



# *2008 Annual Report*





Sunset along K-30 in Wabaunsee County.

## Governor's Message



The importance of an efficient transportation system was strongly reinforced in 2007 when Kansas faced both natural disasters and economic opportunities.

When our roads were impacted by snowstorms and flooding, our appreciation was renewed for a highway system that provides free access to medical care, supplies, schools and jobs. And as we were presented with emerging opportunities - such as ethanol plants, the expansion of Fort Riley and the planned shipping center at Gardner

- it became even clearer that an efficient transportation system is an essential element of economic growth.

The people at the Kansas Department of Transportation showed us last year just how responsive and responsible state government can be, whether it's making roads safe for travel after a blizzard or finding ways to help us strengthen the economy.

For that we should all be grateful.

Gov. Kathleen Sebelius



*K-4 near Auburn.*



*Jason Bryant, Network Service Supervisor, helps keep lines of communication open following disasters.*



*Flooding inundates Erie in July.*

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### On the cover

#### Front

*A harvest moon rises over U.S. 24.*

#### Back

*KDOT staff inspect the U.S. 69 northbound bridge in Wyandotte County.*



*I-70 in Wabaunsee County. Wildflower seeds are included in KDOT's standard seed mixes planted along new projects.*

## Secretary's Message



What a great year it was.

KDOT worked hard to change the way it interacts with Kansans. Our constituents noticed. Now, whenever I meet with local leaders or government associations, I hear positive stories about the caring, open way our employees work with the public. As a result, we're getting better ideas and answers about transportation from Kansans.

We succeeded this year in developing a long-range transportation plan, or LRTP. Its content emerged from a blending of KDOT technical expertise with the interests of the public and of stakeholders expressed in the course of 40 meetings across Kansas. There was 80 percent agreement for 23 of the plan's 24 major proposals. The percentage indicates the careful listening that took place on all sides.

You will read about this process and a great many more of our activities in this report, including our traditional dedication to safety, to system maintenance and preservation, to modernization and to on-time, within-budget project completion.

This year also had challenges, of course. Among them were natural disasters, new infrastructure needs and future funding uncertainties. In the next decade finding sufficient revenue to continue to maintain the system and meet increasing traffic will be an immense challenge. Having developed a working model for consensus decision-making during the LRTP process gives me confidence, however, that we will meet that challenge positively.

Deb Miller



Rising fuel prices impacted the cost of materials used to build roads and bridges.

## Financial Update

### Snapshot: Finance

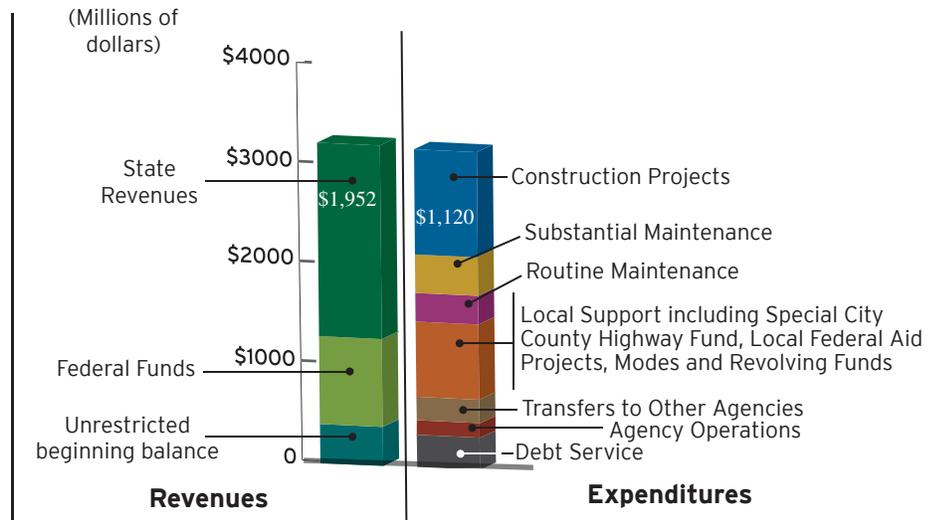
From KDOT's perspective, financial uncertainty was one of the year's key themes.

First, there was continued volatility in energy and materials costs, with an end-of-the-year spike in oil prices.

Second, concern arose that the federal government's highway fund might, without congressional action, run short in 2009.

Finally, a spate of bad weather placed an unexpected burden on the KDOT budget.

### Comparison of Projected Revenues/Expenditures for Fiscal Year 2008-2009



### Volatility in Energy, Materials Costs

At the beginning of fiscal year 2007, KDOT updated the estimated costs of projects included in the Comprehensive Transportation Plan (CTP) that have yet to be completed. The CTP is the Kansas transportation work program that covers the years 1999 to 2009. The revised estimates were based on increased materials prices the agency experienced during fiscal year 2006.

Although the cost of a barrel of oil fell slightly in the early months of 2007 (see the graph on Page 3), the price increased sharply at year's end, continuing a period of rapid increase that began around the time of Hurricane Katrina in 2005. This spike affects not only the fuel costs to KDOT - which consumes 1 million gallons of gasoline and 2 million gallons of diesel fuel annually - but the cost of materials it uses, including asphalt, concrete and steel.

