

# Kansas Making Progress: Our Transportation Performance 2007 Annual Report



**KANSAS**  
DEPARTMENT OF TRANSPORTATION



*K-99 near Alma is the Native Stone Scenic Byway.*

## Governor's Message:



A strong transportation system is fundamental to our success as a state. The network of roads and other transportation modes we have in Kansas allows goods, services and commuters to flow safely and smoothly.

It is extremely important to the state's economy and to the health and well being of all Kansans that we finish the Comprehensive Transportation Program, which has already benefited the state in many ways. I am pleased the program received an important financial

recommitment from the Legislature in 2006, and I will do all I can to see that every CTP project is completed as promised.

When I took office four years ago I pledged to make state government work smarter and more efficiently. I am grateful that the people at the Department of Transportation are helping me keep that pledge to the people of Kansas.

Gov. Kathleen Sebelius

## Secretary's Message:



"You can count on us."

As you read through this report, you will see that phrase a lot. It's a simple way of saying the Kansas Department of Transportation is committed to providing our fellow citizens a transportation system that safely and efficiently supports the Kansas economy.

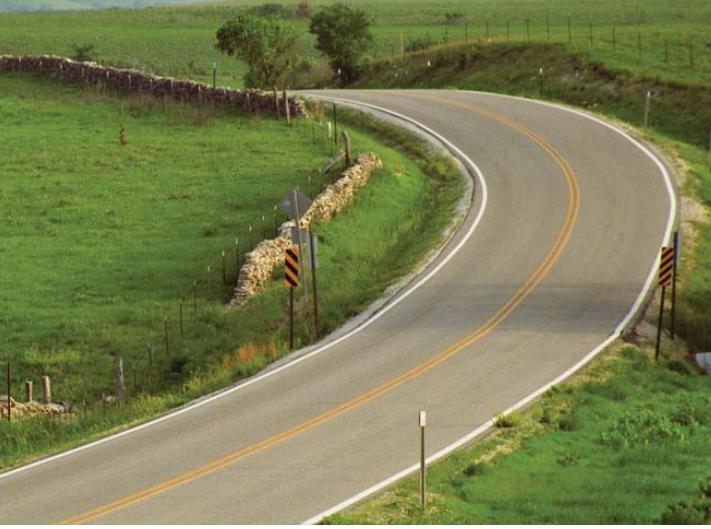
Those who are familiar with KDOT's recent annual reports have already noticed that we've made some big changes in the appearance of the report. I think the changes give the report a more professional quality and make it easier to read. We have improved the quality of the report without spending

any more to print it than we did for last year's report. We held down costs by reducing the number of pages and copies printed. As we did last year, we removed the appendix and posted it on our Internet site.

Throughout the report you will be introduced to some of the people who work at KDOT. They also serve their communities as soccer coaches, camp counselors and fund-raisers. They and their families are among the millions of people who travel on our roads every year.

And that's one of the many reasons you can count on us.

Deb Miller



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### On the cover

#### Front

*Sunset view from the Flint Hills Scenic Byway on K-177 between Cottonwood Falls and Cassoday.*

#### Back

*K-99 south of Alma on the Native Stone Scenic Byway.*



Interstate 435 in Overland Park carries up to 141,000 vehicles a day.

## You can count on us.

Kansans count on KDOT to provide a safe, efficient transportation system that supports the state economy. They entrust the agency with hundreds of millions of tax dollars every year and expect to see results.

KDOT leaders think that's an entirely reasonable expectation. So in 2006, the agency began an in depth process to develop a set of performance measures in six critical areas - safety, preservation and maintenance, program and project delivery, system modernization, workforce priorities and economic impact.

This report examines each of those goals. In some areas, KDOT has established targets to help achieve its goals. In other areas, the targets are still under development.

Because it is the basis for every decision KDOT makes, safety is the first performance area listed in the report. For the past year, KDOT representatives, along with the Kansas Highway Patrol and the Department of Health and Environment, have traveled throughout the state listening to Kansans talk about the devastating impact of traffic fatalities and injuries. A special task force - *The Driving Force* - was formed to develop recommendations about how to lower the number of highway deaths and injuries. The first set of recommendations will be published in early 2007.

While safety is at the core of everything KDOT does, the agency's top priority remains the completion of the 10-year Comprehensive Transportation Program (CTP). As the CTP entered its final three years in July, Secretary Miller released an updated cost estimate for all remaining projects. The report, "Completing the CTP," is an examination of all remaining projects in the program with up-to-date cost estimates. The report's conclusion is one of cautious optimism - KDOT will be able to get all projects under way by the end of 2009 as promised if costs stabilize at 2005 levels.

While the agency continues to deliver CTP projects, planners are now looking beyond the program - to both the near-and long-term future. KDOT teams kept a furious pace in the final weeks of 2006 traveling the state to hear what Kansans want for their communities and what they want the state's Long-Range Transportation Plan (LRTP) to include. Planners heard a lot, and they are using the information to chart a course for KDOT over the next two decades.

This effort to involve citizens in the decision-making is a responsible, responsive way to manage the trust and money Kansans invest in KDOT. It's the right way to do business. And it's why Kansans can count on us.



Cost increases in 2006 prompted financial review of all remaining CTP projects.

## Financial Update

### KDOT's 2006 Financial Snapshot

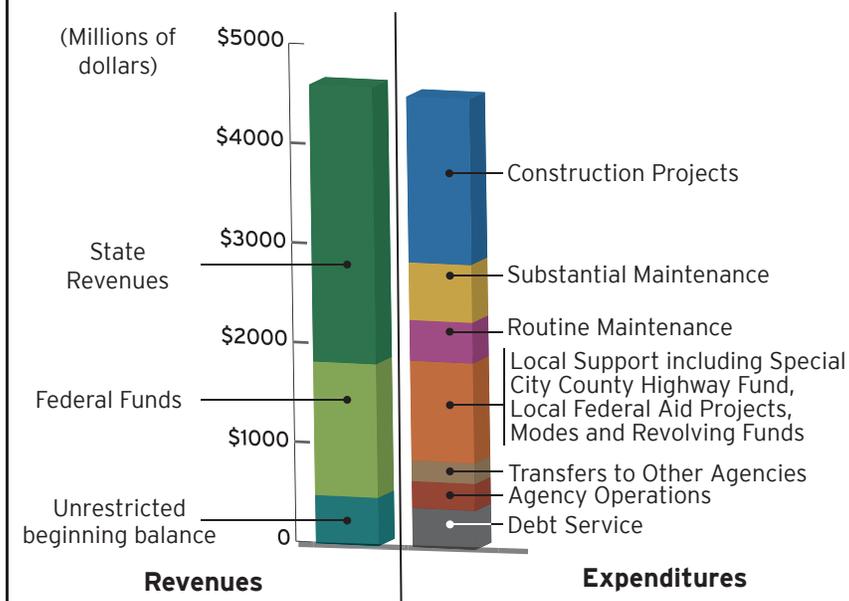
- Kansas Legislature honors 2004 funding commitments.
- Cost of building materials escalates (see graphs on Page 3).
- CTP remains on track, but will finish on fumes.
- KDOT bond rating improves from AA+ to AAA.

The year 2006 began with a question mark about funding and ended on a note of cautious optimism about the agency's ability to deliver on schedule the many remaining projects in the CTP.

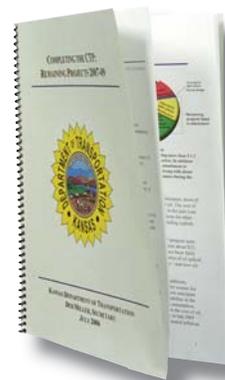
With renewed support from the Legislature, which authorized previously approved bonding, KDOT leaders were free to focus on both the near-and long-term future. The challenges of higher prices were met in a variety of ways, including the use of new technologies, the shifting of funds internally and, where possible, the re-definition of project scopes.

*"There were many ups and downs at KDOT in 2006," said Assistant Secretary and State Transportation Engineer Jerry Younger. "But we were able to keep the CTP on schedule, and the year ended on a positive note when our bond rating was upgraded."*

### Revenues to Expenditures Comparison Fiscal Year 2007 - Fiscal Year 2009



*At the start of fiscal year 2007 in July, Secretary Miller provided a detailed update on the cost estimates for CTP projects as well as the letting schedule. The document can be viewed on the Internet at [www.ksdot.org](http://www.ksdot.org) under news and announcements, "Completing the CTP."*

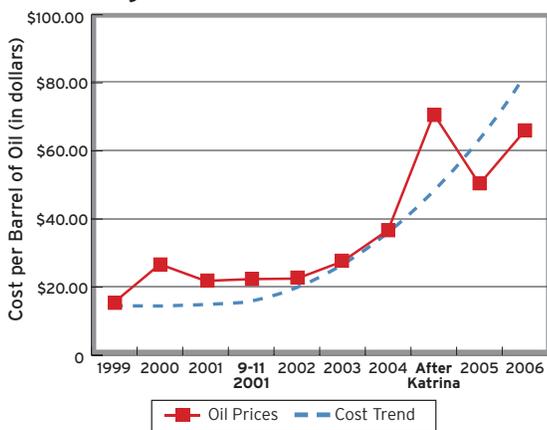




The cost of fuel, asphalt and other materials rose significantly in 2006.

