# MOVING KANSAS FORMARD



#### Table of Contents



Letter from Secretary Richard Carlson



Awards



T-WORKS



Maintaining the System



**Aviation** 



Safety



Freight



Road/Bridges



**KTA Partnership** 



Connecting with Kansas



Budget/Financials Snapshot

# A letter from Secretary Richard Carlson

Throughout 2017, the Kansas Department of Transportation continued its mission of keeping America moving, striving to have the best quality modes of transportation in the nation and promoting a message of safety in our communities, all while maintaining accountability to the people of Kansas.



The rising level of fatalities across the nation and in Kansas are concerning. KDOT continues to collaborate with agencies, organizations and governments throughout the country to develop programs aimed at changing driver behaviors, such as inattentive or distracted driving, cell phone use and speeding.

KDOT is more than excellent highways and bridges, it is the dedicated and professional workforce that makes up the agency. As one of the largest employers of engineers in Kansas, KDOT is always looking for talented scientists, engineers, technical specialists and many more professionals to continue its important work for the state. KDOT is also expanding its horizons, putting more emphasis on new and emerging innovations and technologies in the transportation industry – designed for improving driver safety.

As we look ahead to 2018, it is important to maintain the credibility and accountability that has been the face of KDOT for decades. This report is not a reflection of all that KDOT is or does, however, it is a snapshot of what we can accomplish given the resources to do so. KDOT looks forward to a successful year of partnership with our elected officials, our local, county and state agencies, law enforcement offices and, of course, our Kansas communities, as we continue this deep-rooted tradition of service.

Richard Carlson

Secretary of Transportation & Director of the Kansas Turnpike Authority

Gov. Sam Brownback
Sen. Mike Petersen
Chairman of the Senate
Transportation Committee
Rep. Richard Proehl
Chairman of the House
Transportation Committee
KDOT EXECUTIVE STAFF

**Richard Carlson** 

Transportation Secretary and
Director of the Kansas Turnpike Authority
Catherine Patrick

State Transportation Engineer
Joel Skelley
Director of Policy
Larry Thompson

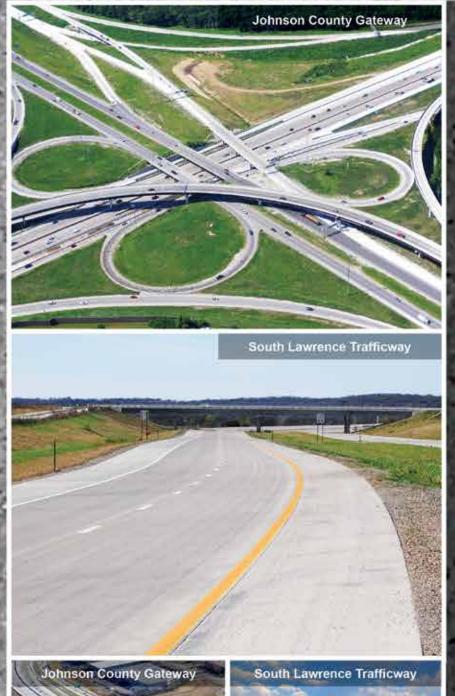
**Director of Operations** 

Ron Seitz
Director of Engineering and Design
Barbara Rankin
Chief Counsel
Chris Herrick
Director of Planning
and Development/
Interim Director of Fiscal and
Asset Management
Wade Wiebe
Director of Administration
Michael Floberg
Director of Innovative Technologies

Robert Brock
Interim Director of Aviation
Nicole Randall
Director of Communications



# KANSAS PROJECTS WIN AWARDS



Two Kansas Department of Transportation projects received national and regional recognition from the American Association of State Highway and Transportation Officials (AASHTO) transportation awards.

Both the Johnson County Gateway
Phase 2 project and the South
Lawrence Trafficway were named
regional winners in the Operations
Excellence category. The South
Lawrence Trafficway won for the
medium category and the Johnson
County Gateway Project won for the
large category.

