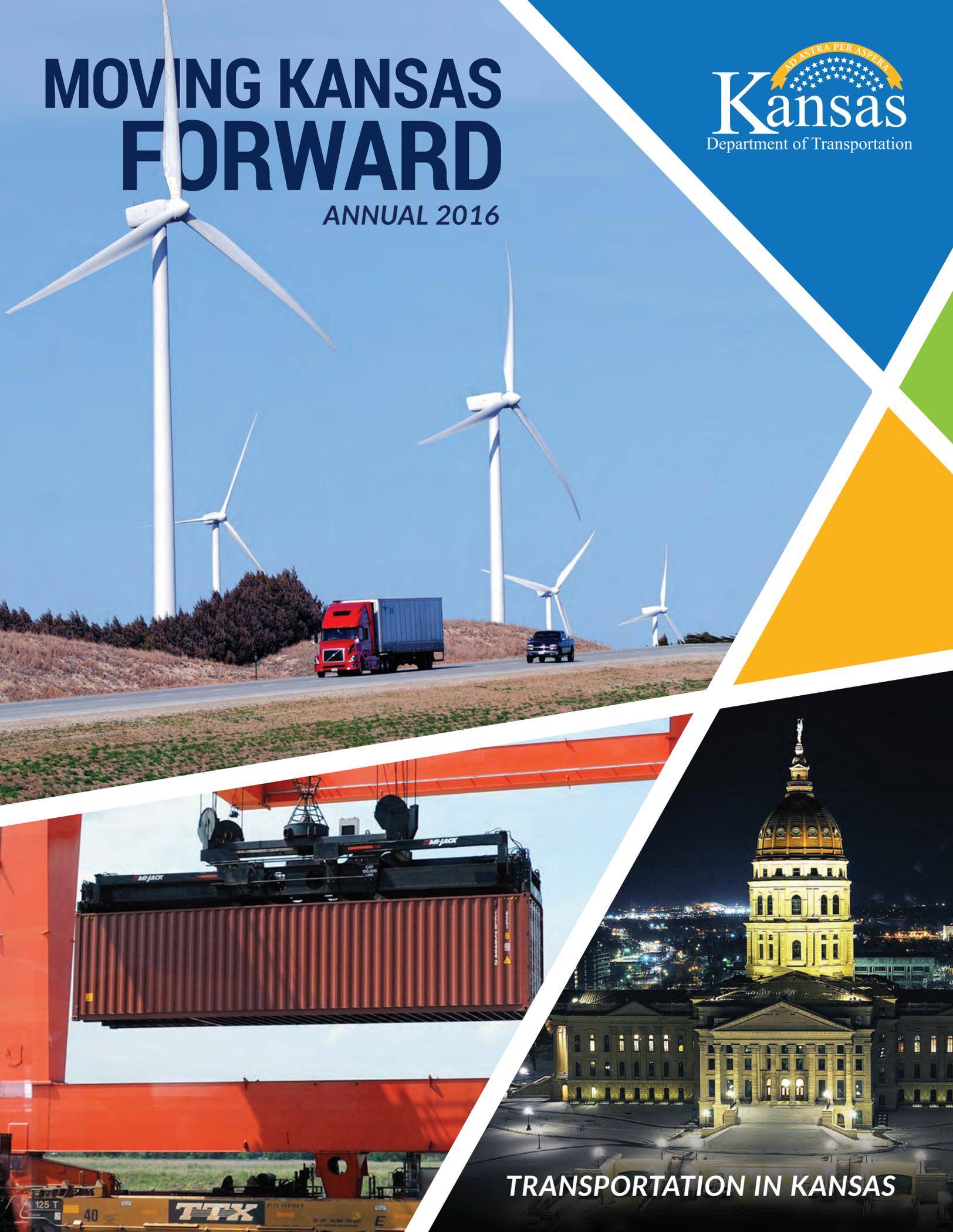


# MOVING KANSAS FORWARD

ANNUAL 2016



TRANSPORTATION IN KANSAS

## Table of Contents

Letter from Mike King .....	2
T-WORKS .....	3
Partnership .....	4-5
Freight .....	6-7
Safety .....	8
Aviation .....	9
Technology .....	10
"We are KDOT" .....	11
Budget/Financials .....	12
Snapshot	

