



# OKLAHOMA Economic Indicators

April 2015

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Oklahoma Employment Security Commission  
Richard McPherson, Executive Director

Economic Research and Analysis Division  
Lynn Gray, Director & Chief Economist

*Prepared by*  
Monty Evans, Senior Economist

Will Rogers Memorial Office Building  
Labor Market Information Unit, 4th Floor N  
P.O. Box 52003  
Oklahoma City, OK 73152-2003  
Phone: (405) 557-5369  
Fax: (405) 525-0139  
Email: [lmi1@oesc.state.ok.us](mailto:lmi1@oesc.state.ok.us)

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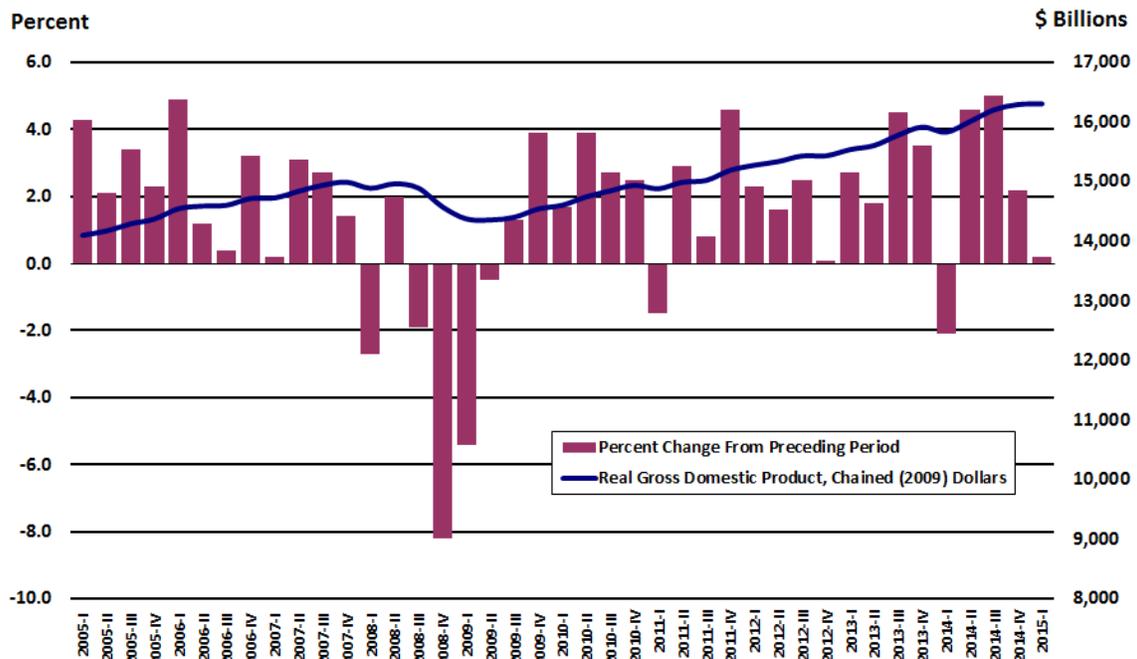
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## Real Gross Domestic Product and Quarterly Change

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. economy stalled in the 1st quarter, held back by a strong dollar and unusually cold weather that put a crimp on consumer spending. Real gross domestic product (GDP) increased at an annual rate of 0.2 percent in the 1st quarter of 2015, according to the "advance" estimate released by the Bureau of Economic Analysis (BEA). In the 4th quarter, real GDP increased 2.2 percent.

Weakness in 1st quarter consumer spending was blamed on the harsh winter weather in February. Real personal consumption expenditures increased 1.9 percent in the 1st quarter, down from an increase of 4.4 percent in the 4th quarter. Durable goods expenditures were 1.1 percent while non-durable goods spending declined 0.3 percent. Spending on services grew at a 2.8 percent pace, in contrast to an increase of 4.3 percent in the 4th quarter.

Business investment spending on equipment and structures fell at a 3.4 percent annual rate, largely reflecting sharp cutbacks in oil and gas drilling. Spending on nonresidential structures, which includes oil and gas exploration and well drilling, plunged at a 23.1 percent rate—the fastest pace of decline in four years.

Businesses accumulated \$110.3 billion of inventory in the 1st quarter, up from \$80 billion in the 4th quarter. The increase in inventory accumulation added 0.74 percentage point to GDP growth after subtracting 0.10 percentage point from the 4th-quarter change.

Residential construction also took a hit from the weather in the 1st quarter. Real residential fixed investment increased 1.3 percent, compared with an increase of 3.8 percent in the 4th quarter.

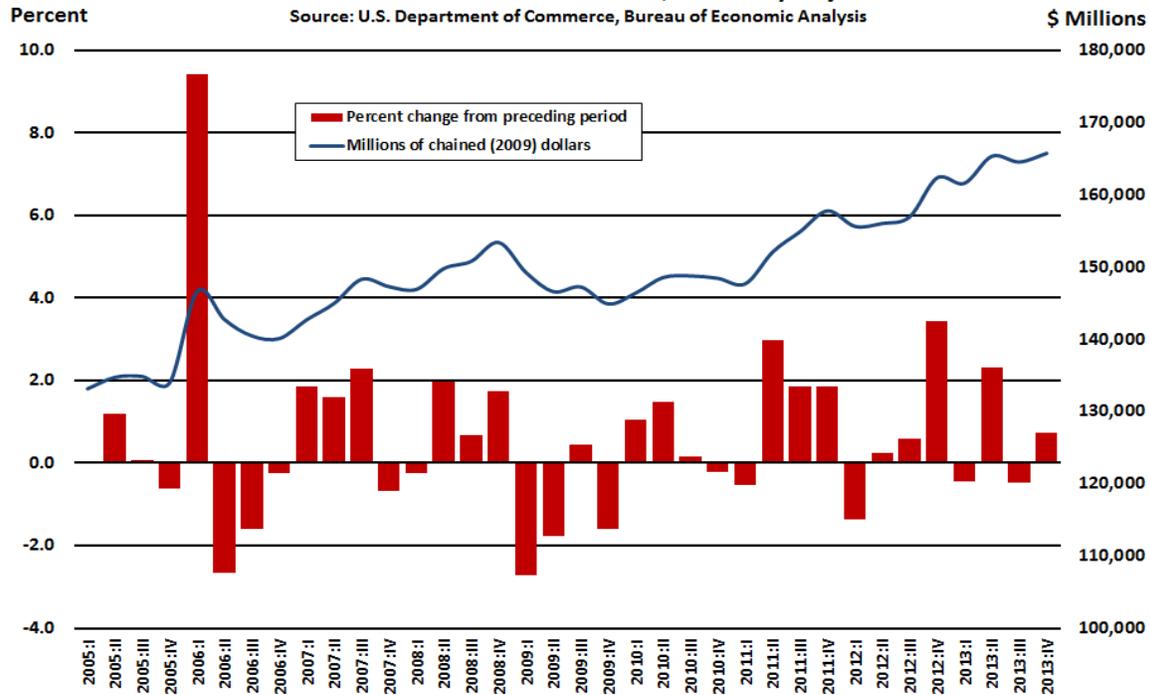
Plunging exports along with a strong dollar, (which makes exports more expensive on overseas markets and imports more attractive to U.S. consumers), weighed on trade in the 1st quarter. The widening trade deficit subtracted 1.25 percentage points from growth, with nearly 1 percentage point of the loss coming from a big drop in exports.

Government spending also weighed on real GDP growth in the 1st quarter. Real federal government consumption expenditures and gross investment increased 0.3 percent in the 1st quarter, in contrast to a decrease of 7.3 percent in the previous quarter. National defense spending decreased 0.7 percent while nondefense spending increased 1.9 percent. Real state and local government consumption expenditures and gross investment decreased 1.5 percent, in contrast to an increase of 1.6 percent in the 4th quarter. Government consumption expenditures and gross investment deducted 0.15 percentage point from GDP growth in the 1st 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.

