submarket.

The apartment market in the submarket was very soft following the housing market downturn and period of job losses 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. Market rents increased less than

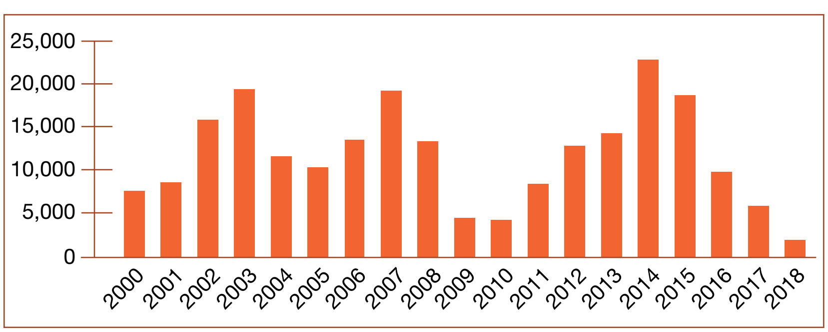
2 percent during this time, and in 2009, the gap between market and effective rents was nearly 6 percent. Because of increased demand caused by strong job growth and relatively limited building activity, the apartment market steadily improved from 2010 through 2014, when the vacancy rate, including units in initial lease-up, fell to 8.1 percent. The apartment market was generally balanced throughout the latter part of this period, and market 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.

Apartment market conditions softened in 2015 and 2016 because 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 market rents increased nearly 5 percent from the previous year, and the gap between market 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, market rent growth slowed to 2 percent, and the gap between market and effective rents increased to more than 3 percent. Since 2017, market conditions have generally improved, in part, because employment growth has resumed, and the number of completions has moderated.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to soft, but improving, apartment market conditions caused by slow employment growth and many new units entering the market. During the 12 months ending March 2018, the number of multifamily units permitted declined by 2,875, or 32 percent, to 6,075 compared with the number permitted during the previous 12 months (preliminary data and estimates by the analyst). Multifamily building activity averaged 18,400 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 14,850 a year before declining to an average of 8,525 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 was primarily in the Central Submarket. From 2000 through 2007, an average of 1,225 condominium units was permitted annually in the submarket, accounting for approximately 9 percent of multifamily units. As the housing downturn began, condominium activity declined

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



Notes: Excludes townhomes. Current includes data through March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates 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 420 condominium units has 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 26,600 additional market-rate rental units in the submarket. Additional units are not needed until the second year of the 3-year forecast period to allow time for the market to come into balance. The excess vacant units, many of which were completed during the past 2 years and remain in initial lease-up, and the 6,075 units currently under construction should be sufficient to meet all of the demand during the first year and a portion of the demand during the second year 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.

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 Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand
960 to 1,159	280	860 to 1,059	4,550	1,125 to 1,324	1,750	1,450 to 1,649	470
1,160 to 1,359	480	1,060 to 1,259	3,800	1,325 to 1,524	2,900	1,650 to 1,849	560
1,360 or more	40	1,260 to 1,459	3,325	1,525 to 1,724	2,275	1,850 to 2,049	370
		1,460 to 1,659	2,275	1,725 to 1,924	1,150	2,050 to 2,249	280
		1,660 to 1,859	760	1,925 to 2,124	440	2,250 to 2,449	130
		1,860 or more	460	2,125 or more	260	2,450 or more	55
Total	800	Total	15,150	Total	8,775	Total	1,875

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 6,075 units currently under construction will likely satisfy some of the estimated demand.

Source: Estimates by analyst

Sales Market—Southern Submarket

The sales housing market in the Southern submarket is currently balanced with an estimated 1.8-percent vacancy rate, down from 2.2 percent in 2010. The sales market was soft in 2010 because 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 March 2018, the inventory of unsold homes on the market ranged from 2.9 months in Brazoria County, the lowest level among all major counties in the HMA, to 4.0 months each in Fort Bend and Galveston counties, up from 2.7, 3.7, and 3.9 months a year earlier, respectively (Real Estate Center at Texas A&M University).