The Johnson County Gateway Project went on to place as a national finalist in the "Top 12" of the transportation awards as one of the three high-scoring projects from the region. The \$288 million project, the first and largest design-build transportation project completed in Kansas, emerged as a finalist out of a record 92 project nominations from 38 states.

The Johnson County Gateway included reconstruction and capacity improvements within the I-435, I-35 and K-10 interchange area along with improvements at several major local interchanges. Within the project area, there were 56 new lane miles added as well as 22 new and five rehabilitated bridges, including three new two-lane flyover bridge ramps and widened bridges on I-435 and I-35

The South Lawrence Trafficway East Leg included construction of a new four-lane, six-mile freeway around the east side of Lawrence, connecting the existing K-10 with the new highway. Construction work included 24 bridges, 29.4 highway lane miles, 16.3 miles of local roads and three new interchanges.



# -WORKS

The 10-year T-WORKS program continues to make a difference for Kansas families and businesses.

#### Major project highlights across the state



Five bridges on I-235 have been replaced in Wichita after two construction

After two construction seasons, five bridges on I-235 in northwest Wichita were replaced and traffic returned to normal in late October.

In 2016, the southbound I-235 bridges over the Wichita/Valley Center Floodway and the Big Arkansas River were replaced. This year, the northbound bridges were built plus the 25th Street bridge over the interstate.

A Smart Work Zone was used to monitor traffic conditions and congestion, advise drivers of travel times through the construction zone and provide camera views to the WICHway traffic management center so traffic and incidents could be monitored.

### **T-WORKS JMBERS**

miles of state highways improved

bridges Improved

#### illions

public transit. aviation, rail and bike/pedestrian





A reconstruction project on the Lewis and Clark Viaduct project will begin early in 2018.

Work is anticipated to begin on a portion of the Lewis & Clark Viaduct in early 2018 in Kansas City, Kansas. The project will include closure of the I-70 westbound bridge and off-ramps from the viaduct to facilitate reconstruction of the bridge.

The Lewis and Clark Viaduct is a series of bridges that provide a vital link for I-70 across the Kansas River and connect Kansas City, Kansas and Kansas City, Missouri. KDOT completed a study in December 2012 to examine the condition of each of the nine bridges making up the viaduct and developed a priority phasing plan for rehabilitation and/or replacement of the existing bridges.

The upcoming reconstruction project will replace the existing I-70 westbound bridge structure and provide connections to I-70 to the west, Minnesota Avenue, Washington Boulevard and Fairfax Trafficway.

# MAINTAINING THE SYSTEM



#### Winter 2016 - 2017

591

Dump trucks / plows

1 million

Miles treated / plowed

269,000 Labor hours

1,255 CDL operators

52,886

Tons of salt

16,086

Tons of sand

3.5 million

Gallons of salt brine

17,500

Gallons of MgCl<sub>2</sub>

\$10.2 million 2017 total expenditures

\$4.14

Cost per registered vehicle

#### KDOT CARES: POLLINATOR PRESERVATION



In an effort to assist with the preservation of habitat for the Monarch butterfly, and other pollinators, KDOT applied for a grant from the Monarch Watch to plant 1,152 milkweed plugs. KDOT crews planted these plugs, as well as wildflower seeds, at the Homewood Rest Area on I-35. For several years, KDOT has included 23 species of wildflower seeds in the seed mix used on the state right-of-way.





LEFT: Monarch butterfly caterpillar feeds on a milkweed leaf. Milkweed plants attract butterflies at the Homewood Rest Area. CENTER: KDOT crews assist with the pollinator habitats by planting milkweed and wildflowers. RIGHT: A milkweed plug.

#### REPAIRING GUARDRAILS AFTER WILDFIRE

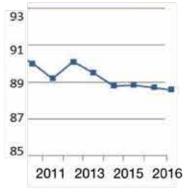
Record breaking wildfires ravaged parts of the state in spring 2017.

KDOT crews got to work and repaired the 620 guardrail systems that were damaged in Clark county.



#### MAINTENANCE QUALITY ASSURANCE

88.7% in 2016



The Maintenance Quality
Assurance program measures
the value of KDOT's
maintenance efforts in the
categories of travel way, traffic
guidance, shoulders, drainage
and roadside.



