



ACE BOOK 2016

ACCOUNTABILITY FOR A COMPETITIVE ECONOMY



STATE CHAMBER
OF OKLAHOMA
RESEARCH FOUNDATION

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2016 OVERVIEW: ABOUT THE DATA

The 2016 Accountability for a Competitive Economy (ACE) Book provides a snapshot of some of Oklahoma's most important issue areas in order to provide a better understanding of our state's current framework and what areas Oklahoma needs to improve on in the future. This book is broken up into four chapters (An Overview of Oklahoma's Economy, Business Climate, Infrastructure, and Education and Workforce Development). Each chapter is broken up into individual sections that focus on pertinent topics to Oklahoma's economic future.

While it is necessary to understand our state's weaknesses, it is also important to see where Oklahoma has improved and what our state does well. By comparing Oklahoma to our regional neighbors and the nation as a whole, we can learn from other states' economic frameworks to see what makes them more or less successful than our state.

Oklahoma's economy has improved in several areas over the past 15 years. Our state's per capita personal income has increased 73.9%, and our economy has added 174,000 jobs. Oklahoma's gross domestic product has also increased 99.3% since 2000. Unfortunately, Oklahoma continues to struggle in other areas. The quality of life and health of Oklahomans continues to be a negative issue due to a high percentage of uninsured residents, a high rate of participation in unhealthy behaviors, and poor air quality. Our education system is also in the spotlight for unfavorable reasons. Oklahoma's public schools are not adequately preparing our youth for higher education and the workforce. Our students' test scores are consistently below the national average, and our education pipeline is broken. These are issues that need to be fixed, and until Oklahoma's health and education problems are solved, our economy will continue to lag behind other states.

This evaluation of Oklahoma's current economic landscape was produced to inform and assist policy makers in creating a better future for our state and all Oklahomans.

CHAPTER 1

AN OVERVIEW OF OKLAHOMA'S ECONOMY

The following pages illustrate the current state of the Oklahoma economy and how it progresses over time. We take a close look at various economic indicators, including migration, per capita personal income, employment growth, state gross domestic product, and public pensions. This section also reviews health care and quality of life issues.



AN OVERVIEW OF OKLAHOMA'S ECONOMY

PEOPLE

OBJECTIVE

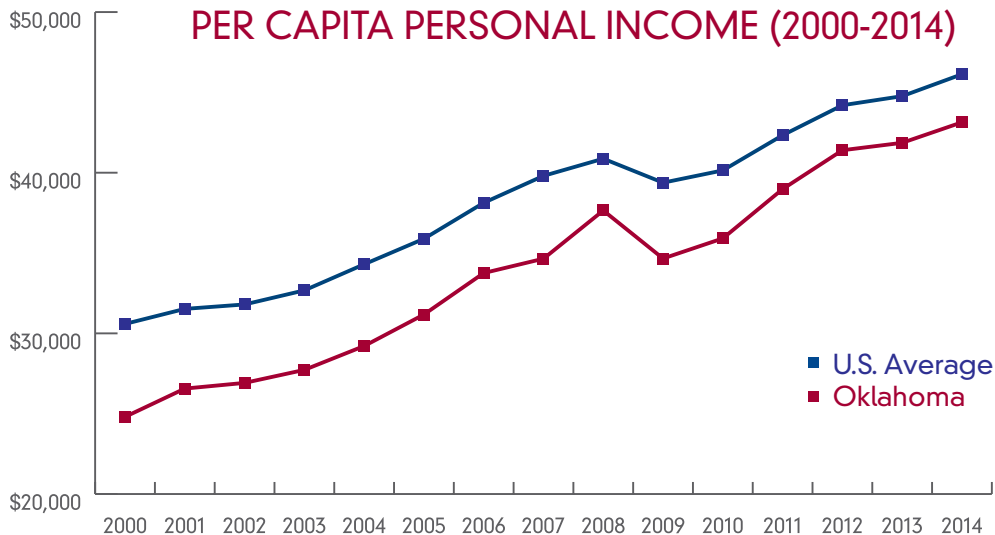
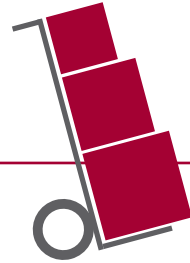
To draw people to Oklahoma, our state must be at the forefront of creating jobs and making Oklahoma a healthy and attractive place to live and raise families.

Oklahoma is the 28th most populated state with **3,911,338 people** as of July 1, 2015. That's a 13.35% increase between 2000 and 2015. The U.S. population increased by 14.21% during the same time period.

Last year, **15,466** people moved to Oklahoma.

- 8,199 from other states
- 7,267 from other countries

In 2014, Oklahoma's per capita personal income was **\$43,138**. It has increased 73.9% since 2000, which is the fourth largest percent change in the nation. The U.S. average has only increased by 50.8% since 2000.



OBJECTIVE

To keep Oklahoma's economy moving in a positive direction, we must continue to create a wide range of jobs and avoid relying on one industry.

EMPLOYMENT BY THE NUMBERS

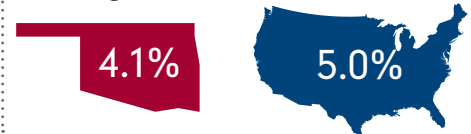
Oklahoma has the 29th largest workforce in the nation with **1,670,500 jobs**.



Oklahoma's economy added **21,000 jobs** in the last year.

21,000
JOBS ADDED

At the end of 2015, Oklahoma's 4.1% unemployment rate was the **15th lowest in the nation**, and it remained below the national average of 5.0%.

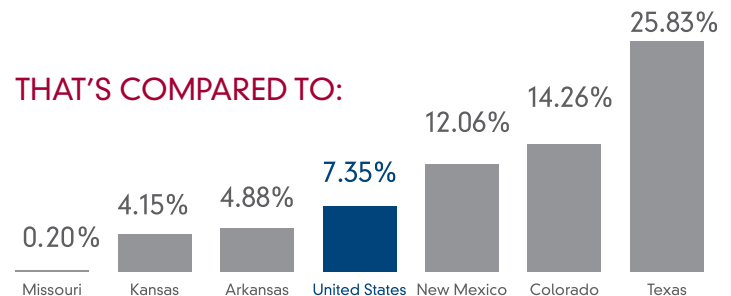


174,000
JOBS ADDED

In the past 15 years, Oklahoma's employment has grown by **11.63%**.



THAT'S COMPARED TO:



OKLAHOMA'S LARGEST SECTORS OF EMPLOYMENT

Government (Federal, State, & Local)	21.0%
Retail & Wholesale Trade	14.6%
Education & Health Services	13.8%
Professional & Business Services	11.2%
Leisure & Hospitality	9.4%

2014 EMPLOYMENT BY INDUSTRY

Government (Federal, State, & Local)	348,000
Retail & Wholesale	240,100
Health Care & Social Assistance	208,200
Professional & Business Services	185,800
Leisure & Hospitality	155,000

OBJECTIVE

In order for Oklahoma's financial health to improve, it is imperative that we control our spending habits and more effectively utilize the state's general revenues.

BY THE NUMBERS

In FY2013, Oklahoma's debt per capita was \$2,482.



THAT'S COMPARED TO:

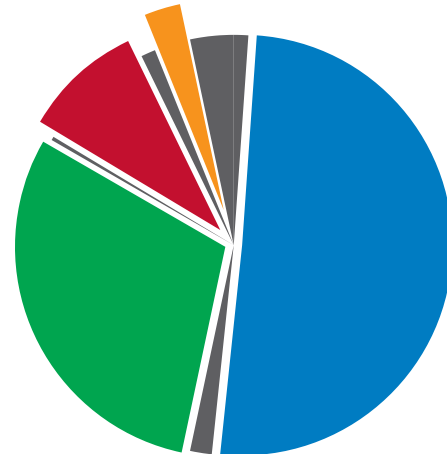
Arkansas	\$1,336
Texas	\$1,509
Kansas	\$2,362
Colorado	\$3,119
Missouri	\$3,200
New Mexico	\$3,470
United States	\$3,611

Oklahoma ranked 9th best in the Mercatus Center's rankings of each state's financial health based on short and long term debt, unfunded pensions, health care benefits, and other key fiscal obligations. Oklahoma ranked better than all of our neighboring states.

FEDERAL FUNDING MAKES UP 33.8% OF OKLAHOMA'S STATE GOVERNMENT GENERAL REVENUES, WHICH IS THE 17TH HIGHEST PERCENTAGE IN THE NATION.

In FY2014, Oklahoma's gross collections totaled \$13.6 billion, however, the amount of money in the general revenue fund was \$5.3 billion. That means that **ONLY 38.9% of gross collections went into the general revenue fund.**

FY2016 APPROPRIATIONS TOP RECIPIENTS



Education & Workforce Development	50.31%
Health & Human Services	30.81%
Safety & Security	9.61%
Transportation	2.63%

OBJECTIVE

Oklahoma's industrial sectors must continue to grow in order for our state to be competitive.

GDP BY THE NUMBERS

Oklahoma's 2014 GDP was \$183.5 billion, which was 1.1% of the total U.S. GDP.

\$183.5 billion
(1.1% of the total U.S. GDP)

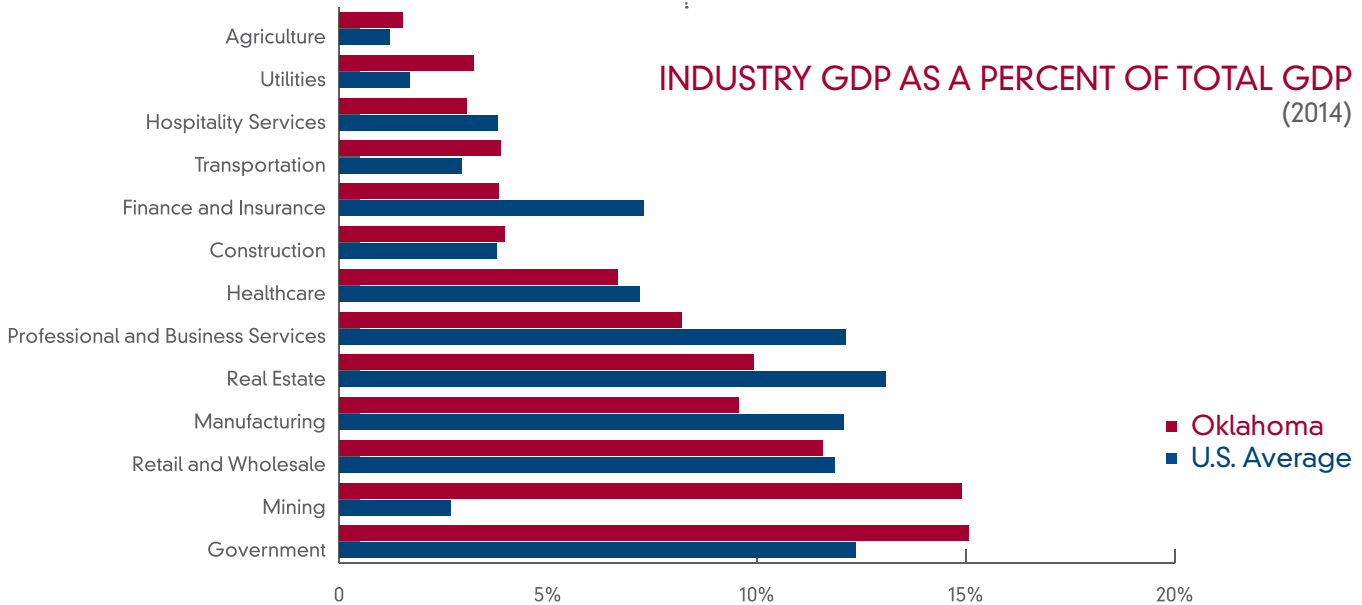
Oklahoma's GDP increased by 99.3% between 2000 and 2014, which was the 7th largest increase in the nation.

THAT'S COMPARED TO:

Missouri	51.5%
New Mexico	67.2%
Kansas	68.2%
United States	69.3%
Colorado	72.0%
Arkansas	75.7%
Texas	119.2%

Oklahoma's GDP increased by 4.0% between 2013 and 2014, which was the 17th largest increase in the nation. The national average was 3.9%.

The two industrial sectors that showed the greatest growth in GDP between 2013 and 2014 are utilities (27.9%) and mining (8.4%).



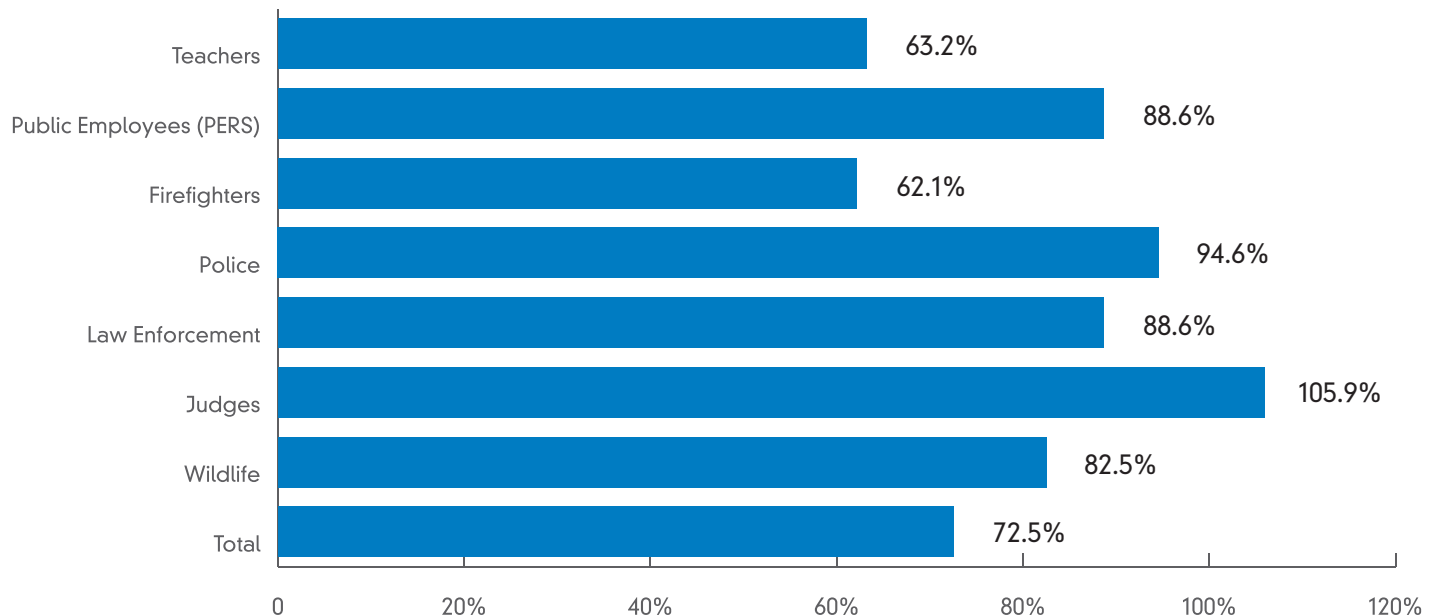
ISSUE

Oklahoma's decreasing unfunded public pension liability is becoming less of a financial strain on our state's government.

PENSION FACTS

- In 2013, Oklahoma had the **29th highest funding ratio** in the nation at 66.5%. The U.S. average was 71.2%.
- Oklahoma's unfunded accrued actuarial liabilities totaled \$11.4 billion in 2013.
- The average public pension plan was 71.8% funded in FY 2013.
- The overall funded status of all pension plans increased from 66.5% to 72.5% between 2013 and 2014.
- The Teachers' plan remains the largest and one of the most poorly funded of the seven plans.

