



# OKLAHOMA Economic Indicators

July 2015

# OKLAHOMA ECONOMIC INDICATORS

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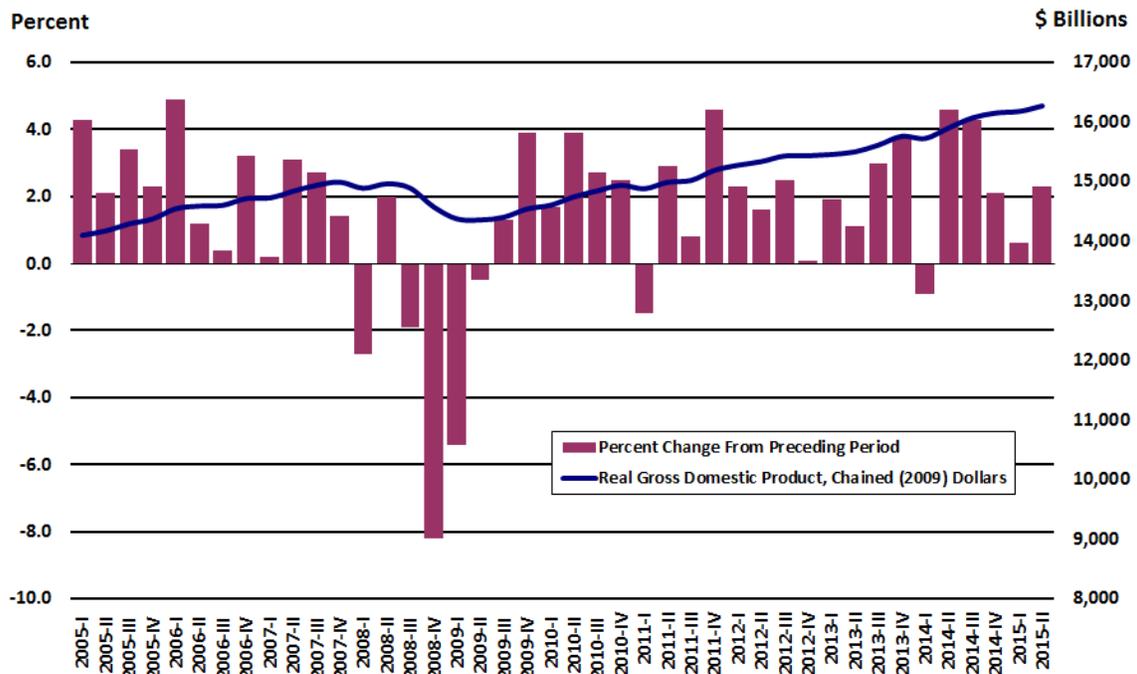
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## Real Gross Domestic Product and Quarterly Change

Source: U.S. Department of Commerce, Bureau of Economic Analysis



### Definition & Importance

Gross Domestic Product (GDP)—the output of goods and services produced by labor and property located in the United States—is the broadest measure of economic activity. It is also the measure that is most indicative of whether the economy is in recession. In the post-World War II period, there has been no recession in which GDP did not decrease in at least two quarters, (the exceptions being during the recessions of 1960-61 and 2001).

The Bureau of Economic Analysis (BEA), U.S. Department of Commerce releases GDP data on a quarterly basis, usually during the fourth week of the month. Data are for the prior quarter, so data released in April are for the 1st quarter. Each quarter's data are revised in each of the following two months after the initial release.

### Background

There are four major components to GDP:

1. *Personal consumption expenditures*: Individuals purchase durable goods (such as furniture and cars), nondurable goods (such as clothing and food) and services (such as banking, education and transportation).
2. *Investment*: Private housing purchases are classified as residential investment. Businesses invest in nonresidential structures, durable equipment and computer software. Inventories at all stages of production are counted as investment. Only inventory changes, not levels, are added to GDP.
3. *Net exports*: Equal the sum of exports less imports. Exports are the purchases by foreigners of goods and services produced in the United States. Imports represent domestic purchases of foreign-produced goods and services and are deducted from the calculation of GDP.
4. *Government*: Government purchases of goods and services are the compensation of government employees and purchases from businesses and abroad. Data show the portion attributed to consumption and investment. Government outlays for transfer payments or interest payments are not included in GDP.

The four major categories of GDP—personal consumption expenditures, investment, net exports and government—all reveal important information about the economy and should be monitored separately. This allows one to determine the strengths and weaknesses of the economy.

### **Current Developments**

U.S. economic growth accelerated in the 2nd quarter on stronger consumer spending, exports and home construction, and 1st quarter GDP was revised turning a 0.2 percent contraction into 0.6 percent growth. Real gross domestic product (GDP) increased at an annual rate of 2.3 percent in the 2nd quarter of 2015, according to the "advance" estimate released by the Bureau of Economic Analysis (BEA). In the 1st quarter, real GDP increased 0.6 percent (revised).

American households appear to be sustaining economic growth thanks to an improving job market. Consumer spending climbed at a 2.9 percent rate following a 1.8 percent advance during the first three months of the year. Spending on durable goods increased 7.3 percent, compared with an increase of 2.0 percent last quarter. Nondurable goods purchases increased 3.6 percent, compared with a 0.7 percent pace in the 1st quarter. Services increased 2.1 percent, the same increase as in the 1st quarter.

Business investment spending remained weak in the 2nd quarter, as energy companies continued to scale back drilling amid low oil prices. Real nonresidential fixed investment fell 0.6 percent in the 2nd quarter, in contrast to an increase of 1.6 percent in the 1st quarter and the worst performance since the 3rd quarter of 2012.

Slower business accumulation of inventories subtracted slightly from 2nd quarter GDP growth after adding to it in the first three months of the year. Private businesses increased inventories \$110.0 billion in the 2nd quarter, following increases of \$112.8 billion in the 1st quarter and \$78.2 billion in the 4th quarter. The change in real private inventories subtracted 0.08 percentage point from the 2nd-quarter change in real GDP after adding 0.87 percentage point to the 1st-quarter change.

Outlays for home construction jumped 6.6 percent as tight housing supplies and growing sales convinced builders to expanding inventories. Real residential fixed investment added 0.21 percentage point to 2nd quarter GDP growth.

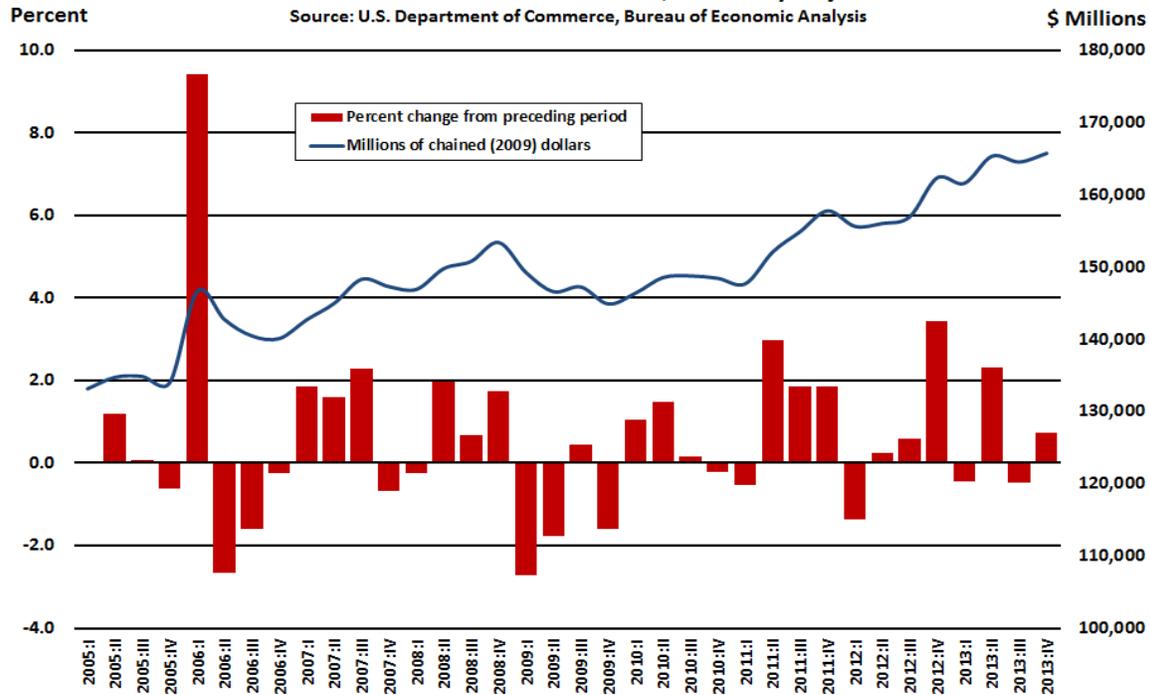
Exports rebounded in the 2nd quarter, despite a strong dollar, while imports rose moderately; leaving a smaller trade deficit that added 0.13 percentage point to GDP growth.

Government outlays were another source of weakness in the 2nd quarter, as gains among state local agencies were almost wiped out by a drop at the federal level. Real federal government consumption expenditures and gross investment decreased 1.1 percent in the 2nd quarter, in contrast to an increase of 1.1 percent in the 1st quarter. National defense spending decreased 1.1 percent while nondefense spending decreased 0.5 percent. Real state and local government consumption expenditures and gross investment increased 2.0 percent, in contrast to a decrease of 0.8 percent in the previous quarter. Government consumption expenditures and gross investment added 0.14 percentage point from GDP growth in the 2nd quarter.

## Oklahoma Real Gross Domestic Product and Quarterly Change

1st Quarter 2005 - 4th Quarter 2013, Seasonally Adjusted

Source: U.S. Department of Commerce, Bureau of Economic Analysis



### Definition & Importance

The U.S. Bureau of Economic Analysis (BEA) recently released prototype statistics of quarterly gross domestic product (GDP) by state for 2005–2013. These new statistics provide a more complete picture of economic growth across states that can be used with other regional data to gain a better understanding of regional economies as they evolve from quarter to quarter. The new data provide a fuller description of the accelerations, decelerations, and turning points in economic growth at the state level, including key information about changes in the distribution of industrial infrastructure across states.

