

Making Houston Greater.

2016 HOUSTON ECONOMIC HIGHLIGHTS

December 9, 2016

Publication Underwritten by:



TABLE OF CONTENTS

- 2 | Houston in Perspective
- 4 | Payroll Employment
- 6 | Unemployment Rate
- 8 Goods-Producing and Service-Providing Jobs
- **10** | Employment by Industry
- **12** | Employment Change by Industry
- **14** | Employment Growth in Major Metros
- **16** | Purchasing Managers Index
- **18** | Oil and Natural Gas Prices
- 20 | Drilling Activity and Oil Price
- **22** | Foreign Trade
- **24** | Air Passengers
- 26 | Residential Real Estate
- **28** Office Market
- **30** | Houston Hotel Data

32 Retail Sales New Car. Truck and SUV Sales Inflation | Living Cost Comparison Housing Cost Comparison Houston Region Population | Foreign-Born Population Most Populous Metropolitan Areas Most Populous Cities | Most Populous Counties The Work Ethic in Houston Gross Area Product Forecast | Population and Employment Forecast Top Metro Areas by Gross Domestic Product

Houston Economic Highlights, a publication of the Greater Houston Partnership, is designed to impart a brief understanding of the changes in Houston's economy over the past decade.

Each page is devoted to a single economic indicator or a few related indicators. In most cases, a key point and a few paragraphs that amplify the data appear on one page, and a table with historical data follows on the next.

PEOPLE

The nine-county Houston Metropolitan Statistical Area (MSA) had a population of 6,656,947 residents as of July 1, 2015, according to estimates by the U.S. Census Bureau. If metro Houston were a state, it would have the 16th largest population in the U.S., ahead of Indiana (6,619,680) but behind Massachusetts (6,794,422).

Harris County had a population of 4,538,028 residents as of July 1, 2015, according to estimates by the U.S. Census Bureau. If Harris County were a state, it would have the 26th largest population in the U.S., ahead of Kentucky (4,425,092) but behind Louisiana (4,670,724).

The city of Houston had a population of 2,296,224 residents as of July 1, 2015, according to estimates by the U.S. Census Bureau. If the city were a state, it would rank 36th in population in the U.S., ahead of New Mexico (2,085,109) but behind Nevada (2,890,845).

Among the nation's metropolitan areas, the Houston MSA in 2015 ranked fourth in number of Hispanics (2,429,487), seventh in number of blacks (1,143,291) and seventh in number of Asians (500,359), according to the Census Bureau's American Community Survey.

ECONOMY

The U.S. Bureau of Economic Analysis estimates metro Houston's Gross Domestic Product (GDP) at \$503.3 billion in 2015. If Houston were a state, its economy would rank 9th, after New Jersey (\$568.2 billion) and ahead of North Carolina (\$499.4 billion).

If the MSA were an independent nation, its economy would rank 23rd largest in the world, behind Taiwan (\$523.6 billion), but ahead of Sweden (\$492.6 billion).

In 2015, the Houston Association of Realtors[®] Multiple Listing Service recorded closings on 89,293 properties (includes single-family homes, townhomes, condos, high rises, etc.), an average of one every 5.9 minutes.

In 2015, Houston-area automobile dealers sold 376,481 new cars, trucks and SUVs, an average of one every 1.4 minutes.

In 2015, the Houston Airport System handled 55,186,706 passengers, an average of 6,300 passengers per hour around the clock.

In 2015, the City of Houston issued building permits for construction valued at \$8.2 billion, an average of \$260 per second.

IN 2015

6,656,947 residents in

Metro Houston

4,538,028 residents in Harris County

2,296,224 residents in the city of Houston

City of Houston ranks:

4th in number of Hispanics

in number of Blacks

7th

7th in number of Asians

89,293 property closings

376,481 new cars, trucks and SUVs sold 55,118,706 airport passengers

\$8.2 billion

in construction building permits

The Houston region has one of the youngest, fastest-growing and most diverse populations in the nation.

The nine-county Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA) covers 9,444 square miles – an area smaller than Maryland but larger than New Jersey.

Harris County covers 1,778 square miles – an area nearly half as large as Rhode Island.

At 655 square miles, the city limits of Houston could contain the cities of New York, Washington, D.C., Boston, San Francisco, Seattle, Minneapolis and Miami.

GEOGRAPHY FOR THE DATA IN THIS PUBLICATION

Metropolitan statistical areas are geographic delineations defined by the Office of Management and Budget for use by federal statistical agencies in collecting, tabulating and publishing federal statistics. These geographic delineations change over time, with the most recent change occurring in March 2013.

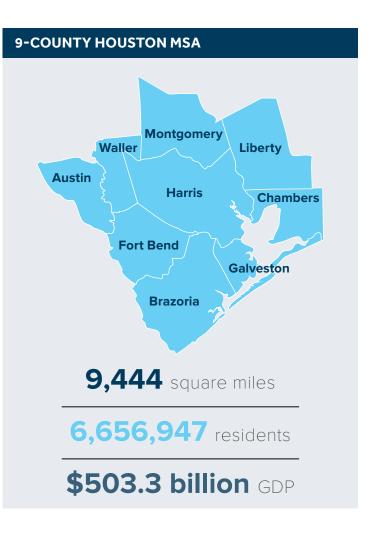
This publication contains data based on both of the 2009 and 2013 delineations for the Houston MSA, depending on the source. Where possible, every effort was made to revise data to reflect the new nine-county Houston MSA.

2009 MSA DELINEATION FOR THE HOUSTON REGION:

Houston - Sugar Land - Baytown Metropolitan Statistical Area (MSA) contains 10 counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto and Waller.

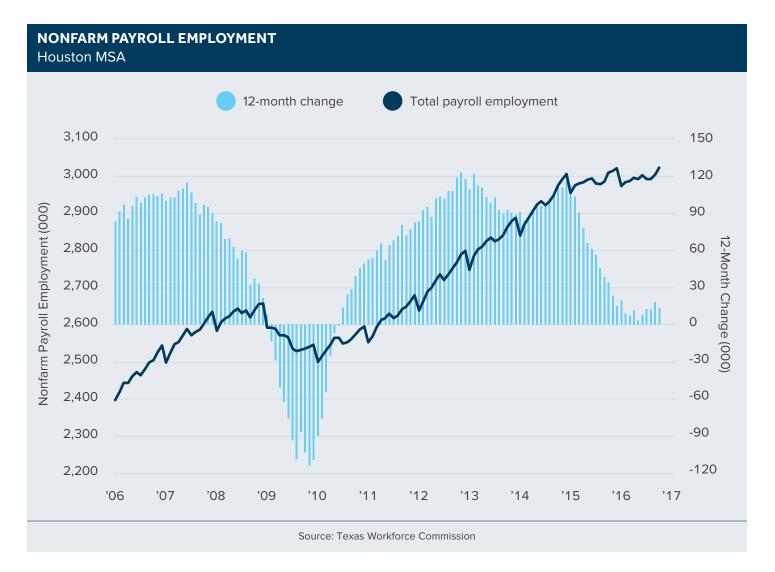
2013 MSA DELINEATION FOR THE HOUSTON REGION:

Houston - The Woodlands - Sugar Land Metropolitan Statistical Area (MSA) contains nine counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller.



PAYROLL EMPLOYMENT

Houston's total nonfarm payroll employment reached a new peak in October '16.



From '10 to '14, Houston added nearly half a million jobs. This period of phenomenal growth provided the momentum needed to sustain the region through the early stages of the energy downturn that began at the end of '14.

As oil prices and rig counts fell through '15 and early '16, Houston's job growth began to slow. In '15, the region added 15,200 jobs, and added 13,400 jobs in the 12-months ending October '16. In spite of the energy industry's worst downturn in history, Houston managed to post 12-month net job gains throughout this period.

A strong U.S. economy, momentum from the previous economic boom, robust population growth and the \$50 billion in petrochemical plant expansions have helped offset losses in upstream energy and manufacturing.

USTON-THE WOODLANDS-SU nfarm Payroll Employment, Year-E	GAR LAND METROPOLITAN STATIS	STICAL AREA (MSA)
Year	Nonfarm Payroll Employment	Change from Prior Year
2006	2,545,200	107,000
2007	2,635,900	90,700
2008	2,657,500	21,600
2009	2,546,900	-110,600
2010	2,596,700	49,800
2011	2,679,900	83,200
2012	2,798,500	118,600
2013	2,888,300	89,800
2014	3,006,100	117,800
2015	3,021,300	15,200
12 months ending October '16	3,022,800	13,400

Source: Texas Workforce Commission

UNEMPLOYMENT RATE

Houston's unemployment rate peaked at 5.8 percent in August '16 but never approached the levels of the Great Recession.



Houston's October '16 unemployment rate was 5.1 percent, up from 4.7 percent in October '15 but down from a high of 5.8 percent in August '16. Texas' unemployment rate was 4.4 percent in October '16, unchanged from October '15. The U.S. rate was 4.7 percent in October '16, down from 4.8 percent in October '15.

Houston's unemployment rate tracked below the U.S. rate for nearly a decade from December '06 to early '16. During much of this period, the region's unemployment rate was below the national rate by at least one percentage point. Since April '16, Houston's unemployment rate has tracked above the national rate.

The unemployment rate can be a misleading gauge of market conditions. "Discouraged workers," those who are unemployed but not actively job seeking since they feel their prospects are limited, are not counted in the labor force and therefore, not captured in the unemployment rate. Those who were fortunate enough to have received generous severance packages have even more incentive to sit on the sidelines and wait for conditions to improve before seeking employment again.

Houston's unemployment rate remained relatively strong through the beginning of the energy downturn, not creeping up until May '15, nearly a year after oil prices plummeted. During this period, the labor force stagnated between 3,240,000 and 3,260,000. Since then, the labor force has grown, reaching 3,296,200 in October '16, potentially reflecting workers returning to the workforce because they see better prospects for employment or their finances no longer allow them to stay out of the labor force.

UNEMPLOYMENT RATE

UNEMPLOYMENT RATE: HOUSTON-THE WOODLANDS-SUGAR LAND MSA,

TEXAS AND THE UNITED STATES

Percent of Civilian Labor Force Unemployed

		Annual Averages*	
Year	Houston MSA	Texas	U.S.
2006	5.0%	4.9%	4.6%
2007	4.3	4.4	4.6
2008	4.8	4.9	5.8
2009	7.6	7.6	9.3
2010	8.5	8.2	9.6
2011	8.3	8.1	8.9
2012	6.8	6.8	8.1
2013	6.2	6.3	7.4
2014	5.0	5.1	6.2
2015	4.6	4.5	5.3
2016 – 12 Months ending in October	5.1	4.5	4.9

* Except where noted

Source: Texas Workforce Commission

GOODS-PRODUCING AND SERVICE-PROVIDING JOBS

Houston's service-providing sector continued to add jobs during the energy downturn while the goods-producing sector experienced layoffs.



GOODS-PRODUCING AND SERVICE-PROVIDING EMPLOYMENT

The goods-producing industries (mining and logging, construction, and manufacturing) peaked at 586,300 jobs in December '14, then fell to 536,400 jobs in October '16.

Mining and logging, primarily oil and gas extraction and support activities, lost 25,600 jobs, a 22.9 percent decrease. These losses rippled through the economy, triggering declines in other sectors, particularly durable goods manufacturing, wholesale trade and professional and business services.

Construction, helped by the petrochemical plant expansions on the eastside of Houston, gained 6,100 jobs, a 2.9 percent increase, over the same period.

Manufacturing shed 30,400 jobs, an 11.6 percent drop. Fabricated metal products lost 12,100 jobs, an 18.3 percent cut. Construction and mining machinery shed 14,200 jobs, a 31.8 percent drop, and computer and electronics lost 2,300 jobs, a 13.1 percent fall.

The service-providing industries added 66,600 jobs, a 2.8 percent increase, between December '14 and October '16. Gains in industries that rely on population growth offset losses in sectors tied to energy.

Trade, transportation, and utilities lost 1,400 jobs, a 0.2 percent drop, financial activities added 3,000 jobs, a 2.0 percent gain, and professional, scientific and technical services cut 7,700 jobs, a 3.5 percent loss.