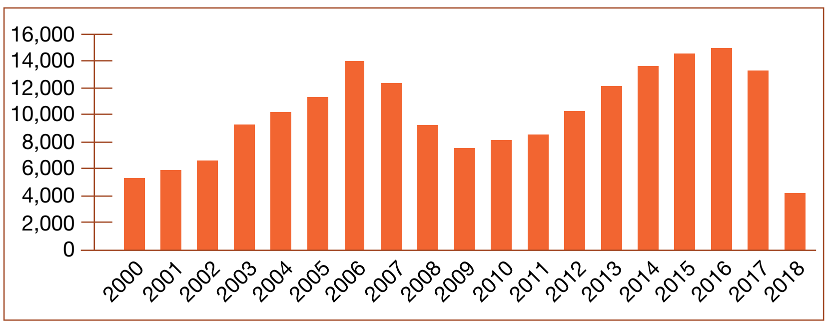
New and existing home sales in the submarket, including single-family homes, townhomes, and condominiums, increased during the past year, but the rate of growth remains below the peak years when job growth was stronger. During the 12 months ending March 2018, 22,550 homes sold, an increase of 1,250 homes, or 6 percent, from the previous year. During the previous 12 months ending March 2017, homes sales increased by 860, or 4 percent, from the previous year. By comparison, from 2012 through 2015 when job growth and net in-migration were stronger, home sales increased an average of 11 percent annually. The recent slowdown was caused, in part, by reduced demand stemming from slowing job growth and net in-migration to the submarket.

The average sales price for new and existing homes, including single-family homes, townhomes, and condominiums, rose slightly during the past year; however, the rate of growth remains below the peak years of 2012 through 2015. During the 12 months ending March 2018, the average sales price increased by $1,525, or 1 percent, to $281,800. During the previous 12 months, the average sales price increased by $3,275, or 1 percent. Slower job growth has dampened recent price gains. By comparison, from 2012 through 2015 when economic conditions were more favorable, prices rose by an average of $15,950, or 7 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 $239,500 and $259,600, respectively, during the 12 months ending March 2018. Fort Bend County had the highest home sales price in the HMA during the same time, averaging $311,500.

In response to continued, but much slower, economic growth since 2015, seriously delinquent home loans and REO properties have become a less significant part of the sales market than they were during the housing crisis and economic downturn in 2009 and 2010. As of April 1, 2018, the percentage of mortgages in the submarket that were seriously delinquent or in REO status were 4.1, 4.2, and 4.4 percent in Fort Bend, Galveston, and Brazoria Counties, up from 2.0, 1.9, and 2.0 percent, respectively, a year earlier. 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.). Like the Central Submarket, rates in August 2017, prior to Hurricane Harvey, were low at between 1.8 and 2.0 percent in all three counties. However, because of flood damage, the number of loans that were 90 or more days delinquent increased through December 2017, and the rates peaked at 5.0, 5.3, and 5.5 percent in Fort Bend, Galveston, and Brazoria County, respectively. Galveston County, along the Texas Gulf Coast, was one of the more heavily flooded counties in the HMA and had the largest rate of increase in the number of seriously delinquent loans among the five most populous counties in the HMA. The number of loans that were 90 or more days delinquent increased from 840 in August 2017 to 2,450 in December 2017, an average monthly increase of 400 loans, or nearly 50 percent.

Building activity, as measured by the number of single-family homes permitted, fell slightly in the submarket during the past year but remains elevated. During the 12 months ending March 2018, the number of single-family homes permitted declined by 250 homes, or 2 percent, to 14,250 compared with the number permitted during the previous 12 months (preliminary data and estimates by the analyst). 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.

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



Notes: Includes townhomes. Current includes data through March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates

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	4,400	11.0
200,000	249,999	6,425	16.0
250,000	299,999	7,225	18.0
300,000	349,999	6,825	17.0
350,000	399,999	4,400	11.0
400,000	499,999	6,025	15.0
500,000	and higher	4,825	12.0

Notes: Numbers may not add to totals because of rounding. The 4,175 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.