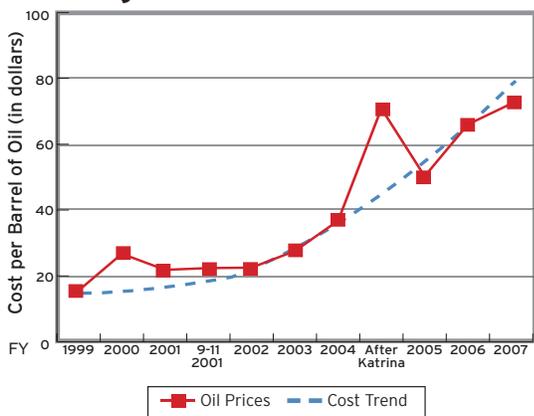
Bid lettings have remained high and are still within the updated project cost estimates. Nevertheless, a level of concern persists about the cost of the remaining CTP projects. One reason for that are questions related to the Federal Highway Trust Fund.



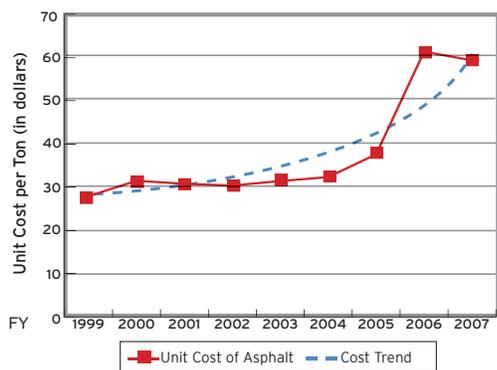
I-470 in Topeka

## Financial Update

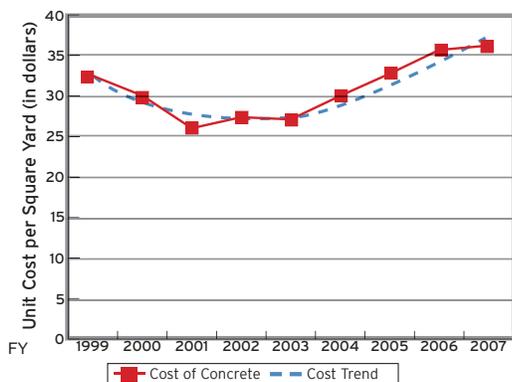
### Average Cost of a Barrel of Oil



### Average Cost of a Ton of Asphalt



### Average Unit Cost of Concrete



### The Trust Fund Question

Congress authorized a federal transportation funding bill in 2005. It assumed existing revenues flowing into the Federal Highway Trust Fund would support planned expenditures through fiscal year 2009. Recent projections indicate otherwise. Without congressional action, funds for states would be cut by \$16 billion in 2009. Kansas would come up \$150 million short, delaying or eliminating some projects.

### Snows, Floods, Tornadoes

Winter storms, flooding and a tornado that made national news put pressure on Kansas transportation revenues this year. The effect on the overall budget was small, but not on the lives of residents. Flooding caused an estimated \$6 million in damage to roads, bridges and railroad tracks in southeast Kansas. KDOT spent more than \$18 million on snowstorms in early 2007 - the five-year average had been \$12 million - and late-year storms will push the total higher. The Greensburg tornado caused KDOT, working at the request of city leaders, to reconsider a U.S. 54 bypass recommended earlier and work with residents to develop an alternative that would support the town's reconstruction.

### For the Full Report

The KDOT Comprehensive Annual Financial Report (CAFR) for fiscal year 2007, which ended June 30, 2007, can be found under "General Categories" (click on the "Publications and Reports" link) at [www.ksdot.org](http://www.ksdot.org).



The Amelia Earhart Memorial Bridge, Atchison



Centerline rumble strips are a cost-effective safety enhancement.



87th Street Parkway and I-35/U.S. 69 in Johnson County

## Accomplishments of 2007

This year, among other things, KDOT won awards for partnering on major highway projects, formulated a new centerline rumble strip policy to make Kansas highways safer, testified in Washington before the House transportation committee, teamed with contractors on a new construction training program and rushed to aid Greensburg after the state's most devastating storm.

### Bridges and Roads

- The Federal Highway Administration approved the final environmental impact statement for the Amelia Earhart Memorial Bridge study. KDOT and the Missouri Department of Transportation are now drafting the final design plans for the new four-lane bridge, which is on U.S. 59 at Atchison.
- Safety on hundreds of miles of Kansas roads will be enhanced next year thanks to a new KDOT policy. Centerline rumble strips are a cost-effective safety enhancement and will be included in most asphalt resurfacing and new construction projects on rural, two-lane highways. The strips, which have been piloted in Kansas the last four years, alert drivers when their vehicle drifts left of the center line.

### Partnering Awards

- A project to improve 87th Street Parkway and I-35/U.S. 69 was selected as the 2007 National Achievement Award state winner by the National Partnership for Highway Quality (NPHQ). KDOT, the cities of Lenexa and Overland Park, Clarkson Construction Co., and the designer PB Americas Inc. were honored for their partnering effort on the \$66 million project. The design chosen for the interchange, a Single Point Urban Interchange (SPUI), was one of the first of its kind in Kansas.
- KDOT received the "Making a Difference Award" in 2007 from the NPHQ for the K-7 Corridor Management Plan. Lead consultant HNTB Inc. and others were honored for the plan, recognized as an exemplary model of partnering in highway planning. Twelve local governments came to agreement on the future of K-7 along the western edge of the Kansas City metropolitan area from Miami to Leavenworth counties.