### Current Developments

U.S. real GDP by state increased 1.8 percent in 2013. Growth in real GDP accelerated in the 2nd and 3rd quarter of the year after increasing at an annual rate of 1.1 percent in the 1st quarter. After reaching a high of 4.2 percent in the 3rd quarter, growth in real GDP decelerated to 2.8 percent in the 4th quarter. Real GDP grew steadily in 24 states through all four quarters in 2013. In the 4th quarter of 2013, real GDP increased in all states except Mississippi and Minnesota.

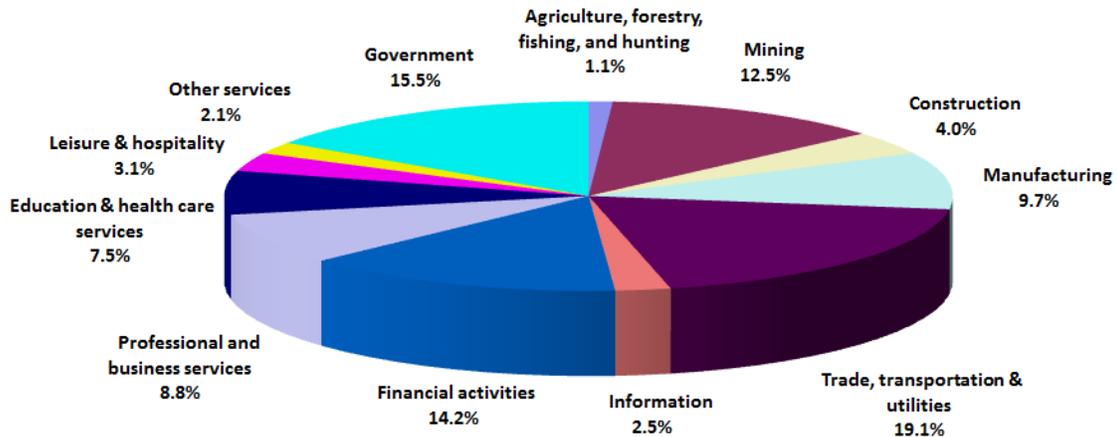
In 4th quarter 2013, Oklahoma’s GDP was \$165.7 billion in constant 2009 dollars, up from \$164.5 billion in the 3rd quarter. The state’s 4th quarter real GDP increased by \$1.19 billion, or 2.9 percent, ranking Oklahoma 29th among all other states and the District of Columbia.

For all of 2013, Oklahoma’s real GDP was at a level of \$164.3 billion in constant 2009 dollars, growing at a rate of 4.2 percent from 2012. That was the fourth-highest annual GDP growth rate among all other states and the District of Columbia. North Dakota was first with a 9.7 percent growth rate followed by Wyoming at 7.6 percent and West Virginia at 5.1 percent.

## 2014 Industry Share of Oklahoma's Economy

(by percentage of Gross Domestic Product)

Source: U.S. Department of Commerce, Bureau of Economic Analysis



### Definition & Importance

Oklahoma's economy typically follows a similar trend to that of the nation. State GDP data lags behind national data and is only available annually. As a result, it is not a good indicator of current economic conditions and does not fully reflect the recent changes in Oklahoma's economic climate. However, it is still valuable to understand the state's growth trend compared to the nation and what industries are the largest contributors to Oklahoma's economy.

### Current Developments

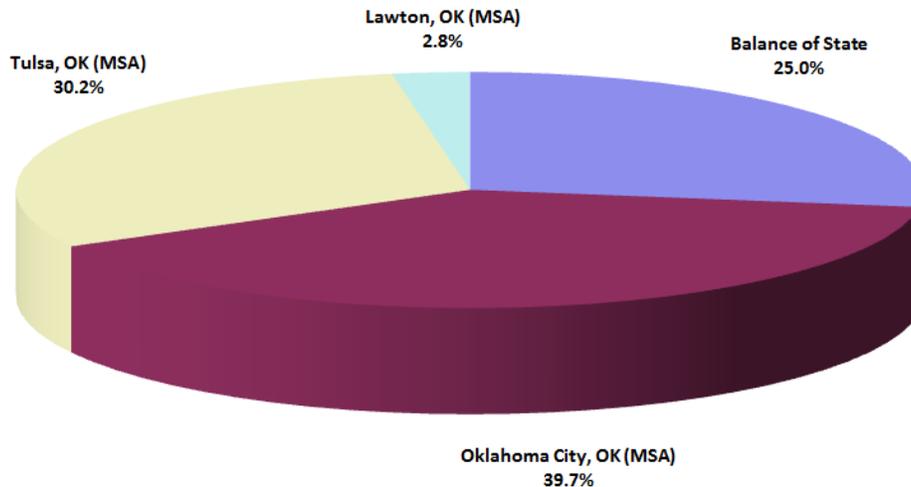
Oklahoma was among 48 states and the District of Columbia experiencing growth in real gross domestic product (GDP) in 2014, according to new statistics from the Bureau of Economic Analysis (BEA). U.S. real GDP grew 2.2 percent in 2014 after increasing 1.9 percent in 2013.

In 2014, Oklahoma's real GDP was at a level of \$162.4 billion, a 2.8 percent gain from the revised \$158.0 billion in 2013. Oklahoma's real GDP growth rate was the 10th highest among all states and the District of Columbia in 2014. Oklahoma's 2013 advance GDP estimate was revised downward from 4.2 percent to 1.8 percent while the state's 2012 GDP was further revised upward from 3.0 percent to 3.5 percent. The Southwest region, which includes Oklahoma, was the fastest growing BEA region in 2014 growing at 4.3 percent, and led by Texas with a 5.2 percent increase.

Although mining was not a significant contributor to real GDP growth for the U.S. economy, it did play a key role in Oklahoma. Mining contributed 1.45 percentage points to statewide real GDP growth in 2014. Other industries adding to 2014 GDP growth in Oklahoma were utilities (0.57 percentage point); non-durable goods manufacturing (0.25 percentage point); wholesale trade (0.22 percentage point); retail trade (0.14 percentage point); and finance & insurance (0.11 percent). Subtracting from Oklahoma GDP growth were real estate, rental & leasing (-0.36 percentage point); construction (-0.22 percentage point); and government (-0.06 percentage point).

## Metropolitan Area Contribution to State Real Gross Domestic Product 2013

Source: U.S. Department of Commerce, Bureau of Economic Analysis



### Definition & Importance

Metropolitan Statistical Areas (MSA) are the county-based definitions developed by the Office of Management and Budget for federal statistical purposes. A metropolitan area is defined as a geographic area consisting of a large population nucleus together with adjacent communities having a high degree of economic and social integration with the nucleus.

Nationally, metropolitan statistical areas represent approximately 90 percent of total GDP. In Oklahoma, the three MSAs of Oklahoma City, Tulsa and Lawton accounted for roughly 75 percent of total state GDP in 2010.

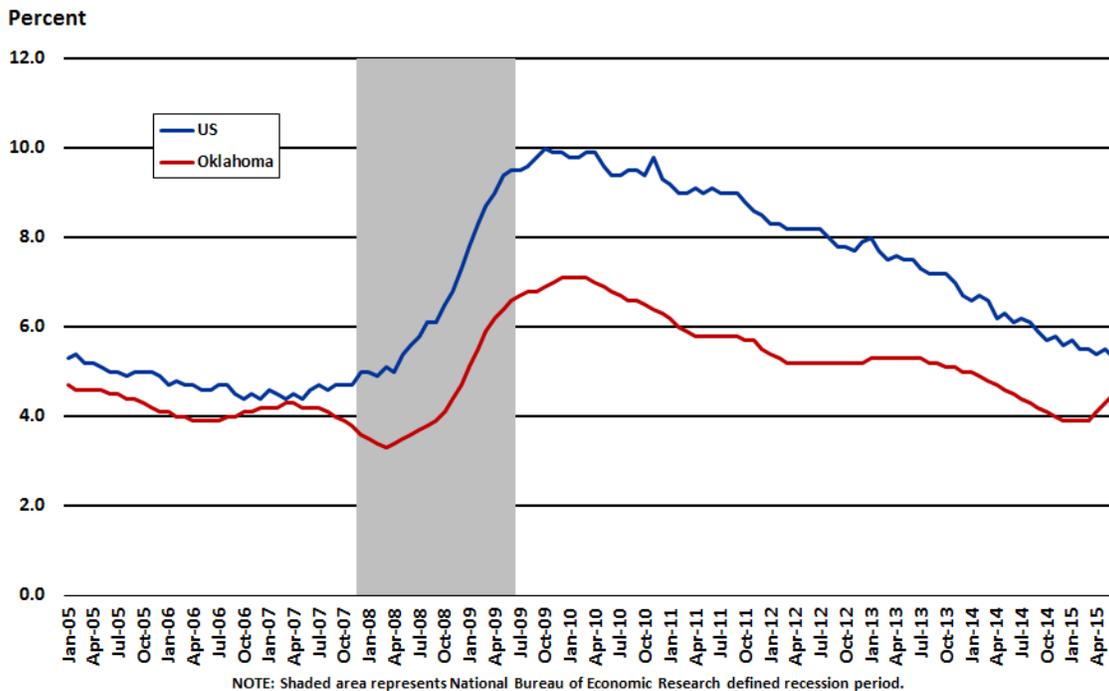
### Current Developments

Real GDP increased in 292 of the nation's 381 metropolitan areas in 2013, led by widespread growth in finance, insurance, real estate, rental, and leasing, nondurable-goods manufacturing and professional and business services, according to the U.S. Bureau of Economic Analysis (BEA). Natural resources and mining also spurred strong growth in several metropolitan areas. Collectively, real GDP for U.S. metropolitan areas increased 1.7 percent in 2013 after increasing 2.6 percent in 2012.

All three Oklahoma metropolitan areas outpaced or equaled U.S. metropolitan area real GDP growth in 2013. Oklahoma City MSA grew by 3.9 percent to \$65.2 billion and ranked 56th (out of 381 metro areas). Tulsa MSA grew at a rate of 3.5 percent to \$49.6 billion and ranked at 68th. Lawton MSA grew 1.7 percent to \$4.5 billion in 2013 and ranked 175th out of 381 U.S. metro areas.

