



# 2015 Kansas Economic Report



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# Acknowledgments

The Economic Report is an annual publication produced by the Labor Market Information Services (LMIS) division of the Kansas Department of Labor (KDOL). The assembly and analysis of the data included in this report would not have been possible without the dedication and hard work of several members of the LMIS team.



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# Secretary's Message

**Greetings** – thank you for your interest in the Kansas economy.

I am pleased to present this year's Kansas Economic Report that I believe shows a strong and growing economy in our state. The division of Labor Market Information Services (LMIS) produces this report, taking a detailed look into the Kansas economy.

Our state has always valued hard work and that is shown through one of the best labor forces in the country. Kansas is also home to many businesses – small and large – that continue to grow and create jobs. The Kansas economy is robust and continuously improves – remaining healthier than the overall national economy in many respects.



Kansas private sector jobs increased by 1.9 percent in 2014. This is the fastest private sector job growth produced in the state since 2007. The number of Kansans employed set a record in 2014 and the number of unemployed decreased by an impressive 14.2 percent.

Wage growth in the state continues to be a strong point. Personal income increased by 2.9 percent in 2014 and real wages increased by 1.3 percent, giving Kansans more purchasing power. On a monthly basis, average weekly wages continue to grow.

Job vacancies in Kansas increased by 5.3 percent. This was the highest number of vacancies ever recorded in the state, since 2007, indicating a healthy demand for hard-working Kansas labor. Further, there was nearly an equal number of unemployed people and job vacancies – showing meaningful opportunities for job seekers to rejoin the workforce.

I encourage you to take a look at the many different economic factors discussed in this report and remember to take all of them into consideration when making a determination about our state's economy. These factors show that Kansas is on the right track.

Thank you for your efforts to strengthen the Kansas economy and make our state the best place in America to work and do business.

A handwritten signature in black ink that reads "Lana Gordon". The script is fluid and cursive, with the first letters of "Lana" and "Gordon" being capitalized and prominent.

Lana Gordon, Secretary  
Kansas Department of Labor

# Executive Summary

The majority of data shows that the Kansas economy continued to strengthen in 2014. The number of jobs in the state increased for the fourth straight year as Kansas added 20,800 private sector jobs, or 1.9 percent. This is the largest increase since 2007, and the second largest since 1998. Job growth occurred in nine of the 11 major industries, and in each Metropolitan Statistical Area.

The labor force expanded by 0.9 percent. This is a result of a record 1,432,359 Kansans working. The unemployment rate significantly improved from 5.3 percent in 2013 to 4.5 percent in 2014. This is due to the 14.2 percent decrease in unemployed Kansans. Wages also increased in the state, with average weekly wages going up by 2.8 percent to \$821. Inflation-adjusted real wages also increased by 1.3 percent, giving Kansans more purchasing power. These improvements were seen throughout the state as 101 of the 105 counties in Kansas recorded lower unemployment rates in 2014, and average weekly wages increased in 95 counties.

The gross domestic product (GDP) increased for the fifth consecutive year, with GDP growth in 10 of the 11 major industries. This includes large increases in GDP in the trade, transportation and utilities, financial activities, and professional and business services industries. Productivity also increased for the fourth time in the last five years, with Kansas workers producing \$92,787 in goods and services in 2014.

While most Kansas economic data is positive, there is still some room for improvement. The agriculture sector suffered from drought related declines in 2014, affecting some aspects of the Kansas economy. It caused the natural resources and mining industry to be the only one that experienced a decline in GDP in 2014. As a result of a \$641 million decline in agricultural product exports, Kansas export sales were down over the year despite growth in other sectors. Personal income grew at a slower pace than most of the country, but Kansas outperformed the Plains region as a whole. The Kansas population continues to grow at a historically slow rate, but this is also true for the U.S. as a whole.

Early indicators show the Kansas economy will continue to grow in 2015. The economy is projected to add approximately 22,000 jobs this year. The number of job vacancies recorded in the second quarter 2015 was 47,269. This is a 5.3 percent increase from last year, and the most vacancies since 2007. The number of unemployed people per vacancy is down to 1.4, the best it has been since 2007. This reflects a healthy labor market because the number of vacancies nearly matches the number of unemployed people.

*Note:* Due to revisions and benchmarking processes, some data may have been updated since last year's Economic Report was published. The data included in the 2015 Economic Report is current as of July 17, 2015. For more information on data found in this report, see *Sources* on page 60.

# Statewide Summary

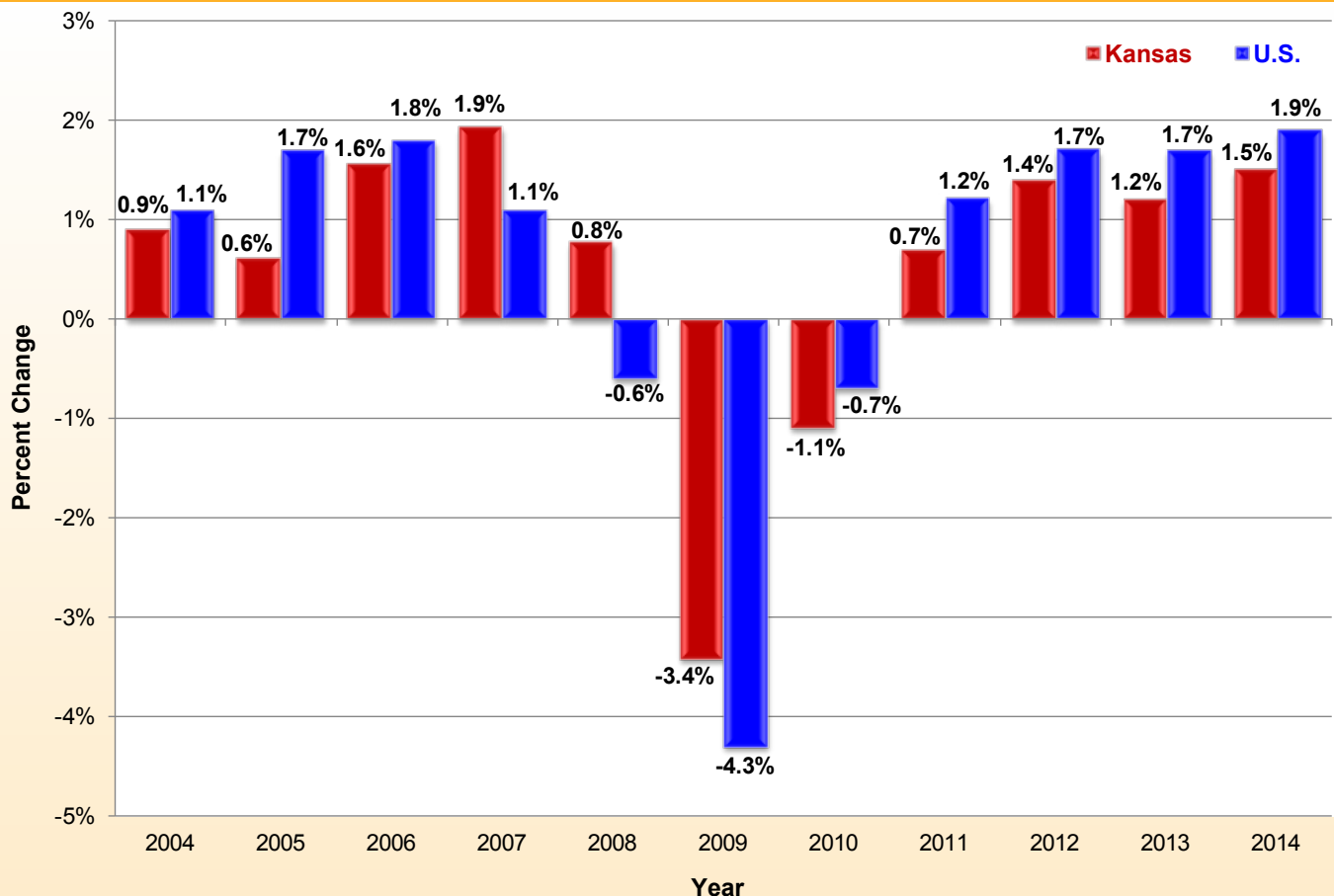
## Nonfarm Jobs

Nonfarm jobs are one of the most current indicators of the economy's health. Job growth indicates increased demand for products and services. This puts money into the hands of those previously unemployed, which further increases the demand for consumer goods and services. Additional jobs also leads to increased output, signifying economic growth.

In 2014, Kansas added 20,800 private sector jobs, or 1.9 percent growth. This is the most private sector jobs added in a single year since 2007, and the second largest growth rate since 1998. Kansas added 20,400 nonfarm jobs in 2014, or 1.5 percent. This is the fourth consecutive year that Kansas experienced job growth. Nationally, total nonfarm and private sector jobs both increased by 2.6 million in 2014, with government jobs virtually unchanged over the year. This also marks the fourth straight year of growth. *Chart 1* shows the annual percent changes in nonfarm jobs for Kansas and the U.S. since 2004. *Table 1* on the following page, displays nonfarm job totals in the U.S. and Kansas.

**Chart 1**

### Percent Change in Nonfarm Jobs



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

**Table 1**

# Nonfarm Jobs

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Kansas</b>	1,325.0	1,333.1	1,353.9	1,380.1	1,390.8	1,343.3	1,328.4	1,338.3	1,356.4	1,372.2	1,392.6
<b>U.S.</b>	131,749	134,005	136,398	137,936	137,170	131,233	130,275	131,842	134,104	136,393	139,042

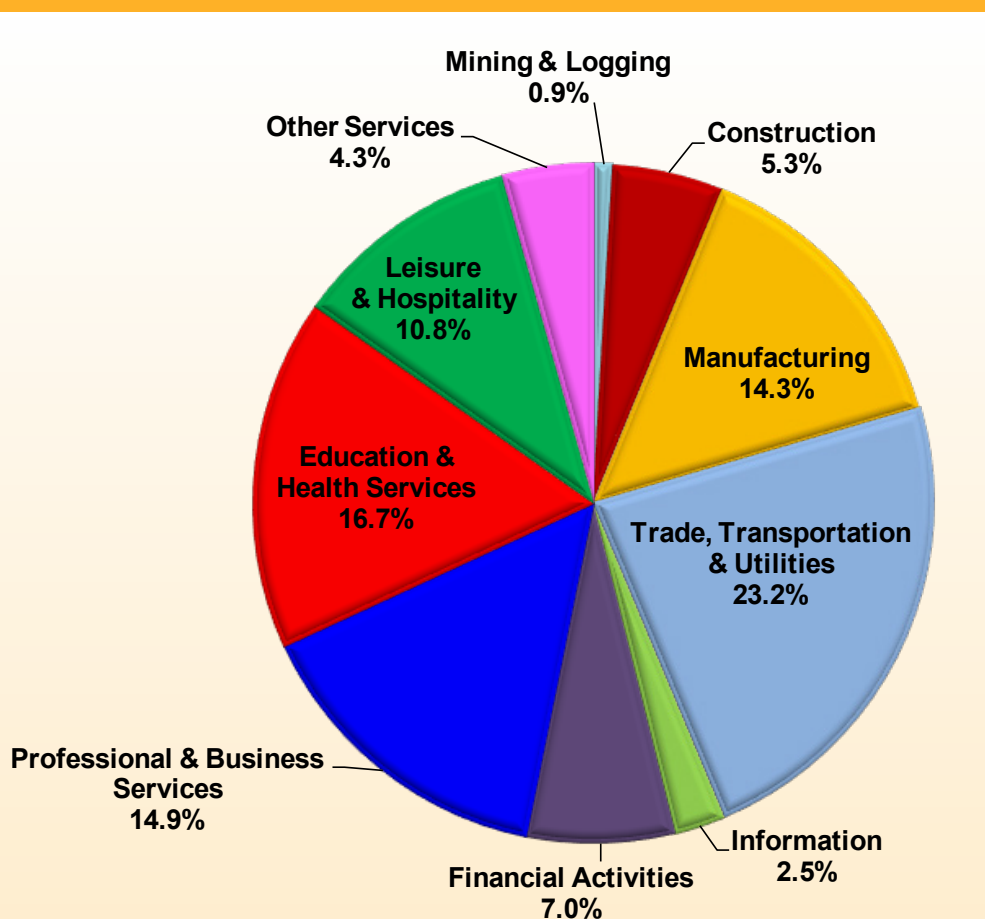
2015						
	January	February	March	April	May	June
<b>Kansas</b>	1,377.1	1,390.6	1,396.4	1,406.7	1,409.5	1,411.7
<b>U.S.</b>	138,671	139,519	140,298	141,437	142,365	142,836

*Note: Data in thousands and not seasonally adjusted.*

*Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics*

**Chart 2**

## Kansas Private Sector Jobs, 2014

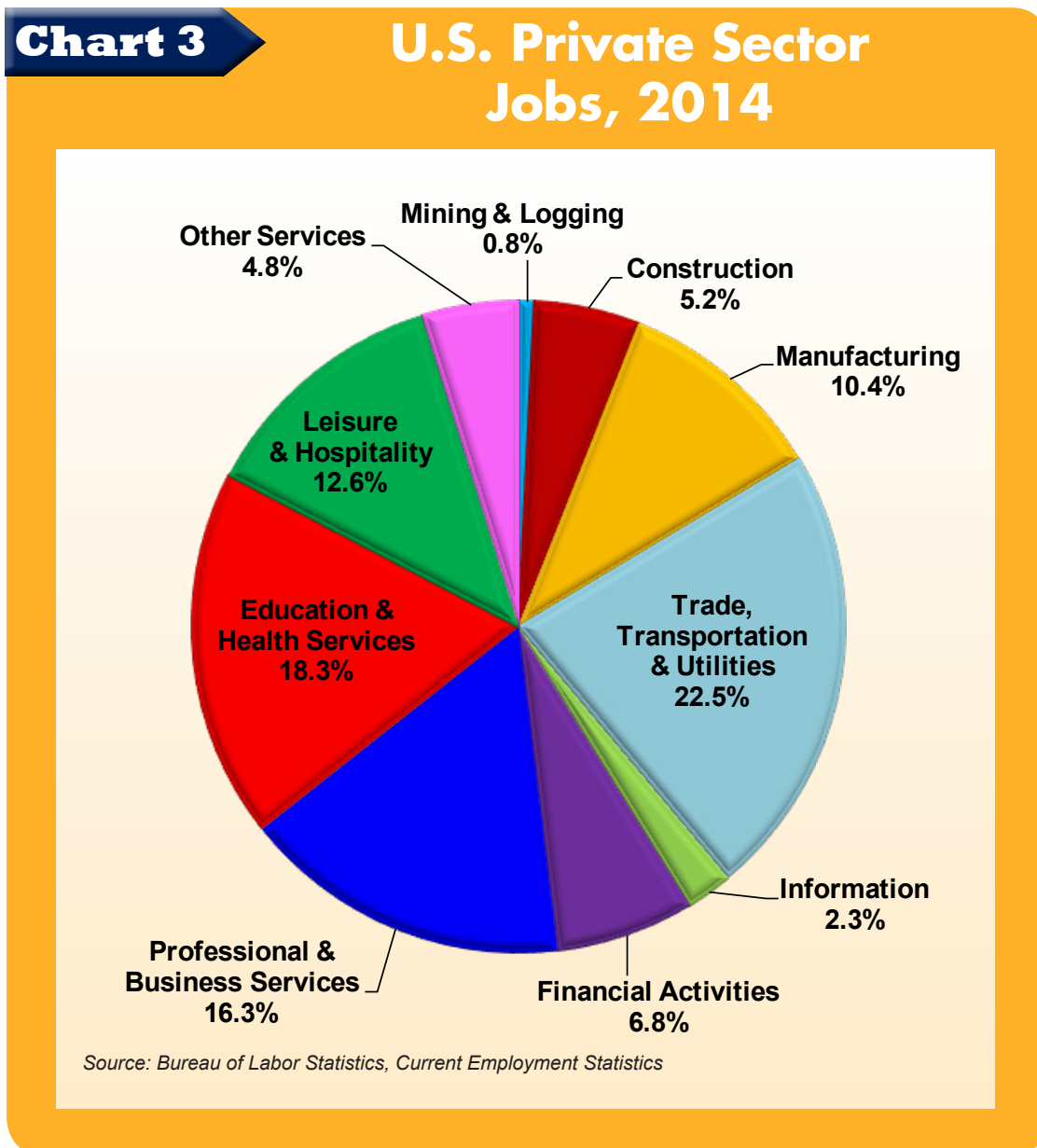


*Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics*



Job growth was recorded in nine of the 11 major industries in Kansas during 2014. The professional and business services industry experienced the largest increase in 2014, gaining 5,900 jobs. This growth was throughout the industry, with a majority of the gains, 3,600 jobs, in administrative and support, and waste management and remediation services. Trade, transportation and utilities also experienced notable growth, adding 3,900 jobs. Gains were mostly in retail trade, 1,700 jobs added, and wholesale trade, 1,600 jobs gained. Construction gained 3,100 jobs, with 1,800 of the growth taking place in specialty trade contractors.

Government was the only major industry to lose jobs over the year, with a slight decline of 400 jobs in 2014. Gains in local government were offset by losses at the state and federal levels. Job levels in mining and logging remained unchanged from 2013 to 2014. *Chart 2* on the previous page and *Chart 3* below, display the percentage of private sector jobs by industry in 2014 for Kansas and the U.S. As seen in the charts, the distribution of jobs by industry in Kansas mirrors those at the national level.



# Labor Force and Labor Force Participation

The civilian labor force is a measure of the number of people over the age of 16 that are available and looking for work, or who have a job. A growing labor force is favorable because it increases the amount of workers available for businesses, and shows there is increasing confidence of finding a job in a given area. As indicated in *Table 2*, there were 1,500,353 people in the Kansas labor force in 2014, a 0.9 percent increase. There were 1,432,359 Kansans working in 2014 – a new state record. The number of unemployed people decreased by 14.2 percent.

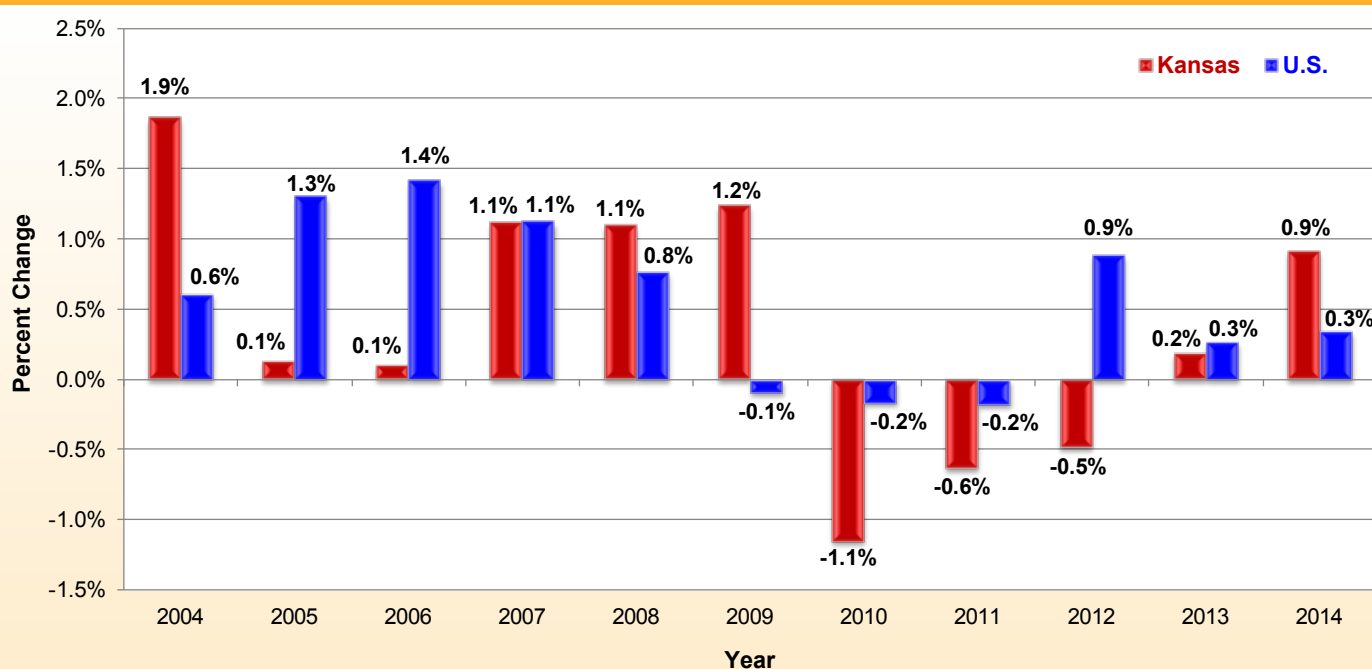
**Table 2** Kan. Labor Force Statistics

	2013	2014	Change	% Change
<b>Civilian Labor Force</b>	1,486,764	1,500,353	13,589	0.9%
<b>Employed</b>	1,407,562	1,432,359	24,797	1.8%
<b>Unemployed</b>	79,202	67,994	-11,208	-14.2%
<b>Unemployment Rate</b>	5.3	4.5	-0.8	NA

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

The U.S. civilian labor force increased for the third consecutive year, recording an expansion of 0.3 percent to 155.9 million people. This means that the Kansas labor force grew at a faster rate than the U.S. for the first time since 2009. There were 146.3 million Americans working in 2014, a 1.7 percent increase, and a new record. The number of workers unemployed in the U.S. decreased from 11.5 million in 2013 to 9.6 million in 2014. *Chart 4* shows the change in civilian labor force for Kansas and the U.S.

