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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 measurements are calculated annually, 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.

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Data current as of February 5, 2020

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The Texas economy grew at a solid pace in 2019 in the midst of one of the longest expansionary cycles in state history. Crude oil production, residential construction, housing sales, and commodity exports increased. The labor market remained strong with record-low unemployment, stable job growth, and improved labor force participation, although initial unemployment claims rose modestly. The manufacturing sector, however, struggled amid the slowing global industry and trade-related uncertainty. Overall favorable economic conditions attracted migrants from other states, boosting population growth. The greatest headwinds to Texas’ continued expansion in 2020 are the slowing national and global economies, downward pressures on oil prices, and ongoing political and trade-related uncertainty.

Recently released 2018 annual data revealed the major metros comprised more than two-thirds of the state’s GDP, led by Dallas-Fort Worth (DFW), increasing 3.9 percent in real terms. The Metroplex was the sixth largest Metropolitan Statistical Area (MSA) by GDP in the nation followed by Houston’s economy, which increased 3 percent in 2018 to recover above pre-oil bust levels after accounting for inflation. Austin’s and San Antonio’s real GDP growth exceeded their 17-year averages, accelerating 5.6 and 4.6 percent, respectively.

The Lone Star State’s economic expansion continued through 2019 albeit at a slightly slower rate as indicated by the Dallas Fed’s Texas Business-Cycle Index, which rose 4.3 percent annually compared with 4.7 percent in 2018. The index’s pace, however, matched its post-recession average. The healthy labor market supported economic activity in the major metros. Accelerated hiring in Dallas and San Antonio pushed their indices up 4.7 and 3.4 percent, respectively. Fort Worth’s economy marched forward, increasing 4.2 percent. Meanwhile, Austin’s ultra-low unemployment rate held the index at 7.4 percent growth despite a slowdown in hiring. Houston’s metric slowed slightly to 3 percent growth amid energy sector struggles but hovered around its post-crisis average.

The state’s long-term outlook was less optimistic as the Texas Leading Economic Index (a measure of future directional changes in the business cycle) fell flat after increasing 2.5 percent in 2018. A sluggish energy sector, a deceleration in hiring, and slowing national economic growth are expected to weigh on Texas economic activity in 2020. Although the Consumer Confidence Index dipped slightly in 2019, assessed growth prospects hovered at record highs.
Recently released 2019 data revealed Texas’ population grew by 367,215, or 1.3 percent compared with 0.5 percent nationwide. The Lone Star State ranked first in the country in terms of absolute change and fifth by percentage change behind states with populations of less than ten million. Texas’ strong economic performance persuaded residents from other parts of the U.S. to move, pushing net domestic migration to its highest level since 2015 and accounting for 34.2 percent of the state’s overall population growth. Net international migration, however, fell to levels unseen since 1991, likely due to stricter immigration policies. The natural increase, i.e. the difference between births and deaths, remained mostly unchanged from 2018. Population growth in the major metros is expected to meet, if not exceed, the statewide average when 2019 data is released later this year.

Interest rates fell through the first three quarters of 2019 as the national economy continued to grow in its longest expansion on record. Uncertainty regarding trade disputes and the slowing global economy pulled long-term rates below those for short-term instruments (inverting the yield curve) to start the second half of the year but has since reverted to normal conditions. The ten-year U.S. Treasury bond yield averaged 2.1 percent while the Federal Home Loan Mortgage Corporation’s 30-year fixed-rate shed 60 basis points, falling to 3.9 percent. Texans capitalized on lower rates, pushing mortgage applications for home purchases up 26.7 percent compared with 2018. Refinance mortgage applications, which are more sensitive to interest rate fluctuations, nearly tripled during the same time period.

A record 356,576 Texas homes sold through Multiple Listing Services in 2019, accelerating 3.8 percent. Current building activity, measured by the Texas Residential Construction Cycle (Coincident) Index, rose 2.2 percent annually as industry employment increased. Momentum should continue into 2020 as indicated by the Texas Residential Construction Leading Index, which reached its highest level since before the Great Recession. Relatively low interest rates and upward trending housing permits and starts supported the positive outlook. (For additional housing commentary and statistics, see Texas Housing Insight at recenter.tamu.edu.)

The West Texas intermediate crude oil spot price averaged just shy of $57 per barrel in 2019, down $8 from the previous year, as global demand forecasts softened amid U.S.-China trade tensions while U.S. oil production continued to rise. An initial agreement between the two nations supported prices at year end, but the coronavirus outbreak in China, the world’s second-largest oil consumer behind the U.S., will weigh on prices to start 2020. Texas produced a record 5.3 million barrels of crude oil per day in November¹, accounting for more than 41 percent of national output. Despite increasing oil production, the number of Texas’ active rigs declined to 406 from 531 in December 2018. On the natural gas front, unseasonably warm winter temperatures pulled the average 2019 Henry Hub natural gas spot price down to $2.57 per million British thermal unit for 2019. Prices at the Waha Hub in West Texas remained low in an environment of abundant supply and improved, but still limited, pipeline capacity.