OKLAHOMA PENSION PLANS (FUNDED STATUS AS OF 7/1/2014)



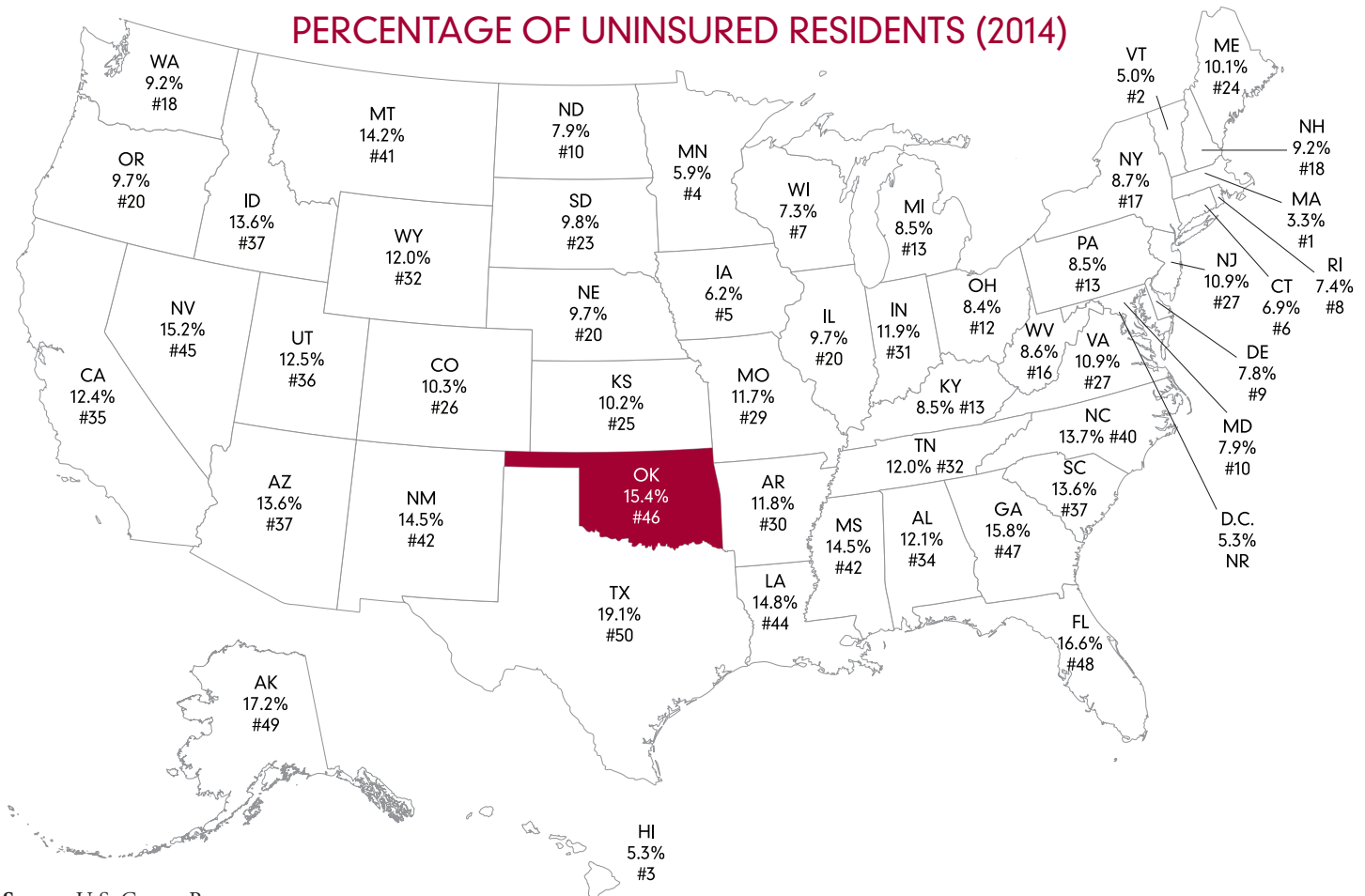
OBJECTIVE

To address access to care issues, it is necessary that we focus on decreasing the percentage of uninsured Oklahomans and increase the number of doctors statewide.

HEALTH INSURANCE COVERAGE

15.4 percent of Oklahoma's population is uninsured, which is the 5th highest percentage in the nation. The U.S. average is 11.7%.

PERCENTAGE OF UNINSURED RESIDENTS (2014)



AVAILABILITY OF HEALTH CARE

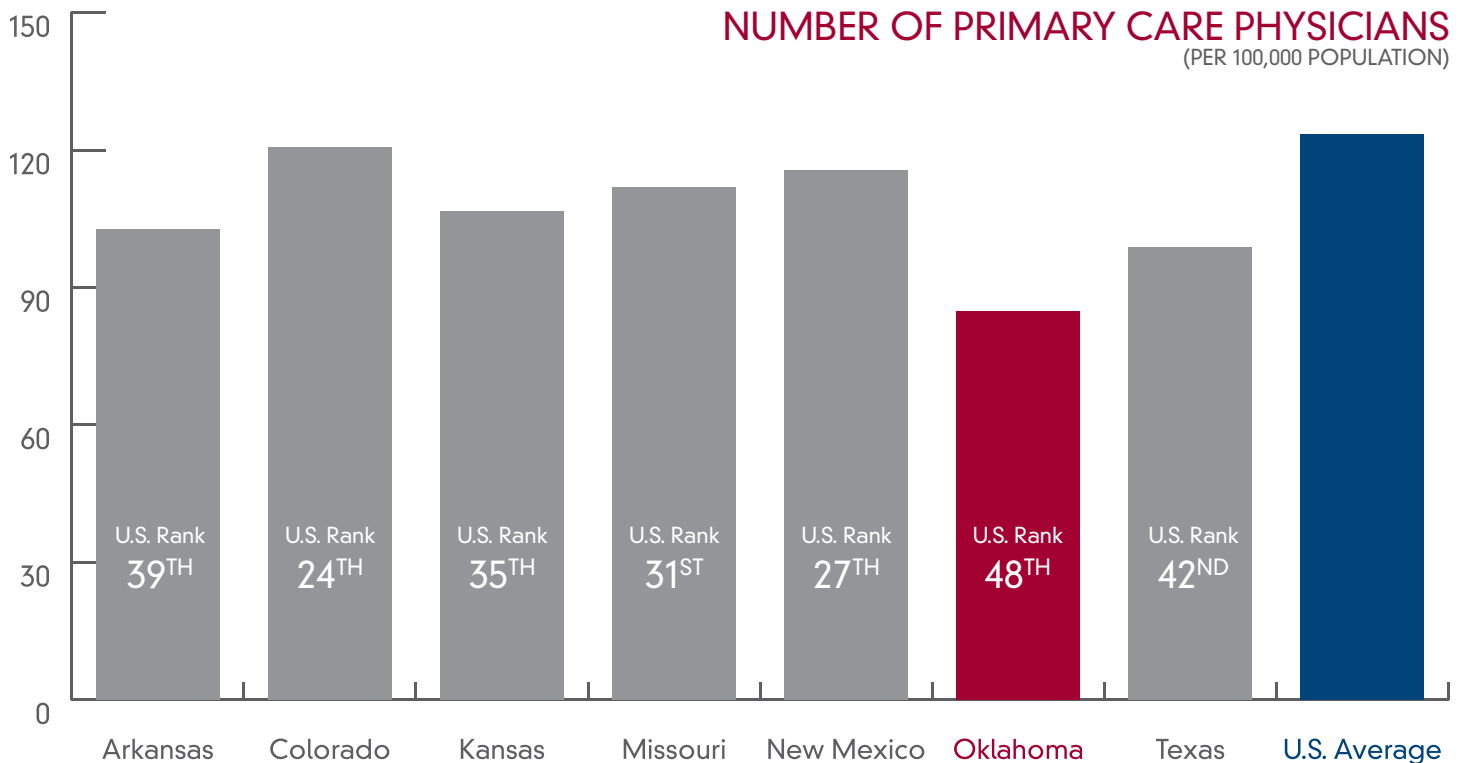
Oklahoma has **84.8 primary care physicians** per 100,000 people (which includes general practice, family practice, OB-GYN, pediatrics, and internal medicine). Only two states have fewer. The national average is 123.5.



Oklahoma has **50.2 practicing dentists** per 100,000 people, which is the 37th most in the nation. The national average is 62.



Oklahoma has **116 hospitals**, which is the 19th most in the nation. When compared to population, Oklahoma has three hospitals per 100,000 people, which is the 9th most in the nation. The national average is 1.6.

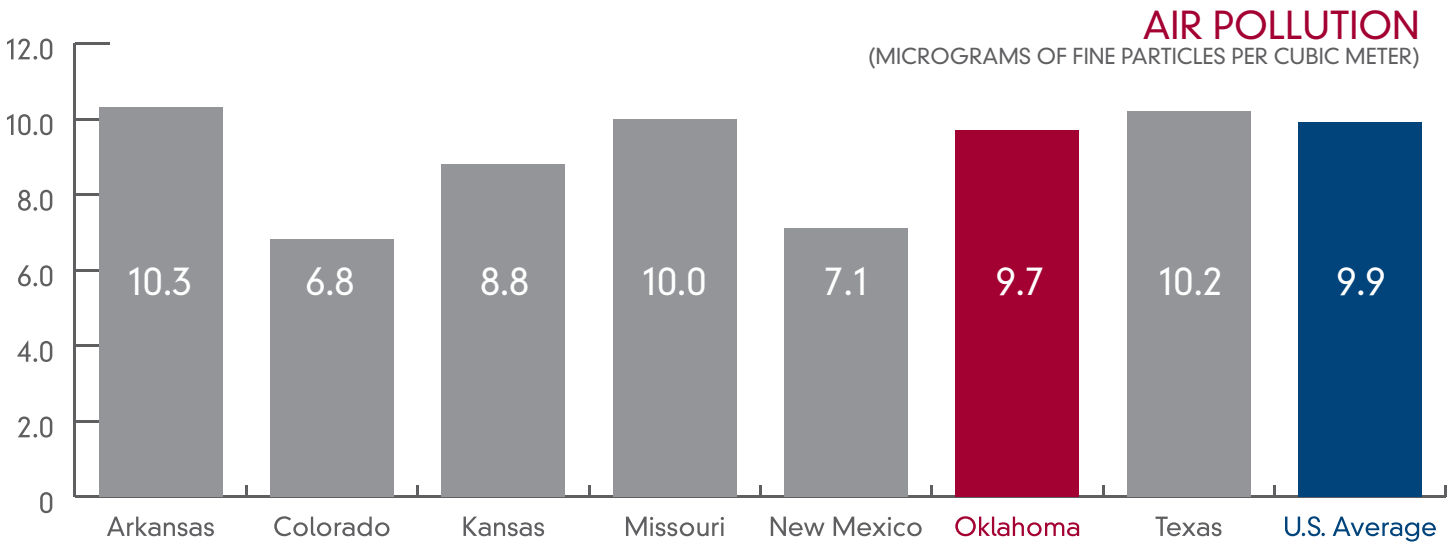


ISSUE

More and more businesses choose to do business based on the best places to live. Oklahoma lags behind most states due to poor air quality, a high crime rate, and an unhealthy population.

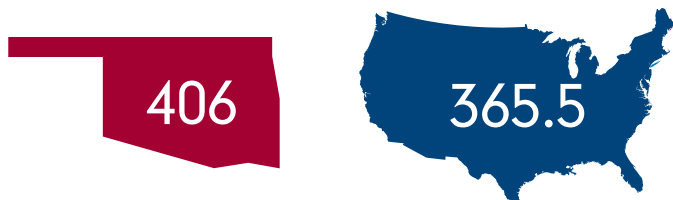
ENVIRONMENTAL FACTORS

Oklahoma's air pollution is considered the 18th worst in the nation.



CRIME FACTS

Violent Crimes per 100,000 People in 2014



Oklahoma's violent crime rate decreased by **9.0%** between 2013 and 2014. The U.S. rate of violent crime only dropped **1.0%** during the same period.

HEALTH BEHAVIORS

FACT

OKLAHOMA'S ADULT OBESITY RATE (33.0%)
IS THE 6TH HIGHEST IN THE NATION.

FISCAL IMPACT

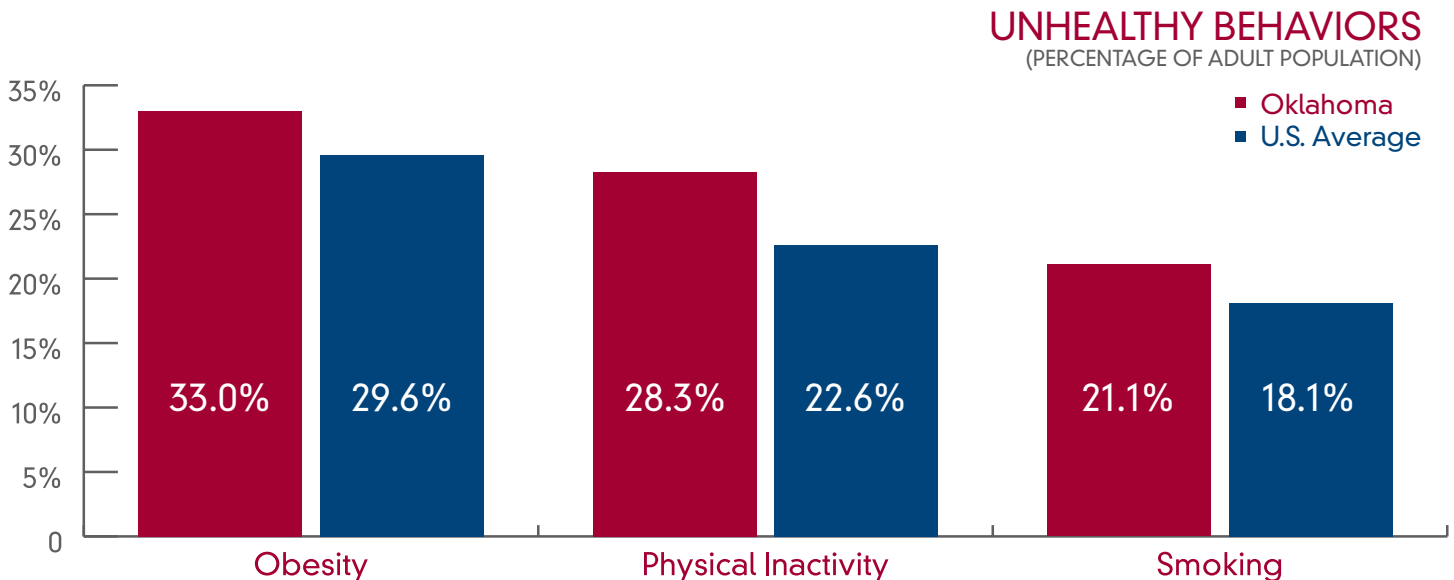
Oklahoma spent an estimated \$1,721,000,000 on health care
directly related to obesity in 2009.

FACT

OKLAHOMA'S PERCENTAGE OF ADULT SMOKERS (21.1%)
IS THE 11TH HIGHEST IN THE NATION.

FISCAL IMPACT

Oklahoma residents' state and federal tax burden from
smoking-caused government expenditures = \$923 per household



CHAPTER 2

OKLAHOMA'S BUSINESS CLIMATE

While Oklahoma provides a more competitive business climate than in the past, there is more work that needs to be done. In CNBC's America's Top States for Business 2015, Oklahoma's overall rank dropped from 28th in 2014 to 31st. This is due to Oklahoma's rank dropping in five of the ten categories. The largest drop came in the "Cost of Doing Business" category, in which Oklahoma dropped from 1st to 9th.

This section examines some of the issues that are most pressing for Oklahoma businesses, including taxation, workers' compensation, innovation, and legal reform.

SNAPSHOT OF OKLAHOMA'S TAXES

This page provides a broad overview of Oklahoma's tax rates and tax collections.

Note: For all rankings on this page, 1 indicates the highest among the 50 states.

Individual Income Tax		Corporate Income Tax		Property Tax	
Number of brackets	6	Number of brackets	1	Collections per capita	\$603
Top income tax rate	5.00%	Corporate tax rate	6%	Collections rank	49
Top bracket kick-in	\$7,200	Collections per capita	\$153	Property taxes paid as share of owner-occupied housing value	0.86%
Bottom income bracket rate	0.50%	Collections rank	18	Property taxes paid rank	29
Bottom bracket kick-in	\$1				
Collections per capita	\$761				
Collections rank	33				

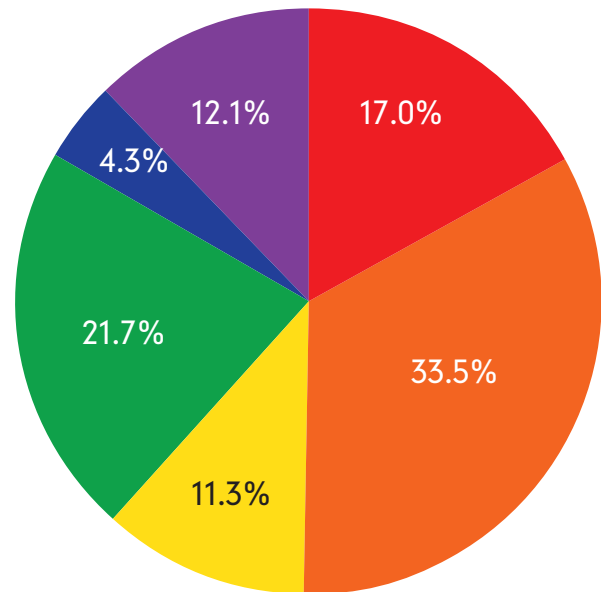
Sales Tax		Excise Taxes			Other Taxes	
			Rate	Rank		Rate
State rate	4.50%	Gasoline taxes and fees	\$0.17 per gallon	47	Gross receipts tax	None
State + average local rate	8.78%	Cigarette taxes	\$1.03 per pack	30	Capital stock tax	0.125%
State + average local rank	6	Spirits taxes	\$5.56 per gallon	25	Inheritance tax	None
Collections per person	\$1,133	Beer taxes	\$0.40 per gallon	15	Estate tax	None
Collections rank	15	Cell phone taxes	9.87%	25		

Oklahoma received the largest share of state and local combined collections in 2013 from sales taxes (33.5% of total), followed by individual income taxes (21.7%) and property taxes (17.0%). The Oklahoma sales tax share is higher than the U.S. average, and the property tax is lower.