## Financial Update

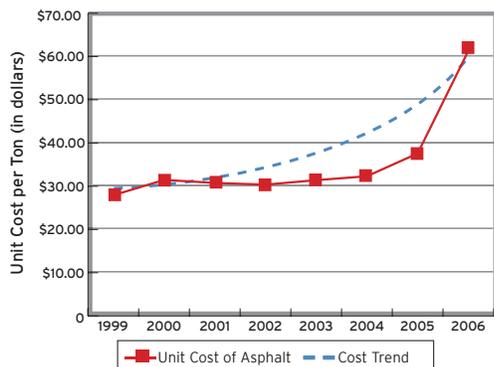
### Average Cost of a Barrel of Oil



The widespread effects of the devastating 2005 hurricane season continued to have an impact on KDOT in 2006. The Gulf Coast's urgent need for many of the same materials KDOT uses to build roads drove up costs. Demand from China and other nations for building materials also put upward pressure on project costs.

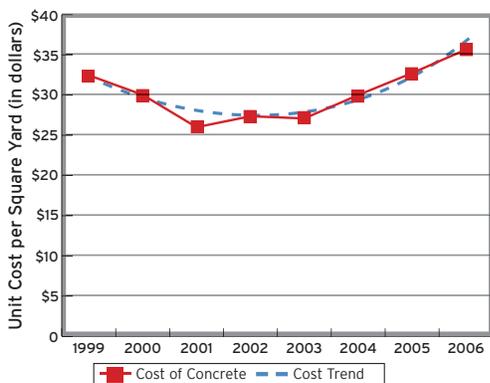
With little or no ability to control some of these costs, KDOT looked for ways to tighten project management, scrutinized design approach and considered the use of different materials. For example, when the cost of oil-based resurfacing materials spiked, engineers expanded the use of recycled road materials. As a result, fewer tons of expensive raw materials were required.

### Average Cost of a Ton of Asphalt



Recognizing that communities' budgets are stretched just as tightly as KDOT's, managers are staying in close contact with local partners to better control projects and problems. Should cost conditions change and impact KDOT's ability to deliver projects as promised under the CTP, Secretary Miller will communicate those changes as quickly and as clearly as possible.

### Average Unit Cost of Concrete



In keeping with state statute, complete information about KDOT's financial reporting, including the Comprehensive Annual Financial Report (CAFR) for fiscal year 2006 is provided on KDOT's Web site, [www.ksdot.org](http://www.ksdot.org), under "Publications and Reports."



*K-10 corridor east of Lawrence*



*Saline River Bridge on US-183*



*Topeka transit bus*



*Students walk to Brookwood Elementary School, Leawood.*

## Accomplishments of 2006

- KDOT was honored in 2006 by the Kansas Preservation Alliance for its efforts to preserve the Saline River bridge on US-183 about 10 miles north of Hays. The Alliance said the 1933 bridge, distinctive for its arches, was one of the largest and finest examples of this particular bridge in the state. KDOT employees from District Three, the Bureau of Design and the Office of Chief Counsel worked together to save the bridge, which had been slated for demolition.
- KDOT initiated corridor studies of I-235 in Wichita, US-24 near Tonganoxie, US-77 near Winfield, and K-18 in western Riley County to develop improvement concepts that will address increasing travel demands.
- Corridor studies of K-7 from Spring Hill to Leavenworth and K-10 from Lawrence to I-435 were completed by KDOT. These studies brought together officials from communities along the corridors in unprecedented ways to create shared visions for the future of the highways and their roles in addressing increasing development.
- With funding and planning assistance from KDOT, public transit agencies in Hays and Reno County began using an Automated Vehicle Locator/Computer-Aided Dispatch System to better use resources and improve customer service. The system allows dispatchers to monitor vehicle locations using Global Positioning System units mounted in transit vehicles.
- KDOT provided funding for the cities of Topeka and Lawrence to purchase new buses to address growing ridership demands. In Lawrence, limited parking on the University of Kansas campus sparked increasing interest in using public transit.
- Safe Routes to Schools (SRTS) was launched in the summer of 2006. SRTS is a funding and education program to help improve the health of children and communities by making it safer and easier to walk and bike to school. A total of 24 communities received funding for projects totaling more than \$729,700.



Marysville grade separation/flood control project



Check presentation on the Prairie Band Potawatomi Reservation



Interoperability project includes installations on KDOT towers



One of KDOT's Prairie Restoration Projects on I-35 in Osage County

## Accomplishments of 2006

- The Marysville Grade Separation and Flood Control Project was completed in April. The partnership of KDOT, Union Pacific Railroad, the U.S. Army Corps of Engineers and the city of Marysville, addressed flooding and traffic issues by modifying the US-36/US-77 corridor in Marysville, relocating the Union Pacific tracks, and protecting the city from Big Blue River floods.
- A cooperative agreement between KDOT and the Bureau of Indian Affairs (BIA) has helped pave the way for a pedestrian/bicycle trail on the Prairie Band Potawatomi Nation reservation in Jackson County. BIA will administer the project and the tribe will build it. The Federal Highway Administration is using this agreement as a model for future Transportation Enhancement projects on Indian nations lands.
- Phase One of the 800 Megahertz (MHz) Interoperability project was completed in southeast Kansas. Phase Two in northeast Kansas is nearing completion. The effort involves upgrading the 800 MHz radio system to support the ability of public service agencies to directly communicate with each other in emergencies. KDOT, citizens, law enforcement and emergency services agencies will benefit.
- The Kansas Prairie Ecosystem Restoration, Education and Conservation Initiative was recognized by the Federal Highway Administration as an Exemplary Ecosystem Initiative. KDOT partnered with Kansas Wildlife and Parks, Kansas Department of Agriculture and the Audubon Society of Kansas on this initiative.
- KC Scout started operating 24 hours a day, seven days a week in the Kansas City region. KC Scout is a freeway management system designed to minimize congestion from traffic incidents and provide traffic information to drivers. Reduced travel times, helpful traffic information and safety are some of the many benefits.
- KDOT's Division of Aviation launched an innovative program to graphically display airport weather information on the Internet. The information is used not only by pilots for flight planning, but also the National Weather Service for forecasting models and public safety personnel for accident reconstruction, hazardous materials containment, and wildfire fighting.



Lt. John Eichkorn of the Kansas Highway Patrol installs an infant seat during a "Put the Brakes on Fatalities" event.

## 1.0 You can count on us to improve safety.

Important measures were taken in 2006 to enhance the safety of the youngest vehicle passengers traveling on Kansas roads and those who work alongside highways.

Kansas law now requires that children ages four through seven weighing less than 80 pounds, or who are shorter than four-foot-nine inches, be placed in an appropriate child passenger restraining system. The requirement is the object of the amended Child Passenger Safety Act, which was approved by the Kansas Legislature and is commonly known as the Booster Seat Law. The law also raises the fine for violations to \$60 from \$20.

The Legislature also addressed the safety of road crews by passing a *Move Over Law* that requires motorists to move to the lane farthest from a stationary vehicle displaying flashing lights, if they can do so safely. Passage of the *Move Over Law* follows the deaths of two KDOT employees who were killed while doing road work in 2005.

Another important safety step was taken in February when Gov. Sebelius announced formation of a statewide, citizen task force to develop recommendations for reducing fatalities and injuries on Kansas roads. The Governor's task force - *The Driving Force* - is an offshoot of a unique cross-agency endeavor by KDOT, the Kansas Highway Patrol and the Kansas Department of Health and Environment.