## A letter from **SECRETARY MIKE KING**



When rankings of the best state highway systems are compiled, the Kansas Department of Transportation consistently ranks high among the nation's best. That's no surprise once you get to know the people of this agency and their innovative programs and practices.

On the following pages, you'll learn about some of the award-winning programs they manage and their high-tech tools that are common today but only imagined a decade or two ago.

One of the things we recognize about success is that no matter how talented you are, you can't do it alone. In this report you'll learn about the many partnerships KDOT has, including our formal partner at the Kansas Turnpike Authority, other state agencies and local governments.

We also understand transportation's role in the success of the Kansas economy. So, we have dedicated two pages to our programs that facilitate the safe, smooth flow of transportation through the state.

Kansans have long supported transportation and are rightly proud of their highway system. I appreciate that support and the input we receive from the people we serve. Thank you for being a valued partner as we continue to be a national leader in transportation.

Mike King

*Transportation Secretary & Director of the Kansas Turnpike Authority*

### Gov. Sam Brownback

*Chairman of the Senate Transportation Committee*  
Sen. Mike Petersen  
Wichita, District 28

*Chairman of the House Transportation Committee*  
Rep. Richard Proehl  
Parsons, District 7

### **KDOT EXECUTIVE STAFF**

**Mike King**  
*Transportation Secretary and Director  
of the Kansas Turnpike Authority*

**Jerry Younger**  
*Deputy Secretary and State  
Transportation Engineer*

**Barb Rankin**  
*Chief Counsel*

**Jim Kowach**  
*Director of Engineering and Design*

**Keith Bradshaw**  
*Director of Fiscal and Asset Management*

**Catherine Patrick**  
*Director of Operations*

**Wade Wiebe**  
*Director of Partner Relations*

**Chris Herrick**  
*Director of Planning and Development*

**Joel Skelley**  
*Director of Policy*

**Peggy Hansen-Nagy**  
*Executive Office Administrator*

# 97.7%

of pavement on interstate highways is considered to be "good" or "very good."

## T-WORKS UPDATE

through 2015

PROJECTS COMPLETED **2,230**  
 MILES COMPLETED **9,645**  
 BRIDGES REPAIRED / REPLACED **633**  
 MODAL PROJECTS COMPLETED **133 / \$139.6 million**

## TRANSPORTATION WORKS

The 10-year T-WORKS (Transportation Works for Kansas) program is now past the midway point and in its biggest construction years. The program creates jobs, preserves highway infrastructure and provides multimodal economic development opportunities across the state.

The South Lawrence Trafficway is expected to be open to traffic in the latter half of 2016. When complete, the \$130 million project will link the K-10 corridor east of Lawrence and the existing western leg, connecting to the Kansas Turnpike west of Lawrence.



	State %	Local %	National %
2010	1.3%	13.6%	11.5%
2011	1.4%	12.9%	11.4%
2012	1.5%	12.4%	11.0%
2013	1.3%	11.8%	10.5%
2014	1.0%	11.4%	10.0%

## BRIDGES

Structurally deficient in the last five years. A bridge is classified as structurally deficient when it is inadequate to carry today's legal loads.

	% Early/On time	% over/under total budget
2006	79.9%	4.3%
2007	80.3%	0.1%
2008	86.3%	-1.7%
2009	91.3%	0.4%
2010	94.8%	1.2%
2011	95.8%	-2.5%
2012	95.2%	1.6%
2013	94.6%	-2.3%
2014	95.3%	-1.3%
2015	95.1%	0.7%

## PROJECT DELIVERY

Work continued in 2015 on the largest project of the T-WORKS program – the \$300 million Johnson County Gateway. The design-build project will ease congestion on one of the state's most heavily-traveled corridors – the connections of K-10/I-35/I-435. The project is expected to open in mid-2017.