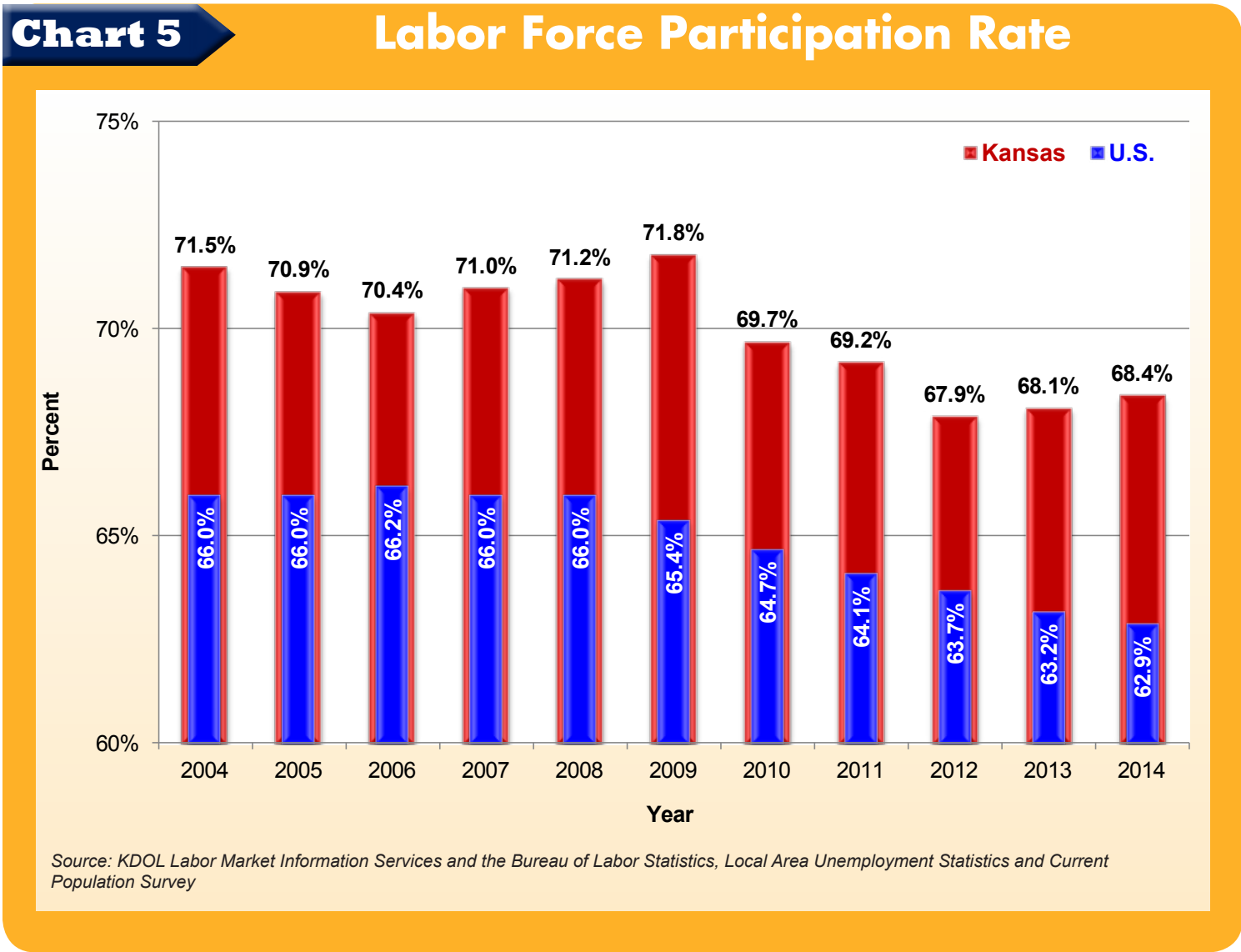
**Chart 4** Percent Change in Labor Force



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Population Survey

The labor force participation rate is the percentage of all individuals above the age of 16, non-institutionalized and civilian, who participate in the labor force. Kansas' labor force participation rate remained among the highest in the nation in 2014. As shown in *Chart 5*, the rate was 68.4 percent in Kansas, which is the eighth highest rate in the nation, including the District of Columbia. The state's rate is well above the national rate of 62.9 percent. This was the sixth consecutive year the national rate has declined and is the lowest recorded rate since 1977. On the other hand, the Kansas rate has increased the last two years.

**Kansas' labor force participation rate remained among the highest in the nation in 2014. The state's rate is well above the national rate of 62.9 percent.**

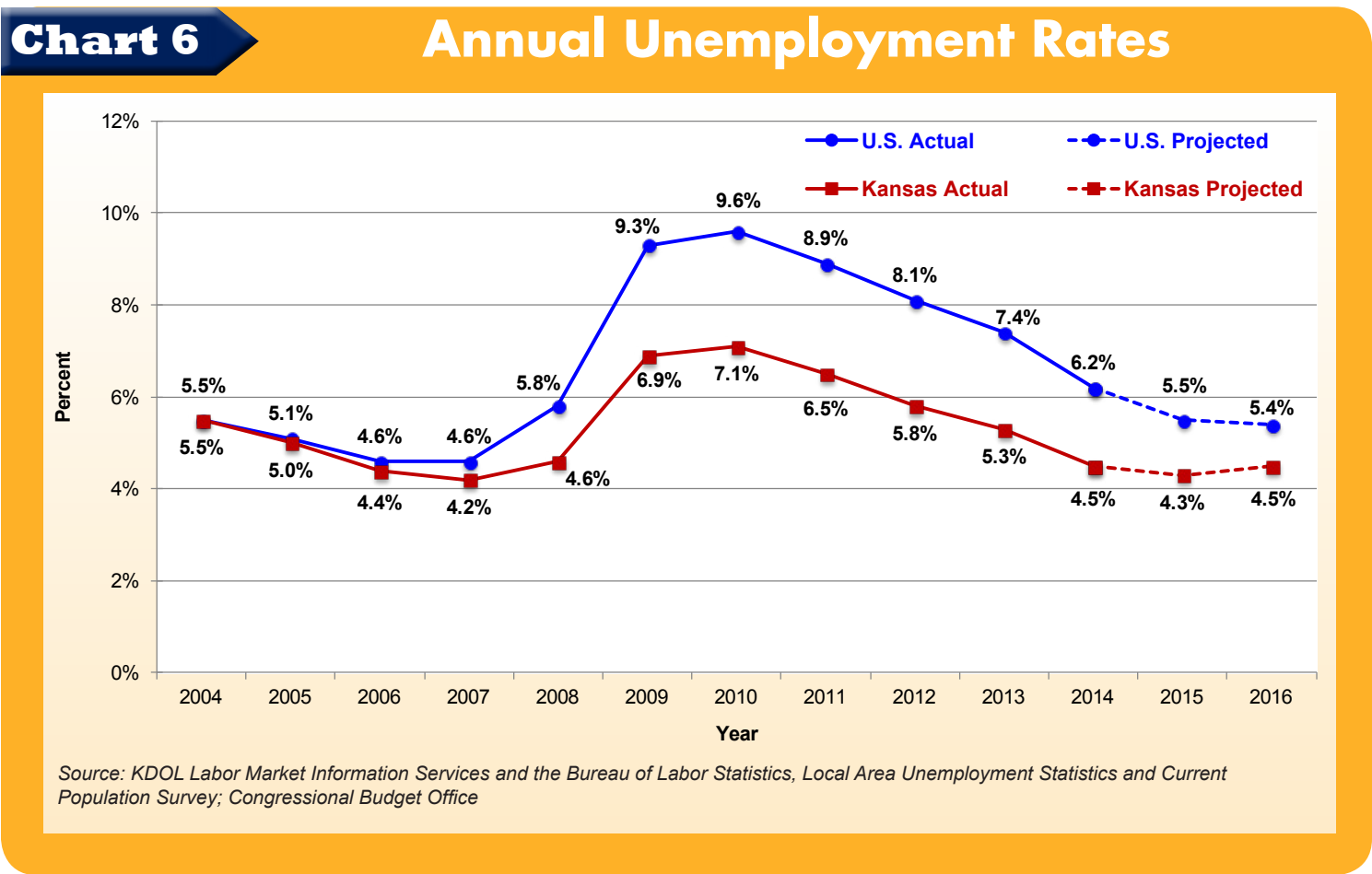


# Unemployment Rate

The unemployment rate is a frequently cited economic statistic because it shows how many people want a job and cannot find one. The unemployment rate shows the percentage of the labor force that is unemployed and currently looking for a job. If the rate is high, there is a large number of people who want a job but are having difficulty finding one because of a lack of demand for employees.

In 2014, Kansas recorded an average annual unemployment rate of 4.5 percent, down from 5.3 percent in 2013. This is the lowest annual unemployment rate since 2008 and marks the fourth straight year of improvement. Kansas' rate continues to be significantly lower than the national unemployment rate, which fell to 6.2 percent in 2014, down from 7.4 percent in 2013. *Chart 6* compares the unemployment rates for Kansas and the U.S. from 2004 to 2014, along with the projected rates for 2015 and 2016. The projected rate for Kansas is expected to level off as rates have reached pre-recession levels. The U.S. rate is projected to continue to decrease but remain higher than pre-recession levels in the next two years.

“ In 2014, Kansas recorded an average annual unemployment rate of 4.5 percent, down from 5.3 percent in 2013. This is the lowest annual unemployment rate since 2008 and marks the fourth straight year of improvement. ”



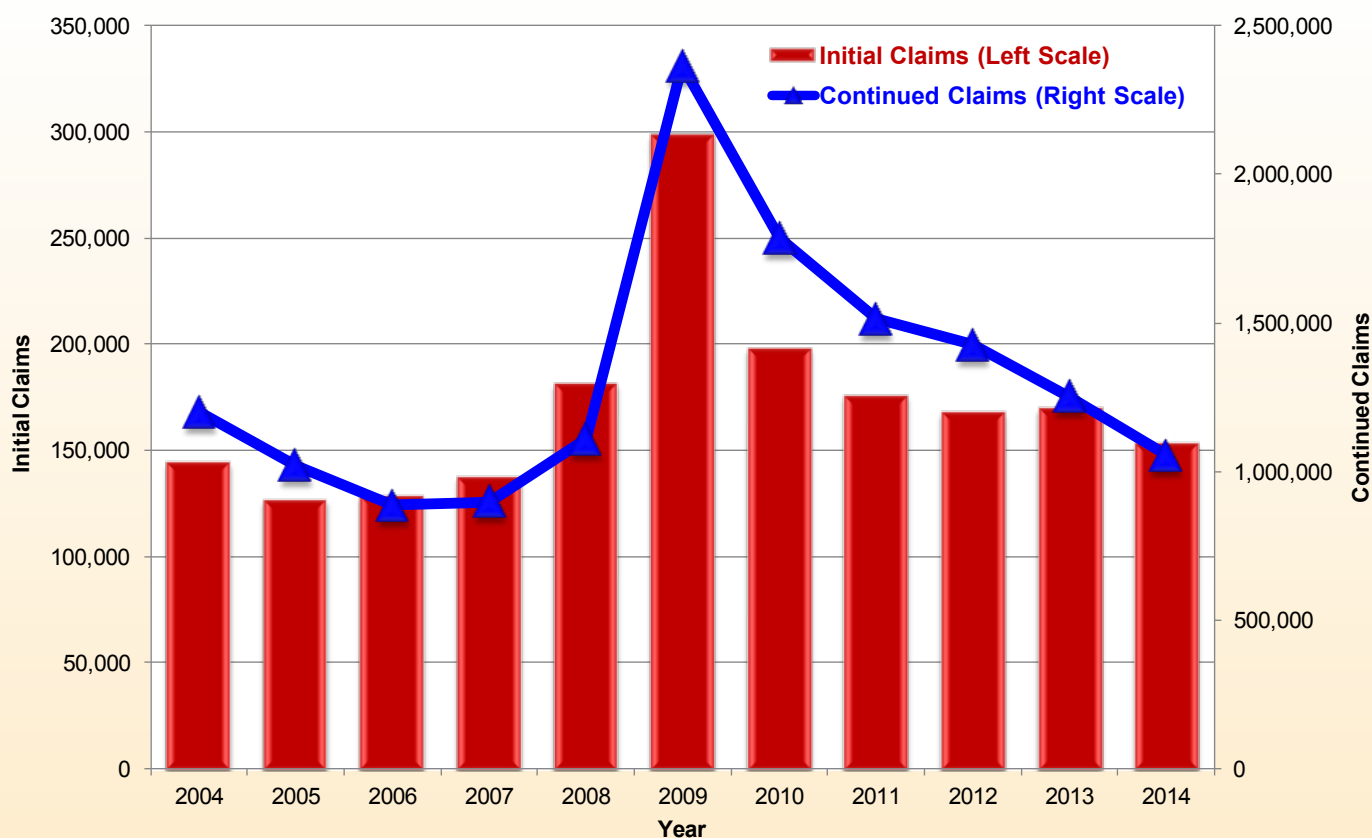
# Initial and Continued Claims

Analyzing trends in unemployment insurance claims is another way to assess unemployment and the labor market. An initial claim is the first claim filed by a claimant to request a determination of eligibility for unemployment benefits. A continued claim is a claim filed by a claimant for a weekly payment of unemployment benefits; this is typically done every week until the claimant finds a job, exhausts benefits or leaves the labor force. Initial claims are an indicator of emerging unemployment, and continued claims indicate the level of difficulty the unemployed are having at finding a new job. Note that the number of claims is not a representation of total unemployment because not all Kansans are covered under unemployment insurance laws or may choose not to file for unemployment benefits.

As shown in *Chart 7*, the number of initial claims filed in 2014 decreased by 9.6 percent to 153,787 claims. Continued claims declined by 15.7 percent in 2014, to approximately 1.1 million claims. The number of initial and continued claims have continued to decrease since 2009, declining overall by 48.5 percent and 55.4 percent respectively, since their peak. Claims have significantly decreased since 2009, but are still slightly higher than pre-recession levels.

**Chart 7**

## Initial and Continued Claims



Source: KDOL Labor Market Information Services, Unemployment Insurance Statistics



# Location Quotients

Location quotients compare the concentration of employment by industry for two or more areas. Comparing Kansas employment to the nation's, with location quotients, identifies the industries that contribute to the economic vitality of Kansas. If the location quotient is higher than one, Kansas has a higher concentration of employment in that industry compared to the nation as a whole. This means Kansas has an advantage in that industry and is likely to generate more income in that industry from sources outside of Kansas. The opposite is true if the location quotient is less than one.

Table 3 lists the location quotients by industry sector for Kansas. There are nine industry sectors where Kansas recorded a location quotient greater than one and therefore has an advantage. The highest location quotient is for the utilities sector due to high employment in electric power generation. The second highest location quotient is in manufacturing, due to high concentrations of employment in the manufacturing of transportation equipment, food, and petroleum and coal products. Kansas is also highly competitive in the mining sector thanks to oil and gas extraction, and support activities. The highest location quotient for an individual industry subsector is animal production and aquaculture, at 2.83. However, the overall agriculture, forestry, fishing and hunting location quotient is around one because of the lack of forestry, logging and commercial fishing, hunting and trapping activities in Kansas.

**Table 3** Location Quotients by Industry, 2014

Industry	Kansas
Utilities	1.47
Manufacturing	1.39
Mining	1.29
Wholesale Trade	1.10
Information	1.06
Finance & Insurance	1.05
Construction	1.02
Transportation & Warehousing	1.02
Administrative & Support, & Waste Management & Remediation Services	1.01
U.S. at 1.00	
Retail Trade	0.99
Health Care & Social Assistance	0.99
Agriculture, Forestry, Fishing & Hunting	0.97
Management of Companies & Enterprises	0.90
Accommodation & Food Services	0.88
Professional & Technical Services	0.84
Other Services, Except Public Administration	0.84
Arts, Entertainment & Recreation	0.80
Real Estate, and Rental & Leasing	0.74
Educational Services	0.56

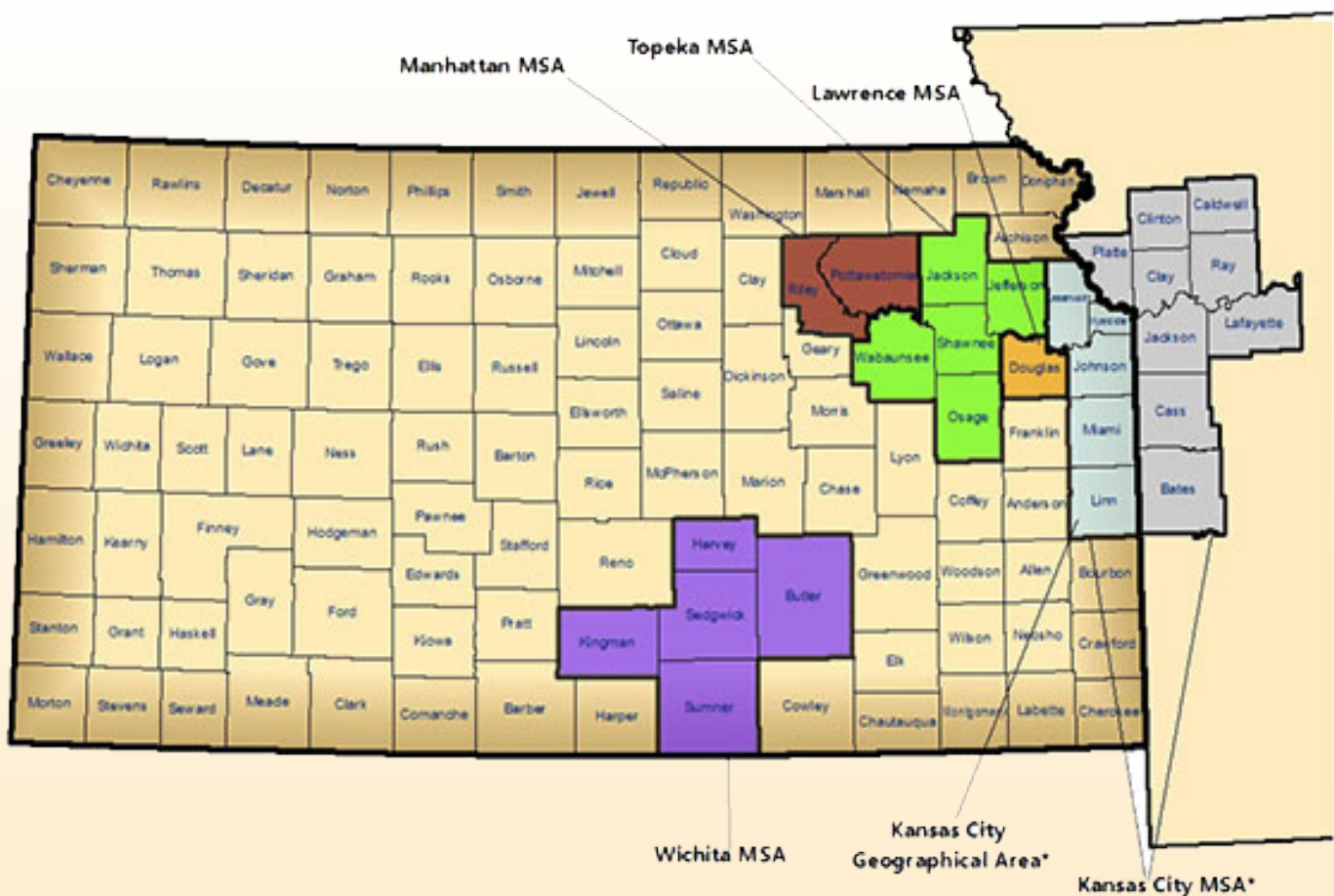
Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Quarterly Census of Employment and Wages

# Metropolitan Statistical Areas

Metropolitan Statistical Areas (MSAs) are major urban areas, including surrounding counties that have a high number of commuters. The Kansas Department of Labor releases data for the four MSAs completely in Kansas: Lawrence, Manhattan, Topeka and Wichita, along with the Kansas counties of the Kansas City MSA, referred to as the Kansas City Area. *Map 1* shows the locations of the Kansas MSAs and the Kansas City Area. MSAs are important because of their concentrated population and subsequent employment. Information pertaining to these areas can give insight into the overall economic well-being of the state.

**Map 1**

## Kansas MSAs & Kansas City Area



*\*Kansas City MSA includes Kansas and Missouri counties; Kansas City Area includes only Kansas counties  
Source: KDOL Labor Market Information Services*

# Kansas City Area

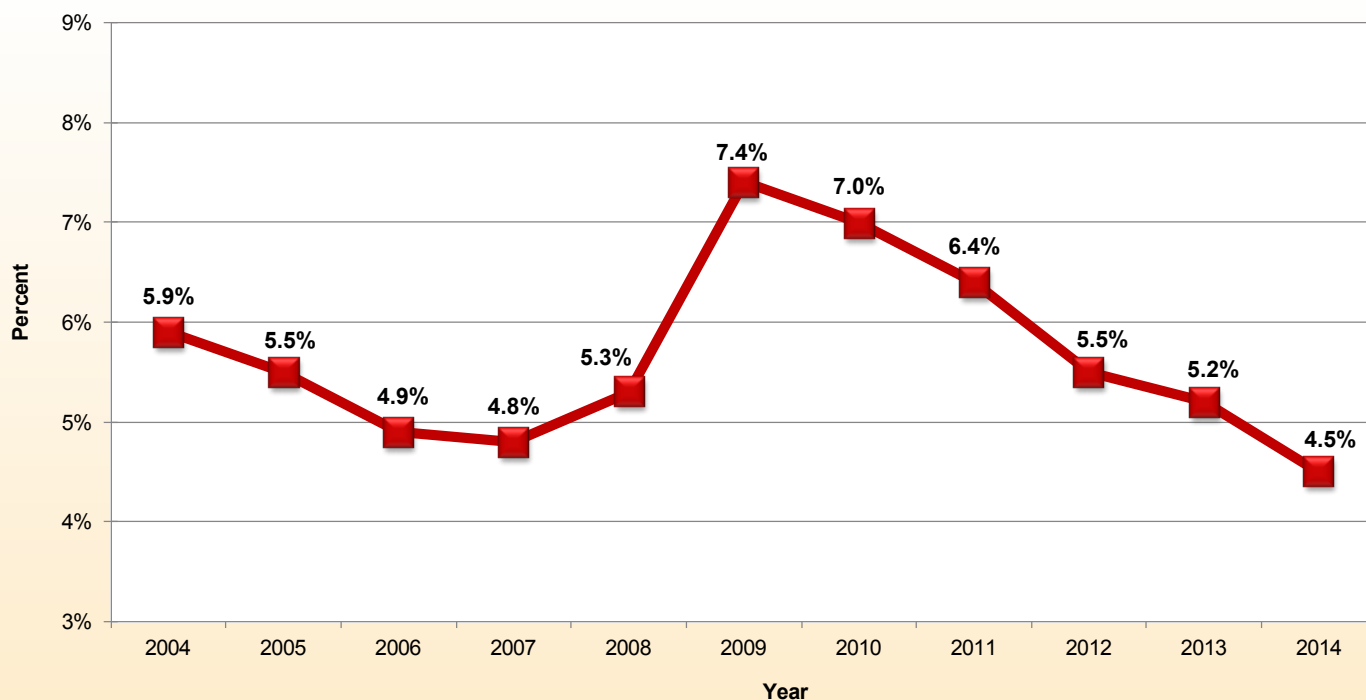
The Kansas City Area includes five counties: Johnson, Leavenworth, Linn, Miami and Wyandotte. The Kansas City Area population grew by 8,498 people, or 1 percent, to 857,029 in 2014. The labor force grew by 8,856, or 2 percent, to 453,816 people in 2014. The number of people employed grew by 11,741, or 2.8 percent, to 433,615 people working in the Kansas City Area. The number of people in the labor force and people working were both record highs in 2014. The Kansas City Area also had the highest growth rate in both the labor force and number of people working out of any Kansas MSA. The unemployment rate in 2014 was 4.5 percent, down from 5.2 percent in 2013. This is the lowest unemployment rate recorded for the Kansas City Area since 2000.

Chart 8 shows the annual unemployment rate for the Kansas City Area since 2004.

“ The number of people in the labor force and working were both record highs in 2014. The Kansas City Area also had the highest growth rate in both the labor force and number of people working out of any Kansas MSA. ”

**Chart 8**

## Kansas City Area Unemployment Rate



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

In 2014, the Kansas City Area added 11,900 nonfarm jobs, or 2.7 percent, and 11,700 private sector jobs, or 3 percent. This was the highest job growth of any MSA. In fact, the Kansas City Area added more jobs than all other Kansas MSAs combined. Nine of the 10 published industries grew in the Kansas City Area from 2013 to 2014. Professional and business services increased by 3,300 jobs, with 2,300 of the job growth occurring in administrative and support, and waste management and remediation services. Trade, transportation and utilities added 3,200 jobs. Most of the growth was in wholesale trade with 1,600 jobs, and retail trade with 1,300 jobs added. Education and health services increased by 1,600 jobs, with the majority of the job growth in health care and social assistance. The only industry that lost jobs in 2014 was other services, which declined by 100 jobs. *Table 4* displays employment by industry for the Kansas City Area in 2013 and 2014.