### Accomplishments



Award-winning Safe Routes to School initiatives include "walking school buses."



Four limestone monument signs were installed in the Flint Hills.



New "Welcome to Kansas" signs were installed throughout the state.

## Accomplishments of 2007

### Other National Recognition

- KDOT was honored for maintaining the third most cost-effective state-owned road and highway system in the nation, according to a California research foundation. The Reason Foundation recognized KDOT following a study that measured the performance of state-owned roads and highways in 12 different categories. The foundation reported that Kansas has no urban or rural interstates in poor condition.
- The Kansas Safe Routes to School (SRTS) program received a four-star rating from the SRTS National Partnership. KDOT was recognized for the outstanding implementation and responsiveness of the program launched in 2006. SRTS aims to improve the health of children and communities by making it safer and easier to walk and bike to school.

### Signs

- Four native limestone monument signs celebrating and promoting the Flint Hills region were installed. They are 25 feet wide and 9 feet high and weigh 30 tons. They are located on I-70 near Maple Hill and Junction City and on the Kansas Turnpike near Emporia and Cassoday.
- The KDOT sign shop sent an essential landscape element to Greensburg after a devastating F-5 tornado: street signs. Virtually all had been destroyed, so the sign shop produced and delivered a rush order of 341 signs. The sign shop also produced 69 new "Welcome to Kansas" highway signs for installation.

### Professional Development

- KDOT and the Kansas Contractors Association (KCA) announced a new construction training program designed to develop a highly skilled workforce. KDOT will oversee the program's curriculum and have the option of sending its own employees to relevant courses. The KCA provides instructors, facilities and materials, and administers the courses.



*Travel information is provided on 511.*



*Flint Hills Scenic Byway along K-177.*



*Local officials help prioritize projects.*

## Accomplishments of 2007

- For encouraging the development of young engineers, KDOT received the 2007 Employer Recognition Award from the American Society of Civil Engineering (ASCE) Committee on Younger Members. The award honors private and public sector employers of engineers for encouraging professionals age 35 and under to become involved in professional development activities and projects.

### **Public Service/Outreach**

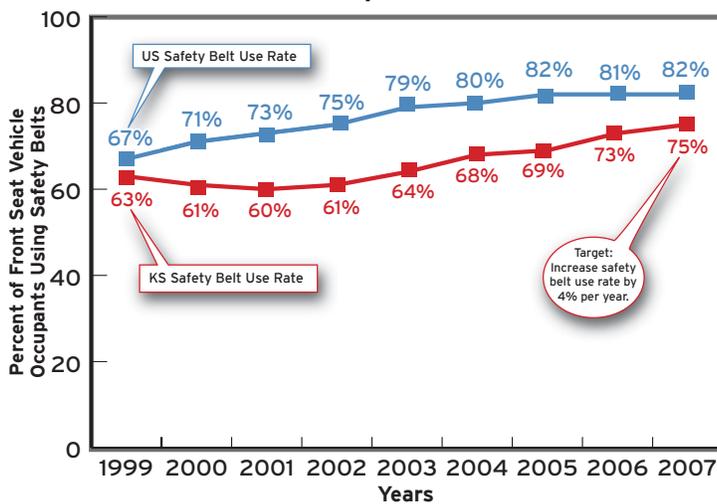
- The Kansas 511 Travel Information phone line handled a record number of calls in 2007.
- KDOT's Bureau of Design accepted the national 2007 Scenic Byway Interpretation Award for the Traveler Information Radio System (TIRS) available along the Flint Hills Scenic Byway. The project is a joint effort between KDOT, the Kansas Scenic Byway Program and the Flint Hills Scenic Byway Management Committee.
- KDOT's Statewide Transportation Planning unit helped Topeka, Wichita and Lawrence refine travel-demand computer models that will assist them in planning for transportation needs during the next 20 years.
- The Kansas Chapter of the American Public Works Association bestowed its Excellence in Program Operations award on KDOT for establishing its Local Consultation Process. It is through this process that the agency seeks assistance from local officials in choosing and prioritizing state highway improvement projects.
- Kansas Safe Routes to School coordinator Lisa Koch testified in Washington before the House Committee on Transportation and Infrastructure's Sub-Committee on Highways and Transit regarding her involvement in and assessment of the Federal SRTS program.



The Child Passenger Safety Act requires that children under the age of four sit in a federally-approved child safety seat.

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

### 1.1 Safety Belt Use Rate



#### Snapshot: Safety

Seat belt use in Kansas rose for the sixth year in a row, and data shows that traffic fatalities declined considerably, according to preliminary 2007 numbers.

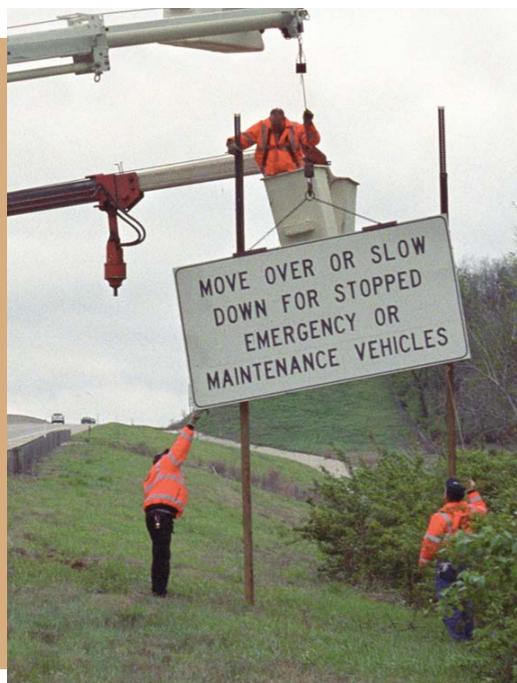
Kansas lawmakers passed three pieces of legislation in the 2007 session that will make the roads safer. Two other pieces of legislation introduced by Driving Force, a statewide safety task force, failed to become law, but KDOT will continue to support them in the 2008 session.

