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The Economic Impact of an Annual \$264 Million Increase in Kansas Highway and Bridge Construction Investment

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Cover photo of the Rainbow Bridge in Baxter Springs, Kansas (Shutterstock). Photo on page 19 of the Kansas State Capitol Building in Topeka, Kansas (Shutterstock).

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EXECUTIVE SUMMARY

This report examines how a \$264 million increase in public investments in Kansas’s highway and bridge infrastructure would stimulate business activity throughout the economy, support jobs and increase government revenues—providing as much as \$1.8 billion in long-run economic benefits, immediate economic output and cost-savings for Kansas drivers.

We use the sophisticated “Regional Input-Output Modeling System” (RIMS II) developed by the U.S. Department of Commerce to track the complex money flows and interactions that occur between the state’s diverse business sectors. This, in tandem with data from the U.S. Census Bureau’s “County Business Patterns” report, allows us to determine how a \$264 million annual increase in highway and bridge construction work would impact the output of key business sectors within the region.

The results show the unique and synergistic nature of transportation capital investments – how they trigger immediate economic activity that creates and sustains jobs and tax revenues, yet yield long-lived capital assets that facilitate economic activity for many decades to come by providing access to jobs, services, materials and markets.

Immediate Economic Benefits of Increasing Investment

A sustained increase in Kansas highway and bridge investment would help businesses increase output, grow the tax base and support jobs across all major sectors of the state economy. An annual investment level of \$264 million is consistent with an increase in the Kansas motor fuel rate of about 15 cents per gallon.¹

The construction activity from a sustained \$264 million increase in Kansas’ highway and bridge investment would:

- Generate nearly \$594.3 million in additional economic output
- Support or create an additional 5,308 jobs throughout the economy

The construction activity from a sustained \$264 million increase in Kansas’ highway and bridge investment would yield the following annual benefits:

- Generate nearly \$594.3 million in additional economic output²
- Increase gross state product (GSP) by nearly \$304 million
- Grow state and local tax revenues by \$29.4 million
- Support or create an additional 5,308 jobs throughout the economy, with 52 percent of the employment outside of the construction industry, including an estimated 549 jobs in retail trade, 330 jobs in manufacturing and 321 jobs in health care and social assistance

¹Based on research by the Kansas Legislative Research Department, an 11-cents-per-gallon increase in Kansas would raise an average of \$200 million in revenue per year between FY 2018 and FY 2022, or an average of \$18.2 million per penny increase. We estimate that average annual revenue of \$264 million is roughly equivalent to a 14.5 to 15-cents-per-gallon increase, depending on the elasticity of demand for fuel in Kansas.

²State output measures total industry sales for both intermediate and final goods, while GSP measures the value added of all industry sales or sales to final users in the economy only.

Additional Savings for Kansas Drivers and Businesses

The improvement in Kansas' transportation network would provide long term benefits for businesses and users, including improved safety, lower operating costs, reduced congestion and an increase in both mobility and efficiency.

Research shows that the economic return from system improvements can range from \$4.00 to \$5.20 for every \$1 invested.³ For drivers in Kansas, this could add up to as much as \$1 to \$1.3 billion in savings, depending on the mix of projects. This does not include the additional benefits of improving access to critical facilities like schools and hospitals or increases in business productivity.

Businesses would have access to a larger pool of labor, supplies and customers. An improved highway and bridge network would also result in lower operating costs, allowing business to increase investment in other capital outlays.

Beyond the jobs supported by the immediate highway and bridge construction work, the economic activity and employment for many Kansas companies relies on the mobility provided by the highway and bridge system.

Without the infrastructure built, maintained and managed by the Kansas' transportation construction industry, *virtually all of the major industry sectors that comprise the Kansas economy—and the local jobs they sustain—would not exist or could not function.*

The simple fact is that 662,077 Kansas jobs in just tourism, manufacturing, transportation and warehousing, agriculture and forestry, mining, retailing and wholesaling alone *are fully dependent on the work done by the state's transportation construction industry.* These dependent industries provide a total payroll of \$25.2 billion and their employees contribute \$4.6 billion annually in state and federal payroll taxes.

Economic Impact of \$264 Million in Highway and Bridge Construction Investment in Kansas

Total Output	\$594.3 million
Total Value Added (GSP)	\$303.9 million
Earnings	\$171.7 million
Employment	5,308 jobs
State Payroll Tax	\$1.5 million
Federal Payroll Tax	\$13.1 million
State Income Tax	\$9.4 million
State Sales Tax	\$5.4 million

A History of Diverting Highway Funds

An annual \$264 million investment would help restore some of the recent cuts to the Kansas highway program. Between FY 2011 and FY 2019, the Kansas state legislature will have diverted \$3.5 billion from the Kansas State Highway Fund to the state General Fund and other state agencies for non-transportation purposes.

These diversions have had a significant market impact—in 2016 the Kansas Department of Transportation (KDOT) announced delays for over \$600 million in road projects because of a lack of funds. During that same time period, the Kansas construction sector lost over 3,000 jobs.

The economic cost of diverting funds from the Kansas highway program is significant. If the \$3.5 billion in diverted funds were instead invested in highway and bridge projects, the construction work would generate \$7.8 billion in economic activity throughout all sectors of the economy and provide an additional \$4.0 billion in state GSP.

The results of the study strongly suggest that highway and bridge investment should be a fundamental component of any plan to grow the state's economy and boost its competitiveness in regional, national and international markets.

³Robert Shapiro and Kevin Hassett, PhD, "Healthy Returns: The Economic Impact of Public Investment in Surface Transportation", March 2005. Additional estimates provided by The Road Information Program (TRIP), a national research group, that analyzed returns from investment in the U.S. Department of Transportation's Conditions and Performance Report.

CHALLENGES FACING THE KANSAS HIGHWAY PROGRAM

As the economy and population of Kansas grow over the next 10 to 20 years, demand on the state's highway and bridge network to move people and goods will only continue to increase.

The value of freight shipments to and from Kansas businesses is forecasted to increase 25 percent by 2030, while the population of the state is expected to grow by 8 percent over the same time period.⁴

Coupled with the recent diversion of Kansas State Highway Funds, the state will face a growing challenge to maintain, repair and invest in its highway and bridge network to meet future needs.

Economic Cost of Diverting Highway Investments

When construction activity and projects are delayed, there is a loss of potential economic activity that has an impact by reducing demand in all sectors of the Kansas economy.

The diversion of \$3.5 billion from Kansas State Highway Funds to the state General Fund between FY 2011 and FY 2019 could cost the state economy as much as \$7.8 billion in construction-related economic activity and \$4.0 billion in state gross domestic product.⁵ As many as 10,600 jobs could be at risk.⁶

In April 2016, KDOT announced that it was delaying \$553 million in road projects scheduled for fiscal years 2017 through 2019, unless existing state highway funds can cover the costs or new money is made available. The delayed modernization and expansion projects include the addition of shoulders, passing lanes and other added capacity to the state's 10,000-mile highway system. The postponed work includes 14 projects with an estimated construction cost of \$271 million set to begin in FY 2017; nine projects totaling \$247 million scheduled for FY 2018; and two projects worth \$35 million penciled in for FY 2019.⁷

In November 2016, KDOT announced the delay of 24 other road projects worth \$32 million, and then in December, the delay of an additional 10 road projects worth \$17.45 million. This brings the total value of projects delayed in 2016 as a result of the state's budget shortfall to over \$602 million.⁸

⁴Federal Highway Administration's Freight Analysis Framework and Wichita State's Center for Economic Development and Business Research.

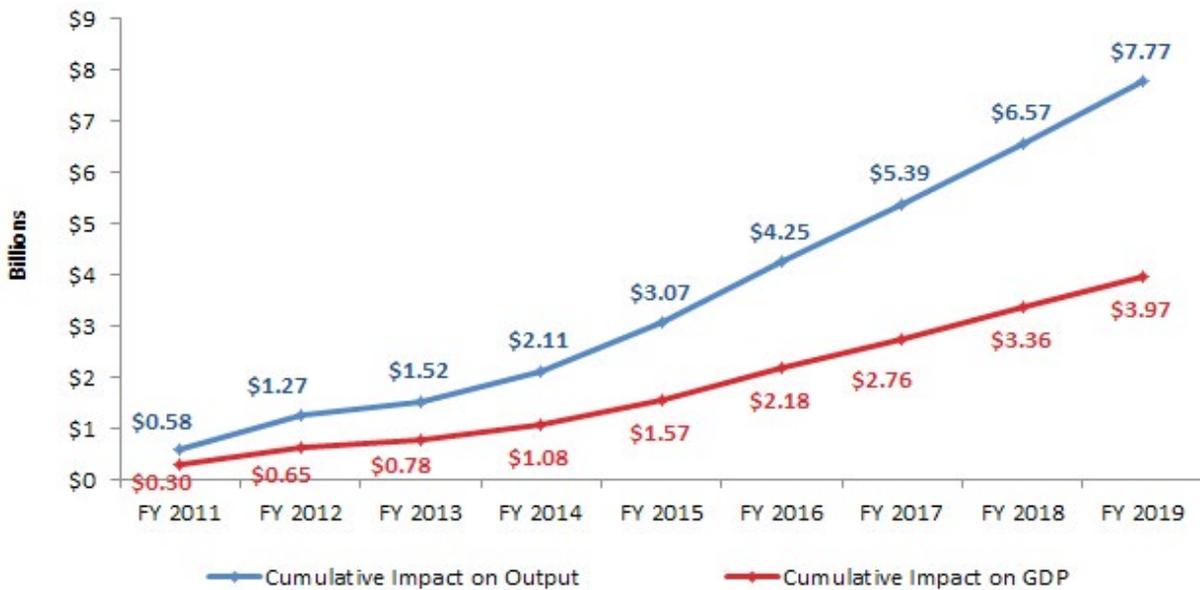
⁵The total impact estimate is based on the economic impact of the diverted funds had they been used for construction-related activity. Funds used for other purposes would have a different impact.