**\$147 million**

of the state's FY 2015 motor fuels tax revenue (a third of the total) was shared with cities and counties.

## PARTNERSHIP: CITIES & COUNTIES

KDOT works closely with cities and counties to create a comprehensive and seamless transportation system for Kansas.

### Share the Wealth!

KDOT shares millions of its state and federal dollars with local governments every year. For example in FY 2015:

KLINK RESURFACING \$6 million

GEOMETRIC IMPROVEMENT \$6 million

LOCAL BRIDGE IMPROVEMENT \$10.5 million

ECONOMIC DEVELOPMENT \$10 million

PUBLIC TRANSIT \$11 million

AVIATION \$6 million

FEDERAL FUNDS \$70-80 million

## Local Programs

KDOT has a variety of programs designed to aid Kansas communities.

**Kansas Local Bridge Improvement Program.** This program helped 77 communities replace small, deficient bridges that are low-traffic but vital links for the farmers and other drivers who use them.

**Federal Funds Exchange.** This program allows local governments to stretch their federal funding allocations, which have costly spending requirements, by exchanging it with KDOT for less-restrictive state funds.

**KLINK Resurfacing Program/Geometric Improvement.** In 2015, KDOT provided funding for more than 30 projects under these programs to improve local roads.

**Transit.** This program helps fund transportation to the elderly, persons with disabilities and the general public, allowing them to participate in the economy. Ridership increased 7 percent in 2014, providing more than 12 million rides for the first time.



before



after

# PARTNERSHIP: KTA & STATE AGENCIES

KDOT joins with the Kansas Turnpike Authority and state agencies to enhance safety, the economy and quality of life.



KDOT's 2015 annual report received national recognition from TransComm, a subcommittee of the American Association of State Highway and Transportation Officials.

## Kansas Turnpike Authority

KDOT and the KTA join together for resource and idea sharing, expansion projects such as the Webb Road interchange in Wichita and for safety campaigns. For the past two years the agencies have joined in welcoming hundreds of motorcyclists participating in the cross-country Run for the Wall event at the KTA Topeka service area, shown at right.



### KANSAS DEPARTMENT OF WILDLIFE, PARKS & TOURISM

The Kansas Byways program is just one product of the collaboration of KDOT and Kansas Department of Wildlife, Parks and Tourism. The agencies developed and manage the 11 state byways, including the Glacial Hills Scenic Byway in northeast Kansas, shown at left.



### KANSAS HIGHWAY PATROL

KDOT and the Kansas Highway Patrol are frequent partners in responding to traffic crashes, weather events and disasters. The two agencies also work closely on traffic safety campaigns, increased enforcement in highway work zones and social media safety messaging. At left, KHP Maj. Scott Harrington speaks at the **Put the Brakes on Fatalities Day** event at the State Capitol as Secretary Mike King looks on.

## Connecting with Kansans

### SOCIAL MEDIA



FACEBOOK	15,093 followers / 10 pages
TWITTER	51,238 followers / 13 accts
TRANSPORTATION BLOG	207 posts / 44,825 views
KSDOT.org	1.6 million visits

### TRAVELER INFO



KANDRIVE TRAVEL INFO	550,600 users
511	168,509 calls
ELECTRONIC MESSAGE SIGNS	102
TRAFFIC CAMERAS	218

\*All numbers are for 2015 through Dec. 16



# 70%

of the 97,000 over-dimension truck routing permits in 2015 were issued through the award-winning, online Kansas Truck Routing and Intelligent Permitting System (K-TRIPS).