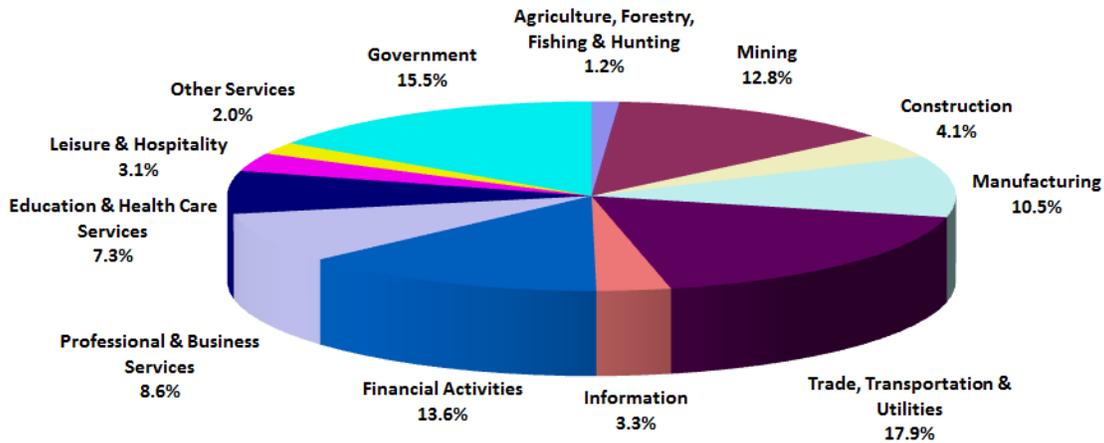
In 4th quarter 2013, Oklahoma’s GDP was \$165.7 billion in constant 2009 dollars, up from \$164.5 billion in the 3rd quarter. The state’s 4th quarter real GDP increased by \$1.19 billion, or 2.9 percent, ranking Oklahoma 29th among all other states and the District of Columbia.

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.

## Industry Share of Oklahoma's Economy, 4th Quarter 2013

(by percentage of Gross Domestic Product)

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



Fifteen Oklahoma industry sectors contributed to GDP growth in the 4th quarter of 2013, with six sectors subtracting from growth. The mining sector, which includes the oil and gas industry, was by far the largest contributor to Oklahoma's GDP growth in the 4th quarter, adding 2.39 percentage points to overall GDP growth, followed by non-durable goods manufacturing which contributed 0.94 percentage points. Agriculture, forestry, fishing and hunting was the biggest drag to state GDP growth subtracting 1.95 percentage points.

Mining was the most predominant contributor to growth in Alaska, Colorado, New Mexico, North Dakota, Oklahoma, West Virginia, and Wyoming. Mining contributed 8.62 percentage points to growth in North Dakota, 6.85 percentage points to growth in Wyoming, 4.85 percentage points to growth in West Virginia, and 2.39 points to growth in Oklahoma.

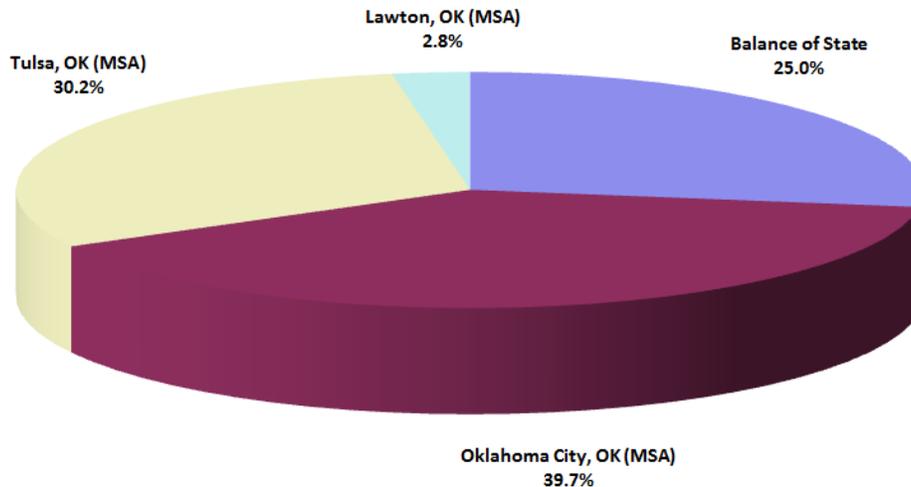
Nondurable-goods manufacturing was the largest contributor to U.S. real GDP by state growth in the 4th quarter of 2013. This industry increased 18.6 percent in the 4th quarter after moderate growth of 2.9 percent in the 3rd quarter. Nondurable-goods manufacturing was the leading contributor to growth in 31 states in the 4th quarter. In Oklahoma, non-durable goods manufacturing contributed 0.94 percent to real GDP growth in the 4th quarter of 2013 and was the second largest contributor to growth in that quarter.

The government sector declined 1.9 percent in the 4th quarter of 2013 and subtracted 0.24 percentage point from the growth in the nation. In Oklahoma, government subtracted 0.06 percentage point from growth in the 4th quarter.

Construction subtracted from growth in 47 states and the District of Columbia in the 4th quarter of 2013. This industry declined 5.9 percent and subtracted 0.22 percentage point from growth in the nation. In Oklahoma, construction subtracted 0.27 percentage point from real GDP in the 4th quarter.