⁶Estimate based on the jobs supported by \$526.2 million—the amount of funding diverted in FY 2016.

⁷KDOT Press Release, "KDOT to delay expansion, modernization projects," April 20, 2016.

⁸Hunter Woodall, "Kansas postpones new round of road projects in wake of state's budget shortfall", *The Kansas City Star*, December 14, 2016.

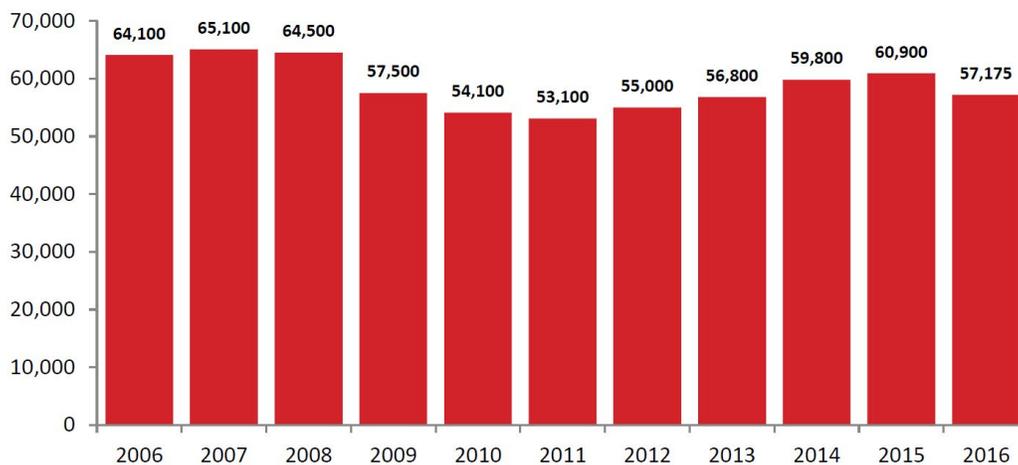
Annual Impact of Budget Diversion on Output and GDP



Source: ARTBA Analysis of KDOT Data

The delay in projects has contributed to an overall decline in Kansas construction sector employment. The number of workers in the industry fell six percent in 2016 compared to 2015, from 60,900 workers to 57,175. Construction employment is still 12 percent below 2007 pre-recession levels.⁹

Total Kansas Construction Employment



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

⁹U.S. Department of Labor Bureau of Labor Statistics

Road and Bridge Conditions

Kansas' highway and bridge network is the backbone of the state's economy, but the system is aging and conditions are deteriorating:

- Eight percent of Kansas' 34,988 miles of roadway eligible for federal aid are rated "not acceptable" and need major repairs or replacement.¹⁰
- Kansas has 25,013 bridges, of which 16 percent are either "structurally deficient" (2,151 bridges) or "functionally obsolete" (1,761 bridges).¹¹
- The average commute one-way to work in Kansas is 19 minutes. Getting there, 82.2 percent drive alone, 9.5 percent carpool and less than one percent take public transportation.¹²
- The National Highway Traffic Safety Administration reports there were 341 fatal motor vehicle crashes, resulting in 385 fatalities in Kansas during 2014. Of these, 77 percent of fatalities occurred on rural roads and 39 percent occurred on the National Highway System. Motor vehicle crashes are the number one cause of death and also permanently disabling injuries for young Americans under age 21.
- Poor roadway conditions are a contributing factor in more than half—52.7 percent—of roadway fatalities, according to research by the Pacific Institute for Research and Evaluation (PIRE). The PIRE study estimates that road condition related crashes cost Kansas \$2.1 billion annually.¹³

Congestion

Kansas will face increased demand for transportation services over the next 20 years as its economy and population continue to grow.¹⁴

- The value of total truck freight shipments to and from businesses in Kansas is expected to reach \$350 billion by 2030, an increase of 25 percent from \$279.5 billion in 2015. This will have a significant impact on congestion on Kansas' road and bridge network.
- Over \$194 billion (79 percent) of domestic shipments by Kansas businesses in 2015 were made via truck. Over \$98 billion of those truck shipments (51 percent) stayed within the state—the remaining shipments were made to neighboring states (21 percent) and non-neighboring states (28 percent).

¹⁰ARTBA. "State-by-state breakdown of Road and Bridge Conditions," accessed February 28, 2017. http://www.artba.org/wp-content/uploads/2014/02/10.1.2015-ARTBA_Conditions.pdf

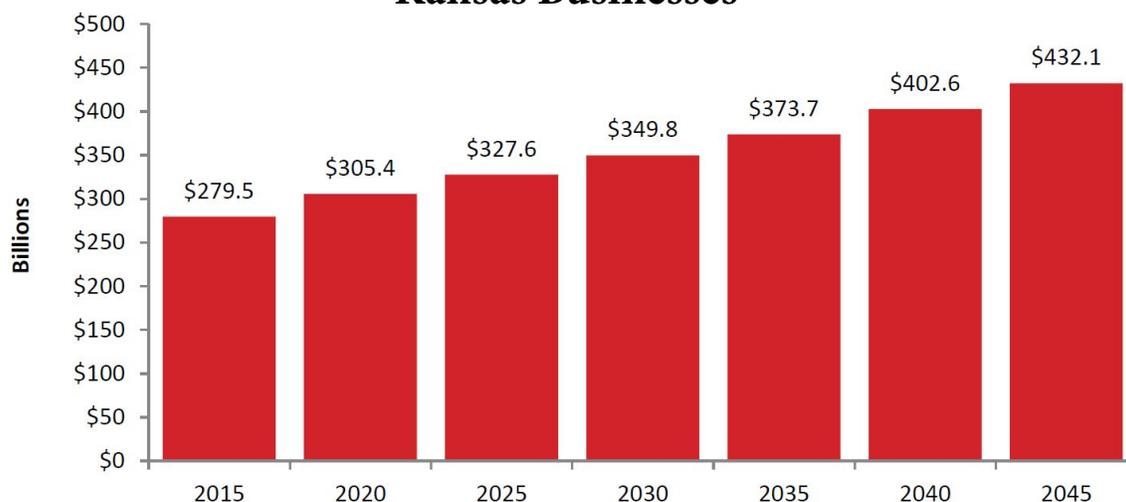
¹¹ARTBA. "National Bridge Inventory: Kansas," accessed February 28, 2017. <http://www.artba.org/deficient-bridge-report-home/>

¹²U.S. Census Bureau (2011–2015 American Community Survey 5-Year Estimates)

¹³Ted Miller and Eduard Zaloshnja, "On a Crash Course: The Dangers and Health Costs of Deficient Roadways," The Pacific Institute for Research and Evaluation (PIRE), May 2009

¹⁴Federal Highway Administration, Freight Analysis Framework v4.0, <http://faf.ornl.gov/fafweb/>

Value of Total Truck Shipments To and From Kansas Businesses



Source: U.S. Department of Transportation Freight Analysis Framework

Without adequate investment, highway conditions and safety will become a greater challenge for Kansas.

- Traffic bottlenecks and increased congestion, particularly during rush hour, result in a high cost for Kansas commuters. According to the Texas Transportation Institute’s latest mobility scorecard, Kansans were delayed by an estimated 67.8 million hours in 2014 due to congestion, which wasted over 32 million gallons of gasoline and cost a total of \$1.6 billion. In the Kansas City metropolitan area alone, the average commuter wasted 39 hours and 18 gallons of gasoline sitting in traffic, costing her \$1,085 per year.¹⁵

¹⁵Texas Transportation Institute 2015 Urban Mobility Scorecard, last accessed February 28, 2017, <https://mobility.tamu.edu/ums/>

Annual Cost of Congestion in Kansas Cities

Urban Area	Annual Hours of Delay Per Commuter	Annual Cost of Congestion Per Commuter	Total Annual Cost of Congestion (millions)
Kansas City MO-KS	39	933	\$1,085
Lawrence KS	13	310	\$34
Manhattan KS	5	109	\$11
St. Joseph MO-KS	10	263	\$24
Topeka KS	16	388	\$62
Wichita KS	35	837	\$407

Source: Texas Transportation Institute 2015 Urban Mobility Scorecard

THE ECONOMIC IMPACT OF INCREASED ANNUAL HIGHWAY & BRIDGE CONSTRUCTION INVESTMENT

An annual \$264 million increase in highway and bridge construction investment in Kansas would have an immediate impact on all sectors of the state economy.