Health care and social assistance added 24,500 jobs, an 8.0 percent gain, accommodation and food services added 27,600, a 10.7 percent jump, and government gained 14,700, a 3.8 percent increase.

GOODS-PRODUCING AND SERVICE-PROVIDING JOBS

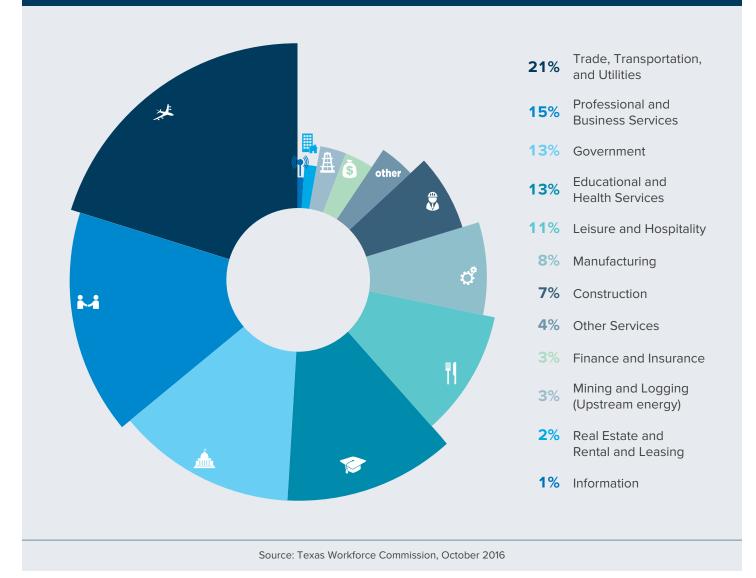
HOUSTON-THE WOODLANDS-SUGAR LAND MSA **Annual Averages** 2006 1,986,592 485,258 2007 2,055,825 518,042 2008 2,096,217 533,408 2009 2,071,225 487,825 2,086,450 2010 468,133 2011 2,134,483 487,192 2012 2,204,983 521,117 2013 2,282,075 545,967 2014 2,358,192 569,692 2015 2,423,350 565,583 2016 – October 12-month average 2,456,550 542,025

Source: Texas Workforce Commission

EMPLOYMENT BY INDUSTRY

No single industry or sector dominates Houston employment.

INDUSTRY SHARE OF METRO HOUSTON EMPLOYMENT



Nonfarm payroll employment in the Houston metro area totaled 3,022,800 in October '16, a 0.4 percent increase from the 3,009,400 in October '15.

Service industries account for 2.5 million Houston-area jobs or four out of five workers in the region. The largest service industries are trade, transportation, and utilities (20.6 percent of jobs), professional and business services (15.4 percent), and educational and health services (12.9 percent). The goods-producing sector employs more than half a million Houstonians and accounts for nearly one in five of the region's jobs. Manufacturing is the largest goods-producing industry with 7.7 percent of total jobs, followed by construction (7.2 percent), and upstream energy (2.9 percent).

Two-thirds of Houston's manufacturing jobs involve the production of durable goods, items with a useful life of three years of more. In Houston, this includes items such as oil field equipment, structural steel and computers.

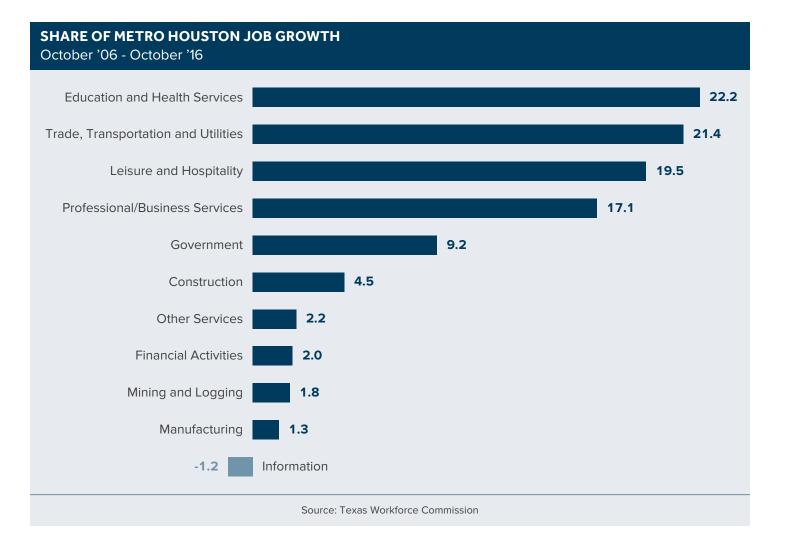
EMPLOYMENT BY INDUSTRY

Industry	Jobs	Percent of Total
Total Nonfarm	3,022,800	100.0%
Total Private	2,623,900	86.8
Goods Producing	536,400	17.7
Service Providing	2,486,400	82.3
Mining and Logging	86,400	2.9
Oil and Gas Extraction	49,200	1.6
Support Activities for Mining	36,400	1.2
Construction	217,900	7.2
Manufacturing	232,100	7.7
Durable Goods	146,700	4.9
Non-Durable Goods	85,400	2.8
Trade, Transportation, and Utilities	622,900	20.6
Wholesale Trade	168,600	5.6
Retail Trade	314,400	10.4
Transportation, Warehousing, and Utilities	139,900	4.6
Information	30,500	1.0
Financial Activities	153,700	5.1
Finance and Insurance	98,000	3.2
Real Estate and Rental and Leasing	55,700	1.8
Professional and Business Services	466,200	15.4
Professional, Scientific, and Technical Services	215,000	7.1
Management of Companies and Enterprises	35,000	1.2
Admin and Support and Waste Mgmt	216,200	7.2
Educational and Health Services	389,400	12.9
Educational Services	59,800	2.0
Health Care and Social Assistance	329,600	10.9
Leisure and Hospitality	319,200	10.6
Arts, Entertainment, and Recreation	33,000	1.1
Accommodation and Food Services	286,200	9.5
Other Services	105,600	3.5
Government	398,900	13.2

Source: Texas Workforce Commission, October 2016; not seasonally adjusted

EMPLOYMENT CHANGE BY INDUSTRY

More than a fifth of Houston's job growth in the past 10 years has occurred in education and health services.



Four sectors were responsible for 80 percent of Houston's employment growth from October '06 to October '16.

Educational and health services grew by 114,800 jobs from October '06 to October '16 and accounted for 22.2 percent of Houston's total employment growth in the past 10 years. The sector depends on the region's population and employment growth, and health services is further spurred by the aging of the population.

Trade, transportation and utilities gained 110,600 jobs and contributed to 21.4 percent of the gain in employment during this period. The sector benefits from the expanding local consumer market through growth in jobs, wages and population. In the past ten years, Houston added 516,900 jobs, increased average wages (net of inflation) by 5.8 percent, and grew by 1.1 million residents. Transportation

also benefits from the \$200 billion in annual trade passing through the Houston-Galveston Customs District.

Leisure and hospitality added 100,900 jobs and contributed to 19.5 percent of total job growth. Houston has approximately 81,500 hotel rooms and on average, a net of 300 new bars and restaurants opened in Houston each year from '10 to '14.

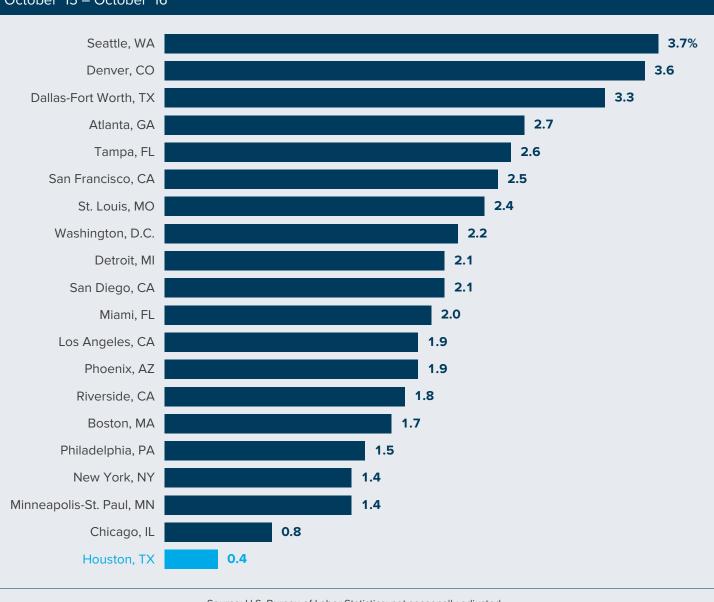
The professional and business services sector added 88,300 jobs and was responsible for 17.1 percent of the total growth in jobs over this period. The professional and business services sector grows as demand increases for technical expertise, such as engineering and computer systems design, and businesses require support services, like office administration, facilities support, and employment services.

HOUSTON-THE WOODLANDS-SUGAR LAND METROPOLITAN STATISTICAL AREA (MSA) Job Growth by Industry

Industry October '105 October '116 Change Percent Change Percent Share of J Construction Total Nonfarm 2,505,900 3,022,800 516,900 20.6% - Mining and Logging 76,900 86,400 9,500 12.4 1.8% Construction 194,400 217,900 23,500 12.1 4.5 Manufacturing 225,400 232,100 6,700 3.0 1.3 Durable Goods 146,100 146,700 600 0.4 0.1 Non-Durable Goods 79,300 85,400 6,100 7.7 1.2 Trade, Transportation, and Utilities 512,300 622,900 110,600 21.6 21.4 Wholesale Trade 136,400 168,600 32,200 23.6 6.2 Retail Trade 254,200 314,400 60,200 23.7 11.6 Transportation, Warehousing and Utilities 121,700 139,900 18,200 15.0 3.5 Information 36,800 30,500 5,700
Mining and Logging 76,900 86,400 9,500 12.4 1.8% Construction 194,400 217,900 23,500 12.1 4.5 Manufacturing 225,400 232,100 6,700 3.0 1.3 Durable Goods 146,100 146,700 600 0.4 0.1 Non-Durable Goods 79,300 85,400 6,100 7.7 1.2 Trade, Transportation, and Utilities 512,300 622,900 110,600 21.6 21.4 Wholesale Trade 136,400 168,600 32,200 23.7 11.6 21.4 Transportation, Warehousing and Utilities 121,700 139,900 18,200 15.0 3.5 Information 36,800 30,500 -6,300 -17.1 -1.2 Finance and Insurance 92,800 98,000 5,200 10.3 1.0 Professional and Business Services 377,900 466,200 88,300 23.4 17.1 Professional, Scientific, and Technical Services 377,900 466,200 88,300 23.8 8.0 Management of Companies
Construction194,400217,90023,50012.14.5Manufacturing225,400232,1006,7003.01.3Durable Goods146,100146,7006000.40.1Non-Durable Goods79,30085,4006,1007.71.2Trade, Transportation, and Utilities512,300622,900110,60021.621.4Wholesale Trade136,400168,60032,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services18,40035,00016,60090.23.2Management of Companies and Enterprises18,40035,00016,60090.23.2
Manufacturing225,400232,1006,7003.01.3Durable Goods146,100146,7006000.40.1Non-Durable Goods79,30085,4006,1007.71.2Trade, Transportation, and Utilities512,300622,900110,60021.621.4Wholesale Trade136,400168,60032,20023.66.2Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services18,40035,00016,60090.23.2Management of Companies and Enterprises18,40035,00016,60090.23.2
Durable Goods146,100146,7006000.40.1Non-Durable Goods79,30085,4006,1007.71.2Trade, Transportation, and Utilities512,300622,900110,60021.621.4Wholesale Trade136,400168,60032,20023.66.2Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Non-Durable Goods79,30085,4006,1007.71.2Trade, Transportation, and Utilities512,300622,900110,60021.621.4Wholesale Trade136,400168,60032,20023.66.2Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Trade, Transportation, and Utilities512,300622,900110,60021.621.4Wholesale Trade136,400168,60032,20023.66.2Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,2005.61.0Real Estate and Rental and Leasing50,50055,7005,20010.31.0Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Wholesale Trade136,400168,60032,20023.66.2Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,2005.61.0Real Estate and Rental and Leasing50,50055,7005,20010.31.0Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Retail Trade254,200314,40060,20023.711.6Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,2005.61.0Real Estate and Rental and Leasing50,50055,7005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services18,40035,00016,60090.23.2Management of Companies and Enterprises18,40035,00016,60090.23.2
Transportation, Warehousing and Utilities121,700139,90018,20015.03.5Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,2005.61.0Real Estate and Rental and Leasing50,50055,7005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services18,40035,00016,60090.23.2
Information36,80030,500-6,300-17.1-1.2Financial Activities143,300153,70010,4007.32.0Finance and Insurance92,80098,0005,2005.61.0Real Estate and Rental and Leasing50,50055,7005,20010.31.0Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Financial Activities 143,300 153,700 10,400 7.3 2.0 Finance and Insurance 92,800 98,000 5,200 5.6 1.0 Real Estate and Rental and Leasing 50,500 55,700 5,200 10.3 1.0 Professional and Business Services 377,900 466,200 88,300 23.4 17.1 Professional, Scientific, and Technical Services 173,700 215,000 41,300 23.8 8.0 Management of Companies and Enterprises 18,400 35,000 16,600 90.2 3.2
Finance and Insurance 92,800 98,000 5,200 5.6 1.0 Real Estate and Rental and Leasing 50,500 55,700 5,200 10.3 1.0 Professional and Business Services 377,900 466,200 88,300 23.4 17.1 Professional, Scientific, and Technical Services 173,700 215,000 41,300 23.8 8.0 Management of Companies and Enterprises 18,400 35,000 16,600 90.2 3.2
Real Estate and Rental and Leasing 50,500 55,700 5,200 10.3 1.0 Professional and Business Services 377,900 466,200 88,300 23.4 17.1 Professional, Scientific, and Technical Services 173,700 215,000 41,300 23.8 8.0 Management of Companies and Enterprises 18,400 35,000 16,600 90.2 3.2
Professional and Business Services377,900466,20088,30023.417.1Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
Professional, Scientific, and Technical Services173,700215,00041,30023.88.0Management of Companies and Enterprises18,40035,00016,60090.23.2
and Technical Services18,40035,00016,60090.23.2and Enterprises18,40035,00016,60090.23.2
and Enterprises
Admin and Support 185,800 216,200 30,400 16,4 5.9
and Waste Management
Educational and Health Services 274,600 389,400 114,800 41.8 22.2
Educational Services 42,600 59,800 17,200 40.4 3.3
Health Care and Social Assistance 232,000 329,600 97,600 42.1 18.9
Leisure and Hospitality 218,300 319,200 100,900 46.2 19.5
Arts, Entertainment, and Recreation 25,400 33,000 7,600 29.9 1.5
Accommodation and Food Services 192,900 286,200 93,300 48.4 18.0
Other Services 94,400 105,600 11,200 11.9 2.2
Government 351,600 398,900 47,300 13.5 9.2

