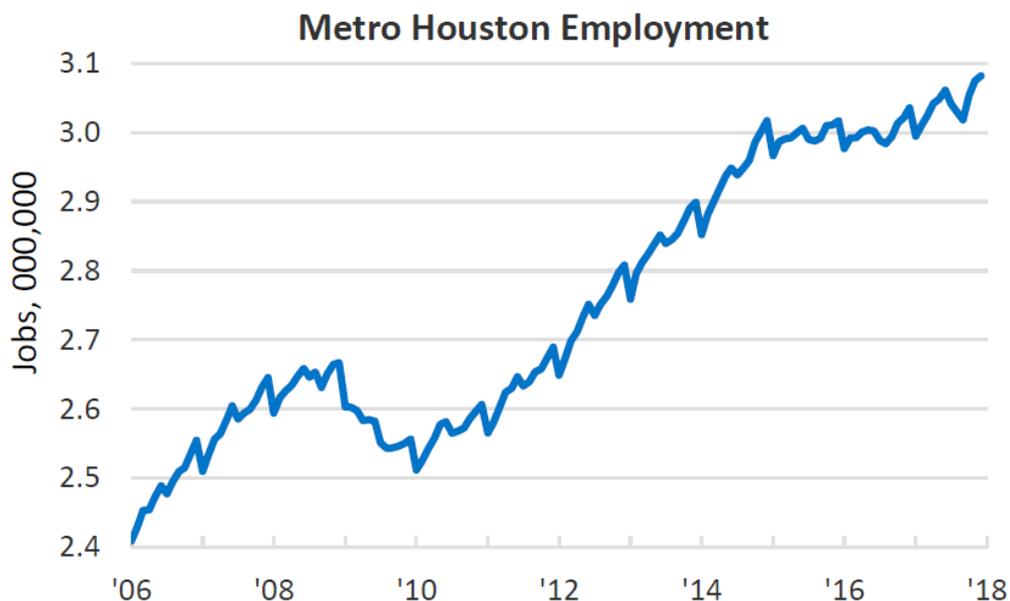


Job Growth Spurred by Price of Oil

The nine-county Houston metro area created 46,000 jobs in 2017. In a normal economy, one not overstimulated by high oil prices or restrained by low oil prices, the region would create 50,000 to 60,000 jobs per year. Last year's growth, though below trend, reflects a considerable improvement over 2016, when the region created 18,700 jobs, and 2015, when the region created only 200 jobs. Even with a weak economy, 2017 ended with payroll employment at 3,082,000, a new peak for the region. Barring a collapse in oil prices, a reversal in U.S. and global economic growth, or a black swan event, employment in Houston should surpass 3.1 million jobs the end of this year. The brightening outlook is largely driven by the rebound of the region's oil and gas industry. The widespread layoffs have largely ended.

The state economy has also benefitted from the oil industry's recovery. For Texas, 2017 also featured the strongest employment growth in three years. The state added more than 300,000 jobs, according to the workforce commission, a healthy growth rate of 2.5 percent, compared to 1.4 percent nationally. The state unemployment rate ticked up last month to 3.9 percent from November's record low of 3.8 percent. Job growth has accelerated in recent months, buoyed not only by rising oil prices, but also by a strong national economy and rebound from Hurricane Harvey as billions of dollars in insurance claims and disaster aid began coming into the state and region.



Source: Texas Workforce Commission

- Mining and Logging:** Mining and logging, which in Houston is primarily oil and gas, finished the year with a net loss of 400 jobs. The jump in the rig count, up 271 rigs over the year, spurred hiring in oil field services. But weak oil prices, which averaged \$50.80 for the year, continued to weigh on exploration firms' balance

sheets. The E&P sector continued to cut payroll while oilfield service firms hired additional workers to handle the upsurge in drilling activity. Unfortunately, the hiring couldn't offset the job losses and Houston's energy sector finished the year with fewer workers than when it started.

