SUMMARY OF CURRENT OKLAHOMA ECONOMIC CONDITIONS

In Oklahoma, the unemployment rate was 5.0 percent in December, and total payroll employment declined 0.3 percent compared to the previous year. Employment growth was mixed across industries, with the strongest gains in the private educational services and information sectors. Oklahoma nominal personal income growth was flat in the third quarter of 2016 compared to the previous year, with workplace earnings down 0.8 percent. Home prices increased 3.6 percent in the third quarter of 2016 compared to a year ago, while single-family and multifamily permits recorded a -3.8 and 96.2 percent change, respectively, year-to-date through November 2016. In October 2016, crude oil production was up 2.4 percent over last year, and rig counts were below year-ago levels. Oklahoma exports were 7.3 percent lower in the third quarter of 2016 compared to the same period in 2015.

This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: employment; employment by industry; county and state unemployment; personal income; home prices; housing indicators; manufacturing activity; oil, gas and coal production; and exports. These indicators can be found on the following pages.
December 2016 Unemployment Rates
Seasonally Adjusted

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate</td>
<td>4.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Unemployment Rate, Last Year</td>
<td>5.0%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Unemployment Rates, Seasonally Adjusted

Note: Gray bars indicate recession.

December 2016 Payroll Employment
Seasonally Adjusted, Year-over-Year Percent Change

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs (Thousands)</td>
<td>145,303.0</td>
<td>1,657.5</td>
</tr>
<tr>
<td>Change from Last Year</td>
<td>1.5%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

Payroll Employment
Seasonally Adjusted, Year-over-Year Percent Change

Note: Gray bars indicate recession.

Source: Bureau of Labor Statistics/Haver Analytics

www.KansasCityFed.org
November 2016 Unemployment Rates & Civilian Labor Force
Seasonally Adjusted

Source: Bureau of Labor Statistics/Haver Analytics
www.KansasCityFed.org
## November 2016 Unemployment Rates & Civilian Labor Force

<table>
<thead>
<tr>
<th>County</th>
<th>Percent Unemployed</th>
<th>Labor Force (Thousands)</th>
<th>County</th>
<th>Percent Unemployed</th>
<th>Labor Force (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ottawa</td>
<td>5.0</td>
<td>14.5</td>
<td>Murray</td>
<td>4.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Delaware</td>
<td>4.9</td>
<td>18.1</td>
<td>McClain</td>
<td>4.1</td>
<td>18.9</td>
</tr>
<tr>
<td>Wagoner</td>
<td>4.9</td>
<td>36.2</td>
<td>Canadian</td>
<td>4.1</td>
<td>67.7</td>
</tr>
<tr>
<td>Washington</td>
<td>4.8</td>
<td>24.2</td>
<td>Pontotoc</td>
<td>4.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Grady</td>
<td>4.8</td>
<td>26.4</td>
<td>Cleveland</td>
<td>3.9</td>
<td>137.8</td>
</tr>
<tr>
<td>Craig</td>
<td>4.7</td>
<td>6.3</td>
<td>Payne</td>
<td>3.9</td>
<td>39.0</td>
</tr>
<tr>
<td>Tulsa</td>
<td>4.7</td>
<td>316.6</td>
<td>Noble</td>
<td>3.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Cotton</td>
<td>4.7</td>
<td>30.0</td>
<td>Harper</td>
<td>3.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Roger Mills</td>
<td>4.6</td>
<td>1.9</td>
<td>Ellis</td>
<td>3.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Tillman</td>
<td>4.6</td>
<td>3.4</td>
<td>Texas</td>
<td>3.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Pottawatomie</td>
<td>4.6</td>
<td>33.3</td>
<td>Kingfisher</td>
<td>3.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Comanche</td>
<td>4.5</td>
<td>50.1</td>
<td>Blaine</td>
<td>3.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Jackson</td>
<td>4.4</td>
<td>11.1</td>
<td>Harmon</td>
<td>3.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Garfield</td>
<td>4.3</td>
<td>30.2</td>
<td>Love</td>
<td>3.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>4.3</td>
<td>375.5</td>
<td>Dewey</td>
<td>3.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Custer</td>
<td>4.2</td>
<td>15.1</td>
<td>Woods</td>
<td>3.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Logan</td>
<td>4.2</td>
<td>21.6</td>
<td>Alfalfa</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Major</td>
<td>4.2</td>
<td>4.1</td>
<td>Grant</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Bryan</td>
<td>4.2</td>
<td>19.8</td>
<td>Beaver</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Cimarron</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Payroll Employment
Seasonally Adjusted