Source: Texas Workforce Commission

Houston gained 13,400 net new jobs from October '15 to October '16, a 0.4 percent increase.



EMPLOYMENT GROWTH, PERCENT CHANGE October '15 – October '16

Source: U.S. Bureau of Labor Statistics; not seasonally adjusted

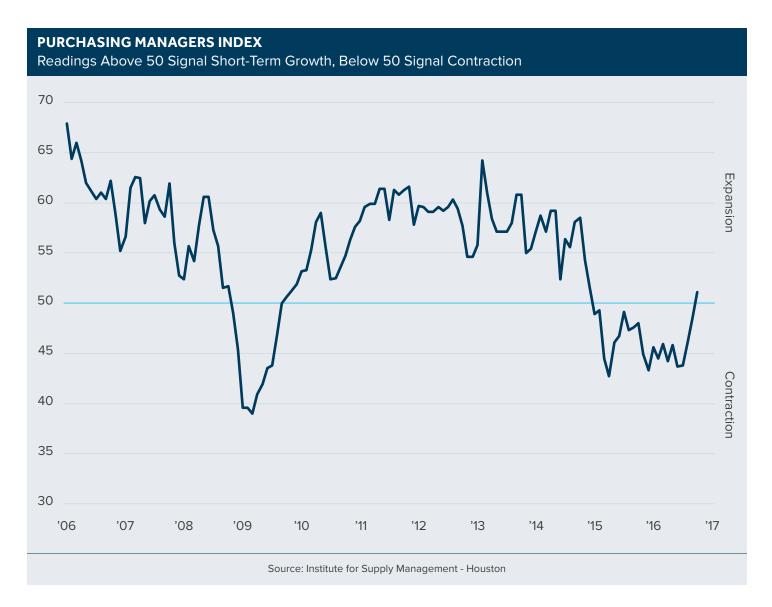
All of the nation's 20 most populous metro areas posted net job gains from October '15 to October '16. During this period, the New York metro led the nation in total job growth with 135,600 jobs. Seattle ranked first in rate of growth with a 3.7 percent increase. After leading the nation in employment gains coming out of the Great Recession, Houston experienced a slower pace of job growth from October '15 to October '16. Amid an energy downturn, the region added 13,400 jobs net new jobs, a 0.4 percent increase during this period.

NONFARM PAYROLL EMPLOYMENT (OCTOBER '15 TO OCTOBER '16) 20 Most Populous U.S. Metropolitan Statistical Areas Ranked by Jobs Created						
Metro Area	Change in Jobs (000)	Percent Change				
New York-Newark-Jersey City, NY-NJ-PA	135.6	1.4%				
Dallas-Fort Worth-Arlington, TX	114.0	3.3				
Los Angeles-Long Beach-Anaheim, CA	111.2	1.9				
Seattle-Tacoma-Bellevue, WA	71.7	3.7				
Atlanta-Sandy Springs-Roswell, GA	70.4	2.7				
Washington-Arlington-Alexandria, DC-VA-MD-WV	70.2	2.2				
San Francisco-Oakland-Hayward, CA	58.2	2.5				
Miami-Fort Lauderdale-West Palm Beach, FL	51.0	2.0				
Denver-Aurora-Lakewood, CO	50.6	3.6				
Boston-Cambridge-Newton, MA-NH	46.7	1.7				
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	43.6	1.5				
Detroit-Warren-Dearborn, MI	41.7	2.1				
Chicago-Naperville-Elgin, IL-IN-WI	38.7	0.8				
Phoenix-Mesa-Scottsdale, AZ	37.8	1.9				
St. Louis, MO-IL	32.7	2.4				
Tampa-St. Petersburg-Clearwater, FL	32.6	2.6				
San Diego-Carlsbad, CA	29.5	2.1				
Minneapolis-St. Paul-Bloomington, MN-WI	26.5	1.4				
Riverside-San Bernardino-Ontario, CA	24.6	1.8				
Houston-The Woodlands-Sugar Land, TX	13.4	0.4				

Source: U.S. Bureau of Labor Statistics; not seasonally adjusted.

PURCHASING MANAGERS INDEX

Houston's PMI signals the downturn is over and the recovery has begun.



The Houston Purchasing Managers Index (PMI), a shortterm leading indicator of regional production, registered 51.1 in October '16, signaling expansion in the local economy for the first time since December '14. (Readings below 50 signal likely contraction within the next three or four months. Readings above 50 signal likely expansion.)

The Houston PMI fell below 50 in January '15 and reached a low of 42.7 in April '15. The PMI remained below 50 for 21 consecutive months, the longest such streak since the index began in '95.

During the Great Recession, Houston's PMI registered below 50 from November '08 to August '09, bottoming out at 39.0 in March '09. A similar v-shaped recovery did not occur in the recent downturn. Instead, the region experienced a shallower but more protracted contraction period. Since the Houston PMI's inception in January '95, the all-time low for the index was 39.0 in March '09. The all-time high occurred in January of '06, when the PMI reached 67.9. Over the past 21 years, the PMI has tracked at 50 or above for 213 months and below 50 for 49 months.

The Houston PMI is based on a survey of some 80 purchasing executives in key Houston industries—oil and gas exploration and production; manufacturing; engineering and construction; chemicals; distribution; health care; and business and financial services. It measures over-themonth changes in sales (new orders), production, employment, purchases of new equipment, prices paid for major purchases, lead times from sellers, purchased materials inventory and finished goods inventory.

PURCHASING MANAGERS INDEX

ANNUAL AVERAGES Above 50 Signals Expansion, Below	50 Signals Contraction	
Year	Houston	United States
2006	62.0	53.9
2007	59.2	51.1
2008	54.3	45.6
2009	44.9	46.3
2010	55.1	57.5
2011	60.1	55.3
2012	58.5	51.7
2013	58.4	53.9
2014	56.5	55.8
2015	46.5	51.4
2016 – October YTD average	45.9	51.2

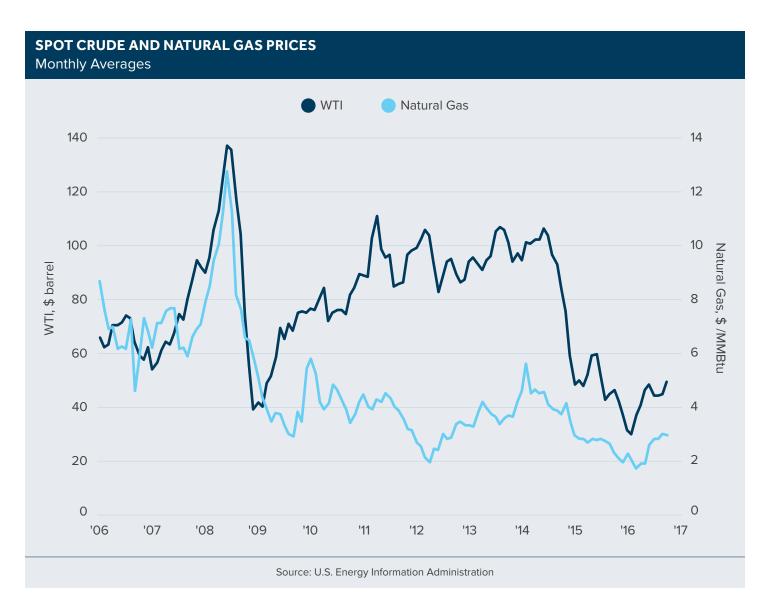
Note: The PMI has a possible range from zero to 100. Readings above the neutral point of 50 indicate likely growth in production over the next three to four months; readings below 50 suggest contraction.

The Houston and U.S. Purchasing Managers Indexes are conceptually similar but not identical.

Source: Institute for Supply Management-Houston

OIL AND NATURAL GAS PRICES

Oil prices began to recover in early '16 but remain well below their recent peak.



The spot market closing price for a barrel of West Texas Intermediate (WTI), the benchmark U.S. light crude oil, fell from \$108 in June '14 to \$26 in February '16, a 76 percent decline. WTI briefly reached \$50 a barrel in October '16 on news of an OPEC production agreement, but prices retreated to the mid-\$40s as hopes of a freeze faded.

The spot price for natural gas followed that of oil, falling from its recent peak of \$5.63 per million British thermal units (MMBtu) in February '14 to \$1.73 in January '16. Natural gas prices averaged \$2.98 in October '16.