PERCENT OF TOTAL COMBINED STATE AND LOCAL TAX COLLECTIONS BY TAX TYPE, OKLAHOMA (2013)



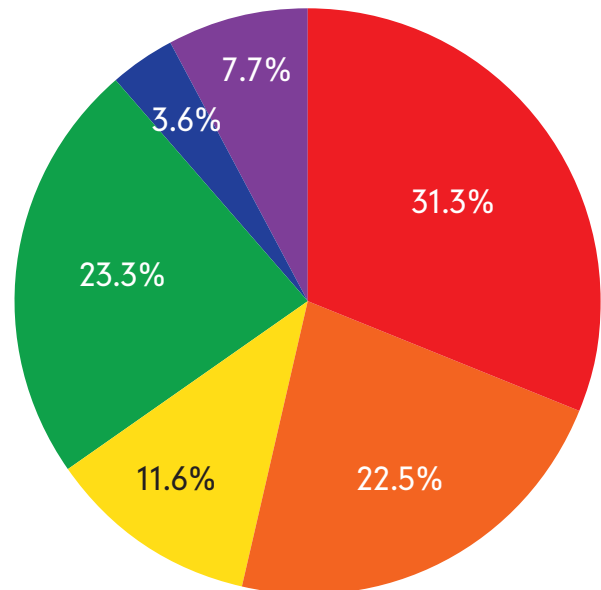
Property Taxes	17.0%
Sales Taxes	33.5%
Excise Taxes	11.3%
Individual Income Tax	21.7%
Corporate Income Tax	4.3%
Other Taxes	12.1%



PERCENT OF TOTAL COMBINED STATE AND LOCAL TAX COLLECTIONS BY TAX TYPE, UNITED STATES (2013)



Property Taxes	31.3%
Sales Taxes	22.5%
Excise Taxes	11.6%
Individual Income Tax	23.3%
Corporate Income Tax	3.6%
Other Taxes	7.7%



Note: Percentages may not add to 100 due to rounding.

STATE BUSINESS TAX CLIMATE

Oklahoma ranks 33rd out of 50 in the State Business Tax Climate Index (2016)

The State Business Tax Climate Index assesses how well-structured each state's tax code is for business. Oklahoma's tax code is more favorable for business in some categories, but not others.

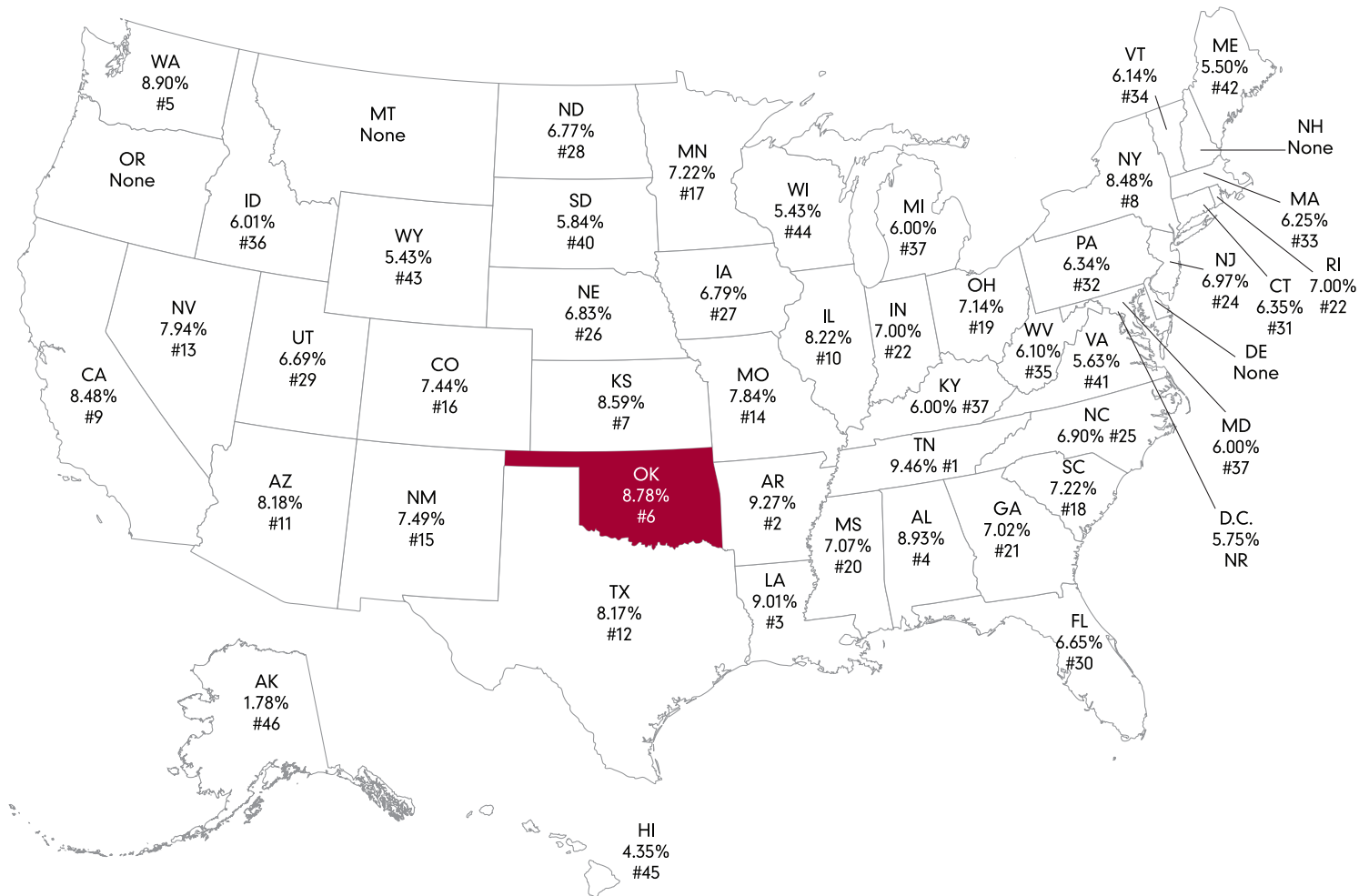
State	Overall Index Rank	Corporate Tax	Individual Income Tax	Sales Tax	Property Tax
Texas	10	41	6	37	34
Missouri	17	3	28	23	8
Colorado	18	15	16	44	12
Kansas	22	40	18	32	19
Oklahoma	33	8	40	38	18
New Mexico	35	27	34	48	1
Arkansas	38	42	29	43	27

Note: A rank of 1 indicates the state's tax system is more favorable for business; a rank of 50 indicates the state's tax system is less favorable for business.



Oklahoma slipped from an overall ranking of 32nd last year to 33rd this year. Our state scores low in the individual income tax and sales tax categories. Our low ranking in the sales tax category is due to Oklahoma having the sixth highest combined state and average local tax rate in the nation at 8.78%

COMBINED STATE & AVERAGE LOCAL SALES TAX RATES (Midyear 2015)



OBJECTIVE

In order to attract new companies to Oklahoma, and keep the ones we have, it is necessary to make our tax code more attractive to businesses.

BY THE NUMBERS

\$7.2 billion

Total Business Taxes

Oklahoma collected \$7.2 billion in total state and local business taxes in 2014.

In 2014, Oklahoma collected 30.6% of revenue from businesses through the sales tax and 5.5% of revenue from businesses through the corporate income tax.

The capital stock tax is a business tax imposed at a low rate but directly on business capital. Oklahoma levies a capital stock tax with a rate of 0.125% and a maximum payment amount of \$20,000. Some states have lower maximum payment amounts such as Georgia (\$5,000), Nebraska (\$11,995), and Alabama (\$15,000).

STATE AND LOCAL BUSINESS TAXES, BY TYPE, FY2014 (\$BILLIONS)

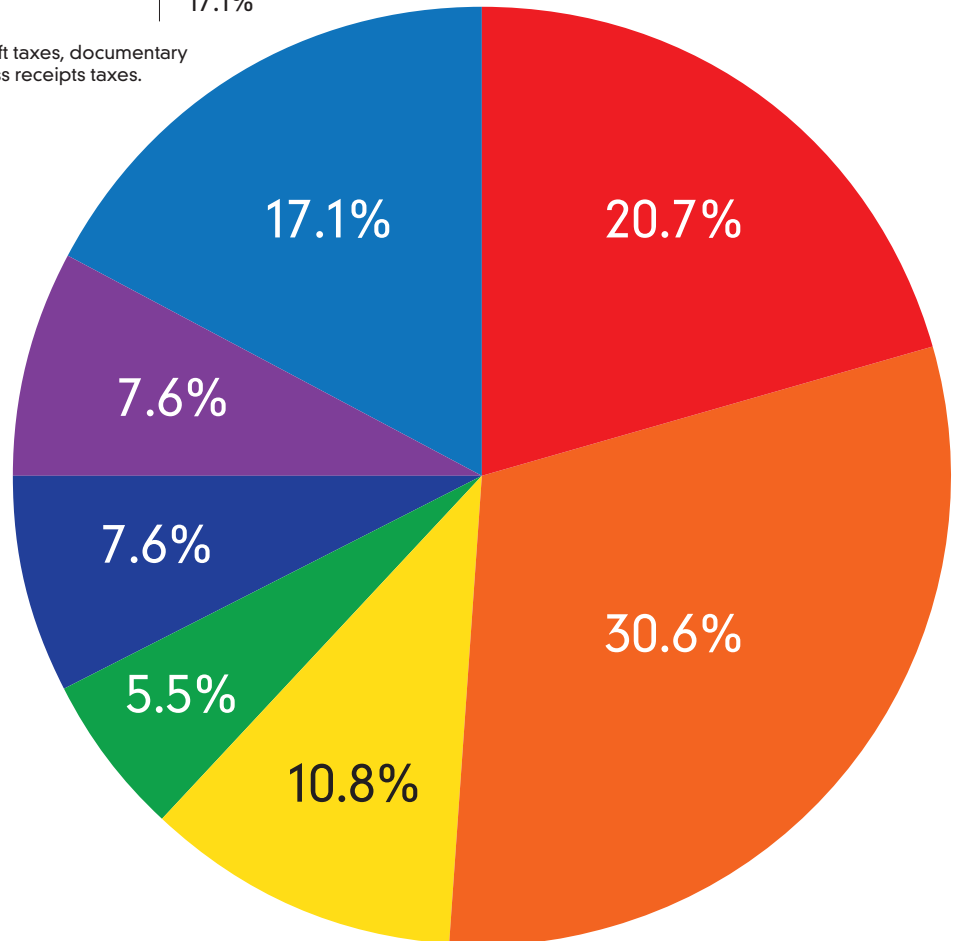
State	Property Tax	Sales Tax	Excise Tax Including Public Utilities & Insurance	Corporate Income & Individual Income Tax on Business Income*	Unemployment Insurance Tax	License and Other Taxes	Total Business Taxes
Arkansas	\$1.1	\$1.5	\$0.5	\$0.7	\$0.4	\$0.4	\$4.5
Colorado	\$4.9	\$2.6	\$1.0	\$1.3	\$0.7	\$0.7	\$11.3
Kansas	\$2.5	\$1.6	\$0.6	\$0.3	\$0.4	\$0.4	\$5.9
Missouri	\$3.3	\$2.2	\$0.7	\$1.0	\$0.6	\$0.8	\$8.7
New Mexico	\$0.9	\$1.9	\$0.4	\$0.3	\$0.2	\$1.2	\$4.9
Oklahoma	\$1.5	\$2.2	\$0.8	\$0.9	\$0.5	\$1.2	\$7.2
Texas	\$29.2	\$18.1	\$7.9	\$4.7	\$2.6	\$12.9	\$70.7
United States	\$250.6	\$142.8	\$84.0	\$98.2	\$48.7	\$64.4	\$688.7

*Corporate income and individual income tax on business income include gross receipts taxes levied in Texas.

COMPOSITION OF OKLAHOMA'S STATE AND LOCAL BUSINESS TAXES, FY2014

■ Property Taxes	20.7%
■ Sales Taxes	30.6%
■ Excise Taxes	10.8%
■ Corporate Income Tax	5.5%
■ Unemployment Insurance Tax	7.6%
■ Individual Income Tax on Pass-through Income	7.6%
■ License and Other Taxes*	17.1%

* Taxes categorized under "other" include death and gift taxes, documentary and state transfer taxes, severance taxes, and local gross receipts taxes.



OBJECTIVE

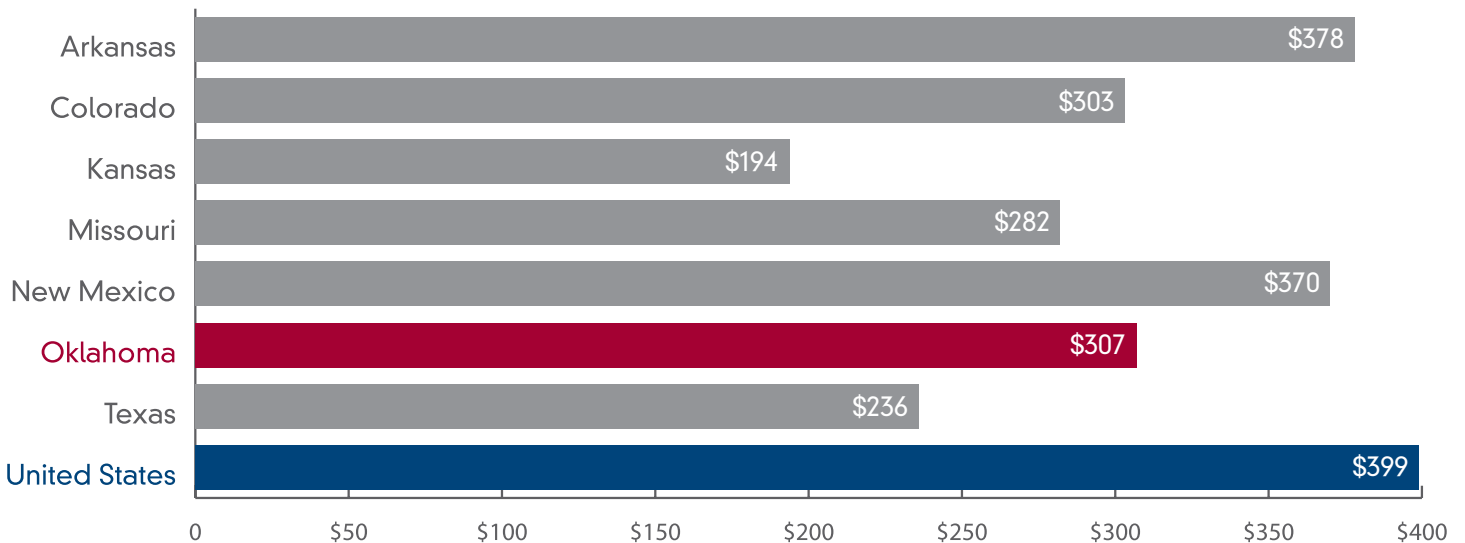
We need to keep Oklahoma's unemployment insurance tax system competitive with the other states in our region.

UNEMPLOYMENT INSURANCE TAXES (2014)

Overall Rank	State	Tax on Average Full-Time Employee	Tax Rate	Taxable Wage Base
	United States	\$399	3.01	\$13,258
25	Arkansas	\$378	3.15	\$12,000
26	New Mexico	\$370	1.58	\$23,400
31	Oklahoma	\$307	1.64	\$18,700
32	Colorado	\$303	2.59	\$11,700
34	Missouri	\$282	2.17	\$13,000
40	Texas	\$236	2.62	\$9,000
43	Kansas	\$194	2.43	\$8,000

Between 2013 and 2014, Oklahoma's unemployment insurance taxes on average, full-time employees decreased by \$147. Oklahoma's UI tax is now less than the U.S. average.

UI TAX ON AVERAGE FULL-TIME EMPLOYEE



Source: U.S. Department of Labor, Employment and Training Administration, *UI Data Summary*

OBJECTIVE

Even with the passage of Senate Bill 1062 in 2013, we must continue to work on lowering the costs of workers' compensation claims and making Oklahoma's workers' compensation system one of the best in the nation.