**Table 4** **Kansas City Area Nonfarm Jobs**

	2013	2014	Change	% Change
<b>Total Nonfarm</b>	442,300	454,200	11,900	2.7%
<b>Total Private</b>	386,100	397,800	11,700	3.0%
Professional & Business Services	82,900	86,200	3,300	4.0%
Trade, Transportation & Utilities	93,400	96,600	3,200	3.4%
Education & Health Services	60,100	61,700	1,600	2.7%
Mining, Logging & Construction	17,300	18,600	1,300	7.5%
Manufacturing	29,500	30,600	1,100	3.7%
Leisure & Hospitality	38,300	39,100	800	2.1%
Information	14,900	15,200	300	2.0%
Financial Activities	33,800	33,900	100	0.3%
Other Services	16,000	15,900	-100	-0.6%
<b>Government</b>	56,200	56,400	200	0.4%

Note: Numbers may not add up due to rounding

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

The average weekly hours worked remained unchanged for the Kansas City Area in 2014, at 35.2 hours. Average hourly earnings increased from \$25.23 in 2013 to \$25.95 in 2014. This resulted in a \$25.34 increase in average weekly earnings in 2014. The Kansas City area recorded the highest hourly and weekly earnings of any Kansas MSA.

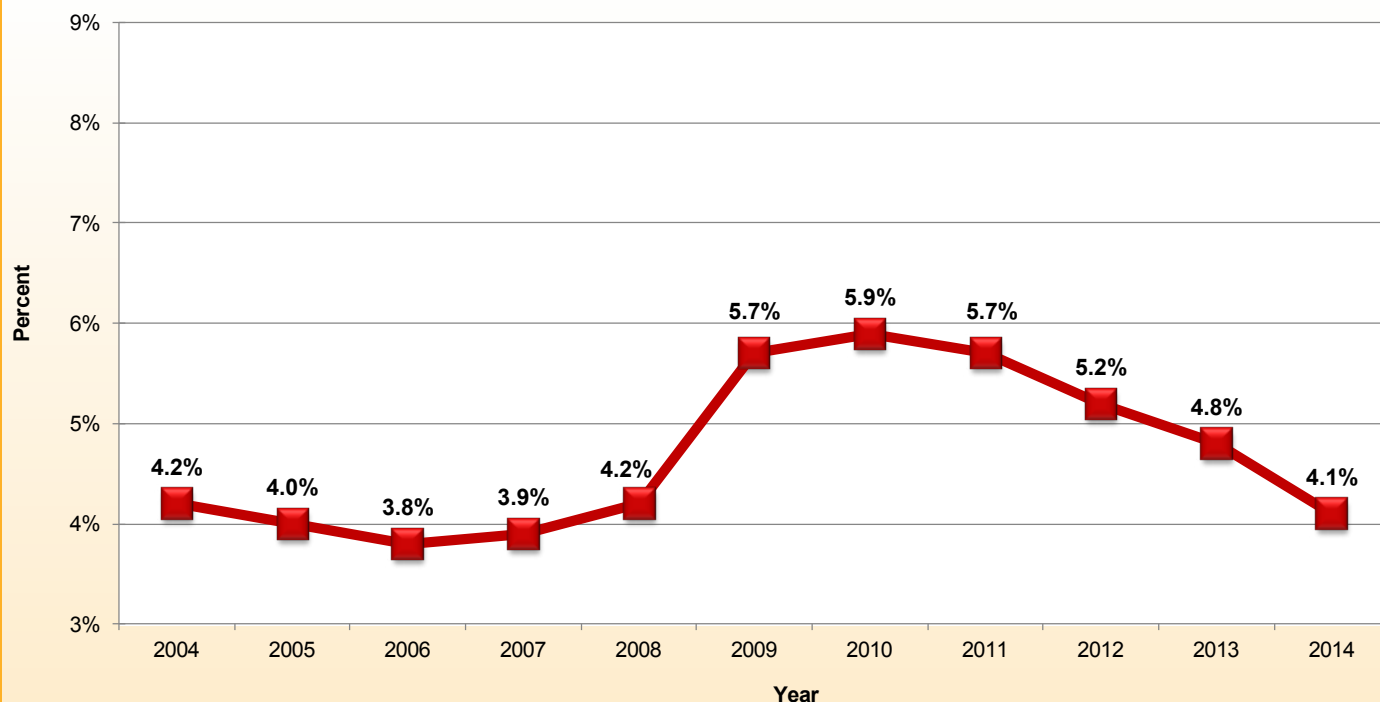
# Lawrence MSA

The Lawrence MSA includes only Douglas County; however its population and job concentration make it a major urban center for the state. The Lawrence MSA population grew by 1,782 people, or 1.6 percent, to 116,585 in 2014. The labor force grew by 1,180, or 1.9 percent, to 64,754 people. The number of people working grew by 1,631, or 2.7 percent, to 62,128 employed in 2014. These were both record highs for the Lawrence MSA and were the second highest growth rates in any Kansas MSA, trailing only the Kansas City Area. The unemployment rate in 2014 was 4.1 percent, down from 4.8 percent the previous year. *Chart 9* displays the unemployment rate for the Lawrence MSA since 2004.

**The labor force and number of people working were both record highs for the Lawrence MSA and were the second highest growth rates in any Kansas MSA, trailing only the Kansas City Area.**

**Chart 9**

## Lawrence MSA Unemployment Rate



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics



In 2014, the Lawrence MSA added 1,100 nonfarm jobs, or 2.2 percent, and 900 private sector jobs, or 2.6 percent. Five of the seven published industries in the Lawrence MSA added jobs in 2014. Professional and business services added 500 jobs, a significant 10.4 percent increase. Leisure and hospitality, and government both grew by 300 jobs. The only industry that lost jobs was other private service providing, which is a combination of information, financial activities and other services. It declined by 200 jobs. Education and health services remained unchanged from 2013 to 2014. *Table 5* shows the jobs by industry for the Lawrence MSA in 2013 and 2014.

**Table 5** **Lawrence MSA Nonfarm Jobs**

	2013	2014	Change	% Change
<b>Total Nonfarm</b>	50,800	51,900	1,100	2.2%
<b>Total Private</b>	34,900	35,800	900	2.6%
Professional & Business Services	4,800	5,300	500	10.4%
Leisure & Hospitality	6,400	6,700	300	4.7%
Goods Producing	5,100	5,200	100	2.0%
Trade, Transportation & Utilities	7,700	7,800	100	1.3%
Education & Health Services	5,600	5,600	0	0.0%
Other Private Service Providing	5,400	5,200	-200	-3.7%
<b>Government</b>	15,800	16,100	300	1.9%

Note: Numbers may not add up due to rounding

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

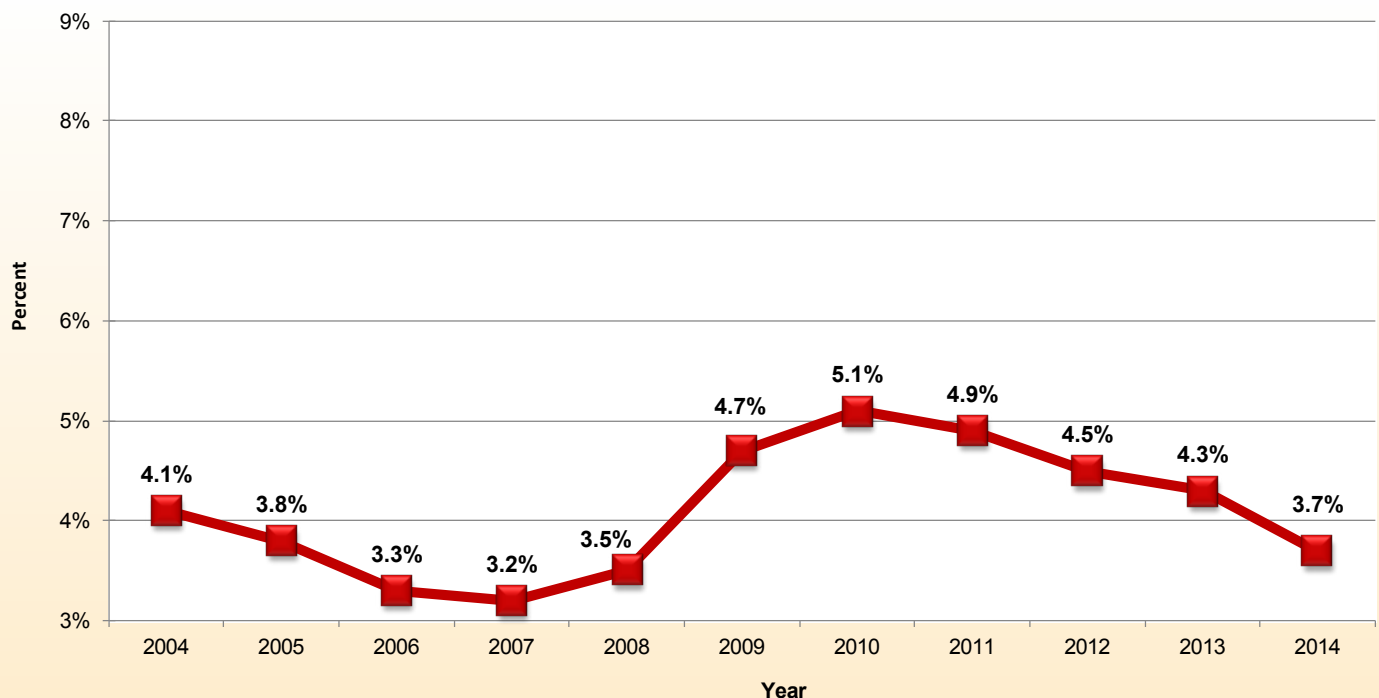
The average weekly hours worked in the Lawrence MSA declined by 2.9 hours from 2013 to 2014, to 26 hours. This is the shortest average work week in any Kansas MSA. Average hourly earnings increased from \$17.88 to \$18.22, but are still the lowest of any Kansas MSA. Due to the significant decline in hours worked, average weekly earnings decreased from \$516.73 in 2013 to \$473.72 in 2014. This is also the lowest weekly earnings recorded in any Kansas MSA.

# Manhattan MSA

The Manhattan MSA includes Pottawatomie and Riley counties. The Manhattan MSA population declined by 484, or 0.5 percent, to 98,091 in 2014. The MSA's labor force grew by 385, or 0.8 percent, to 48,907 and the number of people working increased by 659, or 1.4 percent, to 47,078 people. The unemployment rate in 2014 was 3.7 percent, an improvement from 4.3 percent in 2013. The Manhattan MSA has the lowest unemployment rate of any Kansas MSA. *Chart 10* displays the unemployment rate for the Manhattan MSA since 2004.

“The unemployment rate in 2014 was 3.7 percent, an improvement from 4.3 percent in 2013. The Manhattan MSA has the lowest unemployment rate of any Kansas MSA.”

**Chart 10** Manhattan MSA Unemployment Rate



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

In 2014, the Manhattan MSA added 500 nonfarm jobs, or 1.2 percent, and 700 private sector jobs, or 2.5 percent. *Table 6*, which shows the employment by industry for the Manhattan MSA, shows that only three industries are published due to the small size of the MSA. Private service providing industries grew by 600 jobs, or 2.6 percent, while goods producing industries remained unchanged. Government lost 300 jobs in 2014.

**Table 6** **Manhattan MSA Nonfarm Jobs**

	2013	2014	Change	% Change
<b>Total Nonfarm</b>	42,400	42,900	500	1.2%
<b>Total Private</b>	28,300	29,000	700	2.5%
Private Service Providing	23,200	23,800	600	2.6%
Goods Producing	5,100	5,100	0	0.0%
<b>Government</b>	14,200	13,900	-300	-2.1%

Note: Numbers may not add up due to rounding

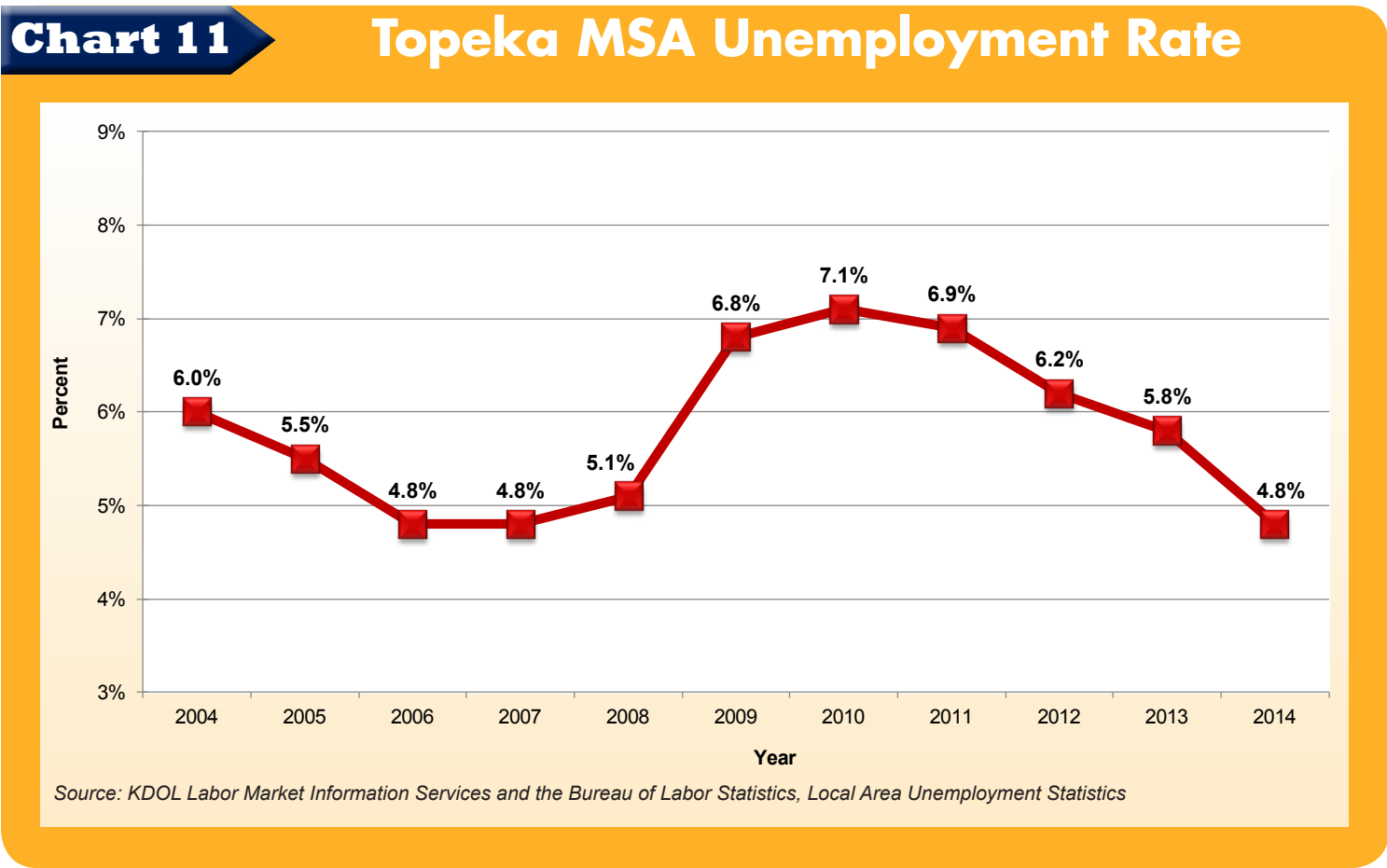
Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

The average weekly hours worked in the Manhattan MSA decreased by 1.1 hours in 2014 to 30.8 hours. The average hourly earnings also declined from \$19.34 in 2013 to \$19.16 in 2014. This led to a \$26.82 decrease in average weekly earnings, to \$590.13.

# Topeka MSA

Jackson, Jefferson, Osage, Shawnee and Wabaunsee counties make up the Topeka MSA. The population in the MSA decreased by 136, or 0.1 percent, to 233,758 people in 2014. The labor force expanded by 837, or 0.7 percent, and the number of people working increased by 2,070, or 1.8 percent. The unemployment rate in 2014 was 4.8 percent, a decrease from 5.8 percent in 2013. This is the most improvement in the unemployment rate of any Kansas MSA. *Chart 11* displays the unemployment rate for the Topeka MSA since 2004.

“ The unemployment rate in 2014 was 4.8 percent, a decrease from 5.8 percent in 2013. This is the most improvement in the unemployment rate of any Kansas MSA. ”



In 2014, the Topeka MSA added 1,500 nonfarm jobs, or 1.4 percent, and 1,300 private sector jobs, or 1.6 percent. Six of the 10 published industries experienced job growth in 2014. Notable gains were in professional and business services, which added 700 jobs; mining, logging and construction, which increased by 400 jobs; and financial activities, which added 300 jobs. Three industries lost jobs; leisure and hospitality declined by 200 jobs; trade, transportation and utilities, and other services lost 100 jobs each. Information remained unchanged from 2013 to 2014. *Table 7* shows the jobs by industry in 2013 and 2014 for the Topeka MSA.

**Table 7 Topeka MSA Nonfarm Jobs**

	2013	2014	Change	% Change
<b>Total Nonfarm</b>	110,000	111,500	1,500	1.4%
<b>Total Private</b>	82,700	84,000	1,300	1.6%
Professional & Business Services	12,300	13,000	700	5.7%
Mining, Logging & Construction	5,600	6,000	400	7.1%
Financial Activities	7,100	7,400	300	4.2%
Manufacturing	7,100	7,200	100	1.4%
Education & Health Services	17,900	18,000	100	0.6%
Information	1,400	1,400	0	0.0%
Trade, Transportation & Utilities	18,200	18,100	-100	-0.5%
Other Services	4,400	4,300	-100	-2.3%
Leisure & Hospitality	8,800	8,600	-200	-2.3%
<b>Government</b>	27,400	27,500	100	0.4%

Note: Numbers may not add up due to rounding

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

Average weekly hours worked in the Topeka MSA decreased by 0.9 hours in 2014 to 32.9 hours. Average hourly earnings increased from \$19.90 in 2013 to \$20.29 in 2014. Average weekly earnings declined slightly from \$672.62 in 2013 to \$667.54 in 2014.

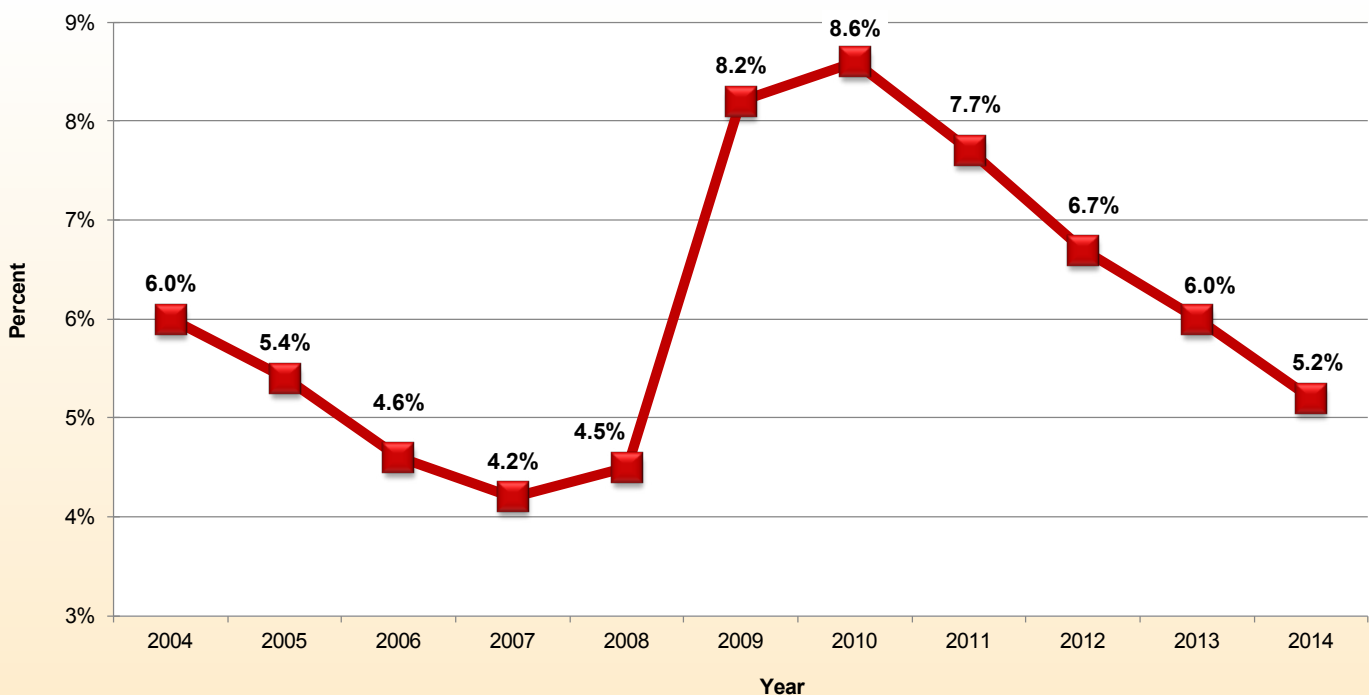


# Wichita MSA

The Wichita MSA contains Butler, Harvey, Kingman, Sedgwick and Sumner counties. Population in the Wichita MSA grew by 2,817 from 2013 to 2014, to a total of 641,076 people. The labor force increased by 1,524, or 0.5 percent. The number of people working grew by 3,892, or 1.3 percent, to 295,455 employed. This was the smallest growth rate in labor force and people working of any Kansas MSA. The unemployment rate in 2014 was 5.2 percent, down from 6 percent in 2013. Despite a decrease from 8.6 percent in 2010, as seen in *Chart 12*, the Wichita MSA unemployment rate continued to be the highest of any Kansas MSA.

“ The number of people working grew by 3,892, or 1.3 percent, to 299,455 employed. ”

**Chart 12** Wichita MSA Unemployment Rate



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

In 2014, the Wichita MSA added 2,500 nonfarm jobs, or 0.9 percent, and 3,600 private sector jobs, or 1.4 percent. The growth rate for both nonfarm and private sector jobs were the lowest of any Kansas MSA. Seven of the 10 industries in the Wichita MSA experienced job growth in 2014. Professional and business services added 1,700 jobs, with a majority of the growth, 1,100 jobs, recorded in administrative and support, and waste management and remediation services. Mining, logging and construction grew by 800 jobs, and education and health services added 700 jobs.

Three industries lost jobs from 2013 to 2014. Government declined by 1,100 jobs, with losses at the federal and local levels. Manufacturing lost 700 jobs, with all the losses in durable goods manufacturing. Other services decreased by 200 jobs. *Table 8* displays the jobs by industry for the Wichita MSA in 2013 and 2014.