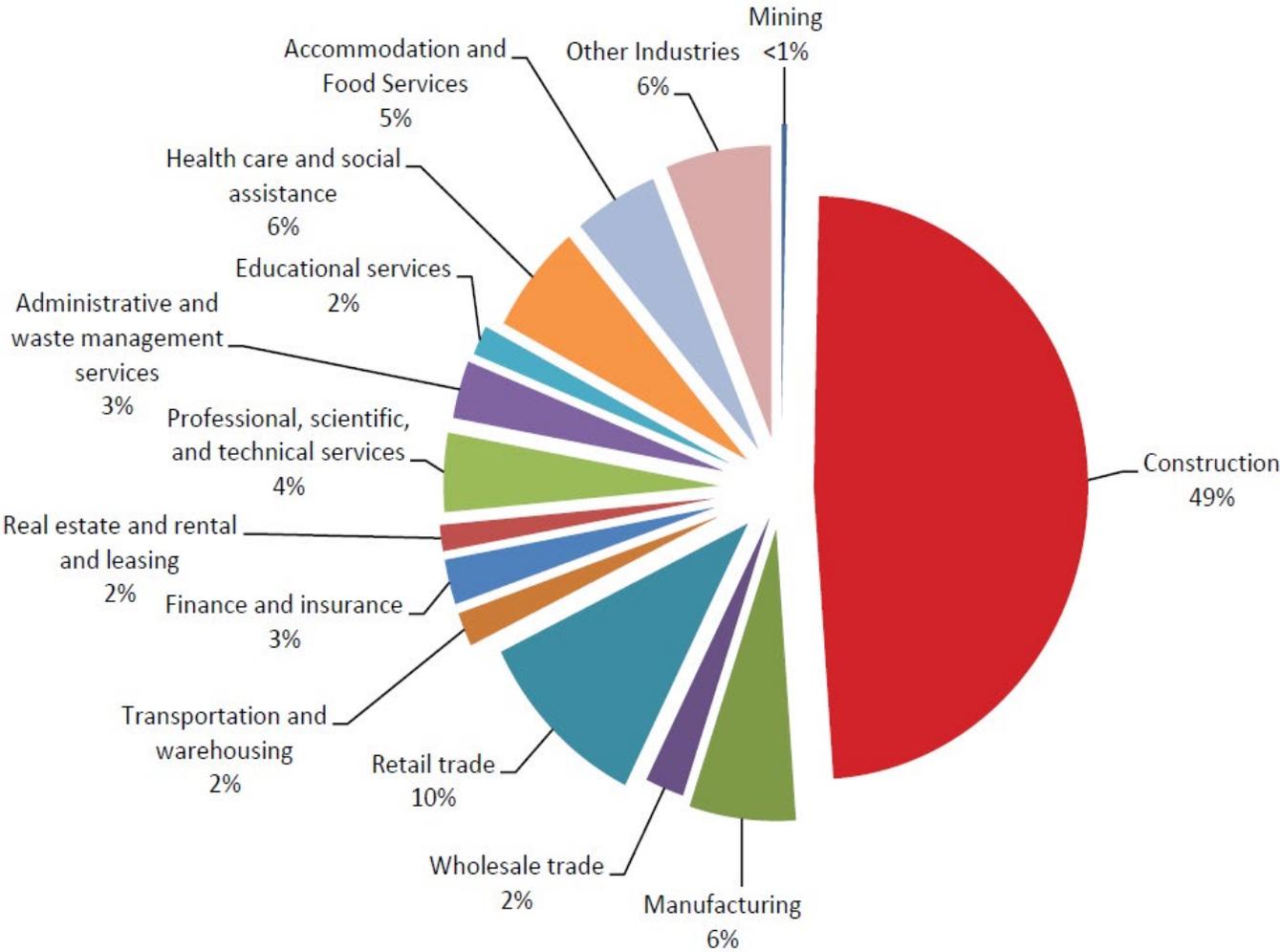
How does this ripple effect work? Highway and bridge contractors purchase inputs (such as materials) from Kansas businesses, in addition to other firms outside of the state, as they complete work on projects. These workers spend their earnings by purchasing clothing, food and other goods and services, thereby creating demand in other sectors of the state economy. As jobs are created or sustained, employees receive additional income and spend more, and businesses increase sales. Subsequently, taxes grow due to larger payroll and sales volumes, providing the state and local municipalities with additional revenues to reinvest in Kansas.

An annual \$264 million increase in Kansas highway and bridge construction investment would generate the following economic benefits each year:

- \$594.3 million in economic output as businesses throughout the economy sell more goods and services to both other businesses and consumers
- \$303.9 million in value added, which contributes to Kansas' GSP
- 5,308 jobs created or supported across all sectors of the economy
- These workers would earn over \$171 million in wages
- \$29.4 million in additional federal and state revenues, including:
 - \$1.5 million in state payroll taxes
 - \$13.1 million in federal payroll taxes
 - \$9.4 million in state income taxes
 - \$5.4 million in state sales taxes

Just over half of the 5,308 jobs supported or created by an additional annual \$264 million in highway and bridge construction activity would be in sectors outside of the Kansas construction market.

Additional Kansas Jobs Supported/Created by an Annual \$264 Million Increase in Highway and Bridge Construction Investment



Economic Impact of \$264 Million in Highway and Bridge Construction Investment in Kansas

Industry	Impact on Industry Output (in millions)	Jobs Supported/ Created
Agriculture, forestry, fishing and hunting	\$2.1	21
Mining	\$4.9	16
Utilities	\$8.2	16
Construction	\$265.6	2,567
Manufacturing	\$80.2	330
Wholesale trade	\$22.7	120
Retail trade	\$35.3	549
Transportation and warehousing	\$15.0	99
Information	\$14.2	53
Finance and insurance	\$24.4	131
Real estate and rental and leasing	\$29.7	75
Professional, scientific, and technical services	\$26.5	231
Management of companies and enterprises	\$4.8	32
Administrative and waste management services	\$9.8	168
Educational services	\$3.8	86
Health care and social assistance	\$24.4	321
Arts, entertainment, and recreation	\$1.6	42
Accommodation and food services	\$9.8	262
Other services	\$11.5	165
Total industry impact*	\$594.3	5,308

*Does not include impact on government output.

Long Run Impacts of Highway and Bridge Investment

In addition to spurring immediate economic growth, investment in Kansas' infrastructure creates tangible assets that are long-lived and facilitates economic activity for many years to come by providing access to jobs, services, materials and markets. An improved highway network results in reduced operating costs and increased market access for Kansas businesses. Sustained investment in highways and bridges is critical to making the best use of these capital assets.

The importance of a robust transportation network has been well documented by business analysts, economists and the research community.¹⁶ Overall estimates are that every \$1 increase in the highway and bridge capital stock generates a total of 30 cents in business savings throughout the economy.¹⁷

Some of these specific benefits include:

- **Access to labor:** A better transportation system means that it is easier for employees in Kansas to get to work, and that businesses may recruit from a larger pool of potential workers.
- **Increased Market Share & More Customers:** A good transportation system means that Kansas businesses can reach a greater pool of customers. For example, if a company in Kansas City did not have to contend with gridlock for product delivery and supply routes, the company would be able to increase employment and its market access to other linked industries. Local industries would benefit from these larger markets and reduced transaction costs.
- **Reducing production costs:** Economic studies show that reduced costs for inputs is one of the main business benefits from an increase in transportation investment.¹⁸ Typically businesses pay less for inputs when they have access to larger markets.
- **Agglomeration Economies:** Firms benefit by locating near one another, even if they are competitors. This is known as the agglomeration of market activity. This happens because a group of firms will attract a greater number of suppliers and customers than one company alone. Lower transportation costs are a key factor for agglomeration, and will be important in attracting new firms to an area.¹⁹ Increasing returns to local industries can be anticipated in areas with intermodal and intra-modal linkages (such as between major highways).

¹⁶Glen Weisbrod, Donald Vary and George Treyz. *Economic Implications of Congestion*. NCHRP Report #463. Project 2-21, National Cooperative Highway Research Program, Transportation Research Board, Washington, DC, 2001.

¹⁷Nadiri, M. Ishaq and Theofanis P. Mamuneas. "Contribution of Highway Capital to Output and Productivity Growth in the US Economy and Industries." FHWA, August 1998.

¹⁸Ibid.

¹⁹Jean-Paul Rodrigue, Claude Comtois and Brian Slack. "Transport and Location, the Geography of Transport Systems." Oxon: Routledge, 2006.

²⁰Glen Weisbrod, Donald Vary and George Treyz. *Economic Implications of Congestion*. NCHRP Report #463. Project 2-21, National Cooperative Highway Research Program, Transportation Research Board, Washington, DC, 2001.

²¹The magnitude of the effect of highway capital on output will differ by industry, with the largest difference observed between manufacturing and non-manufacturing industries.

- **More efficient operations:** With an efficient transportation system, businesses can make better decisions about their products, inputs and workforce without worrying about poor roadways or congestion. Businesses respond in a variety of ways to congestion. Some businesses may change their mix of labor and capital, reduce the daily deliveries made by a driver or serve a smaller, more specialized market. All of these adjustments can mean a loss for business productivity and market share.²⁰
- **Increase in demand for inputs:** As the economy expands, businesses will purchase more goods from their suppliers and will increase their demand for private capital. This includes buying more vehicles, equipment, office supplies or even building new plants and factories.²¹

Consider the benefits to a business in Kansas when the state invests in highway and bridge improvements. The increase in construction activity would mean more demand for products and services in the local area. A local business would sell more of its products and may even hire additional employees to increase output. With an improved transportation network, a local business on one of the many main streets in Kansas could thrive.

The business would also have lower distribution costs because of the improved highways in the area. More customers would be able to reach the business, and the owner would be able to hire more talented, educated and skilled workers that live further away.

The increase in demand may also lead the business to expand, opening another store, plant or business location. Finally, the business would demand more inputs and raw materials from their own suppliers, creating economic ripple effects throughout the economy. It could also be the case that the business owner is able to purchase cheaper inputs because he has greater access to more markets.