During the year, KDOT financed media campaigns and sponsored media events related to drunk driving, seat belt use and motorcycle safety. It also made grants to law enforcement agencies to support overtime enforcement of state traffic laws, with a special emphasis on seat belts, impaired driving and speeding.

#### Buckling Up . . .

Seat belt use in Kansas rose for the sixth straight year. In 2002, 61 percent of front-seat occupants in vehicles were buckled up, in 2007, 75 percent. Nevertheless, the Kansas seat-belt use rate was 7 percentage points behind the national average of 82 percent. Preliminary evidence indicated that traffic fatalities declined significantly, though precise figures weren't available at the time this report was written.

Fines for violation of the state's Move Over law took effect in 2007. Motorists are required to slow down and move over if safe to do so for all authorized vehicles working along the highway and displaying flashing lights. The law is intended to help protect highway maintenance workers, law enforcement officers and emergency first responders.



# Your car can kill.

LOOK TWICE SAVE A LIFE



BE AWARE! Motorcycles Are Everywhere

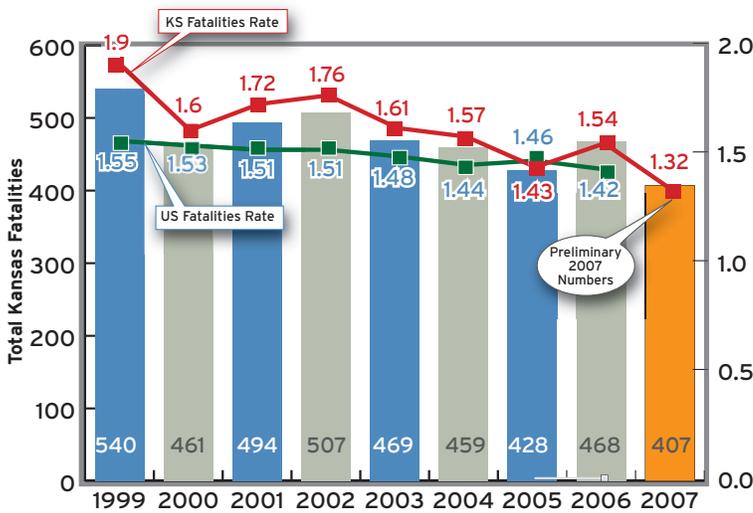
Kansas Department of Transportation



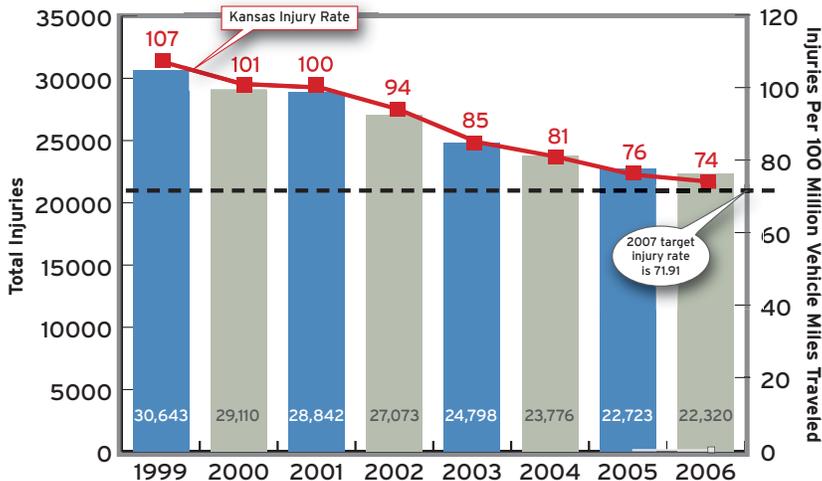
Billboards have been placed across the state as part of a new motorcycle awareness program.

## Safety

### 1.2 Crash Fatality Rate



### 1.3 Crash Injury Rate\*



\*2007 data not final until mid-2008.

### ... And Buckling Down

New laws were passed by the Kansas Legislature. Here are their effects.

- Kansans under age 18 who drive or ride without wearing seat belts can now be stopped by law officers even if they have not committed another traffic infraction. Previously, vehicles with young passengers and drivers could not be stopped for that infraction alone. Fines for seat belt violations were increased from \$30 to \$60. In the past, they had been as low as \$10.
- Drivers whose blood alcohol level is double the legal limit may have their licenses suspended for a longer time. In addition, the period during which controls can be mounted to their ignition switches, preventing their driving while intoxicated, was lengthened.
- Drivers with two or more driving-under-the-influence convictions will have their vehicles impounded or immobilized, or fitted with ignition control devices, for two years.

A safety task force initiative that would have given law enforcement officials authority to stop a vehicle in which Kansans of any age failed to wear a seat belt, even if there was no other traffic violation, failed to advance in the Legislature. So did an initiative that would have created a graduated driver's license system to give novices more time to learn to drive.