KDOT uses 591 trucks, more than 100 motor graders, nearly 200 front loaders and other equipment to keep roads open during winter storms.

## FREIGHT

A well-maintained, multi-modal transportation system helps make Kansas farmers and manufacturers competitive in the global marketplace.



## MOVING THE ECONOMY

These initiatives are designed to improve the flow of goods and products within and through the state. Examples include:

**Transload.** Sites in Garden City and Great Bend have been selected as finalists for development of transload shipping centers. By blending the benefits of shipping by rail and local/short haul trucking, a transload facility can provide more flexible and cost-effective solutions for customers who may not have local access to freight rail service or those who need expanded warehousing.

**Economic Development Program.** The ED program invests \$10 million annually in infrastructure improvements to encourage growth of existing companies and to recruit new businesses. In 2015, the ED program funded aviation, highway and rail improvements.

**Kansas Statewide Freight Network Parking Plan.** Because existing truck parking in Kansas can be overwhelmed at times, KDOT is assessing statewide parking capacity, behaviors and opportunities to enhance safety and increase efficiency.

**Multi-State Network.** Kansas led a consortium of eight Midwestern states that received a \$25 million federal TIGER grant to develop the Truck Parking Information and Management System. It was the largest TIGER grant awarded in 2015.

## SNOW COST

*KDOT spends millions of dollars every winter to keep people and products moving during harsh travel conditions, as shown at right.*

**\$5.48** Average winter expense per registered vehicle over the past 5 years.

Fiscal Year	Cost (Millions)
2011	\$18.1
2012	\$6.9
2013	\$18.7
2014	\$22.8
2015	\$16.3
<b>Average:</b>	<b>\$16.6 million</b>

**\$26**  
million

Over the past five years KDOT has invested or loaned more than \$26 million to make key improvements to the state's short line rail system.

## Rail and Freight in Kansas

**FREIGHT RAILROADS** 13  
**MILES OF TRACK** 4,721  
**CAR LOADS (2014)** 6,364,481

“Improvements made through the Rail Service Improvement Fund have allowed both the Kansas and Oklahoma Railroad and the South Kansas and Oklahoma Railroad to increase traffic flow by over 100% and bring customers back to rail.”

- Pat Cedeno  
 WATCO  
 Vice President of Marketing  
 Central and West Region

## State Rail Service Improvement Fund (SRSIF)

This fund receives \$5 million annually for major rail rehabilitation and capacity improvement. SRSIF funds will be used for transload facility projects in Garden City and Great Bend.

### RAIL IMPROVEMENT FUND BY THE NUMBERS

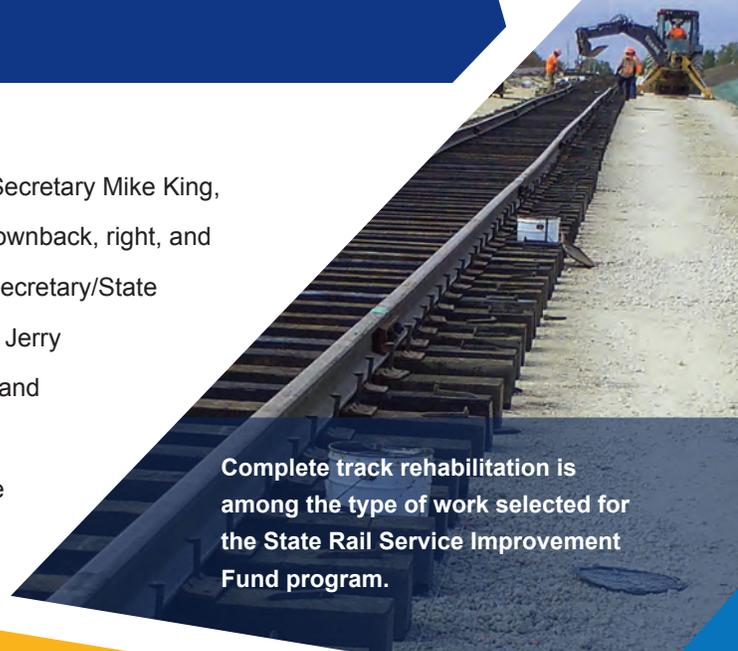
	KDOT Loan/Grant Amount	Railroad Match Amount
2011	\$13.6 million	\$10.1 million
2012	\$2 million	\$3 million
2013	\$408,300	\$1.2 million
2014	\$4 million	\$1.4 million
2015	\$6.4 million	\$2.8 million
Total	\$26.4 million	\$18.5 million