Benefits of Highway Investment Well Documented: Support from Economic Literature

Transportation capital investments boost economic output and spur private sector productivity, a relationship that has been well documented for decades in academic literature. There are numerous studies that have found a positive correlation between transportation infrastructure investment and economic development. Although the exact impact of the investment has varied among studies, the fact that there is a positive relationship is widely accepted.²²

- A recent study commissioned by the U.S. Treasury Department focused on the economic benefits of specific projects across the country. Released in December 2016, “40 Proposed U.S. Transportation and Water Infrastructure Projects of Major Economic Significance” also explores some of the challenges of completing the work.²³

The analysis found that for every \$1 in capital spent on these projects, the net economic benefit to the economy ranged between \$3.50 and \$7.00.

The report also found that a lack of public funding was “by far the most common factor hindering the completion” of the projects. Of the 40 projects, 39 were constrained by funding challenges. Additional factors included rising capital costs, an extended review and permitting process and working across multiple jurisdictions.

- A 2005 report by Dr. Robert Shapiro and Dr. Kevin Hassett found that the U.S. transportation network provides more than \$4 in direct benefits for every \$1 in direct costs that taxpayers pay to build, operate and maintain this system. These economic benefits include lower costs and higher productivity for businesses, and time savings and additional income for workers.

However, this estimate substantially understates the full net benefits of the U.S. transportation network. This estimate of economic benefits does not take into account the increased benefit from better access to schools and hospitals, and fails to include all of the ways in which highways and transit support economic growth and allow American workers and companies to compete successfully on the global stage.²⁴

²²Economic studies have found output elasticities ranging from as high as 0.56 (Aschauer 1989) to a low of 0.04 (Garcia-Mila and McGuire 1992). This means that a one percent increase in highway investment would result in between 0.04 to 0.56 percent increase in output. Most of this variation is because studies have a different focus— looking at different types of investment measures and output at either the national, state or county level.

²³Toni Horst et al, “40 Proposed U.S. Transportation and Water Infrastructure Projects of Major Economic Significance,” accessed February 28, 2017, <https://www.treasury.gov/connect/blog/Pages/Importance-of-Infrastructure-Investment-for-Spurring-Growth.aspx>

²⁴Robert Shapiro and Kevin Hassett, PhD, “Healthy Returns: The Economic Impact of Public Investment in Surface Transportation,” March 2005.

²⁵Alicia Munnell, "How Does Public Infrastructure Affect Regional Economic Performance," *New England Economic Review*, September/October 1990

²⁶Theresa M. Smith, "The Impact of Highway Infrastructure on Economic Performance," *Public Roads* Vol. 57 – No. 4 (Spring 1994).

²⁷A synopsis of these studies are available in the Transportation Research Board's *Expanding Metropolitan Highways: Implications for Air Quality and Energy Use – Special Report 245*, 1995

²⁸Summary provided by U.S. Department of Transportation, *Productivity and the Highway Network: A Look at the Economic Benefits to Industry from Investment in the Highway Network*.

- According to an analysis of U.S. Department benefit/cost estimates in the Federal Highway Administration's Conditions and Performance Report by The Road Information Program (TRIP), a national research organization, drivers and businesses see a number of economic benefits as a result of additional highway and bridge investment. The average return to every dollar spent on highway and bridge investment is \$5.20, which takes the form of lower maintenance costs, fewer delays, improved safety and less congestion.
- A study by Dr. Alicia Munnell of the Federal Reserve Bank of Boston concluded that states that invested more in infrastructure tended to have greater output, more private investment and more employment growth.²⁵ Her work found that a one percent increase in public capital would raise national output by 0.15 percent. She further notes that the major impact of public capital output is from investment in highways and water and sewer systems. Other public capital investments, such as school buildings and hospitals, had virtually no measureable impact on private production. Munnell also concludes that public capital and infrastructure investment have a significant positive impact on a state's private employment growth and private sector output.
- Federal Highway Administration economist Theresa Smith reached similar conclusions, finding that a 10 percent increase in highway and capital stock would increase a state's gross state product by 1.2 to 1.3 percent. This means a \$1 billion increase in Kansas' highway capital stock would increase state productivity by \$1.21 million to \$1.27 million.²⁶
- Additional studies have found that transportation infrastructure investments have an impact on the attractiveness of local communities, which helps determine local economic activity and land values.²⁷
- M. Ishaq Nadiri of New York University and the National Bureau of Economics Research and Theofanis P. Mamuneas of New York University find significant cost structure and productivity performance impacts on the U.S. manufacturing industry as a result of highway investment. Their work shows that the rate of return on highway investment can be greater than private investment. Some major findings include:²⁸

- Over the period 1950 to 1989, U.S. industries realized production cost savings averaging 18 cents annually for each dollar invested in the road system.
- Investments in non-local roads yield even higher annual production cost savings – estimated at 24 cents for each dollar of investment.
- Although the impact of highway investment on productivity has declined since the early 1970s and the initial construction of the Interstate, evidence suggests that highway infrastructure investments more than pay for themselves in terms of industry cost savings.

Overall, the benefits from investing to maintain and improve a state’s transportation network are greater than the cost, and can help support economic growth throughout the economy for years to come.

Who Pays for an Increase in the Gas Tax?

The gasoline tax is collected when gasoline is removed from bulk storage terminals. And it is but one—relatively small—input among several factors used to determine the retail price we are charged for gas at the pump at any given time. In practice, an increase in the gas tax results in a much smaller increase in actual gas prices.

An empirical analysis by ARTBA of gas tax changes in 13 states in 2013 showed that on average, about 50 percent of an increase in the state gas tax rate is passed through to the retail price of gasoline over a period of 30 days.²⁹ After that, the increase has no impact on prices.

If the same holds true in Kansas, an increase of the gas tax by 15 cents would not automatically increase the retail price of gasoline paid by Kansas consumers. For the average Kansas driver, who travels about 15,468 miles per year and consumes 871 gallons of gas, we would expect the increase to cost about \$71 per year, or under 20 cents per day.

²⁹Alison Premo Black; “How a Gas Tax Increase Affects the Retail Pump Price: An Economic Analysis of 2013–2014 Market Impacts in 5 States.” ARTBA, June 2015.

³⁰Analysis of FHWA Highway Statistics data Table SF-1, Table DL-1C, Table FE-9.

³¹American Society of Civil Engineers 2013 Report Card for America's Infrastructure, accessed February 28, 2017, <http://www.infrastructurereportcard.org/>

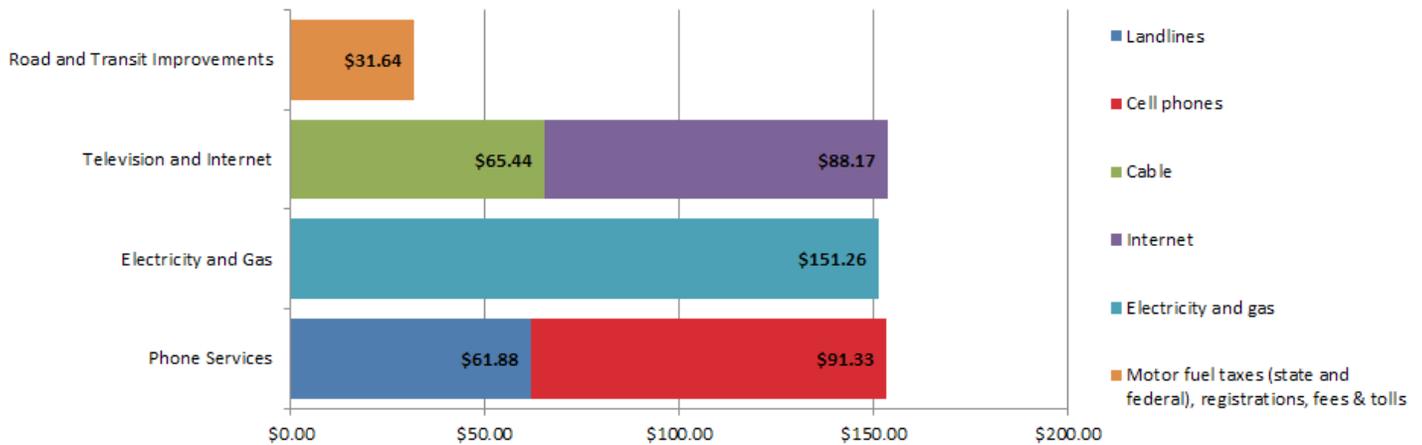
All in all, the average Kansas motorist pays just \$1.04 per day in highway user fees to build and maintain our state's roads and bridges.³⁰

- 46 cents/day through the state gas tax
- 39 cents/day through the federal gas tax
- 6 cents/day through motor vehicle ownership state fees
- 13 cents/day in tolls

This amount is far below the cost of other common services. The average Kansas household spends six times more per month for land line and cell phone service than it invests to build and maintain the roads and bridges we use.