- **Construction:** Through September, the construction sector had cut 7,200 jobs and was on track to lose more than 10,000 for the year. But then Hurricane Harvey hit, damaging more than 160,000 homes in the metro area. The City of Houston approved \$949 million in residential construction permits in the last four months of 2017, up 76.1 percent over the comparable period in 2016. Construction hiring resumed and the sector finished the year with a net loss of only 800 jobs.
- **Manufacturing:** Manufacturing added 8,800 jobs, but what actually happened is hard to decipher. TWC reports that fabricated metal products added 5,400 jobs while machinery manufacturing lost 4,100, nearly canceling out the gains. Those two sectors account for 38 percent of all manufacturing jobs in the region, so it's not clear where the job growth came from. The gains did not come from nondurables (e.g., chemicals, refined products, food processing), where TWC shows a loss of 1,500. The March revisions should provide clarity.
- **Wholesale and Retail Trade:** Wholesale trade lost 2,000 jobs, the bulk of the losses occurring in nondurable goods, e.g., groceries, clothing, pharmaceuticals. Retail added 2,800 jobs, the sector's weakest performance since 2009, marking the second consecutive year of subpar growth. Retail added only 2,900 jobs in 2016. In a non-recession year, retail would be expected to add 5,000 to 6,000 jobs. While the increase in online sales accounts for some weakness, the collapse in local wages and salaries likely has a greater impact. Data from the Federal Reserve Bank of Dallas indicate that as of Q2/17, Houston-area wages adjusted for inflation remain \$4.8 billion below their Q4/14 peak.
- **Transportation, Warehousing, Utilities:** The sector lost 1,400 jobs in 2017. Again, the reason for the losses remains unclear. The Houston-Galveston Customs District recorded growth in bulk cargo. Port Houston set a record for container traffic. The Houston Airport System was fully operational a few days after Harvey passed through. And several large distribution facilities opened during the year.
- **Finance:** Finance, which includes banking, insurance and real estate, added 3,800 jobs, the bulk in the real estate subsector. Causes for the increase include a record number of home sales in 2017, a surge in apartment leasing immediately after Hurricane Harvey, and commercial leasing activity picking up in Q4.
- **Professional, Scientific and Technical Services:** Professional, scientific and technical services—sectors often identified with white-collar employment—added 7,500 jobs in 2017. That 3.5 percent growth was more than twice the rate for total payroll employment. Accounting, legal and IT services had nominal growth. Architectural and engineering services, which had been losing jobs since March 2015, added a handful of jobs in Q4 and finished the year with a gain of 1,600 jobs.

- **Employment Services:** This sector often serves as a bellwether for broader trends in the economy. Contract workers are often the first laid off in a recession. As the economy improves, firms often rely on contract workers before hiring permanent full-time staff. Such appears to have been the case again. Employment services added 10,700 jobs in 2017, nearly a quarter of the region's net gain in jobs last year.
- **Health Care:** The local health care sector endured the resignation of several hospital CEOs, uncertainty over the fate of the Affordable Care Act, and continued pressure from insurance companies and patients to control costs. The sector added 6,400 jobs, the second weakest performance of the past 10 years.
- **Accommodation and Food Services:** The sector, also known as hotels, restaurants and bars, failed to perform at the level of recent years, adding only 2,600 jobs in 2017. Over the past 20 years, job growth has averaged 6,900 per year.
- **Government:** The public sector added 8,000 jobs, of which 5,400 were in local education. Houston's ever-expanding population continues to drive growth in this sector.

Unemployment Rate Shrank

More Houstonians found jobs in 2017 than the year before. The estimated number of unemployed shrank from 174,603 in December '16 to 143,787 in December 2017. Over the same period, the civilian workforce grew from 3,328,011 to 3,299,559. The year finished with a local unemployment rate of 4.3 percent, down from 5.3 percent at the end of 2016. That level remains slightly higher than 3.7 percent for the state and 3.9 percent for the nation.

Oil Jobs Gone For Good?

The Texas oil industry's attempt to do more with less may have left the state's oil and gas workforce permanently smaller. Drillers in Texas are on the cusp of beating the state's 45-year-old oil-production record, even though the workforce supporting the oil industry in Texas is about the size it was in 2011, according to a report for Texas Alliance of Energy Producers. The report, by Karr Ingham, an Amarillo economist who studies the state's oil industry, noted that Texas oil production is projected to reach 12.43 billion barrels a day this year, beating the 1972 record of 1.26 billion barrels. Oil companies could do that with 75,000 fewer workers than at the peak of the previous boom in 2014, when some 300,000 people worked in the industry. "What are the chances it's going to get back to that level anytime soon?" asked Ingham. "Pretty slim, frankly."

Efficiency has been the watchword for the industry since the oil bust that cost tens of thousands of jobs and pushed scores of companies into bankruptcy. As crude prices crept up from the 2016 bottom of \$26 a barrel, oil companies sought ways to profit at lower prices, using computers, sensors and other technologies to drill wells and get more out of them. The length of horizontal wells, for example, has doubled since 2014 and advanced rigs can drill multiple wells from a single location. More sections of wells are hydraulically fractured, using more water, more sand and higher pressures, to

increase the yields. U.S. oil producers are on track to break the nation's production record, producing more than 10 million barrels a day of crude this year while using only about half the number of rigs that were in operation in 2014. Such efficiencies have weighed on several measures of economic activity in the Texas oil industry, said Ingham. Employment in the industry has climbed from 192,000 at the worst of the oil bust to 223,000, but that's about the same level in 2011, Ingham said. The number of working rigs, drilling permits, and wells brought into production also has come in pretty low recently. Ingham uses these measures as components of his Texas Petro Index, which tracks leading indicators of oil activity. The index is still well below its peak in 2014, thanks to more efficient oil and gas output. The index "is nowhere close to where it was in late 2014", Ingham said.

Sources: Greater Houston Partnership; Houston Chronicle