2015 HOUSTON
EMPLOYMENT FORECAST

A PUBLICATION OF THE GREATER HOUSTON PARTNERSHIP

DECEMBER 11, 2014

GREATER HOUSTON
PARTNERSHIP

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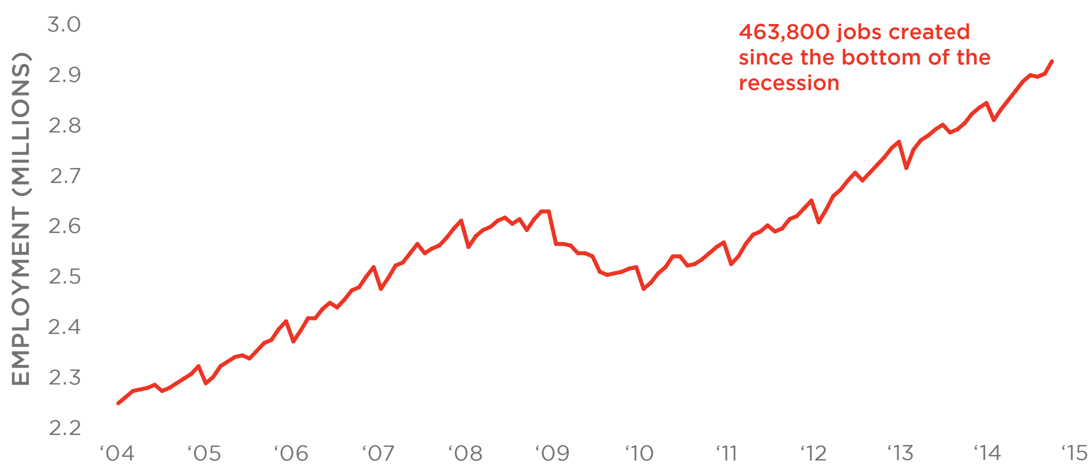
Houston has enjoyed four years of extraordinary growth. From ’09 to ’13, the region’s gross domestic product grew by $141.9 billion, exceeding the combined growth of Austin, Dallas-Fort Worth, El Paso and San Antonio over the same period. With GDP at $517.4 billion, Houston now ranks as the nation’s fourth largest metro economy.[1]

Other indicators reflect this phenomenal growth as well.

- The Greater Houston Partnership has identified more than 1,500 significant corporate relocations and expansions to the region since ’09. Significant is defined as any project creating 50 or more jobs, leasing or constructing 20,000 or more square feet of office or industrial space, or investing $1 million or more in capital improvements.
- The metro area has created 463,800 jobs since the bottom of the recession, or three jobs for every one lost in the downturn. No other major metro area can make a comparable claim.
- Houston realtors sold more than 425,000 homes in the past five years. The region is on pace to record 91,000 closings this year, which would set a record. Home sales are closing at the rate of one every six minutes.

TOTAL NONFARM PAYROLL, HOUSTON METRO AREA, ’04–’15



Source: Texas Workforce Commission

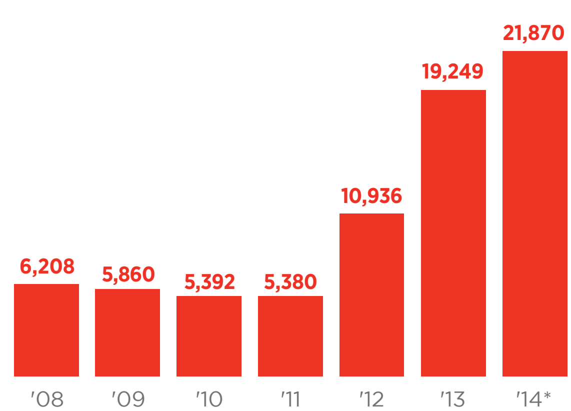
VROOM, VROOM, VROOM

Two engines have driven Houston’s economy, exports and energy, with an octane boost from population growth and a dose of good P.R.

The value of Houston’s exports grew 74.5 percent from ’09 to ’13. The region now ranks as the top U.S. export gateway, overshadowing New York, Los Angeles, Seattle and Detroit. A study by the Brookings Institution found that exports supported 307,000 Houston-area jobs in ’10. Given that local exports have grown 42.7 percent since then, the number of export-supported jobs likely exceeds 400,000 today.

In the first 10 months of ’14, 21,870 oil wells were drilled in Texas, up from 5,392 in all of ’10. The energy sector, defined here as exploration, oil field services, equipment manufacturing, and engineering, has added 93,400 jobs since January ’10, or one in every five created in the recovery and expansion.

OIL WELLS DRILLED IN TEXAS



*Through October

Source: Texas Railroad Commission

[1] For purposes of this forecast, the Houston metro area consists of Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto and Waller counties.

OCTANE BOOSTERS

Houston received a boost from population growth over the past four years. The 10-county metro has added more than 500,000 residents,[2] the equivalent of the population of Spokane, over that period. Half arrived via the moving van and half via the maternity ward. The population increase has driven new home construction, apartment rentals, retail sales, and just about any sector that thrives on an expanding consumer market.

And Houston continues to garner accolades from the national media. The *New York Times* recently rated Houston a "Top Destination for College Graduates," *Forbes* rated Houston among the "Most Competitive Metros in America," *CreditDonkey* scored Houston as one the "Best Cities for Young Entrepreneurs," and U-Haul recognized Houston as the top destination for relocations in '13, the fifth consecutive year Houston has won that designation.

GLOBAL TRENDS, LOCAL IMPACTS

Houston, however, is entering a new phase of the business cycle, one in which growth is less certain.

Though Houston's trade ties remain strong—exports via the Houston-Galveston Customs District are up 5.8 percent in the first 10 months of this year—most of the growth has been in refined products, an outlet for the massive volume of crude being produced in Texas. Exports of plastics, chemicals and industrial machinery are flat or down compared to last year.

The International Monetary Fund (IMF) forecasts global growth to slip next year for eight of Houston's top 25 trading partners and remain flat in seven others. In a broader context, the IMF has trimmed its expectations for global growth from 4.0 percent to 3.8 percent in '15. While the revision seems insignificant, each 0.1 percent drop equates to $776 billion in lost global GDP, the equivalent of one Saudi economy. In addition, the value of the U.S. dollar has risen 9.5 percent over the past 12 months, making Houston's goods and services more expensive overseas.

Falling oil prices pose a graver threat. From mid-June to the last trading day of November, the spot price for West Texas Intermediate (WTI), the U.S. benchmark for light, sweet crude, fell $41.80 a barrel, or 38.7 percent. If a 20 percent decline defines a bear market, a 40 percent drop is an even more dangerous beast. Of greater concern, there's no indication how much further crude prices might fall in coming months.