Source: Estimates by analyst

New home construction in the submarket is concentrated primarily near the border of Harris County. There are several fast-growing MPCs throughout Fort Bend and Galveston counties, including 5 of the 50 fastest growing communities in the nation (RCLCO). Sienna Plantation in Missouri City in eastern Fort Bend County is among these communities. It is the 35th fastest growing community in the nation and had 372 sales in 2017, up 4 percent from 2016. New homes start at approximately $285,000 and reach more than $1 million. The other four ranked communities in the submarket had a combined 1,575 sales in 2017.

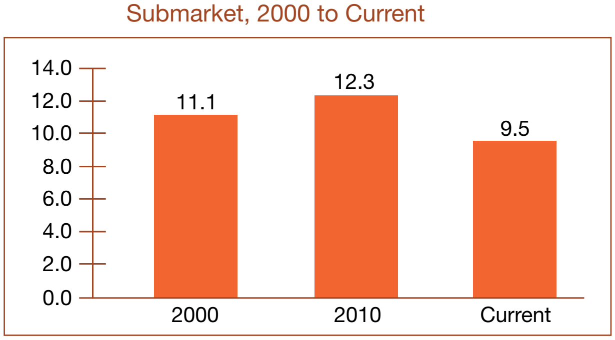
During the next 3 years, demand is estimated for 40,400 new homes, including single-family homes, townhomes, condominium units, and mobile homes. The 4,175 homes currently under construction will meet a portion of the demand during the first year of the forecast period. Sales prices for new units start 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.

Rental Market—Southern Submarket

The rental housing market in the Southern submarket is currently slightly soft with an estimated 9.5-percent vacancy rate, down from 12.3 percent in 2010 (Figure 13). On August 1, 2017, prior to Hurricane Harvey, the renter vacancy rate was estimated to be 13.0 percent. Like the Central submarket, traditional apartments with five or more units are estimated to account for 45 percent of all rental units in the submarket, 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 slightly soft in the Southern submarket. Vacancy rates, including units in initial lease-up, are currently 7.0 percent in Galveston County, 9.0 percent in Fort Bend County, and 12.5 percent in Brazoria County (ALN Apartment Data and estimates by the analyst). Vacancy rates declined approximately 1.5 percentage points from the previous year in Galveston, and Fort Bend Counties and 1.0 percentage point in Brazoria County. The higher vacancy rate in Brazoria County is, in part, the result of many units permitted since 2016 that remain in initial lease-up. Excluding these units, the vacancy rate in the county is lower at approximately 9.0 percent. During the past year, average rents in Galveston County, which had the lowest vacancy rate in the submarket, increased 9 percent to $1,100. Effective rents also increased 9 percent to approximately $1,100, indicating that concessions in the county are minimal at this time. Average rents in Fort Bend and Brazoria Counties each increased 4 percent during the past year to $1,250 and $1,125, respectively. The gaps between market and effective rents in these counties were 1 and 2 percent, respectively. Similar to the Central submarket, the estimated 6,300 excess vacant units as of August 1, 2017 were able to absorb many of the displaced renter households caused by Hurricane Harvey.

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



Note: The current date is April 1, 2018.

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 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. Market rents increased 2 and 1 percent, respectively from the previous year and, in 2009, the gaps between market 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, 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, nearly 560 units were permitted in the county in 2009 and 2010—the most units built during any 2-year period in the county in nearly a decade. In 2010, the vacancy rate in Galveston County rose to 14.8 percent, while market rents declined 2 percent from the previous year, and the gap between market and effective rents increased to 4 percent.

Because 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 market rents in Brazoria, Fort Bend, and Galveston Counties increased at averages of 7, 6, and 2 percent a year, respectively, in 2012 and 2013. By comparison, market rents increased at averages of 2 and 1 percent a year, respectively, in Brazoria and Fort Bend Counties in 2010 and 2011. Market rents declined an average of 1 percent a year in Galveston County during the same time.