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
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</tr>
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<tbody>
<tr>
<td>Jobs (Thousands)</td>
<td>145,303.0</td>
<td>1,657.5</td>
</tr>
<tr>
<td>Change from Last Year (Thousands)</td>
<td>2,157.0</td>
<td>-5.6</td>
</tr>
<tr>
<td>Share of U.S. Employment</td>
<td>1.1%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

Payroll Employment
Ten-Year Index of Growth

Labor Force Dynamics
Ten-Year Index of Growth, Seasonally Adjusted

Employed (Household Survey)

Unemployed

Labor Force

Unemployment Insurance Claims

www.KansasCityFed.org
Payroll Employment by Industry
Seasonally Adjusted

### December 2016 Percent Change Year-over-Year

- Educational Services: United States 7.0%, Oklahoma 4.8%
- Information: United States 4.8%, Oklahoma 3.1%
- Leisure & Hospitality: United States 3.1%, Oklahoma 2.7%
- Healthcare & Social Assit.: United States 1.9%, Oklahoma 1.7%
- Financial Activities: United States 1.7%, Oklahoma 0.8%
- Federal Government: United States 0.8%, Oklahoma 0.4%
- Retail Trade: United States 7.0%, Oklahoma 4.8%
- Construction: United States 3.1%, Oklahoma 2.7%
- Local Government: United States 2.7%, Oklahoma 3.0%
- State Government: United States 1.9%, Oklahoma 1.7%
- Wholesale Trade: United States 1.7%, Oklahoma 0.8%
- Other Services: United States 0.8%, Oklahoma 0.4%
- Prof. & Business Services: United States 0.4%, Oklahoma -0.1%
- Trans. & Warehousing: United States -0.4%, Oklahoma -0.8%
- Manufacturing: United States -1.8%, Oklahoma -2.8%
- Mining & Logging: United States -4.1%, Oklahoma -4.7%
- Share of Jobs
  - United States
  - Oklahoma
  - Manufacturing: United States 8.4%, Oklahoma 7.6%
  - Retail Trade: United States 11.0%, Oklahoma 11.3%
  - Wholesale Trade: United States 4.1%, Oklahoma 3.5%
  - Transportation & Warehousing: United States 3.4%, Oklahoma 3.0%

Source: Bureau of Labor Statistics/Haver Analytics

www.KansasCityFed.org
<table>
<thead>
<tr>
<th>Industry</th>
<th>United States Share of Jobs</th>
<th>Oklahoma Share of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>1.9%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>5.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Private Educational Services</td>
<td>2.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>10.8%</td>
<td>10.3%</td>
</tr>
<tr>
<td>State Government</td>
<td>3.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>1.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Healthcare &amp; Social Assistance</td>
<td>13.3%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Other Services</td>
<td>3.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Local Government</td>
<td>9.8%</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics/Haver Analytics