SPOT PRICE, WEST TEXAS INTERMEDIATE – 2014

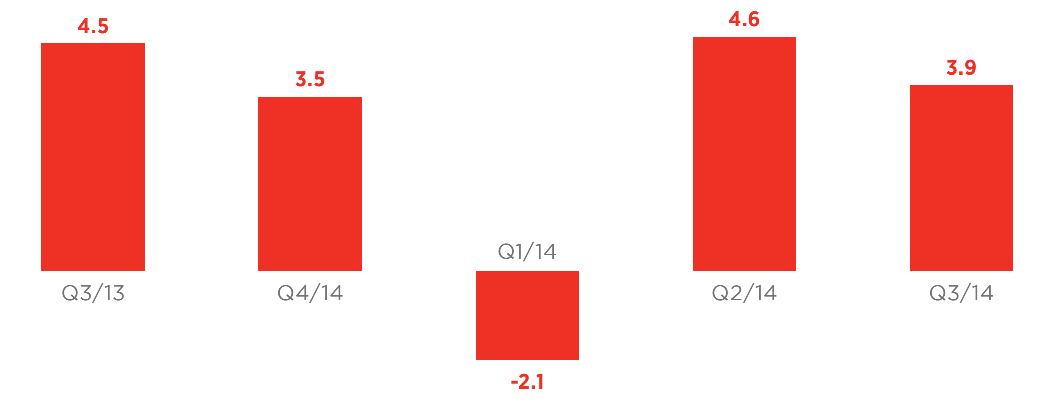
Source: U.S. Energy Information Administration

[2] Based on historic data from the U.S. Census Bureau and GHP estimates based on recent trends.

FLASHING YELLOW, NOT RED

Houston has enough momentum going into ’15 for growth to continue, albeit at a much slower pace. Construction will go forward on the ethane crackers, chemical plants and liquefied natural gas terminals planned for the region. Houston will add another 125,000 residents, driving consumer-related industries. Hobby Airport will open its International Terminal in ’15, funneling more travelers through the region.

% ANNUALIZED GROWTH RATES, U.S. GDP



Source: U.S. Bureau of Economic Analysis

Houstonians will continue to shop, dine out and visit the doctor, though not necessarily in that order. And school districts will boost hiring to handle the expanding student population.

Though many Houstonians don’t like to admit it, the Energy Capital of the World is still part of the U.S., and the U.S. economy is growing again, which will help Houston. The nation added 2.7 million jobs in the past 12 months, 321,000 in November alone. And U.S. GDP grew 3.5 percent or better for four of the previous five quarters. Houston always benefits when the annual U.S. growth rate exceeds 3.0 percent.

THE ’15 FORECAST

The Partnership expects metro Houston to gain 62,900 jobs in ’15. Growth will be strongest outside the economic base—construction, retail, professional services, health care, food services and public education. Job losses will occur in exploration and production, oil field services, and oil field equipment manufacturing. Even with layoffs and slower growth, Houston will reach a milestone in ’15. The year should finish with more than 3.0 million nonfarm payroll jobs.

Final note: Readers should consider that the primary value of any forecast lies not in the accuracy of the numbers but in understanding the trends and discontinuities driving the data. Armed with this knowledge, readers should be able to make better informed decisions in the coming months. Now the details.

ENERGY

Three points underscore the importance of energy to Houston:

- The U.S. Bureau of Economic Analysis estimates that mining (in Houston, almost entirely oil and gas extraction) accounted for $102.7 billion, or 19.8 percent of Houston’s GDP, in ’13. Sectors that Houstonians typically identify as part of the energy industry—chemicals, refining, oil field equipment manufacturing, fabricated metal products, pipelines and engineering—contributed another $83.9 billion, or 18.3 percent, to the total. Broadly defined, energy accounted for $186.6 billion, of 38.1 percent, of the region’s output in ’13.
- A recent McKinsey & Co. study conducted on behalf of the Partnership found that 70 percent of Houston’s tradable sectors are energy-related. “Tradable”

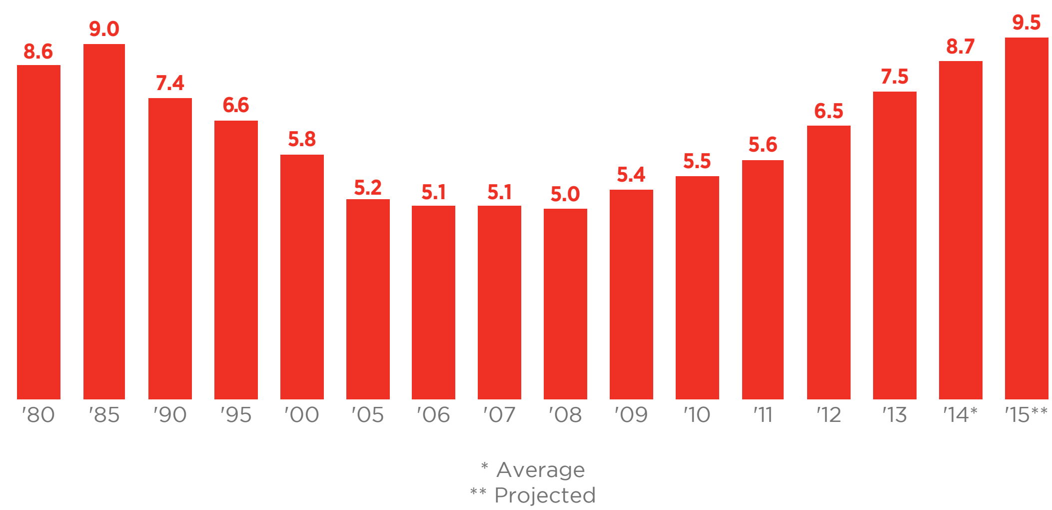
refers to goods and services sold outside the region. Growth in tradable sectors, also known as the economic base, spurs growth in the secondary sectors (*e.g.*, retail, restaurants, health care).

- The average annual compensation in Houston's mining sector was $185,000 in '13, according to the Quarterly Census of Employment and Wages. Compensation for all other industries averaged $64,500. Translation: One energy job has the purchasing power of three non-energy jobs in Houston.

Data Spud

Unfortunately, the industry has become a victim of its own success. By marrying two technologies—directional drilling and hydraulic fracturing—U.S. energy firms have unlocked the nation's enormous, tight oil reserves. Domestic production has grown from 5.0 million barrels per day (bbl/d) in November '08 to 9.1 million in November '14.

ANNUAL U.S. CRUDE PRODUCTION, Millions of Barrels per Day



Source: U.S. Energy Information Administration

The increase in domestic production has greatly reduced U.S. dependence on foreign oil. The share of U.S. consumption met by imports fell from 60 percent in '05 to 33 percent in '13, and is expected to slip to 20 percent in '15, according to the U.S. Energy Information Administration (EIA). OPEC crude, once destined for the U.S., now travels elsewhere or goes into storage. OPEC's surplus capacity now exceeds 2.1 million bbl/d and is projected to reach 2.7 million bbl/d in '15.

When OPEC met in Vienna on November 27, U.S. oilmen hoped the OPEC ministers would agree to production cuts and shore up oil prices. But the ministers took no such action. Instead, they decided to let the market set prices. The day after OPEC met, the price of North Sea Brent, the benchmark for crude traded on the global market, fell from $77.75 to $70.15, and slipped to $68.07 in early December. The price for WTI fell from $77.39 to $66.15 the day after Thanksgiving and has slipped to below $65 since then.

OPEC hopes that a prolonged period of oil below $70 per barrel will shut down high-cost production and balance global supply and demand. Much of that high-cost production is in the United States. The strategy is not without pain for OPEC. Nine of the 12 member nations need oil prices between $70 and $121 per barrel to balance their domestic budgets.[3] It took 40 years for the day to arrive, but now the U.S. creates havoc for OPEC. Unfortunately, the arrival is creating havoc for Texas as well.