## U.S. and Oklahoma Unemployment Rate (Seasonally Adjusted)

Source: U.S. Department of Labor, Bureau of Labor Statistics



### Definition & Importance

The Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) program produces monthly estimates of total employment and unemployment from a national survey of 60,000 households. The unemployment rate measures the percentage of people who are without work and is calculated by dividing the estimated number of unemployed people by the civilian labor force. The result expresses unemployment as a percentage of the labor force.

The unemployment rate is a lagging indicator of economic activity. During a recession many people leave the labor force entirely. As a result, the jobless rate may not increase as much as expected. This means that the jobless rate may continue to increase in the early stages of recovery because more people are returning to the labor force as they believe they will be able to find work. The civilian unemployment rate tends towards greater stability than payroll employment on a monthly basis and reveals the degree to which labor resources are utilized in the economy.

### Current Developments

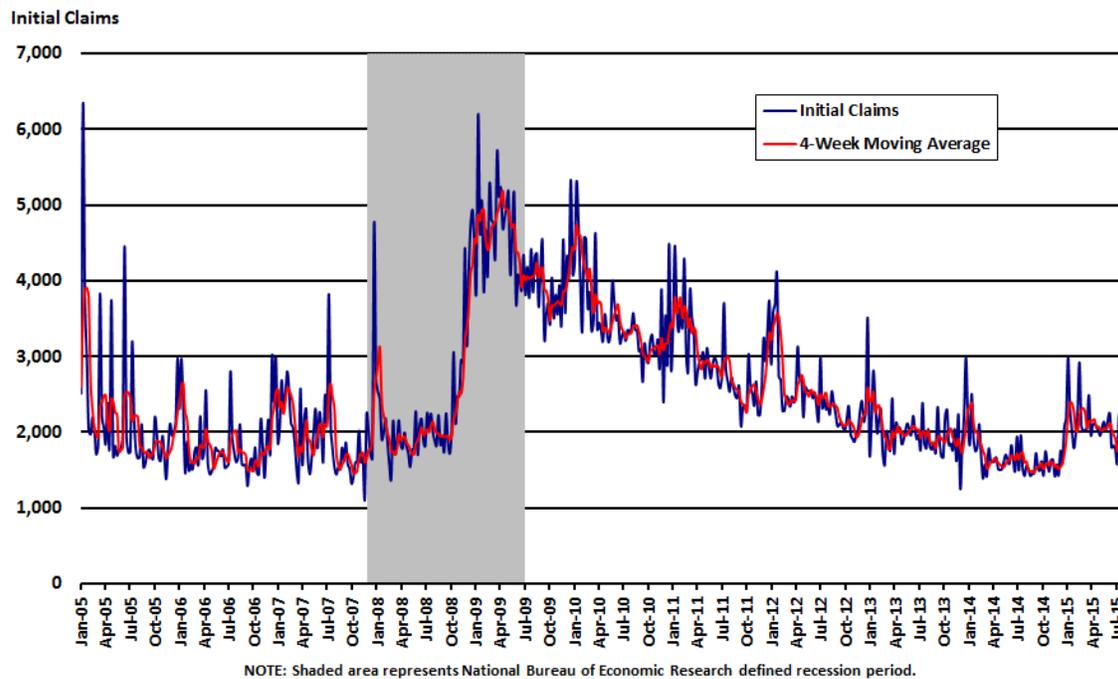
The U.S. unemployment rate didn't budge in July and the jobless rate is near the 5.0 to 5.5 percent range that is typically considered full employment. The unemployment rate held steady at a seven-year low of 5.3 percent in July, according to the Bureau of Labor Statistics (BLS). The labor-force participation rate held at a more than 37-1/2-year low of 62.6 percent.

Oklahoma's unemployment rate increased by two-tenths of a percentage point to a seasonally adjusted 4.5 percent in June. Oklahoma's jobless rate tied with Kansas for the 15th lowest unemployment rate among all states in June. Over the year, the state's seasonally adjusted unemployment rate was unchanged compared to June 2014.

Unemployment rates increased in 76 of 77 Oklahoma counties over the month in June. McIntosh County reported Oklahoma's highest county unemployment rate of 9.0 percent. Cimarron County posted the lowest county unemployment rate in June at 2.8 percent.

## Oklahoma Initial Weekly Claims for Unemployment Insurance (Not Seasonally Adjusted)

Source: U.S. Department of Labor, Employment and Training Administration



### Definition & Importance

Initial unemployment claims are compiled weekly by the U.S. Department of Labor, Employment and Training Administration and show the number of individuals who filed for unemployment insurance benefits for the first time. This particular variable is useful because it gives a timely assessment of the overall economy.

Initial claims are a leading indicator because they point to changes in labor market conditions. An increasing trend signals that layoffs are occurring. Conversely, a decreasing trend suggests an improving labor market. The four-week moving average of initial claims smoothes out weekly volatility and gives a better perspective on the underlying trend.

### Current Developments

The number of Americans filing for unemployment aid increased in the last week of July, but still remained near cycle lows. In the week ending July 25, the advance figure for seasonally adjusted initial claims was 267,000, an increase of 12,000 from the previous week's unrevised level of 255,000, according to figures released by the U.S. Labor Department (DOL). The less volatile 4-week moving average was 274,750, a decrease of 3,750 from the previous week's unrevised average of 278,500.

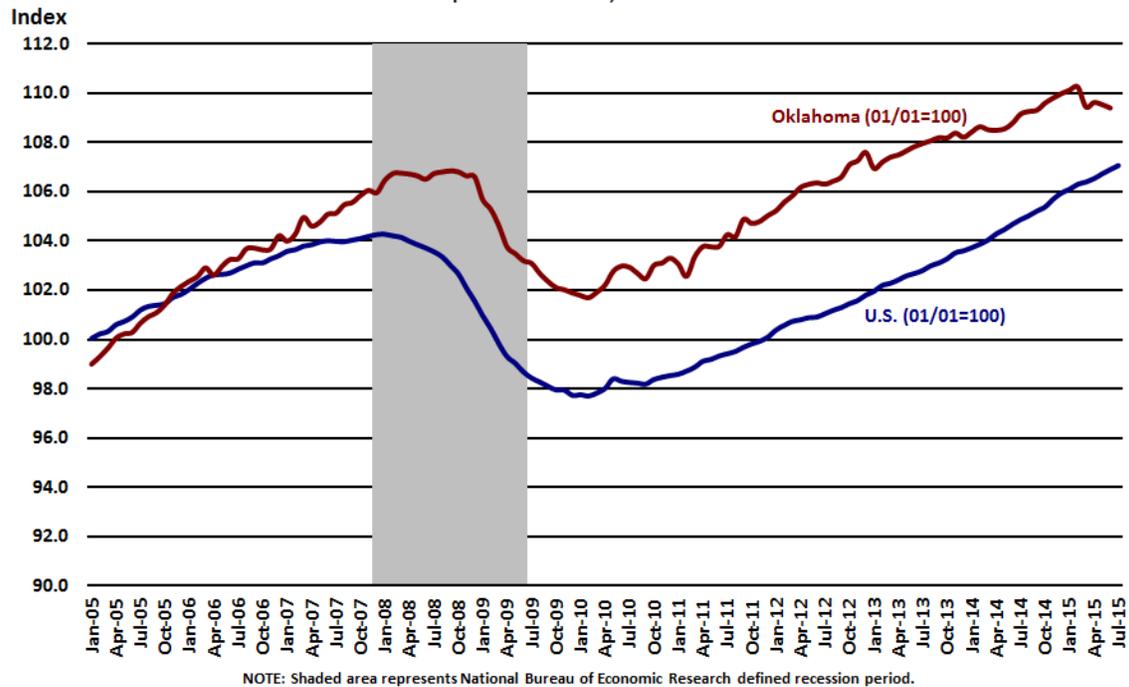
Oklahoma initial jobless claims trended lower in July, suggesting a slowdown of the recent layoffs the in oil and gas industry. For the file week ending July 25, initial jobless claims were at a level of 1,610, or 174 fewer claims than the previous week. For the same file week ending, the four-week moving average inched downward to 23,546, down 65 claims from the previous week. Over the month, initial claims were down 164 from than 1,774 on June 27.

Over the year, statewide initial jobless claims have increased by 185 from 1,425 for the file week ended July 26, 2014, while the less volatile 4-week moving average was 206 more than the 1,559 for the same file week. Continued claims jumped by 6,368 over the year from 17,178 for the file week ended July 26, 2014.

## U.S. and Oklahoma Nonfarm Payroll Employment (Seasonally Adjusted)

Index: January 2001=100

Source: U.S. Department of Labor, Bureau of Labor Statistics



### Definition & Importance

Nonfarm payroll employment data is produced by the Current Employment Statistics (CES) program of the Bureau of Labor Statistics (BLS). The CES Survey is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. The CES program has provided estimates of employment, hours, and earnings data by industry for the nation as a whole, all States, and most major metropolitan areas since 1939. In order to account for the size disparity between of U.S. and Oklahoma employment levels, we have indexed the data with January 2001 as the start value.

Payroll employment is one of the most current and reliable indicators of economic conditions and recessionary trends. Increases in nonfarm payrolls translate into earnings that workers will spend on goods and services in the economy. The greater the increases in employment, the faster the total economic growth.