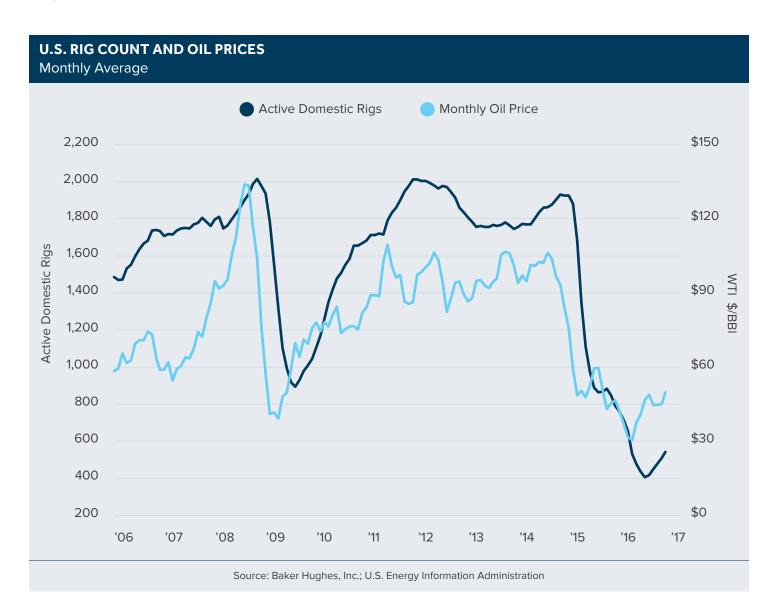
In its November *Short-Term Energy Outlook*, the U.S. Energy Information Administration forecasts WTI spot prices to average \$49.91 in '17. Henry Hub natural gas spot prices are projected to average \$3.12 in 2017. Gulf Coast petrochemicals manufacturers, unlike many of their counterparts elsewhere, rely heavily on natural gas as a feedstock. As a rule of thumb, Gulf Coast plants can compete on the world market so long as the ratio of oil price to gas price exceeds six. The ratio is expected to stay above that level over the next several decades. As a result, U.S. and foreign companies have announced a major expansion of chemical plants. The American Chemistry Council has identified 264 chemical industry investment projects valued at \$164 billion that have been publicly announced; more than \$50 billion will be spent on projects in the Houston area.

SPOT MARKET PRICES, WEST TEXAS INTERMEDIATE CRUDE AND HENRY HUB NATURAL GAS 52-Week Averages of Friday Closing Prices							
Year	WTI Crude Price (\$/bbl)	Natural Gas Price (\$/MMBtu)					
2006	\$66.05	\$6.73					
2007	72.34	6.97					
2008	99.67	8.86					
2009	61.95	3.94					
2010	79.48	4.37					
2011	94.95	4.00					
2012	94.11	2.75					
2013	97.92	3.73					
2014	93.64	4.39					
2015	48.90	2.64					
2016 – October 52-week average	41.99	2.40					

Source: U.S. Energy Information Administration

DRILLING ACTIVITY AND OIL PRICE

After falling nearly 80 percent from its previous peak, the U.S. rig count has slowly begun to recover.



North American oil producers have become victims of their own success. The shale revolution stimulated tremendous oil and gas production increasing supply on the world market. However, global energy demand has been weak and unable to absorb all the new production.

Oil prices have fallen dramatically—from a peak of \$108/ bbl in June '14 to a low of \$26/bbl in February '16. Drilling activity responded swiftly and the rig count dropped from a high of 1,931 in September '14 to a low of 407 in May '16, a 79.1 percent decline. Since reaching the bottom, more than 160 rigs have been added to the U.S. count. Despite the drop in exploration activity, U.S. production has averaged 8.8 million barrels a day through the 12 months ending in October '16, down slightly from 9.3 million in October '15 YTD and still above 8.4 million in October '14 YTD. More efficient drilling and fracking techniques, better understanding of geology associated with shale oil, and steep cost concessions by the oil field service firms have helped to minimize U.S. production declines.

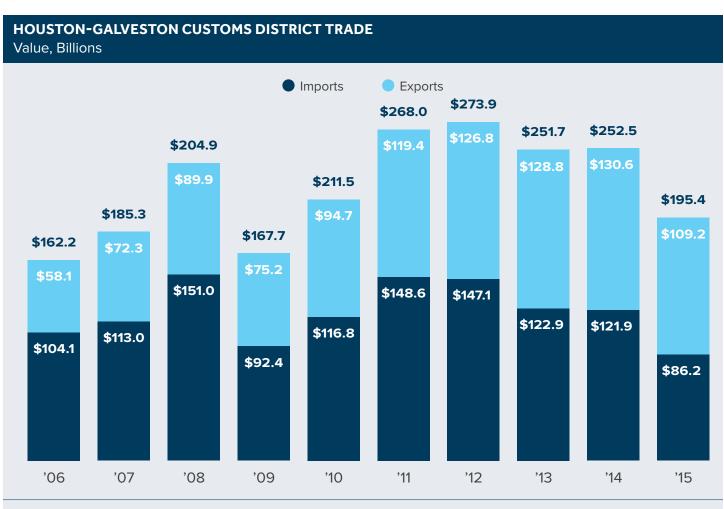
Based on the Barclay's Upstream Spending Survey, North America exploration budgets are forecasted to decline 37 percent in '16 but increase 17 to 23 percent in '17, assuming oil prices stabilize around \$55 and \$60 per barrel on average next year.

ACTIVE DOMESTIC ROTARY RIG COUNT AND PRICE OF WEST TEXAS INTERMEDIATE CRUDE OIL Annual Average							
Year	Active Domestic Rotary Rigs	WTI Crude Price (\$/bbl)					
2006	1,648	\$66.05					
2007	1,767	72.34					
2008	1,877	99.67					
2009	1,086	61.95					
2010	1,544	79.48					
2011	1,874	94.95					
2012	1,919	94.11					
2013	1,762	97.92					
2014	1,838	93.64					
2015	983	48.90					
2016 – October 52-week average	493	41.99					

Sources: Baker Hughes, Inc., U.S. Energy Information Administration

FOREIGN TRADE

Houston handled nearly \$200 billion in foreign trade in '15 and ranked as the seventh busiest U.S. customs district.



The Houston-Galveston Customs District includes the ports of Houston, Galveston, Freeport, Texas City, Corpus Christi, Port Lavaca, Bush Intercontinental Airport and Sugar Land Regional Airport.

Source: WISER Trade

Thirty-nine countries logged more than \$1 billion in trade through the customs district in '15. The 10 largest, which accounted for 50.1 percent of all trade, included China (\$18.5 billion), Mexico (\$17.7 billion), Brazil (\$10.5 billion), Germany (\$10.0 billion), the Netherlands (\$8.4 billion), Venezuela (\$7.9 billion), Colombia (\$7.2 billion), South Korea (\$6.5 billion), Saudi Arabia (\$6.2 billion) and the United Kingdom (\$5.5 billion).

Imports totaled \$86.2 billion in '15. The top five imports were oil and oil products (\$26.9 billion), industrial machinery (\$11.9 billion), articles of iron and steel (\$7.5 billion), vehicles and parts (\$5.0 billion) and electrical machinery (\$4.3 billion).

Exports totaled \$110.3 billion in '15. Leading exports included refined oil products (\$39.7 billion), industrial machinery (\$17.0 billion), organic chemicals (\$13.0 billion), plastics (\$7.1 billion) and electrical machinery (\$5.2 billion).

The strong U.S. dollar and drop in oil and gas prices contributed to the 22.2 percent drop in the value of trade in '15. Exports are down 15.6 percent and imports dropped 29.3 percent.

Despite the decline in total trade value, total vessel weight increased 1.7 percent, from 245.4 million metric tons in '14 to 249.6 million metric tons in '15. During the same period, the total trade value of oil and oil products fell 39.6 percent but its total tonnage increased 3.6 percent.

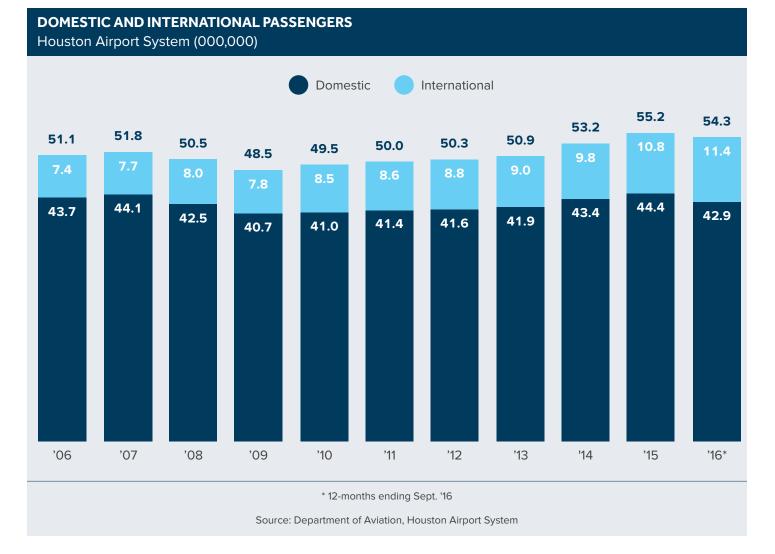
FOREIGN TRADE

STON-GALVESTON C r Value, Billions	USTOMS DISTRICT ANNU	AL TOTALS IN FOREIGN [·]	TRADE
Year	Imports	Exports	Total
2006	\$104.086	\$58.091	\$162.178
2007	112.979	72.329	185.309
2008	150.998	89.906	240.903
2009	92.426	75.233	167.659
2010	116.771	94.685	211.456
2011	148.629	119.400	268.029
2012	147.123	126.818	273.941
2013	122.895	128.835	251.731
2014	121.936	130.517	252.453
2015	86.145	109.222	195.366
2016 — September 12-month total	51.404	68.291	119.695

Source: WISERTrade

AIR PASSENGERS

Total air passenger volume has grown by 3.4 million passengers since '06.



The Houston Airport System (HAS) reached a peak high in passenger volume in '15. Approximately 55.2 million travelers passed through HAS in '15, a 3.7 percent increase from the 53.2 million in '14.

Both Bush Intercontinental Airport (IAH) and Hobby Airport (HOU) experienced historic highs in annual passenger volumes. In '15, 43.0 million travelers passed through IAH and 12.1 million passed through HOU.

In the 12 months ending September '16, HAS handled 54.3 million travelers, unchanged from the same period in '15. International traffic grew while domestic traffic posted losses. International passenger traffic rose 10.5 percent from 10.3 million in the 12-months ending September '15 to

11.4 million in the 12-months ending September '16. During the same period, domestic passengers slipped 2.4 percent from 44.0 million to 42.9 million.

After the launch of international service at Hobby in October '15, the airport has recorded 740,300 global passengers. Houston is now one of only two municipalities in the United States with two international airports.

HAS offers nonstop flights to more than 190 domestic and international destinations. IAH, Houston's largest airport and a significant hub for United Airlines, is the world's 30th busiest airport and the 12th busiest airport in the U.S. for total passenger traffic according to Airports Council International. HOU ranks as the nation's 33rd busiest airport.

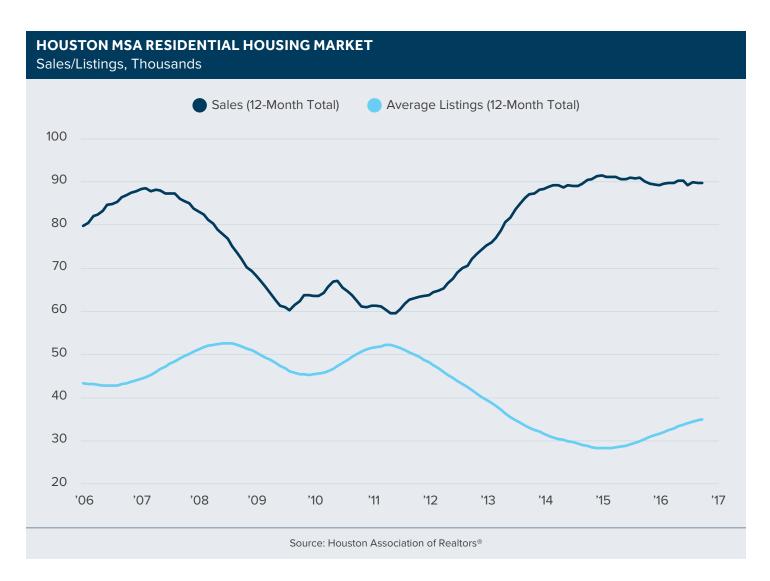
AIR PASSENGERS

HOUSTON AIRPORT SYSTEM – DOMESTI Annual Totals	C AND INTERNATION	IAL AIR PASSENGERS	5
Year	Domestic (000)	International (000)	Total (000)
2006	43,688.4	7,411.0	51,099.4
2007	44,094.6	7,723.0	51,817.6
2008	42,524.2	7,960.1	50,484.4
2009	40,695.9	7,809.9	48,505.8
2010	41,025.7	8,507.9	49,533.6
2011	41,393.4	8,637.3	50,030.7
2012	41,564.5	8,764.6	50,329.1
2013	41,922.6	8,986.3	50,908.9
2014	43,386.7	9,815.6	53,202.3
2015	44,429.8	10,756.8	55,186.6
2016 — September 12-month total	42,930.0	11,398.3	54,328.3

Source: Houston Airport System

RESIDENTIAL REAL ESTATE

Pent-up demand and strong population growth have kept home sales resilient throughout the downturn.