[3] *The Wall Street Journal* reports that to balance their budgets Venezuela requires oil at $121/bbl, Algeria at $121, Nigeria at $119, Ecuador at $117, Iraq at $106, Angola at $98, Libya at $90, Kuwait at $75, and the United Arab Emirates at $70.

The Outlook

Wall Street has punished the industry for the drop in oil prices. Share prices for publicly traded exploration and service firms have fallen 10 to 40 percent this year. The nation's 14 largest publicly traded exploration companies[4] have lost a combined $308.4 billion in market capitalization over the past six months.

Cash flow, already inadequate to fund the industry's aggressive drilling program, has shrunk. A barrel of WTI in December sells for $42 less than it did in June. Given that Texas pumps about 2.0 million barrels every 24 hours, the price drop equates to a loss of $83 million per day, or $2.5 billion each month, in potential revenue.

Falling oil prices are limiting the industry's access to debt. From '09 to '13, the industry outspent its cash flow by $272 billion and turned to banks, private investors, and the bond market to fund exploration programs, according to IHS Herold. Merrill Lynch, which closely tracks the $1.7 trillion high-yield bond market, estimates that 17 percent of these bonds, about $289 billion, were issued by the oil and gas industry over the past few years. The door to new financing shut the day after OPEC met in Vienna, notes Philip Verleger, president of independent consulting firm PKVerleger LLC, and energy economist with the Ford and Carter administrations.

Certain Uncertainty

No one knows how far oil prices will fall in the coming months. The EIA forecasts WTI to average $77.75 in '15. Most oil companies would be grateful if prices remained that high. In early December, crude futures on the New York Mercantile Exchange traded between $65 and $68 per barrel through the end of '15. Recent media reports suggested the Saudis would be content with Brent at $60 per barrel. One thing is certain—the industry will drill fewer wells next year.

Moody's Investor Services expects independents to cut their exploration budgets by 20 percent. An analysis by Tudor, Pickering, Holt & Co. suggests exploration budgets could fall 30 percent or more in '15. Both Tudor Pickering and Simmons & Co. anticipate the rig count to fall by 500 units by the end of '15, which suggests a dramatic cut in the number of wells drilled. Every basin will see a significant drop in activity, even the Eagle Ford, Permian and Bakken.

For the past four years, conventional wisdom held that the breakeven point for drilling a well in the Eagle Ford is $70 a barrel and between $50 and $80 in the Permian. The EIA estimates the breakeven for the Bakken much lower at $42. Those floors will be tested in the coming months.

As exploration firms pull back and the rig count falls, they will gain leverage to negotiate cheaper rates which will lower break-even points. Land acquisition, a significant upfront cost, will slow. Firms will work prospects already in their portfolios, focusing on wells that turn a profit at lower prices. Companies will utilize technologies to increase production from existing wells and test whether wells can be spaced closer without sacrificing overall production. The industry will adapt, and consequently production growth will not slow as quickly as OPEC hopes. The U.S. now produces 9.1 million barrels per day; EIA forecasts production will average 9.5 million in '15. If Libya returns to Gaddafi-era production levels or sanctions are lifted against Iran, the glut and subsequent low oil prices may linger.

A shakeout in the industry will undoubtedly occur. That change began with the pending Halliburton-Baker Hughes merger. Expect more mergers in the future. Balance sheets will be as important as the economics of drilling individual wells. Companies burdened with debt will fold, providing others with opportunities to acquire assets at bargain prices. Service firms with offices in remote locations will consolidate, most likely into Houston. That was the pattern in the '80s and it should repeat itself in the '10s. Mega projects in their early stages will come under closer scrutiny. Those well underway will continue. In a year or two, perhaps more, the industry will emerge leaner and more efficient, and production growth will resume.

[4] Anadarko, Apache, BP, Chesapeake, Chevron, ConocoPhillips, Devon, EOG, ExxonMobil, HESS, Marathon, Noble Energy, Occidental and Shell

Employment Impact

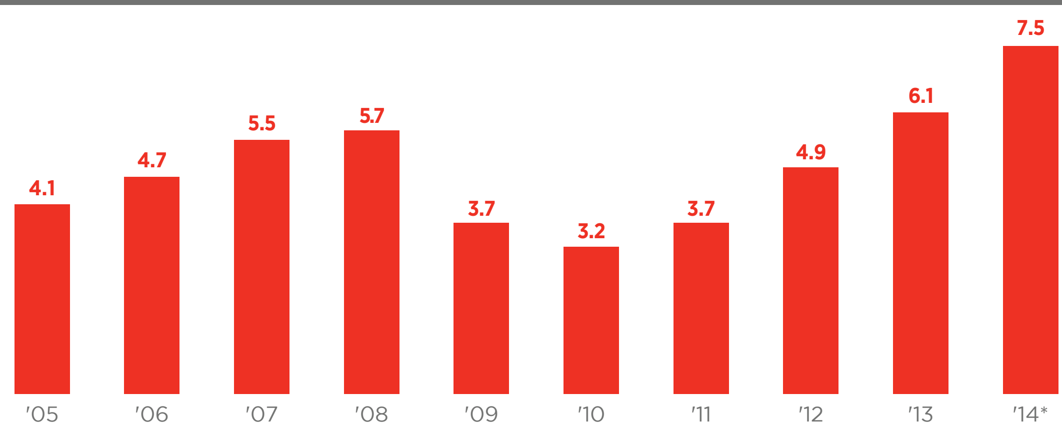
Inevitably, layoffs will occur next year, the result of mergers, bankruptcies, weak demand and the need to cut costs. Resumes of engineers with energy experience have already begun to circulate in the community. If history is a guide, layoffs will be more concentrated in oil field services (blue collar jobs) than in exploration (white collar jobs). During the ’08-’09 swoon, oil fell from $145 to $32 a barrel, the North American rig count fell 60 percent (1,155 rigs), oil field service employment in Houston fell 23.8 percent (9,700 jobs) and oil and gas extraction 2.6 percent (1,200 jobs). The Partnership does not anticipate as dramatic a drop in employment in either sector. The hope that the glut is a short-term phenomenon will mitigate layoffs, with the stronger production firms holding onto talent they know they will need when the market rebalances. As a result, the Partnership anticipates a significant drop in oil field services (7,900 jobs) and a minor drop in oil and gas exploration (1,300 jobs) in ‘15.

CONSTRUCTION

Construction continues to do well in Houston.

- McGraw Hill reports that $25.1 billion in contracts were awarded in the metro area in the first nine months of ’14. That compares to $9.1 billion awarded during the same period in ’13.
- Construction permitting in the city of Houston totaled $8.5 billion for the 12 months ending October ’14, a 41.8 percent increase from the $6.0 billion issued during the same period last year.
- Over the past two years, local voters have approved more than $5.3 billion in school and municipal bonds.
- The U.S. Census Bureau reports that 32,649 permits for construction of single-family homes have been issued in metro Houston during the first 10 months of this year, up 9.6 percent from 29,770 during the same period last year.