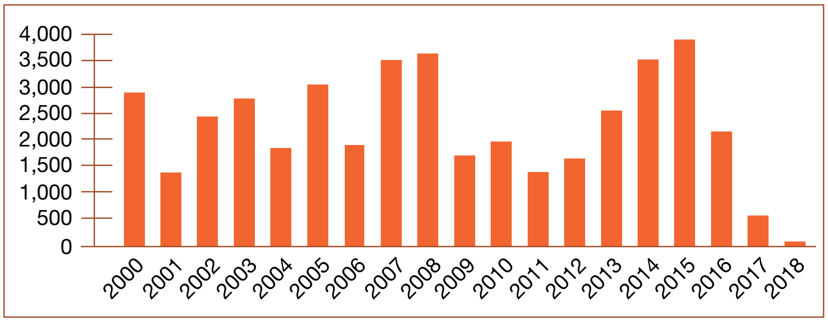
In 2014 and 2015, apartment market conditions began to soften in much of the submarket because of weakening economic conditions and a sharp increase in building activity. Despite weakening conditions, the apartment market generally remained balanced in 2014 and 2015 as the vacancy rate rose to 11.8 percent in Brazoria County and 12.0 percent in Fort Bend County, but market rents increased 7 percent each from the previous year and the gap between market 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, market rents increased an average of 8 percent a year, and the gap between market 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 market rent growth slowed to 3 percent because of many 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 market 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 market rents slowed to 2 percent. Since 2017, market conditions in all three counties have generally improved in large part because of a reduced number of completions and improved economic conditions.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to relatively soft apartment market conditions caused by slow employment growth and many new units entering the market. During the 12 months ending March 2018, the number of multifamily units permitted declined to 530 from 1,700 during the previous 12 months (preliminary data and estimates by the analyst). Multifamily building activity averaged 3,325 units annually from 2013 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 14). By comparison, from 2005 through 2008, during the previous period of strong economic growth prior to the housing downturn, multifamily production averaged 3,000 units a year before declining to an average of 1,650 units annually from 2009 through 2012 in response to soft market conditions.

During the next 3 years, demand is estimated for 4,025 additional market-rate rental units in the submarket. Additional units are not needed until the second year of the 3-year forecast period, to allow time for the market to come into balance. The excess vacant units, many of which were completed during the past 3 years and remain in initial lease-up, and the 390 units currently under construction should be sufficient to meet all of the demand during the first year and a portion of the demand during the second 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 March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates

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 Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand
840 to 1,039	1,150	1,075 to 1,274	920	1,450 to 1,649	160
1,040 to 1,239	520	1,275 to 1,474	350	1,650 to 1,849	120
1,240 to 1,439	270	1,475 to 1,674	150	1,850 to 2,049	80
1,440 to 1,639	100	1,675 to 1,874	60	2,050 to 2,249	25
1,640 to 1,839	20	1,875 to 2,074	30	2,250 to 2,449	10
1,840 or more	20	2,075 or more	15	2,450 or more	10
Total	2,100	Total	1,525	Total	400

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 390 units currently under construction will likely satisfy some of the estimated demand.

Source: Estimates by analyst

Sales Market—Northern Submarket

The sales housing market in the Northern submarket is currently balanced with an estimated 1.8-percent vacancy rate, down from 1.9 percent in 2010. Montgomery County is the primary county in the submarket, containing approximately 75 percent of the population and single-family homes in the submarket. The sales market in the Northern submarket was slightly soft in 2010 because of the housing market downturn and corresponding period of job losses in the Houston HMA in 2009 and 2010. However, the market has improved since that time in response to strong economic growth from 2011 through

2015. During the 12 months ending March 2018, a 4.5-month inventory of unsold homes was on the market in Montgomery County, down slightly from 4.7 months a year earlier (Real Estate Center at Texas A&M University). Despite having the highest number of months of unsold inventory of all major counties in the HMA, the number remains low compared to historical levels, and Montgomery County was the only county in the HMA in which the number declined during the past 12 months.