BY THE NUMBERS

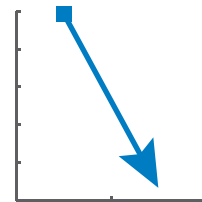
In previous years, more than 50% of Oklahoma's total workers' compensation costs were spent on indemnity versus medical. Today, the breakdown is:

- Indemnity - 46%
- Medical - 54%

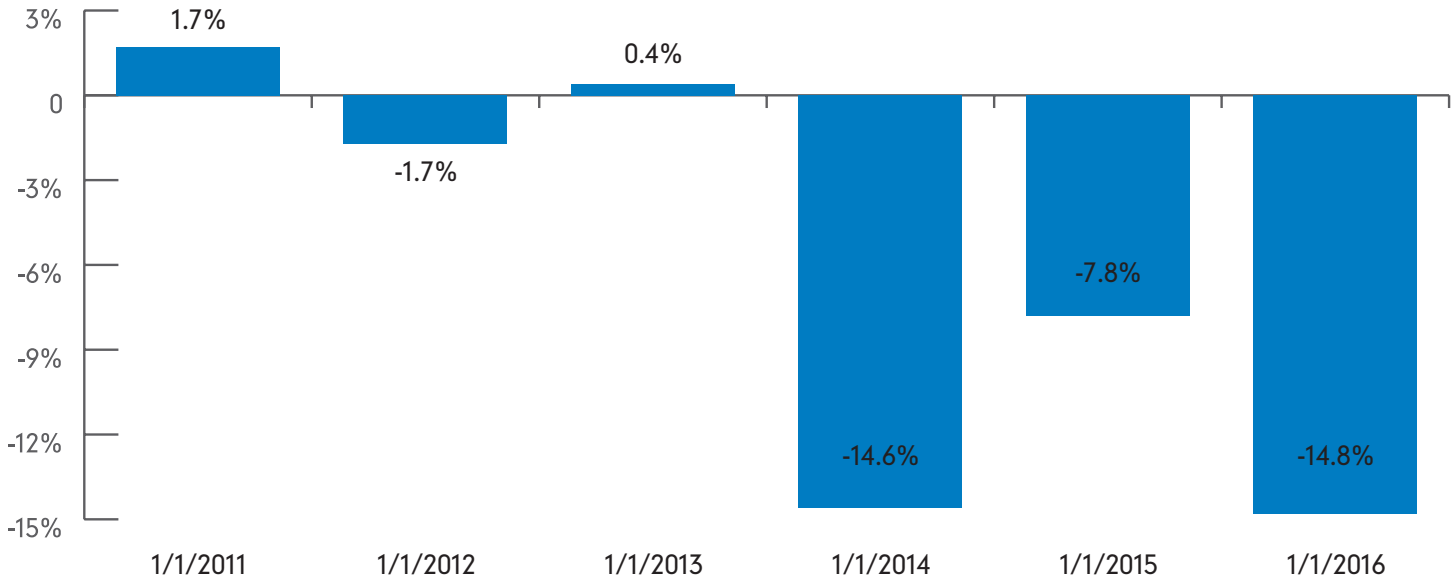
Between 2013 and 2014, Oklahoma's workers' compensation direct written premiums dropped from \$972 million to \$893 million, which is the lowest volume since 2011.

\$79,000,000
DROP

Oklahoma's loss cost level has decreased **37.2%** since January 2014.



OKLAHOMA'S LOSS COST LEVEL CHANGES



OBJECTIVE

A state's litigation environment continues to be important to businesses, so it is essential that we work to create a fair and balanced legal system in Oklahoma.

2015 LAWSUIT CLIMATE SURVEY

The U.S. Chamber Institute for Legal Reform's Ranking the States report explores how reasonable and balanced the states' tort liability systems are perceived to be by U.S. businesses. **Oklahoma's overall ranking improved 9 places** from 42nd in 2012 to 33rd in 2015.

75% of survey respondents reported that a state's litigation environment is likely to impact important business decisions at their companies such as where to locate or to do business.



While Oklahoma has improved in the "Damages" key element category, our state ranks low in some of the other categories, including:

- Judges' Competence - 39th
- Judges' Impartiality - 41st
- Treatment of Class Action Suits and Mass Consolidation Suits - 39th

The top 3 issues mentioned as creating the least fair and reasonable litigation environment include:

1. Biased/partial judgment
2. Corrupt/unfair system
3. Poor quality of jury/judges

2015 Lawsuit Climate Survey Rankings

State	2015 Rank	2012 Rank
Colorado	16	23
Kansas	19	5
Oklahoma	33	42
Texas	40	36
Arkansas	41	35
Missouri	42	34
New Mexico	45	44

ISSUE

Oklahoma is losing ground to other states in attracting research and development companies.

R&D Funding/Spending

The federal government's obligations for research and development in Oklahoma dropped from \$450 million in 2012 to **\$262 million** in 2013. Oklahoma's \$262 million is only 0.24% of the U.S. total, which gives us a ranking of 39th.

In 2011, Oklahoma's total research and development spending was \$1,207,000,000, which was the 35th most in the nation. Oklahoma's R&D spending per capita was \$319, which was the **6th lowest** in the nation.

In 2014, the amount of Small Business Innovation Research (SBIR) grants awarded to Oklahoma, in dollars per worker, was **\$2.19**. Only five states rank lower.

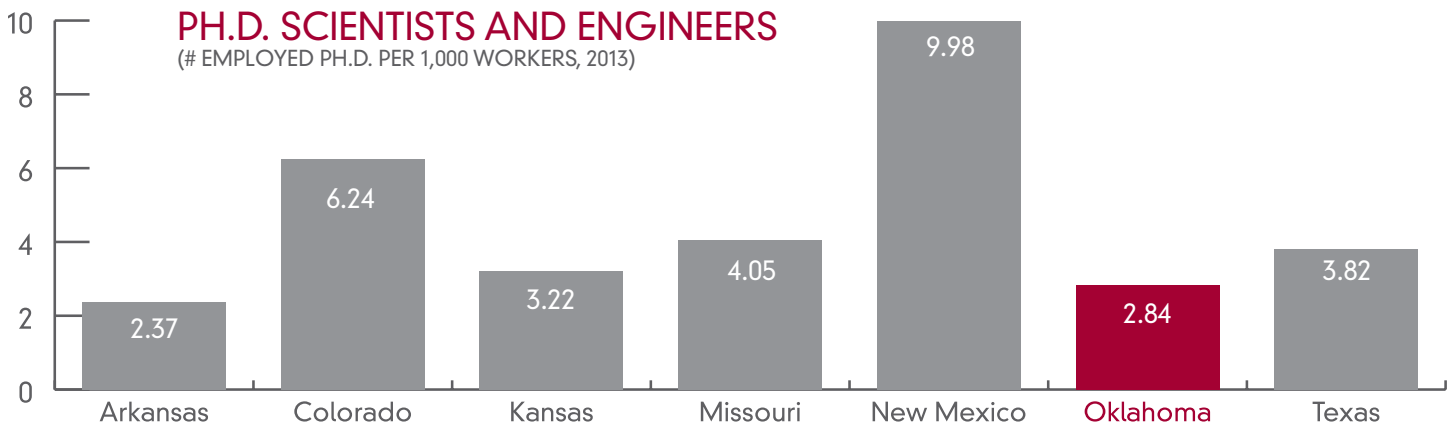


RESEARCH & DEVELOPMENT SPENDING (2011)

Rank	State	Total R&D Spending (in millions)	R&D Spending Per Capita	Rank
3	Texas	\$20,623	\$804	29
18	Colorado	\$6,862	\$1,340	14
20	New Mexico	\$6,070	\$2,921	3
30	Kansas	\$2,081	\$725	31
35	Oklahoma	\$1,207	\$319	45
40	Arkansas	\$678	\$231	47
	United States	\$395,442	\$1,269	

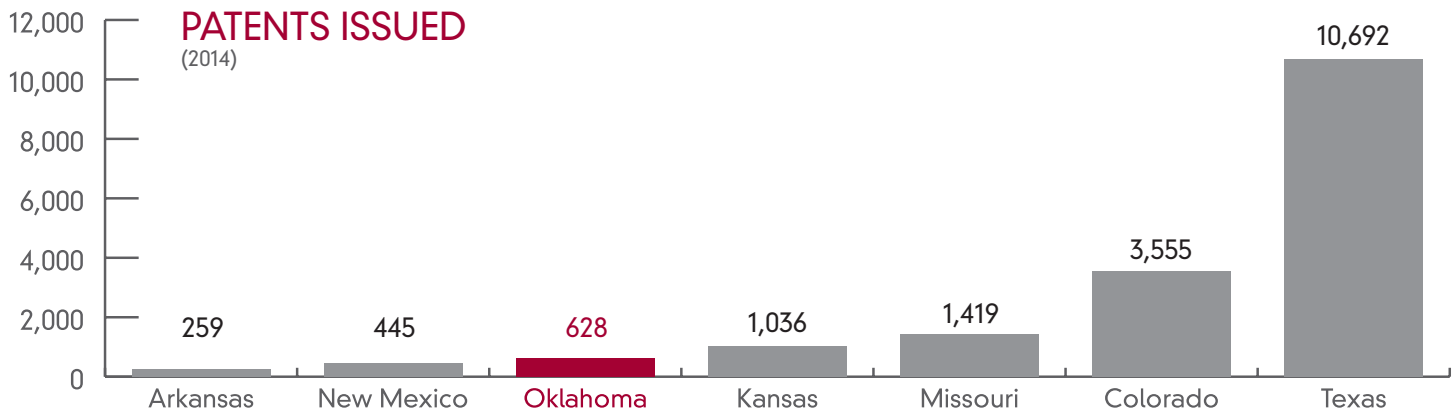
SCIENCE AND ENGINEERING DOCTORATES

Oklahoma ranks **46th** in the number of employed science and engineering doctorates per 1,000 workers (2.84).



PATENTS

Oklahoma ranks **33rd** in the number of patents issued (628) in 2014.



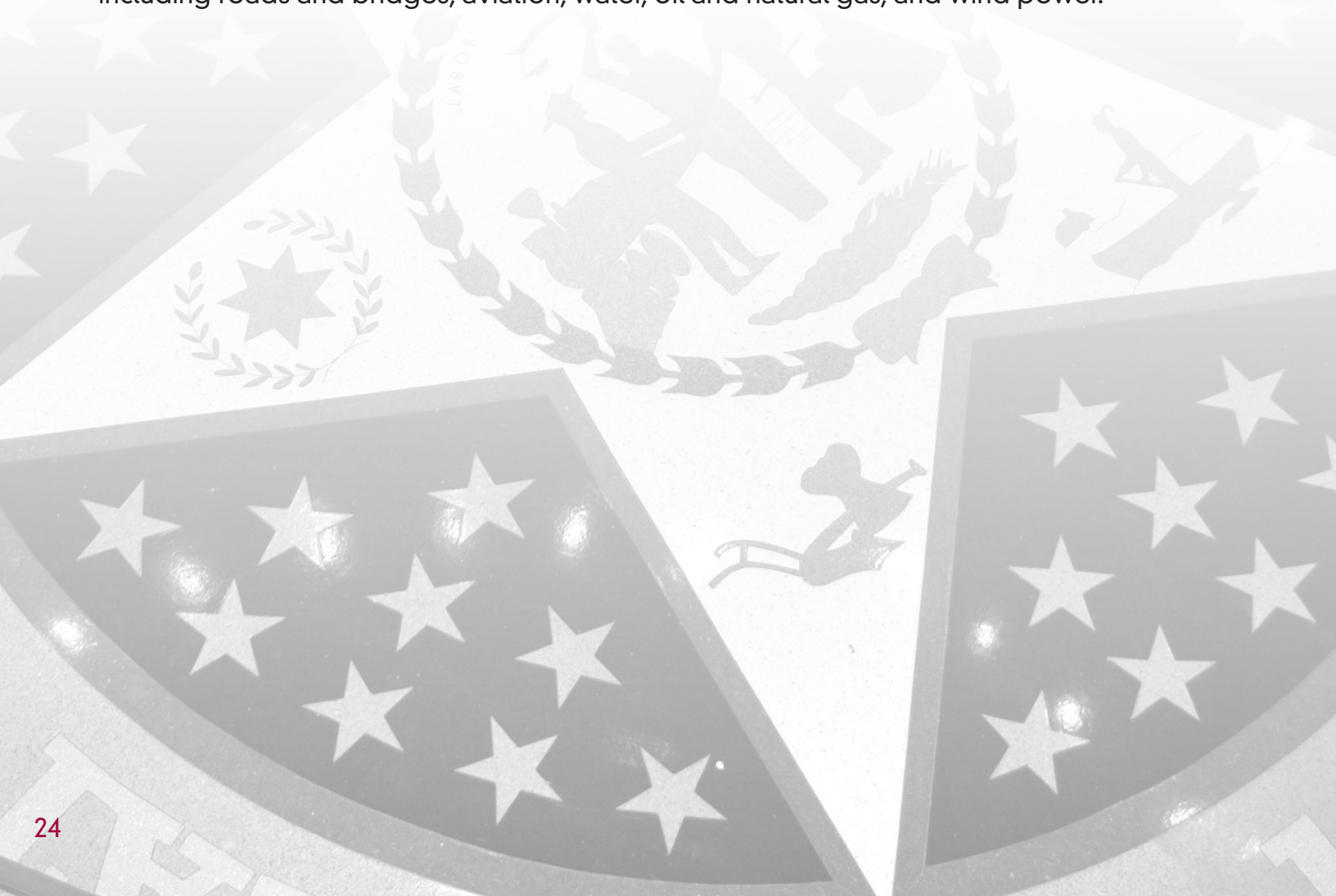
At only **162 patents** issued per one million people, Oklahoma ranks 41st.

CHAPTER 3

OKLAHOMA'S INFRASTRUCTURE

Oklahoma's infrastructure has improved over the past few years. Our number of deficient bridges has decreased, and some of our most traveled roads have been improved. In CNBC's Top States for Business 2015, Oklahoma's rank in the "Infrastructure" category jumped from 33rd in 2014 to 17th in 2015.

The following pages examine some of the most critical aspects of our state's infrastructure, including roads and bridges, aviation, water, oil and natural gas, and wind power.



ISSUE

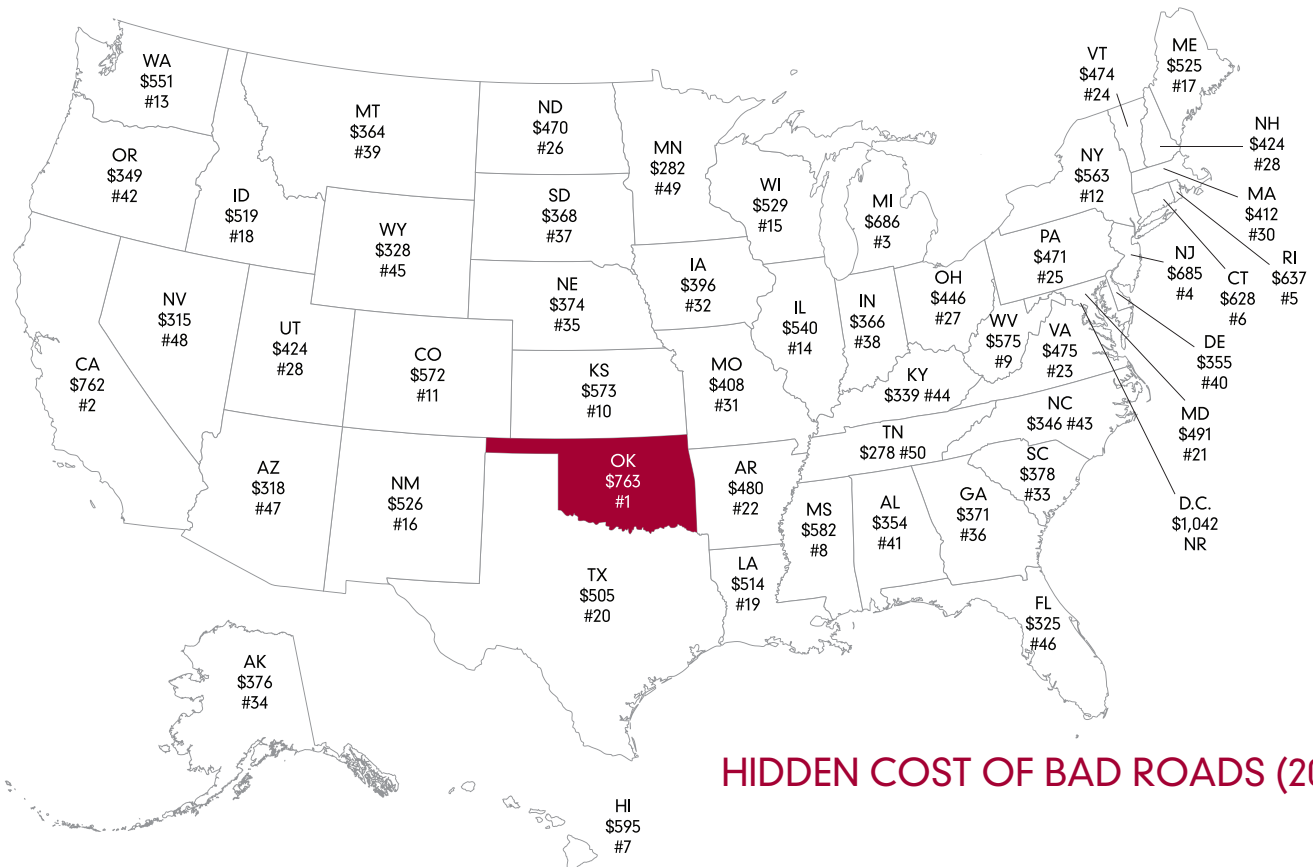
Well maintained transportation infrastructure and bridges are vital to support Oklahoma commerce, job creation and economic growth.