## 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.

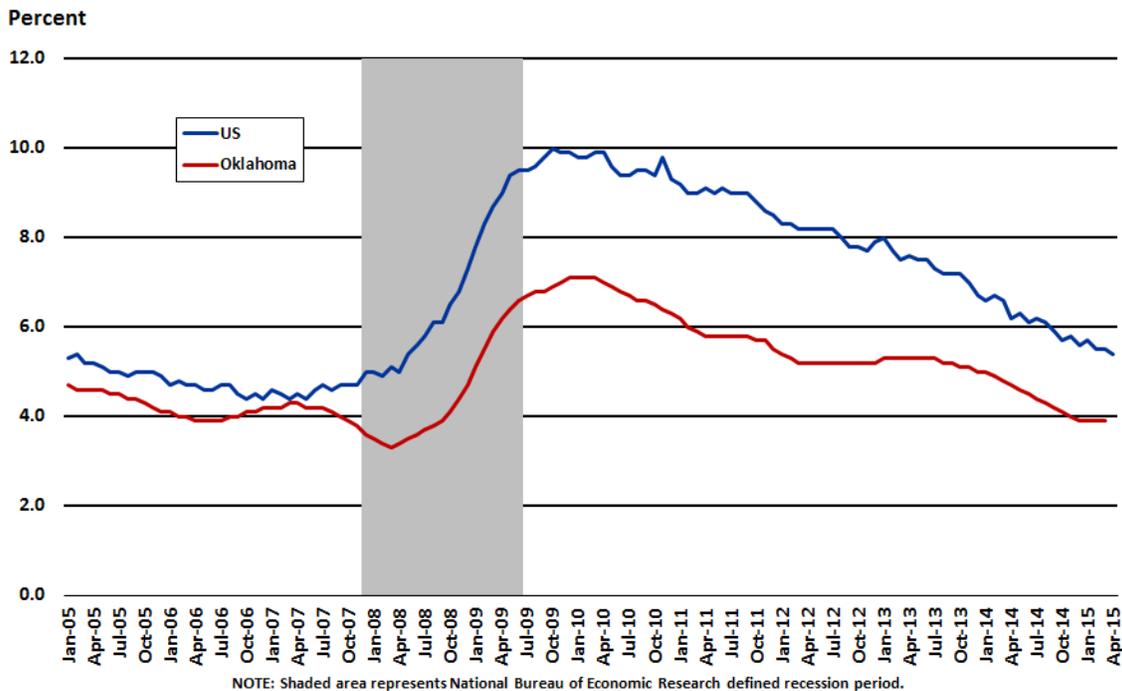
### Current Developments

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

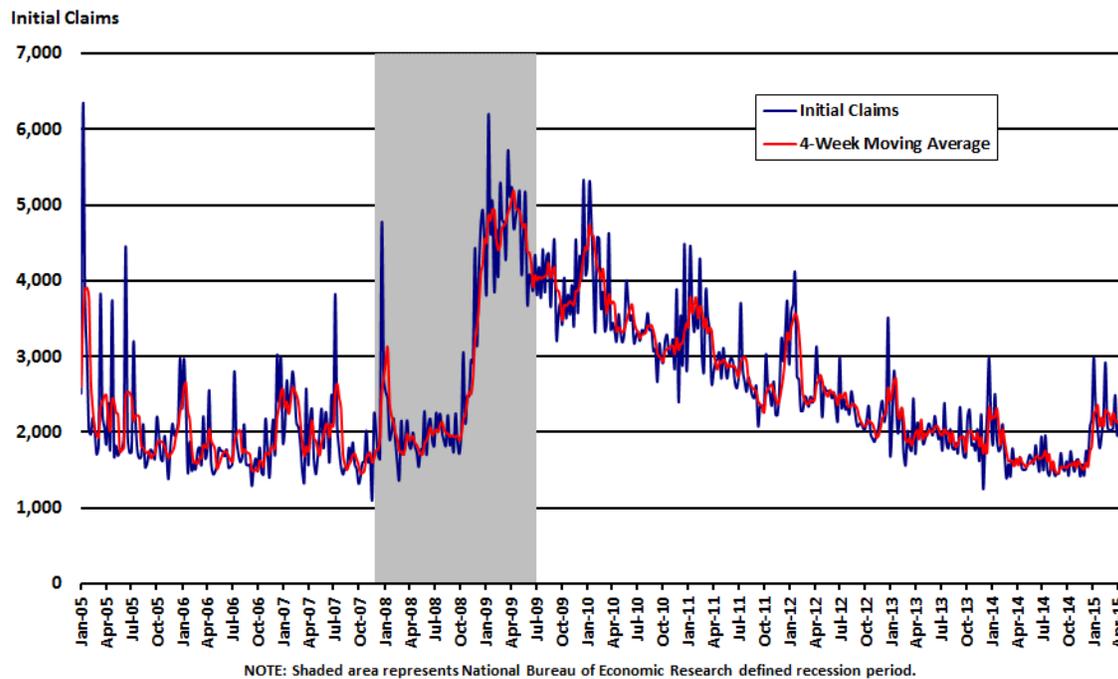
Job growth in April helped to bring down the unemployment rate to its lowest level in nearly seven years. The unemployment rate was 5.4 percent in April, according to the Bureau of Labor Statistics (BLS). The labor force participation rate, the share of working-age Americans who are employed or looking for a job, rose 0.1 percentage point to 62.8 percent.

Oklahoma's seasonally adjusted unemployment rate remained at 3.9 percent for the fourth consecutive month in March, tied with New Hampshire as the 8th lowest unemployment rate among all states.

Over the year, the state's seasonally adjusted unemployment rate was down by 0.9 percentage point from 4.8 percent in March 2014. Kentucky saw the largest drop in year-over-year change in jobless rates among states (-2.1 percentage points), while Louisiana had the largest over-the-year gain at 1.1 percentage points.

## 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

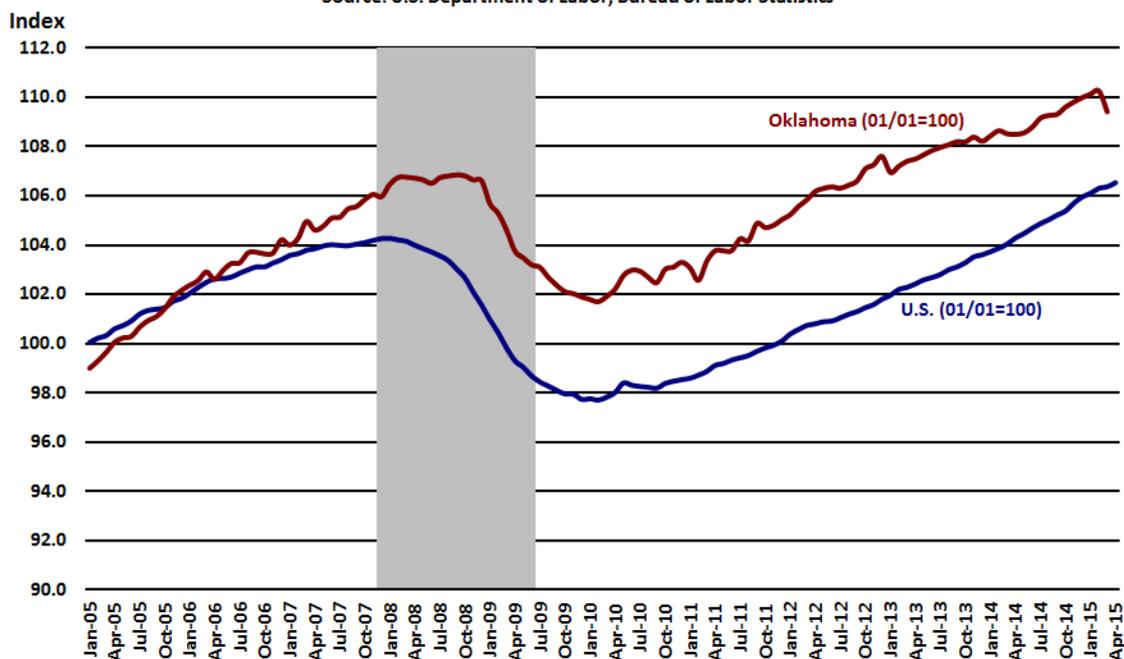
The number of Americans filing for unemployment aid plunged to the lowest level in 15 years in the last week of April. In the week ending April 25, the advance figure for seasonally adjusted initial claims was 262,000, a decrease of 34,000 from the previous week's revised level, according to figures released by the U.S. Labor Department (DOL). This is the lowest level for initial claims since April 15, 2000 when it was 259,000. The less volatile 4-week moving average dropped to 283,750, a decrease of 1,250 from the previous week's revised average.

Oklahoma initial jobless claims moved sideways in April, suggesting a slowdown of the recent layoffs the in oil and gas industry. For the file week ending April 18, initial jobless claims were at a level of 2,066, or 47 less claims than the previous week. For the same file week ending, the four-week moving average was at 2,192, up 133 claims from the previous week's level of 2,060. Over the month, initial claims were 425 less than 2,491 on March 21. Over the year, statewide initial jobless claims have increased by 550 from 1,516 for the file week ended April 19, 2014, while the less volatile 4-week moving average rose by 586 from 1,607 for the same file week.