**Table 8** **Wichita MSA Nonfarm Jobs**

	2013	2014	Change	% Change
<b>Total Nonfarm</b>	289,900	292,400	2,500	0.9%
<b>Total Private</b>	248,700	252,300	3,600	1.4%
Professional & Business Services	31,600	33,300	1,700	5.4%
Mining, Logging & Construction	15,200	16,000	800	5.3%
Education & Health Services	44,000	44,700	700	1.6%
Trade, Transportation & Utilities	51,000	51,500	500	1.0%
Leisure & Hospitality	29,300	29,600	300	1.0%
Information	4,300	4,500	200	4.7%
Financial Activities	10,700	10,900	200	1.9%
Other Services	9,600	9,400	-200	-2.1%
Manufacturing	53,200	52,500	-700	-1.3%
<b>Government</b>	41,200	40,100	-1,100	-2.7%

Note: Numbers may not add up due to rounding

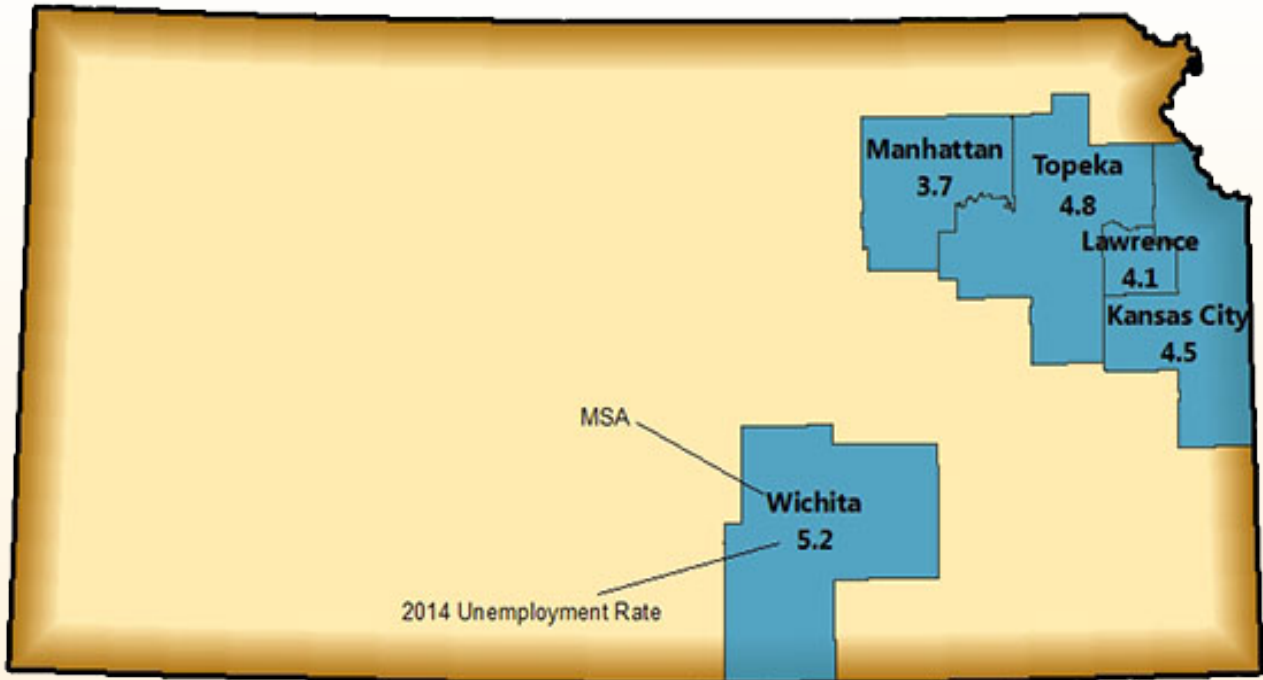
Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

Average weekly hours worked increased from 2013 to 2014 by 0.9 hours in the Wichita MSA to a total of 36.3 hours. This is the longest work week of any Kansas MSA. Average hourly earnings were virtually unchanged over the year, increasing by a single penny to \$20.91 in 2014. Average weekly earnings increased as a result of more hours worked from \$739.86 in 2013 to \$759.03 in 2014.

Included at the end of this section are two comparison maps of the Kansas MSAs. *Map 2*, below, shows the unemployment rate in each MSA. *Map 3*, on the following page, shows the private sector average weekly wages in each MSA.

**Map 2**

**Unemployment Rates by MSA**



MSA	Unemployment Rate		
	2013	2014	2013 - 2014 Percentage Point Change
Kansas City Area	5.2%	4.5%	-0.7
Lawrence	4.8%	4.1%	-0.7
Manhattan	4.3%	3.7%	-0.6
Topeka	5.8%	4.8%	-1.0
Wichita	6.0%	5.2%	-0.8
Statewide	5.3%	4.5%	-0.8

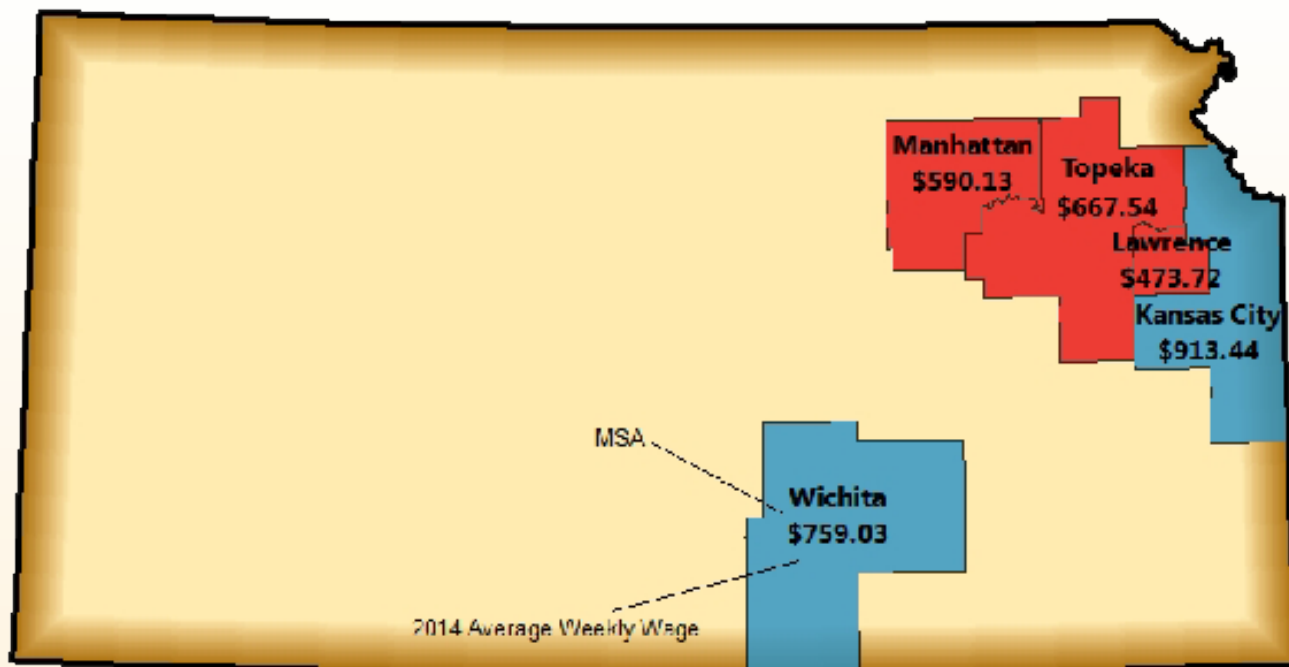
**2014 Unemployment Rate**

- Decreased from Previous Year
- Increased from Previous Year

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

## Map 3

# Average Weekly Wages by MSA



MSA	Average Weekly Wage		
	2013	2014	2013 - 2014 Change
Kansas City Area	\$888.10	\$913.44	\$25.34
Lawrence	\$516.73	\$473.72	-\$43.01
Manhattan	\$616.95	\$590.13	-\$26.82
Topeka	\$672.52	\$667.54	-\$5.08
Wichita	\$739.80	\$759.03	\$19.17
Statewide	\$742.17	\$764.31	\$22.14

### 2014 Average Weekly Wage

- Increased from Previous Year
- Decreased from Previous Year

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

# Kansas Counties

Kansas has 105 counties, and while not as large or concentrated as MSAs, counties are important to the economic welfare of the state. Economic trends and insight can be more easily observed by studying county level statistics.

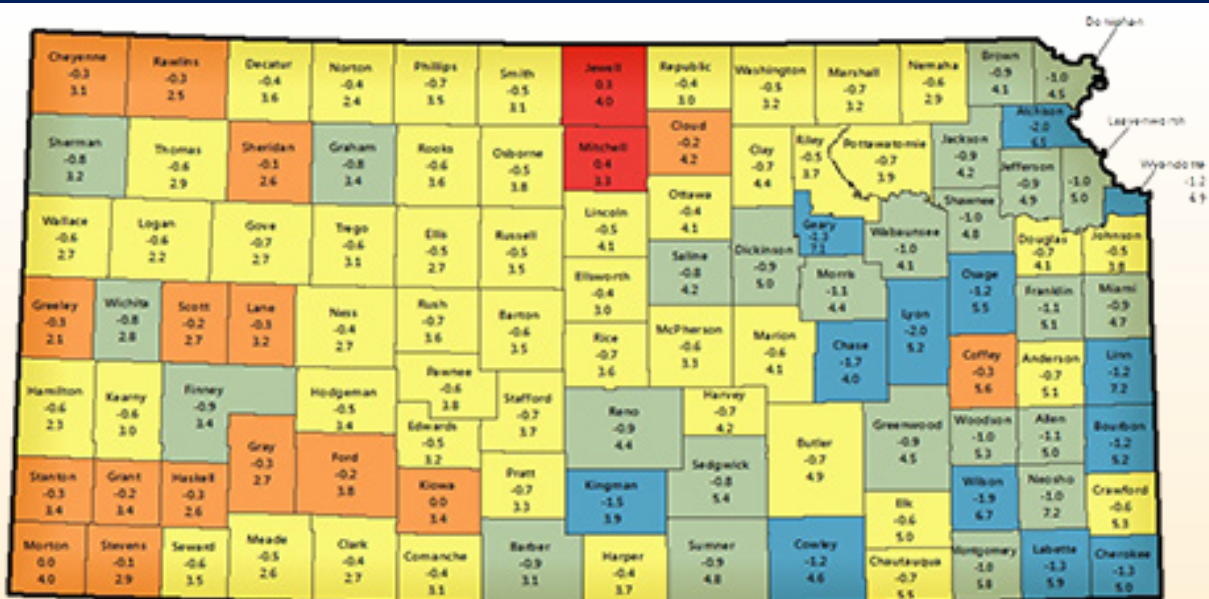
## Unemployment Rate

The unemployment rate decreased in 101 counties in 2014. Twenty-three counties recorded an improvement of 1 or more percentage points in the unemployment rate and two counties, Atchison and Lyon, improved by 2 percentage points. The unemployment rate for two counties, Kiowa and Morton, were unchanged, while the rates for Mitchell and Jewell counties increased by 0.4 and 0.3 percentage points respectively.

The county with the lowest unemployment rate was Greeley County, at 2.1 percent. Nineteen counties overall recorded an unemployment rate below 3 percent, and 58 counties had a rate below 4 percent. Linn and Neosho counties experienced the highest unemployment rates in 2014 at 7.2 percent. They were two of six counties that had an unemployment rate higher than 6 percent in 2014. However, all six of those counties had their rates improve by at least one percentage point from 2013. See *Map 4* to view the unemployment rates by county.

**Map 4**

## Unemployment Rate by County



Percentage Point Change in the Unemployment Rate



Example

Russell

-0.5

3.5

County Name

Change from Previous Year

2014 Unemployment Rate

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics



# Labor Force

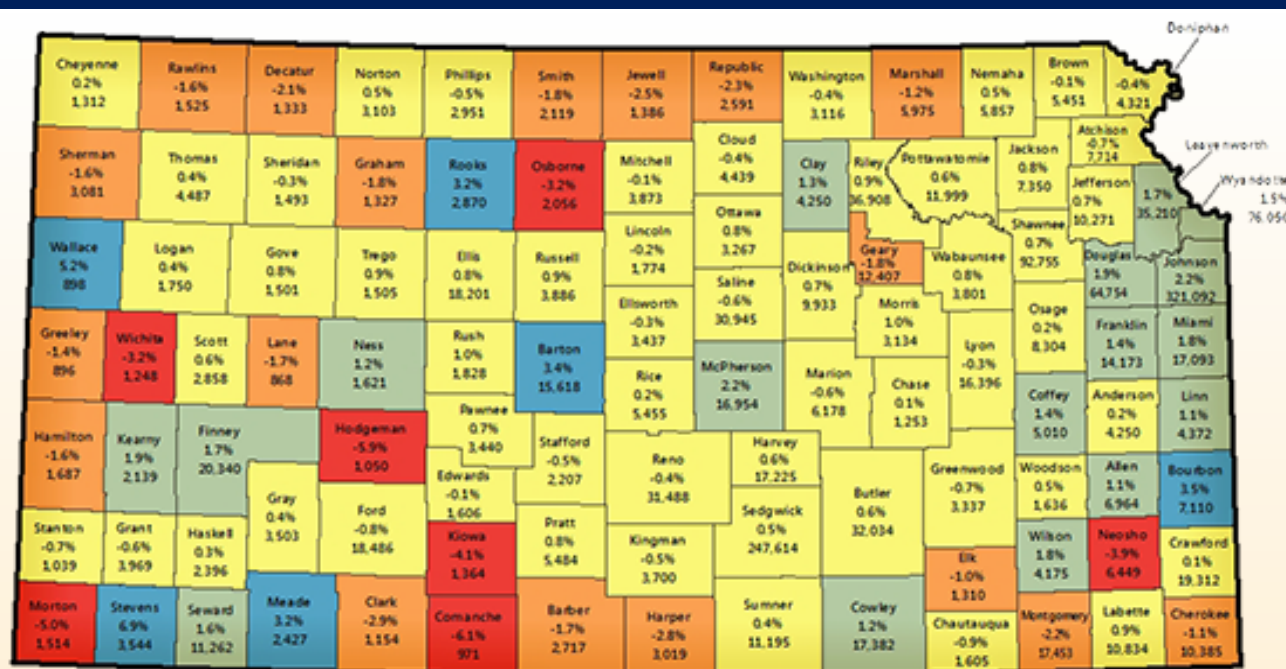
The labor force increased in 58 counties from 2013 to 2014. There were 25 counties that had labor force growth of 1 percent or greater, exceeding the growth rate for the state as a whole. Stevens County recorded the largest percent increase, with the labor force expanding by 6.9 percent. Johnson County experienced the largest total increase adding 6,779 people to the labor force in 2014. Comanche County recorded the largest percent decrease in the labor force at 6.1 percent, and Montgomery County lost the most workers out of the labor force at 394 people.

**“The labor force increased in 58 counties from 2013 to 2014. There were 25 counties that had labor force growth of 1 percent or greater, exceeding the growth rate for the state as a whole.”**

Johnson County had the largest labor force in 2014 with 321,092 people, accounting for 21.4 percent of the total labor force in Kansas. Sedgwick County was the only other county with a labor force greater than 100,000, at 247,614 people, and accounted for 16.5 percent of the Kansas labor force. Lane County had the smallest labor force at 868 people, one of four counties with a labor force of less than 1,000 people. See *Map 5* to view the labor force by county.

## Map 5

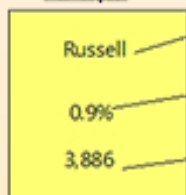
## Labor Force by County



### Percent Change in Labor Force



### Example



County Name

Percent Change from 2013

Number of Individuals in the Labor Force in 2014

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Local Area Unemployment Statistics

# Jobs

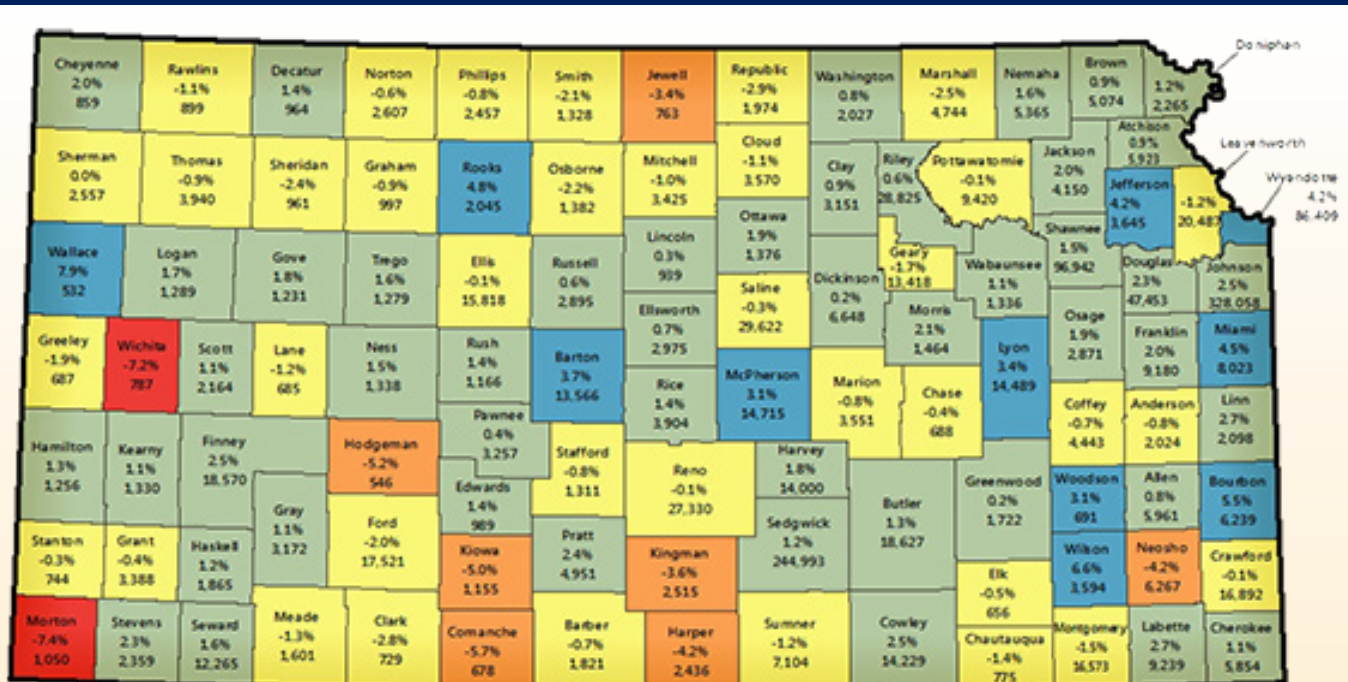
The number of jobs increased in 60 counties during 2014. Thirty-three of the counties experienced a job growth rate of 1.5 percent or higher, equaling or exceeding the statewide growth rate. Wallace County experienced the largest percent increase in jobs at 7.9 percent, and Johnson County added the most total jobs with 8,100 additional jobs. Morton County experienced the largest percent decrease in jobs at 7.4 percent, and Ford County lost the most total jobs, recording 358 fewer jobs in 2014.

There were 328,058 jobs in Johnson County in 2014, the most of any county, followed by Sedgwick County with 244,993 and Shawnee County with 96,942 jobs. Despite recording the largest job growth rate in 2014, Wallace County had the fewest number of jobs with 532. It is one of 20 counties with less than 1,000 jobs. See *Map 6* to view nonfarm jobs by county.

**“ The number of jobs increased in 60 counties during 2014. 33 counties experienced a job growth rate of 1.5 percent or higher, equaling or exceeding the statewide growth rate. ”**

## Map 6

## Jobs by County



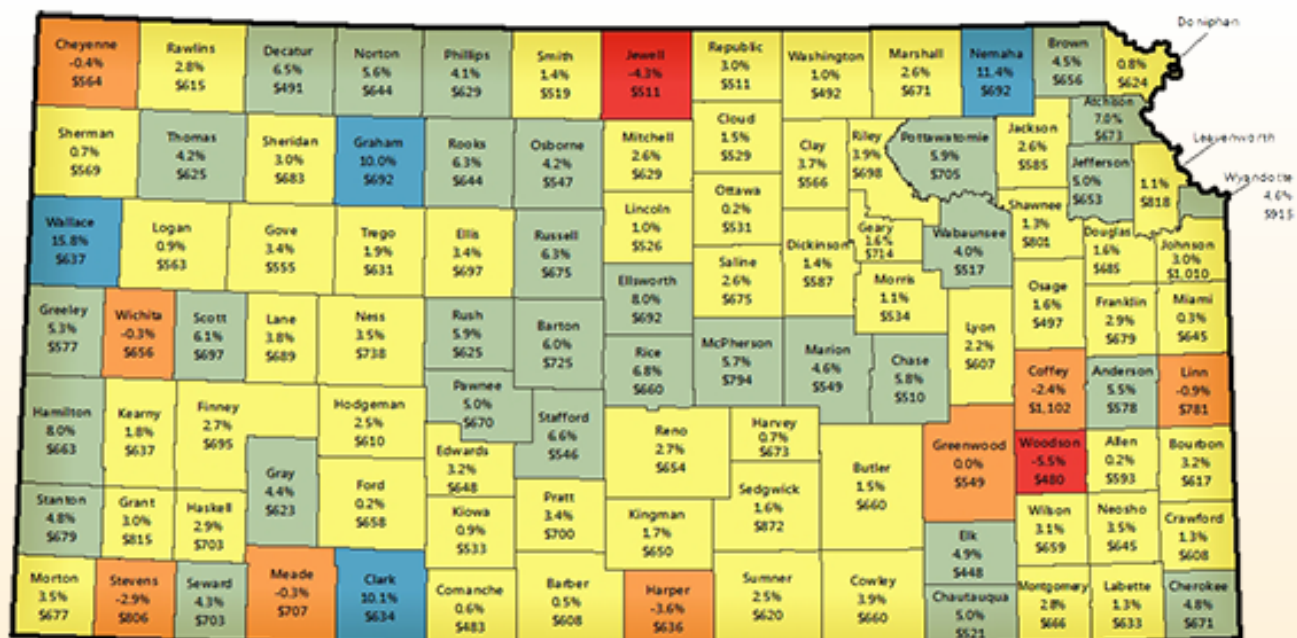
# Average Weekly Wage

Average weekly wages increased in 95 counties in 2014. In 73 counties, average weekly wage increases exceeded the level of inflation experienced in the Midwest, 1.5 percent, meaning real wages also increased. This gives Kansans in those counties more money to spend on additional goods and services. Wallace County experienced the most growth in wages, increasing from \$550 in 2013 to \$637 in 2014, a 15.8 percent increase. Wages also grew by 10 percent or more in Clark, Graham and Nemaha counties. Woodson County recorded the largest decrease in wages, with a decline of \$28, or 5.5 percent. Coffey, Harper, Jewell and Stevens counties also recorded significant declines in average weekly wages.

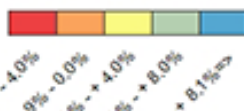
Coffey County recorded the highest 2014 average weekly wage in Kansas at \$1,102. Johnson County was the only other county with an average weekly wage above \$1,000, at \$1,010. Elk County experienced the lowest average weekly wage at \$448, one of six counties with an average weekly wage less than \$500. See *Map 6* to view average weekly wage by county.

**Map 7**

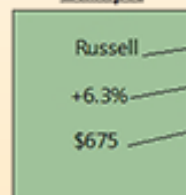
## Average Weekly Wage by County



### Percent Change in Average Weekly Wage



### Example



County Name

Percent Change from 2013

Number of Jobs 2014

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Quarterly Census of Employment and Wages



# Population

Population is an important statistic for two reasons. The first reason is, a growing population creates a larger market for businesses, leading to increased revenue. The second reason, is a larger population can also increase the size of the labor force, providing more labor supply for businesses.

*Table 9* shows a historical perspective of the Kansas and U.S. populations since 2003. The Kansas population was estimated at 2,904,021 in 2014, a 0.3 percent increase from 2013. This is well below the historical average (1946 - present) of 0.8 percent, but it is the second consecutive year Kansas has had a 0.3 percent growth rate. Kansas' population growth ranks 34th out of the 50 states. The U.S. population is also growing at historically low levels, only recording 0.7 percent growth, to 318.9 million in 2014. This is the lowest growth rate recorded since 1937. It also marks the 14th consecutive year that the growth rate in the U.S. has been 1 percent or lower, the longest recorded time period with this slow of population growth.