KDOT places a priority on improving rail infrastructure and developing freight connections that bring together haulers, producers and communities.



#### RAIL ROUNDTABLE

Kansas Transportation Secretary Mike King, flanked by Gov. Sam Brownback, right, and Deputy Transportation Secretary/State Transportation Engineer Jerry Younger, addresses rail and state officials at the October Rail Roundtable in Wichita.



Complete track rehabilitation is among the type of work selected for the State Rail Service Improvement Fund program.

*In 2015*, the numbers of fatalities and disabling injuries were at near-record lows.

	2011	2012	2013	2014	2015
Traffic Fatalities	386	405	350	384	356*
Disabling Injuries	1,581	1,592	1,449	1,199	1,027*

\*Unofficial

**Safety** From education initiatives to road design, safety is the driving force of everything KDOT does.

**SAFETY IS BUILT INTO KDOT'S ROAD DESIGNS, INCLUDING:**

- Shoulders
- Broad, recoverable medians
- Guard rails
- Curve and hill reduction
- Rumble strips
- Lighting
- Signage
- Striping

98%

If the driver is belted, about 98% of front seat passengers are also belted.

23x

Studies have found that text messaging creates a crash risk 23 times greater than driving while not distracted.

**Teen Drivers**

Teen drivers are the focus of many KDOT safety initiatives. Significant gains have been made in reaching the state's most inexperienced, vulnerable drivers.

The observed seat belt rate for drivers age 15 to 17 has increased from 61 percent in 2009 to 85 percent in 2015.

Age 15 to 17  
Seat Belt Rate %

2011	71%
2012	78%
2013	81%
2014	83%
2015	85%

**TEENAGE CRASH RATES FROM 2003 TO 2014**

18-YEAR-OLDS  
REDUCED  
42%



17-YEAR-OLDS  
REDUCED  
47%



16-YEAR-OLDS  
REDUCED  
60%



Members of Students Against Destructive Decisions at the Put the Brakes on Fatalities Day event got a first-hand look at what can happen in a roll-over crash when the occupant isn't wearing a seat belt.

# AVIATION

Aviation plays a critical role in the health and economic well-being of communities throughout Kansas.

## 2015 UAS SUMMIT

A series of workshops were conducted in Kansas to discuss the applications of unmanned aircraft systems (commonly known as drones) in agriculture, public safety, research and more. The workshops culminated in October at the UAS Summit In Wichita.



## 2015 FLY KANSAS AIR TOUR

In collaboration with the Kansas Commission on Aerospace Education, KDOT staged the 700-mile 2015 Fly Kansas tour that featured stops at a number of airports throughout the state (see map at right). The event attracted more than 800 students, who had the opportunity to talk to pilots and see their aircraft up close. The event also brought together pilots, airport managers and aviation leaders.