*"As co-chair of The Driving Force I've seen how dedicated the Kansas Department of Transportation is to saving the lives of Kansans. Every day they work to make our citizens and our roadways safer, and I applaud their efforts."*

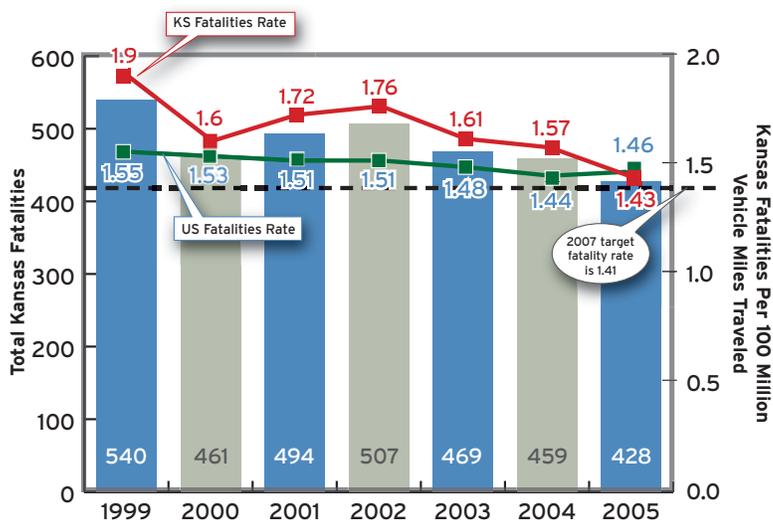
*Darlene Whitlock, RN, MSN,  
Trauma Coordinator,  
Stormont-Vail TraumaCare,  
Topeka*



Governor Kathleen Sebelius signs the Booster Seat law in Topeka.

## Safety

### 1.1 Fatality Crash Rate\*

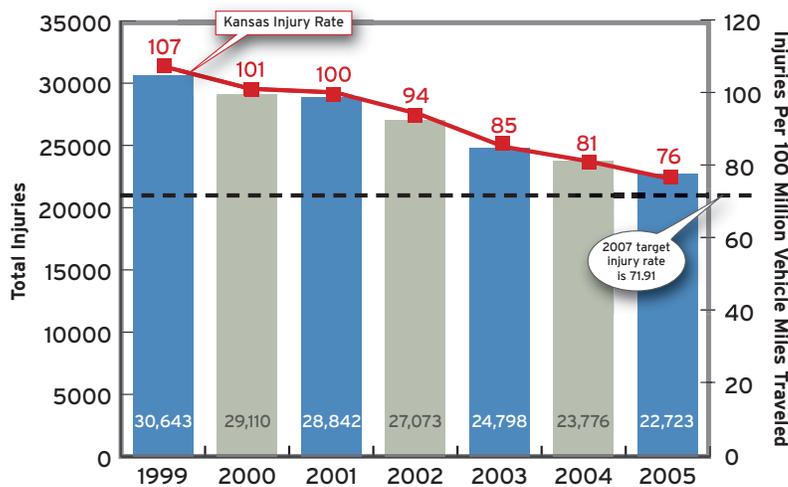


In 2005, the Kansas fatality rate fell below the national average. While that's good news, it isn't cause for celebration because, on average, crashes still kill more than one person a day in the state. Traffic crashes in Kansas remain the number one killer of children, the number one killer of teenagers and the number one killer of adults under the age of 34.

Typically, the state's fatality rate is higher than the national average because:

- There is no primary seat belt law.
- Vehicles typically travel at a higher rate of speed in rural states such as Kansas, increasing the potential for fatalities, according to a study by Kansas State University Professor Sunanda Dissanayake.

### 1.2 Injury Rate\*



\*2006 data not available until mid-2007

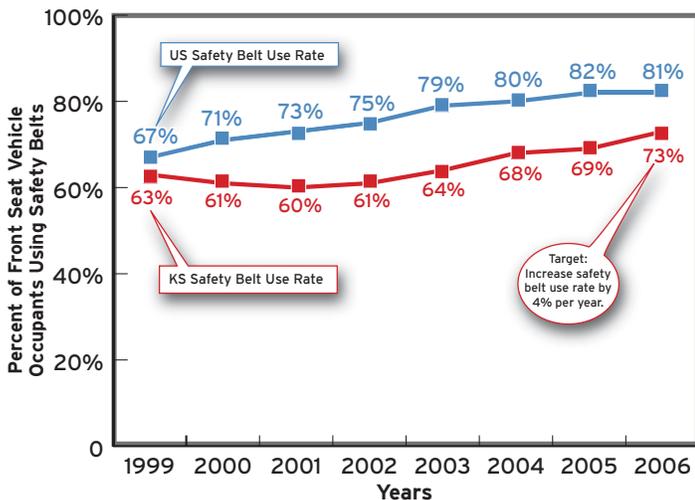
While much of the attention given to traffic crashes centers on the number of fatalities, the number of motorists injured in vehicle crashes is also of epidemic proportions. These crashes have an emotional cost as well as an economic cost. Each year, vehicle crashes cost Kansans more than \$2 billion, and the share borne by taxpayers is huge. National averages indicate the public pays 13 percent of the cost of crash injuries treated in an emergency department; 26 percent of the cost of injuries requiring hospitalization; and 48 percent of the cost of injuries treated in a rehabilitation hospital.



Native Kansan Danni Boatwright, winner of the television show "Survivor: Guatemala," tells a Topeka audience that buckling up is key to surviving.

## Safety

1.3 Safety Belt Use Rate



Wearing a seat belt is the most effective tool to prevent death and injuries in traffic crashes. Statistics show that 76 percent of all people killed in vehicle crashes in Kansas weren't wearing seatbelts. According to the National Insurance Institute for Highway Safety, the economic impact associated with not wearing a safety belt is substantial. On average, hospital costs for an unbuckled crash victim are 50 percent higher than those for a belted victim. Society bears about 85 percent of these costs.

Kansas continues to lag behind the national average in safety belt use, largely because of the lack of a primary seat belt law. Studies show that states that have a primary seat belt law, which gives law enforcement officers authority to stop motorists simply for not wearing seat belts, have increased usage rates and reduced fatalities and injuries.



In August 2006, Rick Kennedy and his family learned first-hand the importance of using safety belts. After their car hydroplaned and slid off the road into a thicket of small trees, it overturned and came to rest on its top. The family thinks they survived the crash because they were all wearing safety belts.

*"We were all OK and were able to get out of the vehicle on our own."  
-Rick Kennedy*





The J-Dub Road Crew of Jefferson West High School, Meriden, received a grant from KDOT to create safety messages and an education awareness program at their school. The group was formed in response to traffic crashes that killed or injured their classmates.

## Safety



*"I think underage drinking is wrong for two reasons. The first is obvious, it's against the law. But more importantly, it's gambling on your future. I personally have too much to live for."*

Kansan Heather Shelley,  
2005 Colgate Country Showdown  
national champion

### Safety is a winner

An advertisement created for KDOT aimed at preventing drunk driving received a Silver Award in the Greater Kansas City Chapter of the Public Relations Society of America 2006 PRISM Award competition.

The advertisement, part of KDOT's "You Drink You Drive You Lose" campaign, was created for the giant video screen at Verizon Wireless Amphitheater and was later used as a television advertisement.

Safety is an integral part of every activity KDOT undertakes, from how roadways are designed, built and maintained to efforts to educate the public on the importance of wearing seat belts and the dangers of drinking and driving.

KDOT administers federal safety funds, using them in a number of awareness and education campaigns. In 2006, those efforts included:

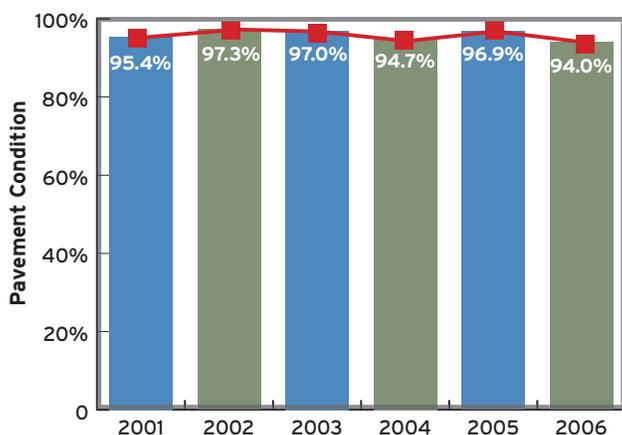
- Making 173 grants, including awards to law enforcement agencies to fund overtime enforcement of the state's traffic laws with an emphasis on seat belts, impaired driving and speeding.
- Conducting two major media campaigns: "Click It or Ticket" and "You Drink You Drive You Lose." These campaigns utilized television, radio and print advertisements across Kansas and were aired or appeared in print more than 21,000 times.
- Advertising safety messages during sporting events at Kansas State University, the University of Kansas and Wichita State University, as well as concerts at Verizon Wireless Amphitheater and during the Country Stampede.
- Initiating a program to prevent underage drinking using up-and-coming 20-year-old country singer Heather Shelley. Heather, a Scott City native, recorded "In My Time," a song written to encourage young Kansans to resist peer pressure by abstaining from drinking.