## U.S. and Oklahoma Nonfarm Payroll 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

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

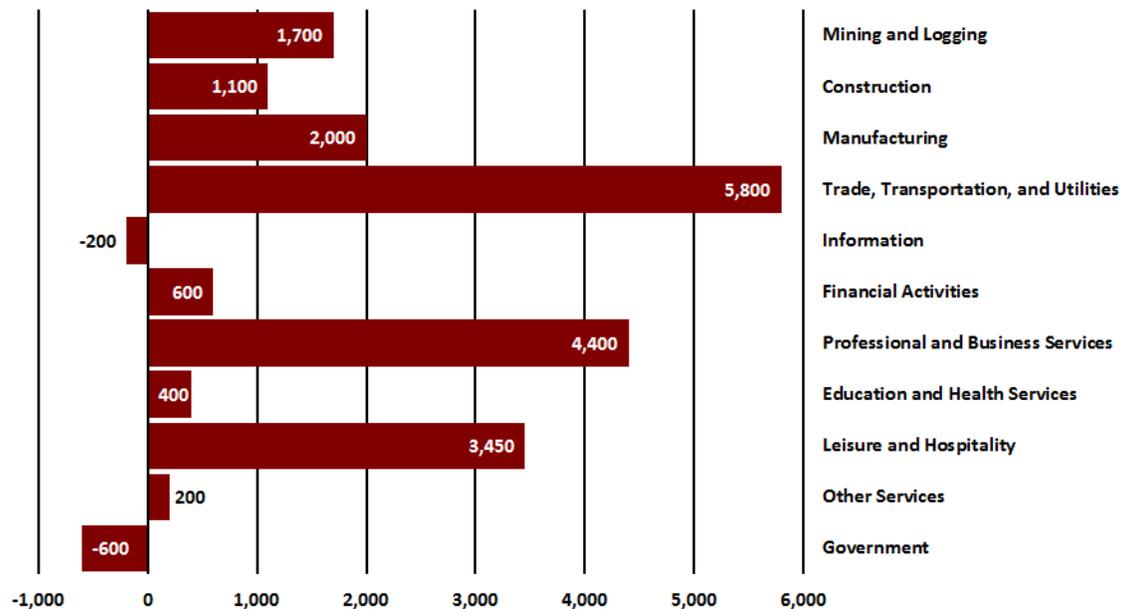
Hiring rebounded in April after a 12-month streak of job gains above 200,000 was broken in March. Total nonfarm employment rose by 223,000 jobs, according to the Bureau of Labor Statistics (BLS). In April, employment increased in professional and business services (+62,000 jobs), health care (+45,000 jobs), and construction (+45,000 jobs), while employment in mining continued to decline (-15,000 jobs). March's employment gains were revised sharply downward to 85,000 from 126,000.

Oklahoma's seasonally adjusted nonfarm employment dropped by 12,900 jobs (-0.8 percent) in March. All but one of Oklahoma's 11 supersectors reported job losses in March, led by professional & business services with an over-the-month loss of 2,800 jobs. Mining & logging and manufacturing both lost 2,000 jobs over the month.

Over the year, Oklahoma total nonfarm employment gained 13,500 jobs (+0.8 percent) with seven out of 11 supersectors adding jobs. Professional & business services (+8,100) posted the over-the-year 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).

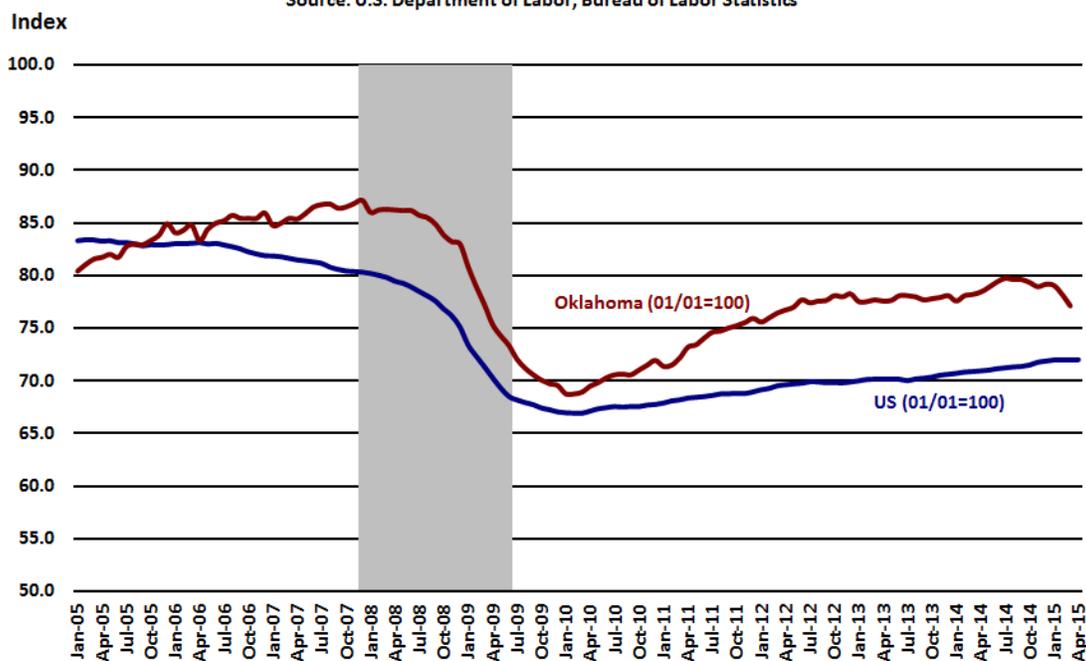
In 2014, nine out of Oklahoma's 11 statewide supersectors recorded job growth. The broad trade, transportation & utilities sector led all other supersectors adding a non-seasonally adjusted 5,800 jobs with the bulk of hiring occurring in retail trade. Professional & business services employment added 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

April marked the third consecutive month of hiring weakness in the U.S. manufacturing sector. Manufacturers added 1,000 net new workers in April, according to the Bureau of Labor Statistics (BLS). In the early months of 2015 the U.S. economy has faced a number of significant headwinds, including a strong dollar, slowing growth abroad, lower crude oil prices, residual effects from the West Coast ports slowdown, a cautious consumer and harsh winter weather.

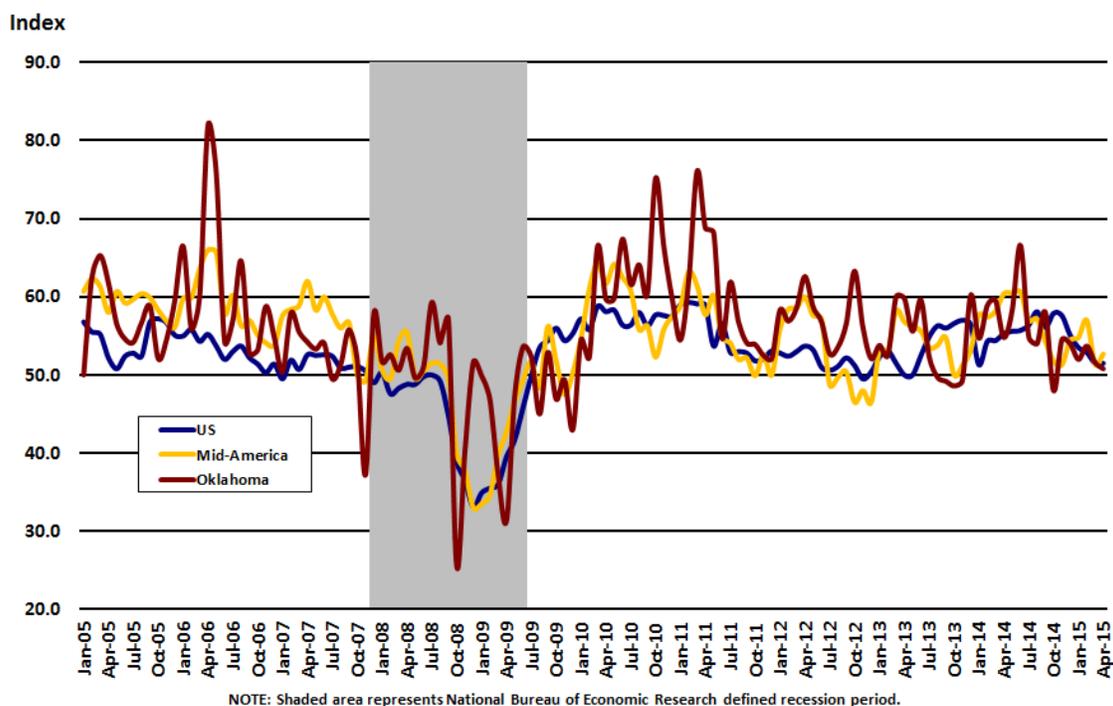
Oklahoma manufacturing employment dropped for the second month in a row in March, shedding a non-seasonally adjusted 1,900 jobs (-1.4 percent) in February. Durable goods manufacturing accounted for the majority of the job losses in March.