Spending on road and bridge improvements also reduces the costs of repair and maintenance to cars from driving on deteriorating roads. The amount of money wasted by driving on poor roads costs the average Kansas motorist \$435 per year in vehicle repairs and wasted fuel.³¹

Kansas Average Monthly Household Expenditures



Source: Road & Bridge Investment from Highway Statistics 2013 Table SF-1, Table DL-1C, Table FE-9, other information from U.S. Bureau of Economic Analysis Personal Consumption Expenditures

The Economic Impacts of an Annual \$264 Million Increase in Highway and Bridge Construction Investment on Major Industry Sectors



The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

AGRICULTURE, FORESTRY, FISHING, AND HUNTING

SECTOR OVERVIEW

Agriculture, forestry, fishing, and hunting in Kansas contributed \$5.1 billion to state economic activity in 2015, accounting for 3.4% of the state's Gross State Product (GSP).³² Total sales in the industry were an estimated \$8.9 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 1,575 establishments and sole proprietorships in Kansas with an existing payroll valued at \$463.7 million. These businesses located in Kansas contribute an estimated \$39.6 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$39,123 each year. The Agriculture, Forestry, Fishing and Hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$8.9 billion	11	3.4%
Value Added (contribution to GSP)	\$5.1 billion	11	3.4%
Establishments	1,575 businesses	N/A	N/A
Employment	11,853 people	N/A	N/A
Average Annual Salary	\$39,123	N/A	
Total Payroll	\$463.7 million	N/A	N/A
State Payroll Tax Contribution	\$4.1 million	N/A	N/A
Federal Payroll Tax Contribution	\$35.5 million	N/A	N/A
State Income Tax Contribution	\$18.0 million	N/A	N/A
State Sales Tax Contribution	\$6.6 million	15	0.3%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$8.9 billion	\$2.1 million	0.02%
Value Added (contribution to GSP)	\$5.1 billion	\$580.8 thousand	0.01%
Employment	11,853 people	21 people	0.2%
Total Payroll	\$463.7 million	\$237.6 thousand	0.1%
State Payroll Tax Contribution	\$4.1 million	\$2.1 thousand	0.1%
Federal Payroll Tax Contribution	\$35.5 million	\$18.2 thousand	0.1%
State Income Tax Contribution	\$18.0 million	\$31.8 thousand	0.2%
State Sales Tax Contribution	\$6.6 million	\$751.5	0.01%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 21 jobs in this sector, generating \$2.1 million in output and \$237.6 thousand in wages.

³²GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

Agricultural sector employment data is from the U.S. Department of Labor's Bureau of Labor Statistics Quarterly Census of Employment and Wages, since County Business Patterns data (which is used for all other sectors in this report) excludes agricultural production employment. Data for the Quarterly Census of Employment and Wages are derived from quarterly tax reports submitted to State workforce agencies by employers (subject to State unemployment insurance laws) and from Federal agencies (subject to the Unemployment Compensation for Federal Employees program).

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

MINING

SECTOR OVERVIEW

Mining in Kansas contributed \$1.5 billion to state economic activity in 2015, accounting for 1.0% of the state's Gross State Product (GSP).³³ Total sales in the industry were an estimated \$2.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 1,102 establishments and sole proprietorships in Kansas with an existing payroll valued at \$677.9 million. These businesses located in Kansas contribute an estimated \$57.8 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$61,692 each year. The Mining, Quarrying, and Oil and Gas Extraction sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$2.7 billion	17	1.0%
Value Added (contribution to GSP)	\$1.5 billion	17	1.0%
Establishments	1,102 businesses	14	1.5%
Employment	10,988 people	17	0.9%
Average Annual Salary	\$61,692	6	
Total Payroll	\$677.9 million	14	1.4%
State Payroll Tax Contribution	\$6.0 million	14	1.4%
Federal Payroll Tax Contribution	\$51.9 million	14	1.4%
State Income Tax Contribution	\$28.1 million	14	1.4%
State Sales Tax Contribution	\$18.1 million	13	0.7%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$2.7 billion	\$4.9 million	0.2%
Value Added (contribution to GSP)	\$1.5 billion	\$2.3 million	0.2%
Employment	10,988 people	16 people	0.1%
Total Payroll	\$677.9 million	\$1.1 million	0.2%
State Payroll Tax Contribution	\$6.0 million	\$9.3 thousand	0.2%
Federal Payroll Tax Contribution	\$51.9 million	\$80.8 thousand	0.2%
State Income Tax Contribution	\$28.1 million	\$41.7 thousand	0.1%
State Sales Tax Contribution	\$18.1 million	\$27.6 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 16 jobs in this sector, generating \$4.9 million in output and \$1.1 million in wages.

³³GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

UTILITIES

SECTOR OVERVIEW

Utilities in Kansas contributed \$2.4 billion to state economic activity in 2015, accounting for 1.6% of the state's Gross State Product (GSP).³⁴ Total sales in the industry were an estimated \$4.3 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 232 establishments and sole proprietorships in Kansas with an existing payroll valued at \$612.5 million. These businesses located in Kansas contribute an estimated \$52.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$84,027 each year. The Utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$4.3 billion	16	1.6%
Value Added (contribution to GSP)	\$2.4 billion	16	1.6%
Establishments	232 businesses	18	0.3%
Employment	7,289 people	18	0.6%
Average Annual Salary	\$84,027	2	
Total Payroll	\$612.5 million	15	1.2%
State Payroll Tax Contribution	\$5.4 million	15	1.2%
Federal Payroll Tax Contribution	\$46.9 million	15	1.2%
State Income Tax Contribution	\$26.1 million	15	1.3%
State Sales Tax Contribution	\$82.2 million	6	3.1%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$4.3 billion	\$8.2 million	0.2%
Value Added (contribution to GSP)	\$2.4 billion	\$4.8 million	0.2%
Employment	7,289 people	16 people	0.2%
Total Payroll	\$612.5 million	\$1.4 million	0.2%
State Payroll Tax Contribution	\$5.4 million	\$12.5 thousand	0.2%
Federal Payroll Tax Contribution	\$46.9 million	\$109.1 thousand	0.2%
State Income Tax Contribution	\$26.1 million	\$58.5 thousand	0.2%
State Sales Tax Contribution	\$82.2 million	\$159.7 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 16 jobs in this sector, generating \$8.2 million in output and \$1.4 million in wages.

³⁴GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

CONSTRUCTION

SECTOR OVERVIEW

Construction in Kansas contributed \$6.1 billion to state economic activity in 2015, accounting for 4.1% of the state's Gross State Product (GSP).³⁵ Total sales in the industry were an estimated \$10.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 6,920 establishments and sole proprietorships in Kansas with an existing payroll valued at \$3.1 billion. These businesses located in Kansas contribute an estimated \$267.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$50,448 each year. The Construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems).

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$10.7 billion	8	4.1%
Value Added (contribution to GSP)	\$6.1 billion	8	4.1%
Establishments	6,920 businesses	5	9.3%
Employment	62,086 people	9	5.3%
Average Annual Salary	\$50,448	9	
Total Payroll	\$3.1 billion	7	6.3%
State Payroll Tax Contribution	\$27.6 million	7	6.3%
Federal Payroll Tax Contribution	\$239.6 million	7	6.3%
State Income Tax Contribution	\$126.4 million	6	6.5%
State Sales Tax Contribution	\$94.5 million	5	3.6%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$10.7 billion	\$265.6 million	2.5%
Value Added (contribution to GSP)	\$6.1 billion	\$119.2 million	1.9%
Employment	62,086 people	2,567 people	4.1%
Total Payroll	\$3.1 billion	\$86.9 million	2.8%
State Payroll Tax Contribution	\$27.6 million	\$764.3 thousand	2.8%
Federal Payroll Tax Contribution	\$239.6 million	\$6.6 million	2.8%
State Income Tax Contribution	\$126.4 million	\$5.2 million	4.1%
State Sales Tax Contribution	\$94.5 million	\$1.8 million	1.9%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 2,567 jobs in this sector, generating \$265.6 million in output and \$86.9 million in wages.

³⁵GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

MANUFACTURING

SECTOR OVERVIEW

Manufacturing in Kansas contributed \$20.9 billion to state economic activity in 2015, accounting for 14.0% of the state's Gross State Product (GSP).³⁶ Total sales in the industry were an estimated \$36.4 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 2,831 establishments and sole proprietorships in Kansas with an existing payroll valued at \$8.8 billion. These businesses located in Kansas contribute an estimated \$748.7 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$53,274 each year. The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$36.4 billion	1	14.0%
Value Added (contribution to GSP)	\$20.9 billion	1	14.0%
Establishments	2,831 businesses	11	3.8%
Employment	164,749 people	2	14.0%
Average Annual Salary	\$53,274	8	
Total Payroll	\$8.8 billion	1	17.7%
State Payroll Tax Contribution	\$77.2 million	1	17.7%
Federal Payroll Tax Contribution	\$671.4 million	1	17.7%
State Income Tax Contribution	\$356.8 million	1	18.3%
State Sales Tax Contribution	\$63.5 million	8	2.4%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$36.4 billion	\$80.2 million	0.2%
Value Added (contribution to GSP)	\$20.9 billion	\$28.6 million	0.1%
Employment	164,749 people	330 people	0.2%
Total Payroll	\$8.8 billion	\$13.9 million	0.2%
State Payroll Tax Contribution	\$77.2 million	\$122.7 thousand	0.2%
Federal Payroll Tax Contribution	\$671.4 million	\$1.1 million	0.2%
State Income Tax Contribution	\$356.8 million	\$715.0 thousand	0.2%
State Sales Tax Contribution	\$63.5 million	\$86.8 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 330 jobs in this sector, generating \$80.2 million in output and \$13.9 million in wages.

³⁶GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

WHOLESALE TRADE

SECTOR OVERVIEW

Wholesale trade in Kansas contributed \$10.2 billion to state economic activity in 2015, accounting for 6.8% of the state's Gross State Product (GSP).³⁷ Total sales in the industry were an estimated \$17.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 4,497 establishments and sole proprietorships in Kansas with an existing payroll valued at \$3.7 billion. These businesses located in Kansas contribute an estimated \$316.3 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$57,177 each year. The Wholesale Trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$17.7 billion	4	6.8%
Value Added (contribution to GSP)	\$10.2 billion	4	6.8%
Establishments	4,497 businesses	8	6.1%
Employment	64,845 people	6	5.5%
Average Annual Salary	\$57,177	7	
Total Payroll	\$3.7 billion	5	7.5%
State Payroll Tax Contribution	\$32.6 million	5	7.5%
Federal Payroll Tax Contribution	\$283.6 million	5	7.5%
State Income Tax Contribution	\$152.1 million	5	7.8%
State Sales Tax Contribution	\$128.5 million	4	4.9%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$17.7 billion	\$22.7 million	0.1%
Value Added (contribution to GSP)	\$10.2 billion	\$14.6 million	0.1%
Employment	64,845 people	120 people	0.2%
Total Payroll	\$3.7 billion	\$6.3 million	0.2%
State Payroll Tax Contribution	\$32.6 million	\$55.3 thousand	0.2%
Federal Payroll Tax Contribution	\$283.6 million	\$480.7 thousand	0.2%
State Income Tax Contribution	\$152.1 million	\$282.4 thousand	0.2%
State Sales Tax Contribution	\$128.5 million	\$184.1 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 120 jobs in this sector, generating \$22.7 million in output and \$6.3 million in wages.