www.KansasCityFed.org
### Oklahoma Nominal Personal Income Growth

*Contributions to Percent Change Year-over-Year, Seasonally Adjusted*

<table>
<thead>
<tr>
<th></th>
<th>'11Q3</th>
<th>'12Q3</th>
<th>'13Q3</th>
<th>'14Q3</th>
<th>'15Q3</th>
<th>'16Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Personal Income</td>
<td>3.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Earnings by Place of Work</td>
<td>4.2%</td>
<td>0.2%</td>
<td>-0.8%</td>
<td>-0.2%</td>
<td>-0.7%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Social Insurance Contributions*</td>
<td>4.1%</td>
<td>0.2%</td>
<td>-7.8%</td>
<td>-6.9%</td>
<td>-7.8%</td>
<td>-6.9%</td>
</tr>
<tr>
<td>Residence Adjustment</td>
<td>9.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Dividends, Interest &amp; Rent</td>
<td>1.1%</td>
<td>1.7%</td>
<td>18.5%</td>
<td>17.5%</td>
<td>18.5%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Transfer Payments</td>
<td>3.5%</td>
<td>1.4%</td>
<td>17.3%</td>
<td>17.8%</td>
<td>17.3%</td>
<td>17.8%</td>
</tr>
</tbody>
</table>

*Subtracted from personal income.

### Real Average Hourly Wage

*Current Dollars, Seasonally Adjusted*

<table>
<thead>
<tr>
<th></th>
<th>Dec '11</th>
<th>Dec '12</th>
<th>Dec '13</th>
<th>Dec '14</th>
<th>Dec '15</th>
<th>Dec '16</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$20</td>
<td>$21</td>
<td>$22</td>
<td>$22</td>
<td>$23</td>
<td>$24</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>$19</td>
<td>$20</td>
<td>$21</td>
<td>$21</td>
<td>$22</td>
<td>$25</td>
</tr>
</tbody>
</table>

**Dec '11 Dec '12 Dec '13 Dec '14 Dec '15 Dec '16**

**December 2016**

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Hourly Wage</td>
<td>$26.00</td>
<td>$22.31</td>
</tr>
</tbody>
</table>

**Real Change from**

<table>
<thead>
<tr>
<th></th>
<th>Last Month</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>0.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>-0.2%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

www.KansasCityFed.org
FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

- United States
- Oklahoma

Rental Vacancy Rates

- United States
- Oklahoma

Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted

- United States
- Oklahoma

Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prices (2016Q3)*</td>
<td>6.1%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Vacancy Rates (2016Q3)</td>
<td>6.8%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Permits (Year-to-Date)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family</td>
<td>8.0%</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Multifamily</td>
<td>-7.7%</td>
<td>96.2%</td>
</tr>
</tbody>
</table>

*Percent change year-over-year.

Top 10 Oklahoma Counties for Permit Activity

Year-to-Date through November

- Oklahoma
- Tulsa
- Cleveland
- Rogers
- Payne
- Wagoner
- McClain
- Canadian
- Osage
- Grady

Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

www.KansasCityFed.org
**Oil & Gas Rig Counts**

*Number of Active Drilling Rigs*

- **United States**
  - Rig Count: 634
  - Change from Last Month: 54
  - Change from Last Year: -80
  - Share of U.S. Activity: 12.9%

- **Oklahoma**
  - Rig Count: 82
  - Change from Last Month: 5
  - Change from Last Year: -4

**Crude Oil Production**

*Thousand Barrels per Month, Seasonally Adjusted*

- **United States**
  - Production: 266,688
  - Change from Last Month: 1.5%
  - Change from Last Year: -5.8%
  - Share of U.S. Activity: 4.8%

- **Oklahoma**
  - Production: 12,780
  - Change from Last Month: 0.2%
  - Change from Last Year: 2.4%

**Coal Production**

*Thousand Short Tons, Seasonally Adjusted*

- **United States**
  - Production: 67,255
  - Change from Last Month: -3.2%
  - Change from Last Year: 4.9%
  - Share of U.S. Activity: 0.1%

- **Oklahoma**
  - Production: 60
  - Change from Last Month: -5.6%
  - Change from Last Year: 9.1%