ROAD CONDITIONS

Thirty-eight percent of Oklahoma's major roads are in poor condition, compared to the U.S. average of 18%.

In Oklahoma, 27% of rural pavements are in poor condition, which is the 7th highest percentage in the nation.

Driving on roads in need of repair costs each Oklahoma motorist \$763 a year in extra vehicle repairs and operating costs, which is the most in the nation.



HIDDEN COST OF BAD ROADS (2015)

FAST FACTS

112,940

Miles of Public Roads

23,049

Bridges

45%

Vehicle travel on Oklahoma's highways increased by 45% from 1990 to 2013

933

Miles of Interstate

5,362

Deficient Bridges

47,872,000,000

Miles Traveled on Oklahoma Roads (2012)

BRIDGES

GOOD NEWS

Between 2010 and 2014, Oklahoma's number of structurally deficient bridges was reduced by **47.3%**.

BAD NEWS

In Oklahoma, **23.3%** of bridges are structurally deficient or functionally obsolete.

Nineteen percent of Oklahoma's rural bridges are considered structurally deficient, which is the 5th most in the country.

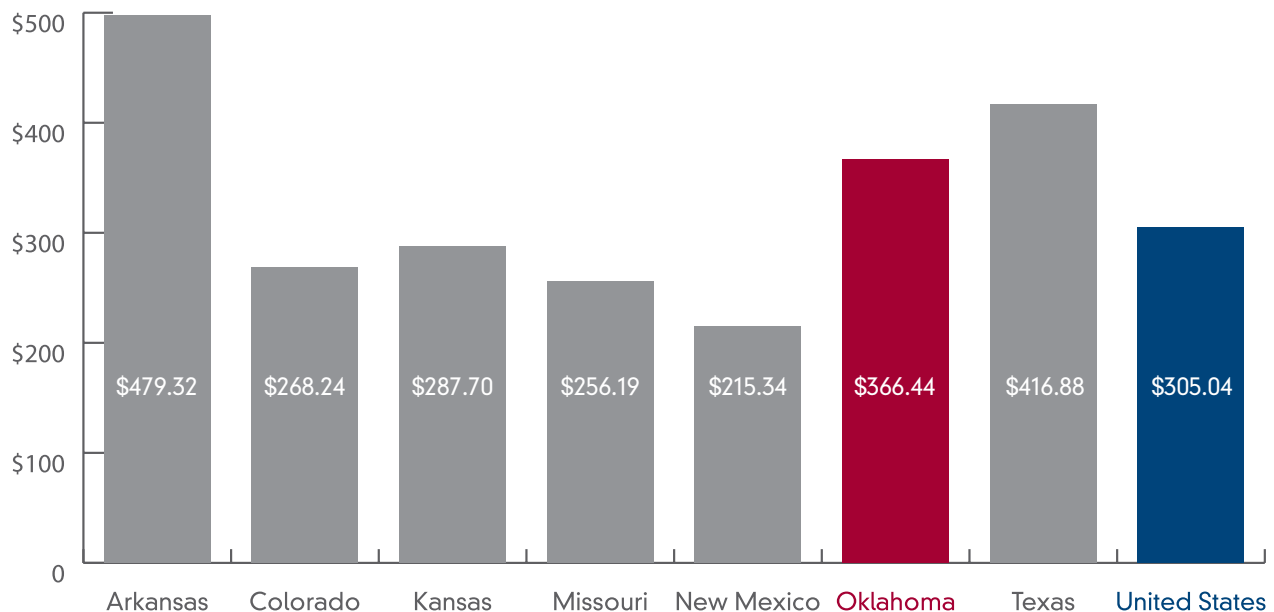
The average age of bridges in Oklahoma is 44.6 years old while the U.S. average bridge age is 42 years. Most bridges are designed to last 50 years. As of 2010, **10,922 of Oklahoma's bridges were over 50 years old.**

STATE EXPENDITURES ON ROADWAYS (2013)

Rank	State	Total Per Capita	Capital Per Capita	Rank	Maintenance Per Capita	Rank
11	Arkansas	\$497.32	\$409.50	9	\$87.81	18
14	Texas	\$416.88	\$341.27	14	\$75.61	23
18	Oklahoma	\$366.44	\$314.87	16	\$51.57	34
	United States	\$305.04	\$235.39		\$69.66	
30	Kansas	\$287.70	\$234.32	28	\$53.38	33
33	Colorado	\$268.24	\$180.11	42	\$88.13	17
38	Missouri	\$256.19	\$181.07	39	\$75.12	24
46	New Mexico	\$215.34	\$196.40	37	\$18.94	50

Between 2011 and 2013, Oklahoma's total per capita spending on roadways dropped \$160.91, which is a 30.5% decrease.

TOTAL PER CAPITA SPENDING ON ROADWAYS



ISSUE

Freight railroads are an important part of Oklahoma's infrastructure that we must continue to support and utilize.

RAIL FACTS

Oklahoma ranks 17th nationally by mileage with **3,273** freight railroad miles.



Oklahoma has **19** freight railroads, which is the 16th most in the nation.



One train can carry as much freight as several hundred trucks. It would have taken approximately 16.5 million additional trucks to handle 297.1 million tons of freight that moved in Oklahoma by rail in 2012.

In 2013, America's railroads moved a ton of freight an average of 473 miles on one gallon of fuel. That's like going from Oklahoma City to Memphis. On average, railroads are four times more fuel efficient than trucks. Moving freight by rail instead of truck reduces greenhouse gas emissions by 75%.



COMMODITIES SHIPPED BY RAIL

Stone, sand, and gravel accounted for the largest percentage (50.9%) of freight tons that originated in Oklahoma in 2012. The 9,313,000 tons that originated here made up 8.4% of the U.S. total for that commodity.

Coal accounted for the largest percentage (56.9%) of freight tons that terminated in Oklahoma in 2012.



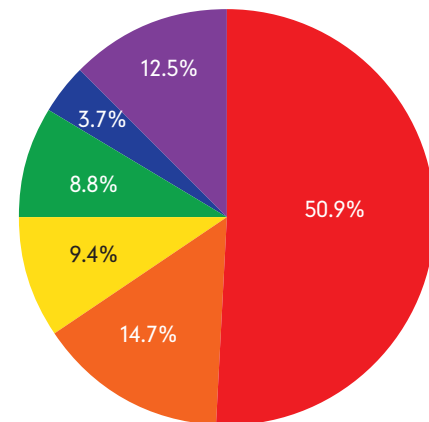
Coal accounted for 38% of electricity generation in Oklahoma in 2012, and nearly all of that coal was delivered by railroads.



RAIL TRAFFIC ORIGINATED IN OKLAHOMA

(2012)

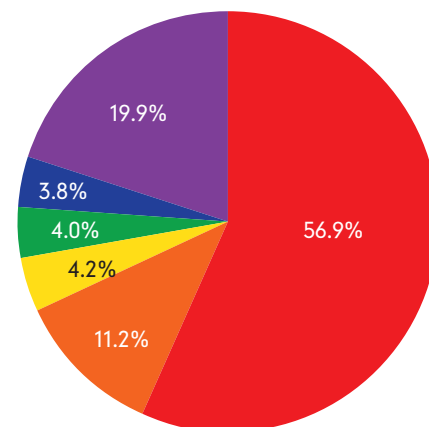
■ Stone, Sand, Gravel	50.9%
■ Chemicals	14.7%
■ Farm Products	9.4%
■ Paper, Waste, Scrap	8.8%
■ Products of Petroleum Refining	3.7%
■ Other	12.5%



RAIL TRAFFIC TERMINATED IN OKLAHOMA

(2012)

■ Coal	56.9%
■ Stone, Sand, Gravel	11.2%
■ Food Products	4.2%
■ Crude Oil	4.0%
■ Farm Products	3.8%
■ Other	19.9%

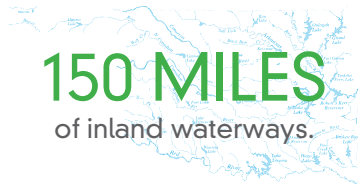


ISSUE

Oklahoma's ports and waterways are an essential piece of our state's infrastructure that connect Oklahoma businesses to the world.

FAST FACTS


Oklahoma has 150 miles of inland waterways.



More than 2.7 million tons of waterborne cargo shipped through the Port of Catoosa in 2013.

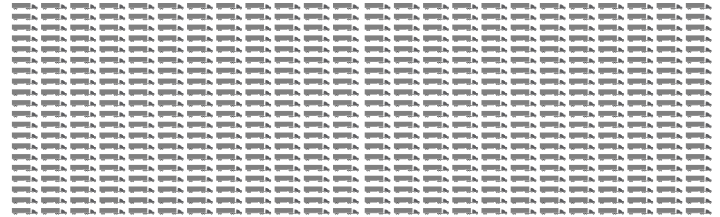


The Tulsa Port of Catoosa is a combination of a multi-modal shipping complex and a 2,000 acre industrial park resulting in an economic impact of \$300 million to Oklahoma. The complex hosts roughly 60 companies and employs nearly 4,000 Oklahomans.



The Tulsa Port of Catoosa is located at the head of the McClellan-Kerr Arkansas River Navigation System, which is a 440-mile waterway linking Oklahoma and the surrounding five-state area with ports on the nation's 25,000-mile inland water transport system. The system is the nation's most inland all-weather waterway.

BENEFITS OF BARGE SHIPPING

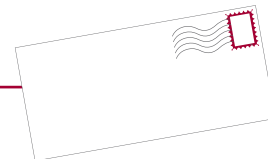


A full tow on the McClellan-Kerr Arkansas River Navigation System consists of eight barges, lashed tightly together and pushed from behind by a single towboat. With each barge holding 1,400 to 1,500 tons of material, a full complement of eight barges carries the equivalent of 480 semi-trailer trucks.

Bulk freight can be moved by barge for 1/3 the cost of railroad and 1/5 the cost of truck.



On the waterway, you can transport three bushels of grain from Tulsa to the Gulf Coast for the price of a first-class postage stamp.



ONE GALLON OF FUEL CAN CARRY ONE TON:



BARGE
514
MILES



RAIL
202
MILES



TRUCK
59
MILES

ISSUE

Oklahoma's aviation and aerospace industry is a large contributor to our state's economy, and it is imperative that we continue to boost the competitiveness of aviation and aerospace companies doing business in Oklahoma.

FAST FACTS

- Oklahoma has 139 public use airports; 49 of them are considered regional business airports.
- Forty-three of Oklahoma's regional business airports have jet capable runways (5,000 feet or longer).
- About 93% of Oklahomans live within 25 miles of an airport with a jet capable runway.
- Oklahoma is one of seven hubs or centers in the world for the maintenance, repair, and overhaul of aircraft.
- Tinker Air Force Base is the largest military aircraft repair facility in the world.
- The FAA's Mike Monroney Aeronautical Center in Oklahoma City serves as the central nerve center for the nation's air transportation system, employing more than 7,000 Oklahomans.

OKLAHOMA COMMERCIAL AIRPORT STATISTICS

	2014 Passenger Flow	Number of Nonstop Airports Served
Tulsa International Airport	2,742,000	18
Will Rogers World Airport	3,834,009	21

ECONOMIC IMPACT

General aviation contributes more than **\$150 billion** annually to the U.S. economy, including **\$1.2 billion** in Oklahoma.

Oklahoma's aerospace industry generates **\$12.5 billion** economic output annually, which is **10%** of the state's total output.

The aerospace industry is responsible for **120,000 direct, indirect, and induced jobs** in Oklahoma, which represents approximately one out of every 11 Oklahomans.

Tinker Air Force Base is the state's largest single-site employer with approximately **26,000 jobs** and an annual economic impact of more than **\$4 billion**.

The average salary of an Oklahoman working in the state's aerospace industry is more than **\$63,000**. The salary is \$22,000 more than the state average.

The American Airlines Maintenance and Engineering Center in Tulsa is the world's largest commercial aircraft repair facility, employing **6,000 people**.

ISSUE

Water is a critical resource for Oklahoma's people and businesses. Without proper permitting procedures, water conservation and reuse efforts, and water quality and quantity monitoring, beneficial use of Oklahoma's water resources will be severely limited.

WATER SOURCES

GROUNDWATER

Oklahoma has **22** major groundwater basins containing approximately **390 million acre-feet** of water in storage, though only one-half of that amount may be recoverable.

The Ogallala Aquifer in western Oklahoma is the state's largest groundwater basin, and it contains **90 million acre-feet** of supply, which is enough to cover the entire state two feet deep.

SURFACE WATER

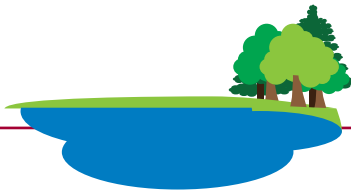
Oklahoma has approximately **55,646 miles** of shoreline along lakes and ponds.

Oklahoma contains approximately **1,401 square miles** of water area in its lakes and ponds, which is larger than the state of Rhode Island.

Oklahoma's longest river is the Beaver/ North Canadian River (752 miles). The Red River is the second longest (570 miles).

Oklahoma's largest lakes in conservation storage:

- Texoma = 2.6 million acre-feet of water
- Eufaula = 2.3 million acre-feet of water



WATER PERMITS

The approximate number of stream water permits on file with OWRB is **2,600**. The approximate total allocated stream water use in Oklahoma is **2.6 million acre-feet/year**.

OWRB forecasted that there will be insufficient surface water permit availability in 22 basins to meet projected surface water demands in 2060.

The approximate number of groundwater permits on file with OWRB is **10,000**. The approximate total allocated groundwater use in Oklahoma is **3.2 million acre-feet/year**.

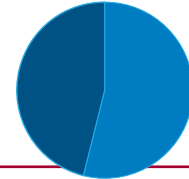
WATER USE

In 2007, **1,814,762 acre-feet** of water was withdrawn for all uses.

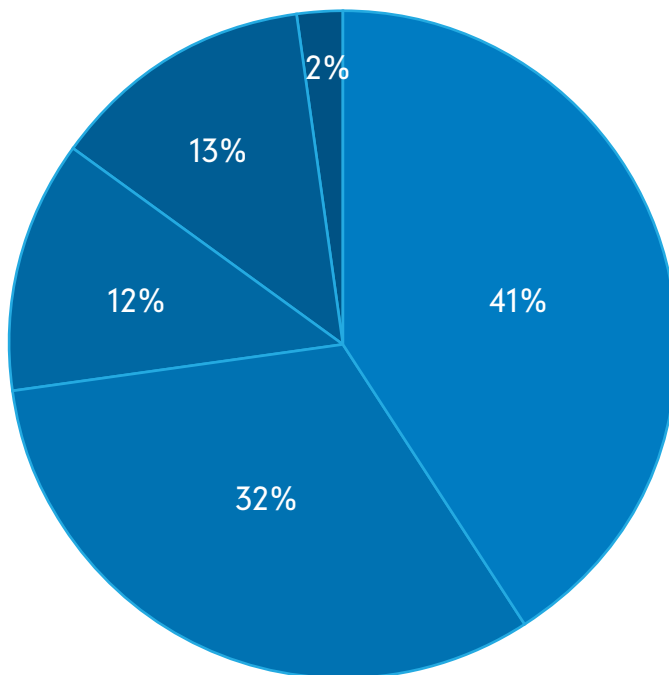
- 56% from surface water sources
- 44% from groundwater sources

While significant growth is anticipated in the state's oil and natural gas industry, it is only projected to account for **5%** of Oklahoma's total water demand in 2060.

Surface water accounts for **54%** of public water supply.



Each year, approximately 10.5 million acre-feet of water flows into Oklahoma through its two major river basins, the Red and Arkansas. An average of almost 36 million acre-feet flows out of the state each year.



OKLAHOMA WATER USE

Public Use	41%
Irrigation	32%
Livestock and Agriculture	12%
Other	13%
Oil & Natural Gas Industry	2%

WATER INFRASTRUCTURE

Water and wastewater infrastructure investment is critical to sustain and increase Oklahoma's economic growth and quality of life.

As of 2007, approximately **50%** of Oklahoma's water treatment plants were 30 years or older.

Approximately **one-third** of drinkable water is lost due to aging water infrastructure.

OVER THE NEXT 50 YEARS, THE NEED FOR WATER INFRASTRUCTURE WILL BE SIGNIFICANT.



\$44 BILLION

Wastewater Infrastructure



\$38 BILLION

Drinking Water Infrastructure

In their 2013 Report Card for Oklahoma's Infrastructure, the American Society of Civil Engineers gave Oklahoma a D+ in the Water and Wastewater infrastructure category primarily due to a lack of access to adequate funding to meet the infrastructure needs.