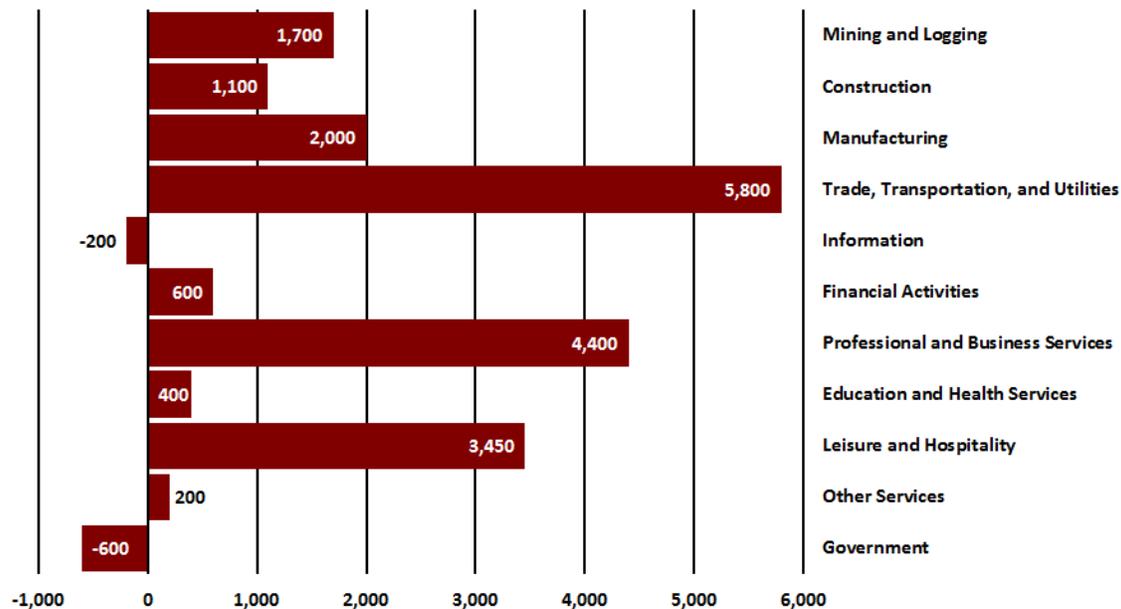
### Current Developments

U.S. employment rose at a solid pace in July, as a pickup in construction and manufacturing jobs offset further declines in the mining sector. Total nonfarm employment rose by 215,000 in July, compared with an average monthly gain of 246,000 over the prior 12 months, according to the Bureau of Labor Statistics (BLS). Payrolls data for May and June were revised to show 14,000 more jobs created than previously reported. The change in total nonfarm payroll employment for May was revised from 254,000 to 260,000, and the change for June was revised from 223,000 to 231,000.

Oklahoma's total nonfarm employment fell by a seasonally adjusted 2,100 jobs (-0.1 percent) in June. Three of Oklahoma's 11 supersectors posted job gains in June, with educational & health services (+1,300 jobs) posting the largest increase. Over the year, statewide total nonfarm employment gained 9,300 jobs (+0.6 percent). The only supersector to drop jobs over the year was mining & logging (-5,700 jobs). Leisure & hospitality (+7,300 jobs) claimed the largest over-the-year job gain.

## Oklahoma Employment Change by Industry, 2013-2014 Annual Averages (Not Seasonally Adjusted)

Source: Current Employment Statistics (CES), U.S. Department of Labor, Bureau of Labor Statistics



### Definition & Importance

Employment growth by industry identifies the types of jobs being created in the state. Conversely, industries with a declining employment trend indicate those which are becoming less important in the state's economy. There may also be industries which behave more cyclically, growing during expansion and decreasing in times of economic slowdown or contraction. These changes are crucial in that they help to recognize the types of jobs being lost by individuals. Anticipating what will happen in recovery helps identify whether those jobs will return or what types of new jobs will be created. Consequently, key information for planning re-employment, retraining, and other workforce and economic development programs is contained within these data. For this analysis, we are using CES non-seasonally adjusted annual averages to compare year-over-year employment changes.

### Current Developments

Nonfarm employment growth eased a bit in 2014, adding a non-seasonally adjusted 18,900 jobs for a 1.2 percent growth rate, (compared to 2013, with 21,000 jobs added and a 1.3 percent growth rate).

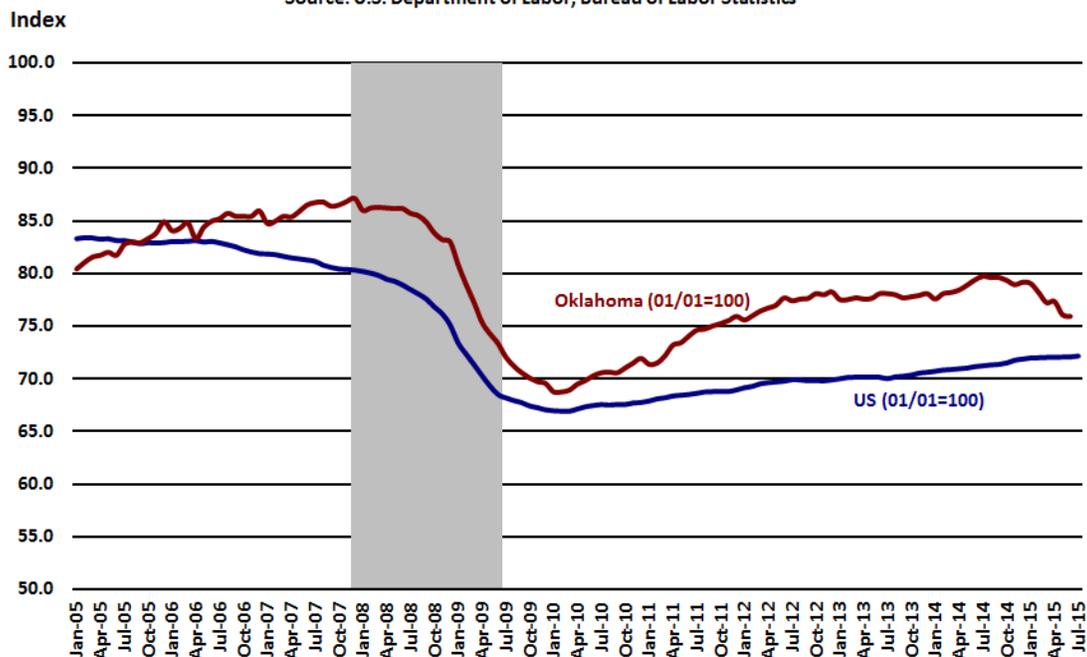
In 2014, nine out of Oklahoma's 11 statewide supersectors recorded job growth. The broad trade, transportation & utilities sector led all other supersectors adding a non-seasonally adjusted 5,800 jobs with the bulk of hiring occurring in retail trade. Professional & business services employment added 4,400 jobs with almost all of the growth coming from administrative & support and waste management & remediation services. Leisure & hospitality added 3,450 employees with most of the growth in accommodation & food services. Manufacturing employment grew by 2,100 driven by job gains in durable goods manufacturing. Mining & logging added 1,700 jobs led by support activities for mining. Construction added 1,100 jobs with nearly all the job growth in specialty trade contractors.

Over-the-year declines were seen in government (-400) and information (-200).

## U.S. and Oklahoma Manufacturing Employment (Seasonally Adjusted)\*

Index: January 2001 = 100

Source: U.S. Department of Labor, Bureau of Labor Statistics



NOTE: Shaded area represents National Bureau of Economic Research defined recession period.

### Definition & Importance

Manufacturing employment data is also produced by the Bureau of Labor Statistics' Current Employment Statistics (CES) program. Manufacturing and production are still important parts of both the U.S. and Oklahoma economies. During the 2007-09 recession, employment in manufacturing declined sharply. Although manufacturing plunged in 2008 and early 2009 along with the rest of the economy, it is on the rebound today while other key economic sectors, such as construction, still suffer. In Oklahoma, manufacturing accounts for one of the largest shares of private output and employment in the state. In addition, many manufacturing jobs are among the highest paying jobs in the state. In order to account for the size disparity between the U.S. and Oklahoma employment levels, we have indexed the data with January 2001 as the starting value.

### Current Developments

In July, U.S. manufacturers hired at the fastest pace since January. Manufacturing employment edged up 15,000 in July, according to the Bureau of Labor Statistics (BLS). Employment in nondurable goods rose by 23,000 over the month, including gains in food manufacturing (+9,000 jobs) and in plastics and rubber products (+6,000 jobs). In contrast, durable goods hiring remained challenged, down by 8,000 with the largest declines in computer and electronic products (-3,100 jobs), machinery (-1,600 jobs), motor vehicles and parts (-1,400 jobs) and primary metals (-1,100 jobs).

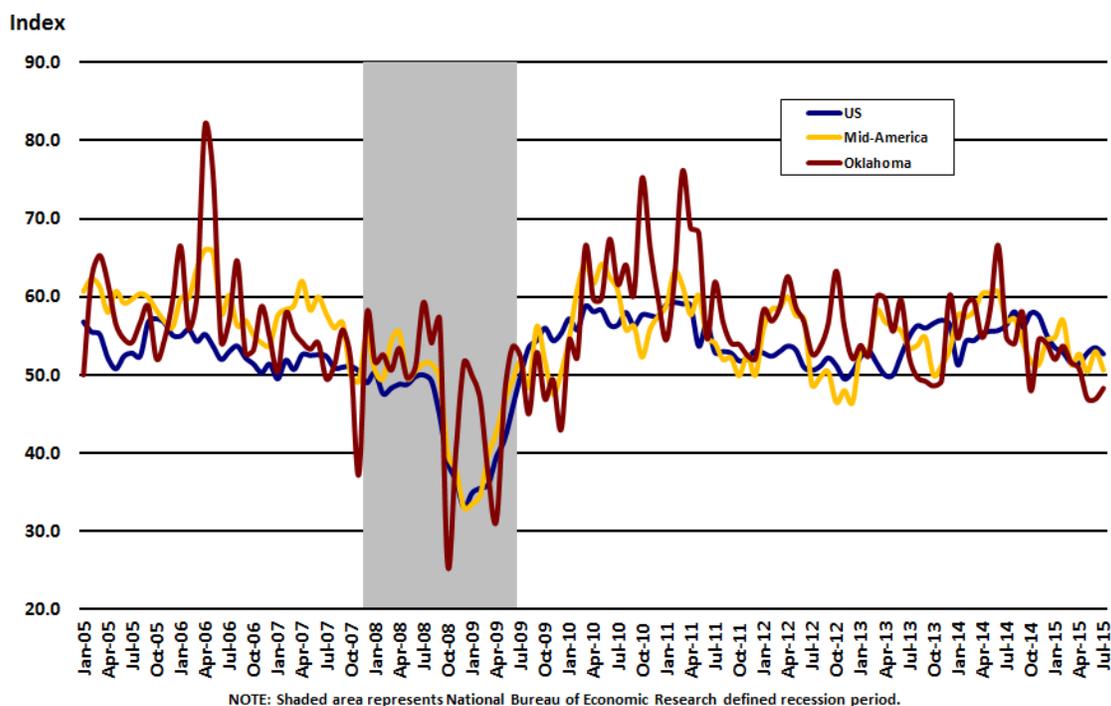
Oklahoma manufacturing employment lost ground for the second month in a row in June, shedding a non-seasonally adjusted 300 jobs (-0.2 percent). Non-durable goods manufacturing accounted for the majority of the job losses in June.