CITY OF HOUSTON BUILDING PERMITS, $ Billions



*First 10 Months

Source: City of Houston

With the slowdown in oil and gas, demand for new office space will abate. Similarly, with a slowdown in manufacturing less industrial space will be needed. Construction will continue on the $100 billion in ethane crackers, chemical plants, and LNG terminals announced for the Gulf Coast, helping to offset the decline in commercial construction. And Houston-area builders will probably start 33,000 to 35,000 single-family homes in ’15, up slightly from approximately 30,000 started in ’14, according to David Jarvis with McAlister Investment Real Estate.

The Partnership calls for employment growth in construction to slow marginally, the sector adding 8,200 jobs next year.

MANUFACTURING

Manufacturing in Houston is a $96.7 billion industry and accounts for slightly less than one-fifth the region's GDP. Seventy percent of Houston's manufacturing output comes from nondurables (*e.g.*, refined products, chemicals, plastics, food, apparel, and paper goods) and 30 percent from durables (*i.e.*, goods with a lifespan of three or more years).

Much of Houston's growth has been tied to the manufacture of oil field equipment and fabricated metal products—the former to support the drilling boom, the latter to support the construction boom. With the anticipated slowdown in exploration, demand for oil field equipment will fall, taking employment with it. The Partnership expects durable goods manufacturers to cut staff in '15.

Growth in the U.S. economy will expand demand for chemicals, plastics and other locally-produced nondurables, but it won't be enough to offset losses associated with the decline in oil field equipment and fabricated metals manufacturing. The Partnership expects manufacturing overall to lose 3,300 jobs in '15.

WHOLESALE TRADE

The sector employs 156,200 Houstonians, making it larger than mining, transportation and utilities, or finance and real estate as an employer.

Wholesale trade is a hidden part of Houston's economy because wholesalers don't deal directly with consumers. Instead, they supply retailers with goods to stock their shelves; deliver bulldozers, oil field equipment and walk-in freezers to firms that use them in their business; distribute nuts, bolts, paint and wiring to manufacturers who incorporate the components into final products; and broker goods and commodities to buyers overseas.

Growth in '15 will depend on what happens in the energy, retail and manufacturing sectors, and on what happens in U.S. and overseas markets.

The anticipated drop in exploration next year will reduce the demand for oil field equipment. Exports will slow if overseas economies continue to weaken. The strengthening dollar will further reduce demand for U.S. exports. Durables manufacturing, in Houston heavily weighted to energy, will contract, but production of nondurables will expand. Consumer purchases, driven by a growing population, will increase. And the U.S. economy will continue to improve.

Though some sectors will struggle, there's enough momentum in wholesale trade for employment growth. The Partnership expects the sector to add another 3,500 jobs in '15.

RETAIL

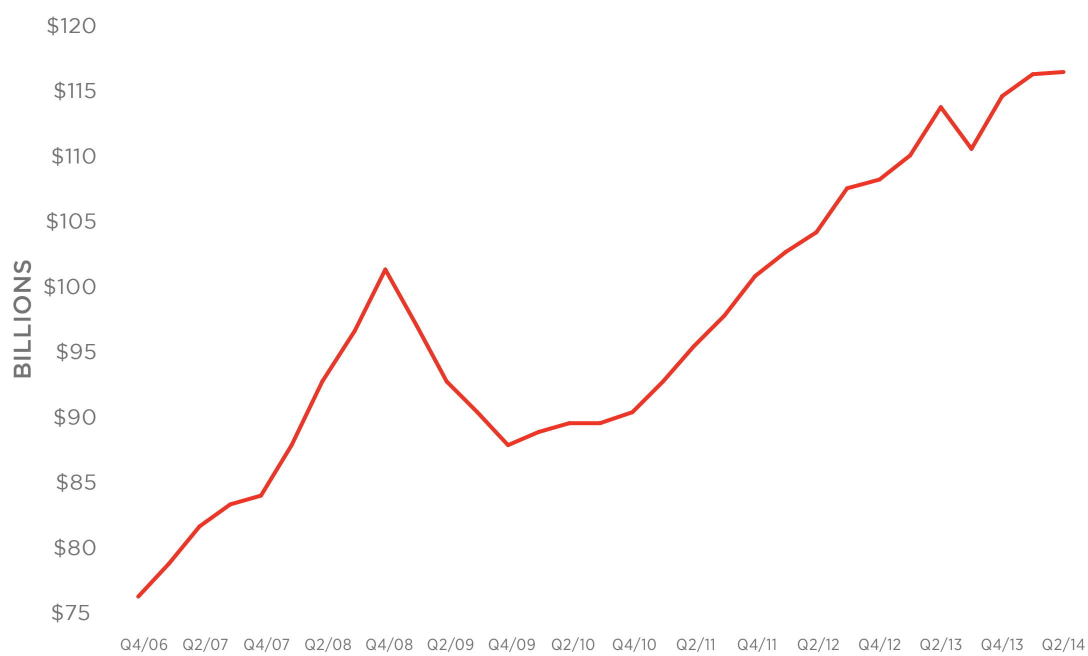
From '09 to '13, retail sales in Houston grew by $26.6 billion (30.3 percent), $17.4 billion (19.8 percent) when adjusted for inflation. The sector has three drivers: population, jobs and income. As noted earlier, Houston has gained more than a half-million residents over the past four years, $30.5 billion in wages and salaries over the past four years, and more than 463,000 jobs since the beginning of '10.

Strong retail growth has attracted scores of retailers in recent years. Grocers entering the Houston market include Aldi, Fresh Market, Sprouts and Trader Joe's. Other retailers entering the market include 5.11 Tactical Series and Cabellas (sporting goods), homeIDENTITY (furniture), Boston Proper, John Varvatos, Kate Spade, Polo Ralph Lauren, Stag, Suitsupply and Top Shop (apparel), and Pet Supplies Plus.

The Partnership foresees only a modest slowdown in retail hiring next year. Many retailers have already signed leases or broken ground for stores that will open in '15. H.E.B., Kroger and Whole Foods plan to open a combined 15 stores. Many well-known retailers—Academy, Conn's, Costco, Gander Mountain, Floor & Décor, HomeGoods, Nordstrom, Ross Dress for Less, Sam's Club, TJ Maxx—are looking to expand in Houston. And CBRE estimates 2.0 million square feet of retail space is under construction, much of it to be delivered in '15. As of Q3/14, another 6.8 million square feet was proposed, though some of those plans undoubtedly will be put on hold.

The uncertainty over oil prices may make retailers more cautious, but it won't derail their expansion plans. Houston's population will continue to grow, new stores will open, and those stores will need meat cutters and produce clerks, sales associates and managers. The Partnership expects retail hiring to dip from recent trend, but still add a healthy 6,600 jobs in '15.

METRO HOUSTON RETAIL SALES, 4-QUARTER MOVING TOTAL



Source: Texas State Comptroller

TRANSPORTATION, WAREHOUSING AND UTILITIES

Transportation comprises several modes—air, water, trucking, rail and pipeline among them—plus support services, warehousing and utilities. Each sector has a different driver.

- Air: business and leisure travel,
- Water: international trade,
- Trucking: manufacturing and wholesaling,
- Pipelines: oil and gas production,
- Warehousing: manufacturing and wholesaling,
- Support services: all the aforementioned, and
- Utilities: commercial and residential construction.

