Contents

About this Report ........................................................................................................................................... 3

August 2018 Summary ................................................................................................................................... 4

Economic Activity ........................................................................................................................................... 8
  Gross Metropolitan Product ......................................................................................................................... 8
  Major Metro Gross Metropolitan Product .................................................................................................. 8
  Texas Business Cycle Index and Leading Index ......................................................................................... 9
  Major Metros Business Cycle Index ........................................................................................................... 9
  Consumer Confidence Index ........................................................................................................................ 10

Financial Activity ........................................................................................................................................ 10
  30-Year Mortgage Rate and 10-Year Bond Yield ...................................................................................... 10
  Texas Mortgage Applications ..................................................................................................................... 11

Housing ....................................................................................................................................................... 11
  Housing Sales ........................................................................................................................................... 11
  Residential Construction Coincident and Leading Indicator .................................................................. 12

Energy ............................................................................................................................................................ 12
  Crude Oil and Natural Gas Prices ............................................................................................................... 12
  Texas Production of Crude Oil and Rig Count ............................................................................................ 13

Employment ............................................................................................................................................... 13
  Labor Force Participation Rate ................................................................................................................... 13
  Unemployment Rate .................................................................................................................................. 14
  Unemployment Insurance Claims: Initial Applications .......................................................................... 14
  Major Metros Unemployment Rate ........................................................................................................... 15
  Personal Income Growth Per Capita ......................................................................................................... 15
  Total Private Employee Hourly Earnings .................................................................................................... 16
  Major Metros Total Private Employee Hourly Earnings ........................................................................ 16
  Employment Growth Rate ......................................................................................................................... 17
  Major Metros Employment Growth Rate .................................................................................................. 17

Manufacturing ............................................................................................................................................... 18
  Manufacturing Employment ....................................................................................................................... 18
  Major Metros Manufacturing Employment ............................................................................................... 18
About this Report

Real Estate Center economists continuously monitor many facets of the global, national, and Texas economies. *Outlook for the Texas Economy* summarizes significant state economic activity and trends. All monthly measurements are calculated using seasonally adjusted data, and percentage changes are calculated month-over-month, unless stated otherwise.

This publication is designed to be a one-stop resource for economic indicators. We hope you find them as useful as we do. Your feedback is always appreciated. Send comments and suggestions to info@recenter.tamu.edu.

Dr. Luis Torres, Wesley Miller, and Paige Woodson
August 2018 Summary

Texas’ economic expansion continued amid increased energy sector activity and labor market improvements. Crude oil prices ticked down but remained elevated, prompting record-level production in the Lone Star State despite pipeline bottlenecks in the Permian Basin. Texas added 32,000 nonfarm jobs, and unemployment reached historic lows. Labor market tightness lifted personal incomes and pressured hourly earnings upward. Inflationary pressures, however, continued to weigh on Texans’ purchasing power. On the trade front, exports declined 3.6 percent as firms adjusted to retaliatory tariffs and barriers in China. The announcement of the U.S.-Mexico-Canada Trade Agreement, however, resolves the uncertainty regarding Texas’ largest trade partners.

Recently released 2017 gross metropolitan product (GMP) data revealed a boom in the technology- and energy-driven regions of the state. Odessa led the nation with 12.1 percent year-over-year (YOY) growth after double-digit contractions in 2015 and 2016. Midland ranked seventh nationally with 7.6 percent growth. Austin secured the ninth largest growth at 6.9 percent, leading the major Texas metros. San Antonio’s economy grew 4.6 percent, while Dallas-Fort Worth (DFW) GMP doubled to 3.9 percent. The Gulf Coast region, however, suffered from large-scale hurricane disruptions during 3Q17, halting Houston’s rebound after a dismal 3.6 percent contraction in 2016.

Contemporaneous data suggest an accelerated expansion through 2018 amid a tightening labor market and thriving energy sector. Economic activity rose 5.4 percent in August on a seasonally adjusted annualized rate (SAAR) according to the Dallas Fed’s Business-Cycle Index. Houston was the primary beneficiary of the energy resurgence, pushing SAAR growth up 6.4 percent. The Austin and Dallas and business cycles boomed 5.0 and 5.2 percent, respectively. Fort Worth’s index settled at 3.2 percent. In San Antonio, employment contractions slowed growth to just 1.7 percent.

A surge in the Texas trade-weighted value of the dollar and slightly lower oil prices held the Texas Leading Economic Index (a measure of future directional changes in the business cycle) below 2.3 percent growth YOY. The Dallas Fed’s 2018 statewide employment forecast, however, increased from 2.7 to 2.8 percent amid solid hiring this month. Annual growth has averaged 2.1 percent since 1991. The economic and labor market expansions stretched across the state, lifting the Texas Consumer Confidence Index up half a point.