**Table 9**

## Total Population

	2003	2004	2005	2006	2007	2008
<b>Kansas</b>	2,723,004	2,734,373	2,745,299	2,762,931	2,783,785	2,808,076
<b>U.S.</b>	290,107,933	292,805,298	295,516,599	298,379,912	301,231,207	304,093,966

	2009	2010	2011	2012	2013	2014
<b>Kansas</b>	2,832,704	2,858,949	2,869,965	2,885,966	2,895,801	2,904,021
<b>U.S.</b>	306,771,529	309,347,057	311,721,632	314,112,078	316,497,531	318,857,056

Source: U.S. Census Bureau

Table 10 shows the largest counties by population in Kansas and the fastest growing counties in 2014. Johnson County is the largest county in Kansas followed by Sedgwick and Shawnee counties. For some perspective:

- 19.8% of Kansans live in Johnson County
- 37.3% of Kansans live in either Johnson or Sedgwick County
- 53% of Kansans live in one of the top five counties by population, listed in Table 10

There were 37 counties that gained population in 2014, led by Edwards County with 2.5 percent growth. Douglas and Johnson counties were the only counties that were in the top 10 in both total population and population growth.

Table 10 Top Counties by Population			
Top 10 Counties by Population	Population	Top 10 Growing Counties	% Growth
Johnson	574,272	Edwards	2.5%
Sedgwick	508,803	Scott	1.8%
Shawnee	178,406	Elk	1.7%
Wyandotte	161,636	Comanche	1.6%
Douglas	116,585	Douglas	1.6%
Leavenworth	78,797	Smith	1.3%
Riley	75,194	Gray	1.2%
Butler	66,227	Jackson	1.2%
Reno	63,794	Johnson	1.2%
Saline	55,755	Meade	1.2%
Source: U.S. Census Bureau			

# Productivity

Labor productivity is defined as output produced by a unit of labor in the production process. A unit of labor can be measured as either a worker or an hour of work. Therefore, labor productivity is expressed as productivity per worker or productivity per hour worked. This section reviews productivity per person employed in the Kansas economy. Productivity per worker is calculated as the ratio of total output to the total number of individuals employed in a given year. The measure of output used is real gross domestic product (GDP) in chained 2009 dollars from the Bureau of Economic Analysis. The number of individuals employed is estimated by Labor Market Information Services in conjunction with the Bureau of Labor Statistics, through the Local Area Unemployment Statistics program.

Labor productivity determines profits, labor demand and labor compensation. Holding all else constant, when labor productivity improves, companies' profits increase. Firms can also improve profits by reducing inputs and maintaining current outputs. This reduces costs while sustaining revenue. If businesses maintain current inputs, or costs, they can increase revenue to improve profits.

There are both scale and substitution effects associated with increased labor productivity. The lower unit cost of labor increases the demand for labor in the short run, holding wages constant – scale effect. In the short run capital is invariable, but in the long run firms use more labor and less capital – substitution effect. Unit cost of labor is the cost of labor, taking into account the productivity of the worker. Higher labor demand occurs if growth in wages is less than the growth in labor productivity. Higher productivity is rewarded with higher compensation. Higher compensation improves the standard of living if its growth exceeds the rate of inflation.

*Table 11*, on the following page, shows productivity for Kansas and the US from 2004 to 2014. On average, a worker in Kansas produced \$82,251 of goods or services in 2004, and produced \$92,787 in 2014. Over the 10-year period, productivity in Kansas increased by an average 1.2 percent per year, or \$1,054 a year. In 2004, productivity per worker was \$16,655 lower in Kansas than the U.S. On average since 2004, Kansas has grown faster than the U.S. by 0.3 percent. The U.S. grew at an average rate of 0.9 percent per year compared to Kansas at 1.2 percent. By 2014, the gap in productivity per person between the U.S. and Kansas has narrowed from \$16,655 to \$15,026.



**Table 11** Productivity per Worker

	2004	2005	2006	2007	2008	2009
<b>Kansas</b>	\$82,251	\$83,974	\$86,273	\$88,810	\$89,120	\$86,308
<b>U.S.</b>	\$98,905	\$100,271	\$101,044	\$101,385	\$101,312	\$102,444

	2010	2011	2012	2013	2014
<b>Kansas</b>	\$90,308	\$93,594	\$93,636	\$92,734	\$92,787
<b>U.S.</b>	\$105,259	\$106,129	\$106,331	\$107,219	\$107,813

*Note: Figures in chained 2009 dollars*

*Source: KDOL Labor Market Information Services and the Bureau of Economic Analysis*

Changes in labor productivity can occur because of changes in: human capital, capital-labor ratio, technology, economies of scale and management practices. *Table 12* shows an index of labor productivity with 2004 as the base year. The index reflects the percentage change in labor productivity since 2004. An index above 100 is a percentage increase compared to the 2004 level.

**Table 12** Labor Productivity Index

	2004	2005	2006	2007	2008	2009
<b>Kansas</b>	100.0	102.1	104.9	108.0	108.4	104.9
<b>U.S.</b>	100.0	101.4	102.2	102.5	102.4	103.6

	2010	2011	2012	2013	2014
<b>Kansas</b>	109.8	113.8	113.8	112.7	112.8
<b>U.S.</b>	106.4	107.3	107.5	108.4	109.0

*Note: Figures in chained 2009 dollars*

*Source: KDOL Labor Market Information Services and the Bureau of Economic Analysis*

Labor productivity in Kansas increased until 2008 reaching a high of 108.4. It fell in 2009 to 104.9 and began to improve again in 2010. The index reached a new peak of 113.8 in 2011 and remained above 112 through 2014. Since 2004, labor productivity in Kansas increased by a total of 12.8 percent.

# Job Vacancies

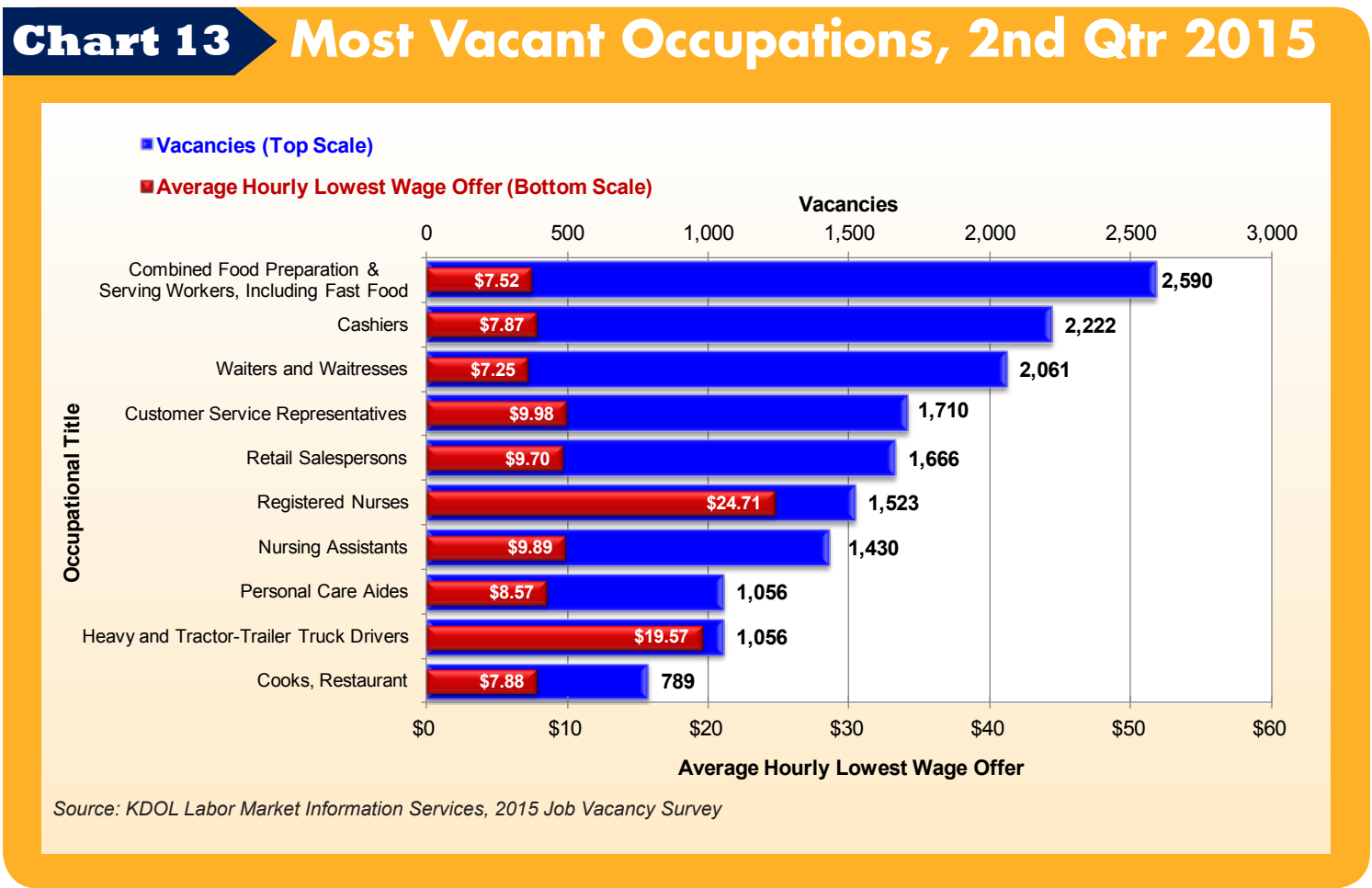
The number of job vacancies and the ratio of the number of unemployed individuals to the number of vacant jobs is used to measure the labor demand in a given area. This provides insight into the health of that area's labor market. The Kansas Department of Labor conducts an annual Job Vacancy Survey to measure the labor demand by area, industry and occupation. The most recent survey was conducted during the second quarter of 2015. The Bureau of Labor Statistics also releases monthly data on job openings in the U.S. and the Midwest region through the Job Openings and Labor Turnover Survey.

There were 47,269 job vacancies in Kansas during the second quarter of 2015, a 5.3 percent increase from 2014. This is the fourth consecutive year the number of vacancies has increased and the highest number of vacancies recorded since 2007. The statewide vacancy rate was 3.4 percent, an improvement from 3.2 percent in 2014. This means that for every 100 positions in Kansas, 3.4 were vacant and 96.6 were filled. The U.S. job vacancy rate was 3.7 percent in May 2015, up from 3.2 percent one year ago. The Midwest recorded a job vacancy rate of 3.8 percent, up from 3.4 percent one year ago.

**“There were 47,269 job vacancies in Kansas during the second quarter of 2015, a 5.3 percent increase from 2014. This is the fourth consecutive year the number of vacancies has increased and the highest number of vacancies since 2007.”**

There were 1.4 unemployed people for every vacancy in Kansas, an improvement of 0.1 from one year ago, and the lowest ratio recorded since 2007. This is the sixth consecutive year that the number of unemployed persons per vacancy has decreased in Kansas. Nationally, there were 1.5 unemployed people per vacancy in May 2015, and in the Midwest there were 1.3 unemployed per vacancy. Since the number of unemployed people per vacancy is nearly 1, this indicates a healthy labor market in Kansas.

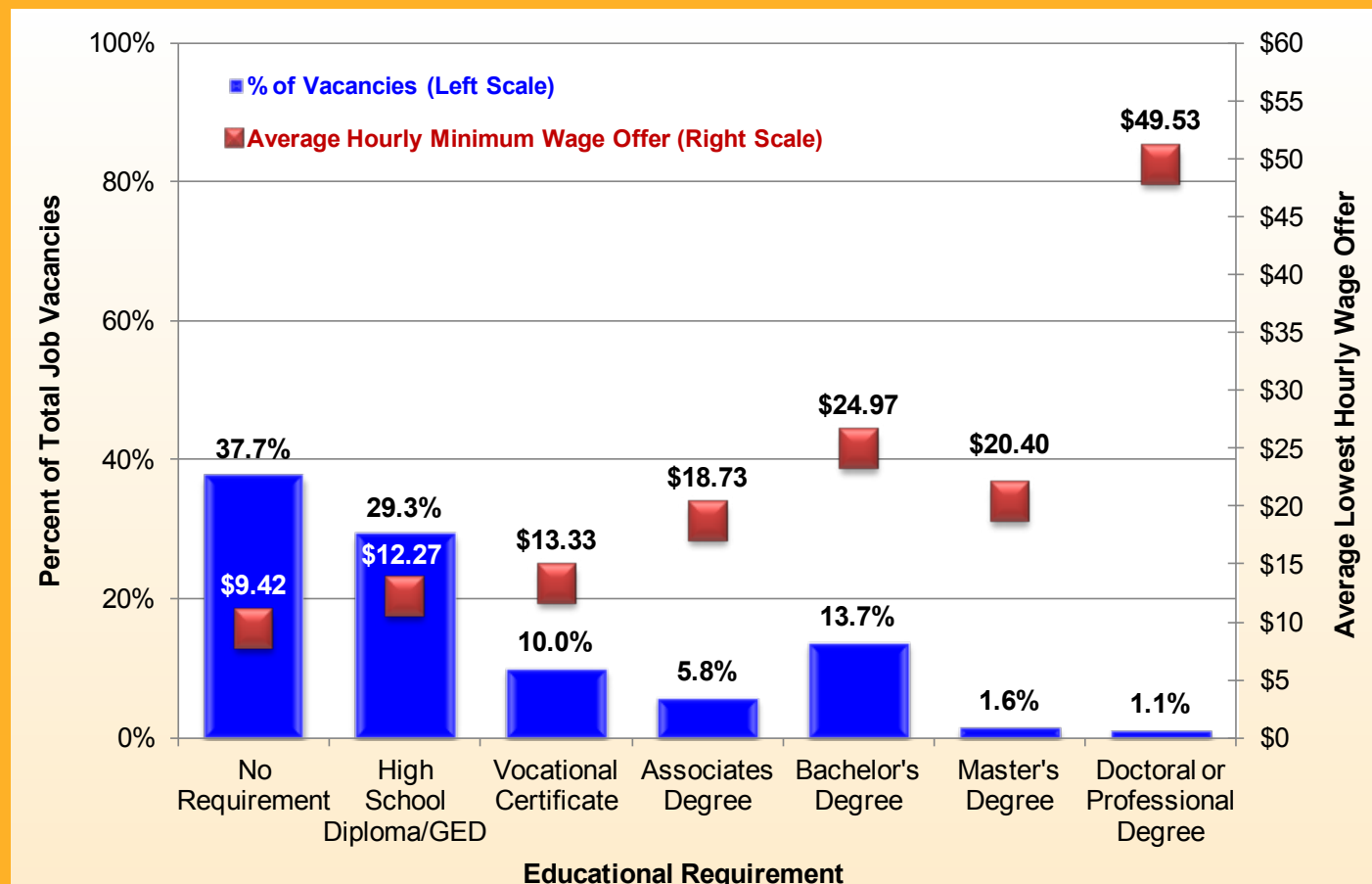
The top 10 vacancies in Kansas are shown in *Chart 13*. Also shown is the average lowest hourly wage offered for vacancies in each of the occupations. The top 10 most vacant occupations accounted for 34.1 percent of the job vacancies in Kansas.



Combined food preparation and serving workers, including fast food was the most vacant occupation in Kansas with 2,590 job vacancies. Half of the top 10 occupations are in sales and food service, reflecting a combination of continued increases in consumer spending and high turnover rates present in those occupations. Three of the other top occupations are health care related professions, showing the continued demand for health care workers as the older population increases. Two relatively high paying occupations, registered nurses and heavy and tractor-trailer truck drivers are in the top 10, indicating a continued shortage of workers for those positions.

Chart 14 shows the percentage of job vacancies by educational requirement as well as the average lowest hourly wage offered by educational requirement. Generally, the average starting pay increases with the amount of education required. Openings with no educational requirements had the lowest average starting wage at \$9.42, while vacancies requiring a doctoral or professional degree had the highest at \$49.53. The average lowest wage offered for all vacancies was \$12.56 per hour. A majority, 67 percent, of all openings required a high school diploma/GED, or had no educational requirements. A smaller but significant portion of job vacancies required a bachelor's degree or vocational certificate, while all other educational groups combined for only 8.5 percent of vacancies.

## Chart 14 Vacancies by Educational Requirement 2nd Qtr 2015



Source: KDOL Labor Market Information Services, 2015 Job Vacancy Survey

# High Demand

High demand occupations are the jobs in greatest demand by employers in Kansas. The list is provided to assist students, educators, administrators and others in making informed decisions regarding career paths. High demand occupations have larger than average combined current and projected (short-term and long-term) demand in the state. It combines occupational projection data with education, training and wage information to give a complete picture of each occupation.

The list is compiled by measuring the number of actual and projected job openings in each occupation. These openings can be the result of growth or replacement. Openings from growth occur when an industry expands, requiring more workers. Openings from replacement occur when a worker decides to leave an occupation and move to another or decides to stop working.

Each occupation receives a score based on the current number of openings, determined by the Job Vacancy Survey (JVS); the projected number of openings in two years, as indicated in the Short-Term Projections; and the projected number of openings in 10 years, calculated by the Long-Term Projections. Each of these scores are added together for a total score. A cumulative score of 30 indicates the occupations in highest demand. A score of zero shows an average demand relative to all occupations.

Table 13 displays the top high demand occupations. The 13 occupations shown received the maximum score of 30. These occupations have the most current and projected openings.

**Table 13** High Demand Occupations

Occupation	Demand Score	Median Wage	Education	On-the-Job Training
Accountant & Auditor	30	\$58,570	Bachelor's	None
Registered Nurse	30	\$55,880	Associate	None
Heavy & Tractor-Trailer Truck Driver	30	\$38,750	Postsecondary non-degree	Short-term
Customer Service Representative	30	\$30,480	High School/GED	Short-term
Hand Laborers & Freight, Stock & Material Movers	30	\$25,380	Less than High School	Short-term
Landscaping & Groundskeeping Worker	30	\$23,820	Less than High School	Short-term
Nursing Assistant	30	\$22,720	Postsecondary non-degree	None
Stock Clerk & Order Filler	30	\$22,580	Less than High School	Short-term
Personal Care Aide	30	\$20,530	Less than High School	Short-term
Retail Salesperson	30	\$21,000	Less than High School	Short-term
Cashier	30	\$18,430	Less than High School	Short-term
Combined Food Preparation & Serving Worker	30	\$18,050	Less than High School	Short-term
Waiter & Waitress	30	\$17,920	Less than High School	Short-term

Source: KDOL Labor Market Information Services, High Demand Occupations

Nine of the occupations in *Table 13* require a high school diploma or less, as noted in the education column. This means there are very low or no requirements of entry into these occupations. Occupations with a requirement to entry are jobs that require a higher level of education, work experience or training. These requirements are in place because employees without the specific qualification cannot enter the occupation. Most of the occupations in the top list have low or no requirements to entry. Many of the openings in these occupations are the result of high turnover in that occupation, and not solely because of industry growth.

*Table 14* displays the top high demand occupations that typically require one of the following: post secondary education, at least one year on-the-job training, internship, apprenticeship or five years of work experience. The education and training that leads to the occupations are included in *Table 14*.

The average median wage of all high demand occupations meeting these qualifications is \$55,856. The average median wage for all high demand occupations is \$44,216. This means that the occupations that require higher levels of education or training earn more on average than the occupations that require less education and training.

**Table 14** **High Demand Occupations by Education, Experience or Training**

Occupation	Demand Score	Median Wage	Education	Work Experience	On-the-Job Training
Accountant & Auditor	30	\$58,570	Bachelor's	None	None
Registered Nurse	30	\$55,880	Associate	None	None
Heavy & Tractor-Trailer Truck Driver	30	\$38,750	Postsecondary non-degree	None	Short-term
Nursing Assistant	30	\$22,720	Postsecondary non-degree	None	None
Teacher Assistant	29	\$22,940	Some College, no degree	None	None
Secondary School Teacher, Except Special Education	28	\$46,010	Bachelor's	None	Internship/Residency
Elementary School Teacher, Except Special Education	28	\$44,590	Bachelor's	None	Internship/Residency
Licensed Practical & Licensed Vocational Nurse	27	\$38,700	Postsecondary non-degree	None	None
General Maintenance & Repair Worker	27	\$34,610	High School/GED	None	Long-term
General & Operations Managers	25	\$86,460	Bachelor's	Less than 5 years	None

Source: KDOL Labor Market Information Services, High Demand Occupations



# Short-Term Projections

Short-term projections are approximations of future job levels. This is estimated using a combination of methods considering trends in past job levels and looking at the relationships between job levels and hours worked, consumer expectations, interest rates, money supply and price indices. Other than holding the observed trends and relationships constant, assumptions are not made about any other variable including the business cycle. Short-term projections reflect changes in cyclical, structural and frictional factors.

Projections inform researchers and other interested parties about the future direction of the labor market and its implications for the economy. Projections also play an important role in making career choices. While general interest in certain careers may impact occupational choices, information about future trends in employment or demand for labor helps identify practical options to ensure future job security.

Projections use the most comprehensive measure of jobs. This measure includes covered and non-covered jobs. Data on self-employed workers are calculated by applying national staffing patterns to state employment data. LMIS conducts school and church surveys that provide information about jobs that are not covered by unemployment insurance. Data on railroad workers are sourced from the Railroad Retirement Board (RRB).

Table 15 shows short-term projections for the first quarter 2016 from the first quarter 2014. The top 10 industries by numerical change are shown. Total jobs are expected to increase by 3 percent, to 1,494,410, over the two-year period. The annual average growth rate is 1.5 percent. This expected rate in the short-term is higher than the 10-year outlook, which projects an annual average growth rate of 1.1 percent. The private sector is expected to add 45,246 jobs, or 3.3 percent, with an annual growth rate of 1.7 percent. The government sector - excluding schools and hospitals - is expected to decrease by 1,091 jobs to 97,469, a 1.1 percent decline over the period. Schools are within the educational services industry, and hospitals are in the health care and social assistance industry. Relatively high growth sectors include management of companies and enterprises; construction; professional, scientific and technical services; agriculture, forestry, fishing and hunting; and administrative and support, and waste management and remediation services.

**Total jobs are expected to increase by 3 percent, to 1,494,410 from 2014 to 2016. The annual average growth rate is 1.5 percent.**

**Table 15** **Top 10 Industries by Numerical Change**

Industries	Job Numbers		Job Changes		
	Quarter 1 2014	Quarter 1 2016	Numerical	Percent	Annual Avg. Growth %
<b>Total, All Industries</b>	<b>1,450,255</b>	<b>1,494,410</b>	<b>44,155</b>	<b>3.0</b>	<b>1.5</b>
Educational Services	148,595	155,827	7,232	4.9	2.4
Construction	55,739	61,289	5,550	10.0	4.9
Professional, Scientific & Technical Services	67,182	72,688	5,506	8.2	4.0
Administrative & Support, & Waste Management & Remediation Services	79,113	84,552	5,439	6.9	3.4
Retail Trade	143,285	147,436	4,151	2.9	1.4
Health Care & Social Assistance	185,860	189,737	3,877	2.1	1.0
Wholesale Trade	60,188	63,298	3,110	5.2	2.6
Management of Companies & Enterprises	18,371	21,057	2,686	14.6	7.1
Accommodation & Food Services	103,022	105,097	2,075	2.0	1.0
Total Self Employed & Unpaid Family Workers	85,473	87,539	2,066	2.4	1.2
Agriculture, Forestry, Fishing & Hunting	10,796	11,628	832	7.7	3.8

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Employment Projections

Table 16 shows the top 10 short-term projections by occupation group sorted by numerical change. Over the projection period, office and administrative support occupations are expected to generate 5,292 additional jobs. Other occupational groups projected to grow more than 4,000 jobs include construction and extraction; sales and related; and education, training and library occupations.