³⁷GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

RETAIL TRADE

SECTOR OVERVIEW

Retail trade in Kansas contributed \$9.6 billion to state economic activity in 2015, accounting for 6.4% of the state's Gross State Product (GSP).³⁸ Total sales in the industry were an estimated \$16.8 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 10,391 establishments and sole proprietorships in Kansas with an existing payroll valued at \$3.6 billion. These businesses located in Kansas contribute an estimated \$308.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$24,053 each year. The Retail Trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$16.8 billion	5	6.4%
Value Added (contribution to GSP)	\$9.6 billion	5	6.4%
Establishments	10,391 businesses	1	14.0%
Employment	150,237 people	3	12.8%
Average Annual Salary	\$24,053	17	
Total Payroll	\$3.6 billion	6	7.3%
State Payroll Tax Contribution	\$31.8 million	6	7.3%
Federal Payroll Tax Contribution	\$276.4 million	6	7.3%
State Income Tax Contribution	\$123.4 million	7	6.3%
State Sales Tax Contribution	\$1.5 billion	1	58.2%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$16.8 billion	\$35.3 million	0.2%
Value Added (contribution to GSP)	\$9.6 billion	\$20.9 million	0.2%
Employment	150,237 people	549 people	0.4%
Total Payroll	\$3.6 billion	\$10.9 million	0.3%
State Payroll Tax Contribution	\$31.8 million	\$95.7 thousand	0.3%
Federal Payroll Tax Contribution	\$276.4 million	\$832.1 thousand	0.3%
State Income Tax Contribution	\$123.4 million	\$450.9 thousand	0.4%
State Sales Tax Contribution	\$1.5 billion	\$3.3 million	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 549 jobs in this sector, generating \$35.3 million in output and \$10.9 million in wages.

³⁸GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

TRANSPORTATION AND WAREHOUSING

SECTOR OVERVIEW

Transportation and warehousing in Kansas contributed \$5.3 billion to state economic activity in 2015, accounting for 3.6% of the state's Gross State Product (GSP).³⁹ Total sales in the industry were an estimated \$9.3 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 2,518 establishments and sole proprietorships in Kansas with an existing payroll valued at \$2.1 billion. These businesses located in Kansas contribute an estimated \$178.7 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$41,574 each year. The Transportation and Warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$9.3 billion	10	3.6%
Value Added (contribution to GSP)	\$5.3 billion	10	3.6%
Establishments	2,518 businesses	12	3.4%
Employment	50,389 people	11	4.3%
Average Annual Salary	\$41,574	10	
Total Payroll	\$2.1 billion	11	4.2%
State Payroll Tax Contribution	\$18.4 million	11	4.2%
Federal Payroll Tax Contribution	\$160.3 million	11	4.2%
State Income Tax Contribution	\$82.0 million	11	4.2%
State Sales Tax Contribution	\$7.6 million	14	0.3%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$9.3 billion	\$15.0 million	0.2%
Value Added (contribution to GSP)	\$5.3 billion	\$8.2 million	0.2%
Employment	50,389 people	99 people	0.2%
Total Payroll	\$2.1 billion	\$4.0 million	0.2%
State Payroll Tax Contribution	\$18.4 million	\$35.1 thousand	0.2%
Federal Payroll Tax Contribution	\$160.3 million	\$305.0 thousand	0.2%
State Income Tax Contribution	\$82.0 million	\$160.5 thousand	0.2%
State Sales Tax Contribution	\$7.6 million	\$11.6 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 99 jobs in this sector, generating \$15.0 million in output and \$4.0 million in wages.

³⁹GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

INFORMATION

SECTOR OVERVIEW

Information in Kansas contributed \$5.7 billion to state economic activity in 2015, accounting for 3.8% of the state's Gross State Product (GSP).⁴⁰ Total sales in the industry were an estimated \$9.9 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 1,335 establishments and sole proprietorships in Kansas with an existing payroll valued at \$2.4 billion. These businesses located in Kansas contribute an estimated \$203.9 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$69,193 each year. The Information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$9.9 billion	9	3.8%
Value Added (contribution to GSP)	\$5.7 billion	9	3.8%
Establishments	1,335 businesses	13	1.8%
Employment	34,552 people	12	2.9%
Average Annual Salary	\$69,193	3	
Total Payroll	\$2.4 billion	9	4.8%
State Payroll Tax Contribution	\$21.0 million	9	4.8%
Federal Payroll Tax Contribution	\$182.9 million	9	4.8%
State Income Tax Contribution	\$100.1 million	8	5.1%
State Sales Tax Contribution	\$197.2 million	3	7.5%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$9.9 billion	\$14.2 million	0.1%
Value Added (contribution to GSP)	\$5.7 billion	\$7.8 million	0.1%
Employment	34,552 people	53 people	0.2%
Total Payroll	\$2.4 billion	\$2.9 million	0.1%
State Payroll Tax Contribution	\$21.0 million	\$25.6 thousand	0.1%
Federal Payroll Tax Contribution	\$182.9 million	\$222.2 thousand	0.1%
State Income Tax Contribution	\$100.1 million	\$154.3 thousand	0.2%
State Sales Tax Contribution	\$197.2 million	\$271.6 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 53 jobs in this sector, generating \$14.2 million in output and \$2.9 million in wages.

⁴⁰GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

FINANCE AND INSURANCE

SECTOR OVERVIEW

Finance and insurance in Kansas contributed \$8.4 billion to state economic activity in 2015, accounting for 5.6% of the state's Gross State Product (GSP).⁴¹ Total sales in the industry were an estimated \$14.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 5,894 establishments and sole proprietorships in Kansas with an existing payroll valued at \$4.0 billion. These businesses located in Kansas contribute an estimated \$344.6 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$64,486 each year. The Finance and Insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$14.7 billion	6	5.6%
Value Added (contribution to GSP)	\$8.4 billion	6	5.6%
Establishments	5,894 businesses	7	8.0%
Employment	62,642 people	8	5.3%
Average Annual Salary	\$64,486	4	
Total Payroll	\$4.0 billion	3	8.1%
State Payroll Tax Contribution	\$35.5 million	3	8.1%
Federal Payroll Tax Contribution	\$309.0 million	3	8.1%
State Income Tax Contribution	\$168.0 million	3	8.6%
State Sales Tax Contribution	\$4.3 million	19	0.2%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$14.7 billion	\$24.4 million	0.2%
Value Added (contribution to GSP)	\$8.4 billion	\$14.9 million	0.2%
Employment	62,642 people	131 people	0.2%
Total Payroll	\$4.0 billion	\$5.5 million	0.1%
State Payroll Tax Contribution	\$35.5 million	\$48.6 thousand	0.1%
Federal Payroll Tax Contribution	\$309.0 million	\$422.1 thousand	0.1%
State Income Tax Contribution	\$168.0 million	\$352.5 thousand	0.2%
State Sales Tax Contribution	\$4.3 million	\$7.6 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 131 jobs in this sector, generating \$24.4 million in output and \$5.5 million in wages.

⁴¹GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

REAL ESTATE AND RENTAL AND LEASING

SECTOR OVERVIEW

Real estate and rental and leasing in Kansas contributed \$16.5 billion to state economic activity in 2015, accounting for 11.0% of the state's Gross State Product (GSP).⁴² Total sales in the industry were an estimated \$28.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 3,135 establishments and sole proprietorships in Kansas with an existing payroll valued at \$541.7 million. These businesses located in Kansas contribute an estimated \$46.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$36,417 each year. The Real Estate and Rental and Leasing sector comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$28.7 billion	2	11.0%
Value Added (contribution to GSP)	\$16.5 billion	2	11.0%
Establishments	3,135 businesses	10	4.2%
Employment	14,874 people	16	1.3%
Average Annual Salary	\$36,417	13	
Total Payroll	\$541.7 million	17	1.1%
State Payroll Tax Contribution	\$4.8 million	17	1.1%
Federal Payroll Tax Contribution	\$41.4 million	17	1.1%
State Income Tax Contribution	\$20.7 million	17	1.1%
State Sales Tax Contribution	\$37.6 million	9	1.4%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$28.7 billion	\$29.7 million	0.1%
Value Added (contribution to GSP)	\$16.5 billion	\$22.8 million	0.1%
Employment	14,874 people	75 people	0.5%
Total Payroll	\$541.7 million	\$1.5 million	0.3%
State Payroll Tax Contribution	\$4.8 million	\$13.2 thousand	0.3%
Federal Payroll Tax Contribution	\$41.4 million	\$115.1 thousand	0.3%
State Income Tax Contribution	\$20.7 million	\$104.9 thousand	0.5%
State Sales Tax Contribution	\$37.6 million	\$52.0 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 75 jobs in this sector, generating \$29.7 million in output and \$1.5 million in wages.