The 12-month total of Houston-area home sales reached a record 91,340 units in December '14 and has since remained around 90,000 despite the downturn in the energy industry. (Sales include single-family homes, townhomes, condominiums, duplexes, high-rise units and residential lots.)

The median single-family sales price continues to grow and post historic highs, averaging \$218,021 for the 12-months ending October '16, a 3.9 percent increase from \$209,800 a year ago. Houston's housing inventory averaged 3.6 months for the 12-months ending October '16, up from 3.0 months for same period in '15. Inventory is measured by the estimated number of months it would take to deplete the current active listings based on the previous 12 months of sales. A market is considered balanced with inventory at six months. U.S. inventory currently sits at 4.5 months.

RESIDENTIAL REAL ESTATE

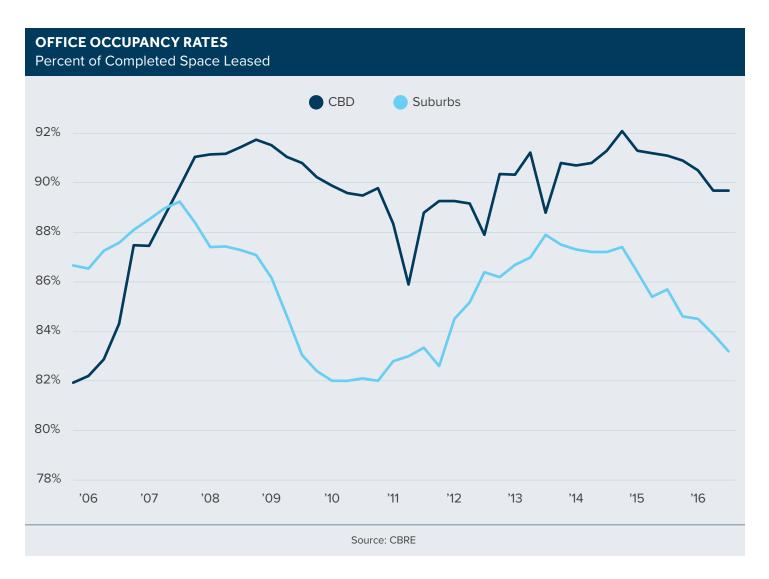
HOUSTON MULTIPLE LISTING SERVICE DATA Historical Closings, Sales Prices and Listings			
Year	Total Closings	Median Sales Price (\$)*	Average Active Listings
2006	87,799	\$148,350	44,032
2007	83,736	151,706	50,643
2008	69,336	150,724	50,946
2009	63,801	150,963	45,286
2010	61,004	153,330	51,097
2011	63,606	153,618	48,800
2012	74,116	162,502	40,247
2013	88,080	179,737	32,101
2014	91,340	197,462	28,363
2015	89,293	211,396	31,249
2016 – October 12-month total/averages	89,736	218,021	35,030

* Average of monthly medians

Source: Houston Association of Realtors®

OFFICE MARKET

The decline in Houston's office occupancy translates into a significant amount of space available at highly favorable terms.



In Houston-the nation's fifth-largest office market with 212.1 million square feet (msf) of net rentable area-overall occupancy at the end of the third quarter of '16 stood at 84.4 percent (89.7 percent in the Central Business District (CBD) and 83.2 percent in the suburbs). Houston's 114.6 msf of Class A space was 86.4 percent leased.

Third quarter '16 Class A asking lease rates ranged from \$44.80 per square foot in the CBD to \$35.86 in the suburban submarkets. Overall asking lease rates for Class A space averaged \$37.76, Class B \$23.66.

A total of 2.3 msf of office space was under construction as of Q3/16, with 47.7 percent of the space preleased.

Four buildings totaling more than one msf of new construction were delivered in Q3/16 at 42.1 percent preleased.

Sublease space has increased from 7.1 msf in Q3/15 to 11.4 msf in Q3/16, accounting for nearly 5.5 percent of Houston's office market.

OFFICE MARKET

Office Occupancy: Houston-The Woodlands-Sugar Land MSA

CENTRAL BUSINESS DISTRICT AND SUBURBAN OFFICE OCCUPANCY RATES Percent of Completed Space								
Maaa		Central Busi	ness District			Sub	urbs	
Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2006	82.2	82.9	84.3	87.5	86.5	87.3	87.6	88.1
2007	87.5	88.7	89.9	91.1	88.5	89.0	89.2	88.4
2008	91.1	91.2	91.4	91.7	87.4	87.4	87.3	87.1
2009	91.5	91.0	90.8	90.2	86.2	84.6	83.0	82.4
2010	89.9	89.6	89.5	89.8	82.0	82.0	82.1	82.0
2011	88.3	85.9	88.8	89.3	82.8	83.0	83.3	82.6
2012	89.3	89.2	87.9	90.3	84.5	85.2	86.4	86.2
2013	90.3	91.2	88.8	90.8	86.7	87.0	87.9	87.5
2014	90.7	90.8	91.3	92.1	87.3	87.2	87.2	87.4
2015	91.3	91.2	91.1	90.9	86.4	85.4	85.7	84.6
2016	90.5	89.7	89.7	N/A	84.5	83.9	83.2	N/A
			S	Source: CBRE				

HOUSTON HOTEL DATA

Hotel activity rebounded after the Great Recession, but slower activity is expected as the energy downturn impacts occupancy, room rates and revenue per available room.



Houston's hotel inventory, approximately 81,500 rooms, averaged 65.8 percent occupancy in the four quarters ending Q2/16. The average daily room rate during this period was \$107.99 and revenue per available room (RevPAR) averaged \$71.10 per day.

During the Great Recession, the four-quarter average for occupancy fell to 53.9 percent, average room rates ran \$88.24, and RevPAR dropped to \$48.00. The Houston hotel market began to recover in '11 as business and leisure travel resumed. Hotel activity dipped at the end of '15 and early '16. The four-quarter average for occupancy reached a low of 65.8 percent in Q2/16—a decline of 4.8 percentage points from 70.6 percent in Q2/15. RevPAR also declined by 5.2 percentage points during this same time period from 76.3 percent to 71.1. Average room rates declined by \$0.10 from \$108.09 in Q2/2015 to \$107.99 in Q2/2016.

CBRE Hotels Research forecasts an 8.9 percent decrease in RevPAR by the end of '16. This is based on an estimated 7.4 percent drop in occupancy and a 1.7 percent decline in average daily room rates. RevPar is expected to decline 2.7 percent in '17.

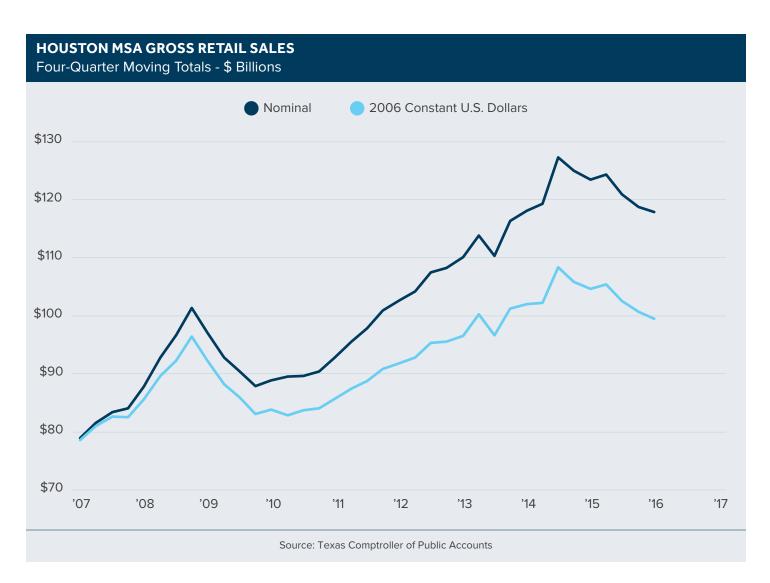
HOUSTON HOTEL DATA

OCCUPANCY, ROOM RATES AND REVENUE PER AVAILABLE ROOM (RevPAR) Annual Averages			
Year	Occupancy (Percent)	Room Rate (\$/Day)	RevPAR (\$/Day)
2006	66.2%	\$88.16	\$58.34
2007	66.2	95.75	63.44
2008	67.6	104.75	70.92
2009	55.4	91.64	51.00
2010	55.0	88.24	48.57
2011	60.0	90.13	54.08
2012	65.6	93.62	61.41
2013	69.3	100.90	69.96
2014	72.0	106.95	76.97
2015	68.5	108.77	74.51
2016 – Four-quarter average ending Q2/16	65.8	107.99	71.10

Source: CBRE Hotels' Americas Research, STR, Q2 2016

RETAIL SALES

Falling gasoline prices, along with a slip in auto, appliance and home furnishings purchases, have caused a drop in local retail sales.



The Houston metro area's nominal gross retail sales reached a record of \$127.3 billion in the four quarters ending Q3/14, according to the Texas Comptroller's Office. Retail sales decreased to \$117.9 billion in the four quarters ending Q1/16, the most recent data available. The bulk of decline over this period is attributed to a 41.6 percent decrease in gas station retail sales.

The majority of the region's Q1/16 retail sales occurred in three counties: Harris County (\$19.1 billion, 76.1 percent), Fort Bend County (\$1.9 billion, 7.6 percent) and Montgomery County (\$1.8 billion, 7.0 percent).

In the third quarter of '16, CBRE reported a total of 215.6 million square feet of rentable retail space and a vacancy rate of 5.7 percent in the Houston market. New retail space under construction totaled 2.6 million square feet.

RETAIL SALES

HOUSTON-SUGAR LAND-BAYTOWN MSA GROSS RETAIL SALES Annual Totals			
Year	Nominal Sales (\$000,000)	Constant 2006 Dollars (\$000,000)	
2006	\$76,207.9	\$76,207.9	
2007	84,056.8	82,591.2	
2008	101,402.1	96,418.4	
2009	87,864.5	83,125.2	
2010	90,404.1	84,100.5	
2011	100,872.9	90,879.6	
2012	108,257.6	95,524.1	
2013	116,361.9	101,259.5	
2014	125,030.7	105,849.6	
2015	118,745.4	100,655.5	
2016 – Four quarters ending Q1	117,910.5	99,544.2	

Source: Texas Comptroller of Public Accounts

NEW CAR, TRUCK AND SUV SALES

After reaching record highs the previous year, Houston-area vehicle sales have slowed in '16.



Houston-area vehicle sales hit a record high of 377,705 vehicles sold in the 12 months ending October '15, but have since fallen 19.3 percent to 304,732 in the 12 months ending October '16.

Low gasoline prices have encouraged consumers to purchase more trucks and SUVs than cars. The market share of truck and SUV sales in Houston averaged 63.4 percent in the 12 months ending October '16, up from 59.7 percent during the same period the previous year. Strong truck/SUV sales drove up the average retail sales price per vehicle to \$36,128 in October '16, the highest for the Houston region since January '16. The average retail sales price for the truck/SUV segment was \$39,428 in October '16 compared to \$29,863 for cars.