The construction and extraction, and farming, fishing and forestry occupational groups have the highest annual average growth rates at 3.5 and 3 percent respectively. Other groups projected to grow more than 2 percent per year are computer and mathematical; education, training and library; and legal occupations. It is expected that there will be 114,530 openings over the projection period, or an average of 57,265 per year from new and replacement jobs. Approximately 59.6 percent or 68,302 openings will be replacement openings.

**Table 16** Top 10 Occupations by Numerical Change

Occupations	Job Numbers		Job Changes			Total Openings
	Quarter 1 2014	Quarter 1 2016	Numerical	Percent	Annual Avg. Growth %	
<b>Total, All Occupations</b>	<b>1,450,255</b>	<b>1,494,410</b>	<b>44,155</b>	<b>3.0</b>	<b>1.5</b>	<b>114,530</b>
Office & Administrative Support	226,823	232,115	5,292	2.3	1.2	15,917
Construction & Extraction	67,475	72,267	4,792	7.1	3.5	7,138
Sales & Related	145,943	150,716	4,773	3.3	1.6	14,564
Education, Training & Library	92,298	96,645	4,347	4.7	2.3	8,099
Transportation & Material Moving	102,031	105,256	3,225	3.2	1.6	7,872
Management	76,433	79,041	2,608	3.4	1.7	5,419
Business & Financial Operations	66,558	68,986	2,428	3.7	1.8	5,091
Food Preparation & Serving Related	114,928	117,186	2,258	2.0	1.0	12,093
Installation, Maintenance & Repair	60,623	62,680	2,057	3.4	1.7	4,937
Building & Grounds Cleaning & Maintenance	51,687	53,649	1,962	3.8	1.9	3,954

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Employment Projections

The Bureau of Labor Statistics assigns the level of education typically needed to enter each occupation. There are eight categories shown in *Table 17*. The greatest numerical change in jobs is projected for those that ask for a high school diploma or equivalent. There are 12,596 additional jobs projected that require less than a high school diploma, and 8,942 additional jobs over the two-year projection period that prefer a bachelor's degree. The fastest growing groups are occupations that ask for some college and occupations that need a master's degree, at annual growth rates of 2.3 and 2 percent respectively.

**Table 17** Projections by Educational Requirement

Education	Job Numbers		Job Changes			Total Openings
	Quarter 1 2014	Quarter 1 2016	Numerical	Percent	Annual Avg. Growth %	
<b>Total</b>	<b>1,450,255</b>	<b>1,494,410</b>	<b>44,155</b>	<b>3.0</b>	<b>1.5</b>	<b>114,530</b>
Less than High School	386,625	399,221	12,596	3.3	1.6	38,091
High School Diploma or Equivalent	596,517	612,774	16,257	2.7	1.4	42,613
Postsecondary Non-Degree Award	98,187	100,050	1,863	1.9	0.9	5,698
Some College	24,714	25,854	1,140	4.6	2.3	2,107
Associate Degree	56,796	58,020	1,224	2.2	1.1	3,339
Bachelor's Degree	233,054	241,996	8,942	3.8	1.9	18,468
Master's Degree	21,471	22,336	865	4.0	2.0	1,680
Doctorate or Professional Degree	32,891	34,159	1,268	3.9	1.9	2,534

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Employment Projections

Total jobs are also estimated by projection region. The regions with the largest estimates for additional jobs are the Kansas City, Northeast and South Central regions. The Kansas City region has the highest estimated annual average growth rate at 2.1 percent. *Table 18* shows the short-term projections by region. *Map 8* shows the projection regions.

**Table 18** Projections by Area

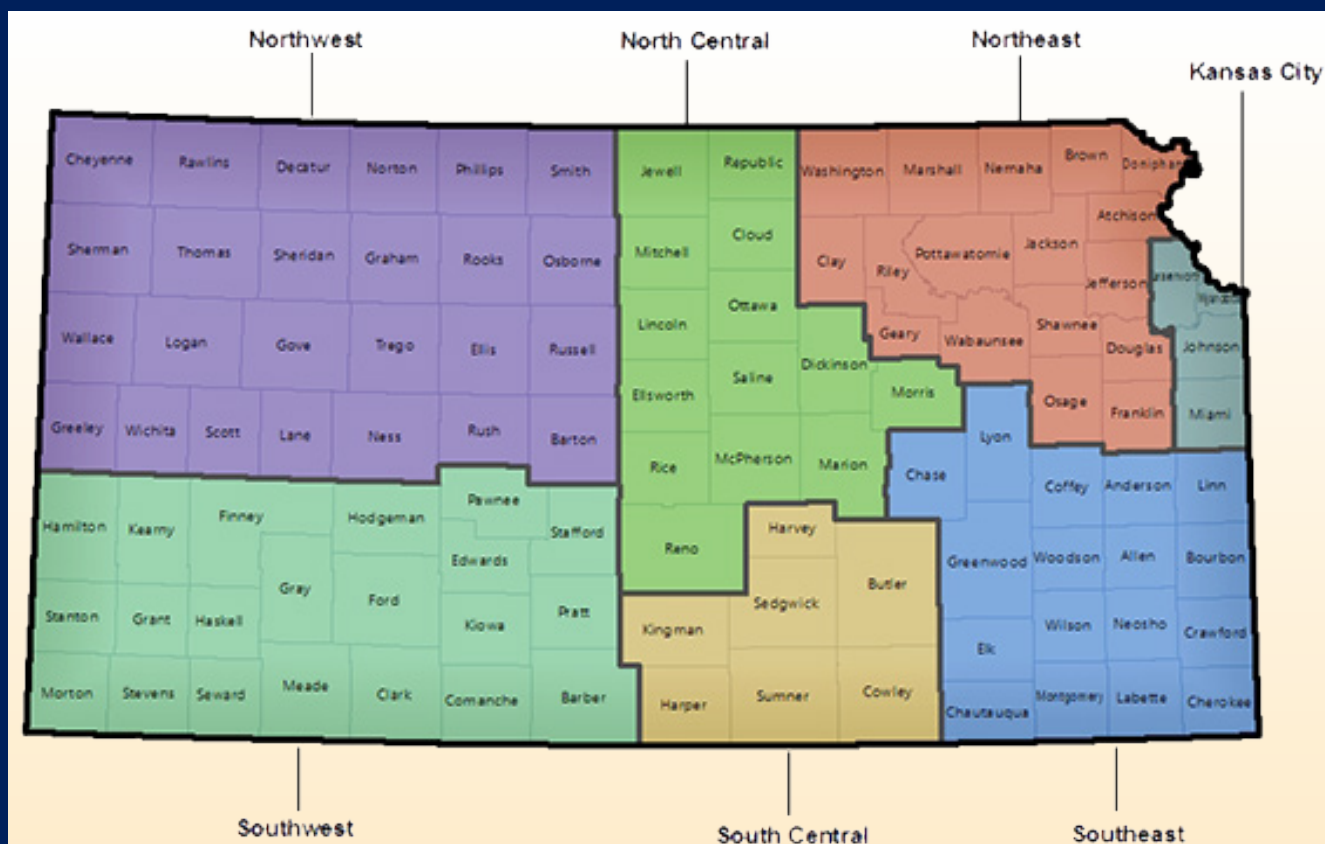
Area	Job Numbers		Job Changes		
	Quarter 1 2014	Quarter 1 2016	Numerical	Percent	Annual Avg. Growth %
<b>Statewide</b>	<b>1,450,255</b>	<b>1,494,410</b>	<b>44,155</b>	<b>3.0</b>	<b>1.5</b>
Kansas City	475,188	494,953	19,765	4.2	2.1
North Central	110,567	111,285	718	0.7	0.3
Northeast	265,921	273,801	7,880	3.0	1.5
Northwest	70,921	72,596	1,675	2.4	1.2
South Central	330,419	336,191	5,772	1.8	0.9
Southeast	106,520	108,235	1,715	1.6	0.8
Southwest	89,734	91,953	2,219	2.5	1.2

*Note: Area figures may not add up to the statewide total*

*Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Employment Projections*

**Map 8**

## Projection Regions



*Source: KDOL Labor Market Information Services*

# Gross Domestic Product

The gross domestic product (GDP) measures the total economic output of an area. It is commonly used as one of the primary measures of economic performance and health of an area. There are two types of GDP discussed in this report: nominal GDP is measured in current dollars, where real GDP is adjusted for inflation. Real GDP allows better year-to-year comparisons by removing the influence that inflation has on nominal GDP. In this report, real GDP is fixed to 2009 dollars.

According to estimates from the Bureau of Economic Analysis, the nominal GDP in Kansas rose for the fifth consecutive year to \$147.1 billion, a 3.2 percent increase. Real GDP grew 1.8 percent in 2014 to \$132.9 billion. The U.S. nominal and real GDP increased by 3.9 percent and 2.2 percent respectively. From 2004 to 2014, the Kansas nominal GDP grew by 38.4 percent, surpassing the national growth rate of 35.8 percent. During the same period, Kansas' real GDP increased by 15.9 percent, higher than the national real GDP growth of 13.8 percent. *Chart 15* below and *Chart 16* on the following page, display the annual percent change in real and nominal GDP from 2004 to 2014 in Kansas and the U.S.

## GDP Represents:

### Total Income:

Rent, compensation of employees, interest, dividends, proprietors' income, corporate profits

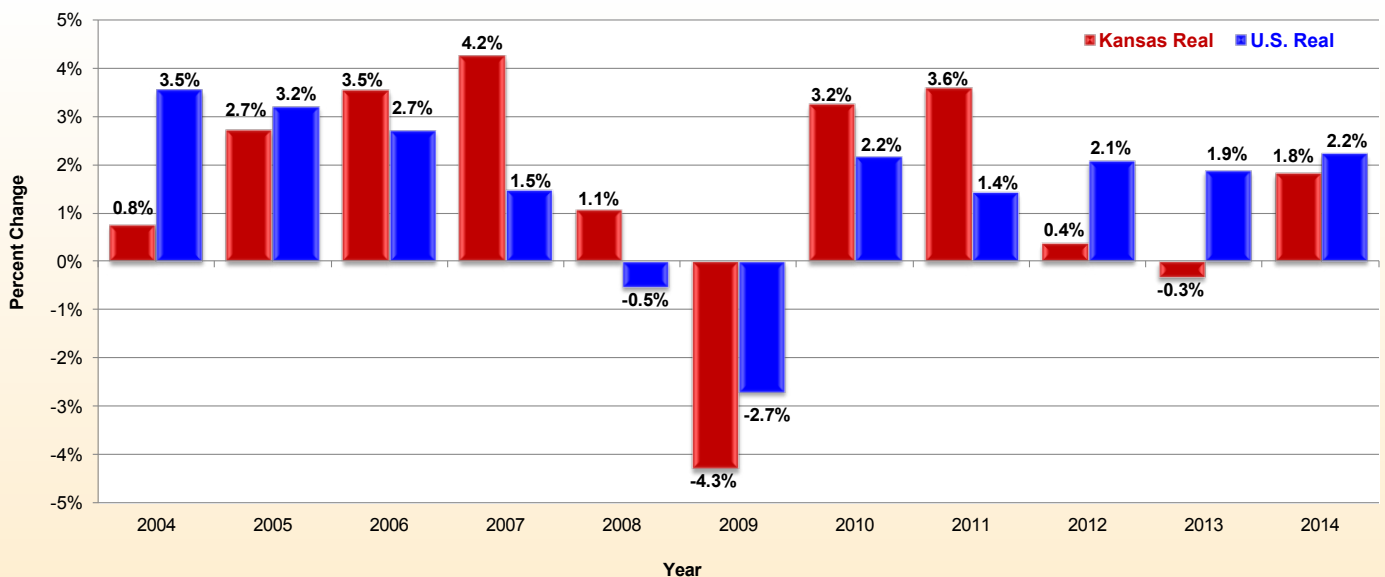
### Total Output

### Total Expenditures:

Personal consumption, gross private/ domestic investments, government expenditures, net exports

**Chart 15**

## Percent Change in Real GDP

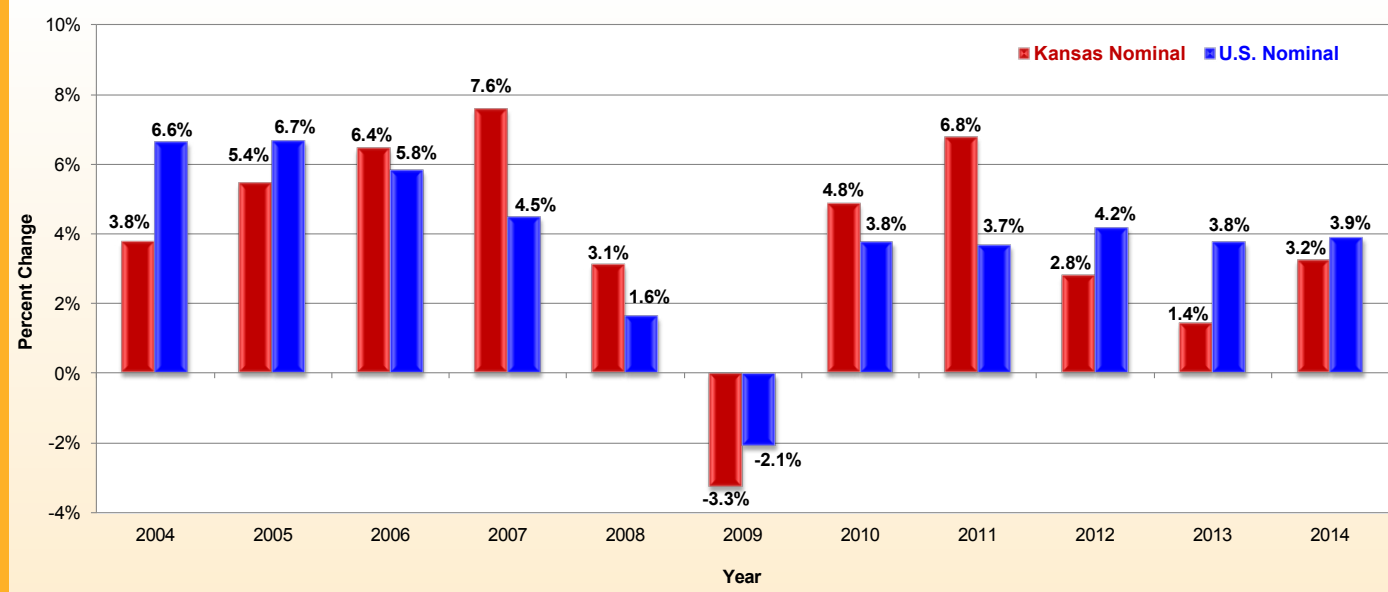


*Note: Nominal and Real GDP in Kansas excludes compensation of federal civilian and military personnel stationed abroad and government consumption of fixed capital for military structures located abroad for military equipment, except office equipment. Nominal and Real GDP in the U.S. includes these items.*  
*Source: Bureau of Economic Analysis*



# Chart 16

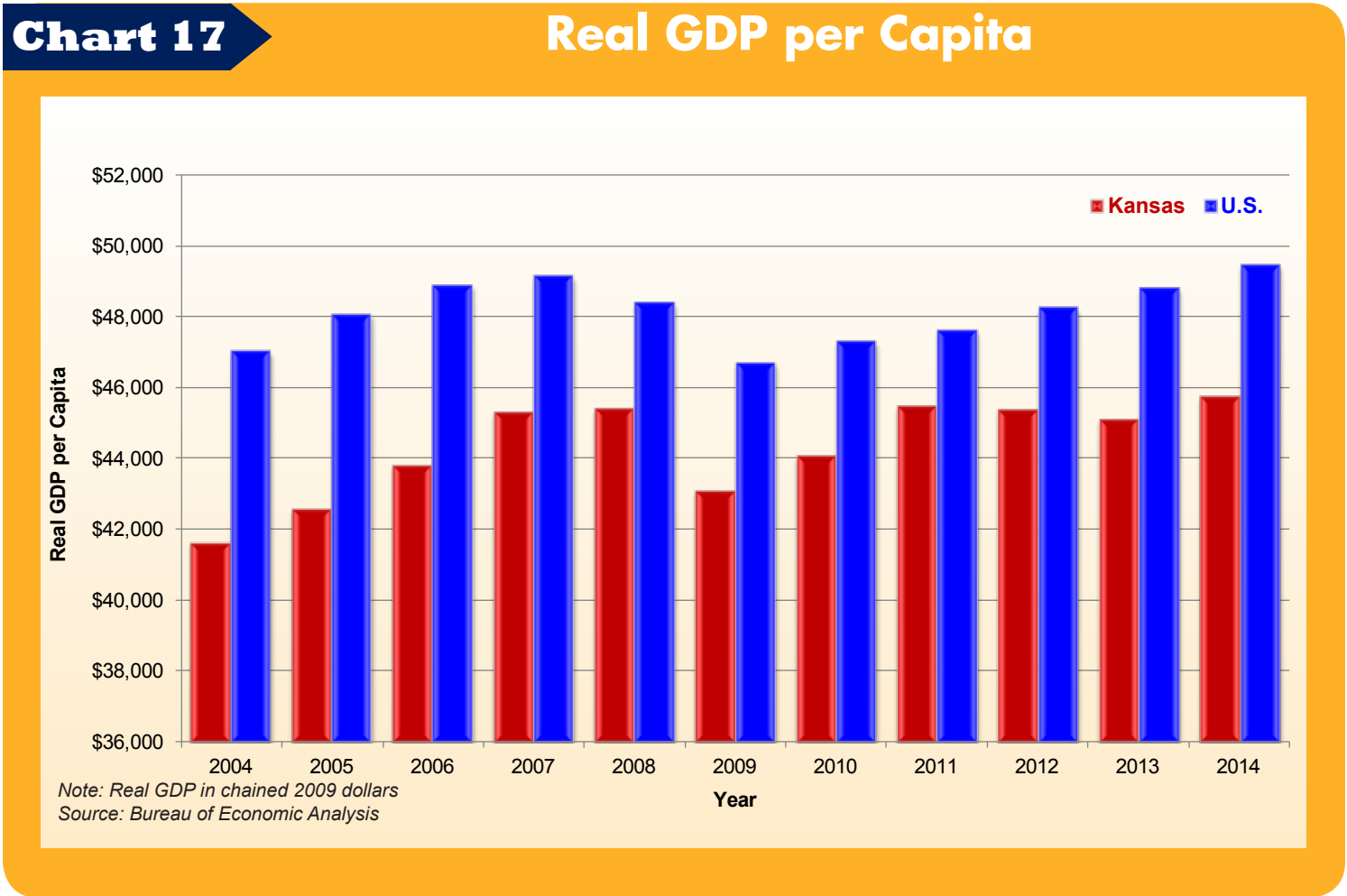
## Percent Change in Nominal GDP



*Note: Nominal and Real GDP in Kansas excludes compensation of federal civilian and military personnel stationed abroad and government consumption of fixed capital for military structures located abroad for military equipment, except office equipment. Nominal and Real GDP in the U.S. includes these items.*  
*Source: Bureau of Economic Analysis*

To compare areas with different population levels, GDP per capita is calculated by dividing GDP by the population of an area. A historical look at the real GDP per capita in Kansas and the U.S. is shown in *Chart 17*. Kansas recorded a real GDP per capita of \$45,765 in 2014, an increase of 1.5 percent. Kansas ranks 28th out of the 50 states in real GDP per capita. The U.S. real GDP per capita rose 1.3 percent to \$49,469 from 2013 to 2014. Since 2004, Kansas has experienced a real GDP per capita growth rate of 9.9 percent, nearly double the 5.2 percent growth rate of the U.S.

**Kansas recorded a real GDP per capita of \$45,765 in 2014, an increase of 1.5 percent. Since 2004, Kansas has experienced a real GDP per capita growth rate of 9.9 percent, nearly double the 5.2 percent growth rate of the U.S.**

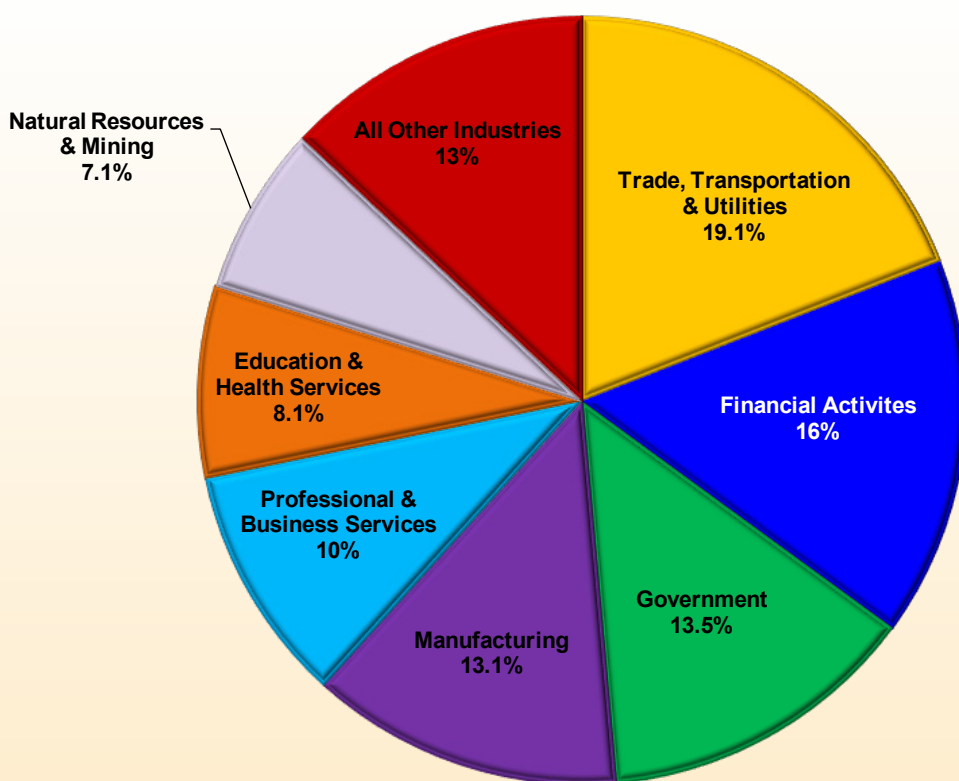


Several industries contribute to Kansas' nominal GDP, as shown in *Chart 18*. The trade, transportation and utilities industry continued to be the largest contributor to Kansas' GDP, making up 19.1 percent of the total in 2014. The industry contributed \$28 billion to the state's total GDP. Financial activities was the second largest contributor at 16 percent of GDP. Three other industries were each responsible for 10 percent or more of Kansas' GDP: government, manufacturing, and professional and business services. The top five industries accounted for 71.8 percent of all nominal GDP in Kansas. This is a similar makeup to the national GDP, where the same five industries accounted for 73.4 percent of GDP.

“ The trade, transportation and utilities industry continued to be the largest contributor to Kansas' GDP, making up 19.1 percent of the total in 2014. The industry contributed \$28 billion to the state's total GDP. ”

**Chart 18**

## Nominal GDP by Industry



Source: Bureau of Economic Analysis

In Kansas, 10 of the 11 major industries increased their contribution to nominal GDP from 2013 to 2014. This is shown in *Table 19*. The trade, transportation and utilities industry had the largest total gain in GDP, increasing by \$1.3 billion in 2014, or 4.8 percent, with increases throughout all sectors. Financial activities grew by \$1.1 billion last year, also a 4.8 percent increase, with most of the growth occurring in real estate, rental and leasing. Professional and business services increased by \$990 million and recorded the second largest percentage increase at 7.2 percent. Most of the growth was in professional and technical services, and management of companies and enterprises. Construction recorded the largest percentage increase with 7.4 percent growth.

The only decline in contributions to nominal GDP by an industry was in natural resources and mining. Natural resources and mining GDP declined by \$362 million over the year, a 3.3 percent reduction. The decrease was due to declines in agriculture.

**Table 19** Nominal GDP by Industry

Industry	2013	2014	Percent Change
Construction	\$4,995	\$5,367	7.4%
Professional & Business Services	\$13,784	\$14,774	7.2%
Other Services	\$3,220	\$3,388	5.2%
Trade, Transportation & Utilities	\$26,731	\$28,027	4.8%
Financial Activities	\$22,476	\$23,544	4.8%
Leisure & Hospitality	\$4,101	\$4,292	4.7%
Education & Health Services	\$11,413	\$11,880	4.1%
Information	\$5,868	\$6,096	3.9%
Manufacturing	\$19,203	\$19,320	0.6%
Government	\$19,794	\$19,885	0.5%
Natural Resources & Mining	\$10,864	\$10,502	-3.3%

*Note: Data is in Millions*  
*Source: Bureau of Economic Analysis*

# Personal Income

Personal income is an important measure of economic health and well-being. Personal income includes earnings, property income and transfer payments.

In 2014, Kansas' total personal income increased by 2.9 percent to \$132.2 billion. Nationally, personal income increased 3.9 percent to \$14.7 trillion. In Kansas, a \$2.7 billion increase in work earnings, or 2.9 percent, was the primary reason for the increase in personal income. Increases in wages and salaries accounted for \$2.4 billion of the increase in work earnings. The two other components of personal income also increased. Income from dividends, interest and rent, increased by 3.1 percent. Income from personal current transfer receipts grew by 3.9 percent. Personal current transfer receipts primarily consist of government payments to individuals and nonprofit institutions along with business liability payments and donations to nonprofit institutions.

Kansas ranked 42nd in 2014 among the 50 states in percentage change of personal income. However, Kansas' personal income growth was higher than the 2.5 percent growth for the Plains region. The Plains region is defined by the Bureau of Economic Analysis as Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota. *Table 20* compares Kansas' total personal income to the total personal income nationwide. Total personal income in Kansas has accounted for a steady proportion of the nationwide total. In 2014, Kansas' total personal income was 0.9 percent of total personal income in the U.S., the same percentage as the past decade.

**Table 20**

## Personal Income

	2005	2006	2007	2008	2009
<b>Kansas</b>	\$91,794,441	\$99,435,490	\$105,709,576	\$114,034,795	\$109,820,740
<b>U.S.</b>	\$10,605,595,000	\$11,376,405,000	\$11,990,104,000	\$12,429,234,000	\$12,080,223,000
	2010	2011	2012	2013	2014
<b>Kansas</b>	\$110,956,678	\$120,801,179	\$125,167,639	\$128,540,565	\$132,266,632
<b>U.S.</b>	\$12,417,659,000	\$13,189,935,000	\$13,873,161,000	\$14,151,427,000	\$14,708,582,165

*Note: Data in Thousands*

*Source: Bureau of Economic Analysis*

# Personal Income per Capita

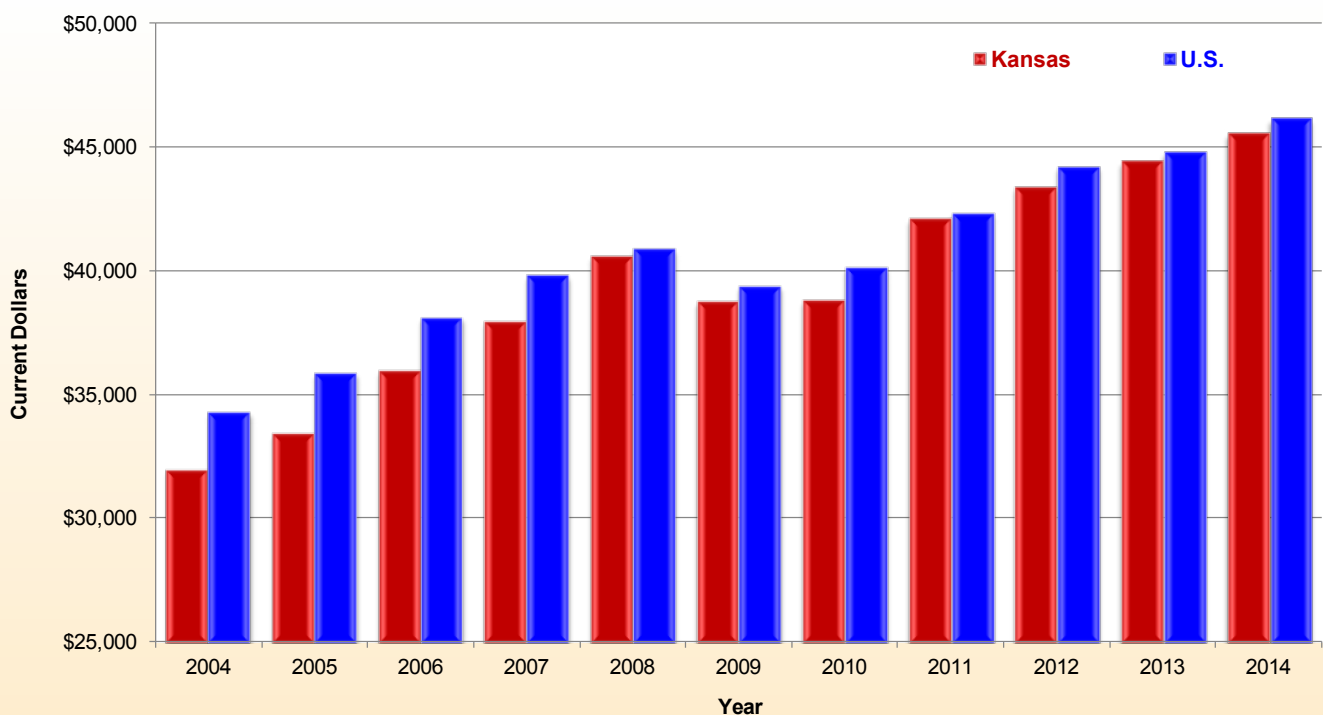
Similar to GDP, personal income can be expressed as per capita to show the average share of personal income for each individual in an area. Per capita personal income is calculated by dividing total personal income by the population for an area. It measures the wealth of the population and provides a common measure for evaluating and comparing countries, states or areas.

**“From 2013 to 2014, Kansas’ per capita personal income increased 2.5 percent, and the nation’s increased 3 percent. Kansas once again outperformed the Plains region which recorded an increase of 1.9 percent in 2014.”**

Chart 19 illustrates the per capita personal income in Kansas and the U.S. In 2014, Kansas recorded a per capita personal income of \$45,546, while the U.S. recorded a per capita personal income of \$46,129. Kansas ranks 23rd out of the 50 states in terms of per capita personal income. From 2013 to 2014, Kansas’ per capita personal income increased 2.5 percent, and the nation’s increased 3 percent. Kansas once again outperformed the Plains region which recorded an increase of 1.9 percent in 2014.

**Chart 19**

## Personal Income per Capita



Source: Bureau of Economic Analysis



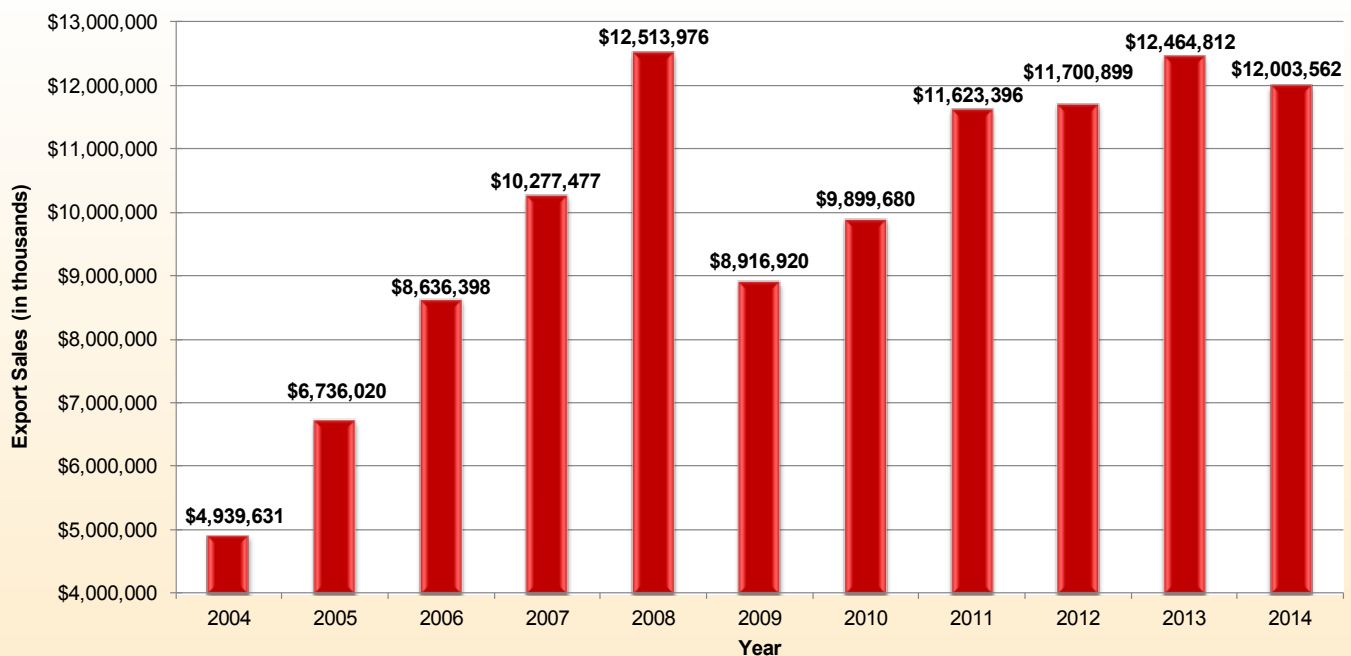
# Global Business

Kansas businesses compete in a global marketplace, where economic growth contributes to the rising demand for Kansas products. Exports data shows how competitive Kansas is in the global economy. As demand for products in which Kansas has a competitive advantage continue to rise, export sales will increase. The value of the U.S. dollar compared to other currencies also has an effect on exports. The value of the U.S. dollar appreciated, compared to other world currencies from 2013 to 2014, making goods produced in the U.S. relatively more expensive. This decreases demand for U.S. goods and services.

Kansas export sales totaled \$12 billion in 2014, as seen in *Chart 20*. This represents a \$461 million decline in export sales, or 3.7 percent, from 2013. This marks the first decline in exports since 2009 after four consecutive years of growth. The decline is due to large decreases in exports of agricultural products and processed food. Drought related declines in wheat and soybean exports are primarily to blame for the decline and are the main reason Kansas export sales were down overall. Despite this, 2014 is still the third highest total in export sales ever recorded, and represents a 143 percent increase in exports since 2004. Kansas ranked 30th among all states in total exports in 2014.

**Chart 20**

## Kansas Export Sales



Note: Data is in thousands

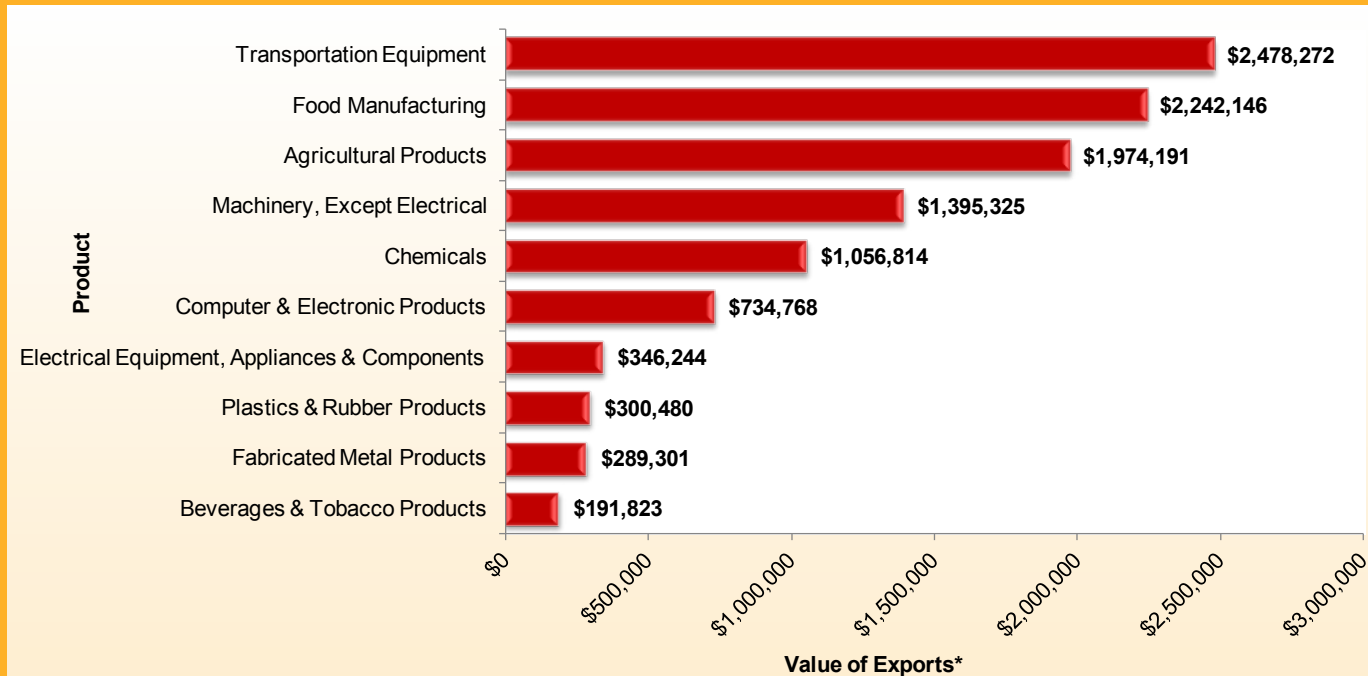
Source: U.S. Department of Commerce, Office of Trade and Industry Information

As seen in *Chart 21* displaying the top exporting sectors, the transportation equipment manufacturing sector moved back to the top spot in 2014 after ranking third in 2013. This was the first time this sector had not been the highest exporter since 2003. This sector includes industries that produce aerospace parts and products, motor vehicle parts and assembly, and other transportation equipment manufacturing. Export sales for this sector totaled \$2.5 billion, a growth of \$340 million, or 15.9 percent in 2014. This is notable because it is the first growth in this sector since 2008. However, exports

of transportation equipment are still about 50 percent lower than pre-recession levels. Civilian aircraft, engines and parts is the main product exported by this industry. On the following page, *Chart 22* shows that this is the product most exported by Kansas at \$1.9 billion in sales. Canada was the largest importer of Kansas transportation equipment in 2014, followed by Mexico and Brazil.

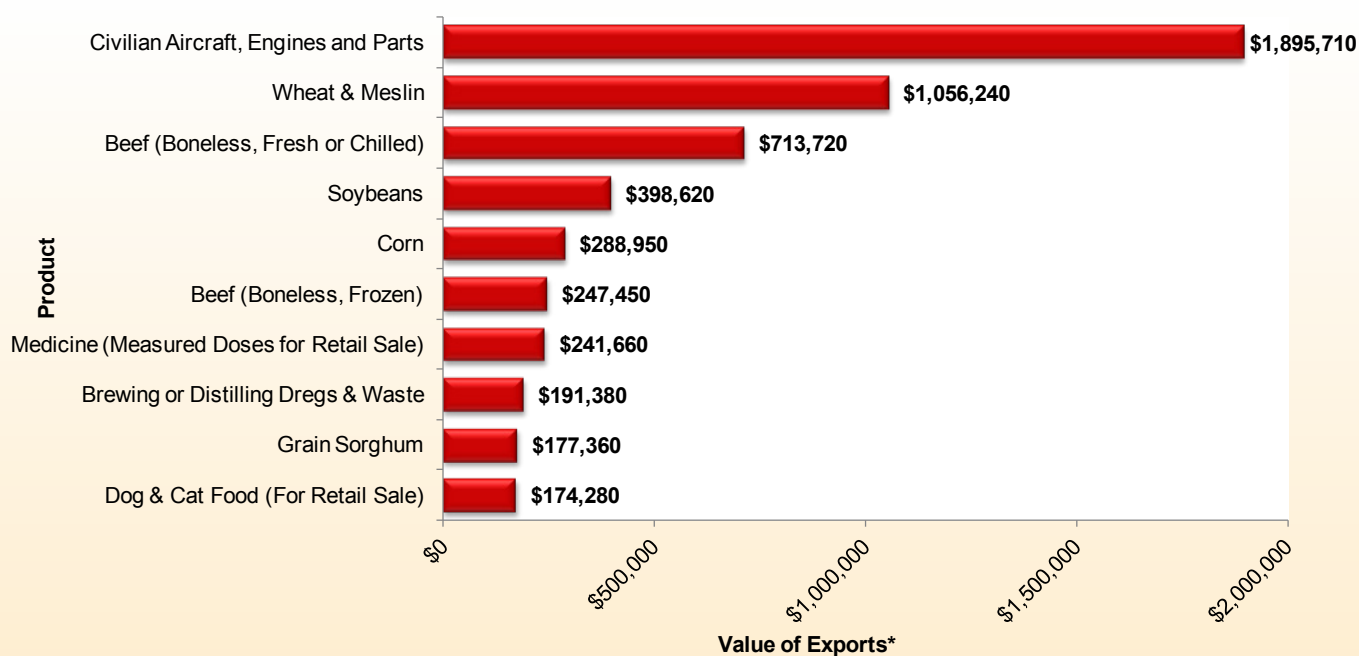
“The transportation equipment manufacturing sector moved back to the highest exporting sector in 2014 after ranking third in 2013, the first time it had not been in the top spot since 2003.”

**Chart 21** Top Kansas Exporting Industries, 2014



\*In thousands

Source: U.S. Department of Commerce, Office of Trade and Industry Information

**Chart 22****Top Kansas Exported Products, 2014**

\*In thousands

Source: U.S. Department of Commerce, Office of Trade and Industry Information

The food manufacturing sector transforms livestock and agricultural products into products for intermediate or final consumption. This sector recorded the second most export sales in 2014, with \$2.2 billion in sales. This is a decrease from 2013 of \$229 million, or 9.3 percent. The decline in exports in this sector can be attributed to \$93 million less in sales of fresh or chilled beef and \$65 million less in sales of dog and cat food. In 2014, those two products were the third and 10th most exported Kansas products respectively. Japan was the largest importer of Kansas food products in 2014, followed by Mexico and Canada.

Agricultural products went from the sector with the most export sales in 2013 to third in 2014. Approximately \$2 billion in export sales were recorded in this sector, a decrease of \$641 million, or 24.5 percent. Drought related declines in wheat and soybean exports are to blame for the decline in this sector. Wheat still recorded the second highest export sales of any product in 2014, with \$1 billion in sales, yet this was a decrease from \$1.4 billion in 2013. Soybean sales declined \$452 million in 2014, to \$398 million, but still remained fourth in export sales among products. On a positive note, grain sorghum (milo) export sales tripled from 2013 to 2014, and corn export sales experienced a slight increase. Mexico was the largest importer of Kansas agricultural products in 2014, followed by China and Brazil.

Table 21 shows the countries that imported the largest dollar amount of goods and services from Kansas. Canada was the state’s largest trading partner in 2014, importing approximately \$2.5 billion in goods and services. This is a 3 percent decrease from 2013 to 2014. The top three sectors exporting products to Canada were machinery, except electrical manufacturing, transportation equipment manufacturing and food manufacturing. These sectors made up 56.2 percent of export sales to Canada.

Mexico imported the second largest amount of Kansas products in 2014 at nearly \$1.8 billion in sales. Mexico imported \$250 million more of Kansas products in 2014. The 16.3 percent increase is the largest of any country. About 75 percent of the Kansas products Mexico imports comes from one of three sectors: agricultural products, transportation equipment manufacturing and food manufacturing. A majority of the increase is from a \$204 million increase in exports of transportation equipment to Mexico.

“ Canada was the state’s largest trading partner in 2014, importing approximately \$2.5 billion in goods and services. ”

China was the third largest importer of Kansas products in 2014, with approximately \$1.2 billion in sales. However, this is a decrease of \$537 million, or 31.5 percent, from 2013. Almost the entire decline was from a drop in agricultural products exported to China. China still imported \$366 million in agricultural products, the second highest amount of any country, and also recorded a high level of imports of manufactured food and beverage and tobacco products.

**Table 21** **Top Export Countries**

	Total Exports
Canada	\$2,526,987
Mexico	\$1,783,343
China	\$1,166,315
Japan	\$828,102
Brazil	\$541,647
United Kingdom	\$519,898
Germany	\$335,279
Nigeria	\$282,481
France	\$261,160
South Korea	\$237,285

*Note: Data is in Thousands  
Source: U.S. Department of Commerce, Office of Trade and Industry Information*

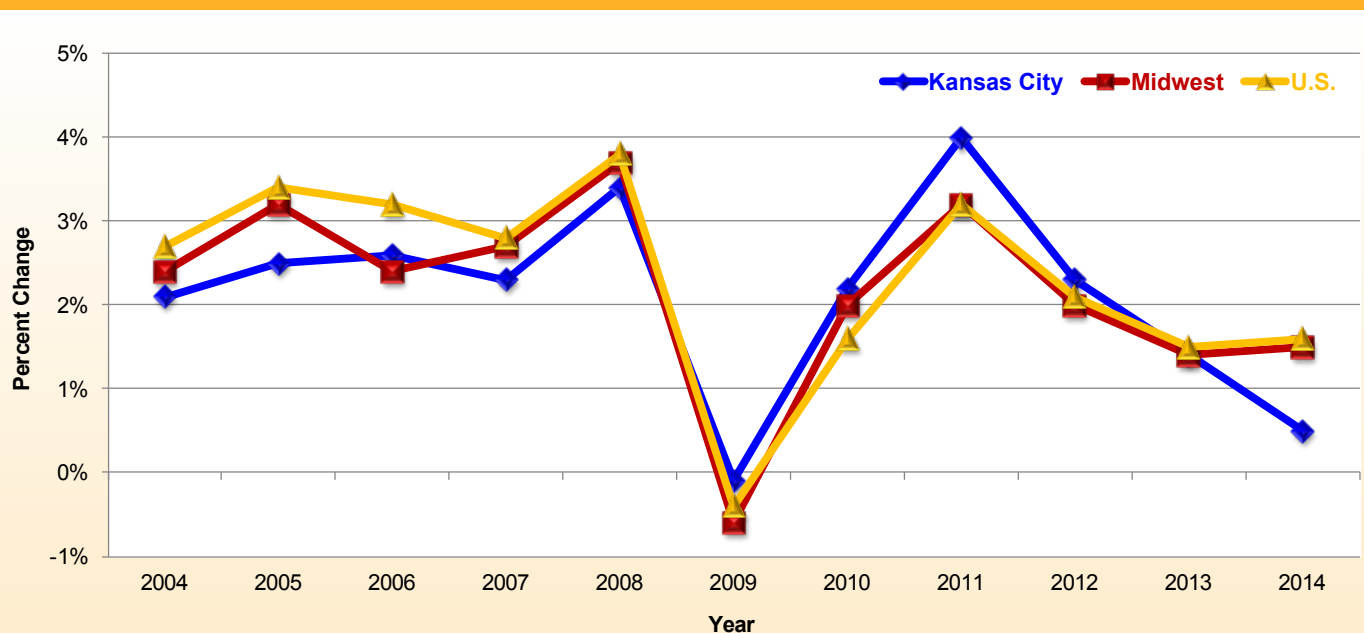
# Inflation & Wages

## Consumer Price Index

The Consumer Price Index (CPI) is a measure of inflation published by the U.S. Bureau of Labor Statistics. It is based on the prices of goods and services commonly purchased by families. The most general measure of the CPI is the CPI-U, which is the CPI of all urban consumers. CPI-U is the most commonly used measure of inflation.