Source: Baker Hughes & Department of Energy, Energy Information Administration/Haver Analytics

www.KansasCityFed.org
Global Exports
Ten-Year Index of Growth, Seasonally Adjusted

United States

Oklahoma

Exports (Millions)

United States

Oklahoma

2016Q3

$360,760.3

$1,184.8

Change from

Last Quarter

1.5%

-8.4%

Last Year (year-to-date)

-5.1%

-7.3%

Share of U.S. Activity

0.3%

Exports as a Percent of GDP

United States

Oklahoma

2015

8.3%

2.8%

Top Markets

Share

1. Canada 28.5%

2. Mexico 10.6

3. Germany 7.1

4. Singapore 5.4

5. China* 5.3

6. Japan 4.6

7. India 3.4

8. Netherlands 3.0

9. United Kingdom 2.5

10. Saudi Arabia 1.8

Top Exports

Share

1. Machinery (Except Electrical) 20.3%

2. Transportation Equip. 14.5

3. Computers & Electronics 13.2

4. Fabricated Metal Products 12.7

5. Chemicals & Rare Earth Materials 8.3

6. Electronic Equip. & Appliances 7.3

7. Food 6.9

8. Agriculture & Livestock 3.7

9. Plastics & Rubber Products 3.6

10. Primary Metals 2.3

*China includes Hong Kong, Taiwan, and Macao.

Source: Census Bureau, WISERTrade & Bureau of Economic Analysis/Haver Analytics

www.KansasCityFed.org
OKLAHOMA Economic Databook

Pages 2-4: County unemployment rates typically lag state data releases by one month. Gray bars show recessionary periods as designated by the National Bureau of Economic Research. The "official" and most commonly reported unemployment rate is calculated as the number of unemployed workers divided by the total civilian labor force. These data are reported from the Bureau of Labor Statistics Current Population Survey, or commonly called the "Household" survey.

Page 5: Nonfarm employment data from the Bureau of Labor Statistics Current Employment Survey are commonly called "Payroll" employment data. Estimates from this survey are revised throughout the year and a major revision or "benchmark" of the data occurs in March of each year. "Payroll" and "Household" surveys are released monthly, providing the most current estimates of employment published by the Bureau of Labor Statistics. Because methodologies differ between surveys, employment estimates also differ. For more information, visit: http://www.bls.gov/web/empsit/cps_cps_trends.pdf
Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

Pages 6 and 7: Payroll employment by industry is shown for each of the major two-digit North American Industrial Classification System industries.

Page 8: Personal income provides a measure of all income received by residents of a given geographic area. Data shown are in nominal terms (not adjusted for inflation). Transfer payments include social benefits such as unemployment insurance, Social Security, and Medicaid. Contributions to social insurance are subtracted from personal income. These contributions include taxes paid by businesses and employees that support social insurance programs such as unemployment insurance, Social Security, and Medicaid. The residence adjustment adds income received outside of a recipient's state of residence and makes a corresponding subtraction from the area where this income was earned or received. Real average hourly wages are calculated as total earnings divided by total employment for a given geographic area. Data are adjusted for inflation using the consumer price index for all urban areas (CPI-U) and are indexed to the most current month of data.

Page 9: Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties. Monthly single and multifamily housing permits data are not revised, and therefore, may not sum to published year-end totals.

Page 10: The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production. Coal production is shown as production during a given month.

Page 11: Exports measure the total physical movement of a given product from the United States to a foreign country.

Data Revisions
Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

Seasonal Adjustments
Most data are seasonally adjusted to remove variance caused by seasonal fluctuations in economic activity. Data in this report show the seasonal adjustments of data publishers where available. In other cases, Census X-12 adjustments were applied.

Regional Economic Analysis
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For regional economic analysis on the state of Oklahoma, read the latest issues of The Oklahoma Economist.

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- Manufacturing Survey
- Energy Survey
- Regional Economic Analysis
- Speeches

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