OBJECTIVE

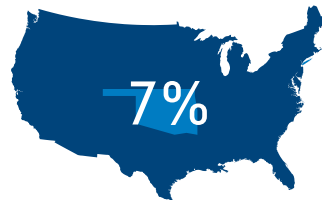
The ongoing transformation of Oklahoma's oil and natural gas industry has important implications for our state's economy, and we must work to positively influence growth in the industry going forward.

NATURAL GAS BY THE NUMBERS

Oklahoma ranks **3rd** in the nation in natural gas marketed production.



In 2013, **7%** of America's natural gas production occurred in Oklahoma.



Approximately **three-fifths** of **Oklahoma households** use natural gas as their primary energy source for home heating.



OIL FACTS

- Oklahoma ranks **5th** in the nation in crude oil production.
- In 2013, **Oklahoma oil production accounted for more than 4% of U.S. onshore production.** Only Texas, North Dakota, California, and Alaska produced more.
- Oklahoma has five petroleum refineries with a combined capacity of more than 200,000 barrels per day, which is roughly **3%** of the total U.S. capacity.

ECONOMIC IMPACT

Since 2010, Oklahoma's oil and natural gas industry has added nearly **15,000 jobs.**

Oklahoma's oil and natural gas producers paid **\$325 million** to local school districts in 2013, in addition to nearly \$150 million to student aid, higher education capital and common education technology funds.

1 in 5 jobs in Oklahoma are directly or indirectly supported by the oil and natural gas industry. That is 465,616 workers.

Annual operations from Oklahoma's oil and natural gas industry generate **\$65 billion** in goods and services. That is one out of every \$3 in gross state product.

The average Oklahoma oil and natural gas worker makes more than **\$133,000** a year.

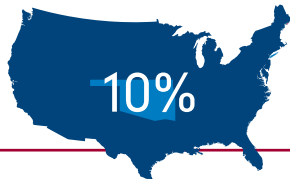
Oklahoma's oil and natural gas producers have given more than **\$1.75 million** in OERB Petroleum Scholarships, which supports hundreds of Oklahoma college students majoring in petroleum-related fields.

OBJECTIVE

While the wind industry plays a vital role in the development of our state, we must continue to make strides in developing Oklahoma's wind power potential.

WIND BY THE NUMBERS

Oklahoma has the wind power resource potential to serve almost **10%** of the nation's electricity needs.



Oklahoma's wind power is capable of meeting more than thirty times the state's current electricity needs.

30x

In 2014, wind energy provided **16.87%** of all in-state electricity production, which is equivalent to powering **1.1 million homes**.



1.1 MILLION
Homes

ECONOMIC IMPACT

\$1.2 BILLION

Wind power saved electricity customers \$1.2 billion in 2013.

SEVEN

There are seven active manufacturing facilities in Oklahoma that produce products for the wind industry.

4,001 to 5,000

2014 direct and indirect jobs supported by the wind industry

WIND PROJECTS

5,184 MW

Oklahoma ranks 4th for installed wind capacity.

2,790 TURBINES

Oklahoma ranks 4th for number of wind turbines.

695 MW

Wind capacity under construction in Oklahoma.

ENVIRONMENTAL BENEFITS

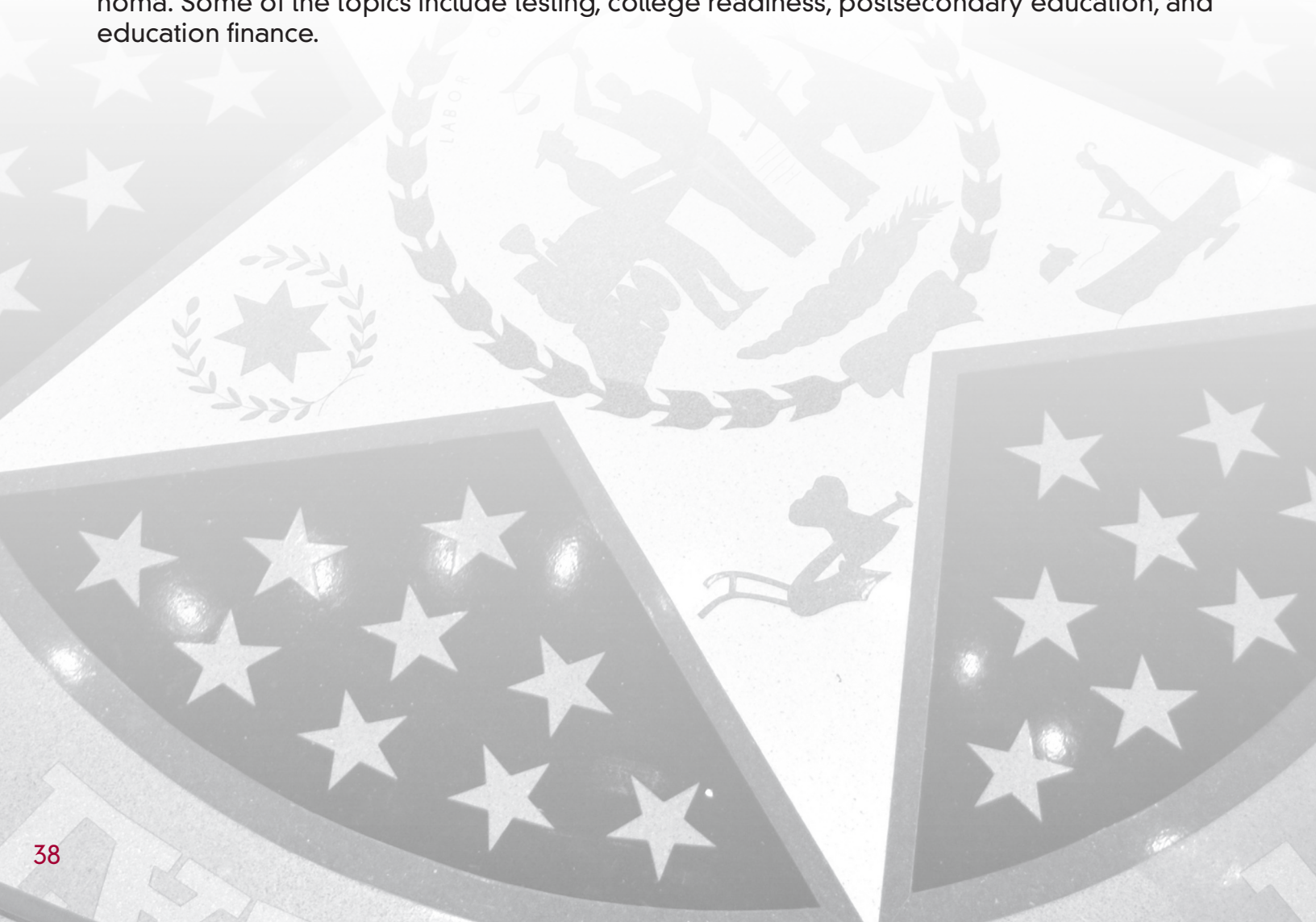
- Generating wind power creates no emissions and uses virtually no water.
- Annual state water consumption savings: **3.5 billion gallons**
- Equivalent number of water bottles saved: **26.6 billion**
- Annual state carbon dioxide (CO₂) emissions avoided: **6.9 million metric tons**
- Equivalent cars worth of emissions avoided: **1.5 million**

CHAPTER 4

EDUCATION & WORKFORCE DEVELOPMENT

Oklahoma's education system continues to underperform. We fall behind most states in terms of national test scores, remediation rates, and education spending. Our state also fares poorly in terms of four year college graduation rates.

This section delves into many aspects of education and workforce development in Oklahoma. Some of the topics include testing, college readiness, postsecondary education, and education finance.



OBJECTIVE

Oklahoma’s K-12 education system is considered one of the worst in the nation. It is imperative that we improve our schools and give more students a chance to succeed.

A-F REPORT CARDS

- Overall, Oklahoma’s public schools earned lower grades in 2014-15 than they did in 2013-14.
- The number of schools earning an A+ dropped from 89 to 68, and the number of schools with F’s also dropped.

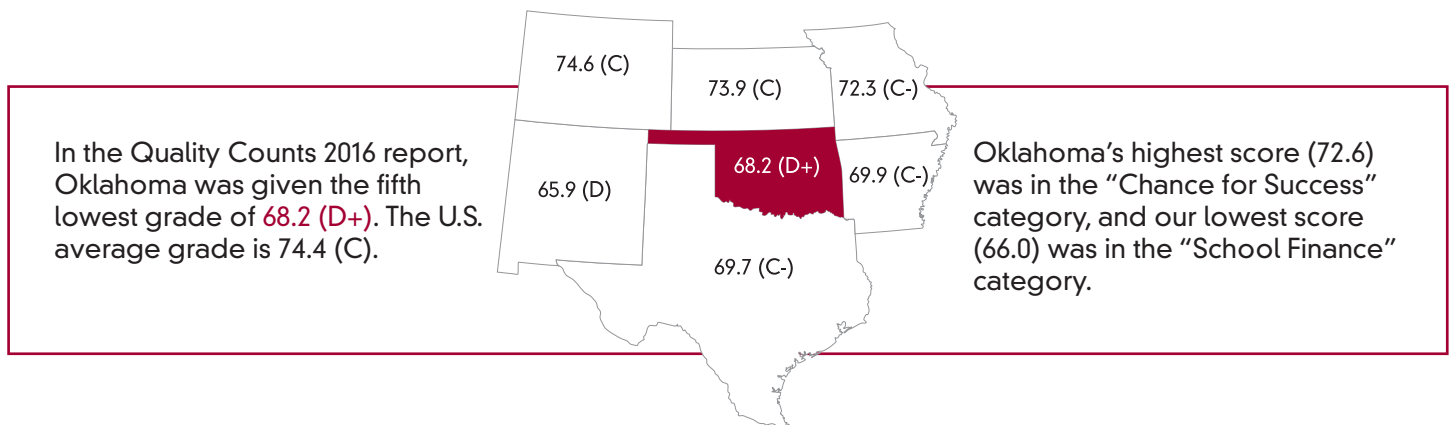
OKLAHOMA PUBLIC SCHOOL A-F GRADES

	A	B	C	D	F
2013-2014 (%)	16.1%	26.4%	28.1%	16.7%	11.1%
2014-2015 (%)	11.9%	27.6%	30.0%	18.6%	10.2%
Difference	-4.2%	1.2%	1.9%	1.9%	-0.9%

Note: Percentages may not add up to 100 due to schools that were given a grade of N/A being excluded from this chart.

STATEWIDE REPORT CARD

Education Week publishes an annual Quality Counts report, which grades states based on K-12 achievement, school finance, and other education factors.



SCHOOL DISTRICTS

FACT: Oklahoma currently has 516 school districts.

In 2012-13, Oklahoma had 520 school districts, which was the **ninth most in the nation**. Ten states have 500 school districts or more. Of those 10 states, eight of them are ranked in the top 11 in terms of state population. Oklahoma is the 28th most populous state.

Number of School Districts by State

Texas	1,029
Missouri	521
Kansas	309
Arkansas	238
Colorado	178
New Mexico	89

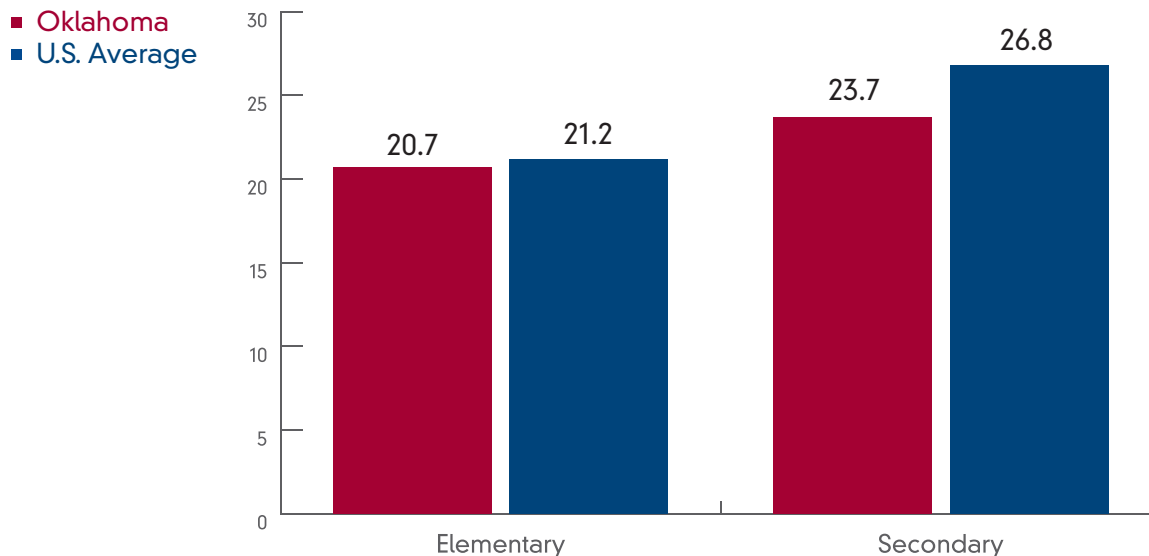
Oklahoma had **32** school districts with fewer than 100 students and **290** school districts with fewer than 500 students in FY15.



CLASS SIZE

FACT: Oklahoma's average elementary and secondary class sizes are smaller than the national average.

AVERAGE CLASS SIZE (2011-12)



ISSUE

Low national test scores show that Oklahoma’s student population is unprepared for postsecondary education and the workforce.

TESTING REQUIREMENTS (UNDER NO CHILD LEFT BEHIND ACT)

OCCT GENERAL ASSESSMENTS FOR GRADES 3-8

Grade	Math	Reading	Science	Geography	Social Studies/ U.S. History	Writing
Grade 3	Fed/State	Fed/State				
Grade 4	Fed/State	Fed/State				
Grade 5	Fed/State	Fed/State	Fed/State		State	State
Grade 6	Fed/State	Fed/State				
Grade 7	Fed/State	Fed/State		State		
Grade 8	Fed/State	Fed/State	Fed/State		State	State

OCCT GENERAL ASSESSMENTS (END-OF-INSTRUCTION)

ACE Algebra I	ACE English II	ACE Biology I	ACE U.S. History	ACE Algebra II	ACE Geometry	ACE English III
Fed/State	Fed/State	Fed/State	State	State	State	State

READING SUFFICIENCY ACT

Under the Reading Sufficiency Act (RSA), third-grade students who score “Unsatisfactory” on the assessment and fail to meet an exemption are subject to retention for intensive remediation in reading. Students who score “Limited Knowledge” are not automatically held back, but must receive reading remediation in fourth grade.

Only **85.4%** of Oklahoma third-graders were promoted to the fourth grade after taking the 2015 OCCT reading test. Results of the test are as follows:

- Unsatisfactory: 14.6%
- Limited Knowledge: 15.9%
- Proficient: 67.0%
- Advanced: 2.5%

The test results show that **15,292** Oklahoma 3rd graders are reading below grade level.



STATE TESTING

Two types of general assessments are given to Oklahoma students: Oklahoma Core Curriculum Tests (OCCT) are criterion referenced tests intended for Grades 3-8 in various subject areas. The seven End of Instruction (EOI) tests are offered at the secondary level.

OCCT TEST RESULTS (2015 SPRING ADMINISTRATION)

Test	Total Valid Test Scores	Advanced	Proficient	Limited Knowledge	Unsatisfactory
Grade 3 Reading	51,247	2%	67%	16%	15%
Grade 3 Math	51,372	22%	40%	22%	16%
Grade 4 Reading	46,578	4%	66%	15%	15%
Grade 4 Math	46,704	27%	45%	18%	10%
Grade 5 Science	48,502	19%	35%	24%	22%
Grade 5 Social Studies	48,468	43%	30%	14%	13%
Grade 8 Reading	47,130	16%	59%	12%	13%
Grade 8 Math	36,911	11%	42%	26%	21%

EOI TEST RESULTS (2015 SPRING ADMINISTRATION)

Test	Total Valid Test Scores	Advanced	Proficient	Limited Knowledge	Unsatisfactory
ACE Algebra I	45,982	28%	48%	14%	10%
ACE English II	42,919	22%	59%	13%	5%
ACE Biology I	42,703	14%	33%	23%	30%
ACE U.S. History	39,018	30%	42%	13%	15%
ACE Geometry	38,514	33%	46%	16%	6%
ACE Algebra II	30,718	23%	51%	15%	11%
ACE English III	33,478	18%	69%	6%	7%


NAEP SCORES

One strong indicator of student progress is the internationally-benchmarked National Assessment of Educational Progress (NAEP) test. The NAEP is considered the gold standard of student assessments for comparisons across state lines and also presents a more rigorous assessment of student performance. More than twice as many students are labeled proficient on the Oklahoma state exam as meet the proficient standard on the National Assessment of Educational Progress. This discrepancy has been labeled the “honesty gap.”