Over the year, Oklahoma manufacturing employment has lost a non-seasonally adjusted 1,900 jobs (-1.4 percent). Durable goods employment lost a non-seasonally adjusted 1,200 jobs while non-durable goods manufacturing dropped a non-seasonally adjusted 700 jobs.

*\*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

The pace of U.S. factory activity held steady in April as a pickup in new orders was offset by contracting employment levels. The April PMI® registered 51.5 percent, the same reading as in March, indicating growth in manufacturing for the 28th consecutive month, according to the latest Manufacturing ISM Report On Business®. The index has dropped consecutively in the last five months.

Although a strong dollar and weak overseas demand continued to provide headwinds for U.S. exports, new export orders rose to 53.5 from 51.8 in March, while the prices paid index rose to 40.5 from 39, returning above 40 after four straight months below that level. Production, at 56.0, was especially strong as were import orders at 54.0 for a 1.5 point gain.

The employment index moved into contraction for the first time since May 2013, dropping to 48.3, the lowest reading since September 2009.

The Mid-America Business Conditions Index for March, a leading economic indicator for a nine-state region stretching from North Dakota to Arkansas, climbed from March's reading. The Business Conditions Index, which ranges between 0 and 100, rose to 52.7 from March's 51.4 reading, according to the Creighton Economic Forecasting Group. The regional index, much like the national reading, is pointing to positive, but slow growth for the first half of 2015.

"Firms linked to energy and agriculture are experiencing pullbacks in economic activity. Growth in Oklahoma and North Dakota, two energy-producing states, is approximately one-third to one-half of what it was one year ago. That growth is likely to move even lower in the months ahead as the strong U.S. dollar slows growth even more," said Ernie Goss, Ph.D., director of Creighton University's Economic Forecasting Group.

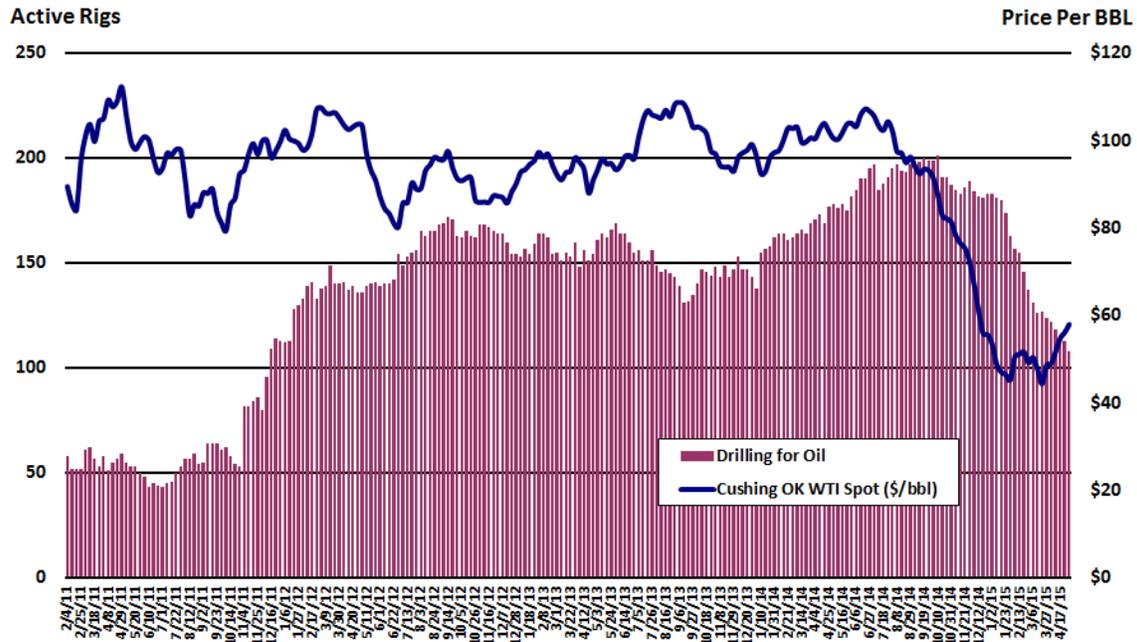
The Business Conditions Index for Oklahoma slipped again in March, but still signals positive but slow growth in the next three to six months. The index for March declined to 50.8 from 51.6 in March. Components of the April survey of supply managers were new orders at 53.5, production or sales at 55.2, delivery lead time at 51.2, inventories at 45.6, and employment at 48.7.

"After reaching a record high of \$6.9 billion in 2013, Oklahoma's exports declined by almost nine percent for 2014. I expect a double-digit decline in state exports for 2015 stemming from lower energy prices and a strong dollar. This will reduce 2015 growth well below that experienced in 2014," said Goss.

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

February 2011 to April 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**

In the April *Short-Term Energy Outlook* (STEO), the U.S. Energy Information Administration (EIA) noted that on April 2, Iran and the five permanent members of the United Nations Security Council plus Germany (P5+1) reached a framework agreement that could result in the lifting of oil related sanctions against Iran. If and when sanctions are lifted, the EIA's baseline forecast for world crude oil prices in 2016 could be reduced \$5 to \$15/barrel (bbl) from the level presented in the current forecast.

EIA forecasts that Brent crude oil prices will average \$59/bbl in 2015 and \$75/bbl in 2016, both unchanged from last month's STEO. West Texas Intermediate (WTI) prices in 2015 and 2016 are expected to average \$7/bbl and \$5/bbl below Brent, respectively.

Oklahoma's crude production in February was at 9,713,000 barrels, 1,466,000 barrels (or 13.1 percent) less than January's level of 11,179,000 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.

Oil prices in April posted their biggest gains in almost six years. After falling to a low of \$43.39/barrel in mid-March, West Texas Intermediate (WTI-Cushing) spot prices climbed to \$59.62/barrel (or 37.4 percent) by the end of April. That's still \$40.45, or 40.4 percent, below \$100.07/barrel a year ago.

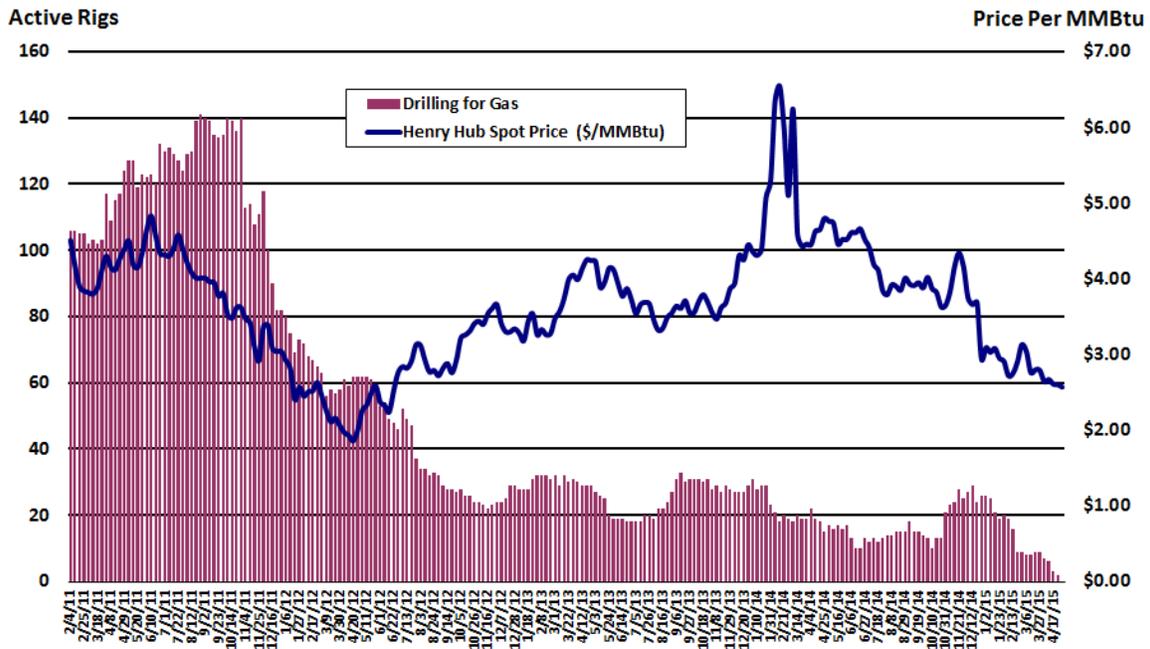
The total rig count for the week ending May 1 fell by 27 units to 905 rigs, according to data from oilfield service company Baker Hughes. Oil rigs fell by 24 units to 679 and natural gas rigs fell by three to 222.