*KDOT and the Kansas Highway Patrol worked together on new Public Service Announcements reminding people of the importance of wearing seat belts.*

## Safety



### Awareness and Education Programs

A surge in traffic fatalities in 2006, many of them related to motorcycle crashes, prompted KDOT to create a Motorcycle Safety Advisory Committee in 2007. Its first action: a public awareness campaign aimed at non-motorcyclists, including print ads and billboards in the five geographic areas in Kansas with the highest numbers of crashes and fatalities. The committee plans to update and expand motorcycle training programs as well.

KDOT, which administers federal safety funds, also ran two major media campaigns targeting seat-belt use and drunk driving. The campaigns, "Click It or Ticket" and "Drunk Driving: Over the Limit, Under Arrest," resulted in publication of more than 16,000 radio, TV and print ads throughout Kansas.

*Above, towels promoting the "Click it. Or ticket." campaign were handed out at a Wichita State University basketball game last season. In 2007, KDOT advertised its traffic safety messages during sporting events at three state universities.*



The agency sponsored safety messages during sporting events at the three largest state universities, at Verizon Wireless Amphitheater concerts, during Country Stampede and at the Kansas Speedway during a NASCAR race.

It also conducted seat belt, drunk driving and child passenger safety media events timed to synchronize with national enforcement efforts.

*At left, buckling up reduces your chance of dying in a fatality accident by up to 70 percent.*

### Strategic Goal:

*The Kansas Department of Transportation is dedicated to reducing fatalities on Kansas roadways.*



About 70,100 linear feet of guardrail and barrier was repaired or replaced along Kansas highways in fiscal year 2007.

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

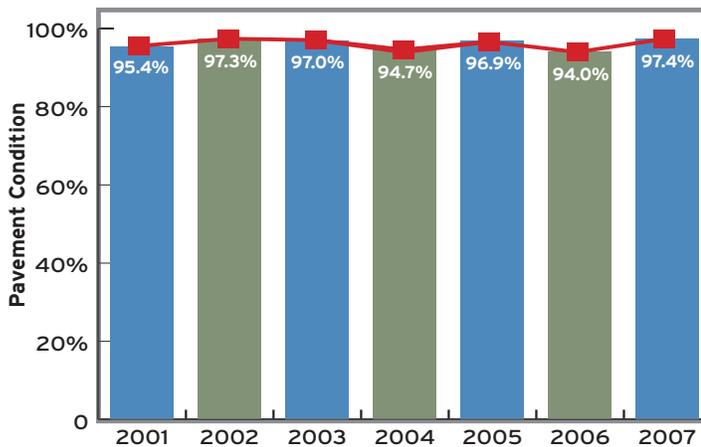
### Snapshot: Preservation & Maintenance

In 2007, 97 percent of Kansas interstates and 88 percent of Kansas non-interstates were rated in good condition.

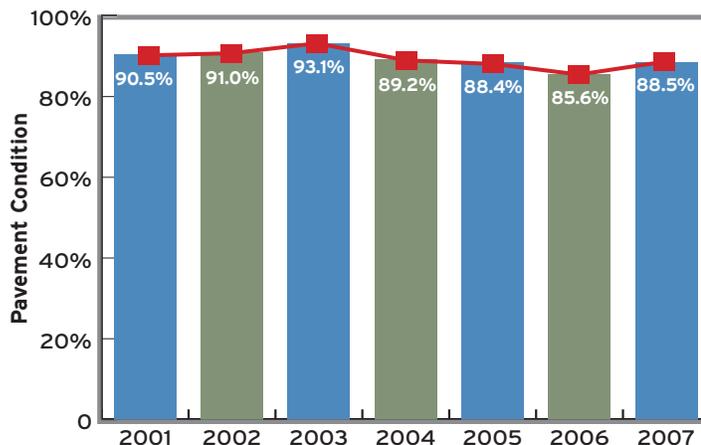
On Aug. 1, the I-35 W bridge collapsed in Minnesota. KDOT began close inspection of the six Kansas bridges most like the Minnesota bridge and launched the inspection of all structurally deficient bridges in the state: the 2 percent designed and built for lighter loads than today's bridges are engineered to handle.

Because KDOT administers only 5,000 of the state's 25,000 public bridges, it decided this year to partner with several other organizations to create a task force, to be launched in early 2008, that aims to improve the inspection and condition of the 20,000 local bridges in Kansas.

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



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



### Highways

KDOT maintains about 9,600 miles of state highway. It is more cost-effective to keep a good system in shape than to let it deteriorate and then do repairs. A Pavement Management System helps KDOT track the condition of state roads and strategically target the use of funds for maintenance, preservation, rehabilitation and construction. The interstate system has benefited, with 97.4 percent of interstates rated in highest condition last year; so has the non-interstate system, with 88.5 percent of pavement achieving that rating. Aside from pavement management, KDOT employees repaired guardrails, striped roads and mowed.



U.S. 166 in south central Kansas.