Over the year, Oklahoma non-seasonally adjusted manufacturing employment fell 6,100 jobs (-4.4 percent) with nearly all of the job losses coming from durable goods manufacturing.

*\*As of January 2013, due to employment stability in the Manufacturing and Information supersectors, the BLS has determined that they do not need to be adjusted for seasonal factors at this time..*

## Purchasing Managers' Index (Manufacturing)

Sources: ISM Manufacturing Report On Business® and Business Conditions Index for Mid-America, Creighton University



### Definition & Importance

Economists consider the Institute for Supply Management's Purchasing Managers' Index (PMI™) a key economic indicator. The Institute for Supply Management (ISM) surveys more than 300 manufacturing firms on employment, production, new orders, supplier deliveries, and inventories. The ISM manufacturing index is constructed so that any level at 50 or above signifies growth in the manufacturing sector. A level above 43 or so, but below 50, indicates that the U.S. economy is still growing even though the manufacturing sector is contracting. Any level below 43 indicates that the economy is in recession.

For the region, since 1994, the Creighton Economic Forecasting Group at Creighton University has conducted a monthly survey of supply managers in nine states (including Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota), to produce leading economic indicators for the Mid-America economy using the same methodology as the national survey by the ISM.

### Current Developments

U.S. manufacturers expanded at a slower pace in July, held back by weak employment and continued contraction in exports. The July PMI® registered 52.7 percent, a decrease of 0.8 percentage point below the June reading of 53.5 percent, indicating growth in manufacturing for the 31th consecutive month, according to the latest Manufacturing ISM Report On Business®. The index had dropped in the prior five months.

In July, the Employment Index registered 52.7 percent, 2.8 percentage points below the June reading of 55.5 percent, reflecting growing employment levels from June but at a slower rate. The new export orders fell 1.5 points to 48.0 percent, for the fifth sub-50 contractionary reading of the last seven months. But there were signs of strength in the July report. The New Orders Index which rose 0.5 point to 56.5 was the strongest reading of the year and contrasts with the drop in export orders and points to strength in the domestic economy. Production was also strong at 56.0 percent.

The Mid-America Business Conditions Index for July, a leading economic indicator for a nine-state region stretching from North Dakota to Arkansas, slumped for the month. The Business Conditions Index, which ranges between 0 and 100, declined to 50.6 from June's 53.0 reading, according to the Creighton Economic Forecasting Group. The regional index, much like the national reading, is pointing to weak growth through the 3rd quarter of 2015.

"Durable and nondurable goods manufacturers, as well as value-added service industries in the region, are experiencing very little growth. Businesses tied to agriculture and energy continue to report pullbacks in economic activity and this is spilling over into the broader regional economy," said Ernie Goss, Ph.D., director of Creighton University's Economic Forecasting Group.

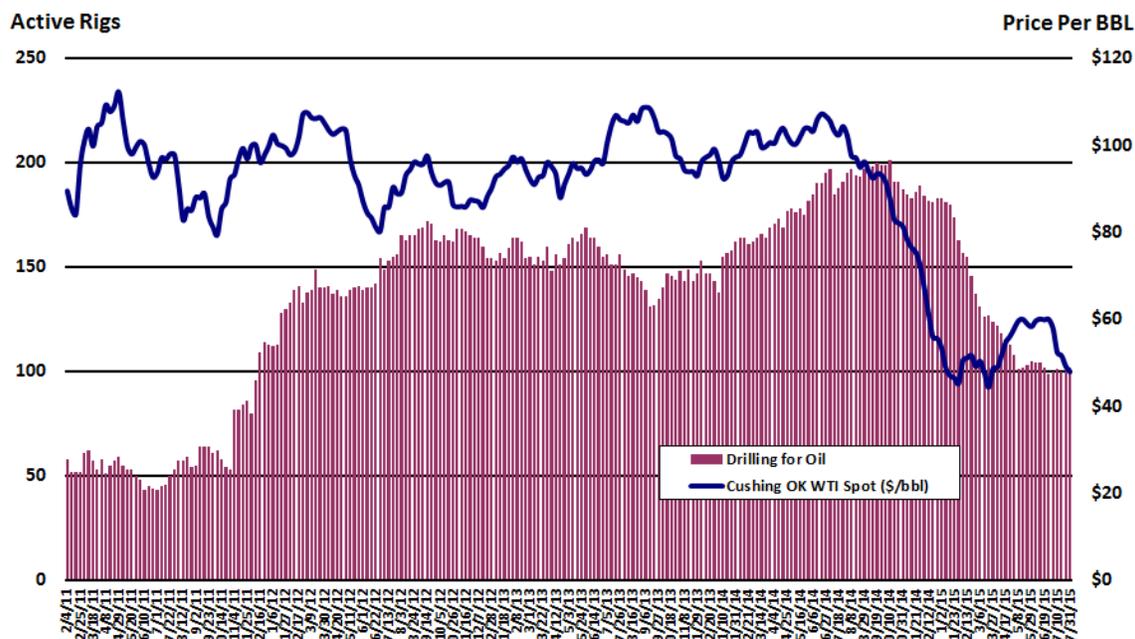
The July Business Conditions Index for Oklahoma slumped below growth neutral for a third straight month. However, the index from a monthly survey of supply managers in the state rose to a weak 48.3 from 46.9 in June. Components of the July survey of supply managers were new orders at 46.1, production or sales at 45.3, delivery lead time at 50.0, inventories at 52.6, and employment at 47.7.

"Weakness in businesses tied to energy is now spilling over into the broader state economy. Both durable and nondurable goods manufacturers are shedding jobs. Based on our survey results over the past several months, these losses will extend into the fourth quarter of this year," said Goss.

## Oklahoma Active Rotary Rigs & Cushing, OK WTI Spot Price

February 2011 to July 2015

SOURCES: U.S. Department of Energy, Energy Information Administration and Baker Hughes Rig Counts



### Definition & Importance

Crude oil is an important commodity in the global market. Prices fluctuate depending on supply and demand conditions in the world. Since oil is such an important part of the economy, it can also help determine the direction of inflation. In the U.S. consumer prices have moderated whenever oil prices have fallen, but have accelerated when oil prices have risen. The U.S. Energy Information Administration (EIA) provides weekly information on petroleum inventories in the U.S., whether produced here or abroad.

The Baker Hughes rig count is an important indicator for the energy industry and Oklahoma. When drilling rigs are active they consume products and services produced by the oil service industry. The active rig count acts as a leading indicator of demand for products used in drilling, completing, producing and processing hydrocarbons.

West Texas Intermediate (WTI-Cushing) is a light crude oil produced in Texas and southern Oklahoma which serves as a reference or "marker" for pricing a number of other crude streams and which is traded in the domestic spot market at Cushing, Oklahoma.

### Background

Oklahoma produces a substantial amount of oil, with annual production typically accounting for more than 3 percent of total U.S. production in recent years. Crude oil wells and gathering pipeline systems are concentrated in central Oklahoma. Two of the 100 largest oil fields in the United States are found in Oklahoma.

The city of Cushing, in central Oklahoma, is a major crude oil trading hub connecting Gulf Coast producers to Midwest refining markets. In addition to Oklahoma crude oil, the Cushing hub receives supply from several major pipelines that originate in Texas. Traditionally, the Cushing Hub has pushed Gulf Coast and Mid-Continent crude oil supply north to Midwest refining markets. However, production from those regions is in decline, and an underused crude oil pipeline system has been reversed to deliver rapidly expanding heavy crude oil supply produced in Alberta, Canada to Cushing, where it can access Gulf Coast refining markets. For this reason,

Cushing is the designated delivery point for the New York Mercantile Exchange (NYMEX) crude oil futures contracts. Crude oil supplies from Cushing that are not delivered to the Midwest are fed to Oklahoma's five refineries, which have a combined distillation capacity of over 500 thousand barrels per day—roughly 3 percent of the total U.S. refining capacity.

### **Current Developments**

The decline in spot oil prices in the last half of 2014 and first half of 2015 has reduced oil and natural gas production tax revenues in some of the largest oil- and natural gas-producing states including Oklahoma. In July 2014, Oklahoma collected \$77.2 million in funds from production oil and natural gas taxes. That value declined to \$41.1 million by July 2015, a drop of roughly 47 percent, based on information from the Oklahoma Tax Commission. Oklahoma's production was relatively steady during this period.

Oklahoma's crude production continues at levels matching those seen in the early to mid-1980s. Statewide crude production in May was at 10,791,000 barrels, 164,000 barrels (or 1.5 percent), more than April's level of 10,627,000 barrels. For 2014, Oklahoma's crude production was 127,730,000 barrels, 13,548,000 barrels or 11.9 percent more than the 114,182,000 barrels produced in 2013 and the highest annual crude production level since 1988.

After falling below \$43 per barrel in March, oil prices recovered to more than \$60 per barrel in June before slipping back down in July. West Texas Intermediate (WTI-Cushing) spot prices finished July at \$47.11/barrel. Compared to a year ago, WTI-Cushing prices were down by over half of the July 31, 2014 price of \$98.23/barrel.