Oklahoma's weekly active rig count fell to its lowest level in five years on the last week of April. The number of active rigs in the state stood at 108 for the week ending May 1, all of which were oil-directed.

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

February 2011 to April 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**

The U.S. Energy Information Administration (EIA) noted that on April 16, the Mercury and Air Toxic Standards (MATS), the EPA rule mandating new environmental standards for coal-fired power plants, took effect. EIA expects 13 gigawatts (GW) of coal-fired generation capacity to retire this year, much of it occurring this month as MATS takes effect. Most scheduled capacity additions this year are either wind (9.8 GW) or natural gas (4.3 MW). Coal-fired generation capacity accounts for 81 percent of all planned retirements in 2015.

According to the EIA, the retirements and additions this year represent a long-term trend of declines in coal-fired generation capacity and increases in gas-fired generation capacity. New gas-fired generation has been one of the largest sources of new generation additions over the past few years. Additionally, natural gas generation has helped replace lost nuclear generation following the retirements of two large nuclear facilities, the San Onofre Nuclear Generating Station (SONGS) in Southern California, and Vermont Yankee Nuclear Power Plant in Vermont.

Statewide natural gas production tumbled in February, as fewer and fewer rigs are drilling for natural gas. February natural gas gross withdrawals were at a level of 181,804 MMcf, or 17,278 MMcf (or-8.7 percent) less than January. 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.

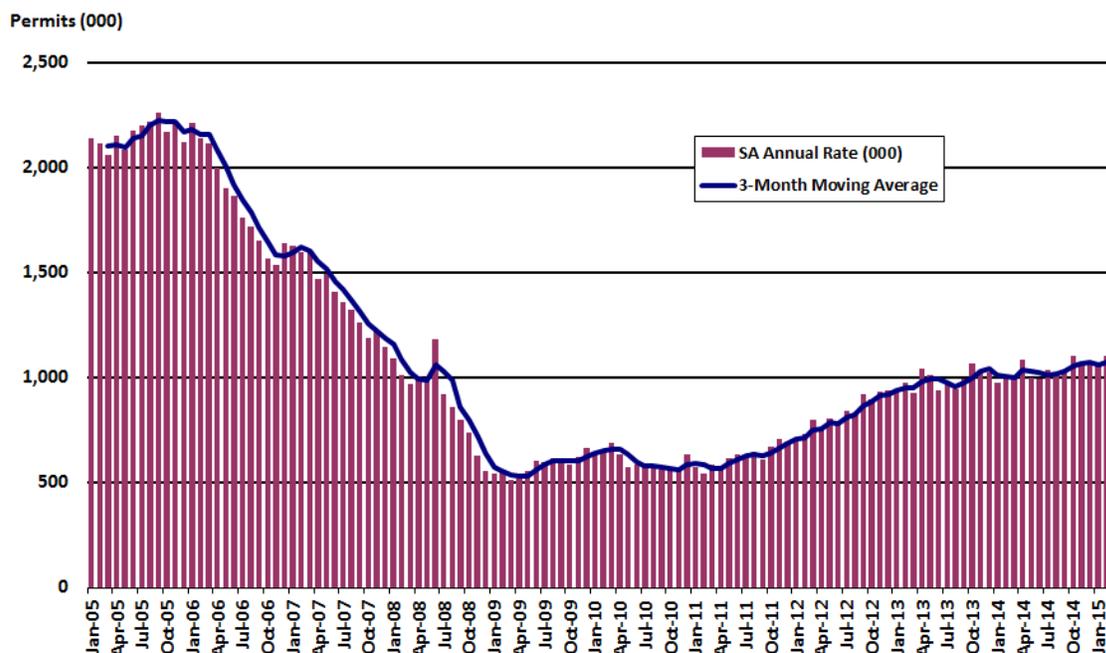
Natural gas prices to fall in April with mild temperatures and relatively low demand from both the heating and cooling sectors in most regions. The Henry Hub natural gas spot price averaged \$2.61/MMBtu in April, a decline of 22 cents from the March average of \$2.83/MMB.

For the first time since oilfield service provider Baker Hughes began publishing numbers, (beginning in February 2011), Oklahoma had no natural gas-directed drilling activity in the last week of April. For the week ending May 1, Oklahoma's natural gas-directed drilling rig count was at a level of zero, shedding two from the previous week. Over the year, Oklahoma's natural gas-directed rotary rig count was down 17 rigs reported for the week ended May 2, 2014.

## U.S. Total Residential Building Permits, 2005-2015

Seasonally Adjusted

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



### 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 outsize 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

It appears that the residential housing market is still soft as March permits recorded their biggest drop since last May. Privately-owned housing units authorized by building permits in March were at a seasonally adjusted annual rate of 1,039,000, or 5.7 percent below the revised February rate of 1,102,000, but 2.9 percent above the March 2014 estimate of 1,010,000, according to the U.S. Census Bureau and the Department of Housing and Urban Development. The entire decline came from the volatile multi-family category that includes apartment construction.

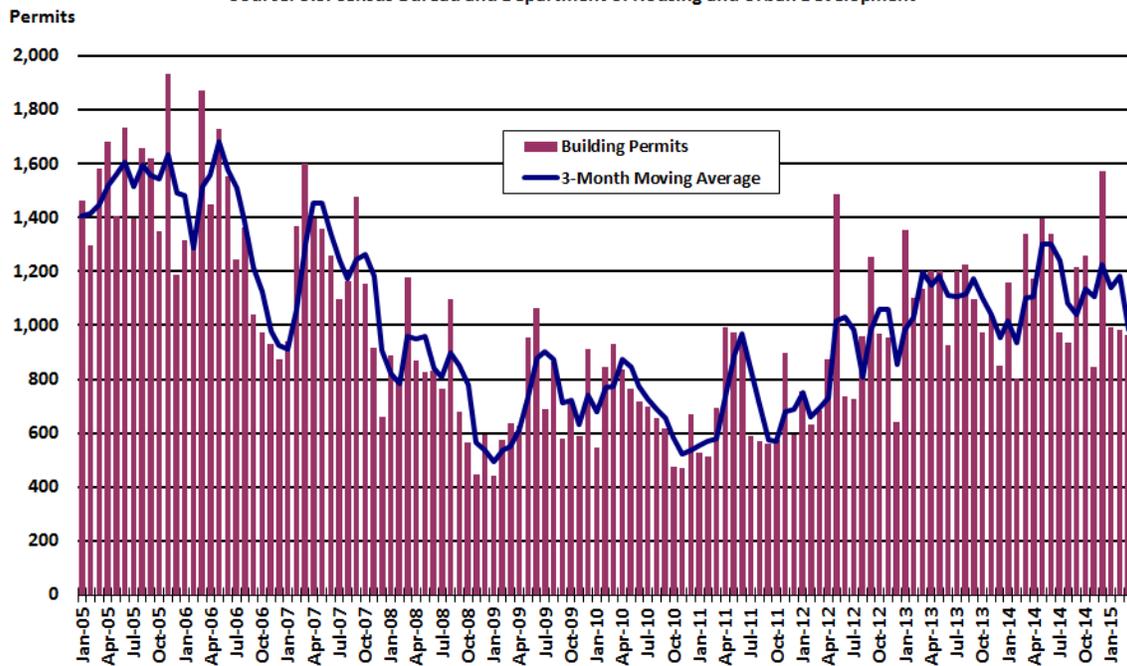
Single-family authorizations in March were at a rate of 636,000, or 2.1 percent above the revised February figure of 623,000. Authorizations of units in buildings with five units or more were at a rate of 378,000 in March.