### **AVIATION SOARS IN KANSAS**

### Kansas air traffic safety program takes flight



As Unmanned Aerial Systems (UAS) usage continues to grow throughout the state, KDOT's Division of Aviation has taken a proactive approach to assist drone users by entering into an agreement for a comprehensive notification and awareness system (NAS). The Aviation Division formalized a strategic partnership with an unmanned traffic management company, that will permit drone users to recognize other users of the airspace and log their own flight information. The goal of this implementation is to allow for recreational and commercial drone users to operate within FAA regulated airspace in a safer and more efficient manner.

LEFT: Matthew Peterson of Project Rail demonstrates how UAS capability will be enhanced through the state's new unmanned traffic management system partnership.

> **STAR Program** By The Numbers

2.500+ Students reached

Communities impacted 70 Aviation professionals

#### Reaching for the STARs: Aviation education expands in Kansas



The Aviation Team poses in front of a North American T-6 Texan at the start of the 2017 Fly Kansas Air Tour with Wellington Elementary students.

KDOT expanded aviation education and outreach exponentially this year, with the introduction of the Science, Technology, and Aviation Resource (STAR) Program.

This program has inspired youth to explore careers in aviation by providing community and classroom exposure to STEM career fields such as professional pilots, air traffic control, airport managers and others through participation in events such as MAGIC camp,

Greenbush Aviation Camp and direct classroom visits. Recently the Division of Aviation received the distinguished NASAO Center Aviation Education Program Award for its work on the STAR program.

The program hopes to actively address the industry and workforce shortage that looms on the horizon as pilots, air traffic controllers, and mechanics from previous generations begin to retire.

# Aviation events

#### KDOT invests \$5 million in airport improvements across the state

As the 138th airport opens in Kansas, the importance of maintaining the state system of airports continues. KDOT invests \$5 million annually into the Kansas Airport Improvement Program (KAIP) to improve

runway condition, minimize air ambulance surface travel time, and enhance local economic development. Up to 90% of the project cost can be covered by KDOT, which has resulted in \$107.98 million dollars of investment into Kansas airports since the program was established.

# KANSAS SAFETY

In 2017, the number of fatalities on Kansas roads reflected a national increase in traffic deaths.

		2013	2014	2015	2016	2017
	Kansas fatalities	350	384	355	429	460*
1	National Fatalities	32,893	32,744	35,092	37,461	<b>**</b>
elted	Disabling Injuries	1,452	1,204	1,195	1,038	1,100*

\*Unofficial \*\*National fatalities expected to increase 6%

**CHILD SEAT BELT RATES IMPROVING** 2017 2016

88% 89%

Distracted driving contributed to 28% of all crashes in 2016.



In 2017 KDOT initiated a campaign called #MoveOverKS. The campaign is designed to remind drivers on all roadways to give roadside workers space to do their jobs and perform their service. In order to convey the message, images were taken of KDOT highway workers reminding everyone who sees them why they need all drivers to move over and give them room to work.

According to NHTSA, Kansas experienced 41 PEDESTRIAN **FATALITIES IN 2016.** 

This is a substantial increase over the 24 deaths recorded in 2015.

Safety is the center of life at KDOT. The design and execution of construction projects, as well as long-term planning and agency communications emphasize a priority and a culture of safety. Education is important in influencing driver behavior, from educating the public about the dangers of driving distracted, to the penalties for drunk driving. Awareness of the consequences of poor driving behaviorcan be a deterrent, which can prevent injury crashes and even fatalities on the roads. KDOT safety campaigns such as "Click it. Or ticket." and "You Drink, You Drive, You Lose" are just some of the safety messages that the agency, in partnership with local communities,

law enforcement and other organizations. utilize in the goal of helping Kansans be

safe on the roads.



wheel — JUST DRIVE. When you are behind the





### KANSAS FREIGHT

Kansas Rail: The Kansas Rail Service Improvement Fund plays an important role in maintaining and expanding a freight rail system that not only moves grain, manufactured products and raw materials, it helps move the entire state economy. In 2017, the fund provided \$1,895,530 in grants and \$2,111,698 in loans for four railroad rehabilitation/expansion projects. Recipients, consisting of three railroads and one shipper, contributed \$1,895,530 in matching funds toward the projects.