Interest rates balanced as a flood of new government bonds offset currency concerns in emerging markets (e.g. Turkey). The ten-year U.S. Treasury bond yield settled at 2.89 percent for the second straight month after reaching a multiyear high in May. The Federal Home Loan Mortgage Corporation’s 30-year fixed-rate remained elevated at 4.6 percent, nearly 70 basis points above last year’s level. Despite higher interest rates, the number of mortgage applications for new-purchases in Texas rose for the third consecutive month.

1 All monthly measurements are calculated using seasonally adjusted data, and percentage changes are calculated month-over-month, unless stated otherwise.
Texas housing sales ticked down 0.4 percent after a record-breaking July but maintained an upward trend. Current residential construction activity, measured by the Residential Construction Cycle (Coincident) Index, reached its highest level since 2008 amid improvements in employment and wages in the industry. Momentum should continue into the fall as the Texas Residential Construction Leading Index (RCLI) extends its upward climb and single-family weighted building permits housing starts remain elevated. (For additional housing commentary and statistics, see Texas Housing Insight at recenter.tamu.edu.)

The average West Texas intermediate crude oil spot price fell to $68.06² per barrel after surpassing $70 per barrel in July. The U.S.-China trade dispute worried investors and outweighed declines in crude stockpiles. Crude oil production surpassed 4.5 million barrels per day³ in July, the most ever recorded, and accounted for 41 percent of the national total. The number of active rigs, however, declined for the second straight month to 510 as pipeline bottlenecks in the Permian Basin hindered drilling activity. The Henry Hub natural gas spot price approached $3 per million BTU² (British thermal units), stretching further from the West Texas Waha hub price, which suffered from similar pipeline constraints.

Texas employment extended its two-year growth spurt, adding 32,000 nonfarm jobs, but data from the Quarterly Census of Employment and Wages revealed a slightly slower pace in the first quarter. The latest hiring increase pushed the Dallas Fed’s 2018 employment forecast up to 2.8 percent growth. The labor force participation rate was down to 63.9 percent but remained a full percentage point above the national level and hovered near its cycle high. The unemployment rate fell below 4 percent for just the third time in series history (beginning in 1975), and initial unemployment insurance claims dropped to a 36-year low below 50,000. Initial unemployment claims relative to the size of the labor force continued to shatter record lows. In Houston and San Antonio, the local unemployment rate balanced at 4.1 and 3.2 percent, respectively, while the DFW rate dropped to 3.3 percent. Growth in Austin held unemployment at 2.8 percent for the second consecutive month.

Tightness in the labor market boosted second-quarter real personal income per capita 1.9 percent YOY, surpassing national growth for the first time since 2014. The goods-producing industries and professional/business services generated most of the quarterly improvement.

Real private hourly earnings indicated similar second-quarter growth but flattened in August. Fort Worth and San Antonio were the only major metros to maintain positive increases YTD at 1.5 and 1.1 percent, respectively. Austin earnings fell 0.6 percent on the year despite its expanding technology sector. In Dallas, earnings growth receded into negative territory YTD but maintained an upward trend, while the healthy energy industry lifted Houston earnings for the third consecutive month.

---
² Nonseasonally adjusted.
³ The release of Texas crude oil production typically lags the Outlook for the Texas Economy by one month.
Houston led the Texas Urban Triangle in employment growth at 3.8 percent SAAR amid gains in the goods-producing sector. The MSA added more than 20,000 construction jobs and nearly 10,000 manufacturing jobs this year alone. Growth balanced at 3.4 percent SAAR in Dallas with 6,800 new jobs, mostly in professional/business services and durable-goods manufacturing. Hiring in Austin and Fort Worth slowed to 1.6 and 1.7 percent, respectively, as trade-related industries stalled. San Antonio lost 1,000 jobs over the past three months as professional/business and education/health services wavered. Declines in retail trade also negatively impacted the local labor force.

Statewide, the goods-producing sector calmed after reaching historic growth in the second quarter. Nondurable-goods manufacturing contracted for the second straight month, but the durable subsector added 4,000 jobs in August. At the metropolitan level, industry employment contracted 1.0 and 2.5 percent SAAR in Austin and San Antonio, respectively, and stagnated in Fort Worth. Manufacturing expanded in the larger metros as Dallas and Houston posted 1.5 and 3.6 percent growth, respectively.