The National Association of Home Builders/Wells Fargo builder sentiment index rose four points to 56 in April, the highest level since January.

## Oklahoma Total Residential Building Permits, 2005-2015

Not Seasonally Adjusted

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



Applications for residential construction in Oklahoma edged down again in March, held back again by weak apartment permitting. Total residential building permitting for March was at an unadjusted level of 965 units, 19 units less than February's level of 984, according to figures from the U.S. Census Bureau and the Department of Housing and Urban Development.

Single-family permitting accounted for 96.1 percent of total residential permitting activity in March while multi-family permitting added only 3.3 percent. Applications for single-family homes were at a non-seasonally adjusted level of 927, or 14.7 percent more than February's level of 808 permits. Multi-family permitting fell to a non-seasonally adjusted level of 32 permits, 132 less than February's level of 164 permits.

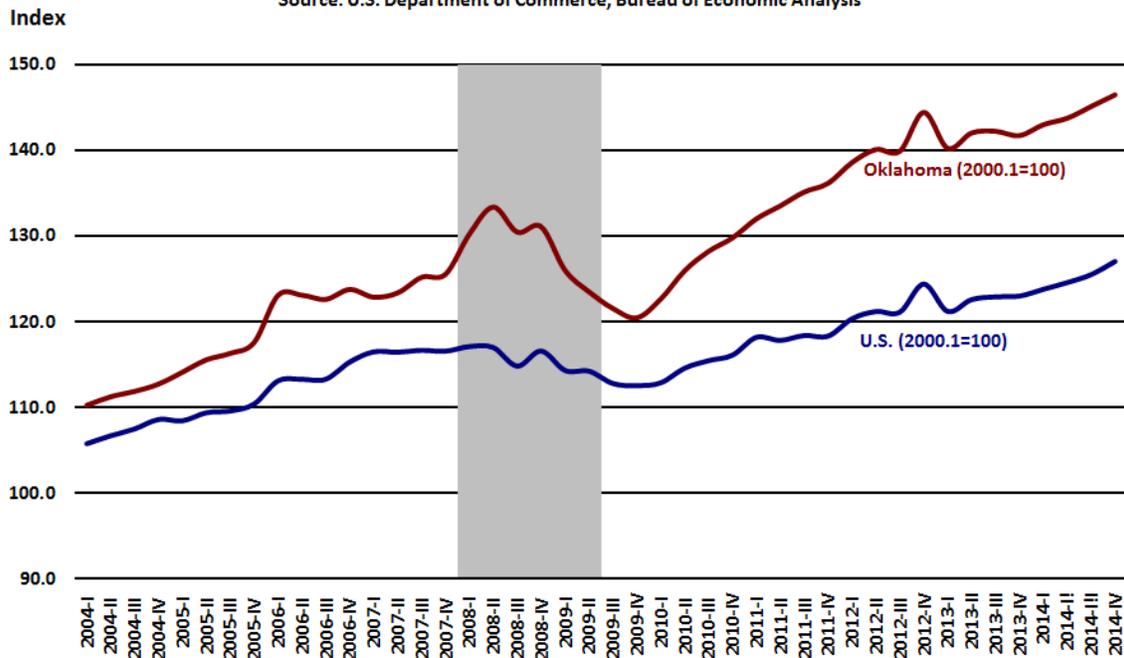
Over the year, total residential permitting was 376 permits, or 28.0 percent, less than March 2014. Single-family permits were down 14 permits, or 1.5 percent, less than a year ago, while the more volatile multi-family permitting was 344 less than the March 2014 level of 376 permits.

In 2014, total unadjusted residential building permitting was at a level of 14,024 or 12.7 percent greater than the 2013 total of 12,464 and the highest annual total since 2007. Multi-family permits were 1,127, or 51.8 percent more than 2013, while single-family permits were 447, or 4.1 percent less than 2013.

## 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

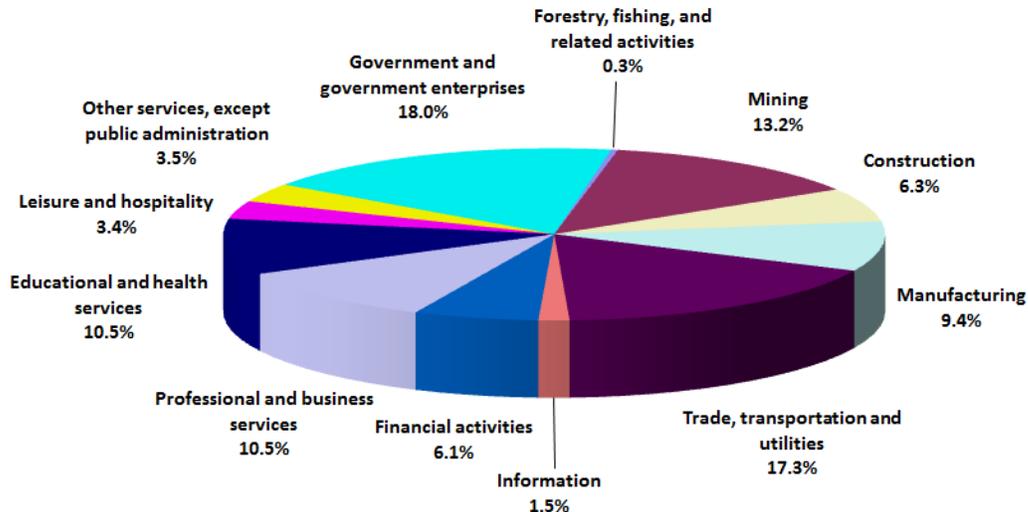
Personal income was flat in March with the weakest reading since December 2013. Personal income increased \$6.2 billion, or less than 0.1 percent, and disposable personal income (DPI) increased \$1.6 billion, or less than 0.1 percent, in March, according to the Bureau of Economic Analysis (BEA). Personal consumption expenditures (PCE) increased \$53.4 billion, or 0.4 percent. In February, personal income increased \$66.4 billion, or 0.4 percent, DPI increased \$61.2 billion, or 0.5 percent, and PCE increased \$20.8 billion, or 0.2 percent, based on revised estimates.

Durable goods purchases, including automobiles, jumped 1.8 percent, after declining 1.0 percent in the previous month. Spending on non-durable goods, which includes gasoline, advanced 0.6 percent in March. Services spending rose 0.2 percent after adjusting for inflation.

With spending outpacing income growth in March, the saving rate declined to 5.3 percent of after-tax income, down from 5.7 percent in February.

## Oklahoma Nonfarm Contribution to Earnings Fourth Quarter 2014

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 than the data that were available when the estimates were initially prepared and to incorporate updated seasonal factors.

### Current Developments

State personal income grew 1.0 percent on average in the 4th quarter of 2014, the same average growth rate as in the 3rd quarter, according to estimates by the U.S. Bureau of Economic Analysis (BEA). The acceleration in personal income growth in Florida, Texas, and 30 other states was offset by a slowdown in 15 states, including California and New York. Growth rates ranged from 0.6 percent in Louisiana to 1.5 percent in Texas. The national price index for personal consumption expenditures fell 0.1 percent in the 4th quarter after rising 0.3 percent in the 3rd quarter.