HOUSTON AIRPORT SYSTEM TRAFFIC PASSENGERS (millions)			
12 Months Ending	Total	Domestic	International
Oct ’04	44.6	38.3	6.3
Oct ’14	52.9	43.2	9.7
10-Year Compound Annual Growth Rate	1.7%	1.2%	4.4%

Source: Houston Airport System and Partnership Calculations

Factors impacting sector employment in ’15:

International momentum continues to build at Bush Intercontinental Airport. In the past two years, Air China initiated service to Beijing; Korean Air to Seoul; Scandinavian Airlines to Stavanger; and Turkish Airlines to Istanbul. United is adding flights to Tokyo, Munich, Santiago, and Punta Cana. Aeroméxico is adding flights to Monterrey, and VivaAerobus to Guadalajara and Cancún. Spirit Airlines will add service to Cancun, Los Cabos, Toluca, Managua, San Jose, San Pedro Sula and San Salvador. By the end of ’15, Southwest Airlines will launch international service from Hobby Airport.[5] As a result, international passenger growth is out pacing domestic.

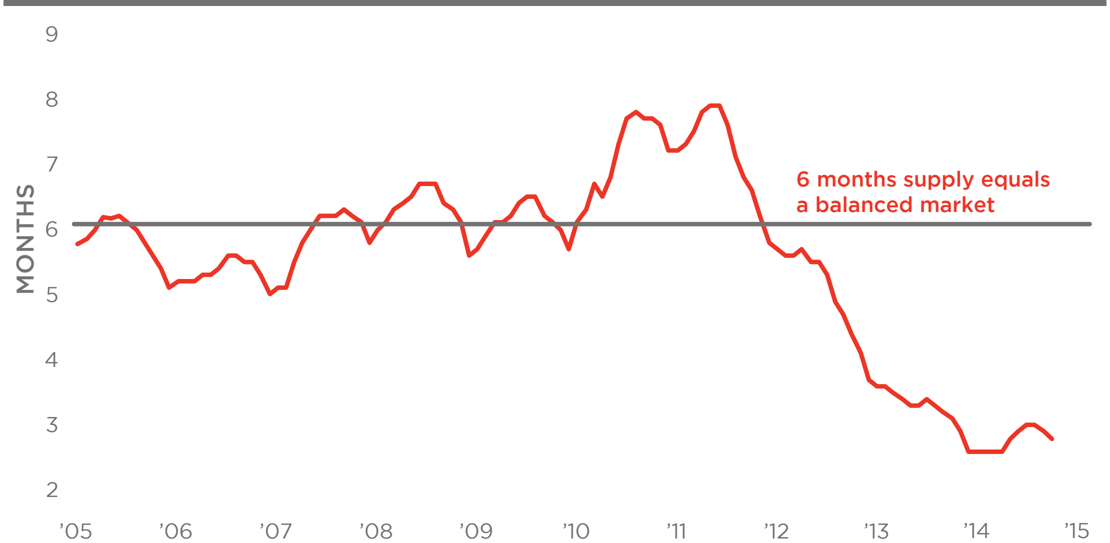
Traffic through the Houston-Galveston Customs District will slow as the global economy weakens and the dollar appreciates, making U.S. exports more expensive in overseas markets.

The expected downturn in oil field services and equipment manufacturing will reduce demand for trucking services (and alleviate some of the associated labor shortages).

CBRE reports that 6.0 million square feet of industrial space was under construction at the end of Q3/14. The firms that operate in that space will need forklift drivers, shipping clerks, stock handlers and truck drivers.

Analysts expect oil production to increase in the near term, even with lower prices. On one hand, this production must be brought to market. On the other, capital to build new pipelines will be hard to come by. Even in the best of times, pipeline transportation added only 200 to 600 jobs per year. Any employment growth next year will be modest at best.

MONTHS OF INVENTORY, HOUSTON RESALE HOUSING MARKET



Source: Houston Association of Realtors, Multiple Listing Service

[5] A ’12 study commissioned by the Houston Airport System indicated that the new terminal and resulting competition to near-international destinations would eventually generate more than 10,000 jobs across the metro area.

Houston's housing market remains tight. The Houston Association of REALTORS® (HAR) reports only 2.8 months of inventory in its Multiple Listing Service (MLS) database.[6] The market is considered evenly balanced between supply and demand when it has a six-month inventory. Developers have the incentive to build 30,000 or more homes in '15, all needing utility hookups. The Partnership expects employment in utilities to grow, but at a substantially slower pace than in recent years.

The Partnership expects the transportation, warehousing and utilities sector, as a whole, to add 2,600 jobs in '15.

INFORMATION

Information includes newspapers, magazines, book publishers, radio, television, cable, sound recording, movies, software, data processing, the Internet and telecommunications. Employment in the sector has trended downward for the last decade. The Internet has transformed how consumers receive their news. More radio stations rely on national feeds rather than local broadcasts. And advances in technology reduce the need for telecom workers. The Partnership's forecast reflects these changes and calls for the sector to create only 100 jobs in '15.

FINANCIAL ACTIVITIES

At the end of Q3/14, Houston enjoyed a healthy real estate market. Residential brokers sold nearly 70,000 homes over the first nine months and were on track to sell more than 90,000 by year's end, which would be a record for Houston. By the time '14 closes, sales volume should surpass $23.1 billion, netting nice commissions for residential brokers and setting a dollar volume record.

Commercial real estate has also performed well. Through the first nine months, the market has absorbed 4.7 million square feet of office, 5.8 million of industrial and 1.8 million of retail space. The Class A office vacancy rate was 8.3 percent, industrial 5.3 percent, and retail 6.6 percent, all respectable for Houston.

Residential activity shows no sign of slowing down. Pending sales at the end of October were well above the 10-year average and the second highest level on record for an October. Brokers can't find enough homes to sell. At the current level of sales, the market could handle another 30,000 listings.

There are signs of a slowdown in commercial real estate. Through the first nine months of '14, the five largest office leases absorbed 700,000 square feet of space, compared to 2.0 million over the same period in '13. Last year, lease transactions above 100,000 square feet were common. Now leases under 75,000 square feet are the norm. And developers have become more cautious, placing several speculative office projects, albeit smaller ones, on hold in recent weeks.

But Houston won't see a repeat of the '80s. For one, the office market is not overbuilt. From '82 to '86, the metro area added 71.7 million square feet of office space, a 61.8 percent increase, much of it built on spec. Since Q1/10, the region has added about 11.1 million square feet of office space with another 17.3 million square feet under construction. The space added and under construction represents a mere 14.3 percent increase in the market, and two-thirds of the space under construction is pre-leased. At the depth of the '80s recession, the office vacancy rate in Houston topped 30 percent. That would be equivalent to every building in the CBD and Energy Corridor going empty—a highly unlikely scenario

Second, Houston's housing market remains tight. From '82 to '86, the region added 187,760 apartments and single-family homes while shedding 221,000 jobs. Since Q1/10, Houston has built 189,575 apartments and single-family homes while adding 463,800 jobs. With a 2.8 month supply of homes in inventory, Houston is not in danger of overbuilding, except for maybe apartments.

[6] That's number of months it will take to deplete current active inventory based on the prior 12 months of sales activity.

Likewise, the banking industry is healthier now. When oil prices fell in the ’80s, the collapse hit Texas banks hard and the legislature opened Texas to interstate banking. Venerable names like Texas Commerce, First City and Republic National disappeared while stalwarts like JPMorgan, Wells Fargo, and Bank of America—national banks with more resources—arrived in Houston. And the banks are more closely watched now and have stricter capital requirements, thus preventing a repeat of the ’80s.