A cold-in-place recycling train reuses 100 percent of the existing road surface on K-23 in Sheridan County.

## 2.0 You can count on us to protect your investment in highways and bridges

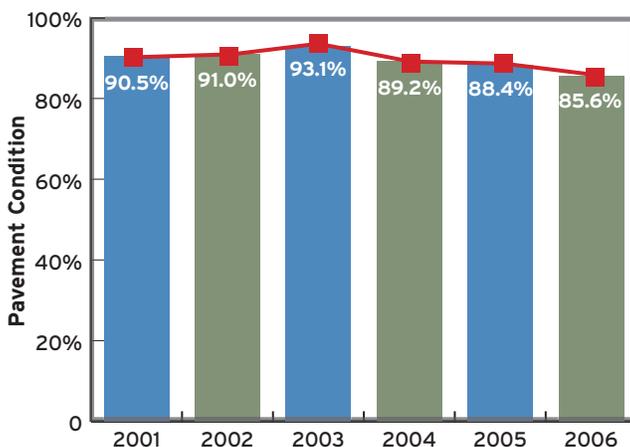
### 2.1 Share of Interstate Pavement in Highest Rated Condition



Because Kansans have made a significant investment in transportation over the past two decades, the state highway system is in good shape. KDOT managers have done a good job managing that investment, operating under the precept that it's more cost effective to maintain a good system than one that's not in such good shape. As the CTP draws to a close and the cost of materials increase, effective maintenance and preservation will be as important as its ever been.

In the next few years, it will be a challenge to maintain as many miles annually as has been the practice. As a result, KDOT will use innovative processes and methodologies to keep pavement in good condition. That reflects the balance the agency is trying to achieve between preserving existing highways and completing the many projects remaining in the CTP.

### 2.2 Share of Non-Interstate Pavement in Highest Rated Condition



Because KDOT has developed an effective Pavement Management System, the agency is prepared to make good preventive maintenance decisions to preserve the state's nearly 10,000 miles of roadway.



*"Our Pavement Management System has helped KDOT improve and maintain good roads by helping us do the right thing at the right time."*

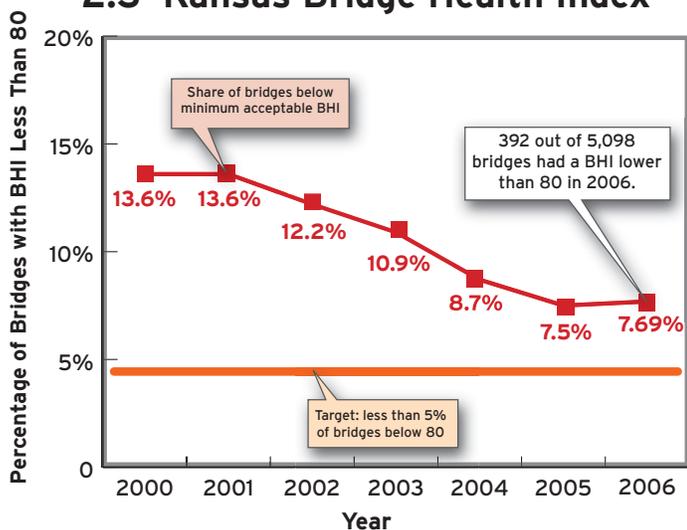
Rick Miller,  
KDOT Assistant  
Geotechnical Engineer



A KDOT crew makes surface repairs on a US-24 bridge near Grantville.

## Preservation and Maintenance

### 2.3 Kansas Bridge Health Index



The Bridge Health Index is a calculated measurement from 0 (worst) to 100 (best) that reflects the overall condition of a bridge.

There are approximately 5,000 bridges on the state highway system (SHS) and, overall, the system is in good shape. Because it is vital that these connectors in the state system be well-maintained, KDOT managers chose this as one of the critical areas for the agency's initial set of performance measures. The target, shown in the graph on the left, is to have no more than 5 percent of all bridges rated below the minimum acceptable level on the Bridge Health Index (the industry-accepted measure of bridge condition). Much progress has been made toward meeting that target under the CTP and the number is expected to improve when all 2006 data is calculated and when more projects are completed in 2007.

A systematic approach to bridge maintenance and the use of better materials have helped KDOT keep the system in good shape. For example, the use of a polymer overlay on bridge decks is extending the life of the structures. Polymer overlay is not only a more cost-effective means of preventative maintenance, it reduces the required time for overlays from three months or more to about a week. KDOT's bridge experts project that the procedure will add 10 to 15 years of life to the bridge deck.



### Employee Spotlight:

**George Dockery** *Area Engineer, Pittsburg*

George takes vacation time to serve as counselor, advisor and teacher at a church youth camp near Rogers, Ark. The experience, he says, helps him deal more effectively with the public in his job. Throughout his 40-year career at KDOT, he has developed "tremendous pride" in the agency. "We have been responsible to the citizens."



Snow removal on US-50 east of Garden City.

## Preservation and Maintenance



KDOT crews are committed to moving people and goods on Kansas highways. Whether it is keeping lanes open in a snowstorm, removing tree limbs from the road after a storm or stopping to check on the well being of a stranded motorist, the people in orange are a welcome sight to travelers.

*"The City of Pretty Prairie would like to thank you for all of the work that your department did for our residents following the recent ice storm. The tree damage was almost overwhelming and would have been a problem for a long time if not for your assistance."*

City Clerk Pattie Brace

*"I want you to know how much I appreciate the driver named Roy (KDOT equipment operator) who not only stopped to make sure I was OK, but made sure I got to a warm place while waiting for help (after sliding off an icy road). Since no one else stopped, it makes me feel safer knowing department workers are so helpful."*

Debra Stone, Kinsley

*"A KDOT snowplow stopped, and the operator asked me if I needed any help. He had an air hose with him that he could hook onto his air brake tank and aired up my tire so I could get to Randolph and off the highway to change the tire. If you get a chance to thank him for me, I would certainly appreciate it as he represents KDOT well."*

Thanks again,  
Dan Petr





In 2006, KDOT repaired or replaced more than 65,000 feet of guardrail and other barriers.

## Preservation and Maintenance



KDOT crews mow an average of 312,033 acres a year.



Nearly 12,700 line miles were striped in 2006 by KDOT crews.

### Employee Spotlight: Cari Jo Patterson *Equipment Operator, Anthony*

“When my roommate’s little girl found out she had cancer, I just decided we needed to do something,” says Cari. That something was participating in various fund-raising activities, which she has continued doing on behalf of others in the Anthony area. Whether it’s organizing bake sales, golf tournaments or placing donation jars around town, Cari is there with a caring heart and a helping hand.

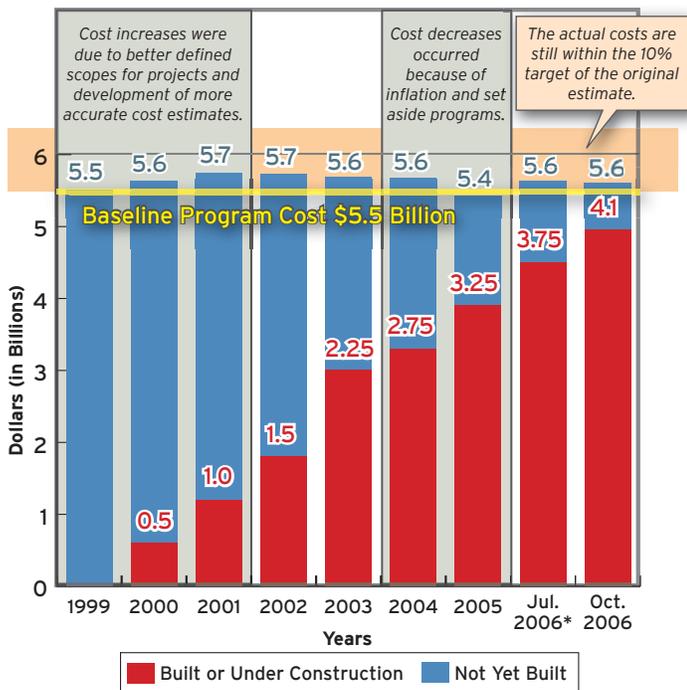




One of the state's first single-point urban interchanges (SPUI) opened to traffic at 87th Street and I-35 in Johnson County in 2006. SPUIs are designed to reduce delays, increase capacity and enhance safety.

## 3.0 You can count on us to deliver projects on time and on budget in a responsible way.

### 3.1 Estimated Construction Costs for CTP vs. Actual Costs to Complete Program



\*Costs for 2006 shown by quarters beginning with 2007 fiscal year starting July 2006.