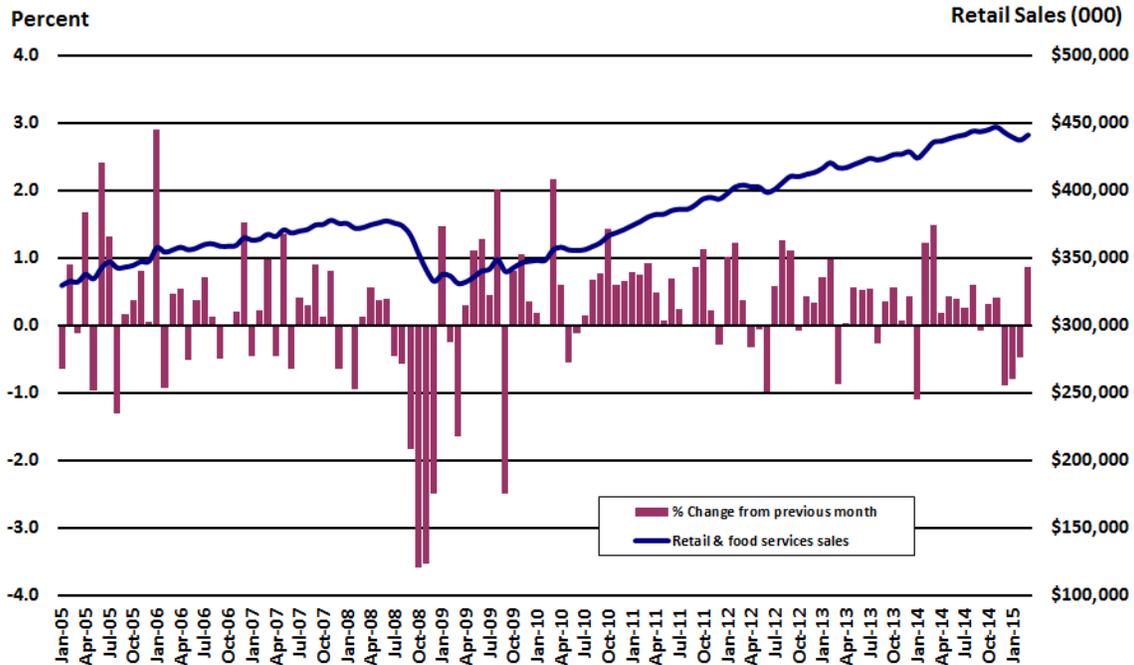
Oklahoma's personal income growth slowed in the 4th quarter to 0.7 percent, following a 1.2 percent pace in the previous quarter, and ranking 48th in the nation. Total state personal income was at a level of \$169.7 billion in the 4th quarter of 2014. Earnings grew \$874.0 million in the 4th quarter to a level of \$121.0 million for a growth rate of 0.7 percent.

The slowdown in Oklahoma's 4th state personal income can be partly attributed to the utilities sector which dropped \$470.1 million or 18 percent due to large bonuses paid in the 3rd quarter. Forestry, fishing, and related activities and farm earnings combined to contribute more than 10 percent to 4th quarter earnings.

Oklahoma's total personal income growth accelerated to 3.8 percent in 2014, from 2.0 percent in 2013, and ranked 27th among all states for income growth, according to the BEA. Total personal income was at a level of \$167.3 billion for 2014. Oklahoma per capita personal income was \$43,138 in 2014, based on an estimated 3.88 million residents.

## 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

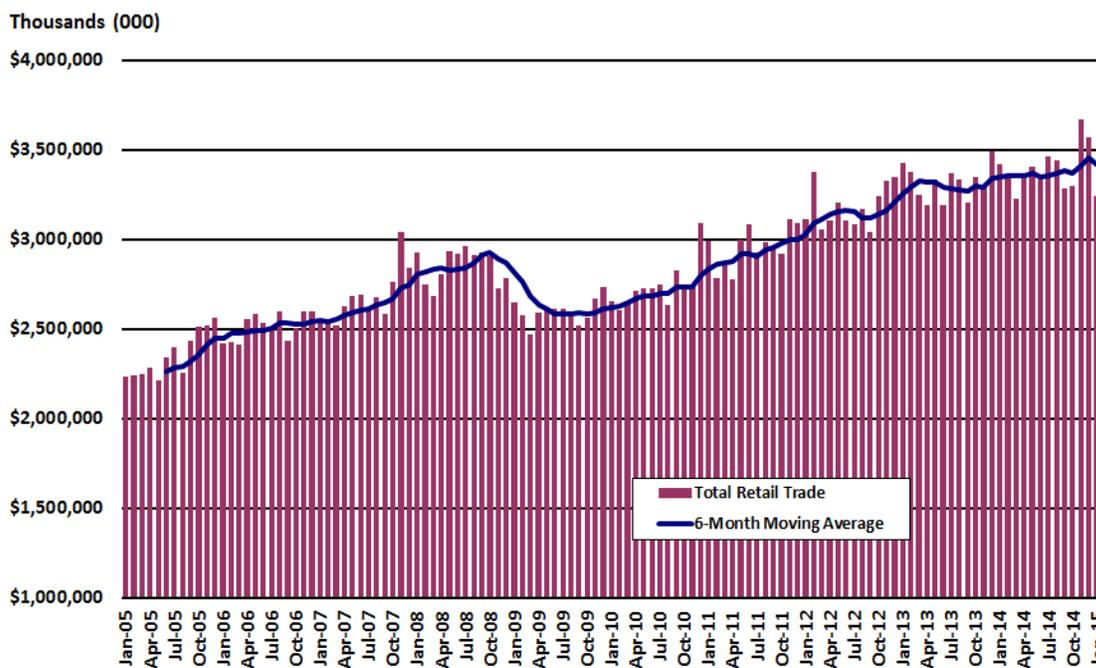
U.S. retail sales had the largest gain in a year, snapping three straight months of declines that had been blamed on unseasonably cold winter weather. Advance estimates of U.S. retail and food services sales for March, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were \$441.4 billion, an increase of 0.9 percent from the previous month, and 1.3 percent above March 2014, according to the U.S. Census Bureau. Total sales for the January 2015 through March 2015 period were up 2.2 percent from the same period a year ago. The January 2015 to February 2015 percent change was revised from -0.6 percent to -0.5 percent.

Retail sales last month were lifted by a 2.7 percent rise in automobile sales, the biggest increase since March 2014. Excluding autos, retail sales gained 0.4 percent, following no change in February. Gasoline sales dipped 0.6 percent after 2.3 percent increase in February. Excluding spending on automobiles and gasoline, sales rebounded 0.5 percent after declining 0.3 percent in February.

The less volatile "core" sales, which strip out automobiles, gasoline, building materials and food services, rose 0.3 percent in March after dropping 0.2 percent in February. There were increases in sales at furniture stores (+1.4 percent), and sporting goods and hobby shops (+0.2 percent). Spending slipped at electronics stores (-0.5 percent), as did receipts at online stores (-0.1 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 retail trade advanced in February but falling pump prices have taken a toll in the past few months. Total adjusted retail sales for February was at a level of \$3.38 billion, up 4.0 percent from the January level of \$3.25 billion. For the first two months of 2015, total adjusted retail trade was at a level of \$6.62 billion, 2.1 percent less than \$6.77 billion for the same period in 2014.

Total durable goods sales climbed 2.6 percent in February with gains in furniture (5.3 percent); auto accessories & repair (4.6 percent); miscellaneous durable goods (3.1 percent); lumber & hardware (1.2 percent); used merchandise (1.0 percent); and electronics & music stores (0.8 percent). Over the year, durable goods sales were grew 10.6 percent.

Nondurable goods sales rose 4.5 percent in February with the largest monthly gain in the volatile estimated gasoline sales which jumped 35.7 percent as a result of rising pump prices. General merchandise store sales followed growing 2.2 percent); apparel (1.8 percent); and eating & drinking (0.2 percent). Spending on drugs fell in February (-2.8 percent); liquor sales (-0.9 percent; food (-0.7 percent); and miscellaneous non-durables (-0.2 percent). Over the year, non-durable goods sales were off 2.2 percent.