Growth in financial services employment will depend on new banks entering the market, the opening of additional branches by existing banks, interest rate increases, and new financial products offered in the market. This will be tempered by regulations put in place by the Dodd–Frank Act and bankers wariness of lending to firms linked to the oil patch.

The Partnership forecasts hiring in financial services—real estate, banking, insurance and related services—to slow somewhat, with the sector adding 1,900 jobs in ’15.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

The sectors that compose professional, scientific, and technical services include accounting, advertising, architecture, computer systems design, engineering, law, management consulting, marketing, public relations, scientific research and the catch-all “other services.”

As the sector name indicates, these firms *serve* the business community. They keep things legal, track cash flow, design systems, suggest ways to improve operations, raise awareness for the company’s brand, and perform contract research.

Houston’s engineering firms have healthy backlogs. In good times and bad, every business needs a CPA and sound legal advice. However, marketing and P.R. budgets are often the first expenses cut in a downturn. The same goes for consulting contracts. Work on new computer systems may be delayed until cash flow improves. Bottom line: growth will slow. The Partnership forecasts the sector to add 9,300 jobs next year.

ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES

This sector contains a hodge podge of industries. It includes firms that support the operations of other organizations by providing typical administrative functions—clerical, human resource, janitorial, maintenance, laundry, and security—for a fee; pest control, landscaping, carpet cleaning and laundry services; credit bureaus and travel agencies; copy centers; temporary/contract employment agencies; and firms that collect, haul, treat and disposal of waste.

Though the sector accounts for only one in 15 jobs in the region, the industry accounts for one in 10 jobs added in the recovery, reflecting the long-running trend toward outsourcing non-core functions. The Partnership expects that trend to continue, especially as firms look for ways to cut costs next year. As a result, the Partnership forecasts the industry to add 8,400 jobs in ’15.

EDUCATIONAL SERVICES

This sector covers private education—vocational training, technical schools, private universities, testing services and the like. Based on data from County Business Patterns, the region has more than 1,600 private institutes of education. Perhaps the best know are Baylor College of Medicine, Houston Baptist University, Rice University, South Texas College of Law, University of Phoenix, and University of St. Thomas. The region has 330 private and parochial elementary and secondary education schools as well. Employment growth tracks the health of the general economy. The Partnership expects the trend to continue, with the sector adding 1,200 jobs in ’15.

HEALTH CARE

Health care accounts for one in every 10 jobs in the region, 9.5 percent of local payroll ($15.9 billion in ’13), and more than 48,000 jobs created since the end of the Great Recession.

Health care, like retail, benefits from population and employment growth. An equally important driver is demographics. In a typical year, Houston records more than 90,000 resident births—children under the age of five visit the doctor frequently for checkups and vaccinations. And every year, Houston’s population 65 and older grows by 15,000 to 20,000 residents—older residents require more health care to deal with ailments associated with aging. Houston’s 65-plus population exceeds 600,000 residents, and it will expand as the baby boom generation ages.

While the demand for health care grows, it’s less certain how it will be paid for. Provisions of the Patient Protection and Affordable Care Act (ACA) along with mandates from private insurers pressure health care providers to cut costs and reduce hospital stays. Critical care centers now see patients once handled in the emergency rooms. Stand-alone dialysis and chemotherapy centers are now the norm. As a result, employment in ambulatory health care is growing at three times the rate of hospital employment.

Although the delivery of health care is changing, the need for it continues to grow. The Partnership expects the sector to add 9,600 jobs in ’15.

ARTS, ENTERTAINMENT AND RECREATION

With just 29,500 employees, arts, entertainment and recreation is one of Houston’s smallest employers, accounting for one percent of regional employment. Annual payroll is just over $1 billion.

The major players include Houston’s cultural treasures (think Theater, Opera, Ballet and Symphony) spectator sports (watch the Astros, Dynamo, Rockets and Texans) and attractions (visit the Zoological Gardens and Space Center Houston). Houston boasts more than 1,300 performing arts organizations, museums, sports teams, and recreational facilities. However, half of these organizations employ five or fewer workers.

Houston is unlikely to add a professional sports team, though the city could use a hockey franchise. Employment in performing and visual arts depends on attendance, corporate support, and the munificence of wealthy donors—three uncertainties in light of next year’s economic prognosis.

A third of all “Arts and Rec” employees work at gymnasiums, fitness centers, tennis clubs and swimming pools. That’s where the potential for growth lies. The need to shrink waistlines will expand employment opportunities next year.

The Partnership forecasts an additional 700 jobs in this sector in ’15.

ACCOMMODATION

The sector is not a major employer—24,100 workers as of October ’14—but it generates significant tax revenue. The City of Houston expects to collect $89.8 million and Harris County $35.7 million from the Hotel Occupancy Tax[7] in the current fiscal year. Since the tax is tacked onto hotel bills, it’s paid mostly by out-of-towners. As a result, non-Houstonians help service debt issued to construct local sports venues and convention facilities. The hotel tax is also used to operate Miller Theatre, the Houston Arts Alliance, and the Theatre and Museum Districts, the operations of Houston First Corporation (which manages the city's convention facilities) and the Greater Houston Convention and Visitors Bureau.

The region hosted 353 conventions and trade shows in '14, according to the GHCVB. These trade shows brought in 758,040 delegates who booked 561,441 room nights in local hotels. The GHCVB expects activity in '15 to surpass that of '14. Several major conventions are already booked—American Bar Association, American Academy of Allergy, Asthma and Immunology, Offshore Technology Conference, Texas High School Coaches Association, Shiners International, and Society of Petroleum Engineers among them.

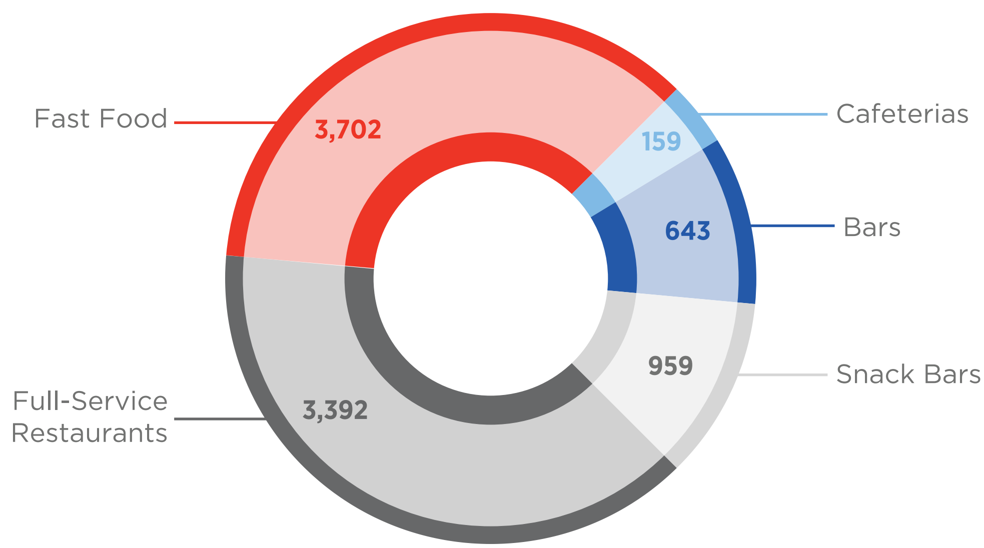
The number of casual visitors to Houston should grow as well. In October, *Travel + Leisure* ranked Houston among the top five America's Favorite Cities, a barometer of what's top-of-mind among travelers. *Trip Advisor* ranked Houston 12th on the firm's list of top 25 U.S. travel destinations. Royal Caribbean Cruises has agreed to bring in larger vessels and expand service at the Port of Galveston in early '15. And as noted earlier, international service to Houston continues to expand.