⁴²GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES

SECTOR OVERVIEW

Professional, scientific, and technical services in Kansas contributed \$7.9 billion to state economic activity in 2015, accounting for 5.3% of the state's Gross State Product (GSP).⁴³ Total sales in the industry were an estimated \$13.8 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 7,206 establishments and sole proprietorships in Kansas with an existing payroll valued at \$4.0 billion. These businesses located in Kansas contribute an estimated \$339.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$62,298 each year. The Professional, Scientific, and Technical Services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$13.8 billion	7	5.3%
Value Added (contribution to GSP)	\$7.9 billion	7	5.3%
Establishments	7,206 businesses	4	9.7%
Employment	63,836 people	7	5.4%
Average Annual Salary	\$62,298	5	
Total Payroll	\$4.0 billion	4	8.0%
State Payroll Tax Contribution	\$35.0 million	4	8.0%
Federal Payroll Tax Contribution	\$304.2 million	4	8.0%
State Income Tax Contribution	\$164.7 million	4	8.4%
State Sales Tax Contribution	\$22.2 million	12	0.8%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$13.8 billion	\$26.5 million	0.2%
Value Added (contribution to GSP)	\$7.9 billion	\$18.6 million	0.2%
Employment	63,836 people	231 people	0.4%
Total Payroll	\$4.0 billion	\$10.3 million	0.3%
State Payroll Tax Contribution	\$35.0 million	\$90.8 thousand	0.3%
Federal Payroll Tax Contribution	\$304.2 million	\$789.7 thousand	0.3%
State Income Tax Contribution	\$164.7 million	\$596.6 thousand	0.4%
State Sales Tax Contribution	\$22.2 million	\$52.0 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 231 jobs in this sector, generating \$26.5 million in output and \$10.3 million in wages.

⁴³GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

MANAGEMENT OF COMPANIES AND ENTERPRISES

SECTOR OVERVIEW

Management of companies and enterprises in Kansas contributed \$4.0 billion to state economic activity in 2015, accounting for 2.7% of the state's Gross State Product (GSP).⁴⁴ Total sales in the industry were an estimated \$7.0 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 603 establishments and sole proprietorships in Kansas with an existing payroll valued at \$2.1 billion. These businesses located in Kansas contribute an estimated \$180.4 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$95,108 each year. The Management of Companies and Enterprises sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$7.0 billion	13	2.7%
Value Added (contribution to GSP)	\$4.0 billion	13	2.7%
Establishments	603 businesses	17	0.8%
Employment	22,235 people	13	1.9%
Average Annual Salary	\$95,108	1	
Total Payroll	\$2.1 billion	10	4.3%
State Payroll Tax Contribution	\$18.6 million	10	4.3%
Federal Payroll Tax Contribution	\$161.8 million	10	4.3%
State Income Tax Contribution	\$90.9 million	10	4.7%
State Sales Tax Contribution	\$4.6 million	18	0.2%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$7.0 billion	\$4.8 million	0.1%
Value Added (contribution to GSP)	\$4.0 billion	\$3.4 million	0.1%
Employment	22,235 people	32 people	0.1%
Total Payroll	\$2.1 billion	\$2.2 million	0.1%
State Payroll Tax Contribution	\$18.6 million	\$19.3 thousand	0.1%
Federal Payroll Tax Contribution	\$161.8 million	\$167.6 thousand	0.1%
State Income Tax Contribution	\$90.9 million	\$129.6 thousand	0.1%
State Sales Tax Contribution	\$4.6 million	\$3.9 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 32 jobs in this sector, generating \$4.8 million in output and \$2.2 million in wages.

⁴⁴GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

ADMINISTRATIVE AND WASTE MANAGEMENT SERVICES

SECTOR OVERVIEW

Administrative and waste management services in Kansas contributed \$4.9 billion to state economic activity in 2015, accounting for 3.3% of the state's Gross State Product (GSP).⁴⁵ Total sales in the industry were an estimated \$8.5 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 3,569 establishments and sole proprietorships in Kansas with an existing payroll valued at \$2.4 billion. These businesses located in Kansas contribute an estimated \$208.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$32,816 each year. The Administrative and Support and Waste Management and Remediation Services sector comprises establishments performing routine support activities for the day-to-day operations of other organizations.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$8.5 billion	12	3.3%
Value Added (contribution to GSP)	\$4.9 billion	12	3.3%
Establishments	3,569 businesses	9	4.8%
Employment	74,392 people	5	6.3%
Average Annual Salary	\$32,816	14	
Total Payroll	\$2.4 billion	8	4.9%
State Payroll Tax Contribution	\$21.5 million	8	4.9%
Federal Payroll Tax Contribution	\$186.8 million	8	4.9%
State Income Tax Contribution	\$91.1 million	9	4.7%
State Sales Tax Contribution	\$24.6 million	11	0.9%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$8.5 billion	\$9.8 million	0.1%
Value Added (contribution to GSP)	\$4.9 billion	\$7.1 million	0.1%
Employment	74,392 people	168 people	0.2%
Total Payroll	\$2.4 billion	\$3.7 million	0.2%
State Payroll Tax Contribution	\$21.5 million	\$32.5 thousand	0.2%
Federal Payroll Tax Contribution	\$186.8 million	\$282.7 thousand	0.2%
State Income Tax Contribution	\$91.1 million	\$206.1 thousand	0.2%
State Sales Tax Contribution	\$24.6 million	\$35.8 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 168 jobs in this sector, generating \$9.8 million in output and \$3.7 million in wages.

⁴⁵GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

EDUCATIONAL SERVICES

SECTOR OVERVIEW

Educational services in Kansas contributed \$934.0 million to state economic activity in 2015, accounting for 0.6% of the state's Gross State Product (GSP).⁴⁶ Total sales in the industry were an estimated \$1.6 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 722 establishments and sole proprietorships in Kansas with an existing payroll valued at \$611.3 million. These businesses located in Kansas contribute an estimated \$52.1 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$28,584 each year. The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$1.6 billion	18	0.6%
Value Added (contribution to GSP)	\$934.0 million	18	0.6%
Establishments	722 businesses	16	1.0%
Employment	21,388 people	14	1.8%
Average Annual Salary	\$28,584	15	
Total Payroll	\$611.3 million	16	1.2%
State Payroll Tax Contribution	\$5.4 million	16	1.2%
Federal Payroll Tax Contribution	\$46.8 million	16	1.2%
State Income Tax Contribution	\$22.0 million	16	1.1%
State Sales Tax Contribution	\$6.2 million	16	0.2%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$1.6 billion	\$3.8 million	0.2%
Value Added (contribution to GSP)	\$934.0 million	\$2.2 million	0.2%
Employment	21,388 people	86 people	0.4%
Total Payroll	\$611.3 million	\$1.6 million	0.3%
State Payroll Tax Contribution	\$5.4 million	\$14.4 thousand	0.3%
Federal Payroll Tax Contribution	\$46.8 million	\$125.2 thousand	0.3%
State Income Tax Contribution	\$22.0 million	\$88.8 thousand	0.4%
State Sales Tax Contribution	\$6.2 million	\$14.4 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 86 jobs in this sector, generating \$3.8 million in output and \$1.6 million in wages.

⁴⁶GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

HEALTH CARE AND SOCIAL ASSISTANCE

SECTOR OVERVIEW

Health care and social assistance in Kansas contributed \$11.3 billion to state economic activity in 2015, accounting for 7.6% of the state's Gross State Product (GSP).⁴⁷ Total sales in the industry were an estimated \$19.7 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 7,809 establishments and sole proprietorships in Kansas with an existing payroll valued at \$7.7 billion. These businesses located in Kansas contribute an estimated \$658.9 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$39,581 each year. The Health Care and Social Assistance sector comprises establishments providing health care and social assistance for individuals.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$19.7 billion	3	7.6%
Value Added (contribution to GSP)	\$11.3 billion	3	7.6%
Establishments	7,809 businesses	3	10.5%
Employment	195,155 people	1	16.6%
Average Annual Salary	\$39,581	11	
Total Payroll	\$7.7 billion	2	15.6%
State Payroll Tax Contribution	\$68.0 million	2	15.6%
Federal Payroll Tax Contribution	\$590.9 million	2	15.6%
State Income Tax Contribution	\$299.7 million	2	15.4%
State Sales Tax Contribution	\$5.2 million	17	0.2%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$19.7 billion	\$24.4 million	0.1%
Value Added (contribution to GSP)	\$11.3 billion	\$15.1 million	0.1%
Employment	195,155 people	321 people	0.2%
Total Payroll	\$7.7 billion	\$11.2 million	0.1%
State Payroll Tax Contribution	\$68.0 million	\$98.3 thousand	0.1%
Federal Payroll Tax Contribution	\$590.9 million	\$854.3 thousand	0.1%
State Income Tax Contribution	\$299.7 million	\$493.7 thousand	0.2%
State Sales Tax Contribution	\$5.2 million	\$7.0 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 321 jobs in this sector, generating \$24.4 million in output and \$11.2 million in wages.