NEW CAR, TRUCK AND SUV SALES

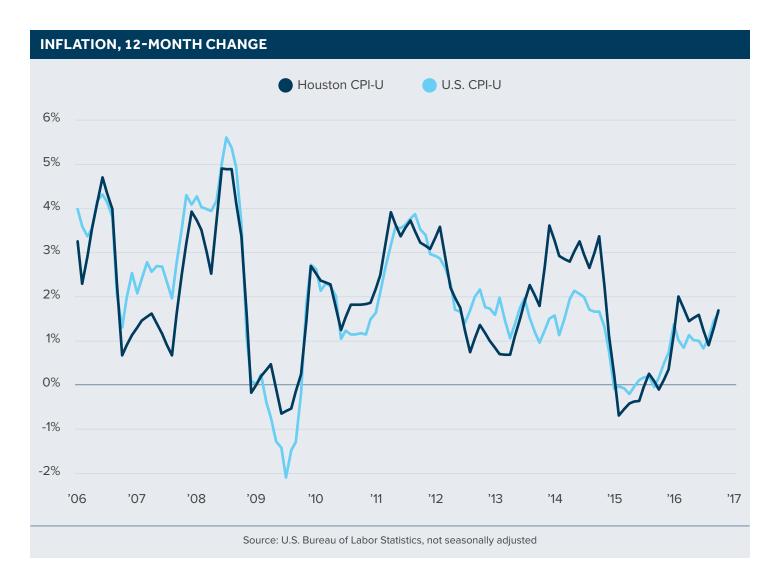
HOUSTON METROPOLITAN STATISTICAL AREA Annual Totals – Houston-Sugar Land-Baytown MSA*			
Year	Cars	Trucks and SUVs	Totals
2006	153,058	196,580	349,638
2007	149,677	209,093	358,770
2008	140,088	166,772	306,860
2009	100,129	118,581	218,710
2010	105,753	134,601	240,354
2011	107,552	147,444	254,996
2012	143,061	182,027	325,088
2013	153,210	194,649	347,859
2014	159,899	214,099	373,998
2015	150,622	225,859	376,481
2016 - October 12-month total	111,655	193,077	304,732

*Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto and Waller counties. Austin and San Jacinto counties were added in January 2007, but the series may be treated as continuous because those counties have a negligible impact on the totals.

Source: TexAuto Facts Report, InfoNation, Inc., Sugar Land, TX

INFLATION

Low energy prices suppressed inflation through much of '16.



The cost of consumer goods and services as measured by the Consumer Price Index for All Urban Consumers (CPI-U) rose 1.6 percent nationwide from October '15 to October '16, according to the U.S. Bureau of Labor Statistics. Over the same period, core inflation (all items less the volatile food and energy categories) increased 2.1 percent.

Energy prices across the U.S. increased 0.1 percent during the 12 months ending October '16, marking the first over-theyear gain in the energy index after 25 consecutive months of declines. The October reading ended the longest period of falling energy prices since the data series began in 1958.

From October '15 to October '16, consumer prices in the Houston-Galveston-Brazoria metro area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) grew 1.7 percent. Core inflation rose 1.9 percent.

In the 12 months ending October '16, Houston's energy costs rose 2.7 percent, the first annual increase in two years. All three subcomponents of the energy index posted gains with electricity prices rising the fastest at 6.0 percent, followed by a 3.2 percent increase in natural gas prices and an 0.9 percent gain in motor fuel prices.

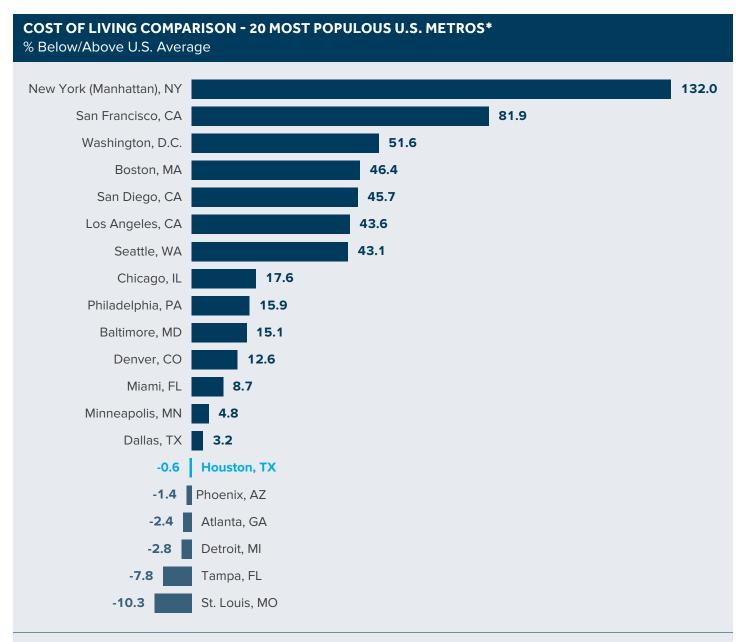
Houston's food index fell 0.2 percent from October '15 to October '16. The cost of dining out increased 1.2 percent, while grocery prices declined 1.2 percent. The cost of shelter rose 3.3 percent since October '15, the largest contributor to the rise in core inflation.

INFLATION

Year	Houston CPI	U.S. CPI
2006	1.13	2.54
2007	3.93	4.08
2008	-0.17	0.09
2009	2.69	2.72
2010	1.86	1.50
2011	3.08	2.96
2012	1.00	1.74
2013	3.62	1.50
2014	1.12	0.76
2015	0.36	0.73
6 – October year-over-year change	1.69	1.64

LIVING COST COMPARISON

Houston offers a low cost of living while maintaining a high quality of life with the amenities expected in a world-class city.



*Metro areas represented by most dominant urban area. Riverside, California ranks as the 13th most populous MSA, but did not submit COLI data.

Source: Council for Community and Economic Research (C2ER), Cost of Living Index, Q3/16 (Data based on a survey of 260 urban areas, published October 2016).

The C2ER *Cost of Living Index* for the third quarter of '16 shows Houston has the sixth lowest cost of living among the nation's 20 most populous metropolitan areas. Houston's overall after-taxes living costs are 0.6 percent below the average for all 260 urban areas participating in the survey.

Among the nation's 20 most populous metro areas, Houston's housing costs are 36.3 percent below the average, and its overall living costs are 20.7 percent below the average for this group. Excluding the two most expensive housing markets — New York and San Francisco which tend to skew the average, Houston's housing costs are still 21.4 percent below the major metro average.

LIVING COST COMPARISON

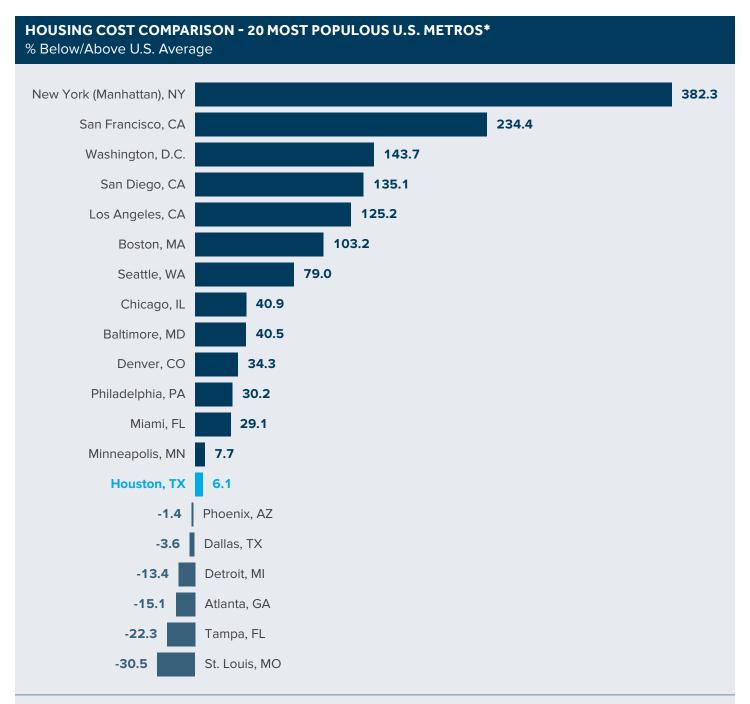
COST OF LIVING COMPARISONS - 20 MOST POPULOUS U.S. METROS* Average for 260 Urban Areas = 100 Misc. Transpor-Health Goods & **Urban Area** Groceries Composite **Services** New York (Manhattan), 232.0 127.4 482.3 123.1 122.5 114.7 147.6 NY San Francisco, CA 181.9 132.8 334.4 107.3 133.1 118.2 119.9 Washington, D.C. 151.6 243.7 121.8 97.9 100.1 122.5 114.3 Boston, MA 146.4 107.9 203.2 150.2 113.3 132.7 125.3 145.7 235.1 117.4 127.0 108.0 102.3 San Diego, CA 114.7 Los Angeles, CA 143.6 112.9 225.2 106.7 130.6 110.0 106.8 143.1 126.5 132.4 Seattle, WA 122.3 179.0 131.0 126.3 Chicago, IL 117.6 103.5 140.9 87.1 133.0 103.3 109.7 Philadelphia, PA 115.9 115.8 130.2 118.5 108.4 105.7 106.7 Baltimore, MD 115.1 111.4 140.5 109.2 100.3 90.1 105.2 Denver, CO 112.6 110.4 134.3 94.7 104.1 107.8 104.2 Miami, FL 108.7 101.7 129.1 96.3 104.6 101.1 100.4 Minneapolis, MN 104.8 106.6 107.7 93.8 101.5 106.8 106.0 Dallas, TX 103.2 110.3 96.4 98.9 100.7 108.3 107.7 Houston, TX 99.4 86.9 106.1 109.8 94.7 90.2 98.4 100.5 Phoenix, AZ 98.6 94.6 98.6 95.2 102.1 95.3 Atlanta, GA 97.6 101.6 84.9 104.8 101.1 110.2 101.7 Detroit, MI 97.2 93.4 86.6 107.7 108.3 100.9 96.7 Tampa, FL 92.2 94.6 77.7 113.2 98.9 98.5 93.9 St. Louis, MO 89.7 102.2 69.5 110.7 94.9 97.5 92.4

*Metro areas represented by most dominant urban area. Riverside, California ranks as the 13th most populous MSA, but did not submit COLI data.

Source: Council for Community and Economic Research (C2ER), Cost of Living Index, Q3/16 (Data based on a survey of 260 urban areas, published October 2016).

HOUSING COST COMPARISON

Houston's housing costs are among the lowest of the major U.S. metro areas.



*Metro areas represented by most dominant urban area. Riverside, California ranks as the 13th most populous MSA, but did not submit COLI data.

Source: Council for Community and Economic Research (C2ER), *Cost of Living Index*, Q3/16 (Data based on a survey of 260 urban areas, published October 2016).

The C2ER *Cost of Living Index* for Q3/16 shows that Houston's housing costs are 6.1 percent above the nationwide average, but 36.3 percent below the average for the 20 most populous U.S. metros. Lower housing costs are one of the reasons Houston's overall living costs are 20.7 percent below the large-metro average. (This housing index is based 71.0 percent on homeownership and 29.0 percent on rental occupancy.)

HOUSING COST COMPARISON

HOUSING COST COMPARISON – 20 MOST POPULOUS U.S. METROS* Average for 260 Urban Areas = 100			
Urban Area	Housing Cost Index**	Percent Above or Below the Nationwide Average	Average Price for New 2,400-Square-Foot House***
New York (Manhattan), NY	482.3	382.3	\$1,672,500
San Francisco, CA	334.4	234.4	1,063,882
Washington, D.C.	243.7	143.7	824,280
San Diego, CA	235.1	135.1	788,568
Los Angeles, CA	225.2	125.2	713,242
Boston, MA	203.2	103.2	579,500
Seattle, WA	179.0	79.0	577,890
Chicago, IL	140.9	40.9	457,175
Baltimore, MD	140.5	40.9	452,000
Denver, CO	134.3	34.3	424,154
Philadelphia, PA	130.2	30.2	423,700
Miami, FL	129.1	29.1	367,288
Minneapolis, MN	107.7	7.7	348,317
Houston, TX	106.1	6.1	310,250
Phoenix, AZ	98.6	-1.4	305,967
Dallas, TX	96.4	-3.6	295,872
Detroit, MI	86.6	-13.4	284,024
Atlanta, GA	84.9	-15.1	259,294
Tampa, FL	77.7	-22.3	225,702
St. Louis, MO	69.5	-30.5	218,092

*Metro areas represented by most dominant urban area. Riverside, California ranks as the 13th most populous MSA, but did not submit COLI data.