KDOT's ability to deliver projects and the overall CTP on budget is essential to achieve the program's objectives. It is a critical performance area, and the established target is to keep actual costs within 10 percent (the industry norm) of the original estimate. As the graph on the left shows, program costs are being kept within the target range.

When the CTP's original costs estimates were developed, the projects were concepts only and limited engineering had been done. As a result, two of the tasks in the early years of the program were to better define scopes of work and develop accurate cost estimates. Some factors, such as the devastating 2005 Gulf hurricanes, cannot be predicted so variations between estimates and actual costs will occur.

To keep on target, KDOT has shifted some money for annual set-aside programs, adjusted maintenance activities where possible, taken advantage of better technology and used new engineering approaches for some activities. As a result, KDOT projects that the CTP will be delivered within the 10 percent target.



### Employee Spotlight:

**Willie Valdery** *Equipment Operator, Topeka*

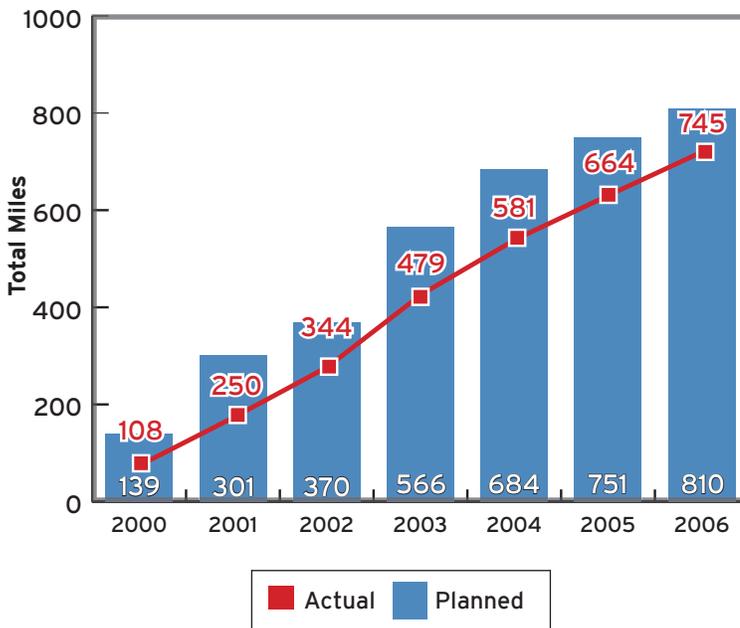
Willie likes helping people, and he doesn't care if he has to travel to do it. He drives to Wichita to coach three youth basketball teams, which he takes to tournaments throughout the Midwest. He has annual cookouts to raise money for travel expenses. In Topeka, he volunteers at the Abbott Community Center and organizes co-rec softball teams. "I like helping and giving back to the community," he says.



Roundabout near Junction City at US-40B and I-70 ramp.

## Program and Project Delivery

### 3.2 Cumulative Miles Planned vs. Actual Miles Constructed



KDOT understands how important it is to keep the promises it makes to communities. And in 2006, KDOT delivered many highway improvements as promised. KDOT completed projects valued at \$465 million that improved 1,695 miles of roads and bridges. Among those projects was reconstruction of nearly 21 miles of US-169 in Miami County at a cost of almost \$99 million.

In addition, many other important projects got under way in 2006 - almost 1,400 miles of improvements valued at \$572 million. Among the projects started in 2006 is the construction of Johnson County's I-435/Antioch interchange and the associated pavement reconstruction covering 2.4 miles, valued at \$141 million. Also under way is a \$22 million, 15-mile project on K-156 in Ellsworth County.

When the CTP is completed, KDOT will have improved all of the miles that were selected for major projects in 1999.



### Employee Spotlight:

**Shad Lohman** *Construction Engineer, Junction City*

Shad jokes about being a bench warmer on his high school baseball team, but it taught him important lessons about teamwork. Over the past 12 years, he's shared those lessons

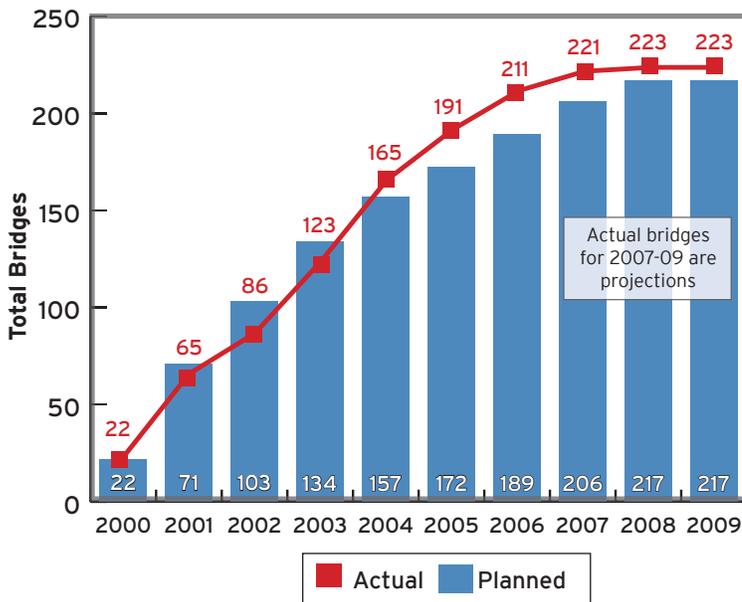
with the girls softball teams he has coached. His teams have won three state championships, a four-state regional championship and made it to nationals four times.



Working at night on the I-235/K-96 interchange in Wichita resulted in less disruption for motorists traveling to and from work.

## Program and Project Delivery

### 3.4 Cumulative Priority Bridges Planned Improvements vs. Actual Improvements Through 5/31/06



### Bridges

Bridges are critical to any highway system, and that is reflected in the CTP. More than 200 bridges will receive major improvements by the end of the program. More bridges will be improved than originally planned because some bridges deteriorated faster than anticipated and required immediate major work. There are about 5,000 bridges on the state system, so the cycle of repairs is never ending.

### Customer Satisfaction

Delivering projects on time and on budget is an important KDOT objective. But, the critical measure of success is whether customers are satisfied with the way in which a project is developed and constructed. More specifically, did KDOT communicate with and involve customers in the way they expect?

To answer those questions, KDOT is developing a customer satisfaction survey that will be reported in a single measure or two. Through written and telephone surveys, KDOT will contact citizens, community leaders and business and property owners from the beginning of a project (including the design and right-of-way purchasing process) to the end of construction. Agency leaders want to better understand what stakeholders think KDOT does well and where improvements in program and project delivery can be made.

## Kansas Fast Facts

### National ranking

Public road miles*	4th
Public bridges*	3rd
Population	32nd
Registered vehicles	30th
Licensed drivers	32nd
Land area	13th

\*Includes state and non-state systems



US-75 and 150th Road interchange in Jackson County was opened in 2006.

## Program and Project Delivery

### Projects Completed in 2006

### Projects Under Way in 2006



US-54/Kellogg celebration in Wichita



US-69 in Southeast Kansas



Completion ceremony at Marysville Grade Separation and Flood Control Project



US-54 ground-breaking south of Liberal

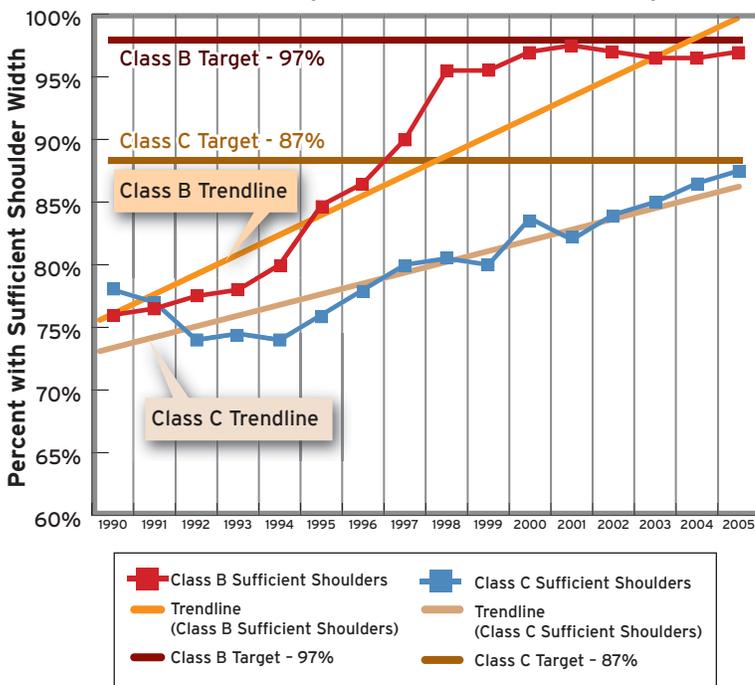


KDOT engineers review design plans for a proposed project at a public meeting.