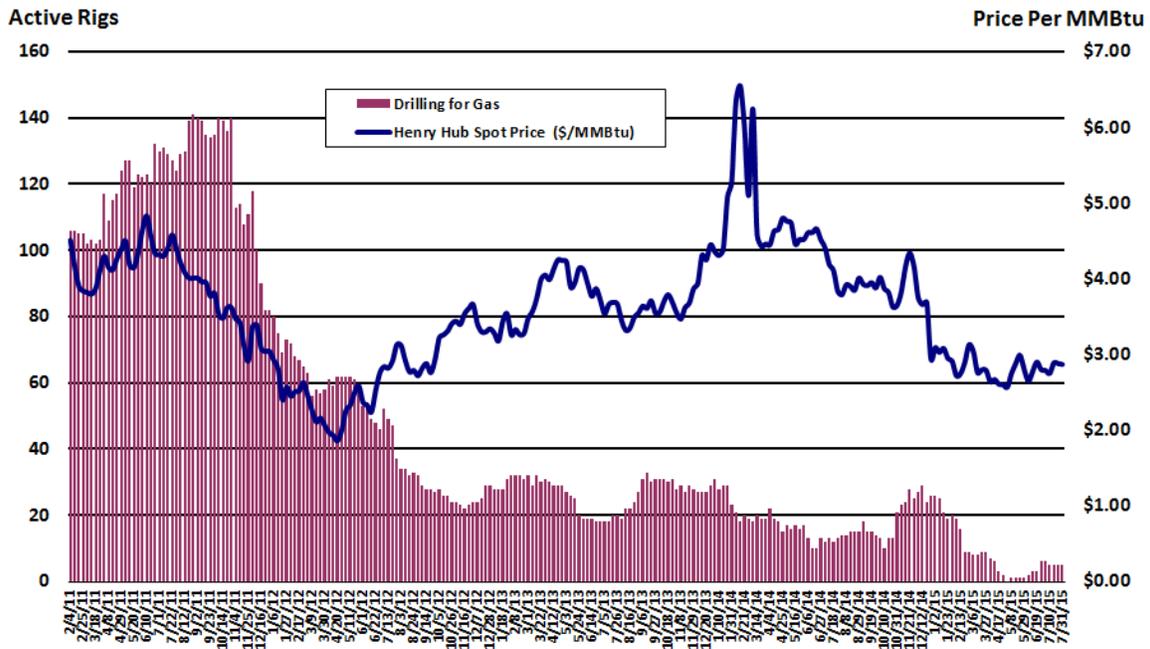
After falling to its lowest level in five years in May, Oklahoma's active rig count held steady at 107 for the week ending July 31. Of that, 102 rigs were oil-directed. Over the year, Oklahoma's rig count was off 97 from 204 rigs operating July 26, 2014.

The overall count of rigs searching for oil and natural gas in the U.S. slumped by 2 to 874 in the week ended July 31, according to data from oilfield service company Baker Hughes. Oil-directed rigs accounted for 76.0 percent of drilling activity while natural gas-directed accounted for 23.9 percent.

# Oklahoma Active Rotary Rigs & Henry Hub Natural Gas Spot Price

February 2011 to July 2015

Sources: U.S. Department of Energy, Energy Information Administration and Baker Hughes Rig Counts



## Definition & Importance

The U.S. Energy Information Administration (EIA) provides weekly information on natural gas stocks in underground storage for the U.S., and three regions of the country. The level of inventories helps determine prices for natural gas products. Natural gas product prices are determined by supply and demand—like any other good or service. During periods of strong economic growth, one would expect demand to be robust. If inventories are low, this will lead to increases in natural gas prices. If inventories are high and rising in a period of strong demand, prices may not need to increase at all, or as much. However, during a period of sluggish economic activity, demand for natural gas may not be as strong. If inventories are rising, this may push down oil prices.

The Henry Hub in Erath, Louisiana is a key benchmark location for natural gas pricing throughout the United States. The Henry Hub is the largest centralized point for natural gas spot and futures trading in the United States. The New York Mercantile Exchange (NYMEX) uses the Henry Hub as the point of delivery for its natural gas futures contract. Henry Hub “spot gas” represents natural gas sales contracted for *next day* delivery and title transfer at the Henry Hub. The settlement prices at the Henry Hub are used as benchmarks for the entire North American natural gas market. Approximately 49 percent of U.S. wellhead production either occurs near the Henry Hub or passes close to the Henry Hub as it moves to downstream consumption markets.

## Background

Oklahoma is one of the top natural gas producers in the United States with production typically accounting for almost one-tenth of the U.S. total. More than a dozen of the 100 largest natural gas fields in the country are found in Oklahoma and proven reserves of conventional natural gas have been increasing in recent years.

Most natural gas in Oklahoma is consumed by the electricity generation and industrial sectors. About three-fifths of Oklahoma households use natural gas as their primary energy source for home heating. Nevertheless, only about one-third of Oklahoma’s natural gas output is

consumed within the state. The remaining supply is sent via pipeline to neighboring states, the majority to Kansas, including the natural gas trading hubs in Texas and Kansas.

### **Current Developments**

In April of this year, natural gas-fired generation surpassed coal-fired generation as a percentage of total generation, according to a recent report from the U.S. Energy Information Administration (EIA). Gas-fired generation made up 32 percent of total generation compared with 30 percent for coal-fired generation. Although the contribution from coal- and gas-fired generation converged in April 2012, when gas prices hit an all-time monthly low, April 2015 marks the first month gas-fired generation actually exceeded coal-fired generation in the same month.

In May, natural gas production in Oklahoma climbed to the second-highest level since record keeping began in 1991. May natural gas gross withdrawals were at a level of 206,110 MMcf, or 3,118 MMcf (or 1.5 percent) more than April's production level. For 2014, Oklahoma natural gas gross withdrawals totaled 2,310,114 MMcf compared to 2,144,000 MMcf for 2013, that's 166,114 MMcf, or 7.7 percent, more than the 2013 total.

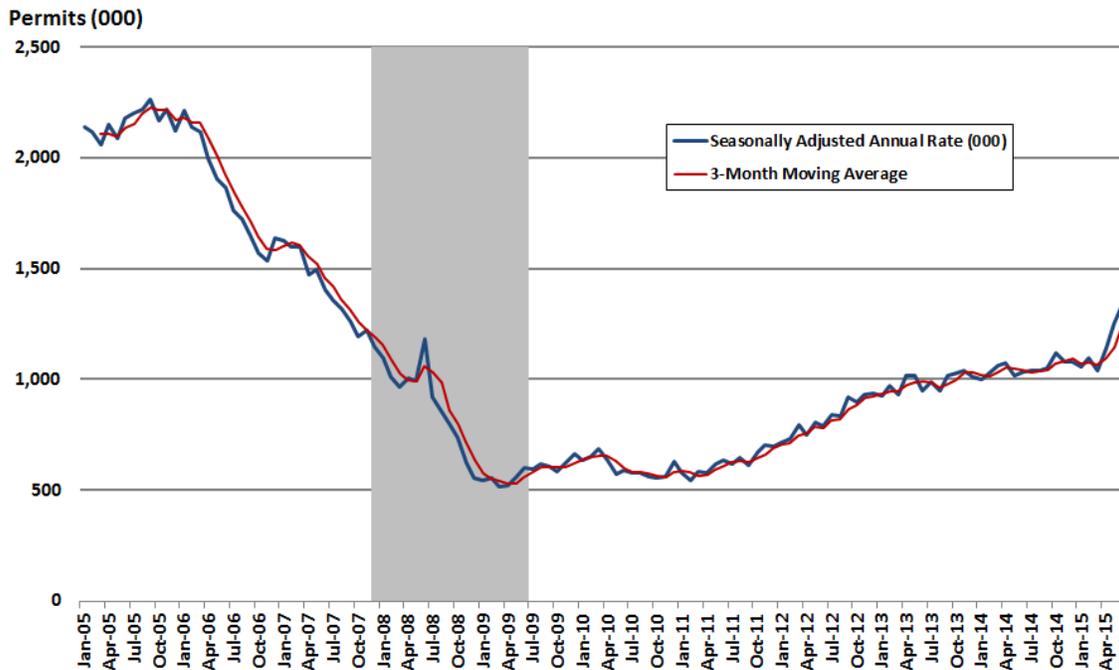
Natural gas prices generally remained fairly stable in July. The Henry Hub spot price began the month at \$2.78 per million British thermal units (MMBtu), climbing to \$2.93/MMBtu by mid-month and finishing the month at \$2.76/MMBtu.

After reaching a level of zero for the week ending May 1, Oklahoma's natural gas-directed drilling rig count averaged about 5 active rigs in July. Over the year, Oklahoma's natural gas-directed rotary rig count was down eight rigs from 13 reported the week ended July 25, 2014.

## U.S. New Private Housing Units Authorized by Building Permit, 2005-2015

### Seasonally Adjusted

Source: U.S. Census Bureau and Department of Housing and Urban Development



NOTE: Shaded area represents National Bureau of Economic Research defined recession period.

### Definition & Importance

The U.S. Census Bureau and the Department of Housing and Urban Development jointly provide monthly national and regional data on the number of new housing units authorized by building permits; authorized, but not started; started; under construction; and completed. The data are for new, privately-owned housing units (single and multifamily), excluding "HUD-code" manufactured homes. Because permits precede construction, they are considered a leading indicator for the residential construction industry and the overall economy. Most of the construction begins the same month the permit is issued. The remainder usually begins construction during the following three months; therefore we also use a three-month moving average.

While home construction represents a small portion of the housing market, it has an outside impact on the economy. Each home built creates an average of three jobs for a year and about \$90,000 in taxes, according to the National Association of Home Builders. Overall, homebuilding fell to its lowest levels in 50 years in 2009, when builders began work on just 554,000 homes.