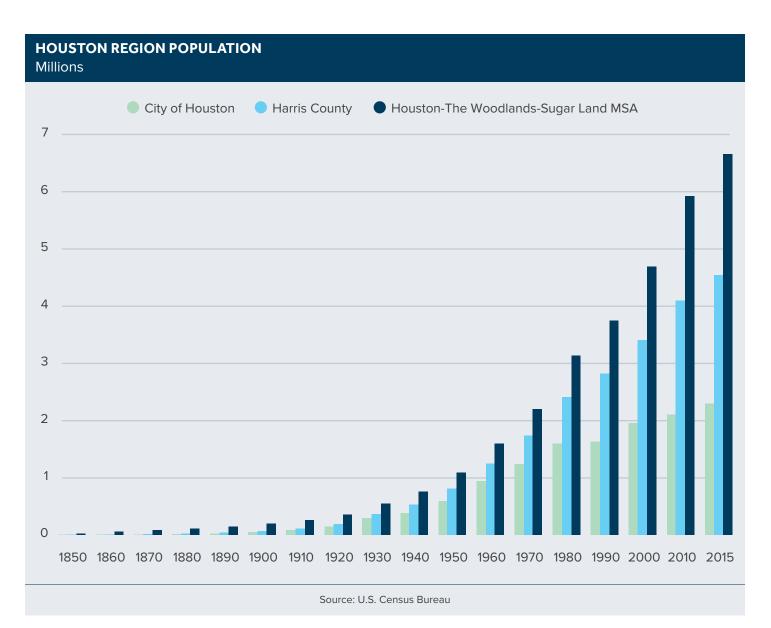
** Index is based 71.0 percent on homeownership costs and 29.0 percent on apartment rent.

*** Approximately 2,400 square foot home with 4 bedrooms, 2 baths, family-room (or equivalent), 2-car garage and 8,000 square foot lot. Neighborhoods are typical for corporate middle-management transferees.

Source: Council for Community and Economic Research (C2ER), Cost of Living Index, Q3/16 (Data based on a survey of 260 urban areas, published October 2016).

HOUSTON REGION POPULATION

Houston has a sustained history of exponential population growth.



From the first census in Texas in 1850 through the 2015 intercensal estimates, the Houston-The Woodlands-Sugar Land MSA — has averaged a compound annual growth rate of 3.4 percent.

The Houston-The Woodlands-Sugar Land MSA is the nation's fifth most populous metropolitan area. As Houston's population has grown, the region has climbed in the rankings. In '70, Houston was the nation's 14th most populous metro, 10th in '90, 8th in '00, and 6th in '10. Today, Houston is the nation's fifth. Over that period, three metros—Cleveland, Detroit and San Francisco—have slipped from the top 10 and three metros—Atlanta, Miami and Houston—took their places.

Between '10 and '15 (the period for which the Bureau of the Census released its most recent population estimates), metro Houston added 736,531 residents, the largest gain of any U.S. metro over that period. About 42 percent of this growth came from the natural increase (births minus deaths) and around 58 percent came from net in-migration (more residents moving in than out).

HOUSTON REGION POPULATION

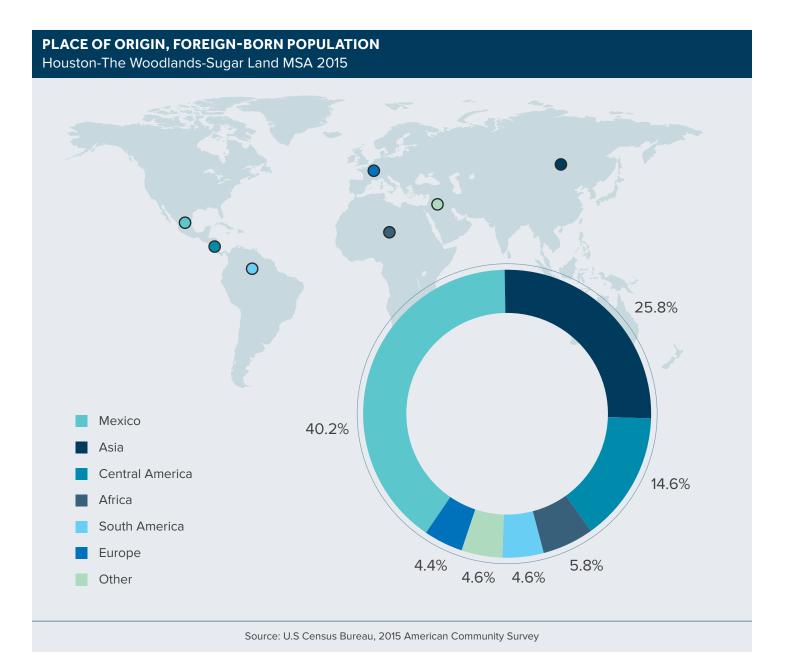
POPULATION TOTALS			
Census Year	Houston-The Woodlands- Sugar Land MSA*	Harris County	City of Houston
1850	27,984	4,688	2,396
1860	55,317	9,070	4,845
1870	80,866	17,375	9,332
1880	112,053	27,985	16,513
1890	137,800	37,249	27,557
1900	202,438	63,768	44,633
1910	252,066	115,693	78,800
1920	348,661	186,667	138,276
1930	545,547	359,328	292,352
1940	752,937	528,961	384,514
1950	1,083,100	806,701	596,163
1960	1,594,894	1,243,158	938,219
1970	2,195,146	1,741,912	1,233,505
1980	3,135,806	2,409,544	1,595,138
1990	3,750,411	2,818,199	1,630,553
2000	4,693,161	3,400,578	1,953,631
2010	5,920,416	4,092,459	2,099,451
2011	6,059,752	4,181,238	2,142,221
2012	6,185,988	4,262,504	2,177,376
2013	6,332,710	4,352,462	2,216,460
2014	6,497,864	4,447,577	2,256,192
2015**	6,656,947	4,538,028	2,296,224

* Census numbers for the 2013 MSA definition, which includes the nine counties of Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller. ** As of July 1, 2015

Source: U.S. Census Bureau

FOREIGN-BORN POPULATION

Nearly one in four Houstonians was born outside the U.S. versus one in eight nationwide.



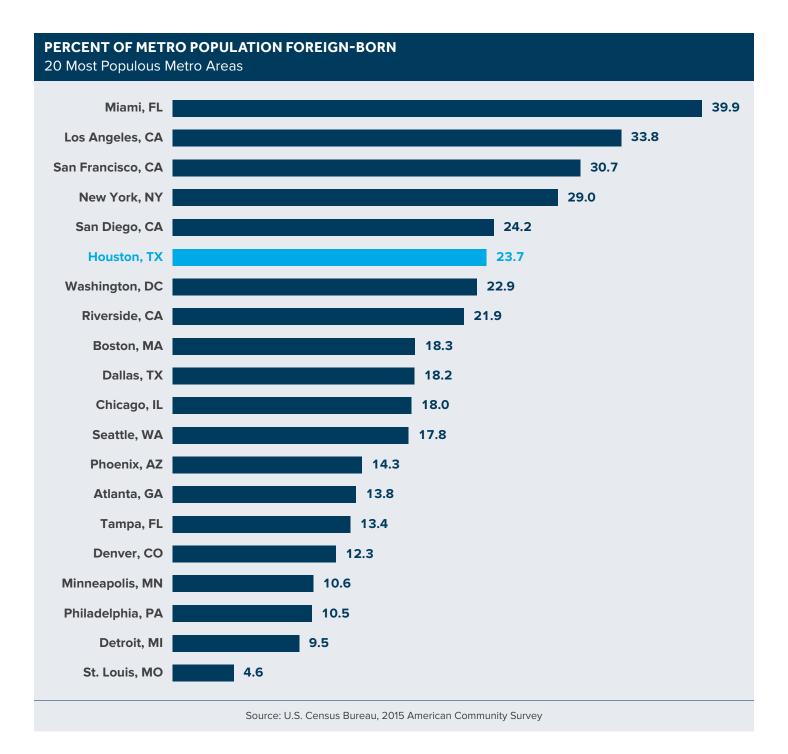
In 2015, the Houston MSA contained an estimated 1.6 million foreign-born residents, according to the Census Bureau's American Community Survey (ACS). This figure represents 23.7 percent of the metro population.

Mexico accounts for two-fifths of Houston's foreignborn residents (633,008). El Salvador (117,244) was the birthplace of the next largest group from Latin America, followed by Honduras (56,932), Guatemala (39,544) and Colombia (24,444).

Asia accounts for one-fourth of Houston's foreign-born residents (406,400). Asian nations with the largest populations in Houston include Vietnam (87,863), India (84,909), China (65,744), Philippines (36,334) and Pakistan (32,879).

FOREIGN-BORN POPULATION

Houston is a magnet for international migration.



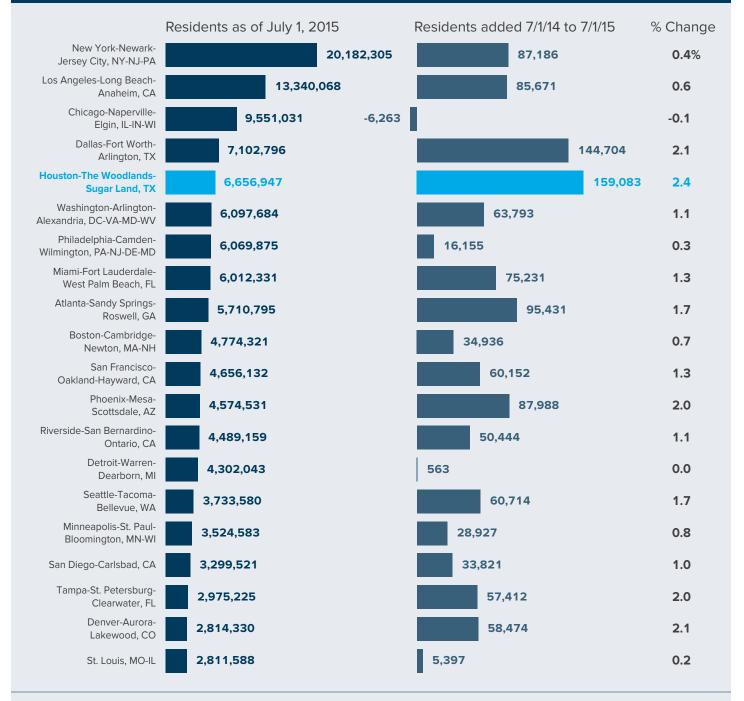
Houston's foreign-born population nearly doubled in the nineties, from 460,380 in '90 to 895,944 in '00. Since then, the region's foreign-born population continued its rapid growth, reaching 1.1 million in '05 and 1.6 million in '15.

In only five of the nation's 20 most populous metropolitan areas—Miami, Los Angeles, San Francisco, New York and San Diego—do foreign-born residents represent a larger share of total population than in Houston.

MOST POPULOUS METROPOLITAN AREAS

Houston is the fifth most populous metro in the nation.

POPULATION ESTIMATES U.S. Metros



Source: U.S. Census Bureau

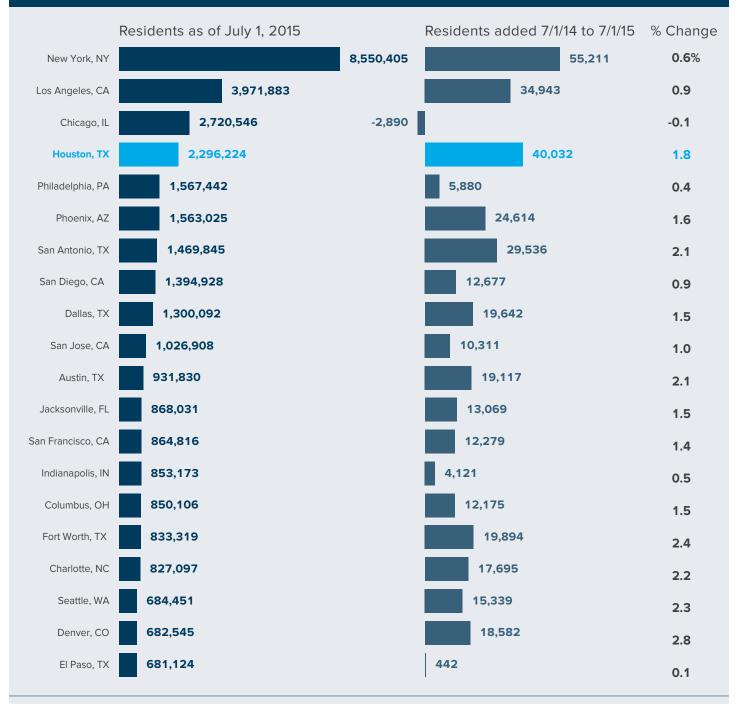
Between July 1, 2014 and July 1, 2015 (the period for which the U.S. Census Bureau released its most recent population

estimates), the Houston-The Woodlands-Sugar Land MSA added more residents than any other U.S. metro area.