PKF Consulting expects Houston to add more than 6,000 hotel rooms over the next two years, all in time for SuperBowl LI in '17. Even with the additional rooms, average daily rates are projected to increase from $108.50 in '14 to $113.00 in '15. The outlook for accommodation remains strong. GHP forecasts the sector to add 1,000 jobs in '15.

FOOD SERVICES

Food services could also be called "wining and dining." The sector includes restaurants, cafés, fast food franchises, cafeterias, food trucks, and bars.

HOUSTON EATING & DRINKING ESTABLISHMENTS



Source: Quarterly Census of Employment and Wages

At mid-'14, the region boasted 159 cafeterias (*e.g.*, Furr's, Luby's), 3,392 full-service restaurants (*e.g.*, Pappasito's, Landry's), 3,702 limited service restaurants (*e.g.*, Schlotzsky's, Chick-fil-A), 959 snack and nonalcoholic bars (*e.g.*, Starbuck's, Jamba Juice), and 643 alcoholic bars and drinking places (*e.g.*, Anvil, Richmond Arms).

[7] The Hotel Occupancy Tax is 17 percent, of which 6 percent goes to the state, 7 percent to the City of Houston, 2 percent to Harris County and 2 percent to the Harris County Houston Sports Authority. The City uses its share to fund Houston First, the Houston Arts Alliance, service convention and entertainment facility construction bonds. The county uses its portion to service debt on the Astrodome and facilities built by Harris County Sports Authority.

Houston's restaurant scene has developed a national reputation. No fewer than 67 Houston-area restaurants have been featured in national publications (*Bon Appetit*, *Esquire*, *Food & Wine*, *GQ*, *Maxim*, *National Geographic Traveler*, *Gourmet*, *Texas Monthly*, *Travel + Leisure*, *Southern Living* and *Zagat*) in recent years. In April, Resonance Consultancy, a global travel marketing firm, ranked Houston the sixth most popular destination in the U.S. for foodies.

Houston has 1,500 more bars and restaurants today than it did five years ago, along with 36,000 new jobs in those eating and drinking places. A number of factors drove the increase: consumer confidence, population growth, hectic lifestyles, the rising popularity of ethnic cuisines, the unwillingness to cook, and the inability to cook. A number of factors may temper growth next year: cutbacks in business entertaining, slippage in consumer confidence, and slower job growth. New bars and restaurants will open next year, but not at the same pace as the past five years. They will still need cooks, bartenders, staff, busboys and managers. The Partnership forecasts food services and bars to add 8,300 jobs in '15.

OTHER SERVICES

Employees in other services work for a variety of areas: repair services (automotive, appliance, machinery), personal services (laundry, dry cleaning, funeral, pet care, parking, dating) and associations (religious, grant-making, civic, business, professional). This is a small sector with barely 100,000 employees, or 3.5 percent of total employment for the region.

Employment in "other services" tracks the economy as a whole, adding jobs when Houston prospers and cutting jobs when Houston struggles. The Partnership expects slower growth in Houston next year, thus slower growth in this sector. Expect it to add slightly more than 2,200 jobs in '15.

GOVERNMENT

Government employment is divided into three sectors—federal, state and local. State and local are subdivided into public education and the other governmental sectors.

Local education, with more than 200,000 teachers, instructional aides, crossing guards, cafeteria workers and administrators, is one of the largest employers in the region—a fact that may seem startling until one considers that the region's 60 school districts educate more than 1.2 million students. Restated: One in five Houston residents attends a local elementary, middle or high school.

School enrollments have grown by more than 200,000 students over the decade ('03–'13), or about 20,000 students each year. The increase came as children relocated to Houston with their families or those children born here reached school age. Over the same period, school district employment grew by 25,400 jobs, an average of 2,540 per year.

Growth in enrollment doesn't necessarily translate into growth in employment. There may be more students on campus but funding determines the number of teachers in the classrooms. Funding comes from three sources—local property taxes, state allocations and federal grants—but mainly from property taxes.

Property tax revenues rise and fall with property values, which rise and fall with the economy. But there's always a lag. Employment in public education may expand as the economy slides into recession, as was the case in '09 (9,200 jobs added) or slip as the economy recovers, as was the case in '11 (8,100 jobs cut).

The good news is that property values have appreciated by $65 billion (all local districts combined) over the past three years. Expanding enrollments, the opening of new schools, and higher property values will support more teachers in the classrooms and coaches on the fields. The Partnership forecasts the local public education sector to add 7,700 jobs in ’15.

Modest growth, driven by a surging population and improved finances, will occur in municipal and county employment as well. The Partnership expects the sectors to add a combined 1,200 jobs next year.

HISTORIC PERSPECTIVE

From ’94 to ’13, Houston created 970,000 jobs, an average of 48,600 jobs per year. Obviously, Houston creates more jobs in robust years and fewer jobs in lean years, but the average provides a decent benchmark against which to assess the Partnership’s employment forecast—growth will be better in ’15 than the long-term average but slower than in recent years. If one strips the outliers from the calculation, removing the three best years (’97, ’06, ’12) and three worst years (’02, ’03, ’09) for job creation, the average jumps to 58,400 jobs. Against that metric, next year’s forecasted job growth seems normal for the region.

Readers should be advised that the current pace of job growth—120,000 jobs in the 12 months ending October ’14—is unsustainable. It’s also likely that this year’s job growth will eventually be revised downward.

That’s because the monthly employment reports commonly cited in the media are issued by the Texas Workforce Commission and come from a national survey of businesses conducted by the U.S. Bureau of Labor Statistics, and as with all surveys, the results are subject to sampling error. BLS revises its estimates once a year based on unemployment insurance reports filed with state workforce agencies. These “benchmark revisions” are released in March and often reflect significant revisions to the original estimates. Readers shouldn’t be surprised if they see downward revisions to Houston’s employment data for ’14. The Partnership’s forecast for 62,900 jobs in ’15 should be seen in that context.