⁴⁷GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

ART, ENTERTAINMENT, AND RECREATION

SECTOR OVERVIEW

Arts, entertainment, and recreation in Kansas contributed \$886.0 million to state economic activity in 2015, accounting for 0.6% of the state's Gross State Product (GSP).⁴⁸ Total sales in the industry were an estimated \$1.5 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 1,030 establishments and sole proprietorships in Kansas with an existing payroll valued at \$288.8 million. These businesses located in Kansas contribute an estimated \$24.6 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$18,918 each year. The Arts, Entertainment, and Recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$1.5 billion	19	0.6%
Value Added (contribution to GSP)	\$886.0 million	19	0.6%
Establishments	1,030 businesses	15	1.4%
Employment	15,264 people	15	1.3%
Average Annual Salary	\$18,918	18	
Total Payroll	\$288.8 million	18	0.6%
State Payroll Tax Contribution	\$2.5 million	18	0.6%
Federal Payroll Tax Contribution	\$22.1 million	18	0.6%
State Income Tax Contribution	\$8.9 million	18	0.5%
State Sales Tax Contribution	\$28.4 million	10	1.1%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$1.5 billion	\$1.6 million	0.1%
Value Added (contribution to GSP)	\$886.0 million	\$950.4 thousand	0.1%
Employment	15,264 people	42 people	0.3%
Total Payroll	\$288.8 million	\$580.8 thousand	0.2%
State Payroll Tax Contribution	\$2.5 million	\$5.1 thousand	0.2%
Federal Payroll Tax Contribution	\$22.1 million	\$44.4 thousand	0.2%
State Income Tax Contribution	\$8.9 million	\$24.8 thousand	0.3%
State Sales Tax Contribution	\$28.4 million	\$30.5 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 42 jobs in this sector, generating \$1.6 million in output and \$580.8 thousand in wages.

⁴⁸GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

ACCOMMODATION AND FOOD SERVICES

SECTOR OVERVIEW

Accommodation and Food Services in Kansas contributed \$3.8 billion to state economic activity in 2015, accounting for 2.5% of the state's Gross State Product (GSP).⁴⁹ Total sales in the industry were an estimated \$6.5 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 5,985 establishments and sole proprietorships in Kansas with an existing payroll valued at \$1.6 billion. These businesses located in Kansas contribute an estimated \$133.9 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$14,170 each year. The Accommodation and Food Services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$6.5 billion	14	2.5%
Value Added (contribution to GSP)	\$3.8 billion	14	2.5%
Establishments	5,985 businesses	6	8.1%
Employment	110,809 people	4	9.4%
Average Annual Salary	\$14,170	19	
Total Payroll	\$1.6 billion	12	3.2%
State Payroll Tax Contribution	\$13.8 million	12	3.2%
Federal Payroll Tax Contribution	\$120.1 million	12	3.2%
State Income Tax Contribution	\$42.4 million	13	2.2%
State Sales Tax Contribution	\$285.0 million	2	10.8%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$6.5 billion	\$9.8 million	0.1%
Value Added (contribution to GSP)	\$3.8 billion	\$5.2 million	0.1%
Employment	110,809 people	262 people	0.2%
Total Payroll	\$1.6 billion	\$3.5 million	0.2%
State Payroll Tax Contribution	\$13.8 million	\$31.1 thousand	0.2%
Federal Payroll Tax Contribution	\$120.1 million	\$270.6 thousand	0.2%
State Income Tax Contribution	\$42.4 million	\$100.3 thousand	0.2%
State Sales Tax Contribution	\$285.0 million	\$392.1 thousand	0.1%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 262 jobs in this sector, generating \$9.8 million in output and \$3.5 million in wages.

⁴⁹GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

The Economic Benefits of a \$264 Million Increase in Kansas' Annual Investment in Highway and Bridge Capital Outlays on ...

OTHER SERVICES

SECTOR OVERVIEW

Other services in Kansas contributed \$3.1 billion to state economic activity in 2015, accounting for 2.1% of the state's Gross State Product (GSP).⁵⁰ Total sales in the industry were an estimated \$5.4 billion, which includes goods and services for final consumers as well as any inputs sold to other industries. This sector includes 7,943 establishments and sole proprietorships in Kansas with an existing payroll valued at \$1.3 billion. These businesses located in Kansas contribute an estimated \$111.2 million in state and federal payroll taxes. Individuals working in this sector earn an average of \$25,381 each year. The Other Services (except Public Administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system.

Regional Profile	Current Value	Kansas Ranking	Percentage of State Total
Industry Output	\$5.4 billion	15	2.1%
Value Added (contribution to GSP)	\$3.1 billion	15	2.1%
Establishments	7,943 businesses	2	10.7%
Employment	51,378 people	10	4.4%
Average Annual Salary	\$25,381	16	
Total Payroll	\$1.3 billion	13	2.6%
State Payroll Tax Contribution	\$11.5 million	13	2.6%
Federal Payroll Tax Contribution	\$99.8 million	13	2.6%
State Income Tax Contribution	\$45.3 million	12	2.3%
State Sales Tax Contribution	\$80.9 million	7	3.1%

	Current Value	Impact of Additional \$264 Million	% Increase
Industry Output	\$5.4 billion	\$11.5 million	0.2%
Value Added (contribution to GSP)	\$3.1 billion	\$6.5 million	0.2%
Employment	51,378 people	165 people	0.3%
Total Payroll	\$1.3 billion	\$3.7 million	0.3%
State Payroll Tax Contribution	\$11.5 million	\$32.8 thousand	0.3%
Federal Payroll Tax Contribution	\$99.8 million	\$284.8 thousand	0.3%
State Income Tax Contribution	\$45.3 million	\$145.8 thousand	0.3%
State Sales Tax Contribution	\$80.9 million	\$170.4 thousand	0.2%

IMPACT OF A \$264 MILLION INCREASE IN HIGHWAY AND BRIDGE INVESTMENT ON THIS SECTOR

The highway and bridge construction industry in Kansas has an impact on the output, employment and value added for this industry in two ways. The first is through direct purchases from transportation construction firms and suppliers involved in building Kansas' highways and bridges. The second effect is when employees of the transportation construction firms spend their wages and make purchases throughout the economy.

Highway and bridge work done by construction firms in Kansas as a result of this increased investment would support up to 165 jobs in this sector, generating \$11.5 million in output and \$3.7 million in wages.

⁵⁰GSP is the value added by an industry to the overall economy. Kansas' GSP was \$149.64 billion in 2015, according to the U.S. Bureau of Economic Analysis. That is the difference between total sales and the intermediate goods. Gross output is the measure of total industry sales for both intermediate and final goods. Kansas' gross output in 2015 is estimated to be \$260.49 billion.

METHODOLOGY AND SOURCES

The impact of highway and bridge construction spending is calculated using the U.S. Department of Commerce Regional Input-Output Modeling System (RIMS II). RIMS II is based on input output (I-O) tables. For a given industry, the I-O tables show the industrial distribution of inputs purchased and outputs sold.

Research shows that RIMS II multipliers are similar to other regional I-O models based on in depth and often expensive surveys. According to the U.S. Department of Commerce, RIMS multipliers have been used to estimate such things as the regional impact of military base closings, tourist expenditures, new energy facilities, offshore drilling and the opening or closing of manufacturing plants and other facilities. The construction multipliers in this report are used frequently to analyze the impact of new construction projects, including transportation construction. The construction multipliers are specific to Kansas and are based on benchmark regional data from 2006 and industry data from the 1997 benchmark series, as published by the U.S. Department of Commerce. These multipliers are standard for this type of analysis and are the latest information available.

Industry value added (contribution to GSP) for Kansas is the most recent data from the U.S. Bureau of Economic Analysis GDP estimates for the state, broken out by industry, for 2015. Industry output for Kansas was estimated by taking Kansas' percent share of national GSP for each industry and multiplying it by national gross output by industry.

The state payroll tax rate is calculated using the average employer tax rate as a percent of total wages. The source for this information is the National Association of State Workforce Agencies (NASWA) and the U.S. Department of Labor Employment Training Administration (ETA) Financial Handbook 394. The federal payroll tax rate is estimated to be 7.65 percent. Income tax contributions are estimated using the average wage in each of the 19 industries and the

corresponding tax rate as published by the state of Kansas. For industries where the average earnings are less than \$15,000, the income tax is calculated as 2.7 percent of the average wages, as per the Kansas Department of Revenue. For industries where the average earnings are over \$15,000, the income tax is calculated as \$405 plus 4.6 percent of the average wages over \$15,000. Total estimated income tax collections using this method are \$2.0 billion. The value of actual income tax collections reported by Kansas in the 2014 U.S. Census of State & Local Governments was \$2.5 billion. This difference is in part attributable to a lowering of the income tax rate in 2015, inflation, an expanded workforce and income taxes paid by government workers. Employment and economic impact of the public sector is not included in the 19 sector analysis.

Total state sales tax revenues are the actual collections of sales tax in fiscal year 2015 as recorded in the Kansas Department of Revenue Office of Policy and Research State Sales Tax Collections by NAICS reports for January through December 2015. Kansas has a 6.5% sales tax rate.

The total value of state sales tax receipts in this report is \$2.6 billion. The figure in this report is less than actual reported revenues for the estate sales and use tax. The 2014 Census of State and Local Government Finance, published by the U.S. Census Bureau, reports that Kansas collected \$3.0 billion in sales tax revenue at the state level.

In this report, we estimate the impact of a \$264 million annual increase in Kansas highway and bridge construction investment on various sectors of the economy.

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APPENDIX

KDOT State Highway Fund Transfers (in millions)										
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2011- 2019
	Actual	Actual	Actual	Actual	Actual	Actual	Approved	Cashflow	Cashflow	Total
Extraordinary Transfers	154.59	205.00	7.35	160.72	319.08	420.43	397.64	423.77	428.58	2,517.16
Ordinary Transfers	103.28	102.59	102.74	103.11	105.47	105.77	107.14	101.60	101.58	933.27
Grand Total SHF Transfers	257.87	307.59	110.10	263.83	424.55	526.20	504.78	525.37	530.16	3,450.43

Source: Kansas Department of Transportation