Transload facilities in both Great Bend and Garden City were in full operation during 2017. The construction of both facilities had a positive economic impact on local and regional economies.

Both transload facilities were a cooperative effort between KDOT, railroads, local economic development organizations facility operators and local units of government.





The Great Bend Transload facility celebrated its completion with a ribbon cutting in summer 2017.

#### Truck Parking Information System honored at World Congress

The Mid America Association of State Transportation Officials (MAASTO), including representatives from KDOT, recently showcased truck parking innovation technology at the Intelligent Transportation Systems World Congress.

The Regional Truck Parking Information System (TPIMS), the largest project of its kind to be funded by a U.S. DOT TIGER grant, was presented at the ITS World Congress in Montreal, Canada. The U.S. DOT TIGER grant made it possible for MAASTO members to attend and present the innovative technology to the world.

The presentation highlighted how MAASTA member-states joined together in creating an eight-state regional technology program for providing commercial freight truck drivers with real-time information that assists in locating nearby parking as they reach the end of their regulated hours of service.







# ROADS &

Smooth roads and well-maintained bridges consistently place the Kansas highway system among the nation's best.

The Amelia Earhart Bridge during the 2017 Solar Eclipse which took place on Aug. 21.

#### Roads

Pavement conditions on the state highway system have steadily improved since passage of the 1989 Comprehensive Highway Program and two subsequent 10-year funding programs. In the 2016 Reason Foundation Roads Report, Kansas is tied for first place in both rural interstate pavement condition and rural arterial pavement condition, and third place for urban interstate pavement condition. Current pavement conditions continue to far exceed performance targets.

Percent of pavement in good or very good condition

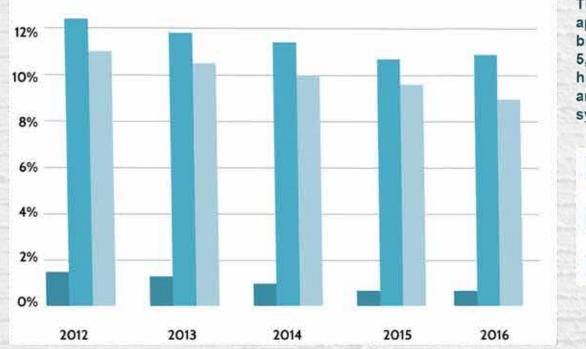
96.2% performance target

interstates | state highways 90.1% performance target

80%

#### **Bridges**

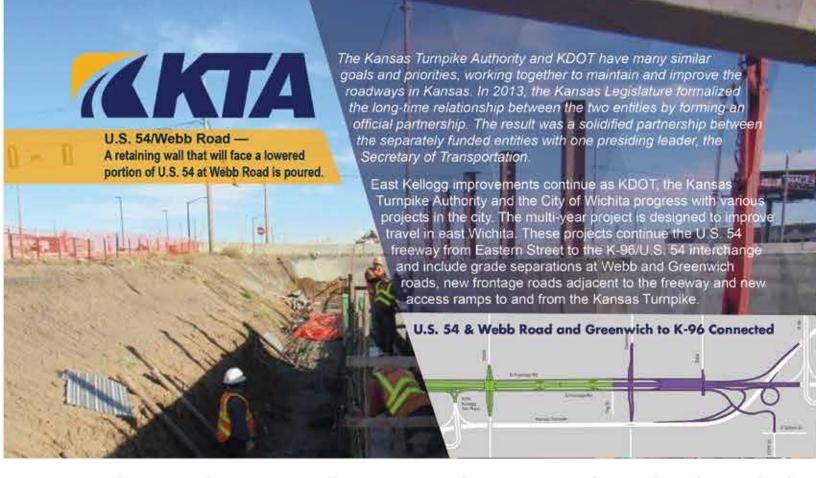
The percentage of structurally deficient bridges on the state highway system has been steadily declining and is now below 1 percent. A bridge is classified as structurally deficient when it is inadequate to carry today's weight limits.