Sluggish wages continued to weigh on Texas’ manufacturing industry. Fort Worth paid the highest hourly manufacturing earnings (Austin data are unavailable) at an average of $34.32 compared to $21.42 and $23.44 in the U.S. and Texas, respectively. That wage premium is slowly deteriorating as Fort Worth wages extended a 14-month slide, contracting 2.9 percent YOY after accounting for inflation. In Dallas, real manufacturing earnings dropped 6.3 percent YOY. Houston’s manufacturing earnings picked up 1.3 percent but remained flat YTD. In San Antonio, wages spiked 13.2 percent last year but have since leveled off to more typical growth patterns and remained 15 percent below the state average.

Weak earnings data contrast the Dallas Fed’s Manufacturing Outlook Survey, in which a third of respondents increased wages and benefits. In addition, more than half of respondents paid higher prices for raw materials, suggesting inflationary pressure on multiple fronts. The industry remained optimistic as the production index increased for the 26th consecutive month with 41 percent increasing output. While manufacturing growth continued, Chinese-trade concerns spread across the industry.

The construction industry added under 1,000 jobs, the fewest since Hurricane Harvey shocked the Gulf Coast last fall. The total value of construction fell 1.8 percent on a three-month moving average amid slower warehouse and educational building investment. Hotel construction also slowed, but eight new projects in Austin should lift values in coming months. In the residential sector, single-family construction values stepped back after three consecutive monthly increases. Multifamily housing, however, spiked 14.4 percent as investment poured into the DFW apartment market. Real hourly construction earnings flattened after approaching double-digit YOY growth this spring. Nominal earnings remained $1.95 below the national average.

The upward trend extended in Texas’ service-providing sector, adding 25,200 jobs amid robust hiring in professional/business services and trade related industries. Health, accommodation, and
food services maintained steady growth as well. The information industry, however, shed 4,100 jobs this year, shrinking to just 2 percent of the state’s labor market.

The Dallas Fed’s *Service Sector Outlook Survey* corroborated overall growth in the industry with 19 percent of respondents noting full-time hiring increases and 29 percent offering higher wages/benefits. More than a third of those surveyed reported rising revenue as personal incomes and consumer confidence rose. Skilled labor shortages remained the primary concern in the service industry, followed by trade barriers.

The healthy economy held the *U.S. Consumer Price Index (CPI)* at 2.7 percent YOY growth, above the Federal Reserve’s benchmark, but core inflation decelerated to 2.2 percent YOY. The strength of the U.S. dollar pressured prices downward. In Houston, lower home-price appreciation and food and beverage costs pulled the local CPI below 2.3 percent YOY, the lowest level since January.

Exports of U.S. goods fell 1 percent, widening the nation’s trade deficit to $53.2 billion. After accounting for inflation, *Texas’ total commodity exports* dropped 3.6 percent as second-quarter spike dissipated. Firms advanced shipments and transactions ahead of anticipated trade restrictions. *Manufacturing exports* fell for the second straight month amid fewer shipments of petroleum products to China. Texas’ machinery exports extended an eight-month downward trend. Crude oil exports contracted 20.1 percent since June but maintained 17.6 percent YTD growth. In addition to changing trade conditions, the increase in the value of the Texas trade-weighted dollar dragged on exports. The *Texas trade-weighted value of the dollar* was 11.7 percent higher than in August 2017, hovering around its cycle-high.

Mexico and Canada received 44 percent of this year’s exports from Texas, remaining the state’s primary trade partners. This trilateral relationship highlights the significance of the United States-Mexico-Canada Trade Agreement and the ensuing supply-chain stability for many Texas firms. China remained the state’s next largest trade partner, receiving 6 percent of exports from Texas, a number that has fallen since this year’s trade dispute.

---

4 The release of Texas retail sales and trade-weighted value of the dollar data typically lags the *Outlook for the Texas Economy* by one month.
Economic Activity

Gross State Product
(Year-over-Year Percent Change)

Major Metro Gross Metropolitan Product
(Year-over-Year Percent Change)

Note: Seasonally adjusted annual rate.
Source: Bureau of Economic Analysis
Texas Business Cycle Index and Leading Index
(Index Jan 2007 = 100)

Note: Seasonally adjusted. For more information, see Texas Business Cycle Index.
Source: Federal Reserve Bank of Dallas

Major Metros Business Cycle Index
(Quarter-over-Quarter Percent Change)

Note: Seasonally adjusted. For more information, see Texas Business Cycle Index.
Source: Federal Reserve Bank of Dallas
Consumer Confidence Index
(Index Jan 2011 = 100)

Note: Trend-cycle Component.
Source: Conference Board

Financial Activity

30-Year Mortgage Rate and 10-Year Bond Yield
(Percent)

Note: Seasonally adjusted.
Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board
Housing

Housing Sales
(Index Jan 2007 = 100)