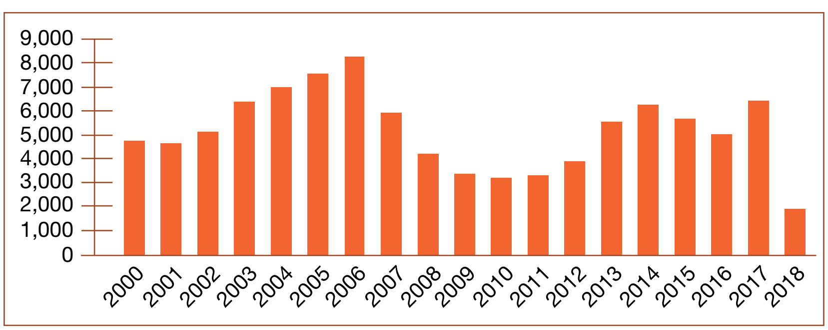
New and existing home sales in the submarket, including single-family homes, townhomes, and condominiums, increased during the past year, but the rate of growth remains below the peak years when job growth was stronger. During the 12 months ending March 2018, 10,600 homes sold in Montgomery County, an increase of 980 homes, or 10 percent, from the previous year. During the 12 months ending March 2017, home sales increased by 280 homes, or 3 percent, from the previous year. By comparison, from 2012 through 2015 when job growth and net in-migration were stronger, home sales increased an average of 13 percent annually. The recent slowdown was caused, in part, by reduced demand stemming from slowing job growth and net in-migration to the submarket.

The average sales price for new and existing homes, including single-family homes, townhomes, and condominiums, rose slightly during the past year, but price increases are well below the peak years of 2012 through 2015. During the 12 months ending March 2018, the average sales price in Montgomery County increased by $180, or less than 1 percent, to $299,500. 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 near the city of Houston. During the previous 12 months ending March 2017, the average sales price declined by $2,675, or 1 percent, as slower job growth temporarily stalled price gains. By comparison, from 2012 through 2015, when economic conditions were more favorable, prices rose by an average of $13,650, 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 in 2009 and 2010. As of April 1, 2018, 2.9 percent of mortgages in Montgomery County were seriously delinquent or in REO status, up from 1.7 percent a year earlier. Despite the increase during the past year, Montgomery County currently has the lowest rate among the five largest counties 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.). Like the other submarkets, the rate of seriously delinquent loans and REO properties increased during the past year as a result of increased delinquencies caused by Hurricane Harvey. The rate of seriously delinquent home loans and REO properties rose to 3.5 percent in December 2017 and has fallen in subsequent months. In general, the Northern Submarket had less flood damage than other parts of the HMA and, as such, increases in delinquencies were less pronounced.

Building activity, as measured by the number of single-family homes permitted, increased significantly during the past year after declining from 2014 through 2016. During the 12 months ending March 2018, the number of single-family homes permitted increased by 1,725 homes, or 33 percent, to 6,875 compared with the number issued during the previous 12 months (preliminary data and estimates by the analyst). 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 previous high of 6,225 homes permitted in 2014 (Figure 15), as builders responded to strong employment and population growth that, along with easing access to credit, boosted demand for new homes. By comparison, single-family building activity was and is currently 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.

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



Notes: Includes townhomes. Current includes data through March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates

New home construction in the submarket is concentrated primarily along Interstate 45 that runs north from Houston through Montgomery County. Several fast-growing MPCs 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 340 units in 2017, up 37 percent from 2016, and was the 41st fastest growing community in the nation during this time. 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 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 MPC, 7 miles west of Interstate 45 and 5 miles north of The Woodlands, sold 337 homes in 2017 and was the 43rd fastest growing community in the nation during this time despite selling 8 percent fewer homes than in 2016. New single-family homes at Woodforest are priced from $200,000 to more than $1 million.

During the next 3 years, demand is estimated for 19,750 new homes, including single-family homes, townhomes, and condominium units. The 1,850 homes currently under construction will meet a portion of the demand during the first year of the forecast period. 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	2,300	12.0
200,000	249,999	3,650	19.0
250,000	299,999	4,050	21.0
300,000	349,999	3,475	18.0
350,000	399,999	1,925	10.0
400,000	499,999	2,300	12.0
500,000	and higher	1,550	8.0

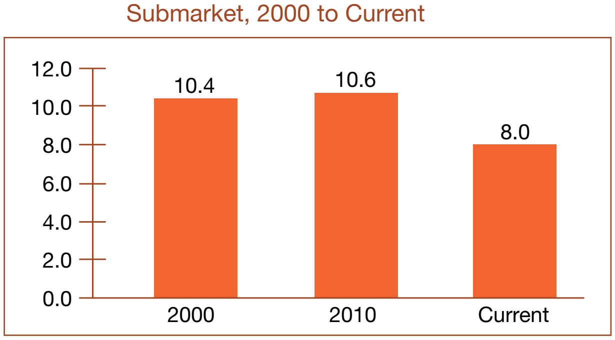
Notes: Numbers may not add to totals because of rounding. The 1,850 homes currently under construction in the submarket will likely satisfy some of the forecast demand. Demand for 500 mobile homes during the forecast period is excluded from this table.