## Preservation and Maintenance

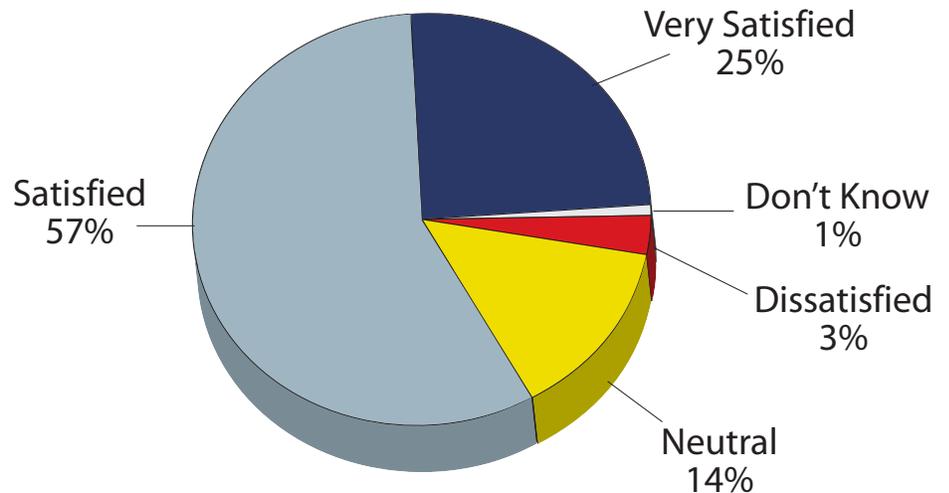
### Customer Satisfaction Survey

In fall 2007, KDOT got good news from the ETC Institute, which surveys communities on behalf of government. The public's satisfaction with how KDOT's doing its job is high.

The institute questioned 947 Kansans about service delivery, focusing on such elements as signs, pavement markings, shoulders, guard rails, lighting, pavement surfaces and bridge conditions. The answers they gave will be used to help set priorities for improvement.

Similar surveys had been administered in 1997, 2000, and 2003. Here are the major findings of the 2007 survey.

### 2.3 Overall Satisfaction with the job that KDOT has done maintaining highways in Kansas during the past 2 years (by percentage of respondents)



**Total Satisfied = 82%**  
**Total Dissatisfied = 3%**

- Eighty-two percent of those surveyed (see chart above) were satisfied with the **overall job** KDOT has done maintaining highways during the past two years.
- Sixty-nine percent were satisfied with KDOT **management of highway construction projects** during that period.
- Fifty-eight percent were satisfied with KDOT **efforts to keep the public informed** about construction projects. Eight percent were dissatisfied, and the remainder were neutral or had no opinion.
- Many see **improvement in KDOT services**. Thirty-four percent thought the quality of KDOT services had improved during the last two years, 52 percent thought that they'd stayed the same. None thought they'd gotten worse.

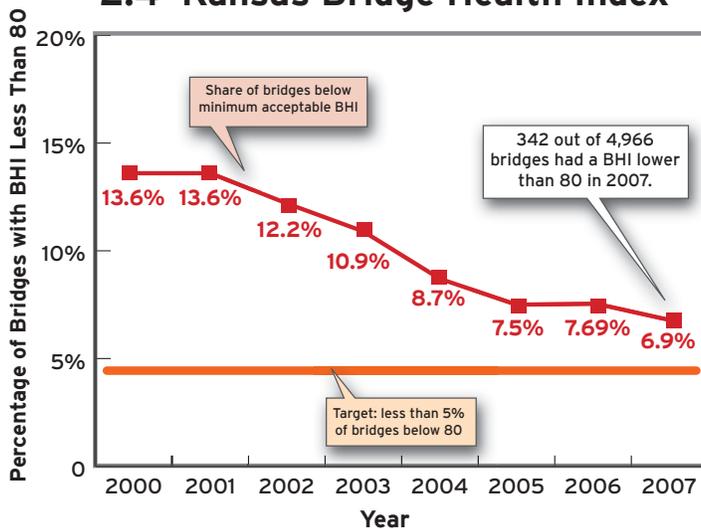
A county-level survey was mailed out late in the year to determine customer satisfaction related to three major construction projects, with results due in early 2008.



K-39 guard rail replacement in Chanute.

## Preservation and Maintenance

### 2.4 Kansas Bridge Health Index



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

### Bridges: KDOT Action After Minneapolis

The bridge collapse in Minneapolis, Minn., on Aug. 1 heightened awareness of bridge conditions nationwide. KDOT inspected the six steel-deck truss bridges in Kansas that are most similar to the Minnesota bridge. The agency also began inspections of the 2 percent of bridges on the state highway system labeled "structurally deficient," not because they are unsafe but because they were not designed to carry the loads today's bridges have to bear.

### Employee Spotlight: Randy Fassnacht *Supervisor, Horton*

Randy believes in public service whether it is at work or during off hours. He has been involved in Boy Scouts for more than 40 years, participates in the Northeast Kansas 90's Motorcycle Unit of the Shrine, is on the council of the Tribe of Mic-O-Say, and serves on the Horton Park and Recreation Board.





KDOT bridge engineers lead a media tour during the inspection of the I-70 eastbound innercity viaduct in Kansas City on Aug. 14, 2007.

## Preservation and Maintenance



A KDOT flagger controls traffic on K-4.

### KDOT highway system receives high rating

A study by the Reason Foundation measured the performance of state-owned roads and highways from 1984 to 2005 in 12 different categories, including traffic fatalities, congestion, pavement condition, bridge condition, highway maintenance and administrative costs, to determine each state's cost-effectiveness. Below are the top performing states.