Note: Trend-cycle component. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes.
For more information, see Housing Sales.
Sources: U.S. Census Bureau, National Association of Realtors, and Real Estate Center at Texas A&M University
Note: Trend-cycle component.
Sources: Real Estate Center at Texas A&M University and Federal Reserve Bank of Dallas

**Energy**

[Graph showing CrudeOil and NaturalGas Prices]

Note: Trend-cycle component.
For more information, see [Crude Oil and Natural Gas Prices](#).
Source: U.S. Energy Information Administration received from Thomson Reuters
Texas Production of Crude Oil and Rig Count

(Number of rigs) (Millions of barrels per day)

Production of Crude Oil (Right Axis)
Number of Operating Rigs

Note: Trend-cycle component.
For more information, see Texas Production of Crude Oil and Rig Count.
Sources: Baker Hughes and U.S. Energy Information Administration

Employment

Labor Force Participation Rate

(Percent)

United States Texas

Note: Seasonally adjusted. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics
Unemployment Rate
(Percent)

Unemployment Insurance Claims: Initial Applications
(Year-over-Year Percentage Change)

Note: Seasonally adjusted. August 2018 is preliminary. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics

Note: Seasonally adjusted. For more information, see Unemployment Insurance Claims: Initial Applications.
Source: Department of Labor
Major Metros Unemployment Rate
(Percent)

Note: Seasonally adjusted. August 2018 is preliminary. For more information, see Unemployment Rate.
Source: Federal Reserve Bank of St. Louis

Personal Income Growth Per Capita
(Year-over-Year Percent Change)

Note: Seasonally adjusted annualized rate
Source: Bureau of Economic Analysis
Total Private Employee Hourly Earnings
(Year-over-Year Percent Change)

Notes: Inflation adjusted. August 2018 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics

Major Metros Total Private Employee Hourly Earnings
(Year-over-Year Percent Change)

Notes: Inflation adjusted. August 2018 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Note: Seasonally adjusted, 3-month moving average. August 2018 is preliminary.
For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Manufacturing

Manufacturing Employment
(Quarter-over-Quarter Percent Change)

Note: Seasonally adjusted, 3-month moving average. August 2018 is preliminary.
For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Major Metros Manufacturing Employment
(Quarter-over-Quarter Percent Change)

Note: Seasonally adjusted, 3-month moving average. August 2018 is preliminary.
For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted. August 2018 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Manufacturing Outlook Survey
(Index)

Note: Seasonally adjusted. For more information, see Manufacturing Outlook Survey.
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted to -50 to be on scale with Texas index.

Construction

Texas Construction Values
(Index Jan 2007 = 100)

Note: Inflation adjusted trend-cycle component.
Source: Dodge Analytics.
Note: Inflation adjusted trend-cycle component.
Source: Dodge Analytics

Note: Seasonally adjusted, 3-month moving average. August 2018 is preliminary.
For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted. August 2018 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics

Services

Note: Seasonally adjusted. For more information, see Services Sector Outlook Survey.
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted -50 to be on scale with Texas index.
Note: Seasonally adjusted. For more information, see CPI Inflation Rates.
Source: Bureau of Labor Statistics

Note: The Houston CPI is composed of the following major groups: Food and Beverages, Housing, Apparel, Transportation, Medical Care, Recreation, Education and Communication, and Other Goods and Services. The four major components are included in the graph above.
Source: Bureau of Labor Statistics
Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see Exports.
Sources: International Trade Administration, Foreign Trade Division and U.S. Census Bureau

Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see Manufacturing Exports.
Sources: International Trade Administration, Foreign Trade Division and U.S. Census Bureau
Note: Inflation adjusted trend-cycle component using the Bureau of Labor Statistics export indices. For more information, see Crude Oil Exports.
Sources: International Trade Administration, Foreign Trade Division and U.S. Census Bureau

Note: For more information, see Real Trade Weighted Value of U.S. Dollar.
Sources: Federal Reserve Bank of Dallas and Federal Reserve Bank of St. Louis
Texas Exports by Country
(Percent)

Note: For more information, see Exports.
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau
DIRECTOR

GARY W. MALER

ADVISORY COMMITTEE

DOUG JENNINGS, CHAIRMAN  BESA MARTIN, VICE CHAIRMAN
Fort Worth  Boerne
TROY ALLEY, JR.  TED NELSON
DeSoto  Houston
RUSSELL CAIN  DOUG ROBERTS
Port Lavaca  Austin
JJ CLEMENCE  C. CLARK WELDER
Sugar Land  Fredericksburg
ALVIN COLLINS  JAN FITE-MILLER, EX-OFFICIO
Andrews  Dallas