Source: Estimates by analyst

Rental Market—Northern Submarket

The rental housing market in the Northern submarket is currently balanced with an estimated 8.0-percent vacancy rate, down from 10.6 percent in 2010 (Figure 16). On August 1, 2017, prior to Hurricane Harvey, the renter vacancy rate was estimated to be 11.0 percent. 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, like 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 slightly soft in Montgomery County with a current vacancy rate of 8.5 percent, including units in initial lease-up, down from 12.0 percent a year earlier (ALN Apartment Data and estimates by the analyst). Excluding units in lease-up, the vacancy rate is lower at 6.7 percent. Market rents increased 5 percent during the past year to $1,175, and effective rents increased 7 percent to $1,150. The gap between market and effective rents in the submarket is currently 2 percent. The Northern submarket had the fewest estimated excess vacant units available for occupancy as of August 1, 2017, at 2,500; however, the submarket also received the least damage from the hurricane and subsequent flooding.

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



Note: The current date is April 1, 2018.

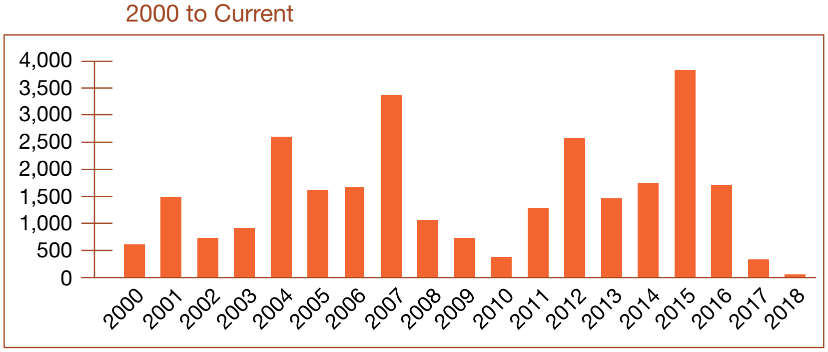
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

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 in Montgomery County peaked at 15.2 percent in 2009, up from 13.0 percent a year earlier. Market rents increased less than 1 percent during this time, and in 2009, the gap between market and effective rents was nearly 7 percent. Because 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 market 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.

Multifamily building activity in the submarket spiked during the housing boom earlier than in the other submarkets, and from 2014 through 2016, apartment market conditions 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 market rents increased nearly 6 percent from the previous year, and the gap between market 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. Market rent growth slowed to 1 percent during these 2 years, and the gap between market and effective rents increased to more than 4 percent. Since 2017, apartment market conditions have improved in the county, largely because employment growth has resumed and building activity has declined substantively.

Building activity, as measured by the number of multifamily units permitted, declined significantly during the past year as builders responded to previously soft apartment market conditions caused by slow employment growth and many new units entering the market. During the 12 months ending March 2018, the number of multifamily units permitted declined 1,200 units, or 80 percent, to 290 compared with the number permitted during the previous 12 months (preliminary data and estimates by the analyst). Multifamily building activity averaged 2,150 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,

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



Notes: Excludes townhomes. Current includes data through March 2018.

Sources: U.S. Census Bureau, Building Permits Survey; 2000–2016 final data and analyst estimates; 2017–2018 preliminary data and analyst estimates from 2003 through 2007, during the previous period of strong economic growth prior to the housing downturn, multifamily production averaged 2,000 a year before declining to an average of 700 annually from 2008 through 2010 in response to soft market conditions.