HISTORIC REVISIONS TO PAYROLL EMPLOYMENT, HOUSTON METRO AREA

Year	Original Estimate*	Benchmark Revision*	Difference From Original Estimate
’05	42,500	89,200	46,700
’06	73,100	106,000	32,900
’07	59,800	89,100	29,300
’08	57,300	19,900	-37,400
’09	-92,500	-108,800	-16,300
’10	13,100	47,300	34,200
’11	75,800	80,500	4,700
’12	84,500	115,400	30,900
’13	82,000	76,200	-5,800

* Measured December to December

Source: Texas Workforce Commission and Partnership calculations

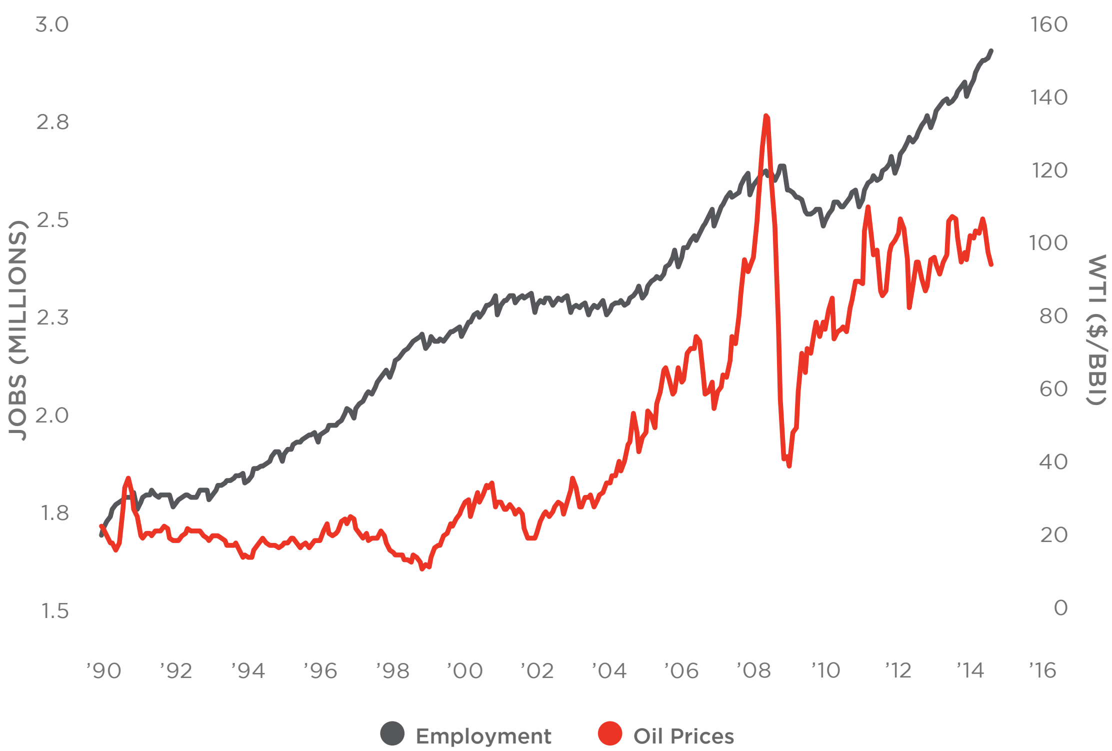
CONCLUSION

To better understand the outlook for Houston, it helps to put the current oil price scenario in an historical context. On January 2, 1990, the WTI spot price was $22.88 per barrel. WTI flirted with the upper $30s at the onset of the First Gulf War then fell to less than $12 later, averaging $19.73 for the decade.

In spite of prolonged low oil prices, Houston grew, adding more than 500,000 jobs in the decade. No individual sector dominated Houston's growth, though a few stories stand out—the birth of COMPAQ, construction of the International Space Station, a greater appreciation for the Texas Medical Center, a new focus on international trade, and Houston's shift from blue collar to white collar employment.

Mark Twain once said, "History doesn't repeat itself, but it sure does rhyme a lot." For the third time in three decades, Houston is about to enter an era of relatively low oil prices. Yet by all measures Houston is better off now than it was in the '80s, '90s, or even the past decade. In the short term, growth may slow, but it always rebounds. That's always been Houston's story. One doesn't need Twain's talent to write it. Just look at the data.

OIL PRICES AND EMPLOYMENT GROWTH



Source: U.S. Energy Information Administration and Texas Workforce Commission Data

Patrick Jankowski, Jenny Philip, Jade Bennett, Allegra Ellis, Edith Chambers, Josh Davis, Julia Gee and Roel Martinez contributed to this forecast.

HOUSTON MSA NONFARM PAYROLL EMPLOYMENT FORECAST (000s)

Industry	Employment as of Dec '14	Employment as of Dec '15	Net Change Dec '14	Net Change Dec '15	% Change Dec '14	% Change Dec '15
Total Nonfarm	2,961.6	3,027.3	121.5	62.9	4.3	2.1
Total Private	2,571.9	2,629.0	110.2	53.3	4.5	2.1
Goods Producing	582.4	578.1	30.5	-4.3	5.5	-0.7
Service Providing	2,379.1	2,449.1	90.9	67.2	4.0	2.8
Mining and Logging	117.1	107.9	9.7	-9.2	9.1	-7.9
Oil and Gas Extraction	64.1	62.8	4.2	-1.3	6.9	-2.0
Support Activities for Mining	52.4	44.5	5.6	-7.9	12.1	-15.1
Construction	201.5	209.7	12.6	8.2	6.7	4.1
Manufacturing	263.6	260.3	8.0	-3.3	3.1	-1.3
Durable Goods	173.4	169.0	1.9	-4.4	1.1	-2.5
Non-Durable Goods	90.4	91.5	6.3	1.1	7.4	1.2
Trade, Transportation, and Utilities	608.2	620.9	21.0	12.7	3.6	2.1
Wholesale Trade	157.2	160.7	3.4	3.5	2.2	2.2
Retail Trade	307.7	314.3	9.3	6.6	3.1	2.1
Transportation, Warehousing, and Utilities	143.3	145.7	8.3	2.6	6.2	1.8
Information	33.7	33.8	0.8	0.1	2.5	0.3
Financial Activities	146.1	148.0	4.9	1.9	3.5	1.3
Real Estate and Rental and Leasing	54.6	55.4	2.5	0.8	4.8	1.5
Professional and Business Services	448.4	464.9	17.4	16.5	4.0	3.7
Professional, Scientific, and Technical Services	224.6	232.9	17.0	9.3	8.2	4.1
Management of Companies and Enterprises	25.3	27.1	0.9	1.8	3.7	7.1
Admin Support & Waste Mgmt	198.7	205.3	-0.3	8.4	-0.1	4.2
Educational and Health Services	364.1	374.9	24.0	10.8	7.1	3.0
Educational Services	53.5	54.7	2.6	1.2	5.1	2.2
Health Care and Social Assistance	310.6	320.2	21.4	9.6	7.4	3.1
Leisure and Hospitality	286.8	296.8	8.9	10.0	3.2	3.5
Arts, Entertainment, and Recreation	28.9	29.6	1.3	0.7	4.6	2.4
Accommodation and Food Services	257.9	267.2	7.6	9.3	3.0	3.6
Other Services	102.0	103.2	2.5	2.2	2.5	1.2
Government	389.7	398.3	11.3	9.6	3.0	2.5
Federal Government	27.3	27.3	-0.1	0.0	-0.4	0.0
State Government	73.1	73.8	0.3	0.7	0.4	1.0
State Government Educational Services	39.5	39.9	0.3	0.4	0.8	1.0
Local Government	289.3	297.2	11.1	7.9	4.0	2.7
Local Government Educational Services	202.3	209.0	8.1	7.7	4.2	3.8

Note: Columns may not add up due to rounding and omission of residual categories.

Source: Greater Houston Partnership based on Texas Workforce Commission Data

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