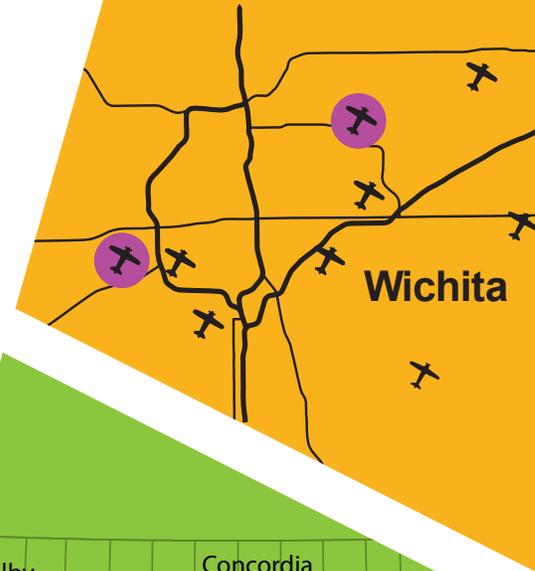
## 2015 AVIATION DAY AT THE CAPITOL

More than 130 industry representatives, 22 exhibitors, 100 legislators and others attended Aviation Day at the Capitol. The event was used to educate Kansans of the positive economic benefits aviation and aerospace industries bring to the state.



# 89%

of Kansans are within 30 minutes of an air ambulance-accessible airport.



The map shows the tour stops, starting in Wellington and ending in Newton.



The Moundridge runway was repaved due to severe cracking. The total project cost totaled \$98,000 in KAIP funds.



## Kansas Airport Improvement Program

In the last four years, KDOT has invested \$16.8 million in improvements at 92 public-use airports.

## Reducing Time & Travel

The use of coordinated dispatching software has reduced travel times and miles traveled for thousands of Kansas' rural transit riders.

## TECHNOLOGY

KDOT uses advanced technology to make each road experience the very best for travelers.

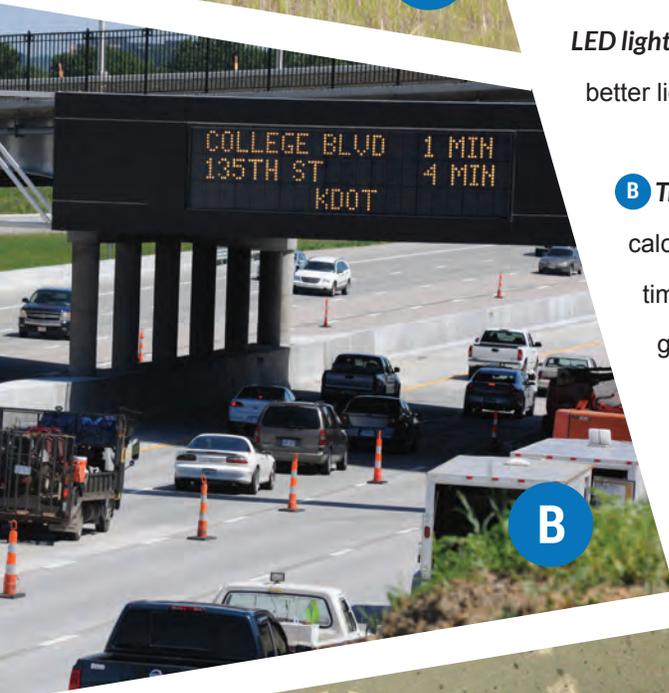
### KDOT EMBRACES CHANGE THROUGH THE USE OF HIGH-TECH TOOLS:



A

**A** *GPS-equipped machinery.* Construction crews make use of satellite technology to be sure grading elevations are precise. GPS equipment extends on the sides of this motor grader working on the South Lawrence Trafficway.

*Smart work zones.* Electronic message signs, cameras and road sensors provide information to drivers to reduce work zone crashes.



B

*LED lighting.* High mast LED lights are replacing traditional overhead lighting to provide better lighting and focus, save money and reduce maintenance.

**B** *Travel times.* Sensors along Kansas' busiest urban routes feed an algorithm that calculates travel times. In the event of a traffic crash or other incident, the travel time is automatically recalculated and posted on electronic message signs to give drivers information to make good decisions.

*3D design modeling.* KDOT will soon be providing three-dimensional modeling on its more complicated projects, which will be a significant tool for use in the field.