### Current Developments

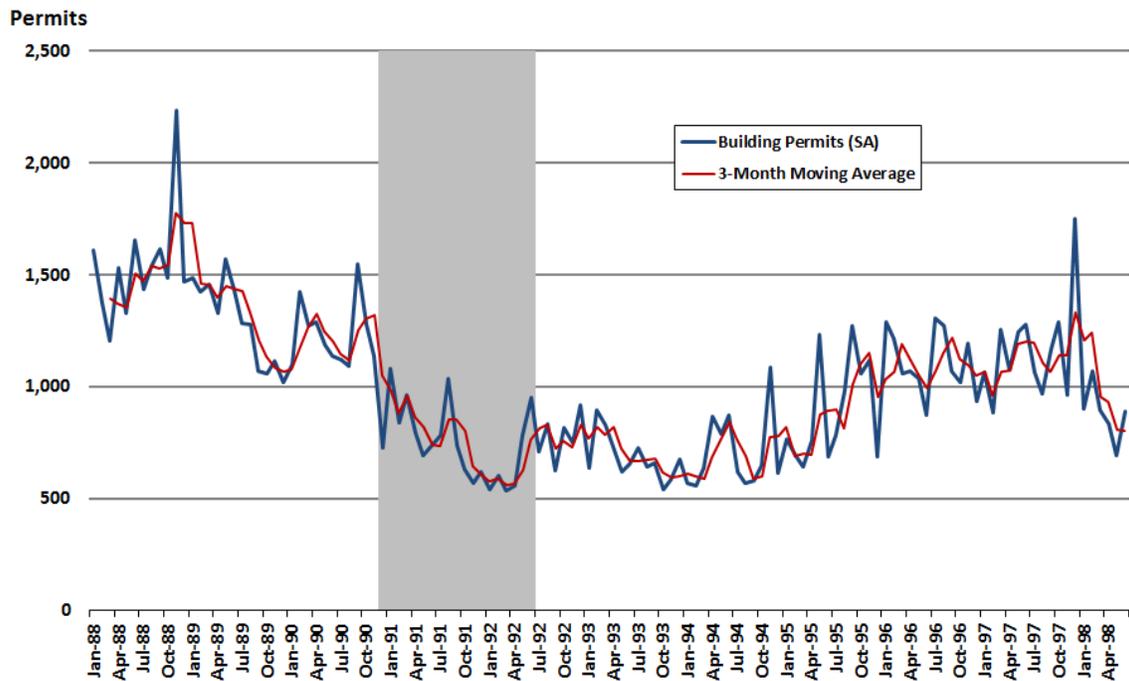
U.S. permits for future home construction surged to a near eight-year high in May, pointing to solid strength for the housing sector. Privately-owned housing units authorized by building permits in May were at a seasonally adjusted annual rate of 1,275,000, or 11.8 percent above the revised April rate of 1,140,000 and 25.4 percent above the May 2014 estimate of 1,017,000, according to the U.S. Census Bureau and the Department of Housing and Urban Development.

Applications to begin work on single-family projects rose to 687,000 in June, the most since January 2008. Permits for construction of apartments and other multifamily dwellings rose 15.3 percent after a 20 percent jump the previous month.

Meanwhile, the National Association of Home Builders/Wells Fargo builder sentiment index climbed to 60 in June, the highest level since November 2005.

## Oklahoma New Private Housing Units Authorized by Building Permit, 2005-2015 Seasonally Adjusted

Sources: U.S. Census Bureau and Department of Housing and Urban Development, Federal Reserve Bank of St. Louis



NOTE: Shaded area represents National Bureau of Economic Research defined recession period.

### Definition & Importance

The data services of the Federal Reserve Bank of St. Louis produces series that are seasonally adjusted including monthly state level data on the number of new housing units authorized by building permits. These adjustments are made using the X-12 Procedure of SAS to remove the seasonal component of the series so that non-seasonal trends can be analyzed. This procedure is based on the U.S. Bureau of the Census X-12-ARIMA Seasonal Adjustment Program.

### Current Developments

After four consecutive months of decline, residential permitting activity in Oklahoma finally turned up in June. Total residential building permitting for June was at a seasonally adjusted level of 888, or 28.0 percent above May's level of 694 but 30.5 percent below the June 2014 estimate of 1,278, according to figures from the Federal Reserve Bank of St. Louis.

Single-family permitting accounted for 96.1 percent of total residential permitting activity in May while multi-family permitting added only 2.6 percent. Applications for single-family homes were at a seasonally adjusted level of 872, or 26.4 percent below May's level of 690 permits.

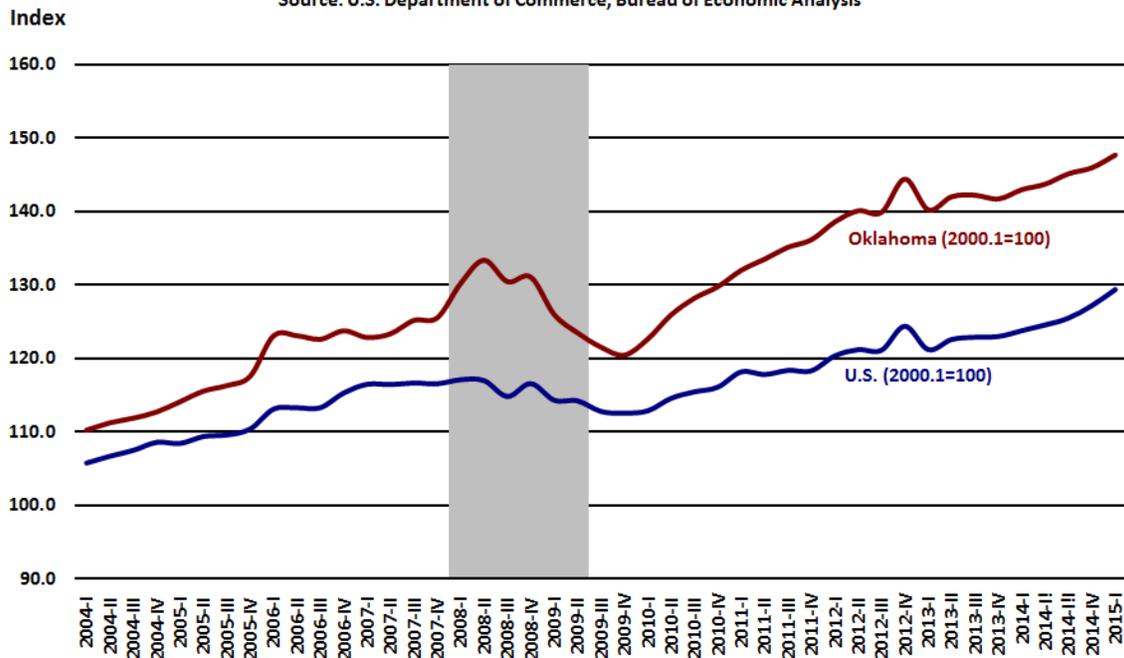
Over the year, total residential permitting was off 390 permits, or -30.5 percent, less than May 2014. Single-family permits were up 10 permits, or 1.2 percent more than a year ago, while the more volatile multi-family permitting was 400 less than the June 2014 level of 416 permits.

It looks like statewide residential permitting has gotten off to a slow start in 2015. Total seasonally adjusted residential building permitting was at a level of 5,287 for the first half of 2015, or 1,519 permits less than the first half of 2014.

## U.S. and Oklahoma Real Personal Income

Index: 1st Quarter 2000 = 100

Source: U.S. Department of Commerce, Bureau of Economic Analysis



NOTE: Shaded area represents National Bureau of Economic Research defined recession period.

### Definition & Importance

Personal income is a broad measure of economic activity and one for which relatively current data are available. Personal income includes earnings, property income such as dividends, interest, and rent and transfer payments, such as retirement, unemployment insurance, and various other benefit payments. It is a measure of income that is available for spending and is seen as an indicator of the economic well-being of the residents of a state. Earnings and wages make up the largest portion of personal income.

To show the vastly different levels of total personal income for the U.S. and Oklahoma on the same chart, these data have been converted to index numbers. This chart shows a comparison of Oklahoma and U.S. growth in real personal income with 1st quarter 2000 as the base year.

### Current Developments

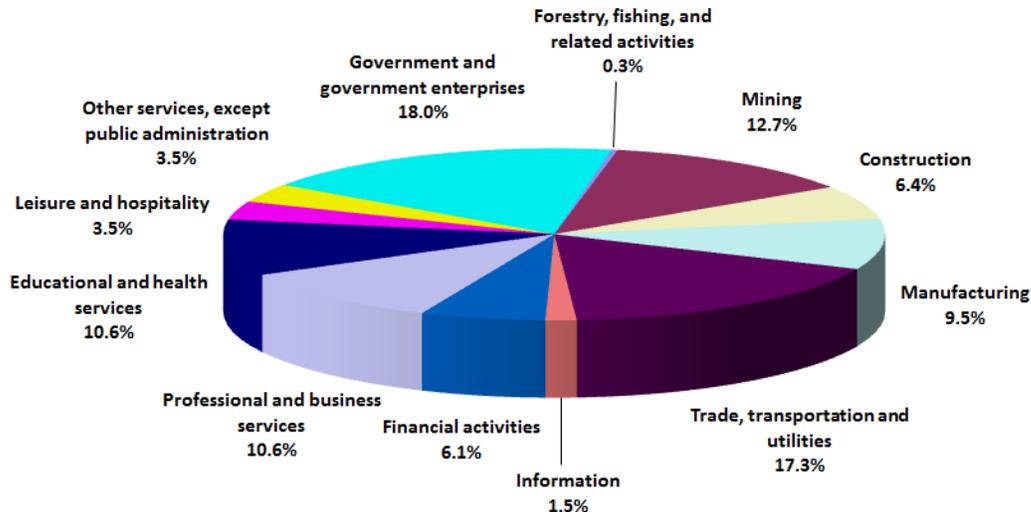
Consumer spending rose by the smallest amount in four months in June with the slowing tied in part to lower automobile sales. Personal income increased \$68.1 billion, or 0.4 percent, and disposable personal income (DPI) increased \$60.6 billion, or 0.5 percent, in June, according to the Bureau of Economic Analysis (BEA). In May, personal income increased \$66.3 billion, or 0.4 percent, DPI increased \$53.8 billion, or 0.4 percent, and PCE increased \$90.8 billion, or 0.7 percent, based on revised estimates.

Personal income rose 0.4 percent for a third straight month, reflecting strong employment gains. Purchases of durable goods, the category that covers autos, fell 1.3 percent in June. Outlays on services like utilities rose 0.4 percent. A key inflation reading, the core PCE price index, rose only 0.1 percent in June, and only 1.3 percent over the year.

The personal savings rate increased to 4.8 percent from 4.6 percent in May, suggesting consumer health and hints at underlying spending strength.

## Oklahoma Nonfarm Contribution to Earnings First Quarter 2015

Source: U.S. Department of Commerce, Bureau of Economic Analysis



### Definition & Importance

Quarterly estimates of state personal income are seasonally adjusted at annual rates by the Bureau of Economic Analysis (BEA). Quarterly personal income estimates are revised on a regular schedule to reflect more complete information than the data that were available when the estimates were initially prepared and to incorporate updated seasonal factors.