MOST POPULOUS CITIES

Houston is the fourth most populous city in the nation.

POPULATION ESTIMATES U.S. Cities



Source: U.S. Census Bureau

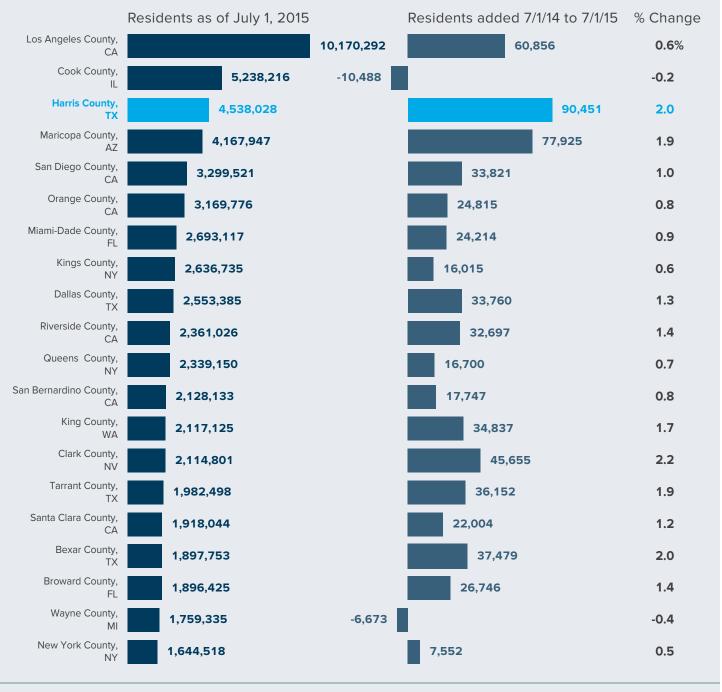
Between July 1, 2014 and July 1, 2015 (the period for which the U.S. Census Bureau released its most recent population

estimates), only New York City added more residents than the city of Houston.

MOST POPULOUS COUNTIES

Harris County is the third most populous county in the nation.

POPULATION ESTIMATES U.S. Counties



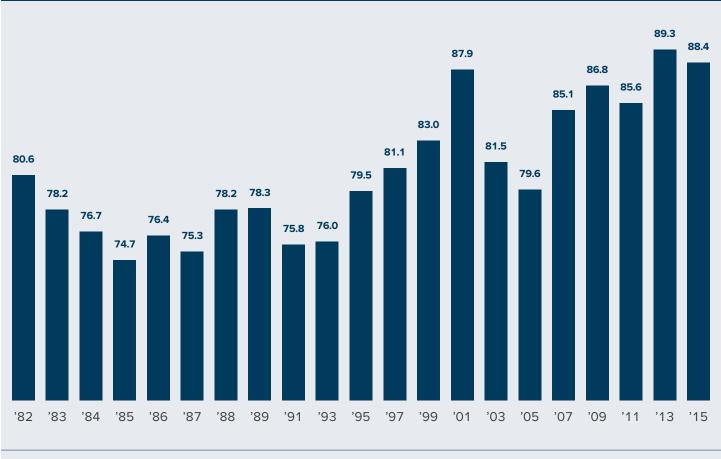
Source: U.S. Census Bureau

Between July 1, 2014 and July 1, 2015 (the period for which the U.S. Census Bureau released its most recent population

estimates), Harris County added more residents than any other county in the nation.

THE WORK ETHIC IN HOUSTON

The work ethic is alive, well and flourishing in Houston.



"IF YOU WORK HARD IN THIS CITY, EVENTUALLY YOU WILL SUCCEED." Percent of Adults Who Agree

Source: Kinder Institute, Houston Area Survey

Houston's business success appears related, at least in part, to the overwhelming prevalence of the work ethic here and to confidence that Houston provides an environment in which individual initiative will be rewarded.

According to Rice University's annual *Houston Area Survey*, a large majority of Houstonians agree that "if you work hard in this city, eventually you will succeed." In March 1982, when employment in Houston stood at what was then the all-time peak, 81 percent of respondents agreed. In February 1987, when Houston was at the bottom of its recession and unemployment stood above 10 percent, 75 percent of respondents still shared this view. In 1999, 83 percent of Houstonians accepted this statement — a record at the time. In 2001, agreement soared to 88 percent. (By 1990, it had become clear that Houstonians' responses to this item barely shifted, thus the question is only asked every other year.)

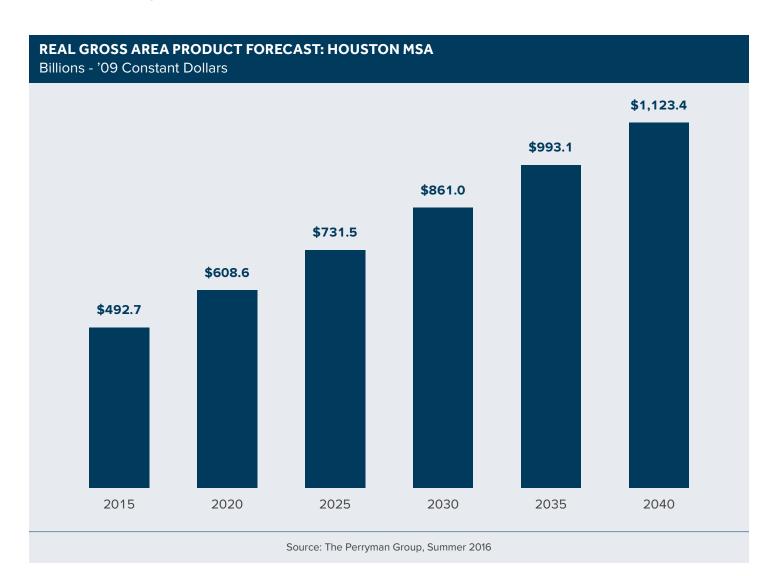
In '15, when the region struggled with massive layoffs in the oil and gas industry, Houstonians remained upbeat, with the second highest share of respondents in the survey's history agreeing with the statement.

In contrast to Houston's strongly positive attitude, agreement with this same statement in national samples over the same period has ranged only from 58 to 63 percent. The difference between Houston and the nation as a whole is statistically significant and has endured through the entire range of the regional business cycle.

The confidence that personal effort will be rewarded in Houston transcends racial and ethnic categories. Over the past six surveys, on average 85 percent of Anglos, 82 percent of Blacks, 88 percent of U.S.-born Latinos, and 94 percent of U.S.-born Asians agreed with the statement.

GROSS AREA PRODUCT FORECAST

The Perryman Group forecasts sustained growth for the Houston metro over the next quarter century.



Real (*i.e.*, net of inflation) Gross Area Product (GAP) in the Houston region is expected to grow at an average annual rate of 3.3 percent from '15 to '40 in The Perryman Group's forecast. The Houston MSA's GAP is projected to more than double between '15 and '40.

Compound annual growth rates of real GAP from '15 to '40 are highest in services (4.0 percent), manufacturing (3.8 percent) and trade (3.4 percent).

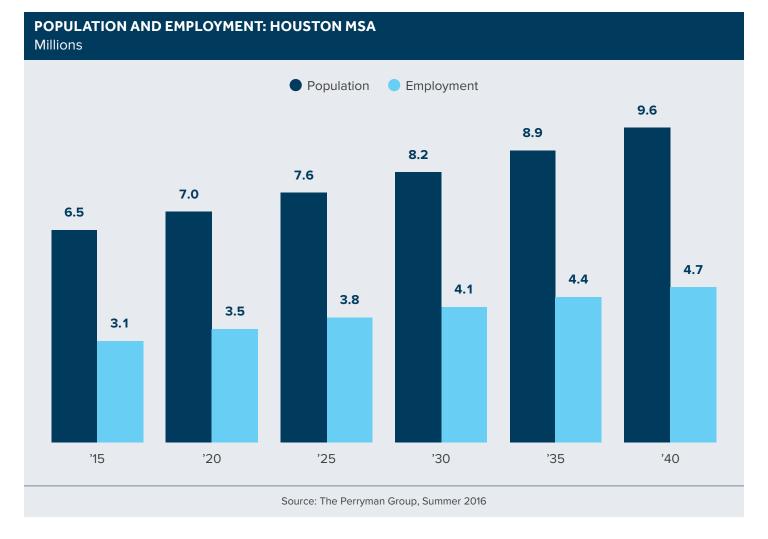
REAL GROSS AREA PRODUCT: HOUSTON-THE WOODLANDS-SUGAR LAND MSA

Estimates and Forecasts

Estimates and receases		
Year	Real Gross Area Product (\$ Billions) Constant '09 Dollars	Compound Annual Growth Rate (Percent), 5 Years Ending
2015	\$492.729	5.40%
2020	608.613	4.31
2025	731.471	3.75
2030	861.030	3.32
2035	993.059	2.89
2040	1,123.428	2.50

Source: The Perryman Group, Summer 2016; Growth rate calculations by the Greater Houston Partnership

The Perryman Group forecasts Houston's population and employment to grow faster than the state's and the nation's over the next **25** years.



From '15 to '40, The Perryman Group sees population growth averaging 1.6 percent annually in the Houston region. Over the same period, the Texas-based economic forecasting firm expects wage and salary employment to rise at a 1.7 percent annual rate.

Perryman states:

"As a major center for the oil industry and related activity, Houston has been hit by lower oil prices. While the end of the oil surge will affect performance in the near term, the Houston area's economy is far more diversified than in decades past, and the downturn in oil prices is not likely to derail economic performance for an extended period of time. The Houston–The Woodlands–Sugar Land Metro Area will add 3.1 million residents between '15 and '40. Perryman also forecasts that Houston will add an additional 1.6 million jobs and account for one-fourth of Texas' job growth during that time frame.

Despite weakness from the lower energy prices and the ripple effects through the economy, expansion in other sectors is expected to moderate the overall negative impact and generate growth in the years to come."

POPULATION AND EMPLOYMENT FORECAST

HOUSTON-THE WOODLANDS – SUGAR LAND MSA

Estimates and Forecasts	
-------------------------	--

Estimates and Forecasts		
Year	Population (000,000)	Payroll Employment (000,000)
2015	6.463	3.096
2020	7.027	3.455
2025	7.610	3.794
2030	8.232	4.124
2035	8.893	4.437
2040	9.596	4.723

Source: The Perryman Group, Summer 2016

TOP METRO AREAS BY GROSS DOMESTIC PRODUCT

Houston has the fourth largest metro GDP in the nation.

GROSS DOMESTIC PRODUCT — TOP 20 METROS \$ Billions



Source: U.S. Bureau of Economic Analysis, 2015 GDP by Metropolitan Area, current dollars

The U.S. Bureau of Economic Analysis (BEA) estimates Houston's gross domestic product (GDP) at \$503.3 billion in '15, ranking it as the nation's fourth largest metro economy. Metro Houston's GDP slipped 3.6 percent from \$522.0 billion in '14. The Houston region has a gross domestic product greater than 40 states and accounted for nearly a third of Texas' GDP.



Making Houston Greater.

Patrick Jankowski, CCR Senior Vice President, Research

Jenny Philip Director, Economic Research

> **Roel Martinez** Manager, Research

> Nadia Valliani Manager, Research

Josh Pherigo Analyst, Research

Allegra Ellis Coordinator, Research

Ashley S. White Intern, Research



in

Follow on Twitter: @pnjankowski



Connect with me: linkedin.com/in/pnjankowski

Publication underwritten by:

