OKLAHOMA ECONOMIC OUTLOOK: 2017-2018

A Review of Economic and Fiscal Conditions in the U.S., Oklahoma, and Oklahoma City

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Introduction

Both empirical and anecdotal evidence confirms Oklahoma's economic reality as an energy state. This reality, however, occasionally leads casual observation to give too much credit to the state's oil and gas sector in determining economic outcomes. Such was the case in 2016. Energy industry activity peaked in the fall of 2014 and contracted sharply through the fall of 2015. The pace of contraction ameliorated in early 2016 and formed a bottom by summer. Industry activity has since improved modestly with cautious optimism guiding expectations for 2017. The Bank SNB Oklahoma Energy Index created and maintained by Oklahoma City University in partnership with the Oklahoma Independent Petroleum Association summarizes the state's recent oil and gas experience.

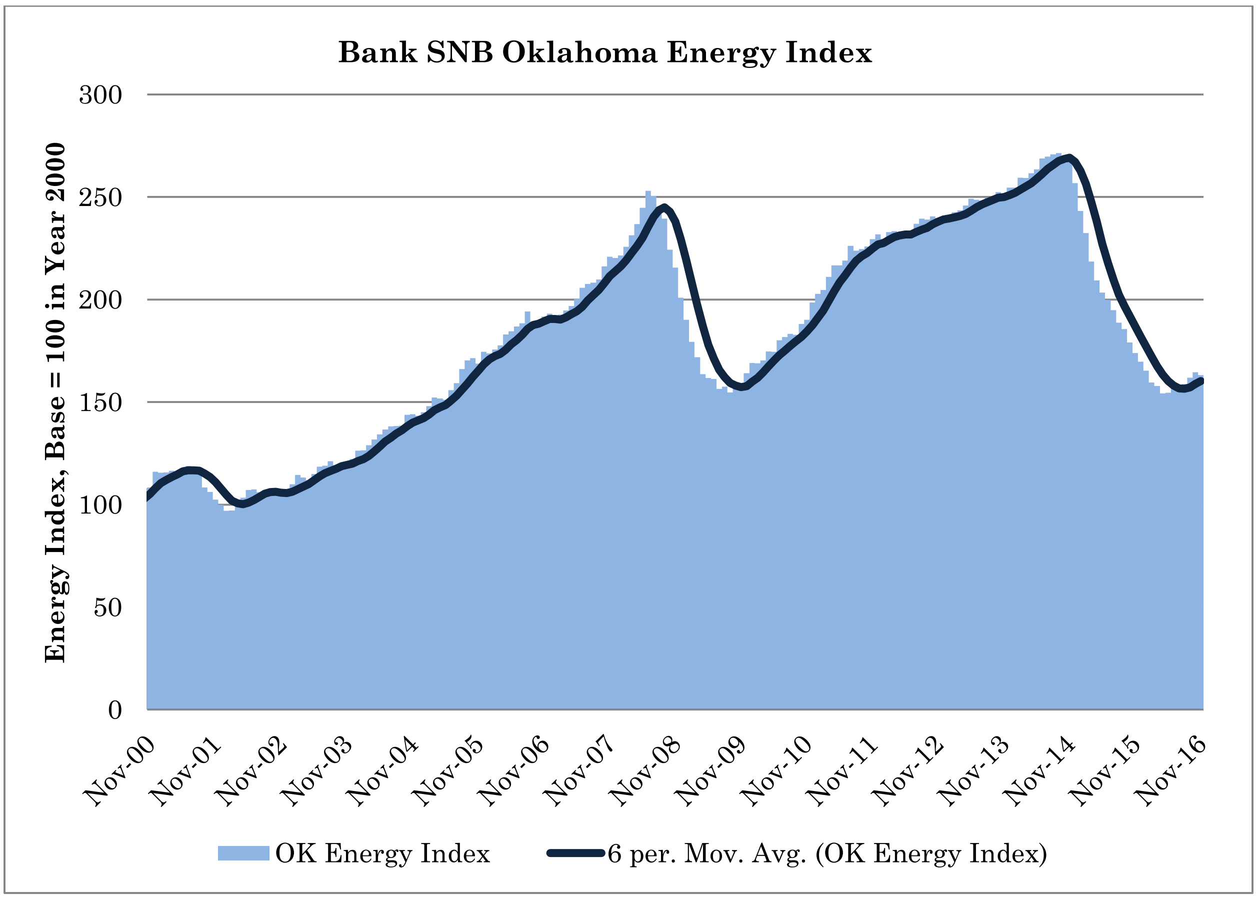
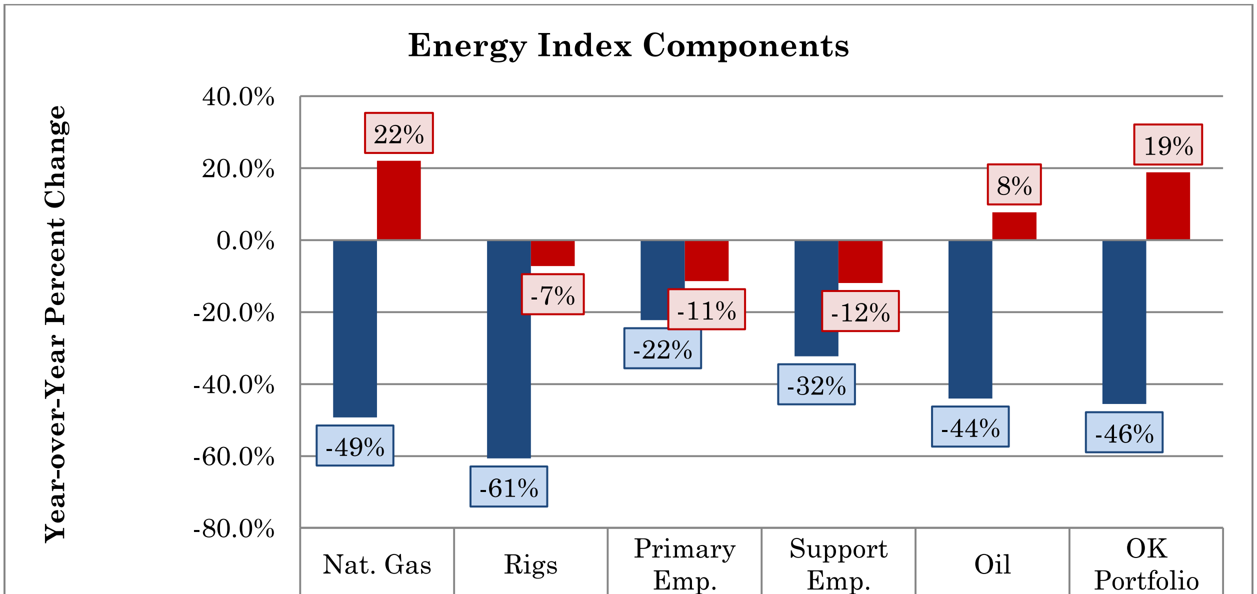


Figure 1: ***Bank SNB Oklahoma Energy Index: 2000-2016***

Although it has been said repeatedly, it is worth emphasizing again the severity of the industry contraction. The bust was greater in both magnitude and duration than the experience of the great recession and the influence of an inventory of drilled but uncompleted wells combined with only modest growth in global energy demand make an imminent return to boom conditions unlikely. Rather, the expectation is that 2017 marks a year of persistent but modest recovery.



	Nat. Gas	Rigs	Primary Emp.	Support Emp.	Oil	OK Portfolio
Y/Y Change 2015	-49.3%	-60.7%	-22.2%	-32.3%	-44.0%	-45.6%
Y/Y Change 2016	22.0%	-7.2%	-11.4%	-11.9%	7.7%	18.8%

Figure 2: ***Energy Index Components, Y/Y Growth***

Comparing the fall of 2014 to subsequent years illustrates the depth of the contraction. Through November 2015 all index components were down significantly led by a 61% drop in rig activity, commodity prices and Oklahoma equity valuations that fell nearly by half, and employment contractions of 22% in energy employment and 32% in energy support employment. In contrast, moving from November 2015 to November 2016 saw natural gas prices rise by 22% and oil prices by 8%. Oklahoma equity valuations were up 19%. Employment is still down year-over-year but up from the lows set in the summer of 2016. The weakness experienced in local economies in 2016 cannot be explained by energy sector weakness alone.

U.S. economic activity as measured by gross domestic product can be calculated either by adding together expenditures on final goods and services or by adding together all income and profit streams (the expenditure and income approach to calculating GDP). Taking the expenditure approach, GDP can be decomposed into sales to domestic purchasers (households, firms, and governments), sales to foreign purchasers (net exports) and internal sales to the producer (change in private inventories). As GDP is measured at the point of production rather than the point of sale, goods produced but unsold are treated as imputed purchases to the producer who holds product in inventory to be sold at a later date. Inventories generally follow a natural ebb and flow cycle as inventory accumulation in one period prompts a slowdown in the next period's production as producers work to draw down existing inventory before rebooting the production process. In periods of recession, however, working through existing inventory can take longer, leading to a prolonged period of suppressed production. The U.S. economy experienced an inventory cycle consistent with a modest recession that began in the second quarter of 2015 and continued through the second quarter of 2016. The average annual rate of growth in the U.S. economy over this period was just 1.5%.

Heading into 2016 the baseline expectation was for slow U.S. growth, but not nearly as slow as recorded in the first half of the year. Inventory drawdown in the latter half of 2015 was expected to yield to modest production increases in early 2016. Instead, production slowed further as firms slowly worked through existing inventory. U.S. economic growth in the first half of the year struggled to top 1% and is not expected to reach 2% for the year even with some second half strength.

The local impact of a marked slowdown in national conditions when already fully exposed by a regional oil bust mirrored that of a mild recession. That is, rather than hold steady with energy industry activity, statewide labor market and fiscal outcomes experienced a second round of contractions.

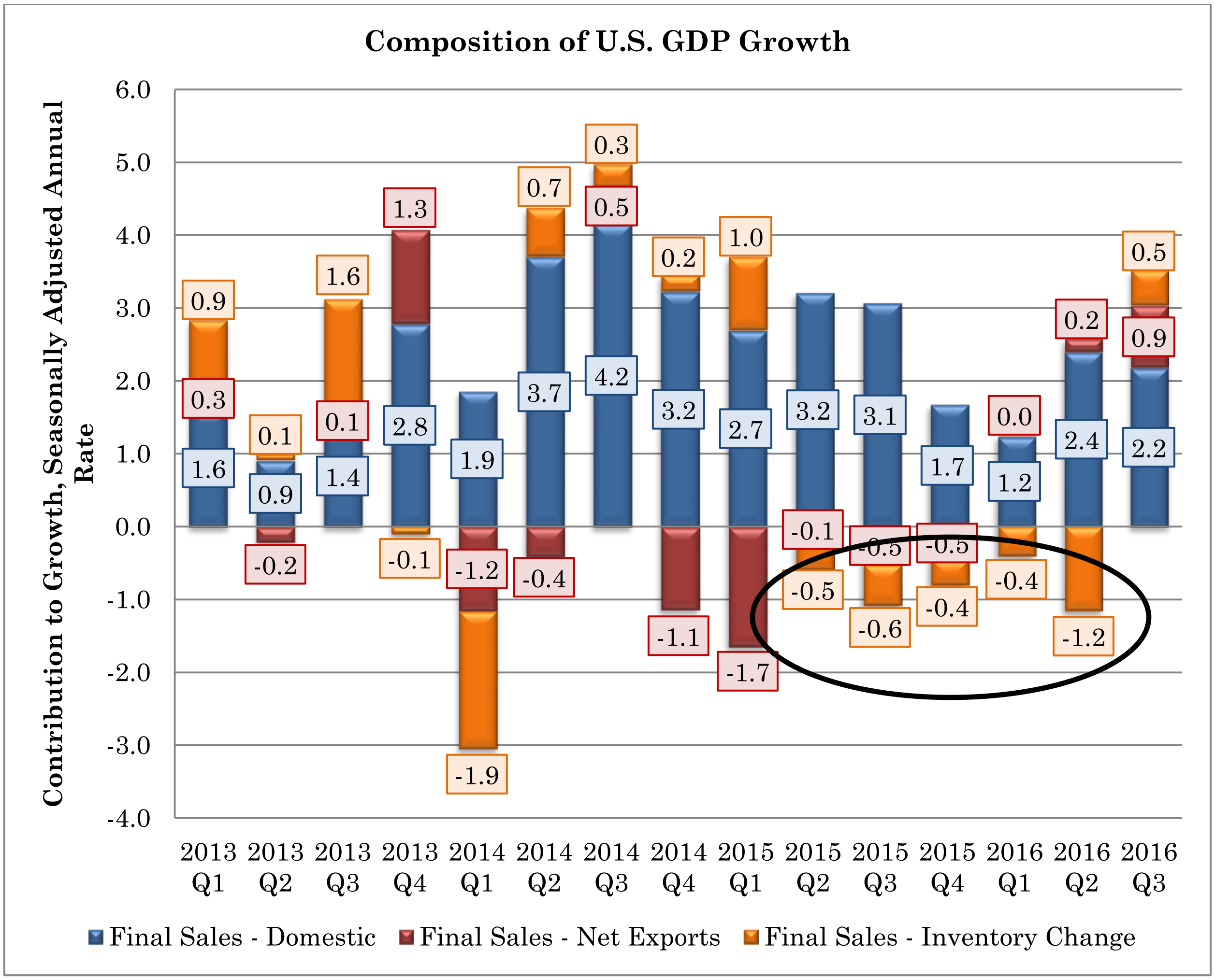


Figure 3: *Composition of U.S. Growth – Inventory Cycle Highlighted*

In both the state and city economy, the effect of the inventory cycle headwind was stronger than any developing tailwind from a stabilizing oil and gas sector. The result was a second wave of labor market challenges. Private payroll employment growth at both the state and city level stalled with peak activity in the oil and gas sector. Statewide employment contracted modestly through 2015 while Oklahoma City employment moved laterally (highlighted as the commodity cycle in figure 4). As 2015 turned to 2016, both the state and city were in an economically weakened condition when confronted with a recession-like inventory adjustment cycle. The effect of which was declining payroll employment in both economies (highlighted as the inventory cycle in figure 4).

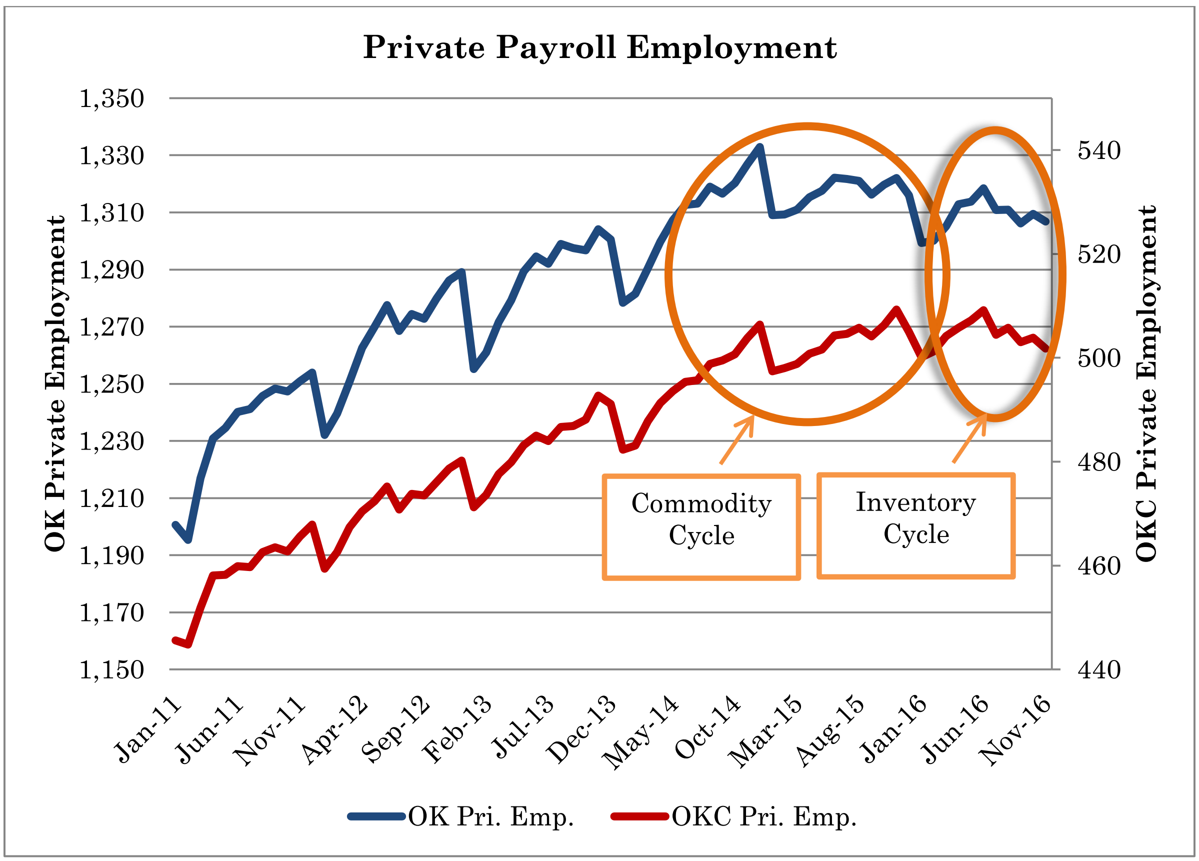


Figure 4: ***Oklahoma and Oklahoma City Private Employment***

The dual cycle influence in also seen in average weekly earnings data. The effect of the commodity cycle was to force from the labor market disproportionately high wage jobs in the oil and gas sector causing the all private sector average to contract. The effect of the inventory cycle, however, was to force from the labor market a mix of low income jobs from the goods producing (primarily manufacturing) sector causing the all private sector average weekly earnings to expand. While initially seen as a source of economic strength, the growth in average wages belied a labor market contraction.

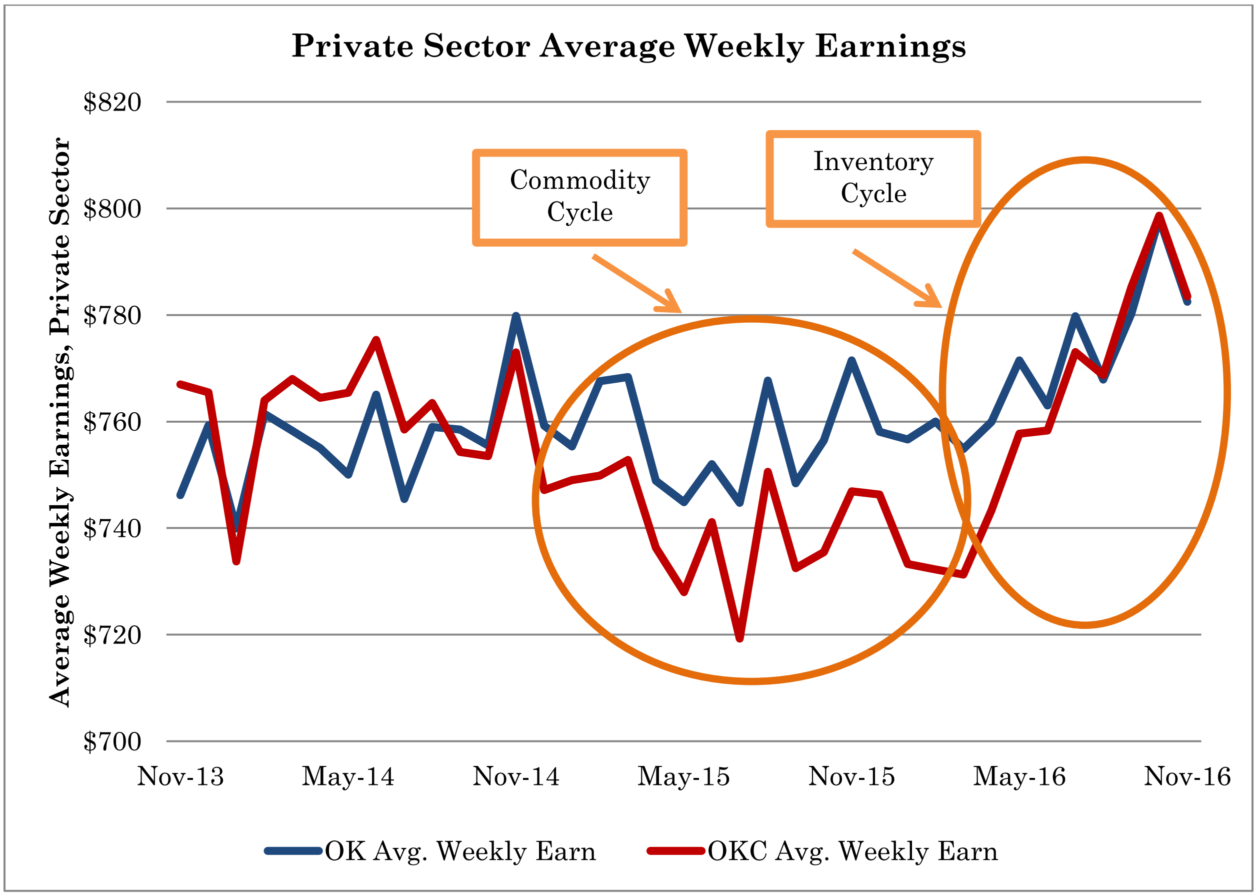


Figure 5*: Oklahoma and Oklahoma City Average Weekly Earnings*

The impact of the inventory cycle following closely the bottom of the commodity price cycle exerted different impacts in the goods and services producing sectors of the economy. In the services sectors, the commodity cycle dampened the rate of growth (flattened the trend) through 2015 before yielding nearly all growth in 2016. In the goods producing sectors, employment tried to hold a bottom in late 2015 only to be turned lose again to the downside in 2016. Again, the Oklahoma experience in both of these sectors is very similar to what was experienced in both of the last two national recessions.

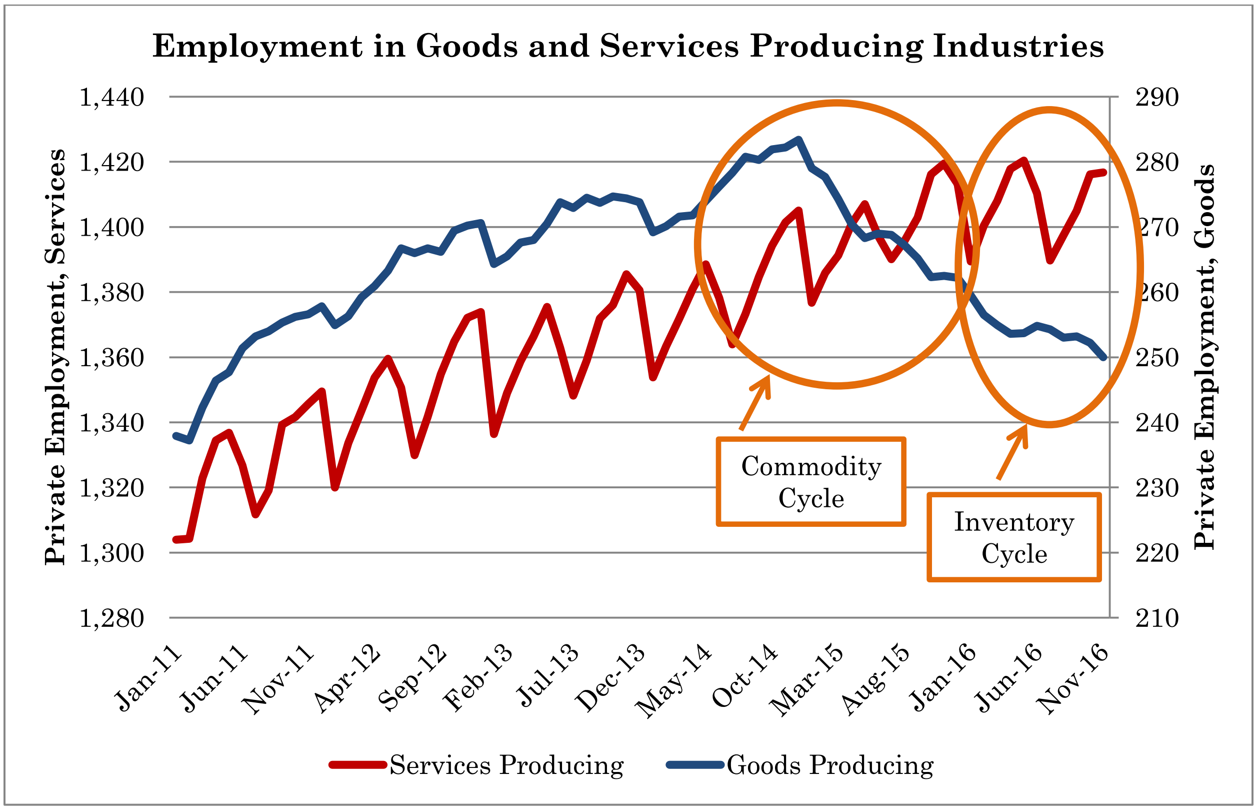


Figure 6: *Oklahoma Goods and Services Sector Employment*

The macroeconomic theme of 2016 was the pronounced, recession-like inventory cycle. That the inventory cycle followed so closely the energy sector bust left energy states like Oklahoma exposed to the full effect of national weakness. Indeed, the 2016 experience underscores how fortunate the state was to avoid an outright recession when so economically vulnerable.

The U.S. Outlook

Economic activity is expected to stabilize in 2015, expanding at an annual rate of just over 2% consistent with the post-recession recovery but still disappointing compared to pre-recession activity. The age and maturity of the current expansion indicate some risk of a developing recession, but moving out of the inventory cycle discussed previously should push any economic weakness into 2018 or beyond. Additional risks include lingering global economic weakness, political and regulatory uncertainty associated with an administration change, and rapidly shifting geopolitical relationships (particularly with regard to trade relationships).

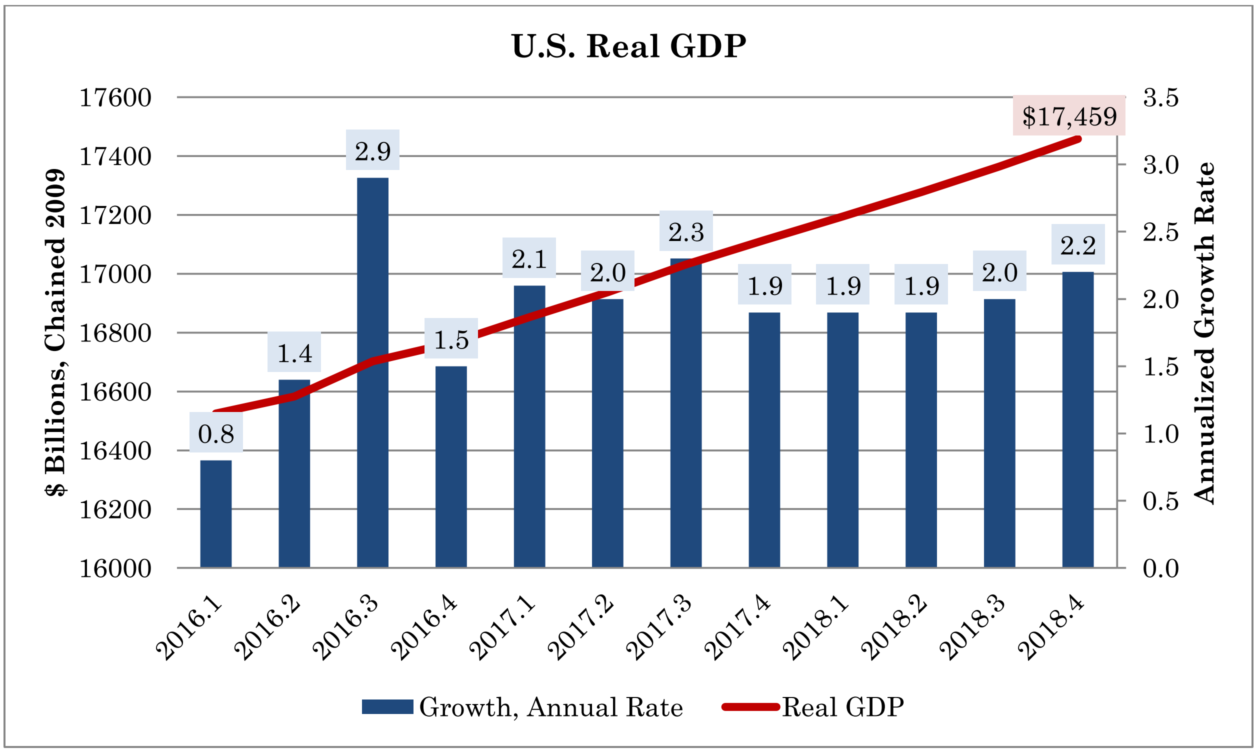


Figure 7: *U.S. Real GDP*

The U.S. labor market continues its slow but persistent move towards full employment. Improving labor market conditions likely signal at least two interest rates moves by the Federal Reserve in 2017. Importantly, a labor market at or near full employment also suggests that any large infrastructure initiative from the new administration would have a larger price effect (inflation) than employment effect (job creation). The U.S. labor market is expected to create an average of 175,000 new nonfarm jobs per month through 2017 with the unemployment rate trending slowly towards 4.5%.

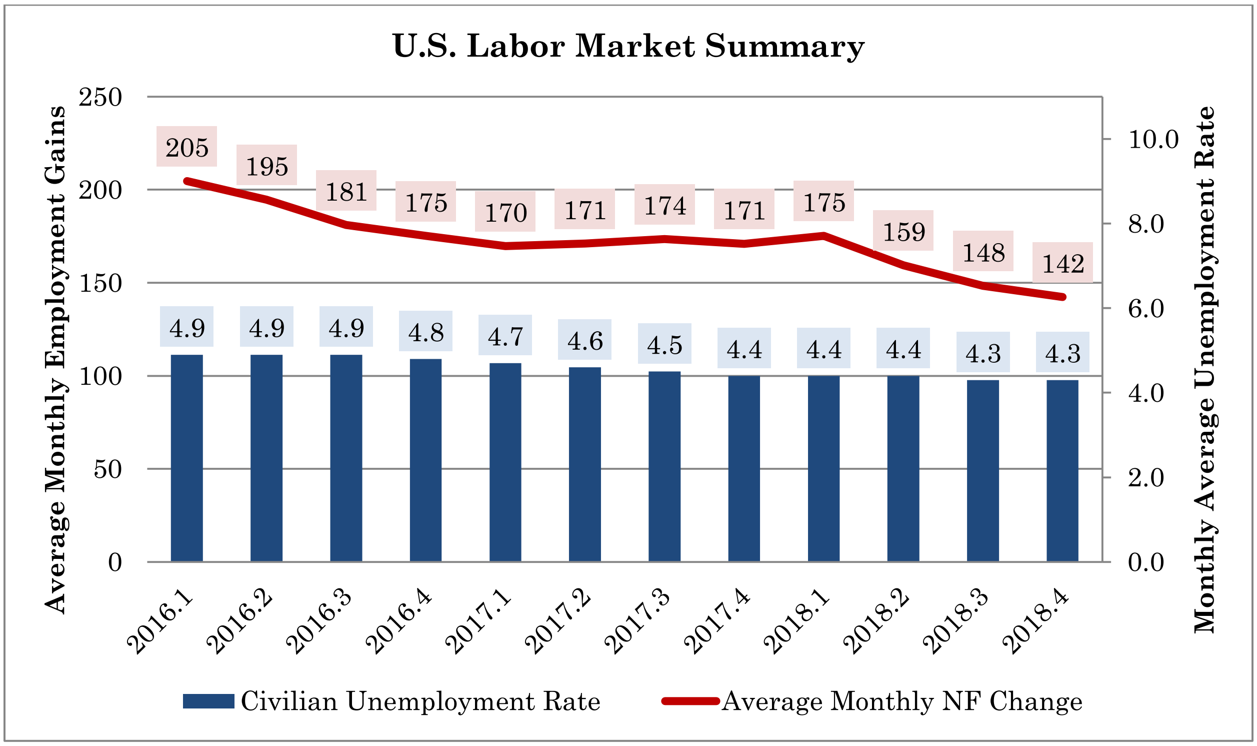


Figure 8*: U.S. Nonfarm Job Creation and Unemployment Rate*

Improving labor market conditions combined with modest inflationary pressures should give weight to the argument for less accommodative monetary policy. While the Federal Reserve remains dovish, a consensus seems to be emerging among policymakers that they must begin the process of monetary policy normalization. Exactly what normalization will entail remains to be seen and may include adjusting both the balance of assets and the size of the central bank's balance sheet. Any path to normalization likely begins with increases in the targeted federal funds rate. The baseline expectation is for two rate hikes in 2017, likely in the first and third quarters. The worst of the commodity price cycle has passed as prices of metals, agriculture products, and energy rise. The potential for acceleration in inflation is present (should global growth surprise to the upside) and would require the attention of policymakers if they are to maintain the stated inflation target of 2%.

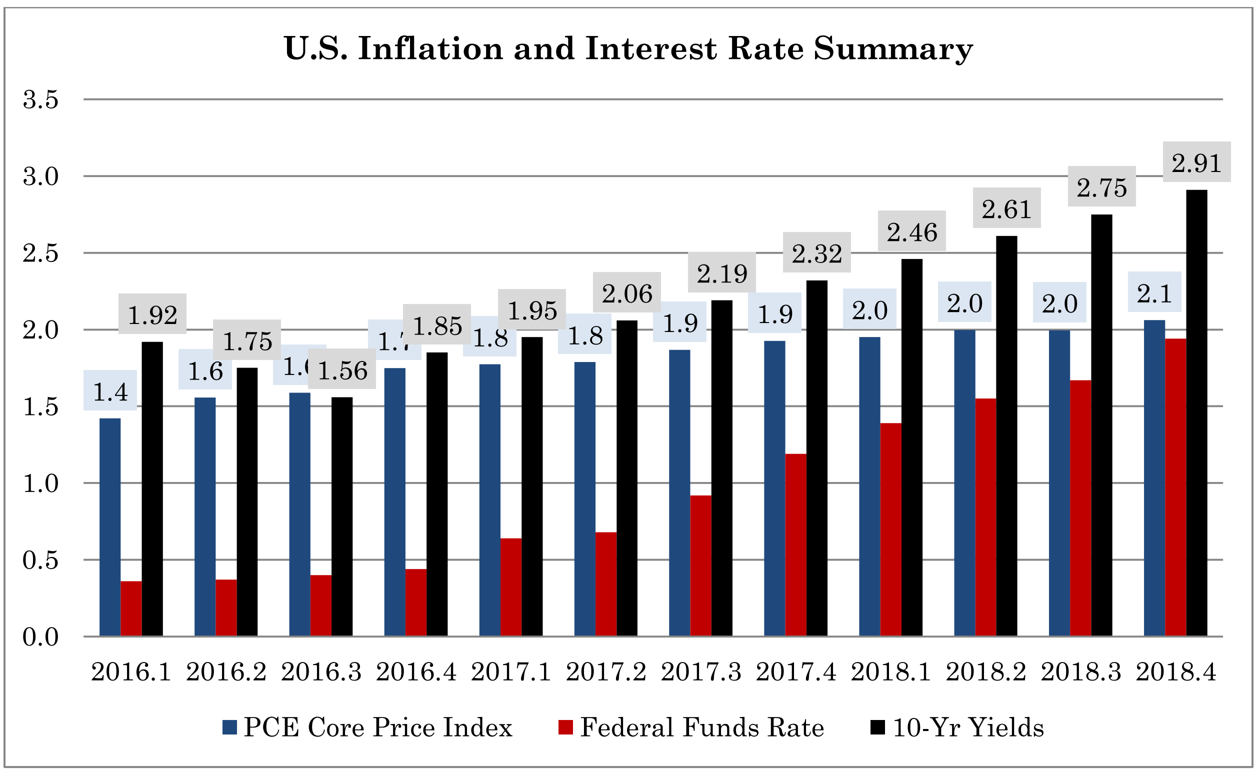


Figure 9*: U.S. Inflation, Interest Rates, and Monetary Policy*

The Oklahoma Outlook

A year ago the outlook for 2016 was described as a lateral move disguising a modest expansion in Oklahoma City offsetting a modest contraction in the rest of the state. This description proved largely correct. As discussed previously, however, the inventory adjustment cycle that crimped national activity imposed constraints on economic activity in the state. Oklahoma City managed only a lateral move insufficient to fully counter the contraction in the rest of the state. Average monthly nonfarm and private sector payrolls fell in 2016 with the state averaging 8,000 fewer private sector jobs in 2016 than 2015.

The year ahead is anticipated to be a year of recovery and economic improvement. The depth of the improvement will depend on how early in the year the state's economy transitions to strength and how strong the second half of the year proves to be.

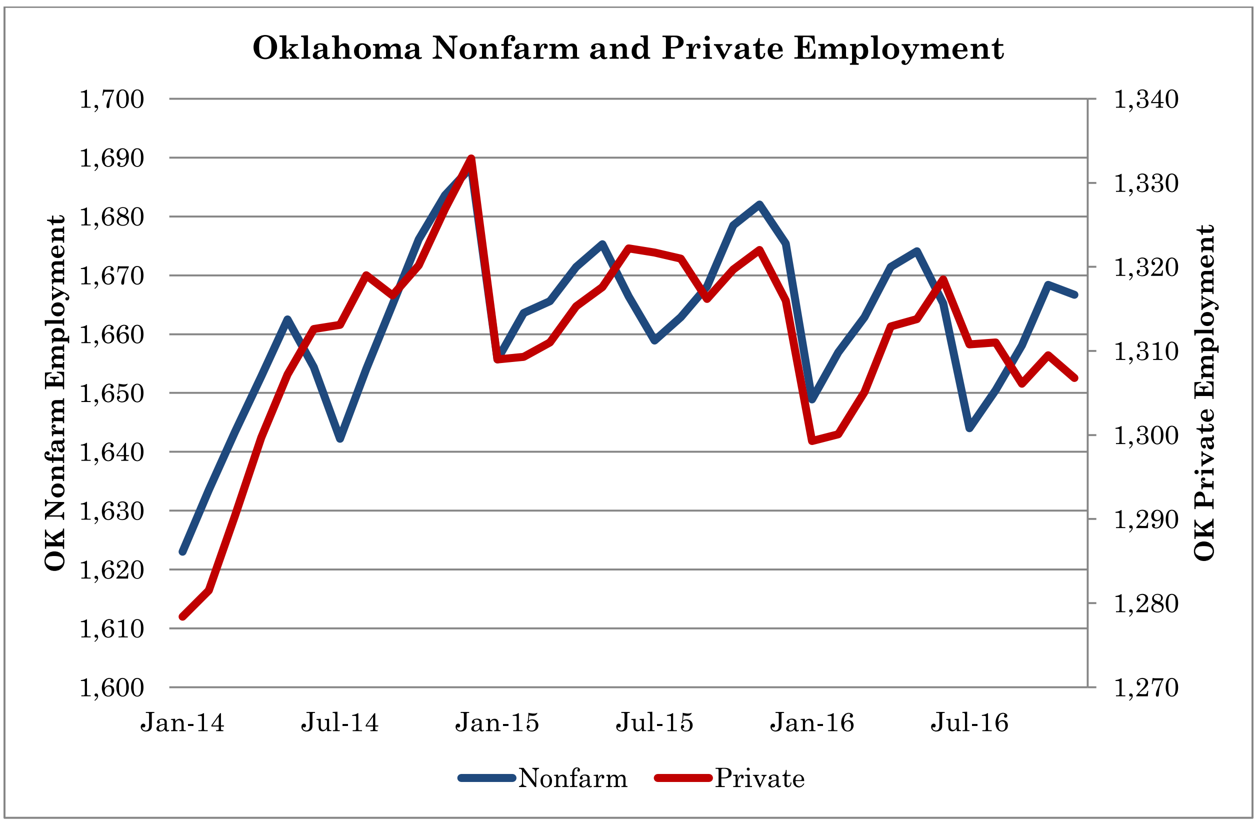


Figure 10*: Oklahoma Nonfarm and Private Employment*

National recessions are measured in terms of successive periods of declining gross domestic product. It is less clear, however, that gross production is the best proxy for a regional economy's health and therefore gross state (or metro) product may not be the appropriate measure of aggregate economic well-being. Instead, regional economists generally prefer measures of employment and income. Following the great recession that stretched from December 2007 through June 2009, Oklahoma suffered a state recession as both state GDP and employment contracted sharply. The state then enjoyed a period of prolonged growth from the middle of 2010 through 2014 before oil prices peaked and the recent downturn ensued. As measured by gross state product, the state suffered a recession very similar to the experience of 2009. As measured by employment, however, the state narrowly skirted a significant recessionary period and instead drifted laterally through much of 2016 and into 2017. Baseline expectations remain for the state's economy to turn in 2017, transitioning by the end of the year to a level of activity very close to full economic health.

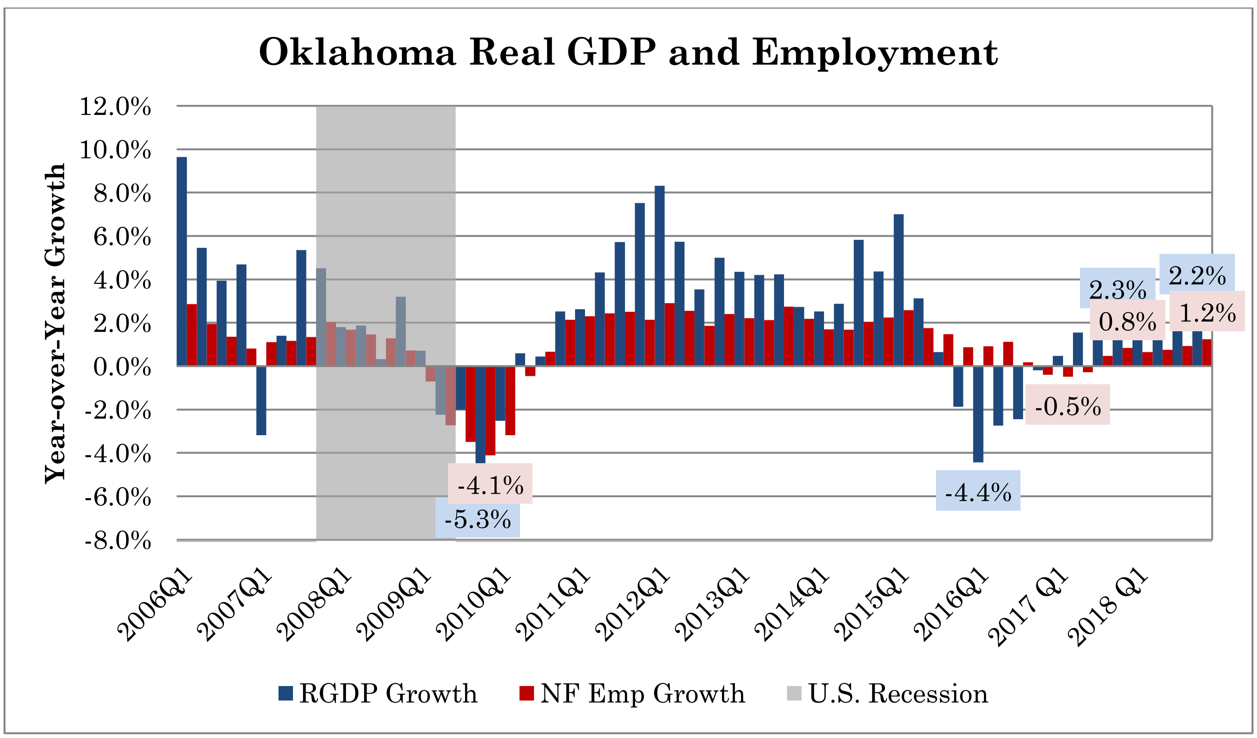


Figure 11*: Oklahoma Gross State Product and Nonfarm Employment*

The state's population currently stands at just under 4 million persons and continues to grow at annual rates just less than 1%. These population growth rates are expected to maintain, leading Oklahoma's population to break the 4 million barrier in the second half of 2018. The decline in commodity prices constrained an important source of income to many Oklahomans, curbing growth in income. Per capita income has stalled for several years and will enter the first quarter of 2017 at the same level as the last quarter of 2014. Per capita income is expected to return to growth in the latter half of 2017 and into 2018, reaching $47,690 by the end of the period.

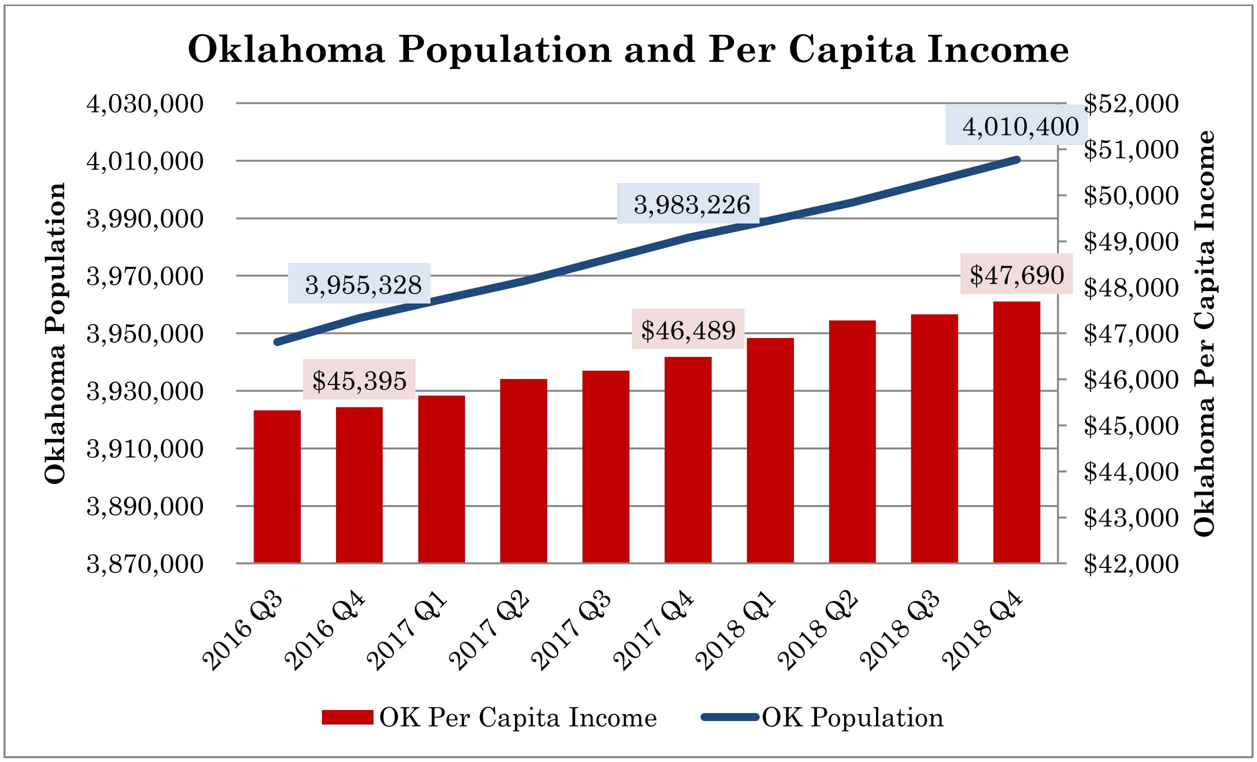


Figure 12*: Oklahoma Population and Per Capita Income*

The year ahead will be a year of transition. Both national economic conditions and activity in the oil and gas sector are improving in a transition to something that resembles full health. Just as the state's economy was hit by the dual headwinds in 2016, it should benefit from dual tailwinds in 2017. Increases in drilling activities combined with a return to inventory accumulation will arrest the contraction in goods producing sectors. Similarly, improving economic conditions combined with persistent population growth will support a return to growth in the service sectors. The year ahead will mark a transition from an economic reality that feels less than satisfying at the beginning of the year to an economic reality that feels decidedly (and refreshingly) healthy by year's end. The significance of the improvement will be obscured in the numbers as the second half of the year will offset the first half of the year leaving the average annual level of employment little changed from 2016.

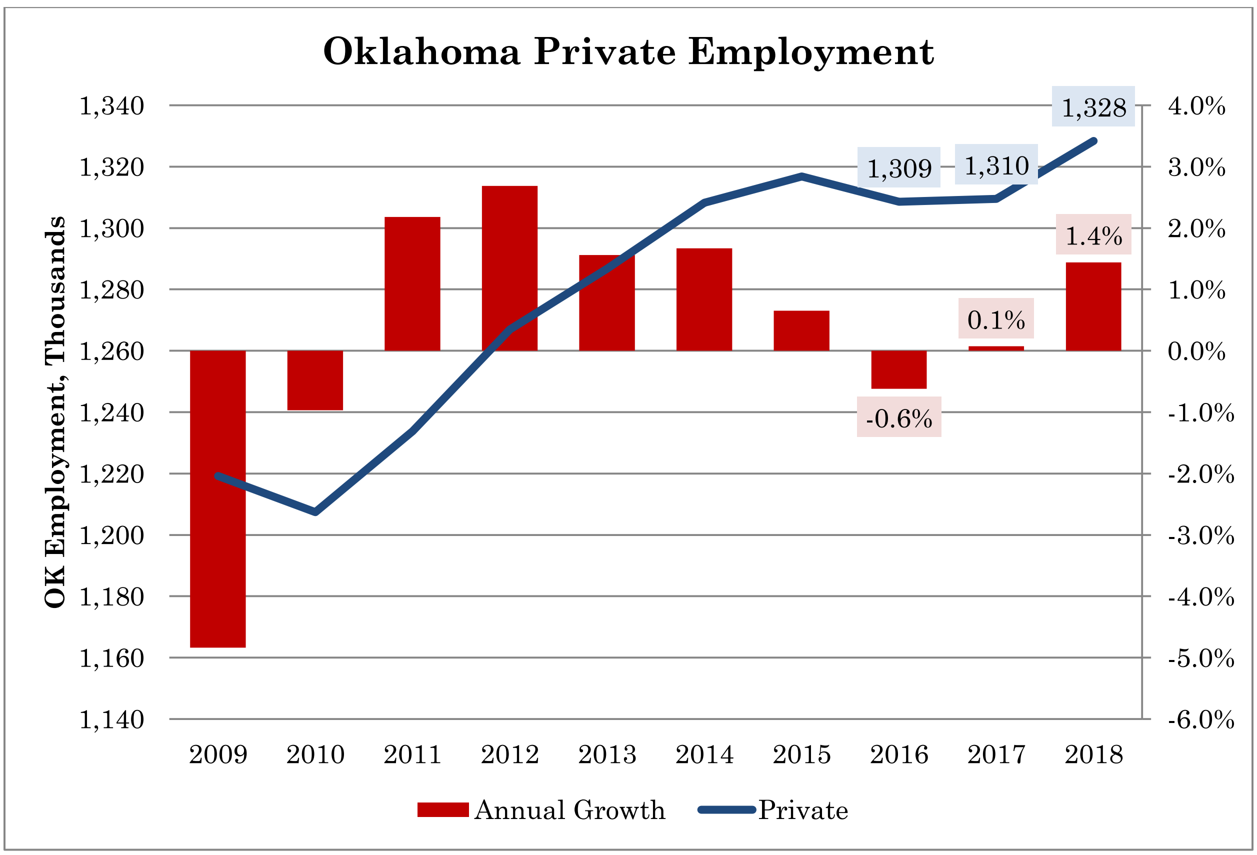


Figure 13*: Oklahoma Private Sector Employment*

As indicated by the Bank SNB Oklahoma Energy Index, industry activity formed a bottom in the second half of 2016 that appears to be holding. Industry activity is slowly improving with commodity prices, rig activity, and equity prices all trending positively. Oil and gas employment continues to hold steady but has yet to show signs of significant gains. This will likely be the case for 2017 with hiring activity picking up in the second half of the year. The baseline expectation is for a holding pattern to dominate 2017 before growing at 3.7% in 2018.

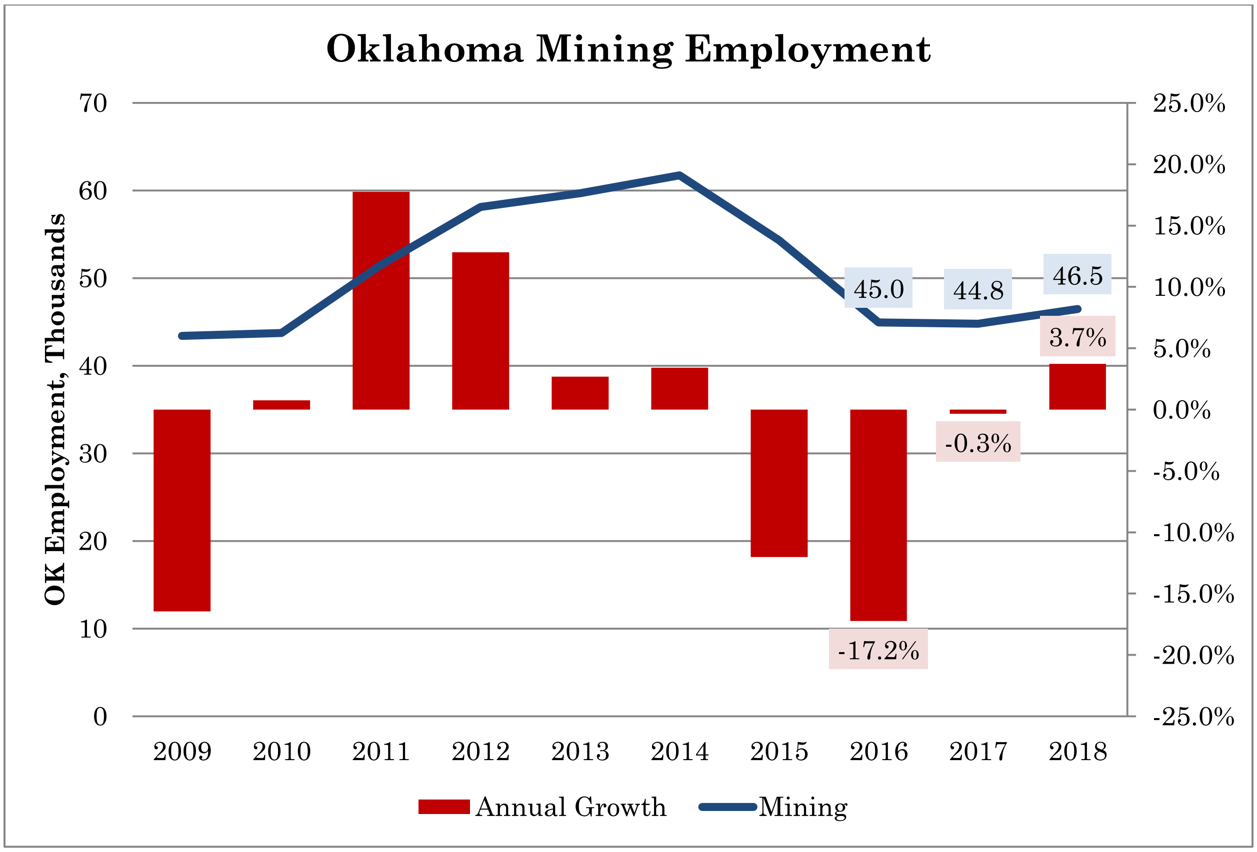


Figure 14: *Oklahoma Mining Employment*

Oklahoma manufacturing employment was among the hardest hit sectors of 2016. The experience of this sector mirrors that of conditions generally. Already vulnerable from a lack of oil and gas related equipment demand, goods production dropped precipitously with the inventory adjustment further contracting the industry. Payroll employment fell by 7.2% in 2016 and is expected to fall by 2.4% in 2017. This contraction in the average monthly manufacturing payroll disguises the expectation that conditions will improve substantially in the second half of the year. The strength is expected to carry into 2018 with 1.6% growth.

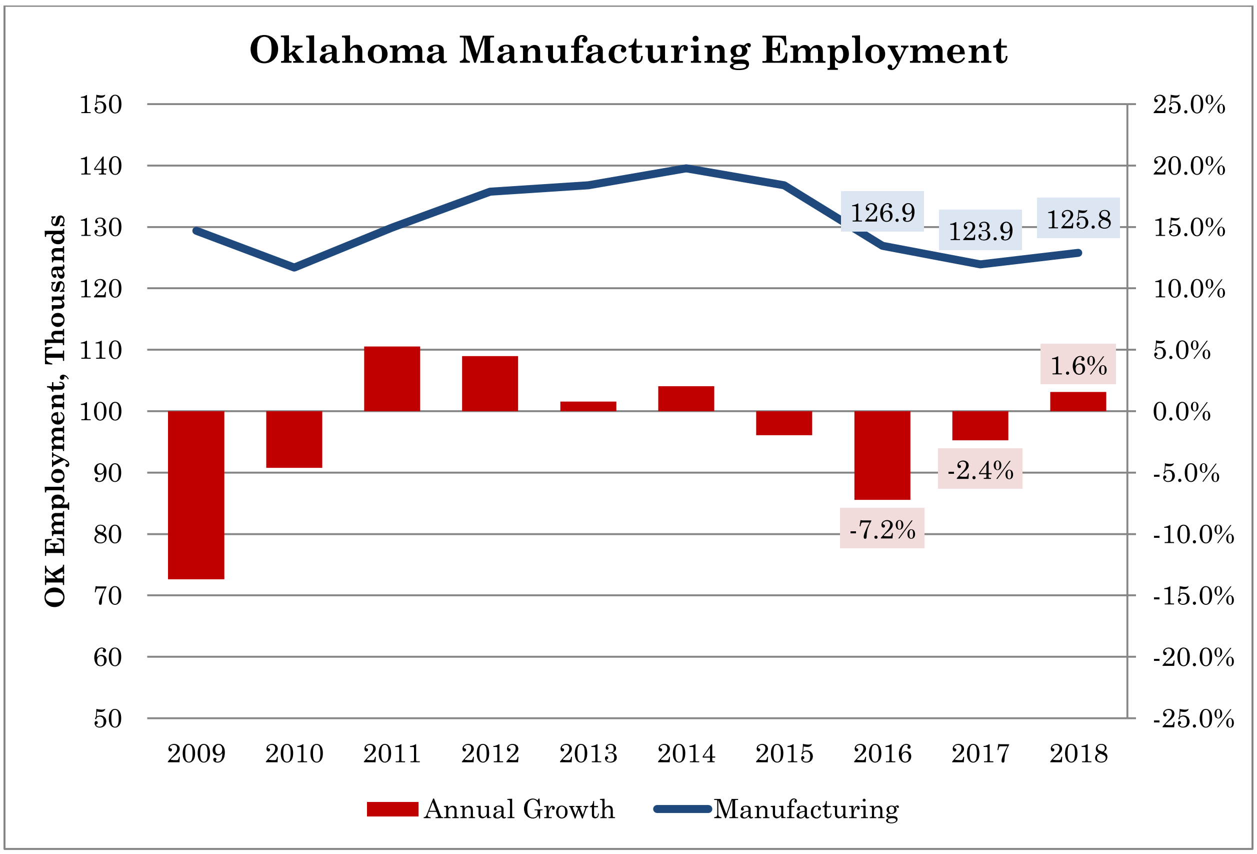


Figure 15: *Oklahoma Manufacturing Employment*

Retail employment in the state managed to expand in 2016 in spite of the challenges in the broader economy. Baseline expectations are for the retail expansion to continue, but ebb a bit from the nearly 2.5% growth averaged in 2014 and 2015. Employment in the retail industry is expected to grow at a pace closer to its recent long run average posting gains of 0.4% and 1.0% respectively in 2017 and 2018.

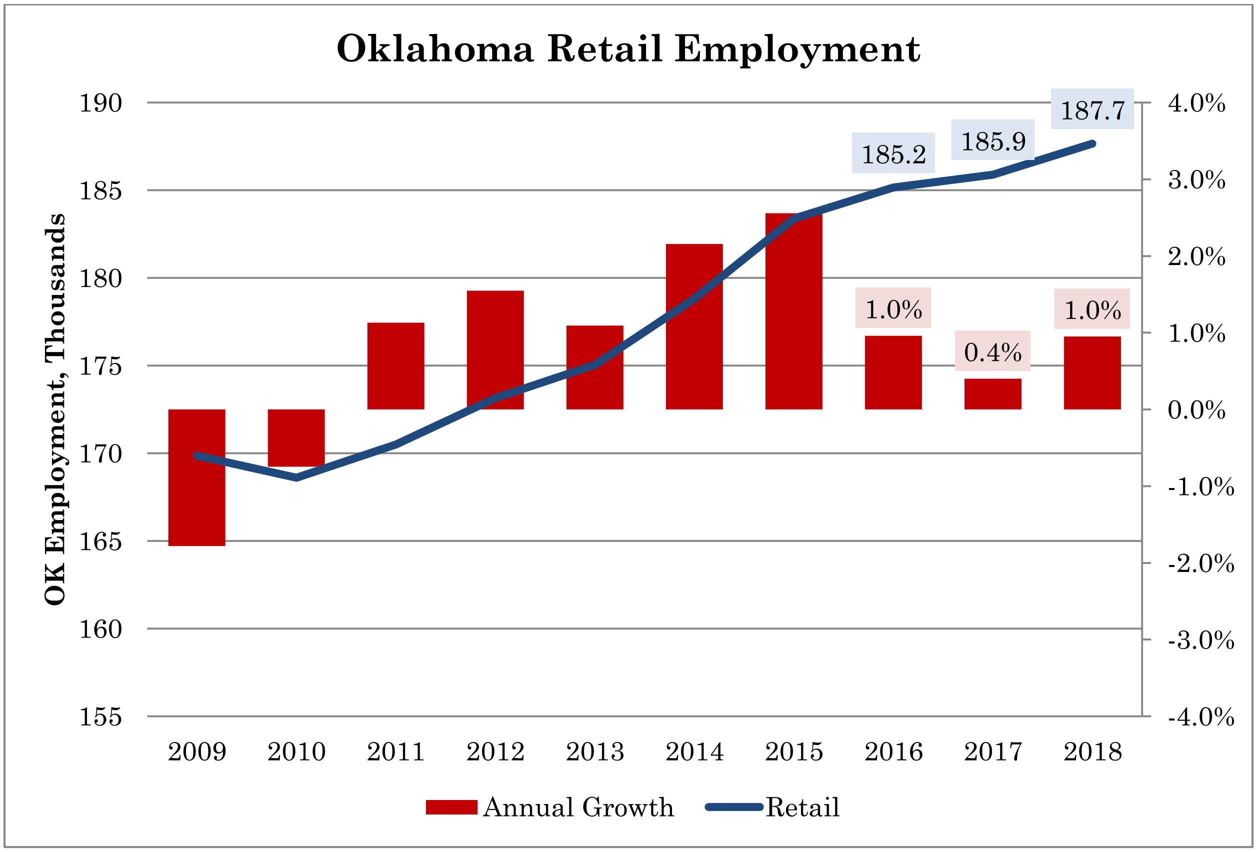


Figure 16*: Oklahoma Retail Employment*

Professional business services employment also experienced recession-like contractions in 2016. Average monthly payroll levels fell 2.6% from their 2015 mark with the biggest reductions coming in the administrative and support services and management subsectors. Lingering first half weakness is expected to dominate second half strength leaving the sector down 0.7% in 2017. Improving conditions will take positive momentum from 2017 into 2018 with the sector posting average monthly payroll gains of 2.1%.

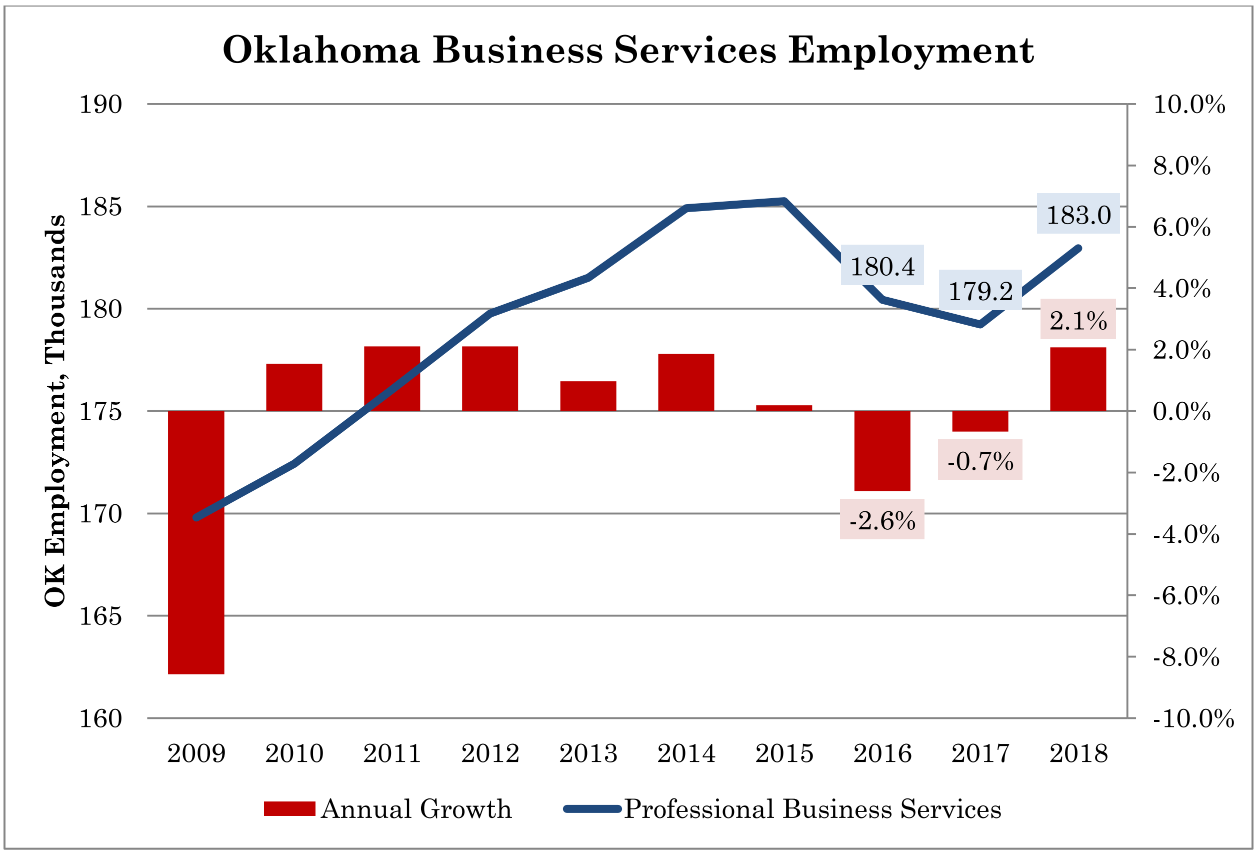


Figure 17: *Oklahoma Professional and Business Services Employment*

Health services employment continues to grow with a state population that is both growing and aging. Growth in 2016 is estimated at 1.6%, just ahead of trend growth. Population influences will be joined by positive economic influences in 2017 leading expectations of continued growth. The pace of expansion is expected to slow modestly and return to trend with employment growth of 1.2% in 2017 followed by growth of 1.1% in 2018.

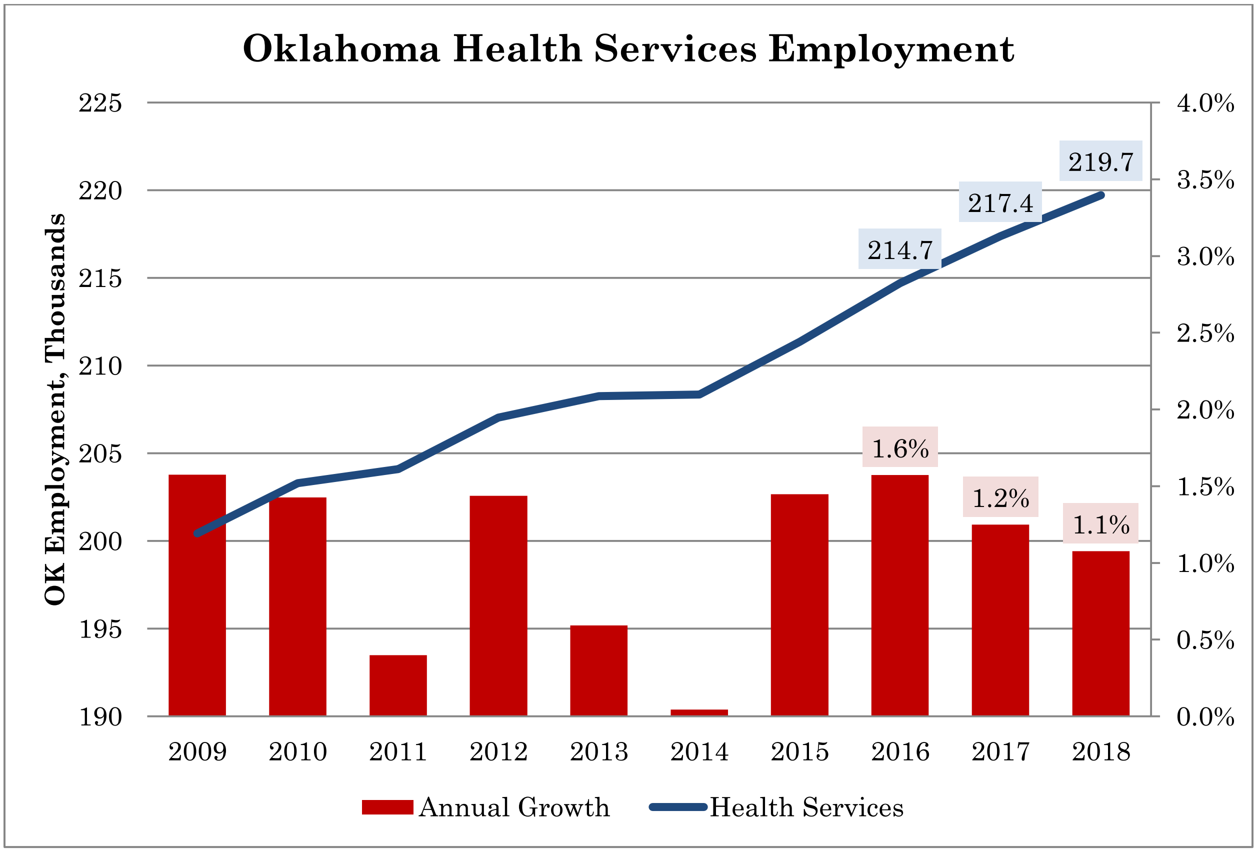


Figure 18: *Oklahoma Health Services Employment*

Leisure services (arts, food, and accommodations) posted surprising growth in 2016 in spite of economic conditions. The industry is projected to have grown at its fastest rate in a decade posting 4.3% growth. Baseline expectations are that some of this activity is stolen from 2017, suggesting 2017 will post more modest growth of 0.7%. All of the growth in 2017 is expected to come from gains in the food and accommodations subsector. Current expectations are for 2.8% growth in 2018 that is both closer to trend and more broad across the sector.

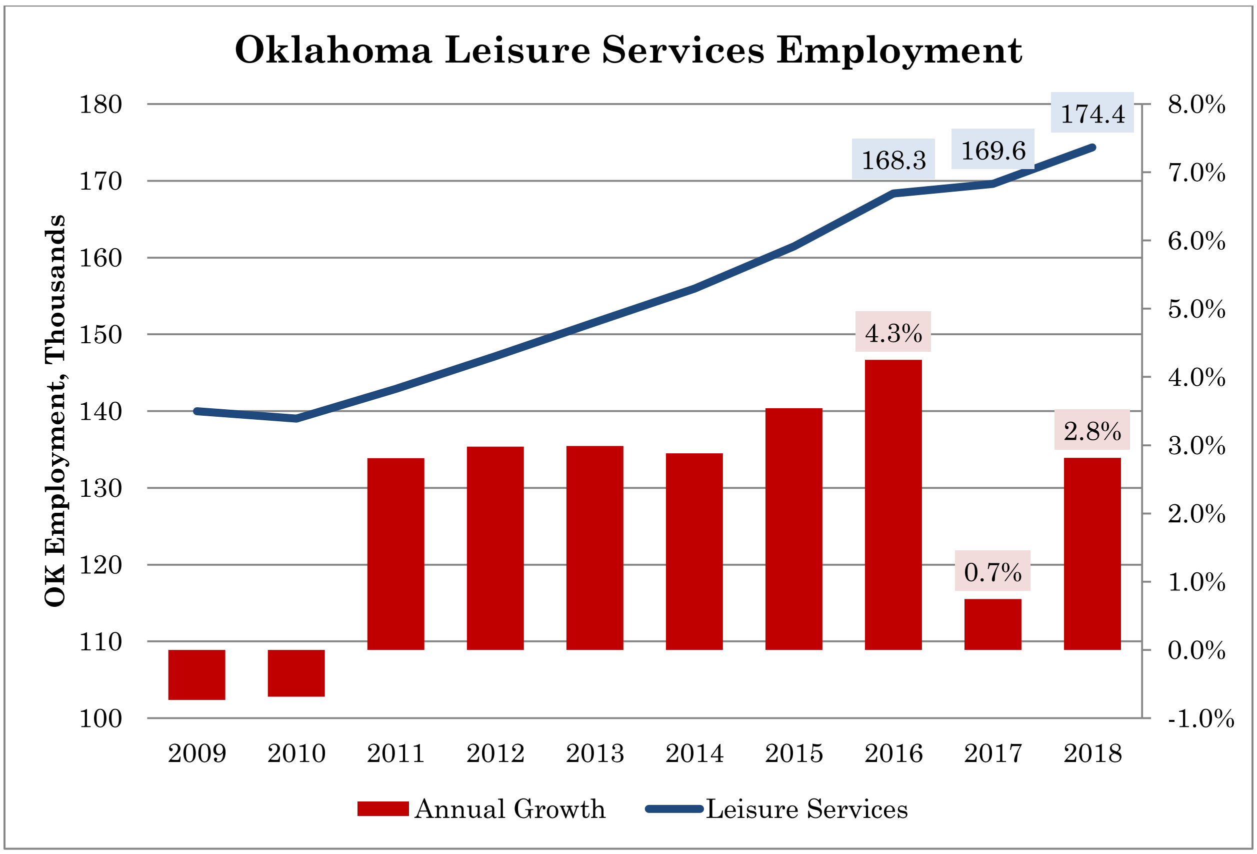


Figure 19*: Oklahoma Leisure Services Employment*

The Oklahoma City Outlook

Oklahoma City gross metro product and personal income growth slowed in 2016 as national weakness coupled with local exposure stalled economic activity. Gross metro product reached $71.3 billion dollars in 2016, up a modest 2.3% for the year and the slowest rate of growth in the post-recession period. Personal income growth was even slower, expanding by only 1.6%. Both metro product and personal income are expected to resume solid growth in 2017 with gross metro product climbing by 3.0% to $73.5 billion and personal income growing by 3.9% to $66 billion. Both measures are expected to maintain strength into 2018.

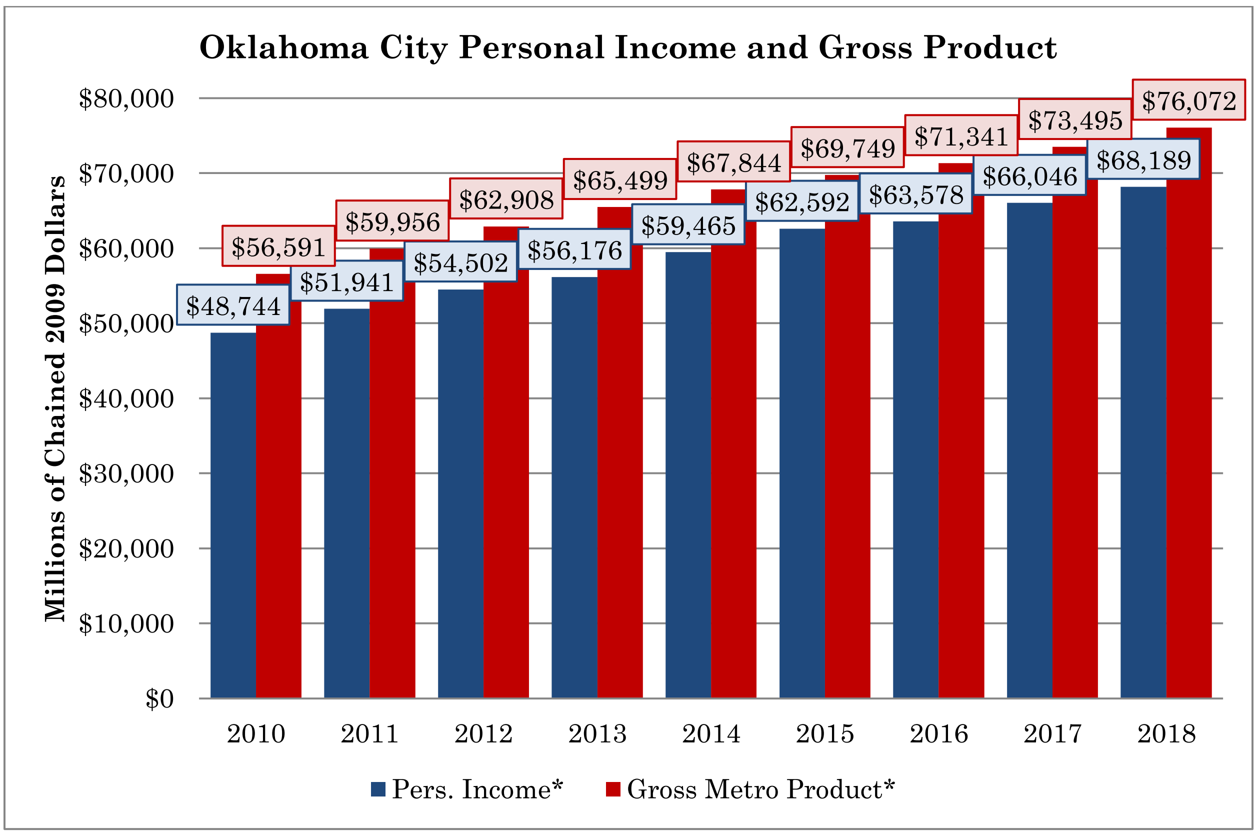


Figure 20: *Oklahoma City Income and Metro Product*

Oklahoma City's population continues to grow at an average annual rate of 1.6% trending towards 1.4 million in 2018. Slowing income growth combined with population gains are projected to leave per capita income unchanged in 2016 at $46,064. Per capita income is expected to return to growth in 2017 and 2018 at rates of 2.2% and 1.6% respectively. Baseline expectations are for per capita income to reach $47,818 by the end of the forecast period.

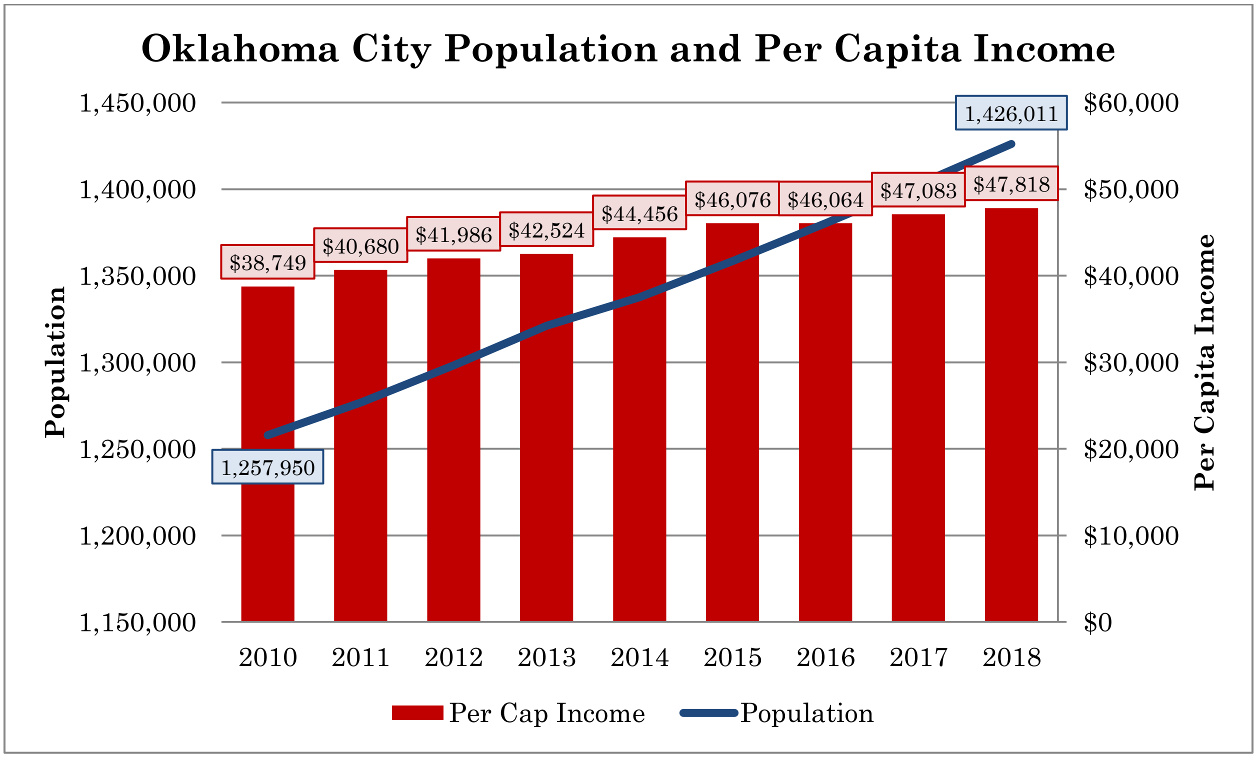


Figure 21*: Oklahoma City Per Capita Income*

Oklahoma City nonfarm employment growth slowed considerably in 2016 with preliminary numbers indicating falling year-over-year employment in the second half of the year. The local economy is at an inflection point, with year-over-year employment expected to reverse from losses to gains by late spring. Solid growth in the second half of the year should be sufficient to post a 0.7% increase in average monthly payroll levels. Nonfarm payrolls are expected to average 637.2 thousand positions in 2017 before growing by 1.9% in 2018 to 649.1 thousand. Baseline expectations are for the second half of 2017 to feel like an economy at full health with 2018 posting numbers that match that reality.

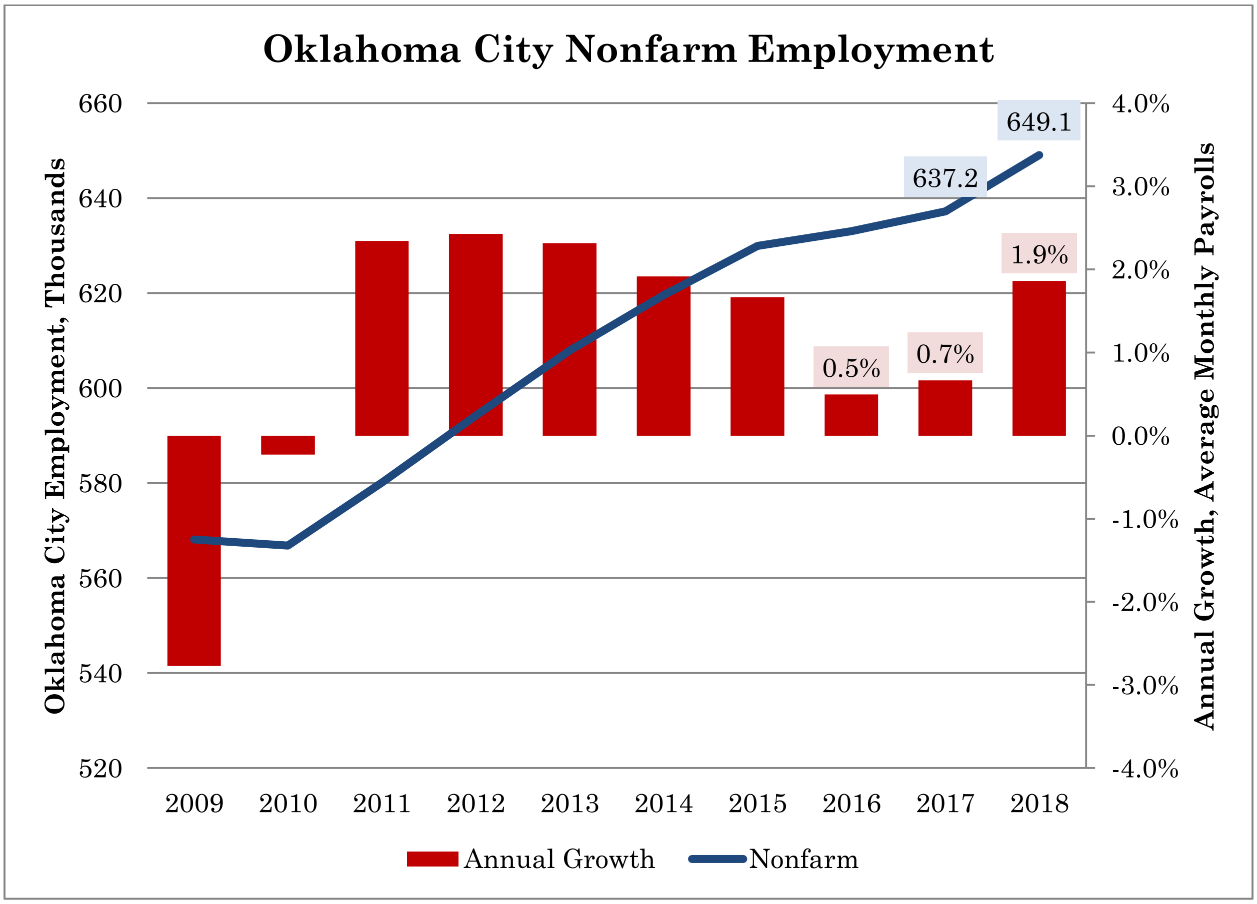


Figure 22: ***Oklahoma City Nonfarm Employment***

Oklahoma City private employment stalled in 2016 before yielding to an outright contraction in the latter half of the year. Private payrolls will manage a modest gain for the year (0.3%) before gaining traction in 2017. Private payrolls will turn positive on a year-over-year basis in the spring of 2017, growing throughout the end of the year. Baseline expectations are for average monthly private payrolls to expand by 0.7% in 2017 before posting robust growth in 2018 more typical of Oklahoma City's post-recession experience at 2.4%.

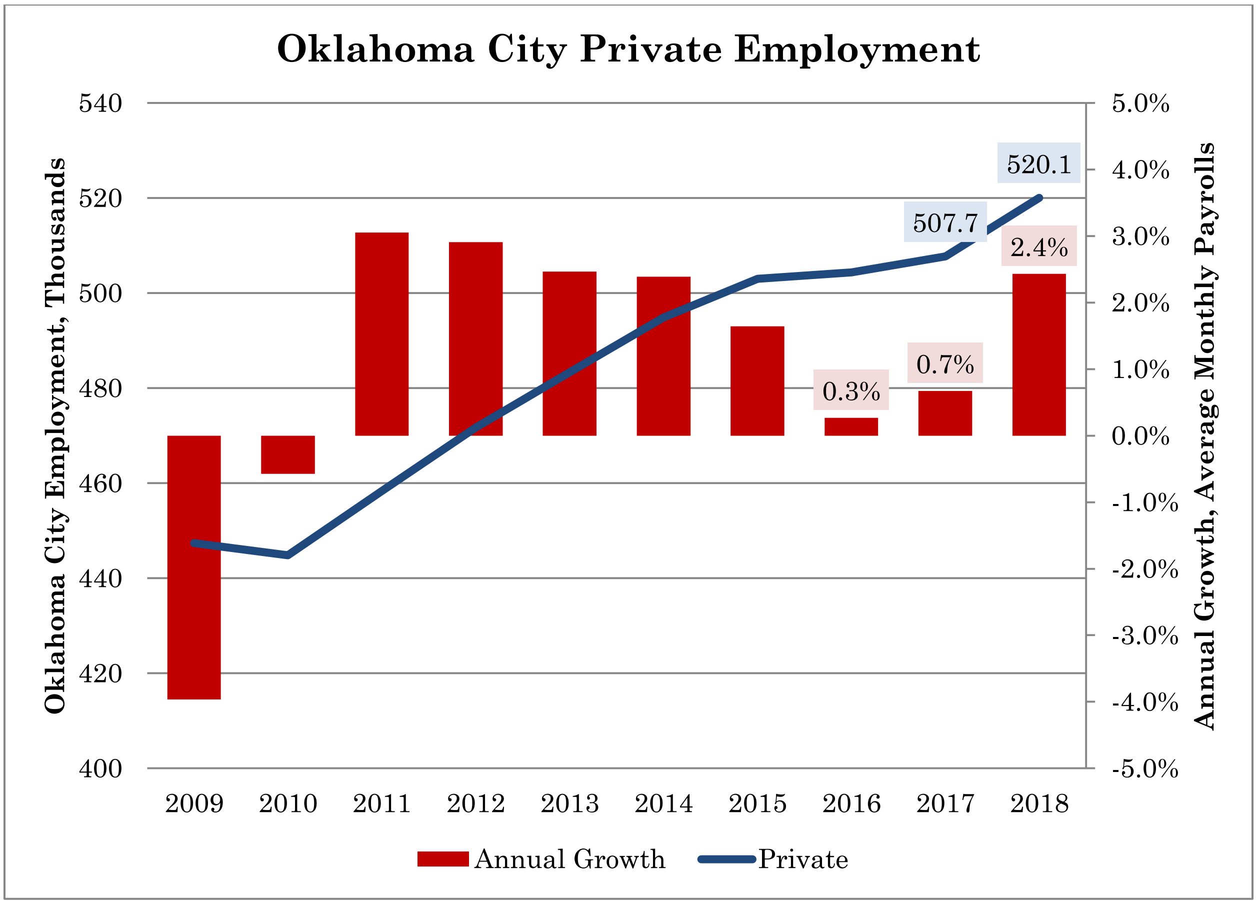


Figure 23*: Oklahoma City Private Employment*

Oklahoma City's oil and gas employment base contracted for two consecutive years in 2015 and 2016 as prices and drilling activity pushed unforeseen lows. Local employment in the industry fell through 2016 but has since stabilized at a level near 15,000 payroll positions. Employment is expected to hold steady around this level early in 2017 before returning to a modest expansion by the spring/summer. In total, average annual employment levels will be modestly lower in 2017 but will be exhibiting significant growth heading into 2018. Discussion is developing around the inability to find skilled workers willing to return to the oil field having been soured by the experience of the last two years and similar reticence may be expected from those returning to office positions. We don't anticipate any labor market reluctance sufficient to curb growth as the industry recovers; we do anticipate the industry to make considerable strides towards full health in 20107 and 2018.

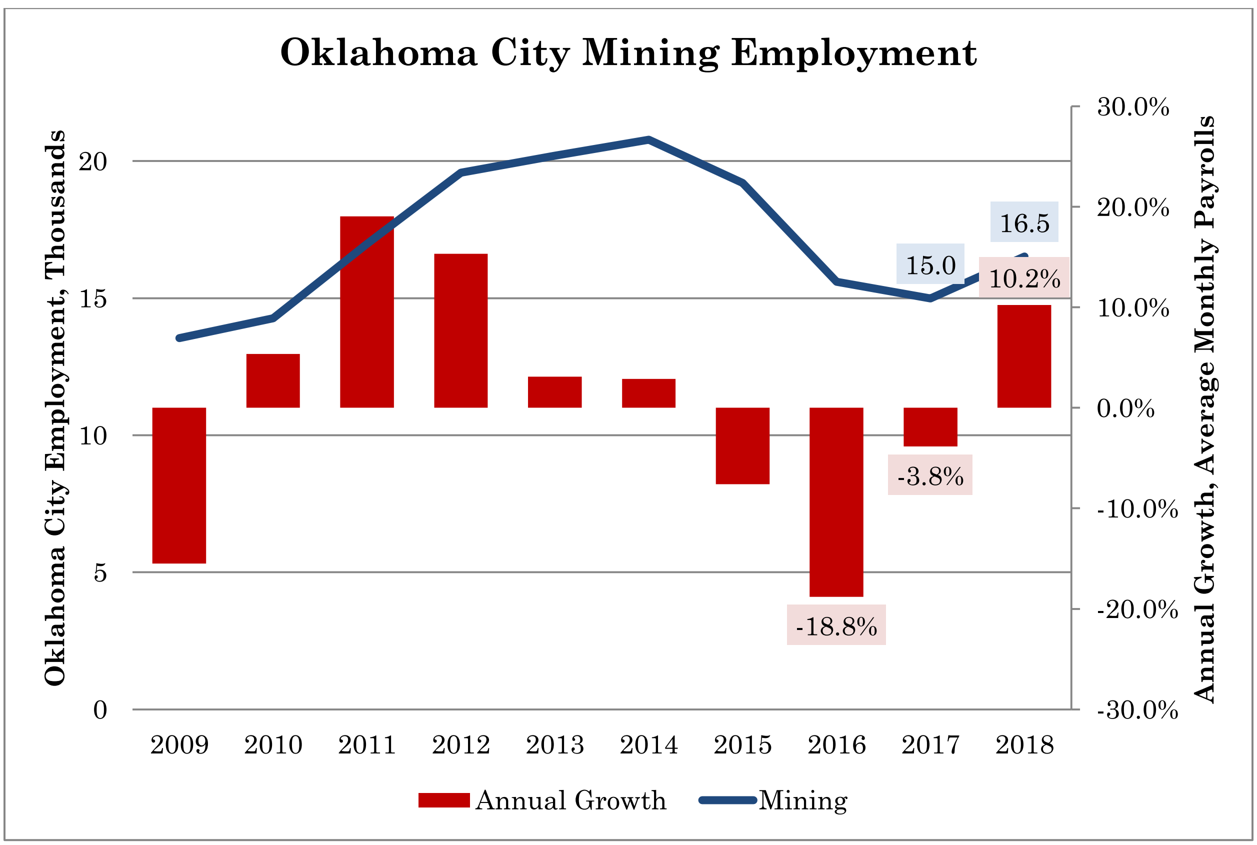


Figure 24***: Oklahoma City Mining Employment***

Oklahoma City manufacturing employment contracted with the sharp decline in goods production experienced statewide. Average annual manufacturing payrolls fell by 4.3% in 2016. This trend is expected to reverse over the course of 2017 as both national activity and local oil and gas activity rebound. The net effect will be little change in average payroll size in 2017 and modest growth in 2018. Not included in the forecast is any assumption as to the industrial development and trade policies to be pursued by the new Trump administration with its associated effect on the U.S. manufacturing sector.

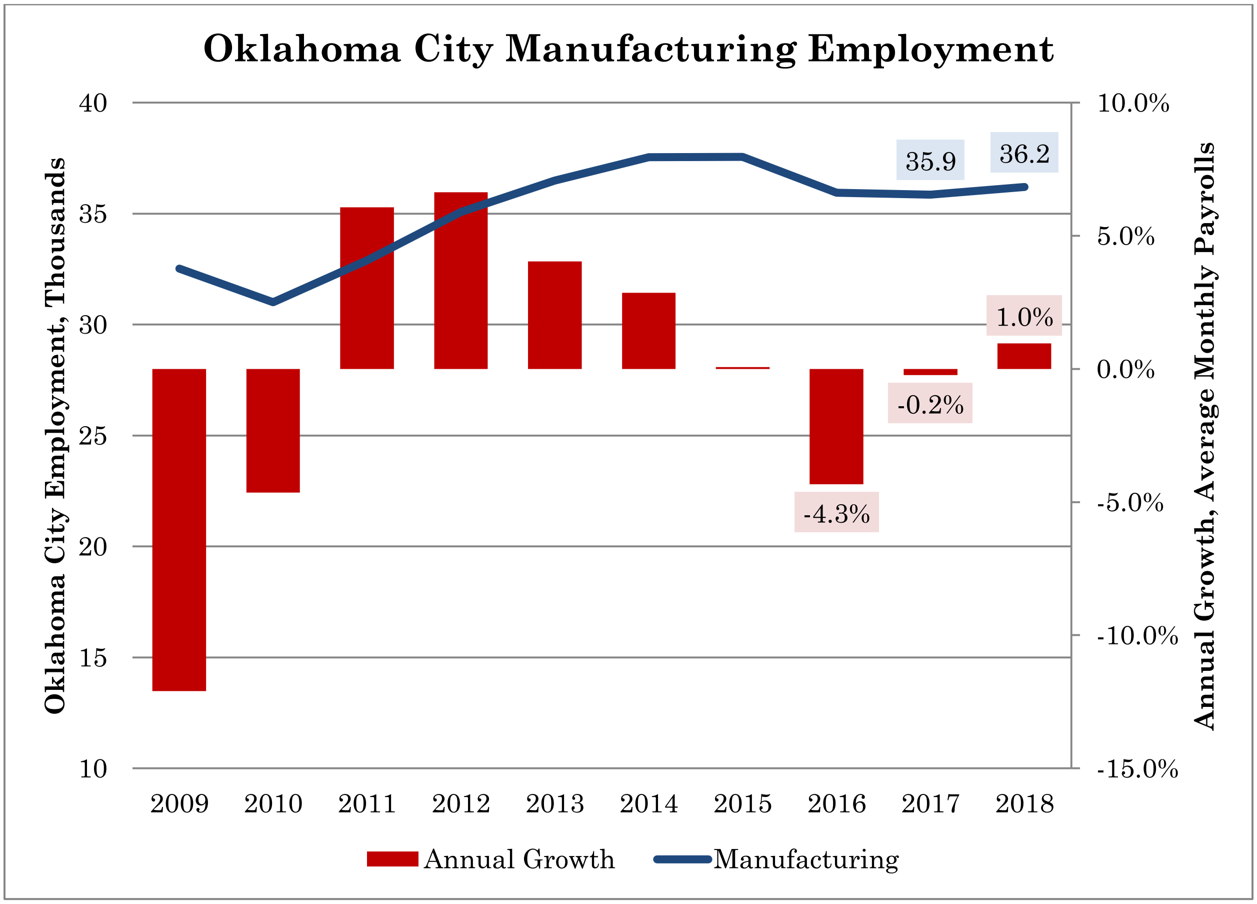


Figure 25*: Oklahoma City Manufacturing Employment*

Retail employment slowed to 1.2% in 2016 as general economic weakness combined with broader shopping trends slowed retail development. Improving economic conditions will help in 2017 but challenges to the sector will remain from national movements away from large retailers and towards online shopping. Baseline expectations are for average monthly retail payrolls to grow by 1.6% and 2.6% in 2017 and 2018 respectively.

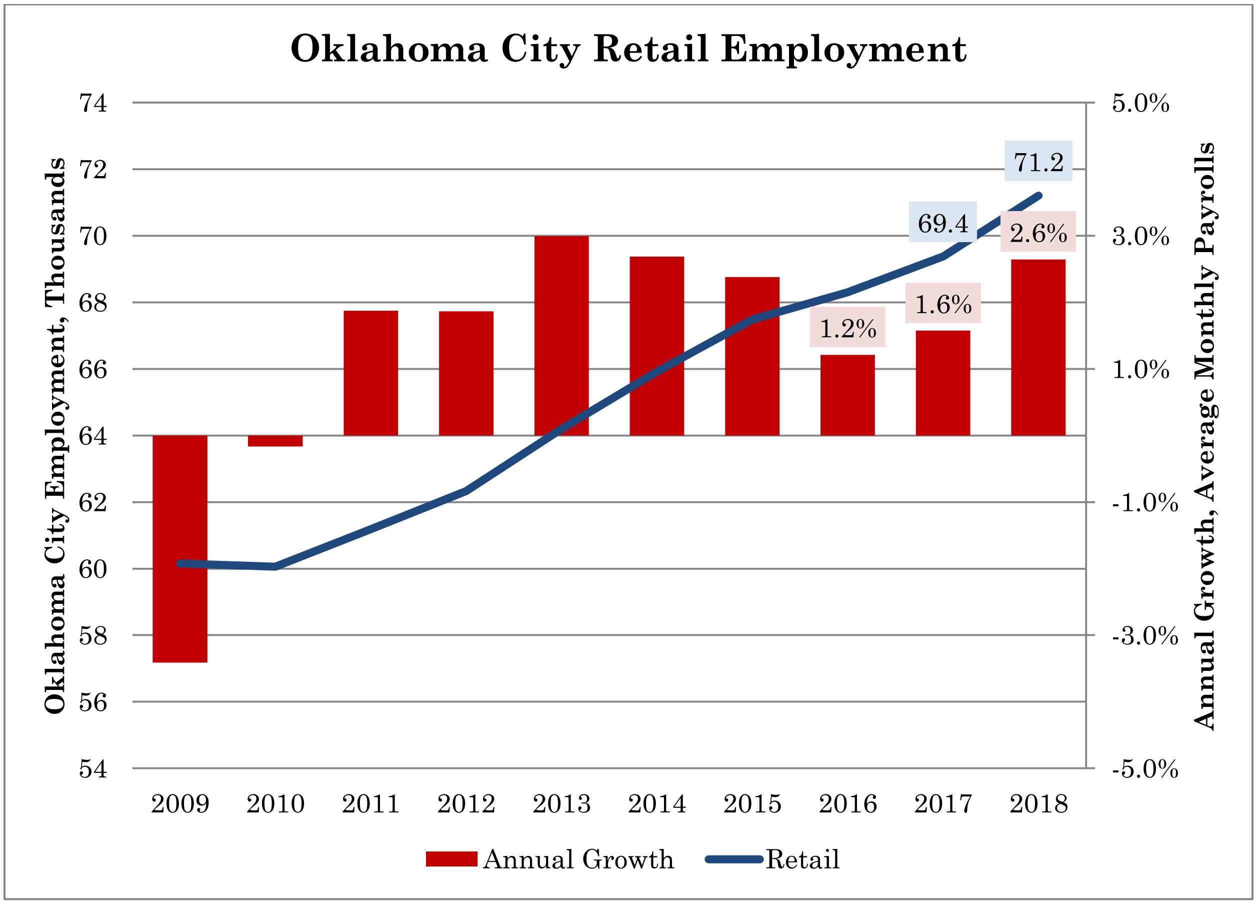


Figure 26: ***Oklahoma City Retail Employment***

Urbanization and population demographics continued to drive predictable increases in health services employment. The recent experience suggests some ebb and flow in the growth with high growth years followed by periods of slower growth as population trends build up and pressure the next wave. Health services employment grew at 3.5% in 2016, the sector's fastest rate of growth in the post-recession period. Baseline expectations are for growth to ease modestly in 2017 to 1.8% - a level roughly equal to the post-recession average. Health sector employment will carry into 2018 with baseline expectations for 1.3% growth.

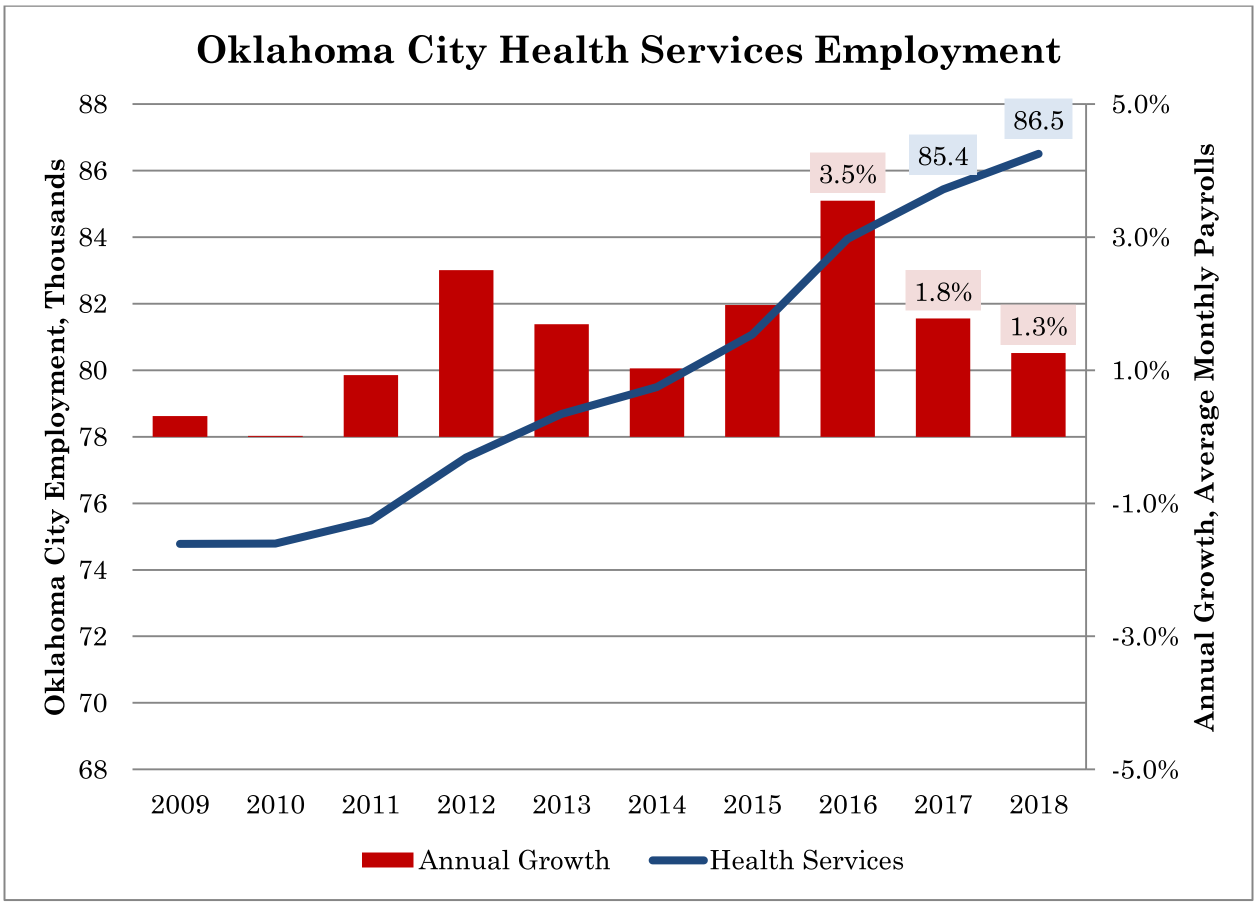


Figure 27: *Oklahoma City Health Services Employment*

Similar to the expectations for overall employment, leisure services employment is expected to carry lingering weakness into early 2017 before turning to growth in the spring of 2017. The second-half strength is expected to draw largely from growth in the food services and accommodations subsector and will carry into 2018. Growth in leisure services employment will continue to follow population movements with increased urbanization expected to bring leisure service sector jobs to the urban core in the years ahead. Average monthly payrolls are expected to grow by 1.6% in 2017 with growth accelerating to 3.8% in 2018.

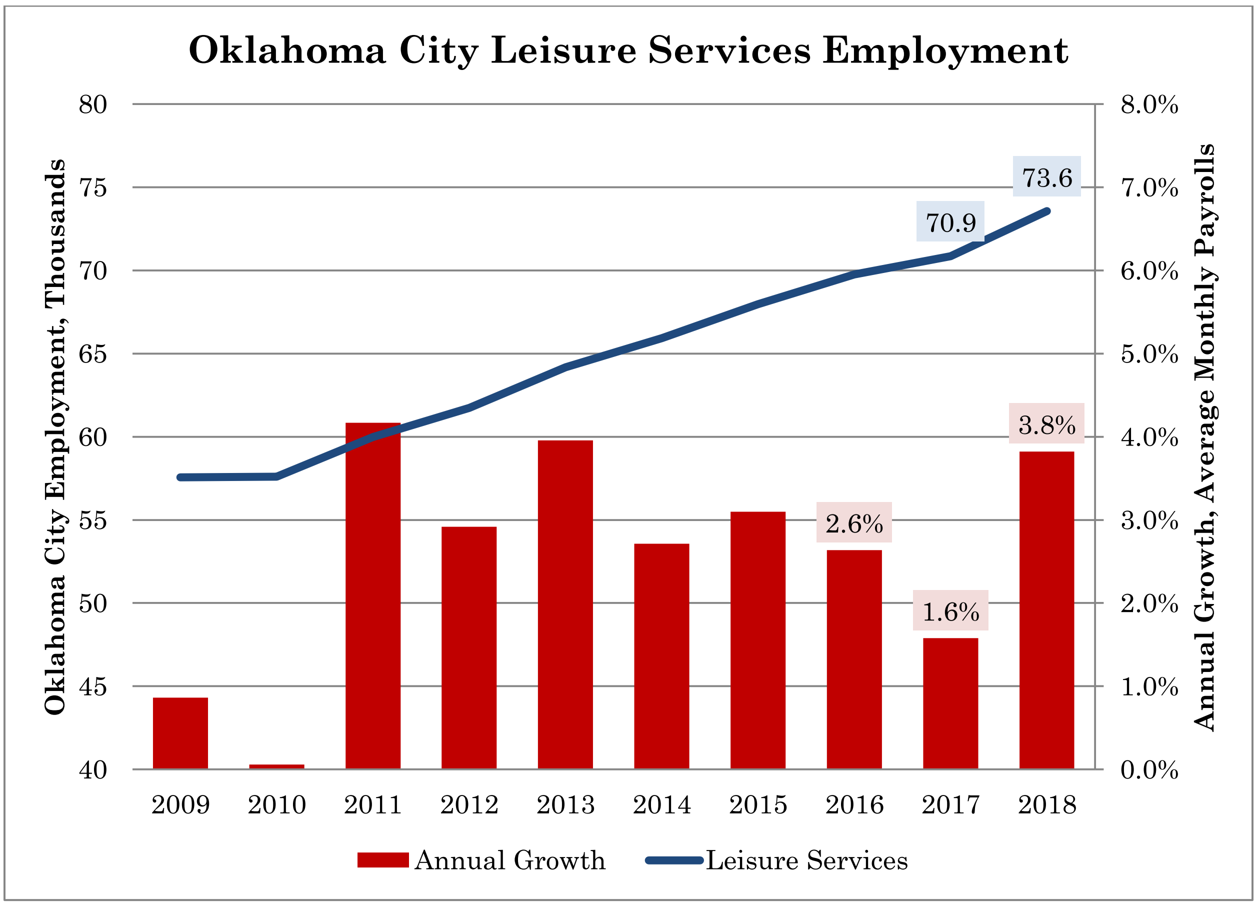


Figure 28*: Oklahoma City Leisure Services Employment*

Oklahoma City's labor market moved laterally in 2016 posting almost not growth in the metro area labor force. At the same time, unemployment rates in both Oklahoma City and Oklahoma County increased to 4.2% and 4.3% respectively. Modest labor force growth is expected in 2017 with little change in local unemployment rates. Labor force growth more consistent with economic expansion is expected for 2018 with unemployment rates trending towards 4% in both the city and county.

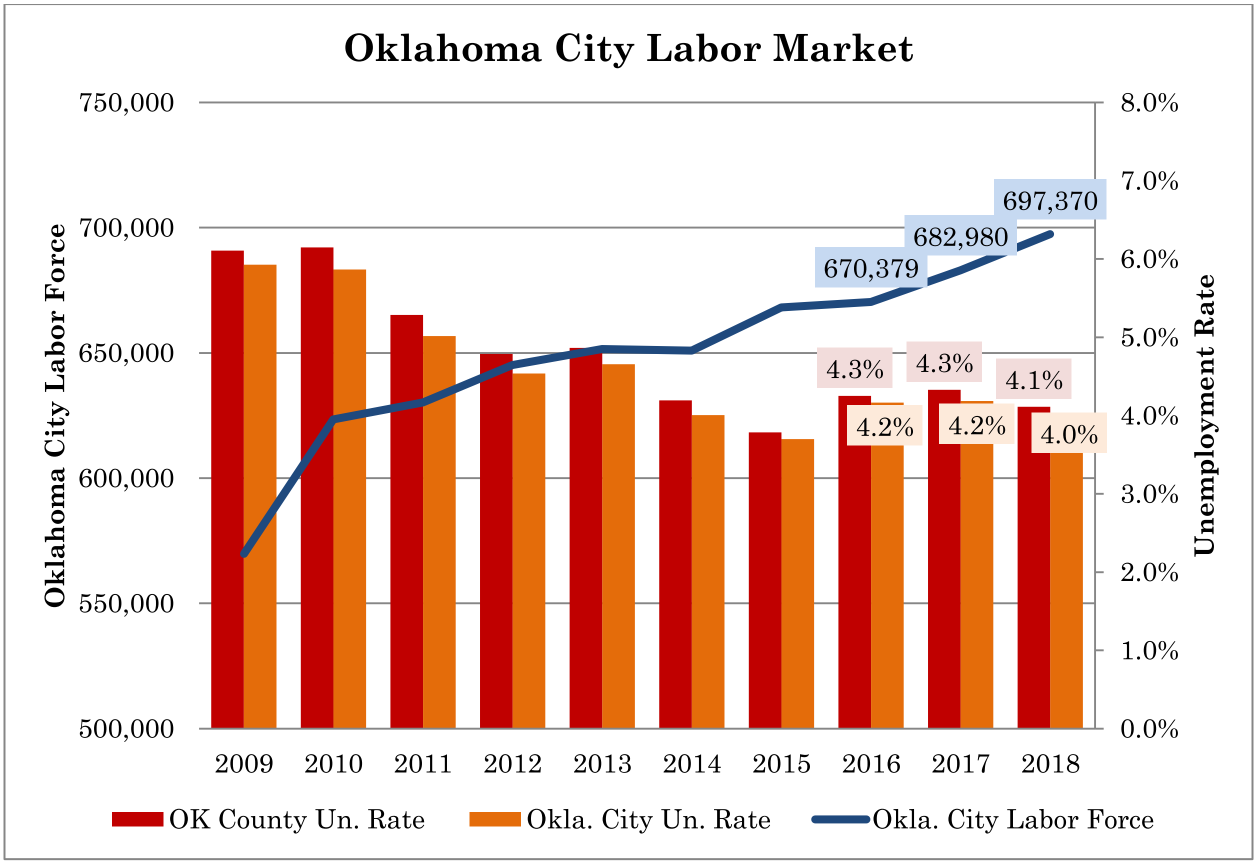


Figure 29*: Oklahoma City Labor Force and Unemployment Rates*

Appendix: Detailed Forecast Tables

U.S. Economic Outlook Summary											
Key U.S. Economic Variables / Year	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Gross Domestic Product: Annual Growth by Major Component											
Real GDP	-2.8	-0.2	2.7	1.7	1.3	2.7	2.5	1.9	1.7	2.1	2.0
Personal consumption expenditures	-2.0	-0.2	3.1	1.5	1.3	2.0	3.5	2.6	2.5	2.4	2.6
Fixed investment	-12.5	-11.9	5.5	8.4	7.0	5.2	5.3	3.4	0.2	4.3	4.6
Inventory investment ($ Billions, 2005)	-33.7	-147.6	58.2	37.6	54.7	78.7	57.7	84.0	19.9	40.9	47.6
Gov't consumption & gross invest.	3.3	2.3	-1.1	-3.0	-2.2	-2.8	0.3	2.2	0.1	0.4	0.3
Employment and Industrial Activity											
Private Housing Starts (SA, Thousands of Units)	900	554	586	612	784	928	1001	1108	1165	1297	1477
Light Vehicle Sales (Millions of Units)	13.2	10.4	11.6	12.7	14.4	15.5	16.5	17.4	17.3	17.1	16.9
Industrial Production (SA Percent Change)	-9.0	-5.6	5.9	2.6	2.3	2.0	3.5	-1.6	-0.3	1.8	2.1
Manufacturing Capacity Utilization Rates	74.7	65.6	70.8	73.7	74.6	74.5	75.4	75.5	75.0	74.7	74.9
NF Payroll Employment (Monthly Avg., Millions)	137.2	131.3	130.4	131.9	134.2	136.4	138.9	141.8	144.3	146.5	148.3
Unemployment Rate (Monthly Average)	5.8	9.3	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.6	4.3
Prices, Productivity, & Costs											
Consumer Price Index (All Items)	1.6	1.5	1.2	3.3	1.9	1.2	1.2	0.4	1.9	2.1	2.2
Core Consumer Price Index (Ex. Food & Energy)	2.0	1.8	0.6	2.2	1.9	1.7	1.7	2.0	2.2	2.2	2.2
Personal Consumption Expenditures Price Index (Ex. Food & Energy)	1.6	1.4	1.0	1.9	1.8	1.5	1.6	1.4	1.8	1.9	2.0
Compensation Per Hour (Annual Growth)	3.0	1.2	1.4	0.5	5.6	0.0	2.9	3.1	1.9	2.9	3.4
Price of WTI Crude (Monthly Average $/barrel)	99.57	61.69	79.43	95.08	94.20	97.94	93.26	48.74	42.93	49.60	52.94
Price of Brent Crude (Monthly Average $/barrel)	96.85	61.49	79.51	111.26	111.65	108.64	99.02	52.35	43.44	52.12	55.61
Income, Interest Rates, and the Deficit											
Federal funds rate	1.93	0.16	0.17	0.10	0.14	0.11	0.09	0.13	0.39	0.86	1.64
10-year Treasury note yield	3.67	3.26	3.21	2.79	1.80	2.35	2.54	2.14	1.77	2.13	2.68
Disposable Personal Income ($ Billions, 2009)	1.1	-0.7	2.6	1.7	5.1	-2.8	4.5	3.0	1.8	2.4	2.6
U.S. Personal Savings Rate	4.9	6.1	5.6	6.1	7.6	5.0	5.6	5.8	5.7	5.5	5.4
Unified Federal Surplus, Fiscal Year	-454.8	-1415.7	-1294.2	-1296.8	-1089.2	-680.2	-483.6	-439.1	-587.4	-524.5	-459.7

Source: Steven C. Agee Economic Research and Policy Institute; Macroadvisers MAUS 2015 Model

Oklahoma Employment Outlook

Variable / Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfarm	1,567.6	1,556.0	1,577.7	1,614.1	1,635.3	1,656.6	1,668.7	1,661.3	1,662.1	1,680.0
Annual Growth	-3.1%	-0.7%	1.4%	2.3%	1.3%	1.3%	0.7%	-0.4%	0.0%	1.1%
Private	1,219.3	1,207.5	1,233.8	1,266.9	1,286.7	1,308.2	1,316.8	1,308.6	1,309.5	1,328.4
Annual Growth	-4.8%	-1.0%	2.2%	2.7%	1.6%	1.7%	0.7%	-0.6%	0.1%	1.4%
Mining	43.4	43.8	51.5	58.1	59.7	61.7	54.3	45.0	44.8	46.5
Annual Growth	-16.4%	0.7%	17.8%	12.8%	2.7%	3.4%	-12.0%	-17.2%	-0.3%	3.7%
Construction	68.9	67.0	68.3	70.4	74.7	75.4	77.8	82.0	81.4	82.7
Annual Growth	-8.8%	-2.7%	1.9%	3.1%	6.1%	0.9%	3.2%	5.4%	-0.7%	1.6%
Manufacturing	129.4	123.4	129.9	135.7	136.8	139.5	136.8	126.9	123.9	125.8
Annual Growth	-13.7%	-4.6%	5.3%	4.5%	0.8%	2.0%	-2.0%	-7.2%	-2.4%	1.6%
TTU	281.3	277.2	282.6	290.4	295.0	301.8	306.9	306.2	306.2	307.9
Annual Growth	-2.8%	-1.5%	2.0%	2.8%	1.6%	2.3%	1.7%	-0.2%	0.0%	0.5%
Wholesale	54.8	54.0	55.9	58.1	59.2	60.8	60.2	58.1	57.5	56.9
Annual Growth	-5.5%	-1.4%	3.4%	3.9%	1.9%	2.8%	-0.9%	-3.5%	-1.1%	-1.0%
Retail	169.9	168.6	170.5	173.2	175.0	178.8	183.4	185.2	185.9	187.7
Annual Growth	-1.8%	-0.7%	1.1%	1.5%	1.1%	2.2%	2.6%	1.0%	0.4%	1.0%
Transport	56.7	54.6	56.2	59.2	60.8	62.2	63.3	62.9	62.9	63.3
Annual Growth	-3.0%	-3.7%	3.0%	5.2%	2.8%	2.3%	1.9%	-0.7%	0.0%	0.7%
Information	26.8	24.3	23.0	22.5	21.8	21.2	20.9	21.5	21.8	22.1
Annual Growth	-6.6%	-9.5%	-5.0%	-2.5%	-3.0%	-2.7%	-1.5%	2.6%	1.5%	1.5%
Finance	79.5	78.1	77.6	78.1	78.9	79.5	80.0	80.7	81.1	81.5
Annual Growth	-1.6%	-1.8%	-0.7%	0.7%	1.0%	0.8%	0.6%	0.9%	0.5%	0.5%
Prof Bus	169.8	172.4	176.1	179.8	181.5	184.9	185.3	180.4	179.2	183.0
Annual Growth	-8.6%	1.5%	2.1%	2.1%	1.0%	1.9%	0.2%	-2.6%	-0.7%	2.1%
Scientific and Technical	62.9	63.5	64.3	65.9	67.0	67.8	69.0	68.7	69.5	70.5
Annual Growth	-3.0%	0.9%	1.3%	2.4%	1.6%	1.2%	1.8%	-0.5%	1.1%	1.5%
Management	16.4	16.3	17.0	18.0	18.4	18.6	18.8	17.4	17.0	17.2
Annual Growth	-1.9%	-0.5%	4.3%	5.8%	2.0%	1.2%	1.0%	-7.3%	-2.6%	1.1%

Variable / Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Admin	90.5	92.6	94.7	95.9	96.2	98.6	97.5	94.3	92.8	95.3
Annual Growth	-13.1%	2.3%	2.3%	1.2%	0.3%	2.5%	-1.1%	-3.2%	-1.6%	2.7%
Education Health	218.6	221.7	223.1	226.2	227.7	228.1	231.2	235.6	239.1	241.7
Annual Growth	1.8%	1.4%	0.6%	1.4%	0.6%	0.2%	1.4%	1.9%	1.5%	1.1%
Education	18.1	18.4	19.0	19.2	19.4	19.7	19.9	20.9	21.7	22.0
Annual Growth	4.1%	1.5%	3.3%	1.0%	1.2%	1.5%	0.7%	5.2%	3.8%	1.3%
Health	200.4	203.3	204.1	207.0	208.3	208.4	211.4	214.7	217.4	219.7
Annual Growth	1.6%	1.4%	0.4%	1.4%	0.6%	0.0%	1.4%	1.6%	1.2%	1.1%
Leisure	140.0	139.0	142.9	147.2	151.6	155.9	161.5	168.3	169.6	174.4
Annual Growth	-0.7%	-0.7%	2.8%	3.0%	3.0%	2.9%	3.5%	4.3%	0.7%	2.8%
Arts	14.4	14.3	14.1	14.3	14.6	14.8	15.9	16.6	16.3	16.7
Annual Growth	-8.0%	-0.7%	-1.3%	1.2%	2.3%	1.4%	7.1%	4.5%	-1.8%	2.5%
Food and Accom.	125.6	124.7	128.8	132.9	137.0	141.1	145.6	151.7	153.3	157.7
Annual Growth	0.2%	-0.7%	3.3%	3.2%	3.1%	3.0%	3.2%	4.2%	1.0%	2.8%
Other	61.6	60.6	58.8	58.6	59.1	60.1	62.0	62.1	62.5	63.0
Annual Growth	-3.0%	-1.7%	-2.9%	-0.4%	0.9%	1.7%	3.2%	0.1%	0.6%	0.9%
Government	348.3	348.5	343.9	347.1	348.6	348.4	351.9	352.7	352.6	351.6
Annual Growth	3.3%	0.1%	-1.3%	0.9%	0.4%	-0.1%	1.0%	0.2%	0.0%	-0.3%
Federal	46.6	50.4	49.1	48.4	47.1	46.3	46.9	47.6	48.0	47.8
Annual Growth	3.0%	8.3%	-2.6%	-1.6%	-2.5%	-1.8%	1.4%	1.5%	0.8%	-0.3%
State	85.1	83.8	84.8	86.4	86.3	85.8	85.5	85.3	85.3	85.4
Annual Growth	1.2%	-1.5%	1.2%	1.9%	-0.1%	-0.6%	-0.3%	-0.3%	0.0%	0.1%
Local	216.7	214.3	209.9	212.4	215.1	216.3	219.5	219.8	219.3	218.4
Annual Growth	4.2%	-1.1%	-2.0%	1.2%	1.3%	0.5%	1.5%	0.2%	-0.2%	-0.4%
OK Household Empl.	1,652,023	1,648,138	1,668,417	1,709,351	1,710,780	1,717,136	1,763,844	1,752,865	1,748,953	1,755,680
Annual Growth	-1.7%	-0.2%	1.2%	2.5%	0.1%	0.4%	2.7%	-0.6%	-0.2%	0.4%
OK Labor Force	1,764,432	1,768,284	1,772,665	1,804,070	1,806,829	1,797,933	1,842,048	1,840,995	1,836,264	1,832,248
Annual Growth	1.0%	0.2%	0.2%	1.8%	0.2%	-0.5%	2.5%	-0.1%	-0.3%	-0.2%
OK UN RATE	6.4%	6.8%	5.9%	5.3%	5.3%	4.5%	4.2%	4.8%	4.8%	4.2%

Oklahoma Quarterly GDP, Income, and Population										
	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
OK RGDP (Mil)	$171,927.12	$172,515.16	$172,806.81	$173,451.14	$174,936.19	$176,484.02	$176,495.75	$176,617.72	$178,264.72	$180,407.04
Growth*	2.6%	1.4%	0.7%	1.5%	3.4%	3.5%	0.0%	0.3%	3.7%	4.8%
OK PI (Mil)	$178,899.69	$179,552.00	$180,837.00	$182,576.00	$183,640.00	$185,178.00	$187,099.00	$188,906.00	$189,773.00	$191,257.00
Growth	1.5%	1.5%	2.9%	3.8%	2.3%	3.4%	4.1%	3.9%	1.8%	3.1%
OK Pop	3,946,963	3,955,328	3,961,767	3,968,115	3,975,631	3,983,226	3,989,284	3,995,487	4,002,940	4,010,400
Growth	0.9%	0.8%	0.7%	0.6%	0.8%	0.8%	0.6%	0.6%	0.7%	0.7%
OK Per Cap	$45,326.00	$45,394.97	$45,645.54	$46,010.77	$46,191.41	$46,489.46	$46,900.39	$47,279.84	$47,408.40	$47,690.26
Growth	0.7%	0.6%	2.2%	3.2%	1.6%	2.6%	3.5%	3.2%	1.1%	2.4%

*Annualized rate of growth

Oklahoma and Oklahoma City Population, Income, and Gross Product									
Oklahoma	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pers. Income*	$135,011	$145,616	$156,874	$164,437	$175,037	$178,250	$178,592	$183,058	$189,259
Population	3,759,596	3,786,626	3,817,679	3,853,405	3,879,610	3,911,338	3,943,000	3,972,185	3,999,528
Per Cap Income	$35,911	$38,455	$41,092	$42,673	$45,117	$45,573	$45,294	$46,085	$47,320
FT and PT Empl.	2,131,426	2,160,846	2,212,883	2,248,933	2,271,239	2,287,902	2,299,087	2,303,589	2,323,125
W & S Empl.	1,607,228	1,626,838	1,658,230	1,680,348	1,700,578	1,706,632	1,717,995	1,723,945	1,738,898
Proprietor Empl.	524,198	534,008	554,653	568,585	570,661	581,270	581,092	579,644	584,227
Oklahoma City	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pers. Income*	$48,744	$51,941	$54,502	$56,176	$59,465	$62,592	$63,578	$66,046	$68,189
Population	1,257,950	1,276,810	1,298,118	1,321,040	1,337,619	1,358,452	1,380,219	1,402,742	1,426,011
Per Cap Income	$38,749	$40,680	$41,986	$42,524	$44,456	$46,076	$46,064	$47,083	$47,818
Gross Metro Product*	$56,591	$59,956	$62,908	$65,499	$67,844	$69,749	$71,341	$73,495	$76,072

* Measured in Millions of Dollars

Oklahoma City Employment Outlook										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfarm	568.1	566.8	580.1	594.2	608.0	619.6	629.9	633.0	637.2	649.1
Annual Growth	-2.8%	-0.2%	2.3%	2.4%	2.3%	1.9%	1.7%	0.5%	0.7%	1.9%
Private	447.4	444.8	458.4	471.7	483.3	494.9	503.0	504.3	507.7	520.1
Annual Growth	-4.0%	-0.6%	3.1%	2.9%	2.5%	2.4%	1.6%	0.3%	0.7%	2.4%
Mining	13.5	14.3	17.0	19.6	20.2	20.8	19.2	15.6	15.0	16.5
Annual Growth	-15.5%	5.4%	19.0%	15.3%	3.1%	2.9%	-7.6%	-18.8%	-3.8%	10.2%
Construction	25.8	25.2	25.9	26.5	27.1	28.3	29.4	31.5	31.6	32.7
Annual Growth	-6.8%	-2.3%	2.6%	2.4%	2.4%	4.6%	3.7%	7.3%	0.1%	3.6%
Manufacturing	32.5	31.0	32.9	35.1	36.5	37.5	37.6	35.9	35.9	36.2
Annual Growth	-12.1%	-4.6%	6.1%	6.6%	4.0%	2.9%	0.1%	-4.3%	-0.2%	1.0%
Trade, Transport, Utilities	97.5	97.2	100.0	102.9	107.0	109.5	111.5	111.1	111.9	114.9
Annual Growth	-3.2%	-0.3%	2.9%	2.9%	4.0%	2.4%	1.8%	-0.4%	0.7%	2.7%
Wholesale	20.5	20.6	21.6	22.7	23.9	24.5	24.4	23.1	22.4	23.1
Annual Growth	-5.1%	0.1%	4.8%	5.5%	5.1%	2.4%	-0.2%	-5.6%	-2.7%	2.8%
Retail	60.2	60.1	61.2	62.3	64.2	65.9	67.5	68.3	69.4	71.2
Annual Growth	-3.4%	-0.2%	1.9%	1.9%	3.0%	2.7%	2.4%	1.2%	1.6%	2.6%
Transport	16.8	16.6	17.3	17.8	18.9	19.1	19.6	19.7	20.1	20.6
Annual Growth	0.3%	-1.5%	4.1%	3.3%	5.9%	1.2%	2.5%	0.6%	1.9%	2.7%
Information	11.1	9.6	9.0	8.6	8.2	8.1	8.1	8.2	8.0	7.8
Annual Growth	-9.0%	-13.6%	-5.8%	-4.4%	-4.7%	-0.7%	-0.2%	0.4%	-2.5%	-2.1%
Financial	31.3	31.0	30.8	31.8	32.4	33.1	33.5	34.0	35.1	36.0
Annual Growth	-1.7%	-1.0%	-0.6%	3.1%	1.9%	2.4%	1.1%	1.6%	3.0%	2.7%
Professional Svcs.	71.9	73.1	75.8	76.8	77.6	78.9	80.6	79.4	78.6	80.1
Annual Growth	-7.1%	1.7%	3.7%	1.3%	1.1%	1.7%	2.3%	-1.5%	-1.1%	1.9%
Scientific	27.6	28.3	29.1	29.9	29.9	30.1	31.0	31.2	31.5	32.3
Annual Growth	-2.1%	2.6%	3.1%	2.8%	-0.3%	0.9%	2.7%	0.8%	0.9%	2.5%
Mgmt. of Companies	7.5	7.2	7.8	8.8	9.0	9.4	9.5	9.2	8.9	9.1
Annual Growth	-11.2%	-3.1%	7.4%	12.9%	2.5%	4.5%	1.5%	-3.8%	-3.4%	2.7%

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Admin & Waste Support	36.8	37.6	38.9	38.0	38.7	39.3	40.1	39.1	38.2	38.7
Annual Growth	-9.7%	2.1%	3.4%	-2.1%	1.8%	1.5%	2.1%	-2.7%	-2.1%	1.2%
Ed & Health	82.9	83.2	84.4	86.4	88.0	88.9	90.4	93.9	95.8	97.1
Annual Growth	0.9%	0.4%	1.4%	2.4%	1.7%	1.1%	1.6%	3.9%	2.1%	1.4%
Health	74.8	74.8	75.5	77.4	78.7	79.5	81.1	83.9	85.4	86.5
Annual Growth	0.3%	0.0%	0.9%	2.5%	1.7%	1.0%	2.0%	3.5%	1.8%	1.3%
Leisure	57.6	57.6	60.0	61.7	64.2	65.9	68.0	69.8	70.9	73.6
Annual Growth	0.9%	0.1%	4.2%	2.9%	4.0%	2.7%	3.1%	2.6%	1.6%	3.8%
Other	23.3	22.7	22.7	22.4	22.3	23.7	24.8	25.0	25.2	25.2
Annual Growth	-2.2%	-2.7%	0.0%	-1.4%	-0.4%	6.5%	4.3%	0.8%	0.9%	0.0%
Gov	120.8	122.0	121.7	122.5	124.6	124.7	126.9	128.7	129.5	129.0
Annual Growth	1.9%	1.0%	-0.2%	0.6%	1.7%	0.1%	1.8%	1.4%	0.6%	-0.4%
Federal	26.2	28.1	28.4	28.2	27.6	26.9	27.4	27.9	28.8	28.6
Annual Growth	1.8%	7.4%	0.9%	-0.6%	-2.2%	-2.4%	1.9%	1.6%	3.1%	-0.6%
State	42.0	41.7	42.1	42.4	43.5	44.4	45.3	46.1	46.1	46.0
Annual Growth	1.0%	-0.8%	0.8%	0.8%	2.6%	2.0%	2.0%	2.0%	-0.1%	-0.2%
Local	52.6	52.2	51.3	51.9	53.6	53.5	54.2	54.7	54.7	54.4
Annual Growth	2.7%	-0.7%	-1.7%	1.2%	3.2%	-0.2%	1.4%	0.8%	0.0%	-0.4%
OK County Unempl.	19,909	21,768	18,886	17,512	17,978	15,488	14,316	16,124	16,646	16,124
Annual Growth	56.5%	9.3%	-13.2%	-7.3%	2.7%	-13.9%	-7.6%	12.6%	3.2%	-3.1%
OK County Empl.	305,990	332,486	338,450	348,420	351,530	353,937	364,026	363,294	367,863	375,994
Annual Growth	-1.7%	8.7%	1.8%	2.9%	0.9%	0.7%	2.9%	-0.2%	1.3%	2.2%
OK County Labor Force	325,899	354,254	357,336	365,932	369,508	369,425	378,341	379,419	384,509	392,119
Annual Growth	0.5%	8.7%	0.9%	2.4%	1.0%	0.0%	2.4%	0.3%	1.3%	2.0%
OK County Un. Rate	6.1%	6.1%	5.3%	4.8%	4.9%	4.2%	3.8%	4.3%	4.3%	4.1%
Okla. City Unempl.	33,791	36,554	31,613	29,272	30,338	26,054	24,706	27,919	28,595	27,713
Annual Growth	59.3%	8.2%	-13.5%	-7.4%	3.6%	-14.1%	-5.2%	13.0%	2.4%	-3.1%
Okla. City Empl.	535,992	586,949	598,676	615,942	621,278	624,889	643,491	642,460	654,386	669,657
Annual Growth	-1.4%	9.5%	2.0%	2.9%	0.9%	0.6%	3.0%	-0.2%	1.9%	2.3%

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Okla. City Labor Force	569,783	623,502	630,289	645,214	651,616	650,943	668,196	670,379	682,980	697,370
Annual Growth	0.9%	9.4%	1.1%	2.4%	1.0%	-0.1%	2.7%	0.3%	1.9%	2.1%
Okla. City Un. Rate	5.9%	5.9%	5.0%	4.5%	4.7%	4.0%	3.7%	4.2%	4.2%	4.0%
Annual Growth	58.0%	-1.1%	-14.5%	-9.6%	2.6%	-14.0%	-7.7%	12.7%	0.5%	-5.1%