There are approximately 25,000 bridges in Kansas -5,000 on the state highway system and 20,000 on local systems.







#### MAP OF KDOT HEADQUARTERS AND DISTRICT OFFICES





Headquarters

★ District Office

#### District 1

District 1 Office Topeka

(785) 296-3881

#### District 2

District 2 Office Salina

Randy West District Engineer (785) 823-3754

#### District 3

District 3 Office Norton

Jeff Stewart District Engineer (785) 877-3315

#### District 4

District 4 Office Chanute

Wayne Gudmonson District Engineer (620) 431-1000

#### District 5

District 5 Office Hutchinson

Brent Terstriep District Engineer (620) 663-3361

#### District 6

District 6 Office Garden City

Ron Hall District Engineer (620) 276-3241

# KDOT CONNECTS WITH KANSAS

#### TRANSIT

Kansas continues to implement new public transit and paratransit programs and technologies to serve those who want to continue living in their homes and communities but need transportation to reach medical and other services that may be miles away. In 2017, KDOT's Office of Public Transportation worked with transit providers across the state in an effort to regionalize operations. Implementation of the Mobility Managers program, creation of new regional routes. purchase of new buses with optional bike racks, coordinated dispatch scheduling that utilizes GPS and working with local municipalities have allowed rural Kansans to use public transportation to more easily get to all the places they live. work, learn, play, and heal.

#### Transit ridership in 2017

URBAN 7.6 Million RURAL 2.5 Million TOTAL 10.1 Million

#### **Transportation Alternatives**

KDOT's Transportation Alternatives (TA) program is a popular funding source for projects that support non-motorized transportation throughout the state. This includes a variety of projects that develop or expand sidewalks, multi-use paths, bike routes, Safe Routes to School and access to public transportation. In 2017, KDOT awarded 34 TA projects - totaling nearly \$18 million. This program helps communities make improvements to their transportation networks by providing options beyond the car.



Funding through the TA Program has helped continue the development of the Flint Hills Nature Train into a recreational destination.

#### **Social Media** in 2017



77,943 followers 15 accounts

KSDOT.org - 2.2 million page views



27,459 followers 10 pages



190 posts 280,526 views

#### **New Social Media Accounts**





kansasdepttransportation linkedin.com/company/kdot

Traveler Info KANDRIVE.ORG - 684,569 page views



DYNAMIC MESSAGE SIGNS

107



303



#IAMKDOT is an illustration project that recognizes KDOT employees who work hard to keep Kansans moving. This series also serves as a reminder for travelers to slow down and remember that underneath those neon vests are individuals with families, friends and hobbies waiting for them at home.

Revenues Amounts in Thousands		2017	Percent of Total
Revenues Amounts in Thousands  Motor Fuel Taxes	\$	452,598	28 %
Vehicle Registrations and Permits	٧	219,710	13
Intergovernmental		426,852	26
Sales and Use Taxes	_	513,533	32
Investment Earnings		3,193	0
Other		10,997	1
Transfers from Other State Funds			0
Total revenues	\$	4,272	100 %
	Ş	1,631,155	100 %
Expenditures	Sans	N. E. Barrier	Service .
Current Operating		STATE OF THE PARTY	
Maintenance	\$	116,294	6 %
Preservation		329,827	18
Modernization		35,699	2
Expansion and enhancement		254,961	13
Communications system		4,912	0
Local Support		339,368	18
Rail, Air and Public Transportation		23,432	1
Administration and transportation planning		49,750	3
Debt Service			
Principal		107,310	6
Interest and fees		89,038	5
Transfers to Other State Funds		516,763	28
Total expenditures	\$	1,867,354	100 %
Excess (Deficiency) of Revenues and			
Other Sources Over Expenditures	\$	(236,199)	100 %

The 2018 Annual Report Appendix is available at: www.ksdot.org/publications.asp