¹ The release of crude oil production typically lags the Outlook for the Texas Economy by one month.
Texas’ annual nonfarm employment increased by nearly 309,700 jobs, exceeding national growth by a full percentage point at 2.5 percent. The Real Estate Center’s 2020 Housing Economic Outlook, however, projects hiring to decelerate due to slower economic growth on the national and state levels and a stagnant energy sector. Texas’ labor force participation rate ticked up to 64.1 percent as improved employment prospects pulled more than 236,700 individuals back into the labor force. Participation levels are unlikely to return to the nearly 70 percent rate reached in the 1990s as the population ages. As the large baby boomer generation retires, they exit the labor force but are still counted in the working age population (civilians over age 16), pulling down the labor force participation rate. Initial unemployment insurance claims rose in the fourth quarter but hovered near the post-recessionary low reached the previous year following a 21.7 percent decrease. Meanwhile, the statewide unemployment rate ticked up at year end but fell to a new annual low of 3.5 percent. The labor market tightened even more in the major metros. Austin maintained the lowest unemployment at 2.7 percent, while DFW and San Antonio joblessness fell to 3.2 and 3.1 percent, respectively. Houston was the exception with an unemployment rate above the statewide average at 3.7 percent but still boasted a historical low.

Average real private hourly earnings balanced around its five-year average as inflation offset nominal gains. The aging workforce may explain some sluggishness in the average earnings, as older workers generally experience less wage growth. Dallas paid the highest nominal wages at about $29 per hour, but real earnings flattened for the second straight year. Houston real wages weighed heavily on the statewide metric, falling 1.2 percent for the fourth consecutive annual decline. Inflation-adjusted earnings in Austin also dragged on Texas’ average, dropping 2.7 percent after six years of growth. On the other hand, San Antonio and Fort Worth wages increased 1.8 and 0.9 percent, respectively, in real terms.

Dallas employment led in the state in both absolute and percentage terms, adding 94,300 jobs for 3.6 percent growth. Professional/business services, leisure/hospitality and mining/logging/construction contributed half of the total gains with a record number of jobs added in each sector. Houston’s payrolls expanded by 82,700 positions, or 2.7 percent, with strong growth in the durable goods manufacturing and professional/business services. San Antonio’s workforce added 24,400 employees, increasing 2.3 percent. The trade/transportation/utilities industry corrected for contractions the previous year while leisure/hospitality finished the year strong after a sluggish second quarter. On the other hand, hiring in Austin recorded its slowest pace since 2010 at 2.4 percent. Stagnation in education/leisure services and government employment offset year-end wholesale and construction sector improvements. In Fort Worth, job growth fell below 2 percent as retail and professional/business services struggled during the third quarter.

Statewide, the goods-producing sector expanded by 78,600 positions. Energy-related employment growth slowed to 4 percent in 2019 from double-digit improvement the prior year as oil prices slid. Manufacturers added 27,400 jobs, most of which occurred in Houston and North Texas. Hourly earnings in the industry, however, flattened at its five-year average after adjusting for inflation, with real wages in the major metros faring similarly. Fort Worth was the exception with real compensation increasing 3.5 percent annually.
The Dallas Fed’s Manufacturing Outlook Survey suggested softer industry conditions relative to 2018. The wages and benefits and employment indexes decelerated over the year, corroborating the data. New orders slowed and general business activity decreased as outlook uncertainty rose during trade tensions. Company outlook on future business conditions were positive but below the long-term average due to tariffs and slowing global manufacturing activity.

Texas’ construction industry added 41,700 jobs, just under the record high in 2007. Although hiring accelerated 5.6 percent, real hourly construction earnings fell 1.5 percent on average. This may be explained by employers hiring more low-skilled workers as the demand for higher-paid tradesmen remain largely unfulfilled, pulling the average wage down. Deceleration in nominal wage growth contributed to builders’ efforts to keep input prices low and improve affordability. Total construction values neared $64 billion in 2019 but flattened after adjusting for inflation. Commercial activity rose 9.7 percent in real terms at the expense of the residential sector, which pulled back 4.5 percent. Office/bank building construction increased by nearly a third amid rapid growth in all the major metros except for San Antonio, which stabilized at its six-year average. Hospital construction in the metro also normalized after sluggish activity the past three years while skyrocketing in Austin. The warehouse sector was the greatest detractor to nonresidential values, falling 6 percent, although levels remained elevated after surging between 2011-17. On the residential side, single-family activity contracted for the first time in seven years as construction value per start trended downward for most of 2019 as homebuilders attempted to boost supply at the lower end of the market. Apartment construction picked up in the second half of the year after a weak start, but activity still decreased moderately.