## 4.0 You can count on us to improve the highway system.

### 4.1 Rural Miles with Sufficient Shoulder Width (B and C)

Roads that carry 2,500 - 3,500 vehicles a day



KDOT recognizes the importance of providing travelers the most modern highways possible within a fixed budget. KDOT's measure of "modern" is the number of miles of highway that have sufficient shoulder width. When shoulders meet the standard set for that particular level of highway, typically the other features of the road, like hills, curves and sight distance, will also meet acceptable levels. That's because KDOT usually modernizes all parts of a highway at the same time - not just the shoulders.

As the graph shows, KDOT has been making steady progress on modernizing the Kansas highway system over the last 15 years. Because the interstates (Class A routes) are fully modern, KDOT measures progress on Class B and C routes (which carry about 2,500 to 3,500 vehicles a day).

It takes a long-term effort and on-going commitment to modernize a highway system. Modernizing one mile of highway (adding or improving shoulders and reducing hills and curves) usually costs \$1 to 2 million a mile.

## Fast Facts

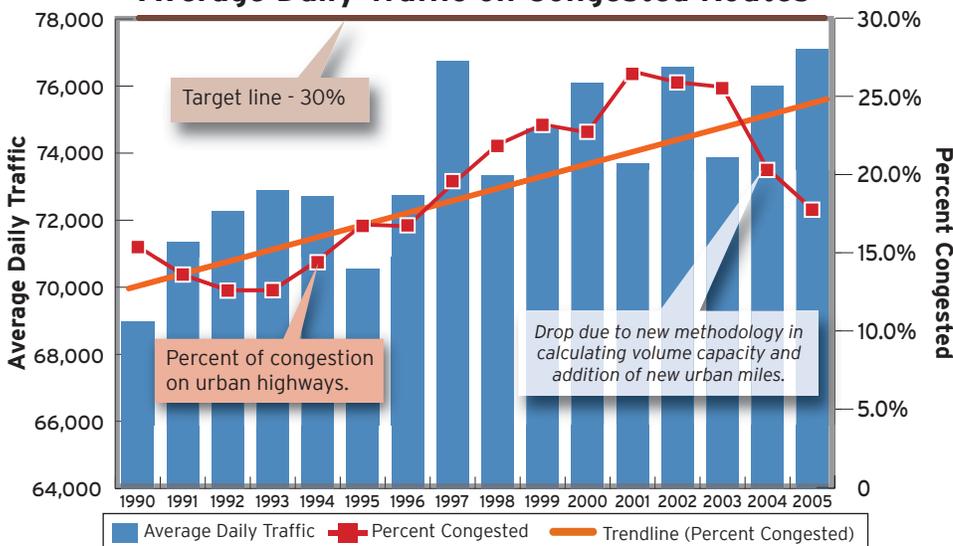
- Thirty-six percent of America's major urban roads are congested.
- Traffic congestion costs American motorists \$63.2 billion each year.
- Americans spend 3.6 billion hours stuck in traffic.
- For every 10 cars or trucks on state highways and interstates today, there will be 14 on state highways by 2025 and 16 on interstates.



Traffic congestion on I-435 in Overland Park.

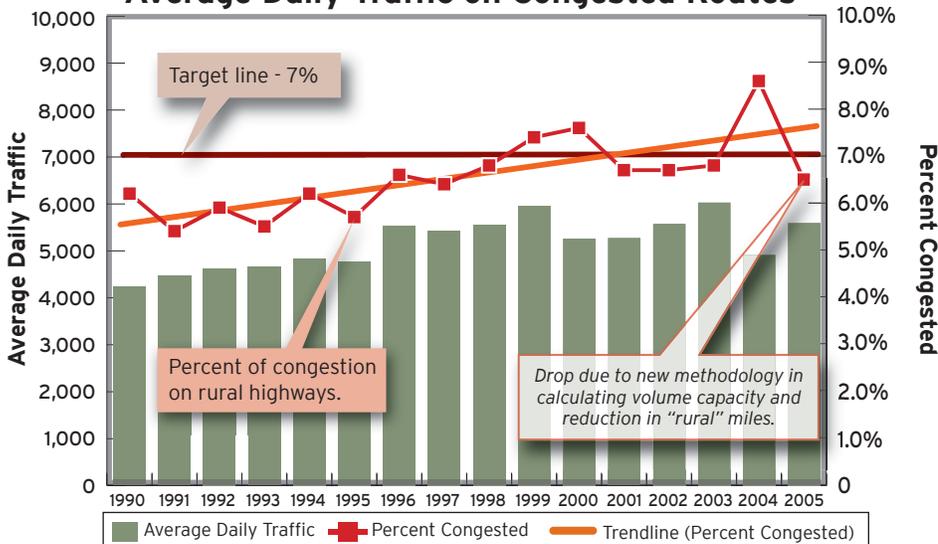
## System Modernization

### 4.2 Percent of Urban Miles Congested and Average Daily Traffic on Congested Routes



Congestion is calculated (by comparing the amount of traffic on the road to the amount of traffic the roadway is designed to handle). Similar to the grading system in elementary school, the urban level of service goal is D while the rural level of service goal is C - recognizing that urban travelers expect more traffic on the highways.

### 4.3 Percent Rural Miles Congested and Average Daily Traffic on Congested Routes



## Urban congestion

Over the past 15 years, the percent of urban roads in Kansas that are congested has more than doubled, affecting more than 70,000 vehicles each day. While KDOT is working hard to improve traffic flow by using new technology (see page 20), keeping up with demand in rapidly growing urban areas is a challenge. There's not much room to expand and adding lanes is very expensive - upwards of \$12 million a mile. As KDOT looks to the future, it's clear that work will be needed in areas that are becoming bottlenecks on our highways.

## Rural congestion

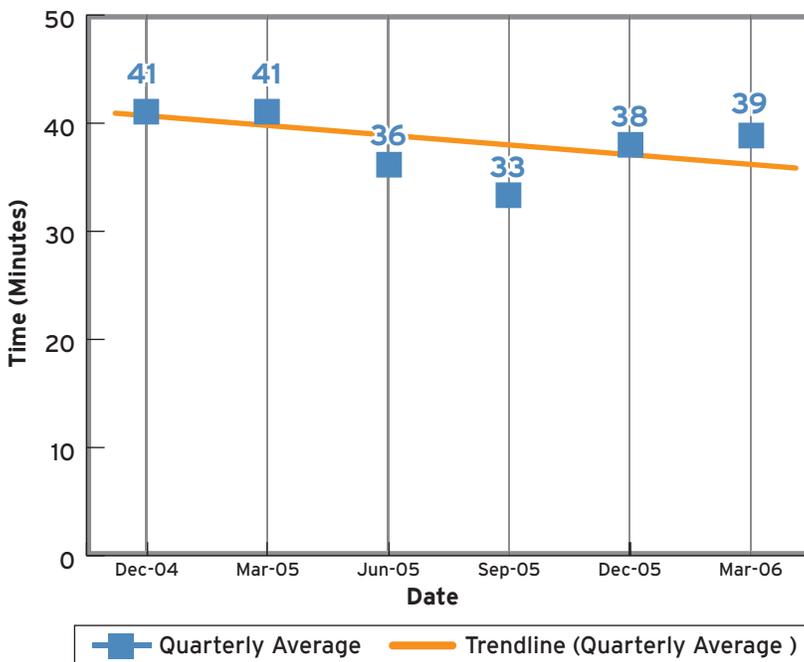
Rural congestion also continues to increase, particularly on those highways that lead into urban areas like US-50 in Finney County, K-4 in Jefferson County south of Meriden, US-75 in Jackson County and US-160 in Montgomery County. With more than 600 miles of rural congested highways affecting about 5,000 vehicles on each route a day, addressing rural congestion is also an expensive proposition. Adding lanes to rural highways typically costs \$3 to 4 million a mile.



Operators monitor traffic flow in the Kansas City metro area from the KC Scout Control Center.

## System Modernization

### 4.3 Non Recurrent Congestion (Time required to clear incidents)



### Kansas City Scout

A leading cause of congestion on urban freeways is the unplanned event, which includes crashes, stalled vehicles, debris on the road or other incidents. It's important to give travelers as much advance information as possible about such incidents so they can avoid the resulting backups. KDOT does this through its bi-state traffic management system known as Kansas City Scout.

The Kansas and Missouri departments of transportation designed Scout to increase safety, and decrease congestion especially during rush hours, and improve emergency response to traffic incidents. Scout manages traffic 24 hours a day on more than 90 miles of freeways in metropolitan Kansas City. Though Scout has only been operating for two years and limited data is available, it appears that Scout is already helping to improve the time it takes to clear an incident.

