

# Houston Economic Indicators

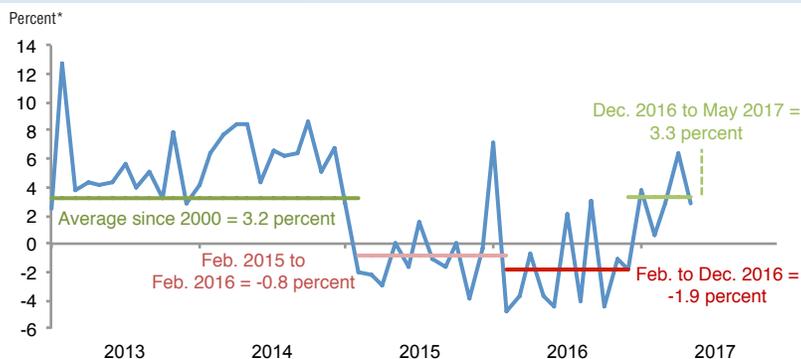
DALLAS FED

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## Summary

May data were mixed for the Houston metro area. The business-cycle index continued to signal a moderate expansion. Labor market data indicated job growth, the energy sector improved significantly and low fuel prices helped consumers. However, retail sales and wage and salary data suggest that Houston exited 2016 less robustly than initially believed. Overall, the outlook for Houston is guardedly optimistic.

## Houston Business-Cycle Index



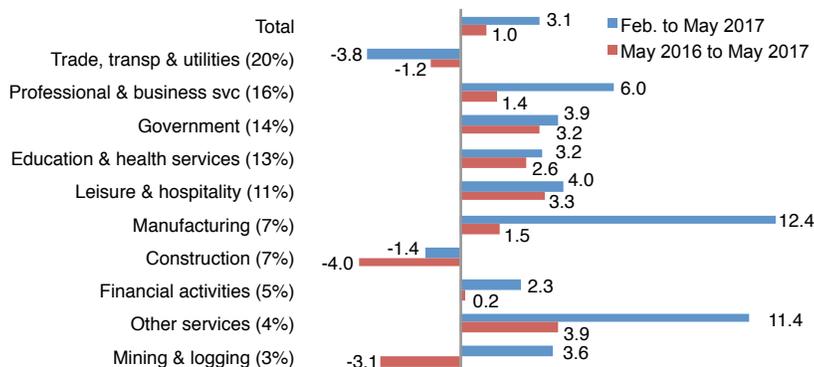
\*Annualized month-over-month growth rate.

SOURCE: Dallas Fed.

▶ The **Houston Business-Cycle Index** has expanded at an average annual rate of 3.3 percent so far in 2017—close to its historical average. Revisions to data at the end of 2016, however, left the index reading considerably weaker than initially estimated. The data since December are still subject to substantial revision.

## Employment

### Employment Growth



NOTES: Chart shows smoothed, annualized percentage job growth by sector. Numbers in parentheses represent share of total employment and may not sum to 100 due to rounding.

SOURCES: Bureau of Labor Statistics; seasonal and other adjustments by the Dallas Fed.

▶ Total nonfarm employment growth in **Houston** accelerated to an annualized 3.1 percent between February and May this year. The largest gains came from manufacturing (6,600 jobs), professional and business services (6,900) and “other services” such as auto mechanics, laundromats and pet boarding (3,000). Job losses were concentrated in trade, transportation and utilities (5,800) and construction (800).

▶ Taking a longer view, Houston jobs were up by about 1 percent (30,000) from May 2016 to May 2017. All of that growth has occurred since December, and while the data are still subject to revision, the timing of the improvement is more consistent with a number of **leading indicators** and recent energy-related activity.

▶ Houston’s unemployment rate was 5.1 percent in May, down from 5.4 in April and below its year-to-date average of 5.5 percent. The April drop was driven in part by a fall in the labor force, which had been growing for six consecutive months. The May unemployment rate was 4.3 percent in the U.S. and 4.8 percent in Texas.

## Wages and Retail Sales



NOTES: Data are seasonally adjusted. Shaded area is U.S. recession.

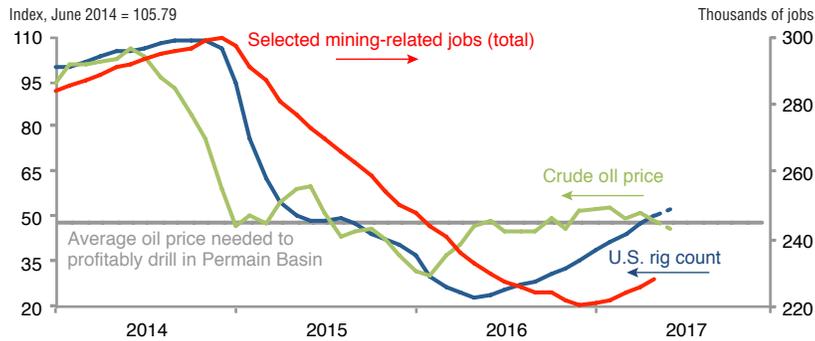
SOURCES: Texas State Comptroller; Bureau of Labor Statistics; adjustments by the Dallas Fed.