The service-providing sector accelerated 2.2 percent, generating 231,100 jobs statewide. Every subsector except information services expanded. Professional/business services, leisure/hospitality, and trade/transportation/utilities each added more than 40,000 positions. Retail employment, on the other hand, posted near-zero growth for the third straight year as many brick-and-mortar merchandisers struggled with increasing e-commerce activity.

The Dallas Fed’s Service Sector Outlook Survey corroborated employment growth throughout the year, but input costs rose faster than selling prices, straining profits. Although uncertainty due to trade-related concerns weighed on the company outlook index, trade pact resolutions at year end increased optimism going into 2020. Nevertheless, lack of skilled labor, a slow energy sector, and political uncertainty remained relevant concerns.

Higher energy prices at year end pulled the U.S. Consumer Price Index (CPI) solidly above the Federal Reserve’s 2 percent YOY benchmark after soft growth for much of 2019. Core inflation, however, hovered around the target rate every month in 2019. The Houston CPI flattened in the fourth quarter, increasing less than 1 percent YOY in December as local housing costs decelerated, offsetting elevated transportation prices.

The Texas trade-weighted value of the dollar rose slightly in 2019 to a 31-year high. Despite currency fluctuations and global trade tensions, Texas goods and services remained attractive to
foreign consumers. **Texas’ commodity exports** improved 5.5 percent after adjusting for inflation, setting a new annual record and accounting for a fifth of nationwide exports for the first time in series history. **Crude oil exports** reached an all-time high in 2019 despite low prices as pipeline capacity increased, with nearly 90 percent of the national total attributable to Texas. **Manufacturing exports**, however, flattened due to decreased petroleum/coal shipments throughout most of the year.

Although Texas’ total export values improved, there was a compositional shift in export recipients. Despite 2018 ending on a positive note after the USMCA was initially drafted, exports to Mexico declined due to the slower global manufacturing sector. Our southern neighbor received only 32.9 percent of state exports in 2019, 2 percent lower than the prior year and Mexico’s lowest share in series history. Tariff uncertainty regarding U.S.-China trade pulled shipments to China down by the same percentage during the trade spat, falling to 3.3 percent of Texas’ total exports. Among the countries that gained from decreased North American and Chinese trade volumes were South Korea (5.1 percent), Brazil (4.1 percent), and the Netherlands (3.5 percent). Nonetheless, progress in the approval of the USMCA and a phase one trade deal with China at the end of 2019 should reaffirm trade relationships with the involved countries. Uncertainty remains, however, until a final trade deal is reached with China, the leader in global manufacturing. Moreover, extended panic over the novel coronavirus that originated in China may reverberate through global markets, hindering Texas’ growing trade industry.
**Major Metros Gross Domestic Product**

(Annual Percentage Change)

- Austin-Round Rock
- Dallas-Fort Worth-Arlington
- Houston-The Woodlands-Sugar Land
- San Antonio-New Braunfels

Note: Annual. Not seasonally adjusted.
Source: Bureau of Economic Analysis

**Major Metros Business Cycle Index**

(Quarter-over-Quarter Percent Change)

- Austin-Round Rock
- Dallas-Plano-Irving
- Fort Worth-Arlington
- Houston-Sugar Land-Baytown
- San Antonio

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

Consumer Confidence Index
(Index Jan 2011 = 100)

Note: Seasonally adjusted and detrended.
Source: Conference Board
Total Resident Population
(Annual Percentage Change)

United States
Texas

Note: Annual. Not seasonally adjusted.
Source: United States Census Bureau
Financial Activity

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

Note: Annual average.
Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board

Texas Mortgage Applications
(Year-over-Year Percentage Change)

Note: Seasonally adjusted.
Source: Mortgage Bankers Association
Total Housing Sales
(Index 2000 = 100)

- United States
- Texas

Note: Annual sum. 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

Texas Residential Construction Index
(Index Jan 2000 = 100)

- TX Coincident Index
- US Coincident Index
- TX Leading Index

Note: Annual average.
Sources: Real Estate Center at Texas A&M University and Federal Reserve Bank of Dallas
Crude Oil and Natural Gas Prices

