2016 Texas Economic Outlook: Riding the Energy Roller Coaster

Keith Phillips
Assistant Vice President and Senior Economist
In five years prior to 2015, growth in energy, construction and exports provided a strong stimulus to Texas.

In 2015, low oil prices, strong dollar and labor market tightness reduced job growth.

Health care and leisure and hospitality remained strong—offsetting some of the weakness in energy and manufacturing.

In 2015, jobs grew about 1.5% (171,100 jobs), a drop from 3.6% in 2014. In 2016, if oil prices average around $30-$40, growth will be about 0.5% to 1.5% (59,600 to 178,800 jobs). If prices average below $30 jobs could decline slightly.
Texas Ranked Third in Job Growth in 2014, Growth in Energy States Varied Widely


NOTE: Black bars represent major energy-producing states.
SOURCE: Bureau of Labor Statistics
Texas Ranked 30th in Job Growth in 2015, but Above Most Energy States

NOTE: Black bars represent major energy-producing states.
SOURCE: Bureau of Labor Statistics
2015 Texas Job Growth Less Than the Nation’s

Source: Bureau of Labor Statistics, Federal Reserve Bank of Dallas
2015 Growth Was Mixed Across Major Metros

Job Growth, 2012-2015

<table>
<thead>
<tr>
<th>City</th>
<th>Percent, Dec./Dec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>(25.2%)</td>
</tr>
<tr>
<td>Houston</td>
<td>(20.6%)</td>
</tr>
<tr>
<td>Dallas</td>
<td>(8.4%)</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>(8.3%)</td>
</tr>
<tr>
<td>San Antonio</td>
<td>(8.1%)</td>
</tr>
<tr>
<td>Austin</td>
<td>(2.6%)</td>
</tr>
<tr>
<td>Corpus Christi</td>
<td>(1.7%)</td>
</tr>
</tbody>
</table>

NOTE: Figures in parentheses represent shares of total state employment.
Texas Unemployment Rate Still Below Nation But Rising

Percent, SA

US unemployment rate

Texas unemployment rate

Texas Economic Growth Below Trend But Positive (Texas Business Cycle Index)

- Shaded areas represent Texas recession.
- 3.8% trend
Texas Industry Mix Closer to U.S. & More Diversified Than in 1980s

Texas Industry Mix Compared to U.S.
Texas Industrial Portfolio Volatility

Index (0 to 1)

Index, Nov. 1981 = 100
Energy & Manufacturing Weakened Sharply in 2015

(Job Growth 2012-2015)

Dec/Dec Percent Change

Source: Bureau of Labor Statistics, Federal Reserve Bank of Dallas
Texas Construction Contracts Strong in 2015

Source: F.W. Dodge, Federal Reserve Bank of Dallas
Texas Residential Construction Indexes Suggest Continued Growth

Sources: Federal Reserve Bank of Dallas, Texas A&M Real Estate Center.
Texas Office Markets Remain Healthy

Real, Millions $, 5MMA

Office and Bank Buildings Contract Values

Office Vacancy Rate

Note: Shaded areas represent Texas recessions
Source: F.W. Dodge, CBRE, Federal Reserve Bank of Dallas
TX Manufacturing Indicators Weak

Production
Volume of New Orders
Company Outlook

Texas Exports Weakened as Value of the Dollar Continues to Rise

Index, SA, Real
Jan. 2000=100

Texas Value of the Dollar

Texas

U.S. minus Texas

Drilling Rig Count Continues to Fall Amidst Renewed Plunge in Energy Prices

Sources: Oil and Gas Journal, Baker Hughes.
Which Metros Performed the Best in 2015? Size of Energy Sector Explains a Lot

<table>
<thead>
<tr>
<th>City</th>
<th>Mining Sector Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas-Fort Worth-Arlington</td>
<td>3.3%</td>
</tr>
<tr>
<td>Austin-Round Rock</td>
<td>4.5%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>3%</td>
</tr>
<tr>
<td>McAllen-Edinburg-Mission</td>
<td>1.6%</td>
</tr>
<tr>
<td>College Station-Bryan</td>
<td>1.9%</td>
</tr>
<tr>
<td>Tyler</td>
<td>0.7%</td>
</tr>
<tr>
<td>Abilene</td>
<td>0.3%</td>
</tr>
<tr>
<td>Laredo</td>
<td>1.9%</td>
</tr>
<tr>
<td>Wichita Falls</td>
<td>0.2%</td>
</tr>
<tr>
<td>San Angelo</td>
<td>0.6%</td>
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<tr>
<td>Houston-Baytown-Sugar Land</td>
<td>0.6%</td>
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<tr>
<td>Corpus Christi</td>
<td>1%</td>
</tr>
<tr>
<td>Longview</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Odessa</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Midland</td>
<td>-3.4%</td>
</tr>
<tr>
<td>El Paso</td>
<td>2.5%</td>
</tr>
<tr>
<td>Brownsville-Harlingen</td>
<td>1.2%</td>
</tr>
<tr>
<td>Killeen-Temple-Fort Hood</td>
<td>2.4%</td>
</tr>
<tr>
<td>Texarkana</td>
<td>1%</td>
</tr>
<tr>
<td>Waco</td>
<td>0.3%</td>
</tr>
<tr>
<td>Lubbock</td>
<td>2%</td>
</tr>
<tr>
<td>Sherman-Denison</td>
<td>-0.2%</td>
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<td>Amarillo</td>
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Note: Data in parentheses are total nonfarm job growth Dec. 2014 - Dec. 2015. Mining share data as of 2014.

Correlation: -0.74
Share of Manufacturing Also Accounts for Some Differences in Job Growth

Note: Data in parentheses are total nonfarm job growth Dec. 2014 - Dec. 2015. Manufacturing share data as of 2014.

Sources: Texas Workforce Commission, Bureau of Labor Statistics.
11th District Banks Remain More Profitable than U.S. Banks…

Return on Assets, Percent

*Through September 30th, annualized.
...But Noncurrent Loans Have Ticked Up Regionally.

*Annual data, 2015 data are annualized through Q3
Texas Homes Have Lowest Rate of Negative Equity in the Nation

Percent of Mortgages "Under Water"
Q3 2014 - Q3 2015

Nevada
Arizona
Florida
Michigan
California
Idaho
Texas
U.S.

Source: CoreLogic
Leading Index Components Mixed

(Weighted contribution of components to index change, October-December 2015)

Net Change in Texas Leading Index
Texas Value of the Dollar
U.S. Leading Index
Real Oil Price
Well Permits
New Unemployment Claims
Texas Stock Index
Help Wanted Index
Average Weekly Hours

NOTE: Seasonally adjusted.
SOURCE: Federal Reserve Bank of Dallas.
Texas Jobs Forecasted to Grow 1.1% in 2016

Millions, seasonally adjusted

Index, 1987=100

Leading Index

Texas nonfarm employment and forecast (with 80% confidence band)

• In 2015 Texas weakened sharply but continued to grow - did much better than 1980s and better than other energy states.

• Tight real estate markets and continued growth in sectors such as health care and leisure and hospitality are helping sustain positive job growth.

• 2016 Texas job growth likely to be between 0.5% and 1.5%.

• Biggest risk to the forecast is declining oil prices. If average oil prices fall between $20–$30 for the year, then negative job growth likely.