▶ Total wages and salaries paid to employees and total retail sales in fourth quarter 2016 both fell to their lowest level since 2013 on a seasonally adjusted basis.

▶ The recovery in energy jobs that began in the latter part of 2016 and the royalty payments tied to U.S. production growth in Texas should provide some support for wages and retail sales in 2017.

## Oil and Gas

### U.S. Rig Count and Houston Energy Jobs



NOTE: The dashed line is an estimate based on data available through June 16.

SOURCES: Dallas Fed; Baker Hughes; Energy Information Administration; Bureau of Labor Statistics; seasonal and other adjustments by the Dallas Fed.

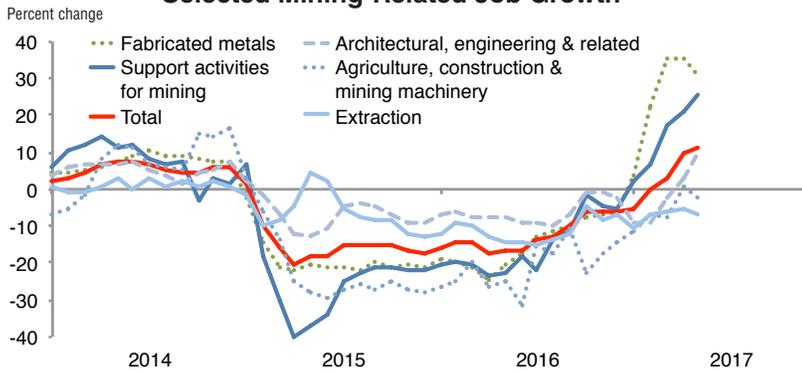
► In past oil busts, it took about three months for the rig count and about a year for the mining-related job count to bottom out once oil prices began to recover. West Texas Intermediate (WTI) crude oil hit bottom in February 2016, followed by the rig count in May 2016. It looks like mining-related employment in Houston bottomed out in December 2016, though that data may be revised. Since December, mining-related jobs have grown by 7,300.

► Rig counts extended their yearlong recovery through mid-June, reaching over 930 in the U.S., with most rigs targeting oil and most located in the Permian Basin. However, rising costs, moderate oil prices and a presently flat outlook for oil prices may temper the trajectory of the rig count.

► The June WTI price was about \$46, slightly below the average level that [industry respondents to the Dallas Fed Energy Survey](#) say they need to break even on new wells in the Permian Basin.

► Mining-related jobs in Houston transitioned from contraction to growth in 2017, but the expansion remains uneven. The fabricated metals and support activities for mining subsectors are the most sensitive to changes in the rig count and have averaged annual growth of 20 percent and 34 percent, respectively, this year. Jobs in extraction and the agriculture, construction and mining machinery subsector are still contracting, albeit at a slower pace since 2016.

### Selected Mining-Related Job Growth

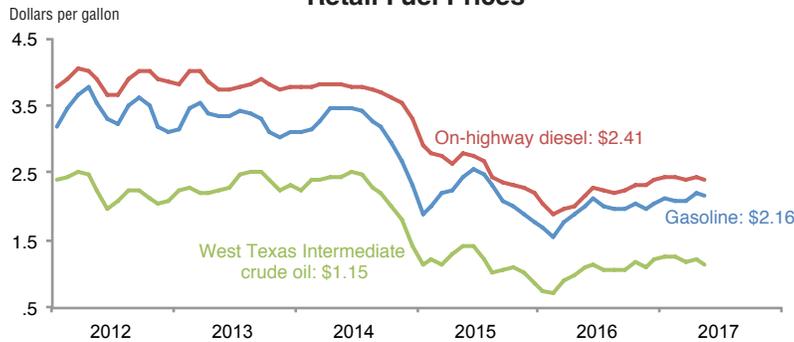


NOTE: Data are three-month annualized percent changes.

SOURCES: Bureau of Labor Statistics; seasonal and other adjustments by the Dallas Fed.

► Real retail fuel prices on the Gulf Coast have been relatively flat this year, mainly due to moderate crude prices but also modest consumption growth and elevated product inventories. Normally, seasonal demand and the switch to summer fuel blends drive up fuel prices, but May retail gasoline prices were up only slightly from a few months ago and down from April. On-highway diesel prices have also been essentially flat since the start of the year.

### Retail Fuel Prices



NOTES: Prices adjusted to real using Houston Consumer Price index, February 2017 = 100. Gasoline price is for regular unleaded gasoline. WTI dollars per barrel are adjusted to gallons.

► Nominal fuel prices may be relatively flat this year, but real, seasonally adjusted refining cash margins on the Gulf Coast have weakened through 2017. Operating margins are just below their historical average but are further below the levels that predominated during the global boom in demand from 2004 to 2014. However, modest margins haven't stopped Gulf Coast refineries from processing record volumes of crude, much of which has gone into products for export. The seasonally adjusted operating rate of Gulf Coast refineries hasn't been below 90 percent all year.

### Gulf Coast Refinery Margins



NOTE: Data are seasonally adjusted, centered three-month moving averages (adjusted using the Consumer Price Index, May 2017 = 100).

SOURCES: Pace Consulting; author's calculations.

NOTE: Data may not match previously published numbers due to revisions.

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