2015

Difference in 2015 fourth grade reading test results:

- NAEP - 33% proficient
- OCCT - 70% proficient



NAEP fourth grade math test results:

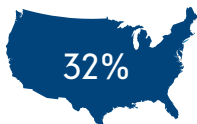
- Oklahoma - 37% proficient
- United States - 39% proficient

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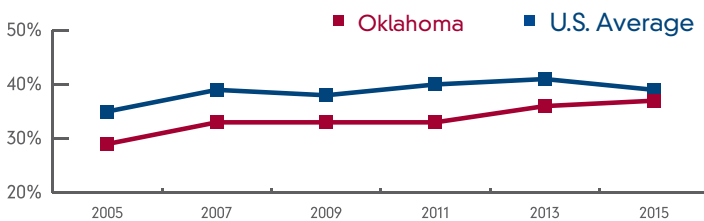
NAEP eighth grade math test results:

- Oklahoma - 23% proficient
- United States - 32% proficient

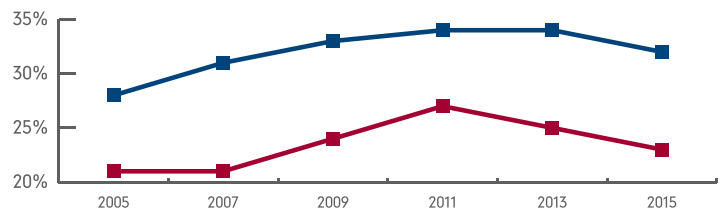
23%



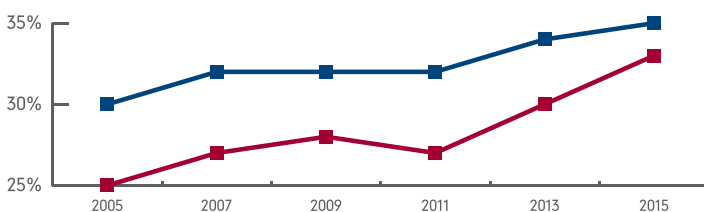
NAEP 4TH GRADE MATH (% PROFICIENT)



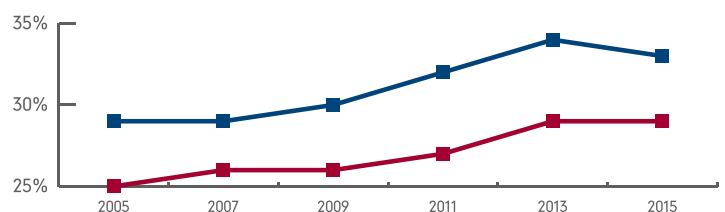
NAEP 8TH GRADE MATH (% PROFICIENT)



NAEP 4TH GRADE READING (% PROFICIENT)




NAEP 8TH GRADE READING (% PROFICIENT)



AP TESTING

Percentage of 2013 high school graduates that took an AP Exam during high school:

- Oklahoma - 22.1%
- United States - 33.2%



In 2013, **11.0%** of Oklahoma public high school graduates scored a 3 or higher on an AP Exam during high school.

THAT'S COMPARED TO:

Colorado	24.4%
United States	20.1%
Texas	18.5%
Arkansas	16.0%
New Mexico	12.0%
Kansas	10.5%
Missouri	9.5%

The AP Honor Roll recognizes and honors those outstanding school districts that simultaneously increase access to Advanced Placement course work while increasing the percentage of students earning scores of 3 or higher on AP Exams. Oklahoma currently has ZERO AP Honor Roll districts.

ACT

In 2015, Oklahoma's average ACT composite score of high school graduates tested was **20.7**. Only 17 states had lower scores. The national average is 21.0.

ACT TEST SCORES (2015)

	Percent of Graduates Tested	Average Composite Score	Average English Score	Average Math Score	Average Reading Score	Average Science Score
Oklahoma	80%	20.7	20.1	19.8	21.5	20.7
United States	59%	21.0	20.4	20.8	21.4	20.9

OBJECTIVE

High school graduation is a key indicator on the road to success, and many Oklahoma students don't meet it. We must make sure students in Oklahoma are graduating high school, and when they do are prepared to head to postsecondary education or into a career.

HIGH SCHOOL GRADUATION

Students starting high school in Oklahoma are less likely than their peers in four of the six bordering states to earn a high school degree.

-U.S. Department of Education

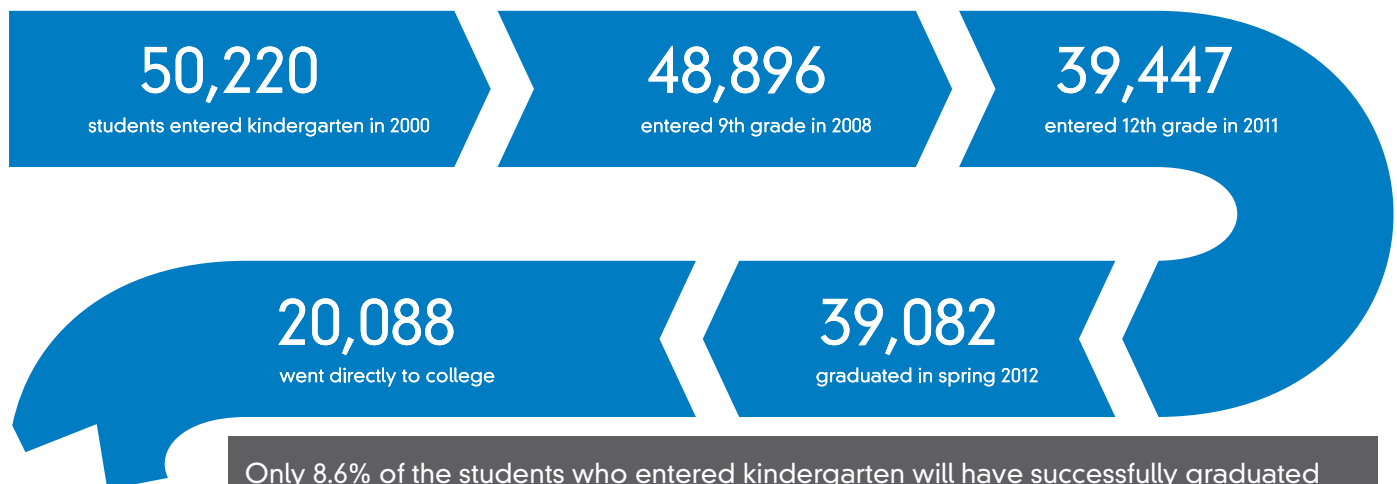
Without a high school diploma, students will earn an average of **\$10,000** less per year than their better-educated peers.

Oklahoma high schools lose almost **one-quarter** of their students between 9th grade and graduation.

Oklahoma's high school graduation rate in 2012-13 was **84.8%**.



OUR BROKEN PIPELINE



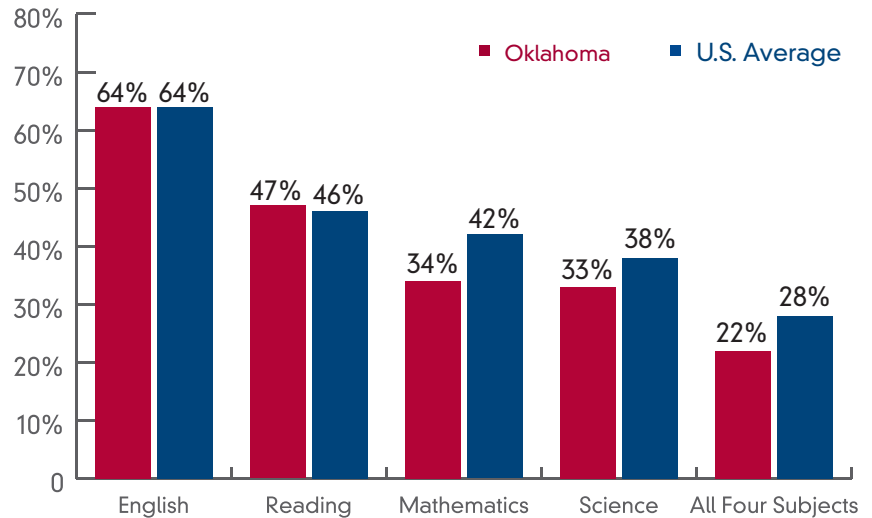
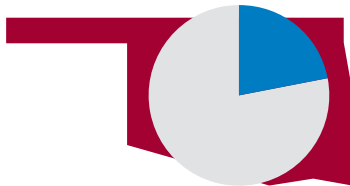
Only 8.6% of the students who entered kindergarten will have successfully graduated college in four years. Allowing a couple of extra years for graduation, only 16.5% of the students who entered kindergarten will have successfully graduated college in six years.

ISSUE

With a large percentage of Oklahoma high school students not academically ready for college, it is clear we must do more to give every student a shot at success.

COLLEGE READINESS

Only **22%** of Oklahoma students earned "college-ready" scores on all four sections of the ACT exam.



PERCENT OF 2015 ACT -TESTED HIGH SCHOOL GRADUATES MEETING ACT COLLEGE READINESS BENCHMARKS BY SUBJECT

REMEDiation

Students who score below **19** on any subject area of the ACT may need to take remedial courses for that subject.

19

During the 2013-14 school year, **39.1%** of fall, first-time freshmen direct from Oklahoma high schools were enrolled in at least one remedial class at Oklahoma public colleges and universities.

Nationally, only **32%** of college freshmen must take remedial coursework.

The "cost of remediation" per student runs as much as **\$2,000** in community colleges and **\$2,500** in four-year universities.

ISSUE

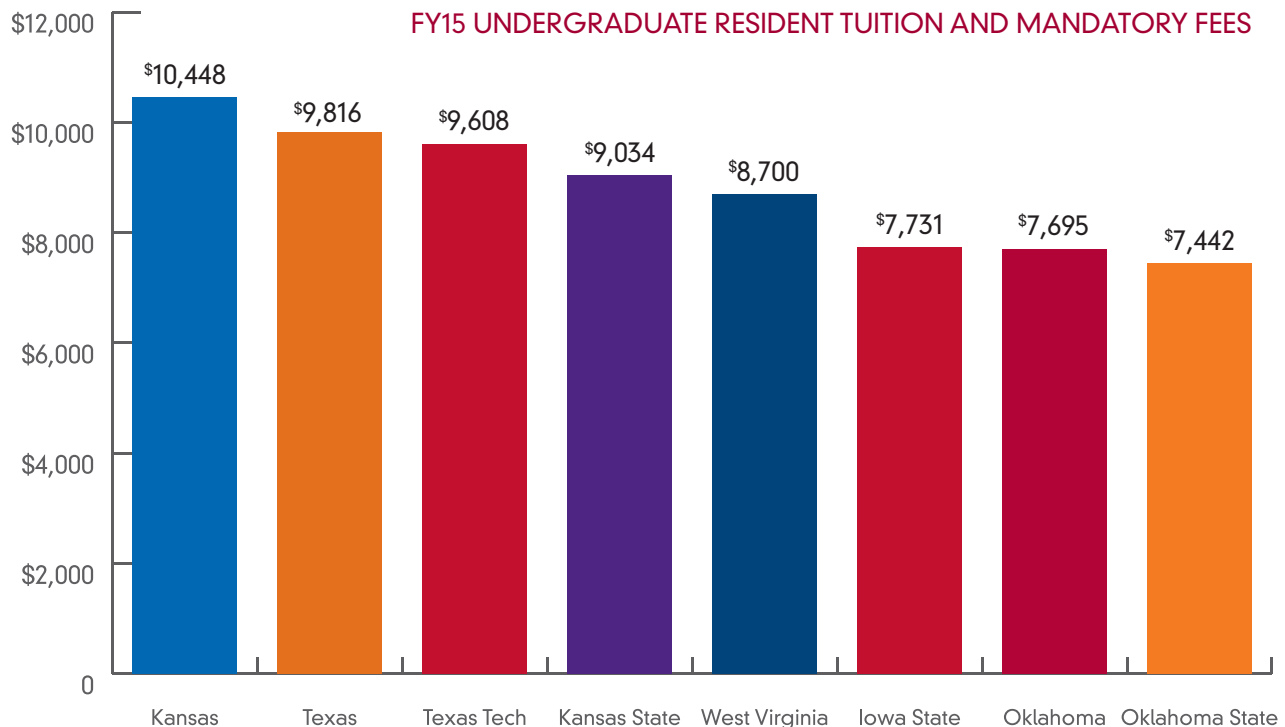
Increasing the number of Oklahomans with a college degree is crucial for our state's future economic prosperity.

ACCESS TO HIGHER EDUCATION

FACT: The Oklahoma State System of Higher Education is comprised of 25 colleges and universities with 49 campuses, including two research universities, 10 regional universities, one public liberal arts university, and 12 community colleges. Oklahoma also has 14 independent colleges and universities.

AFFORDABILITY

FACT: Oklahoma residents pay an average of \$1,640 less annually in tuition and mandatory fees for an undergraduate education than their peers in other states.



STUDENT FLOW

FACT: 49.6% of 2013 Oklahoma public high school graduates entered an Oklahoma college or university in the fall following high school graduation.



ENROLLMENT

FACT: Enrollment at private colleges and universities increased by 15.7% between 2004-05 and 2013-14, while enrollment at public colleges and universities decreased 0.3% over the same time period. Overall, enrollment at Oklahoma institutions increased by 1.1% during that ten year span.

STUDENT RETENTION

FACT: Fewer students make it past their first year of college than they did 10 years ago.

FIRST YEAR PERSISTENCE RATES FOR FALL, FIRST-TIME, DEGREE-SEEKING FRESHMEN WITHIN THE STATE

Tier	2004-05	2013-14	10 Year Difference
Research Institutions	91.2%	89.1%	-2.1%
Regional Institutions	77.8%	75.3%	-2.5%
Community Colleges	66.8%	62.3%	-4.5%

GRADUATION RATES

FACT: Oklahoma places **33rd** in the nation in terms of four-year graduation rates at four-year private colleges and **40th** in terms of four-year graduation rates at four-year public colleges.

COLLEGE GRADUATION RATE (FIRST TIME, FULL TIME DEGREE SEEKING STUDENTS), CLASS OF 2013

State	4-Year Public Colleges		2-Year Public Colleges		4-Year Private Colleges	
	4-Year Graduation Rate	6-Year Graduation Rate	2-Year Graduation Rate	3-Year Graduation Rate	4-Year Graduation Rate	6-Year Graduation Rate
Arkansas	20.6%	39.7%	13.1%	21.4%	39.4%	53.2%
Colorado	30.3%	53.6%	14.2%	20.8%	56.2%	66.4%
Kansas	27.6%	54.6%	22.8%	30.6%	34.8%	48.2%
Missouri	32.3%	55.2%	8.5%	18.7%	46.1%	59.7%
New Mexico	14.4%	41.7%	8.2%	13.0%	32.3%	41.9%
Oklahoma	22.8%	46.2%	8.3%	16.5%	38.5%	52.2%
Texas	27.6%	51.7%	6.3%	13.6%	44.1%	59.7%
U.S. Average	33.3%	57.6%	19.4%	--	52.8%	65.4%

DEGREES CONFERRED

FACT: During 2013-14, Oklahoma public and private institutions granted **40,535** degrees. Of those, 11,342 were Associate degrees, and 19,932 were Bachelor's degrees. Master's and Doctoral degrees totaled 6,749.

STUDENT DEBT

FACT: In 2014, the average debt of Oklahoma college graduates was **\$23,430**, which was the **7th lowest** in the nation. **Fifty-five percent** of those graduates had some amount of student debt.

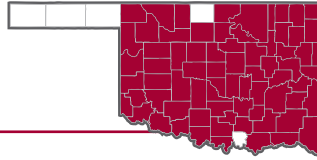
OBJECTIVE

Many consider Oklahoma's CareerTech system one of the best in the world. It is essential that we continue to support its operation and mission of providing our state's citizens and industries with the training needed to achieve success in the workplace.

BY THE NUMBERS

The Oklahoma CareerTech system has **29** technology center districts located on **59** campuses.

72 of Oklahoma's 77 counties are served by a career technology center.



For FY16, technology centers are approved to offer **568** different career major offerings.

PARTNERSHIP WITH K-12 SCHOOLS

- 390 of Oklahoma's 516 comprehensive school districts offer CareerTech classes to their students.
- 542 of Oklahoma's 1,754 comprehensive school sites offer CareerTech classes to their students.
- There were **1,583** CareerTech students who graduated from high school AND received one or more industry-given/industry-endorsed certifications during FY14.
- 82,561 9th through 12th grade students were enrolled in CareerTech classes in FY15.

INDUSTRY CREDENTIALS

There were **194** different types of industry-recognized/industry-given certifications received during FY14.



14,318 industry credentials were earned by CareerTech students in FY14.

THE TOP 8 CERTIFICATIONS ARE:

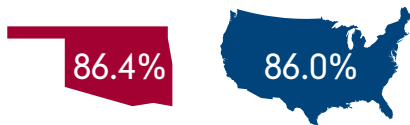
1. Long-Term Care Nurse Aide
2. Home Health Care Nurse Aide
3. Licensed Practical Nurse
4. Fundamentals of Technology
5. Oklahoma Welder Certification
6. Shielded Metal Arc Welder
7. Entry Level Child Care Training
8. Cosmetologist

ISSUE

We will need dramatic improvements in the productivity of our educational system for the Oklahoma workforce to meet the demands of the 2020 job market.