### Current Developments

State personal income grew 0.9 percent on average in the 1st quarter of 2015, after growing 1.1 percent in the 4th quarter of 2014, according to estimates released today by the U.S. Bureau of Economic Analysis (BEA). Personal income grew in 46 states and growth accelerated in 15 of those states. The fastest growth, 1.3 percent, was in Florida. Personal income fell in four states, with the largest decline, 1.2 percent, in Iowa. The national price index for personal consumption expenditures fell 0.5 percent in the 1st quarter, after falling 0.1 percent in the 4th quarter.

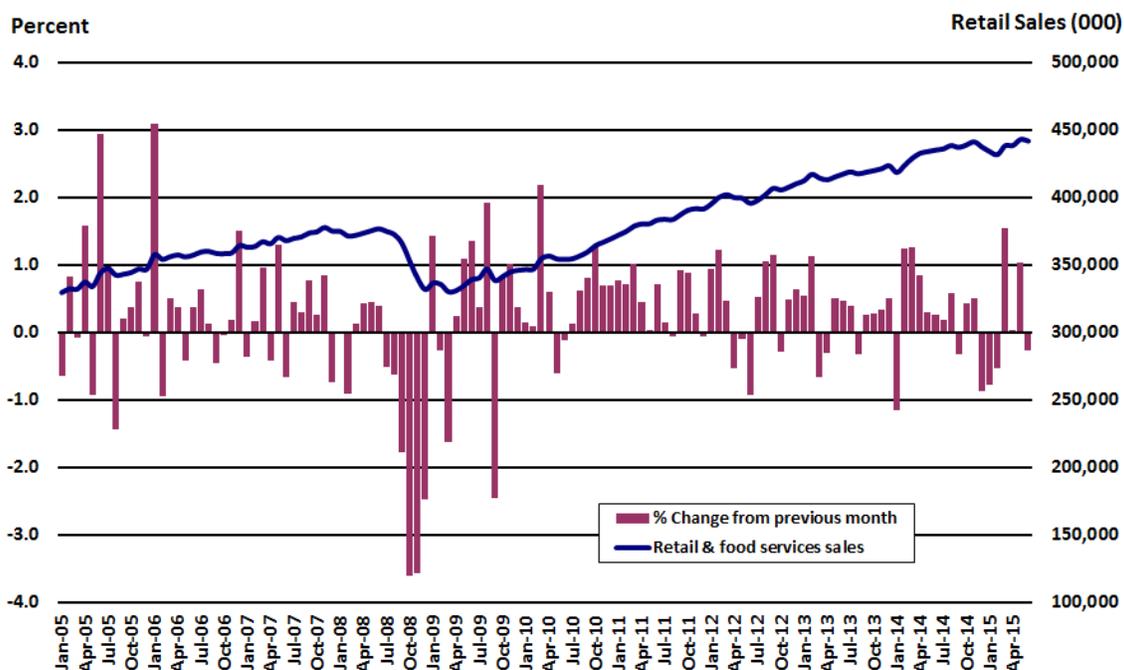
Oklahoma's personal income grew at a 0.4 percent pace in the 1st quarter of 2015, following a revised 0.3 percent rate in the 4th quarter, ranking the state 42nd among all other states and the District of Columbia. Total state personal income was at a level of \$169.8 billion in the 1st quarter of 2015.

The drop in oil prices has hurt top oil-producing states, including Oklahoma, in the form of slower growth in personal income and employment. Earnings in mining (which includes oil and gas extraction) fell 3.5 percent in the 1st quarter, the first decline since the 3rd quarter of 2009, according to the BEA. Mining earnings fell 4.5 percent in Wyoming, 4.4 percent in Louisiana, 4.1 percent in North Dakota, 3.9 percent in Oklahoma, and 3.1 percent in Texas.

Oklahoma's earnings growth was essentially flat in the 1st quarter, growing only \$11.0 million to a level of \$120.3 million and a growth rate of 0.01 percent. Mining was the largest detractor to earnings growth, subtracting 0.36 percentage point. Farm earnings subtracted another 0.21 percentage point. Construction was the largest contributor to 1st quarter earnings growth, adding 0.12 percentage point.

## U.S. Retail Sales (Adjusted for Seasonal, Holiday, and Trading-Day Differences)

Source: U.S. Census Bureau, Advance Monthly Sales for Retail and Food Services



### Definition & Importance

Retail sales measure the total receipts at stores that sell merchandise and related services to final consumers. Sales are by retail and food services stores. Data are collected from the Monthly Retail Trade Survey conducted by the U.S. Bureau of the Census. Essentially, retail sales cover the durables and nondurables portions of consumer spending. Consumer spending accounts for roughly two-thirds of the U.S. GDP and is therefore essential to Oklahoma's economy. Retail sales account for around one-half of consumer spending and economic recovery calls for consumption growth.

### Current Developments

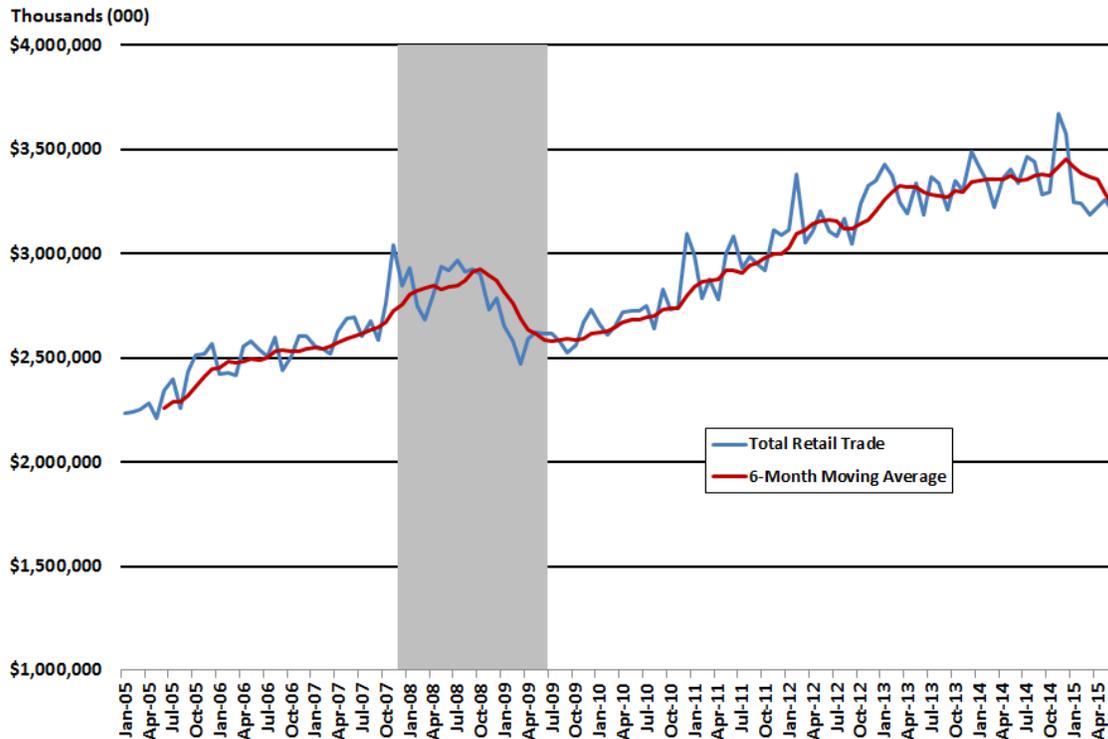
U.S. retail sales fell in June, as consumers cut back spending on automobiles and at stores and restaurants. Advance estimates of U.S. retail and food services sales for June, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were \$442.0 billion, a decrease of 0.3 percent from the previous month, but up 1.4 percent above June 2014, according to the U.S. Census Bureau. Total sales for the April 2015 through June 2015 period were up 1.7 percent from the same period a year ago. The April 2015 to May 2015 percent change was revised from +1.2 percent to +1.0 percent.

June's retail spending showed broad weakness. Motor vehicles were part of the reason, as sales at auto dealers fell 1.1 percent, after reaching the highest level in a decade in May. The bounce back in gasoline prices has boosted gas station sales in the last couple of months, up 0.8 percent in June following May's 3.7 percent surge. Excluding spending on automobiles and gasoline, retail sales fell 0.2 percent in June.

The less volatile "core" sales, which strip out automobiles, gasoline, building materials and food services fell 0.1 percent in June, after an increase of 0.7 percent in May. There were gains in general merchandise stores, (+0.7 percent) and electronic & appliance stores, (+1.0 percent), in June. However, furniture sales fell 1.6 percent, apparel sales fell 1.5 percent, building materials fell 1.3 percent, and restaurants fell 0.2 percent.

## Oklahoma Total Adjusted Retail Trade

Source: Center for Economic & Management Research, University of Oklahoma



### Definition & Importance

The Center for Economic and Management Research (CEMR) Price College of Business, at the University of Oklahoma produces the Oklahoma Monthly Retail Sales Series containing monthly estimates of retail sales for Oklahoma, the Oklahoma City, Tulsa and Lawton Metropolitan Statistical Areas and 48 selected cities in Oklahoma. The series is based on sales tax collection data provided by the Business Tax Division, Oklahoma Tax Commission (OTC). In order to take out monthly volatility, we have used a six-month moving average.

### Current Developments

Oklahoma total adjusted retail trade fell in June with broad-based losses occurring in both durable and nondurable sales. Total adjusted retail sales for June were at a level of \$3.19 billion, or 1.9 percent lower than the May level of \$3.26 billion. For the first six months of 2015, total adjusted retail trade was at a level of \$19.35 billion, or 3.7 percent lower than \$20.09 billion for the first half of 2014.

Total durable goods sales fell 1.1 percent in June led by big declines in miscellaneous durable goods (2.2 percent) and auto accessories & repair (-1.9 percent). Other declining durable goods categories were furniture (-1.9 percent); electronics & music stores (-0.6 percent); lumber & hardware (-0.2 percent); and used merchandise (-0.8 percent).

Nondurable goods spending sank 2.2 percent in June led by a drop in estimated gasoline sales (-13.4 percent) due to lower pump prices. Other declining categories were miscellaneous non-durable goods sales (-1.3 percent); apparel (-0.7 percent); and general merchandise stores (-0.6 percent). Advancing for June were drugstore sales (1.2 percent); eating & drinking (0.5 percent); food (0.2 percent); and liquor (0.1 percent).