C

**C** *Ultrasonic testing.* KDOT bridge inspectors use ultra sonic testing devices to detect cracks in steel bridge components not visible to the naked eye.

*Dynamic lane merge.* Also known as the “zipper merge,” KDOT will begin using information from sensors, converted into electronic roadside messages, to enhance the safety and efficiency of moving traffic through a construction zone. In a “zipper merge,” vehicles alternate entrance into the flow of traffic.

# WE ARE KDOT

It takes the talents, experience and diverse backgrounds of KDOT's 2,400 employees to build and maintain a world-class transportation system.



Kansans share their appreciation for the work of KDOT and its crews.

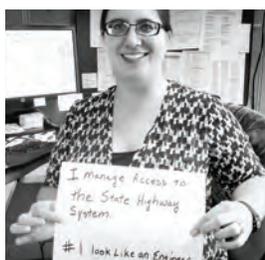
“You're out there working in the wee hours of the night and on holidays to make sure everyone gets to the destinations safely. We would like to commend you for that.”

“It is always reassuring to know great help is available from great neighbors just down the road.”

“KDOT does an awesome job, year after year.”

## #ILookLikeAnEngineer

Many of KDOT's female engineer's took part in an international social media campaign, #ILookLikeAnEngineer, to show that engineers aren't just men and to highlight the jobs they do for the agency. Of KDOT's 190 engineers, about 17 percent are women.



## KDOT EDUCATION / TRAINING DIVERSITY

KDOT draws on many disciplines in its workforce to achieve success.

### OUR MOST COMMON COLLEGE MAJORS FOR THE WORKFORCE ARE:

- Civil Engineering
- Business
- Accounting

### OUR MORE UNIQUE MAJORS INCLUDE:

- |                           |                        |
|---------------------------|------------------------|
| Agriculture               | Chemistry              |
| Animal Science            | Health                 |
| Architectural Engineering | Physical Education     |
| Automotive Technology     | Journalism             |
| Applied Science           | Environmental Studies  |
| English                   | Planning               |
| Mining Engineering        | Public Administration  |
| Computer Science          | Human Resources        |
| Criminal Justice          | Public Relations       |
| Communications            | Radio & TV             |
| Economics                 | Science Technology     |
| Earth Science             | Management in Aviation |
| Forestry                  | Commercial Advertising |
| Geology                   | Sociology              |
| Graphic Design            |                        |

# MOVING KANSAS FORWARD

ANNUAL 2016

Amounts in thousands



REVENUES	2015	Percent of Total
Motor Fuel Taxes	\$ 434,662	28%
Vehicle Registrations and Permits	218,788	14%
Intergovernmental	399,932	25%
Sales and Use Taxes	512,360	32%
Investment Earnings	3,378	0%
Other	7,955	1%
Transfers from Other State Funds	2,196	0%
<b>Total revenues</b>	<b>\$ 1,579,271</b>	<b>100%</b>

EXPENDITURES	2015	Percent of Total
<i>Current Operating</i>		
Maintenance	\$ 133,608	7%
Preservation	432,941	23%
Modernization	19,528	1%
Expansion and enhancement	344,574	18%
Communications system	5,519	0%
Local Support	299,250	16%
Rail, Air and Public Transportation	16,556	1%
Management	53,465	3%
<i>Debt Service</i>		
Principal	90,065	5%
Interest and fees	74,727	4%
Transfers to Other State Funds	430,519	22%
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,900,752</b>	<b>100%</b>

OTHER SOURCES (USES)		
Revenue Bond Proceeds	511,504	100%
Total other	511,504	100%
<b>Excess (Deficiency) of Revenues and Other Sources Over Expenditures</b>	<b>\$ 190,023</b>	<b>100%</b>

The 2016 Annual Report Appendix is available at:  
[www.ksdot.org/publications.asp](http://www.ksdot.org/publications.asp) under Project/Publications.