Chart 23 indicates the percent change in the CPI-U of three different areas; the U.S., the Midwest region – including Kansas and 11 other states – and the Kansas City MSA. The chart shows that since 2004, inflation in all three areas has generally followed the same trend, with each area recording average annual inflation within 0.2 percent of one another. In 2014, the U.S. and Midwest CPI-U increased by 1.6 percent and 1.5 percent respectively, while the Kansas City MSA CPI-U only increased 0.5 percent. This is the lowest inflation experienced in the Kansas City MSA since 2009 when negative inflation, or deflation, occurred.

**Chart 23** Percent Change in Consumer Price Index



Source: Bureau of Labor Statistics, Consumer Price Index

As shown in *Table 22*, the low inflation in 2014 is due to deflation in five of the eight goods and services measured. Comparatively, the Midwest had deflation in two categories in 2014 and the U.S. only had deflation in one category.

**Table 22** ▶ **Percent Change in Consumer Price Index by Category, 2014**

Category	Kansas City	Midwest	U.S.
Food & Beverages	3.0%	2.5%	2.3%
Housing	1.4%	2.2%	2.6%
Apparel	-2.8%	0.7%	0.1%
Transportation	-1.7%	-1.2%	-0.7%
Medical Care	-0.5%	3.0%	2.4%
Recreation	-0.7%	-0.1%	0.2%
Education & Communications	-1.4%	1.6%	1.2%
Other Goods & Services	0.9%	1.6%	1.8%

*Source: Bureau of Labor Statistics, Consumer Price Index*

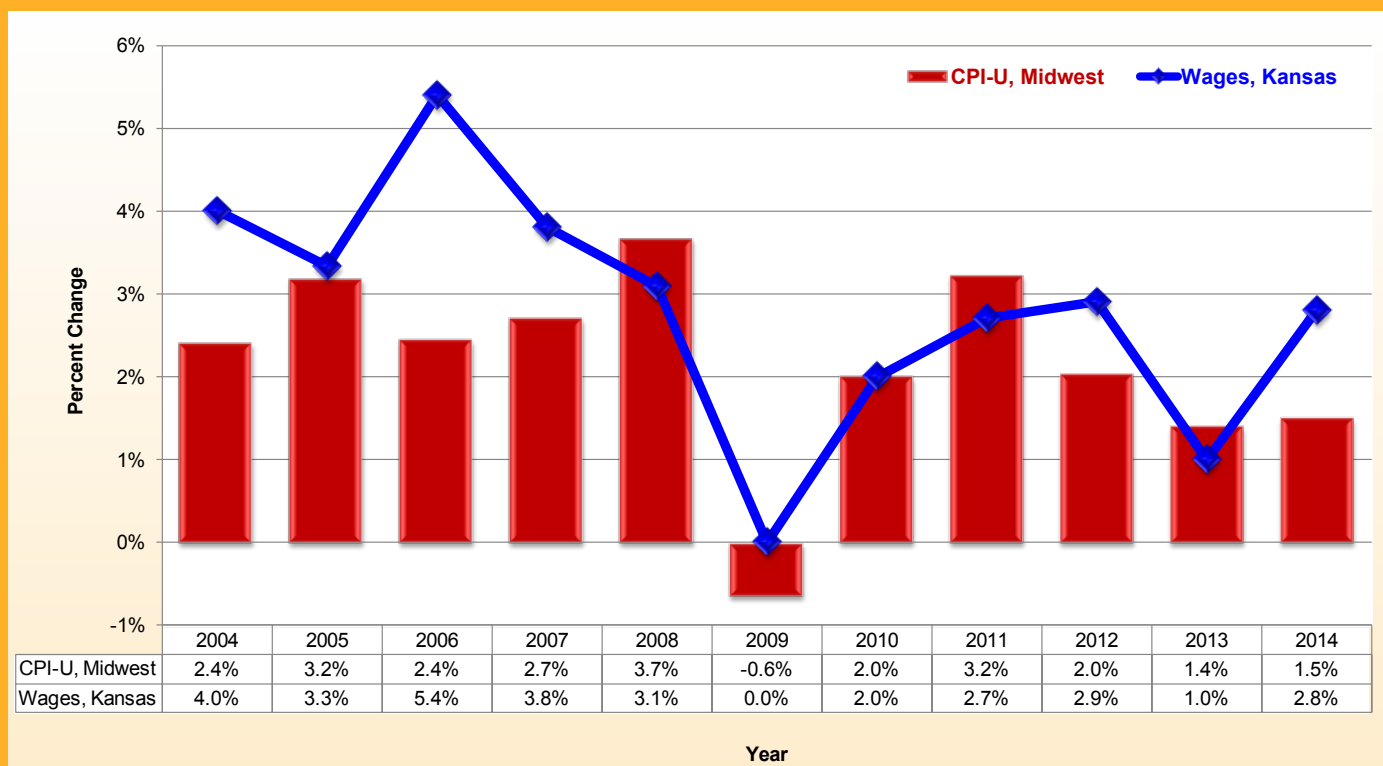


# Wages

Wages and salaries accounted for 49 percent of the total personal income in Kansas in 2014, and help determine the health of the economy. Inflation can erode customer purchasing power. Therefore, real wages and salaries which account for inflation, provide better estimates of economic health. *Chart 24* compares percent changes in wages and inflation from 2004 to 2014 in Kansas. In 2014, the average weekly wage in Kansas rose to \$821, an increase of 2.8 percent from 2013. Nationwide, the average weekly wage improved to \$988, an increase of 3.1 percent. When accounting for the 1.5 percent inflation in the Midwest region, the real average weekly wage in Kansas improved by 1.3 percent. The national real average weekly wage increased by 1.5 percent in 2014.

“ In 2014, the average weekly wage in Kansas rose to \$821, an increase of 2.8 percent from 2013. ”

**Chart 24** Percent Change in Consumer Price Index & Wages



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Quarterly Census of Employment and Wages, and Consumer Price Index

# Economist Note

## Measuring Wage Growth in Kansas

2014 was a positive year for wage growth for Kansas workers. On average, the weekly wage increased \$22 or 3 percent over the year. The average weekly wage (AWW) is a product of the average rate of pay multiplied by the average number of hours worked in the week. AWW is important in understanding the demand for labor, it is also used to understand the current condition of the labor market. The AWW is a good indicator of how much workers have to spend on goods and services.

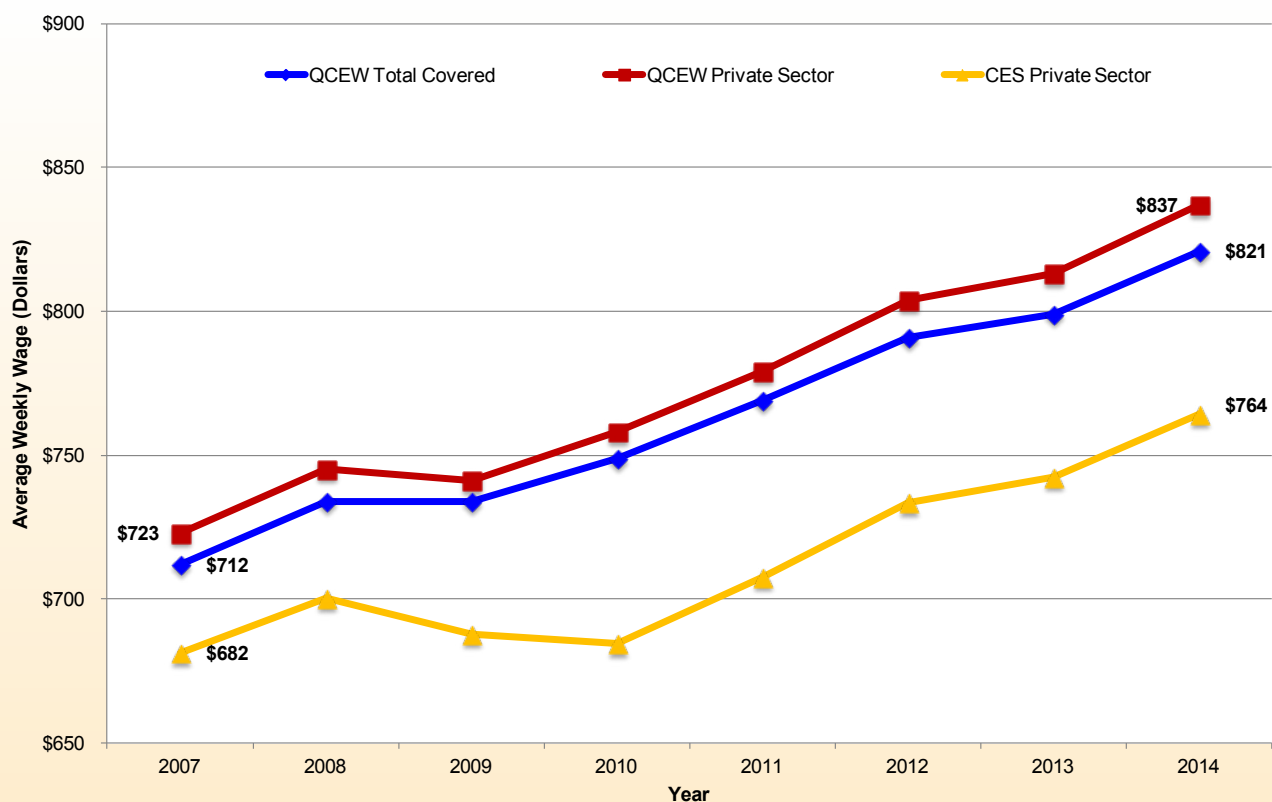
AWW helps explain the demand for labor because employers may control labor costs by scheduling employees to work an increased number of hours, particularly when the demand for labor is high. Alternately employers may schedule fewer hours, instead of decreasing their hourly rate of pay.

Wage data is collected by the Kansas Department of Labor (KDOL) and the Bureau of Labor Statistics (BLS) from two sources: the Current Employment Statistics (CES) survey and the Quarterly Census of Employment and Wages (QCEW). CES data is collected through a survey of employers conducted by BLS and is available the month following data collection. CES has the most recent available wage data for the statewide area. KDOL compiles the QCEW data through unemployment insurance (UI) tax records. Since employers only have to report tax information quarterly, the data is not as timely, though it is more accurate because it is not survey based. QCEW data is released approximately six months after the raw data is collected.

Additional differences are found in the sources of the data. For example, Kansas statute determines which employers are covered by UI and compiled in the QCEW program. QCEW includes private household workers, as well as many agricultural employees in the state. These groups are not measured in the CES program, but CES does include groups that are not part of QCEW. Included in CES are elected state and local workers, railroad employees, commissioned real estate and insurance agents, university student workers and non-profit employees. Overall, CES represents a broader section of employment in the state. At the end of 2014, CES employment outnumbered QCEW by 34,788.

## Chart 25

## Private & Total Average Weekly Wage, Kansas



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Quarterly Census of Employment and Wages and Current Employment Statistics

Chart 25 shows the AWW data available from both sources for the state of Kansas. There are two comparisons worth noting: QCEW private sector versus CES private sector, and the other comparison is QCEW total versus QCEW private sector. QCEW private sector data shows the AWW in 2014 was \$837 and CES private sector reports it was \$764. The difference is due to the two programs reporting on different sets of employers.

The chart also compares QCEW total with QCEW private sector wages. The AWW of total employees is typically just below the wage of the private sector. This indicates weekly wages are higher in the private sector than in the public, though they follow similar trends.

**Table 23** Nominal Private Sector Average Weekly Wages

	U.S.	Kansas	Nebraska	Missouri	Oklahoma	Colorado
<b>2007</b>	\$724	\$682	\$667	\$681	\$607	\$807
<b>2008</b>	\$744	\$700	\$667	\$710	\$618	\$828
<b>2009</b>	\$752	\$688	\$680	\$710	\$634	\$816
<b>2010</b>	\$770	\$684	\$712	\$719	\$683	\$816
<b>2011</b>	\$792	\$708	\$711	\$721	\$720	\$826
<b>2012</b>	\$810	\$734	\$712	\$743	\$740	\$861
<b>2013</b>	\$825	\$742	\$715	\$752	\$742	\$892
<b>2014</b>	\$845	\$764	\$728	\$752	\$758	\$907
<b>Over the Year Percent Changes</b>						
	U.S.	Kansas	Nebraska	Missouri	Oklahoma	Colorado
<b>2007</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>2008</b>	2.7%	2.7%	-0.1%	4.2%	2.0%	2.6%
<b>2009</b>	1.1%	-1.8%	2.0%	0.0%	2.5%	-1.5%
<b>2010</b>	2.4%	-0.5%	4.7%	1.2%	7.7%	0.0%
<b>2011</b>	2.8%	3.4%	-0.2%	0.4%	5.5%	1.3%
<b>2012</b>	2.4%	3.7%	0.2%	3.0%	2.7%	4.2%
<b>2013</b>	1.8%	1.2%	0.4%	1.2%	0.3%	3.6%
<b>2014</b>	2.4%	3.0%	1.8%	0.0%	2.0%	1.7%

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics

QCEW data is helpful for historical analysis on a state level. However, the preferred measure for comparing states is CES private sector data. Comparing QCEW data between states is not suggested because the group of employers covered under UI laws are different based on the differences in UI laws between states. For CES, BLS ensures comparable samples among states in the survey. Table 23 shows CES private sector weekly wages for the United States, Kansas and its neighboring states.

In 2007, the AWW in the U.S. was \$724 per week. In the five state region, Colorado, at \$807, is the only state that reported a higher wage than the national average. Kansas was second with an AWW of \$682, which was slightly higher than Missouri. From 2007 to 2014 wages grew at an average annual rate of 2.2 percent in the nation, while Kansas grew at the average rate of 1.7 percent per year. Through 2014 Kansas showed strong growth and was slightly behind Oklahoma and on par with Colorado. Before the recession Kansas had near equal wages with Missouri and throughout the recession trailed the state, however in 2014, Kansas jumped ahead of Missouri by 1.6 percent.

Raw or nominal AWW data from QCEW and CES tells only part of the story about how much workers have to spend on goods and services. Another factor to consider is the rate of inflation and how it affects real wages. Workers in Kansas have realized increased weekly wages since 2007; but they have also seen increasing prices for the goods they purchase. Real wages are determined by adjusting nominal wages by the rate of inflation.

Chart 26 shows the unadjusted private sector AWW and the inflation-adjusted wages. Adjusting nominal wages for inflation shows that, like in many areas, real wages in Kansas declined from 2007 to 2014. But, from 2011 to 2014, a trend of real wage gains is seen.

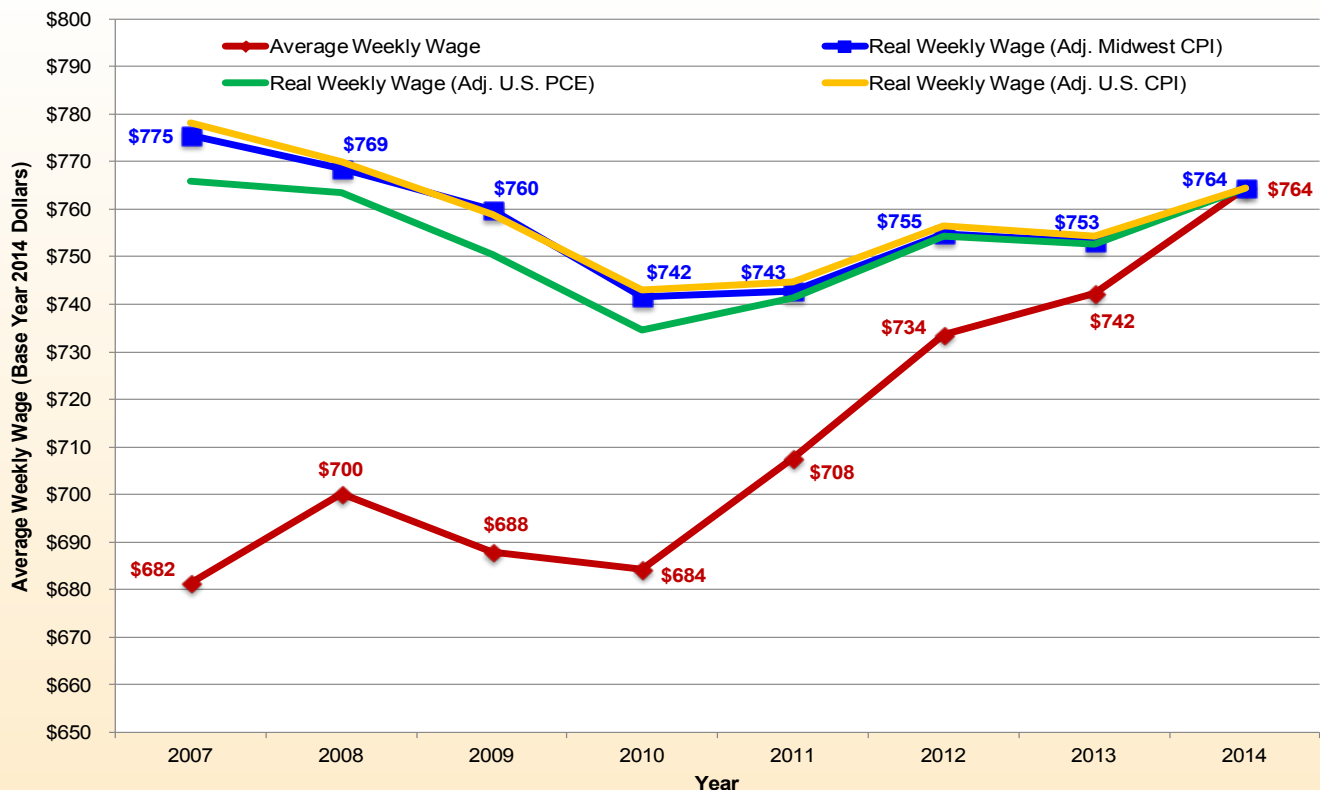
The chart uses three sources of inflation to adjust wages: these are Consumer Price Index (CPI) for the U.S.; the Midwest Urban CPI; and the Personal Consumption Expenditure (PCE) from the Bureau of Economic Analysis. The CPI and PCE measure price increases from different perspectives. The CPI measures the change in the price of goods and services paid for by an average consumer. The PCE measures prices paid by consumers, employers, and the government.

One example of how the same service is measured differently is medical services. The CPI only measures changes in the price of out of pocket expenses paid at the doctor's office, such as co-pays. The PCE measures the full price of the same service, including the full expenses the insurance company pays. If the federal government paid all or a portion of the medical cost, that amount is also measured.

The Board of Governors of the Federal Reserve System (Fed) is tasked with managing the rate of price inflation using short-term interest rates. Currently, the Fed is considering raising short-term interest rates by the end of 2015. The Fed has indicated the health of the labor market will be a driving factor in deciding when and how frequently interest rates will be raised. The Fed has used the PCE along with the CPI when analyzing real wages in the United States. Thus both measures should be considered.

**Chart 26**

## Nominal & Real Private Sector Wages, Kansas



Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics and Consumer Price Index; Bureau of Economic Analysis, Personal Consumption Expenditures

Similar to how QCEW and CES gather data in different manners, PCE and CPI also collect data differently. The CPI uses data collected in the Consumer Expenditure Survey. The PCE measure collects data from the businesses that provide these services instead of from the consumer, therefore it includes the amount paid by all parties. In the medical services example, PCE data is collected from the doctor's office, instead of from the patient, as it is in CPI.

Table 24 shows the private sector AWW for the U.S., Kansas and its surrounding states, as adjusted for their respective regional CPI. Kansas, Nebraska and Missouri are all in the Midwest region, while Colorado is in the West region and Oklahoma is in the South region.

After adjustment, all the areas grew at a slower pace than when compared to nominal wage growth. The data indicates that workers did not experience increased purchasing power in the last seven years, even though nominal wages increased. The lack of real wage growth over this time period is not unexpected considering the state of the global economy as the Great Recession started in December 2007. Demand for labor fell during this time as employers experienced sharp decreases in demand for their products and services. Many workers found themselves out of work, leading to high levels of unemployment and low wages.

**Table 24** Real Private Sector Average Weekly Wages

	U.S.	Kansas	Nebraska	Missouri	Oklahoma	Colorado
<b>2007</b>	\$827	\$775	\$759	\$775	\$698	\$914
<b>2008</b>	\$818	\$769	\$732	\$779	\$683	\$905
<b>2009</b>	\$830	\$760	\$752	\$784	\$703	\$895
<b>2010</b>	\$836	\$742	\$772	\$779	\$745	\$886
<b>2011</b>	\$833	\$743	\$746	\$757	\$760	\$873
<b>2012</b>	\$836	\$755	\$733	\$765	\$764	\$890
<b>2013</b>	\$838	\$753	\$726	\$763	\$755	\$909
<b>2014</b>	\$845	\$764	\$728	\$752	\$758	\$907

**Over the Year Percent Changes**

	U.S.	Kansas	Nebraska	Missouri	Oklahoma	Colorado
<b>2007</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>2008</b>	-1.1%	-0.9%	-3.6%	0.6%	-2.1%	-0.9%
<b>2009</b>	1.5%	-1.1%	2.7%	0.7%	2.9%	-1.1%
<b>2010</b>	0.7%	-2.4%	2.7%	-0.7%	5.9%	-1.0%
<b>2011</b>	-0.3%	0.2%	-3.4%	-2.8%	2.0%	-1.5%
<b>2012</b>	0.3%	1.6%	-1.8%	1.0%	0.6%	2.1%
<b>2013</b>	0.3%	-0.2%	-0.9%	-0.2%	-1.2%	2.1%
<b>2014</b>	0.8%	1.5%	0.3%	-1.4%	0.3%	-0.2%

Note: The base year is 2014.

Source: KDOL Labor Market Information Services and the Bureau of Labor Statistics, Current Employment Statistics and Consumer Price Index



Despite an overall decrease in real wages since 2007, Kansas real wages have grown since 2010. Among surrounding states that are in the Midwest region, Kansas was first in AWW in 2014. Compared to all of its bordering states, Kansas was second, just behind Colorado.

**“ The \$11, or 1.5 percent increase in real average weekly wage was better than every surrounding state and the U.S. as a whole. ”**

Over the last seven years, nominal AWWs in Kansas have increased by an average annual rate of 1.7 percent. This growth is slightly slower than the growth in the price of goods and services, measured by the CPI. After adjustment for inflation, wages have fallen slightly by 0.2 percent on average annually since 2007. Four out of five states experienced declines since 2007. Real wages have grown in Kansas for three of the past four years. In particular, 2014 saw notable growth. The \$11, or 1.5 percent, increase in real average weekly wage was better than every surrounding state and the U.S. as a whole. It is a positive sign for Kansas workers that 2014 saw strong real wage growth.

The rate of inflation, coupled with the AWW, continues to be an issue in the discussion about the health of the economy in the United States. Hopefully this note provides a better understanding of the issue. For more information, please visit our website at [www.klic.dol.ks.gov](http://www.klic.dol.ks.gov), or contact us at 785-296-5000.

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