- |                   |            |
|-------------------|------------|
| 1. North Dakota   | 6. Georgia |
| 2. South Carolina | 7. Wyoming |
| 3. <b>Kansas</b>  | 8. Oregon  |
| 4. New Mexico     | 9. Nevada  |
| 5. Montana        | 10. Idaho  |

### Bridges: The Inspection System

KDOT follows a rigorous schedule in reviewing the nearly 5,000 bridges on the state system. A team of full-time inspectors is equipped to do visual, hands-on and underwater inspections. In addition, it employs more sophisticated testing equipment to conduct, for example, ultrasound inspections to determine interior bridge condition.

The result of the inspection is a Bridge Health Index, an industry standard. KDOT's goal is that no more than 5 percent of bridges rate below the index's minimum acceptable level of 80. KDOT has made strides toward that goal since the Comprehensive Transportation Plan program began. The number of bridges below the minimum level dropped from 13.6 percent in 2000 to 6.9 percent in 2007. (See chart on page 12.)

### Bridges Under Other Jurisdiction

Kansas ranks fourth in the nation in number of bridges. The great majority of the 25,000 are owned by counties, cities and the Kansas Turnpike Authority. Local governments are responsible for inspecting their own bridges and providing inspection data to KDOT. KDOT provides quality control and also forwards the data to the Federal Highway Administration, or FHWA.

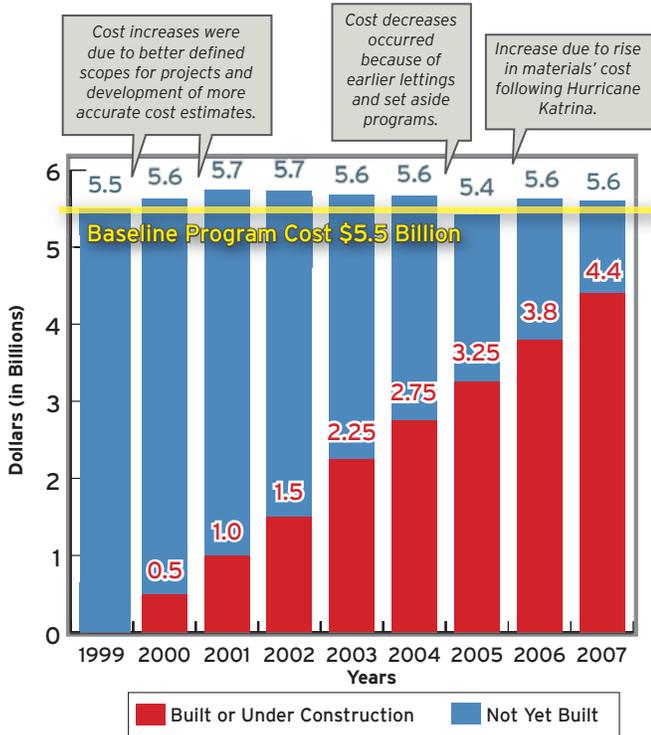
In conjunction with the Kansas Association of Counties and the League of Kansas Municipalities, KDOT decided last year to create a Kansas Local Bridge Task Force in early 2008 to identify and evaluate options that local governments and KDOT can take to improve the inspection and condition of local bridges. The task force will be composed of representatives from cities and counties statewide, KDOT and FHWA.



Bridge deck replacement work on K-18 east of Ogden.

## 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



#### Snapshot: Program and Project Delivery

Four words weigh heavily when it comes to project delivery: "on time" and "within budget."

For heavy construction projects, the ratio of highway miles finished to those planned in the CTP has improved as the state approaches the end of the program.

Kansans across the state have benefited from these heavy construction projects as well as from the many maintenance improvements to the state's roads and bridges.

Staying within the original CTP budget set in 1999 has been challenging, given the steep inflation associated with petroleum-based construction materials and increased global competition for building materials, especially since 2005.

#### 'Within Budget'

With pressures on revenues from several directions (see Financial Update, Page 3), remaining within the budget established at the outset of the CTP will be a challenge. Chart 3.1 shows that while the estimated total construction cost has fluctuated over time, KDOT has kept the program costs within the industry standard of 10 percent of the original estimate. The chart also shows the cumulative actual construction costs for each year of the

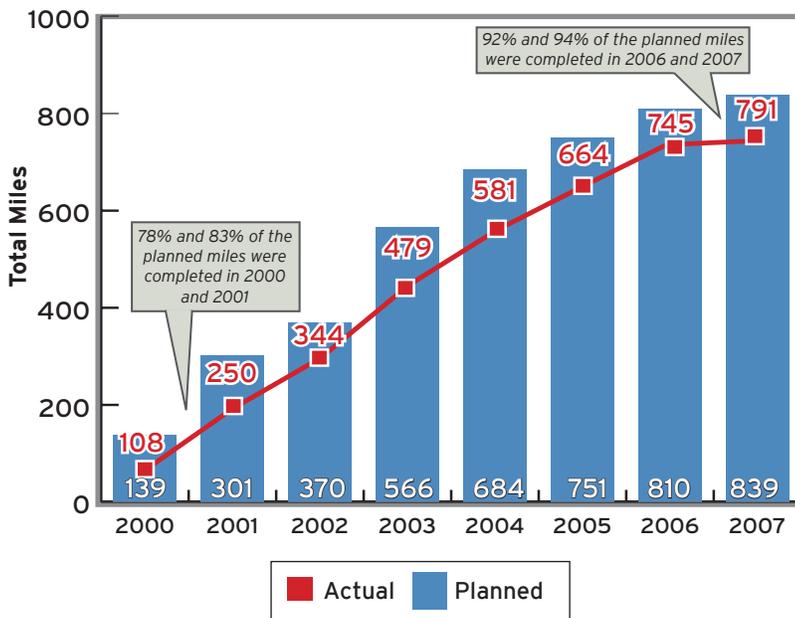
CTP as it approaches the estimated cost. With increased costs for fuel and building materials, this has been a challenge. In part, these increases have been offset by letting some projects early and making programming adjustments to some set-aside programs. In addition, KDOT has taken advantage of construction technologies, new engineering approaches and adjusted work schedules to keep the program on budget.