Scout integrates 84 closed-circuit television cameras, 36 message boards along the highways, a highway advisory radio system and a continuously updated Web site ([www.kcscout.net](http://www.kcscout.net)).

A traffic management system similar to Scout is being designed for the Wichita area and will become operational in the near future.

### Know before you go

511, like 411 or 911, is becoming known nationally as an important telephone resource. Dialing 511 gives callers access to information about road conditions, construction detours and weather reports. The Kansas 511 service, which began in January 2004, is gaining users and received its millionth call on December 31. 511 is an increasingly important tool for KDOT to improve the flow of traffic and for travelers planning trips or commutes.





KDOT Engineer Scott King meets with land owners at a public meeting.

## 5.0 You can count on us to employ a qualified workforce to carry out KDOT's mission.

### KDOT Engineer Turnover for Fiscal Year 2006\*

\*(The fiscal year from July 1, 2005 to June 30, 2006)

Total number of engineers as of 7/1/05	<b>270</b>
Total number of engineers as of 6/30/06	<b>247</b>
Turnover	<b>13%</b>

While KDOT has talented engineers, it simply doesn't have as many of them as it had in the past. Like many other transportation departments across the country, KDOT will lose many of its engineers in the next five years to retirement. And competition from private sector firms that offer greater pay and benefits poses a recruiting challenge.

The turnover rate for engineers at KDOT is 13 percent. Compounding the issue is the fact that the universities from which KDOT routinely recruits don't graduate as many engineers as they once did.

That's why the agency is developing performance measures to help in monitoring and reporting the turnover rate.

*"The workforce is changing, and we must develop new approaches to hiring," said Allen Humphrey, Chief of the Bureau of Personnel Services. "We must ensure that we not only have the required staff, but that they have the tools and skills needed to be successful."*

A well-qualified workforce makes a business successful. That's why KDOT works hard to attract, retain and improve employees that can carry out the agency's mission. Recruiting teams travel to universities throughout the region to find new engineers, and a variety of training programs provide improvement opportunities for nearly all employees.



### Employee Spotlight:

**Kyle Schneweis** *Long-range Planner, Topeka*

Since he was six years old, Kyle has spent thousands of hours on soccer fields. He played the game up until he attended the University of North Dakota, where he was a kicker on the football team. When he arrived at KDOT after earning an engineering degree, he began coaching soccer as a way to stay active and meet people. Kyle coaches three girls' teams ranging in age from six to 16 in Topeka.



Maggie Thompson, Public Involvement Liaison, Topeka, is utilizing KDOT's tuition assistance program to earn a master's of public administration degree at the University of Kansas.

## Workforce Priorities

### KDOT Workforce Distribution

Where we work	Employees
District 1	785
District 2	362
District 3	313
District 4	320
District 5	463
District 6	281
★ Headquarters	714

Total KDOT Employees: 3,238



KDOT leaders think that educating workers about trends, techniques and developments in their fields is one of the keys to successfully meeting agency goals. To that end, KDOT offers a variety of professional training opportunities that give workers the knowledge and tools to better do their jobs. Last year more than 1,200 employees - better than a third of the KDOT workforce - enrolled in training classes.

Also important to KDOT's mission is having workers who are satisfied with their jobs and the agency. A number of programs are in place to address workers' personal and professional concerns and needs, such as professional license reimbursement and flexible work schedules. And recognizing that job satisfaction is closely tied to one's relationship with his or her immediate supervisor, KDOT will survey workers this year about this relationship to determine areas of strength and opportunities for improvement.

### Employee Spotlight:

**Mary Haen** *Administrative Assistant, Hutchinson*

Bringing a little bit of home to soldiers fighting a half a world away is important to Mary. So she makes sure that her fellow District Five employees who are on active military duty overseas are not forgotten by sending them care packages and organizing welcome home receptions. "I want to make sure they know people at home care about them and what's going on," Mary says.

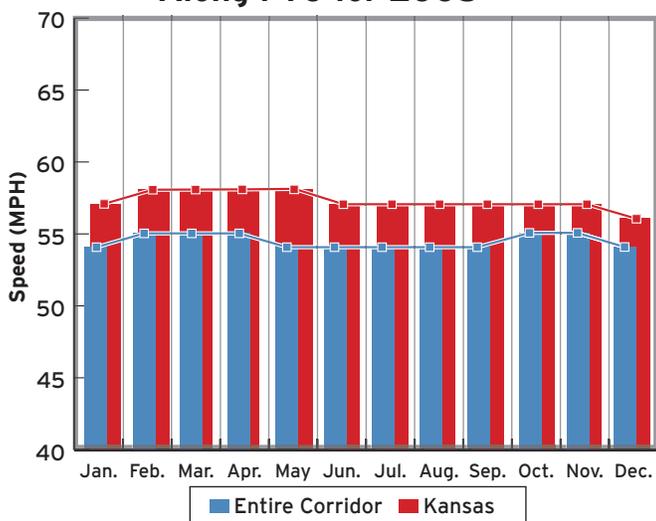




Trucks, such as these on US-50 west of Garden City, transport tens of billions of dollars worth of goods annually on Kansas highways.

## 6.0 You can count on us to move the Kansas economy.

### 6.1 Average Truck Speed Along I-70 for 2005



A 2005 Federal Highway Administration study found that trucks crossing Kansas averaged higher speeds than the average across the entire I-70 corridor. Higher average speeds typically mean less congestion and more efficient movement of goods.

Source: Federal Highway Administration (FHWA) and American Transportation Research Institute (ATRI)

Transportation is one of the key factors in generating and sustaining economic growth. A good transportation system encourages private investment in the economy and provides efficient access to materials, labor, equipment and markets.

Kansas is at the hub of a network of interstate highways that criss-cross the nation. Interstates 70 and 35 are principal corridors for commercial and personal travel. The state is close to major markets so travel times and shipping rates are competitive with the rest of the nation. In fact, the interstate system in Kansas carries 40 percent of all large commercial truck travel in the state.

Projects that enhance the transportation system also create economic benefits in several ways. Jobs, wages and production in construction and related industries increase. Retail and service sector businesses also benefit from the infusion of dollars into the economy.

Businesses and residents who use the improvements benefit from improved travel times, travel reliability and better access to jobs and markets. Improved accessibility also translates into lower costs for materials, shipping and obtaining goods and services. That's why KDOT will continue to develop measures for assessing the economic impact of its programs.

### Fast Fact

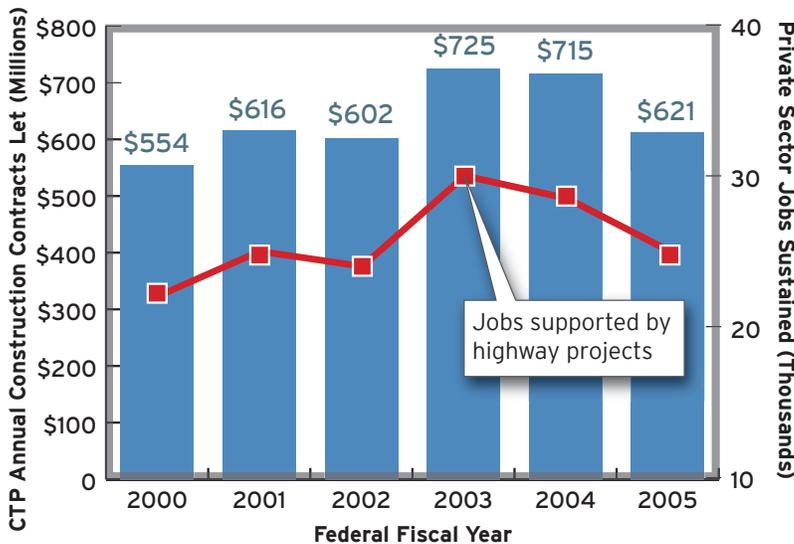
Consumer costs in Kansas for apparel, food, housing, and transportation are reduced by about \$3.5 billion annually, or \$1,297 per person, as a result of interstate highways.



CTP projects, such as this one on heavily traveled I-435 in Overland Park, have sustained tens of thousands of jobs.

## Economic Impact

### 6.2 Estimated Jobs Sustained During the CTP, Based on Annual Contracts Let



KDOT's construction program has a major impact on private sector job creation in Kansas. In 2005, KDOT spent about \$621 million on CTP-related highway construction contracts. While the number of jobs generated by KDOT construction spending varies by project (for example, a resurfacing project may generate fewer jobs than full-scale road reconstruction), it is a fact that our road program creates tens of thousands of jobs.