TODAY'S WORKFORCE

Oklahoma ranks **32nd** in the percentage of adults who have completed high school or an equivalent.



Only **23.5%** of Oklahoma's adult population hold a Bachelor's degree or better, which is the **ninth lowest** percentage in the nation.

THAT'S COMPARED TO:

Colorado	37.0%
Kansas	30.3%
United States	28.8%
Texas	26.7%
Missouri	26.2%
New Mexico	25.8%
Arkansas	20.1%

WORKFORCE OF TOMORROW

From 2010 to 2020, U.S. job growth will be greatest in the occupations and fields requiring the greatest educational preparation. In Oklahoma, job growth will be highest in the following seven occupations:

Occupation	Number of New Jobs by 2020	2020 Job Growth Rate	% New Jobs Needing Associate's Degree or More	% New Jobs Needing Bachelor's Degree or More
Social Sciences	1,280	23%	100%	100%
Healthcare Support	9,550	23%	59%	6%
Healthcare Technical and Professional	17,680	22%	94%	47%
STEM	10,140	19%	86%	55%
Food and Personal Services	49,610	19%	42%	9%
Education	16,690	18%	93%	92%
Managerial and Professional	52,910	18%	81%	49%

By 2020, 64% of Oklahoma jobs will require post-secondary education. According to 2011 Census data, however, only 33% of Oklahoma's working-age adults hold such two- or four-year college degrees.

OBJECTIVE

STEM (Science, Technology, Engineering & Mathematics) skills lead to opportunities in Oklahoma, but our education system is not preparing all young people to achieve in math and science. It is necessary that we give Oklahoma students access to better STEM learning opportunities.

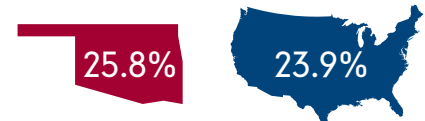
STEM EDUCATION

Oklahoma elementary schools spend less time teaching science than elementary schools nationwide. In 2011-12, the average number of hours spent per week on science in grades 1-4 was:

- Oklahoma - 2.2 hours
- United States - 2.6 hours

Only 7% of Oklahoma's high school graduating class of 2013 took an AP math exam, and only 3% scored a 3 or higher. The same percentages apply to AP science exams.

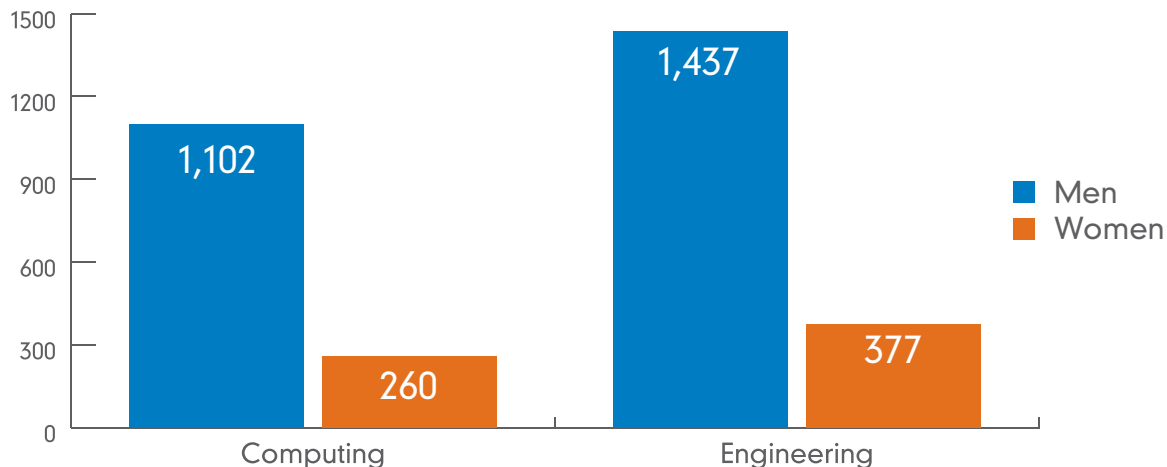
The news about STEM education in Oklahoma is not all bad. In 2012-13, 25.8% of certificates and degrees in Oklahoma were in STEM fields. The U.S. average was 23.9%.



DIVERSITY

Oklahoma's women lag behind in STEM degrees. Closing the gender gap in STEM subjects could dramatically increase the available talent in those fields for Oklahoma employers.

NUMBER OF STEM DEGREES/CERTIFICATES IN OKLAHOMA (2013)



STEM JOBS

In Oklahoma, between 2014 and 2024, the number of STEM jobs will grow **15%**.

- 12% Computing
- 14% Engineering
- 20% Advanced Manufacturing

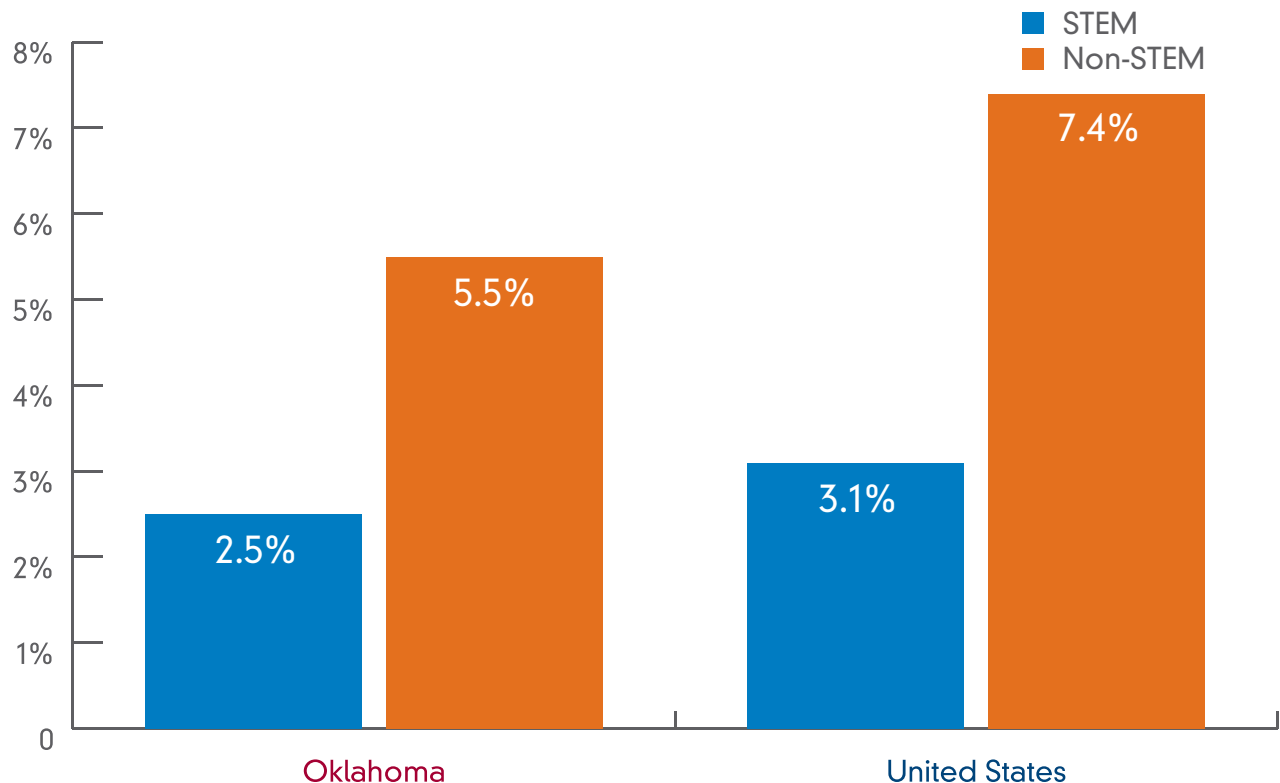
All other jobs in Oklahoma will grow **10%**.

Unemployment is lower in STEM occupations in Oklahoma and the nation as a whole. The average STEM unemployment rate between 2011 and 2014 was **2.5%** in Oklahoma and 3.1% in the United States.

Oklahomans with STEM jobs also earn more money.

- Median earnings in STEM jobs: **\$31.90/hour**
- Median earnings in all other jobs: **\$16.22/hour**

STEM AND NON-STEM UNEMPLOYMENT RATES (2011-2014)



OBJECTIVE

Oklahoma needs to prioritize education funding for programs and reforms designed to address current and future Oklahoma workforce needs.

EDUCATION FUNDING

Education & Workforce Development agencies received **50.31%** of total FY16 state appropriations. The main recipients are:

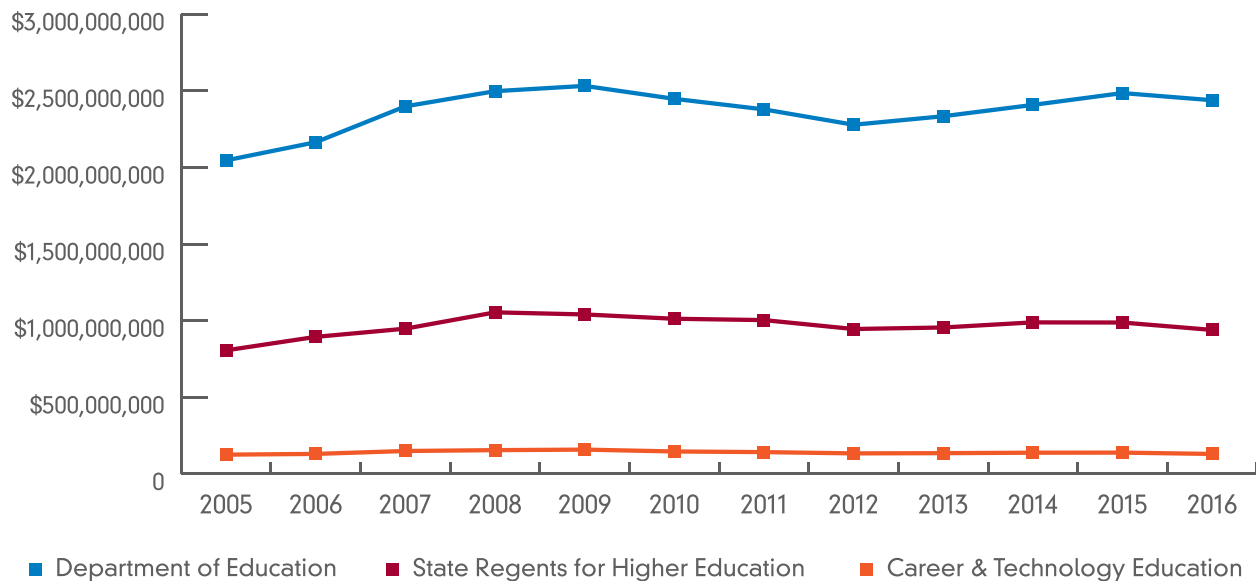
- Career & Technology Education - 1.85%
- Department of Education - 34.71%
- Regents for Higher Education - 13.37%

In FY13, the distribution of Oklahoma's public elementary-secondary school system revenue was the following:

- Federal Sources - 12.2%
- State Sources - 49.2%
- Local Sources - 38.6%

While **34.4%** of the State Regents for Higher Education's revenue came from appropriated funds, the largest percentage (**48.2%**) came from tuition and fees in FY16.

EDUCATION & WORKFORCE DEVELOPMENT STATE APPROPRIATIONS (FY2005 - FY2016)



OKLAHOMA PUBLIC SCHOOL SYSTEM EXPENDITURES

In FY13, Oklahoma's public elementary-secondary school system expenditures were **\$5,777,164,000**. That was the **29th highest** amount spent in the nation.



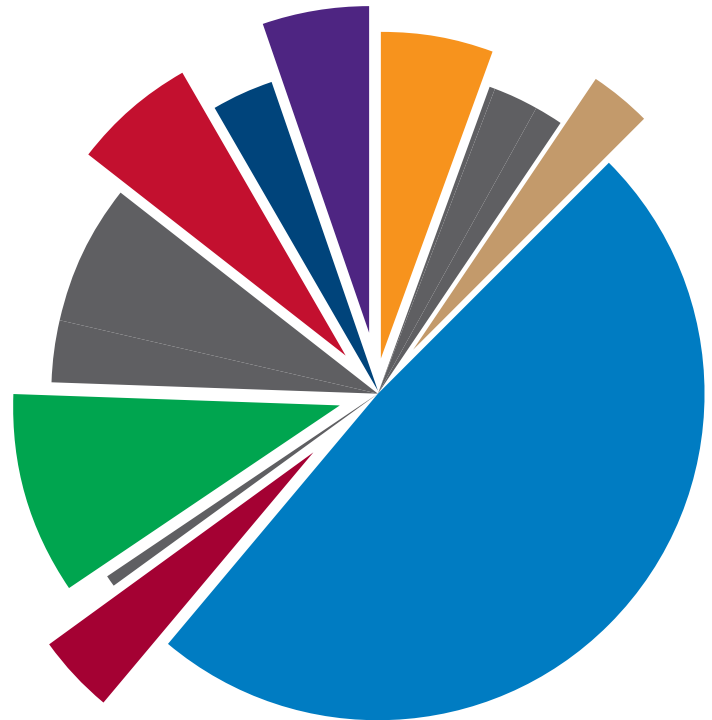
Oklahoma spent \$2,800,189,000 on instruction, which was **48.47%** of the total amount spent.

THAT'S COMPARED TO:

United States	53.88%
Kansas	52.86%
Missouri	51.85%
Colorado	49.62%
Arkansas	49.06%
New Mexico	48.42%
Texas	47.97%

PUBLIC SCHOOL SYSTEM EXPENDITURES TOP RECIPIENTS

Instruction	48.47%
Operation & Maintenance of Plant	9.94%
Pupil Support Services	6.16%
Capital Outlay - Construction	5.59%
School Administration	5.03%
Instructional Staff Support Services	3.86%
Pupil Transportation	3.17%
General Administration	3.03%



PER PUPIL SPENDING

In FY13, Oklahoma spent **\$4,170** per student on instruction, which was the **fourth lowest** amount spent in the nation.

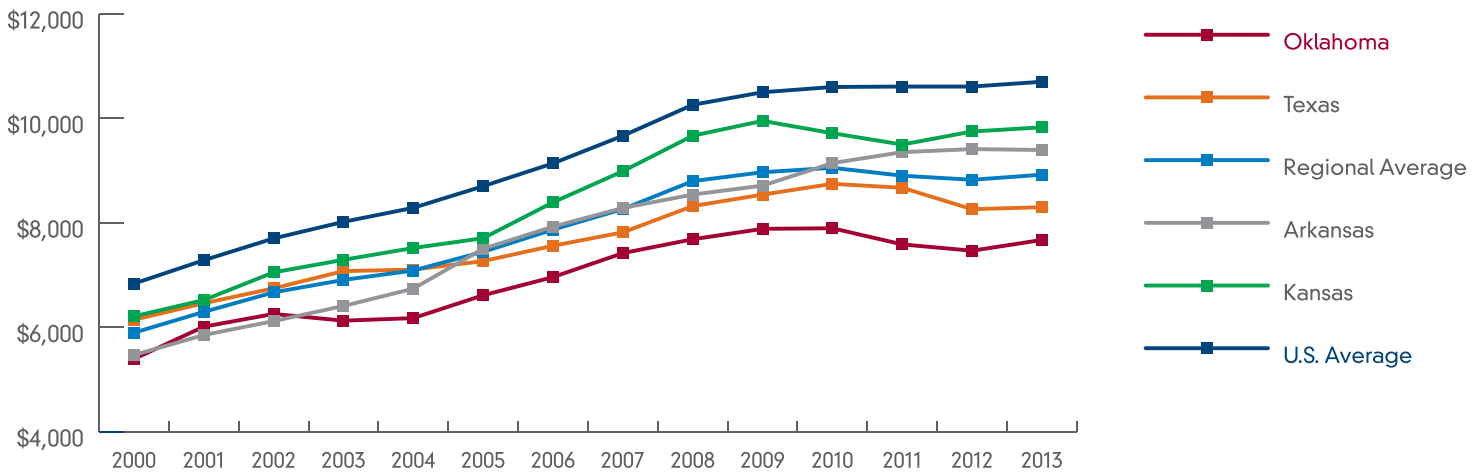
THAT'S COMPARED TO:

U.S. Average	\$6,480
Missouri	\$5,728
Arkansas	\$5,319
New Mexico	\$5,225
Colorado	\$5,036
Texas	\$4,947
Kansas	\$3,072

Oklahoma ranked **20th** in administrative spending for FY13 with **\$261** spent per student. The U.S. average was \$204.



TOTAL PER PUPIL SPENDING (2000-2013)



In FY13, Oklahoma spent **\$7,672** overall per student. Only Arizona, Idaho, and Utah spent less per student. The U.S. average was \$10,700.

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