During the next 3 years demand is estimated for 5,475 additional market-rate rental units in the submarket. The 250 units currently under construction will meet a portion of the demand during the first year 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 Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand	Monthly Rent ($)	Units of Demand
820 to 1,019	1,175	1,150 to 1,349	500	1,375 to 1,574	230
1,020 to 1,219	890	1,350 to 1,549	840	1,575 to 1,774	260
1,220 to 1,419	440	1,550 to 1,749	320	1,775 to 1,974	100
1,420 to 1,619	320	1,750 to 1,949	150	1,975 to 2,174	35
1,620 to 1,819	90	1,950 to 2,149	35	2,175 to 2,374	20
1,820 or more	30	2,150 or more	20	2,375 or more	15
Total	2,950	Total	1,850	Total	660

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 250 units currently under construction will likely satisfy some of the estimated demand.

Source: Estimates by analyst

Data Profiles

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

	2000	2010	Current	Average Annual Change (%) 2000 to 2010	Average Annual Change (%) 2010 to Current
Total resident employment	2,282,357	2,724,782	3,183,000	1.8	2.2
Unemployment rate	4.2%	8.3%	4.7%		
Total nonfarm payroll jobs	2,281,400	2,566,100	3,038,000	1.2	2.4
Total population	4,693,161	5,920,416	6,976,000	2.4	2.1
Total households	1,648,148	2,062,529	2,423,800	2.3	2.0
Owner households	1,001,101	1,286,423	1,444,000	2.5	1.5
Percent owner	60.7%	62.4%	59.6%		
Renter households	647,047	776,106	979,800	1.8	3.0
Percent renter	39.3%	37.6%	40.4%		
Total housing units	1,788,107	2,295,018	2,628,000	2.5	1.7
Sales vacancy rate	1.6%	2.2%	1.9%		
Rental vacancy rate	9.1%	13.4%	9.0%		
Median Family Income	NA	NA	$69,200	NA	NA

NA = data not available

Notes: Median Family Incomes are for 1999, 2009, and 2016. Employment data represent annual averages for 2000, 2010, and the 12 months through March 2018.

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

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

	2000	2010	Current	Average Annual Change (%) 2000 to 2010	Average Annual Change (%) 2010 to Current
Total population	3,400,578	4,092,459	4,692,000	1.9	1.7
Total households	1,205,516	1,435,155	1,649,500	1.8	1.8
Owner households	666,940	814,810	886,600	2.0	1.1
Percent owner	55.3%	56.8%	53.7%		
Renter households	538,576	620,345	762,900	1.4	2.6
Percent renter	44.7%	43.2%	46.3%		
Total housing units	1,298,130	1,598,698	1,784,000	2.1	1.4
Sales vacancy rate	1.5%	2.3%	1.9%		
Rental vacancy rate	8.7%	13.8%	9.0%		
Median Family Income	NA	NA	$69,200	NA	NA

Note: Median Family Incomes are for 1999, 2009, and 2016.

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

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

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	846,377	1,189,850	1,491,000	3.5	2.9
Total households	287,651	402,942	498,900	3.4	2.7
Owner households	213,072	304,170	361,800	3.6	2.2
Percent owner	74.1%	75.5%	72.5%		
Renter households	74,579	98,772	137,100	2.8	4.2
Percent renter	25.9%	24.5%	27.5%		
Total housing units	318,352	447,858	546,500	3.5	2.5
Sales vacancy rate	2.0%	2.2%	1.8%		
Rental vacancy rate	11.1%	12.3%	9.5%		

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

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

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	446,206	638,107	793,400	3.6	2.8
Total households	154,981	224,432	275,200	3.8	2.6
Owner households	121,089	167,443	195,400	3.3	1.9
Percent owner	78.1%	74.6%	71.0%		
Renter households	33,892	56,989	79,800	5.3	4.3
Percent renter	21.9%	25.4%	29.0%		
Total housing units	171,625	248,462	297,700	3.8	2.3
Sales vacancy rate	1.8%	1.9%	1.8%		
Rental vacancy rate	10.4%	10.6%	8.0%		

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

Data Definitions and Sources

2000: 4/1/2000—U.S. Decennial Census

2010: 4/1/2010—U.S. Decennial Census

Current date: 4/1/2018—Estimates by the analyst

Forecast period: 4/1/2018–4/1/2021—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_18.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.