According to a Kansas State University study, construction spending in 2005 is estimated to have sustained about 25,000 jobs in the state.

In addition to the construction jobs created, the CTP provides significant indirect benefits to the many industries that supply highway contractors.



Secretary Deb Miller, center, dedicates a new section of US-75 at Sabetha.

*"One of our objectives at KDOT is to make improvements to the transportation infrastructure that create opportunities for economic development. We have projects going on throughout the state that will spur economic development, as well as enhance safety, maintain our valuable infrastructure or improve a community's appearance."*

Deb Miller  
Secretary of Transportation



The US-281 bridge south of Osborne replaces a 1936 structure that was so narrow that modern farm equipment couldn't cross the bridge when there was on-coming traffic.

*"Having the new bridge was essential in both improving and maintaining a vital economic transportation link to our city and county. This much-needed project will affect the fiscal prosperity of the region for generations to come."*  
- Von Rothenberger  
Executive Director  
Osborne Chamber of Commerce

## Economic Impact

Since 1990, truck travel in Kansas has increased 76 percent and is expected to reach 12.5 million miles of daily travel by 2020. KDOT and its local partners have made important infrastructure improvements under the CTP to improve the efficiency and flow of commercial traffic through the state.



Vehicles traveling on I-135 at the Water Well Road interchange at Salina have improved access to south Salina industries such as Phillips Lighting, El Dorado National, Long McArthur Ford and Marshall Motor.

*"I think (the Water Well Road interchange) will spur a lot of development down here. If you look at every interchange in Salina, you always have significant development that develops after the interchange is put in. That's what'll happen here."*  
- Gerald Cook  
Salina Area Chamber of Commerce  
(Salina Journal)



The nearly five-mile-long Arkansas City Bypass on US-77 routes truck traffic away from downtown and aids local industries by improving truck access to their businesses.

*"In the past, we had trouble recruiting industries to Ark City because our downtown area was not accessible for commercial trucking. The completion of the bypass is going to be a big boost to our economy and has improved pedestrian safety in the downtown area."*  
- State Sen. Greta Goodwin



*Kingman Municipal Airport. General aviation (all flying that isn't commercial or military) contributes \$7 billion to the Kansas economy.*

## Economic Impact



Kansas' complex transportation needs require more than just good highways. The state depends on the integration of other modes - rail, aviation, public transit and bicycle/pedestrian trails - into the transportation system to meet the health, economic and recreational needs of Kansans. The information below and on page 27 describes in short detail how important these modes are to the state.

### Aviation

- Under the CTP, KDOT funds \$3 million in airport improvements annually. CTP aviation funding has supported 200 projects at 85 public use airports.
- Kansas airports carried 1.5 million passengers and more than 150,000 tons of freight in 2005.
- Runway pavement conditions in Kansas improved from a "fair" rating in 1999 to "very good" by 2002 and could reach "excellent" by the end of the CTP in 2009.
- Statewide, all citizens are now only 30 minutes away from emergency air service.

### Rail

- Kansas ranks in the top 10 of all states in railroad mileage with 4,917 miles of track, more than 2 percent of all U.S. miles.
- Without short-line railroads, 250,000 truck trips would be added to the highway system each year just to haul grain.
- A 2005 rail study found that the state's short-line rail improvement program resulted in \$1 billion in business earnings, based on cost savings due to operational improvements and prevention of business closures.



Topeka transit bus. KDOT has a public transportation capital investment program that provides funding for facility construction or renovation.

## Economic Impact



### Public Transit

- Approximately \$19 million in combined federal and CTP funding will be allocated to address public transportation needs in fiscal year 2007. The program supports 180 transit providers covering 99 counties.
- Public transit is a vital lifeline, especially in rural areas, and KDOT funding helps provide access to health care, employment, education, shopping and other services.
- Funding is provided to private non-profit corporations and associations for the purchase of vehicles and related equipment to improve accessibility and mobility for the elderly and persons with disabilities.

### Bicycle Pedestrian

- KDOT promotes and funds bicycle and pedestrian trail projects to help reduce traffic congestion and air/noise pollution, as well as to provide health and economic benefits.
- KDOT has funded 106 bicycle/pedestrian projects at a total project cost of \$91.5 million since 1994.
- The five major metropolitan areas in Kansas have bicycle networks.

### Employee Spotlight: Steve Gerber *Equipment Inspector in District Six*

Along with his wife, Lauri, Steve organizes week-long REACH (Religious Education and Activities for the Community Handicapped) camps for mentally and physically disabled people at Camp Lakeside near Garden City each June and August. "I learn a lot more from the campers than they will ever learn from me," Steve says.





## 50<sup>th</sup> Anniversary of the Interstate

The American interstate system has been called the eighth wonder of the world, a linear economy-on-wheels and the most ambitious public works project since the Roman Empire.

As it was built into the remarkable system it is today, Americans had greater choices about where they lived, worked, shopped and spent their leisure time. Travel times were reduced, saving both time and money. Businesses adopted more cost-efficient logistics practices. The multiple lanes, separation from other roads, gentler curves and paved shoulders made travel safer and saved thousands of lives.

To celebrate the interstate on its 50th anniversary last summer, and to initiate discussion of the future of transportation, a convoy traveled from San Francisco to Washington, D.C., in June. The convoy recreated the U.S. Army's Transcontinental Motor Convoy across the United States in 1919. A young Lt. Col. Dwight David Eisenhower was part of that convoy and the experience helped shape his commitment years later to building a national highway system. As president, Eisenhower signed the Federal-Aid Highway Act on June 29, 1956, authorizing the interstate system.

Although the 1919 convoy didn't pass through Kansas, a swing group of last summer's convoy traveled across Kansas for events at the Eisenhower Presidential Library in Abilene and at Kansas Speedway in Wyandotte County. Among the visitors traveling with the convoy was President Eisenhower's great-grandson, Merrill Eisenhower Atwater. He spoke to an enthusiastic crowd from the front porch of his great-grandfather's boyhood home in Abilene.

Approximately 110 vehicles joined in the convoy from Abilene to Kansas Speedway. More than 160 KDOT employees and 28 partnering organizations worked together to host events that included an ice cream social, antique car show, an interstate panel discussion, parades and more.





I-70 near Junction City.



## 50<sup>th</sup> Anniversary of the Interstate



- There are 874 miles of interstate in Kansas. Although the interstate is less than 1 percent of the Kansas road network, it carries 23.5 percent of the daily vehicle miles traveled on the entire state system.
- About 40 percent of statewide truck travel is on the interstates in Kansas.
- In 1998, an estimated \$144 billion was shipped on Kansas highways and by 2010, it is estimated to grow to \$264 billion.
- In the early to mid 1900s, two main events convinced Dwight D. Eisenhower of the need for a national system of good roads: the inefficiency of the Army's 1919 transcontinental motor convoy and the efficiency of the German autobahn for moving armies in World War II.
- The nation's first segment of interstate highway completed after Eisenhower signed the Federal-Aid Highway Act is a segment of I-70 that opened west of Topeka on Nov. 14, 1956.
- Over the past decade, nearly all of I-70 in Kansas has been reconstructed.
- Since interstate construction began in 1956, total vehicle miles of travel in Kansas have nearly tripled. Since that time, the number of registered vehicles in the state has more than doubled and the state's population has increased by 32 percent.



*Fall foliage along US-40 between Lawrence and Topeka.*

## Appendix Available

This Annual Report has an appendix that contains additional transportation information including:

### Section A

- Transportation revolving fund
- KDOT Right of Way information
- Information on signs available for increasing tourism or economic development
- Financial compliance
- An explanation of changes from last year's Annual Report project list
- Reference Information
  - Glossary of commonly used KDOT terms
  - Commonly-used acronyms and abbreviations

### Section B

- **Project Selection Criteria**
  - Includes an outline of four program categories. (System Enhancement, Major Modifications, Priority Bridges and Substantial Maintenance)
  - A detailed explanation of the selection criteria used in developing projects and in awarding assistance to cities, counties or other transportation providers.
  - Funding constraints of each program component is provided.

### Section C

- **Project list detailing projects scheduled for improvement during FY 2000-2009**
  - Each one includes a project description, length, construction cost or estimated construction cost, and work type. In addition to state highway construction project lists are aviation, rail, and public transit project listings.
- **Maps**
  - Two maps showing Comprehensive Transportation Program state highway system projects, and maps involving aviation, public transit, and rail.

The appendix is available on KDOT's Internet site at [www.ksdot.org/publications.asp](http://www.ksdot.org/publications.asp) under the 2007 Annual Report listing.

If you would like to receive a copy of this section, please contact KDOT's Bureau of Transportation Information at 785-296-3585.