- **Crude Oil**
- **Natural Gas (Right Axis)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Oil Price ($/Barrel)</th>
<th>Natural Gas Price ($/million BTU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>2008</td>
<td>90</td>
<td>9</td>
</tr>
<tr>
<td>2009</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>2010</td>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>2011</td>
<td>60</td>
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<td>3</td>
</tr>
<tr>
<td>2015</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>2016</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2018</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2019</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Note:** Annual average. 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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Production of Crude Oil (Annual thousand barrels per day)</th>
<th>Number of Operating Rigs (Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>5,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2008</td>
<td>4,950</td>
<td>950</td>
</tr>
<tr>
<td>2009</td>
<td>4,900</td>
<td>900</td>
</tr>
<tr>
<td>2010</td>
<td>4,850</td>
<td>850</td>
</tr>
<tr>
<td>2011</td>
<td>4,800</td>
<td>800</td>
</tr>
<tr>
<td>2012</td>
<td>4,750</td>
<td>750</td>
</tr>
<tr>
<td>2013</td>
<td>4,700</td>
<td>700</td>
</tr>
<tr>
<td>2014</td>
<td>4,650</td>
<td>650</td>
</tr>
<tr>
<td>2015</td>
<td>4,600</td>
<td>600</td>
</tr>
<tr>
<td>2016</td>
<td>4,550</td>
<td>550</td>
</tr>
<tr>
<td>2017</td>
<td>4,500</td>
<td>500</td>
</tr>
<tr>
<td>2018</td>
<td>4,450</td>
<td>450</td>
</tr>
<tr>
<td>2019</td>
<td>4,400</td>
<td>400</td>
</tr>
</tbody>
</table>

**Note:** Annual average. For more information, see [Texas Production of Crude Oil and Rig Count](#).

**Sources:** Baker Hughes and U.S. Energy Information Administration
Total Nonfarm Annual Employment
(Average in Thousands)

Labor Force Participation Rate
(Percent)

Note: Annual average. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Note: Annual average. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics

United States
Texas
Note: Annual average. For more information, see Unemployment Insurance Claims: Initial Applications.
Source: Department of Labor

Note: Annual average. December 2019 is preliminary. For more information, see Unemployment Rate.
Source: Bureau of Labor Statistics
Major Metros Unemployment Rate
(Percent)

Note: Annual average. December 2019 is preliminary. For more information, see Unemployment Rate.
Sources: Bureau of Labor Statistics and Real Estate Center at Texas A&M University

Total Private Employee Hourly Earnings
(Annual Percentage Change)

Notes: Inflation adjusted. Annual average. December 2019 is preliminary.
For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted. Annual average. December 2019 is preliminary. For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics

Note: Annual average. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Employment Growth Rate
(Annual Percentage Change)

Note: Annual average. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Manufacturing Employment
(Annual Percentage Change)

Note: Annual. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Major Metros Manufacturing Employment
(Annual Percentage Change)

Note: Annual. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics
Notes: Inflation adjusted. Annual Average. December 2019 is preliminary. For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Note: Seasonally adjusted. For more information, see Manufacturing Outlook Survey. United States index is adjusted -50 to be on scale with Texas index.
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management.
Construction Employment
(Annual Percentage Change)

Note: Annual. December 2019 is preliminary. For more information, see Employment Growth Rate.
Source: Bureau of Labor Statistics

Construction Employee Hourly Earnings
(Annual Percentage Change)

Notes: Inflation adjusted. Annual average. December 2019 is preliminary. For more information, see Total Private Employee Hourly Earnings.
Source: Bureau of Labor Statistics
Texas Construction Values
(Index Jan 2007 = 100)

- Residential
- Non-Residential
- Total Value

Note: Real value. Annual Sum.
Source: Dodge Analytics

Major Metros Total Construction Values
(Index Jan 2007 = 100)

- Austin-Round Rock
- Dallas-Fort Worth-Arlington
- Houston-The Woodlands-Sugar Land
- San Antonio-New Braunfels

Note: Real values. Annual sum.
Source: Dodge Analytics
Note: Seasonally adjusted. For more information, see Services Sector Outlook Survey. United States index is adjusted -50 to be on scale with Texas index.
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management

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

Real Trade Weighted Value of U.S. Dollar
(Index Jan 2007 = 100)

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
Note: Inflation adjusted with Bureau of Labor Statistics export indices. Annual sum. 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. Annual sum. For more information, see Manufacturing Exports.
Sources: International Trade Administration, Foreign Trade Division and U.S. Census Bureau
Note: Inflation adjusted and detrended with Bureau of Labor Statistics export indices. Annual sum. For more information, see Crude Oil Exports. Sources: International Trade Administration, Foreign Trade Division and U.S. Census Bureau.

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