Traffic is reduced to one lane in each direction while the westbound lanes of I-70 east of Salina are reconstructed.

## Program and Project Delivery

**3.2 Cumulative Miles Planned vs. Actual Miles of Heavy Construction**



### The Road Program

For heavy construction, Chart 3.2 shows the number of miles targeted for completion by the end of each year during the CTP, as well as the total miles actually finished. At the end of 2000 and 2001, KDOT had completed 78 percent and 83 percent, respectively, of the miles planned for completion by the end of these years. At the end of 2006 and 2007, it had finished 92 and 94 percent of the miles planned.

### Some Road Projects of 2007 and 2008

- Reconstruction of 18 miles of Interstate 70 in Saline and Dickinson counties was finished, at a cost of \$75 million.
- In Johnson County, the 87th Street Parkway and I-35/U.S. 69 interchange system enhancement concluded, at a cost of \$66 million.
- In western Kansas, a four-lane U.S. 54 expressway was constructed in Seward County, between Liberal and the Kansas-Oklahoma border. It cost \$20.4 million.
- Groundbreaking occurred in June that will lead to the revamping of U.S. 59 between Ottawa and Lawrence. The road will become a four-lane freeway. The first of four projects related to the expansion will cost \$43.7 million. There will be access to the freeway at seven interchanges in Franklin and Douglas counties.
- In southeast Kansas, work continues on the construction of a four-lane U.S. 69 freeway between Fort Scott and Louisburg. Three projects, totaling about \$97.5 million, were let for construction in Linn County.

Crack sealing work on K-4 will help to extend the life of the pavement.

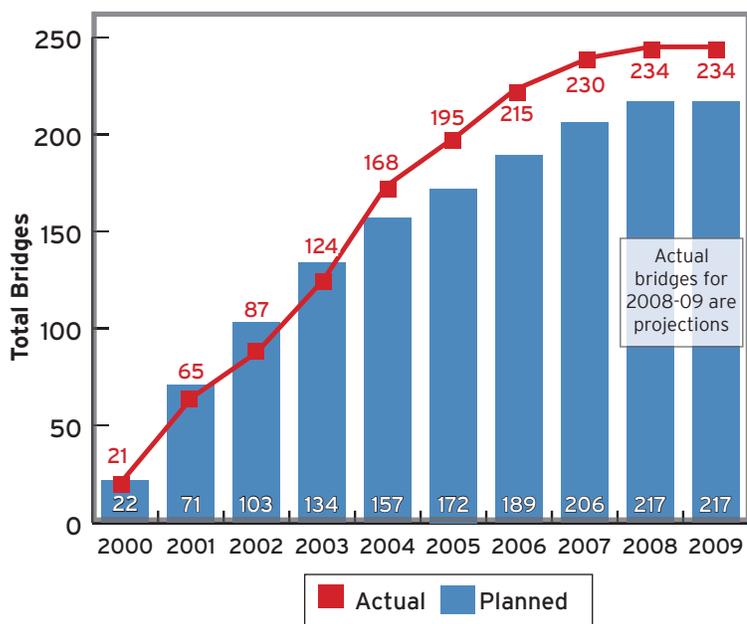




Reconstruction of I-435 in Kansas City is in the second year of a four-year construction schedule.

## Program and Project Delivery

### 3.3 Cumulative Priority Bridges Planned Improvements vs. Actual Improvements Through 9/30/07



#### The Bridge Program

During the course of the CTP, KDOT has determined that it is more cost efficient to replace, rather than rehabilitate or repair, some bridges because of accelerated deterioration.

As a result, KDOT has improved and replaced more bridges than originally planned at the beginning of the CTP, as shown at left.

Aggressive and flexible work schedules have helped accomplish the added work. For example, in Wichita, 12 bridges were resurfaced in just two weekends because of work schedule changes. In addition, many maintenance and construction projects were done at night. This meant less inconvenience for drivers and greater safety for workers.

#### The Bridges of 2007 and 2008

By 2007, the CTP had called for improvement to 206 bridges; in fact, 230 had been addressed. KDOT completed 15 priority bridges projects in 2007. It projects that four more bridges will be replaced or rehabilitated in 2008. A total of 17 more bridges than originally planned in the CTP will have been constructed or rehabilitated when the bridge program finishes in 2008.



Nighttime resurfacing of Wichita bridges meant less inconvenience for motorists.



**Project Under Way in 2007**  
*U.S. 59 groundbreaking at Ottawa.*

## Program and Project Delivery

### Projects Completed

*Below, the Main Street System Enhancement Project on K-7 at Lansing.*



*At right, U.S. 69 in Linn County.*



*U.S. 54 ribbon cutting near Liberal.*

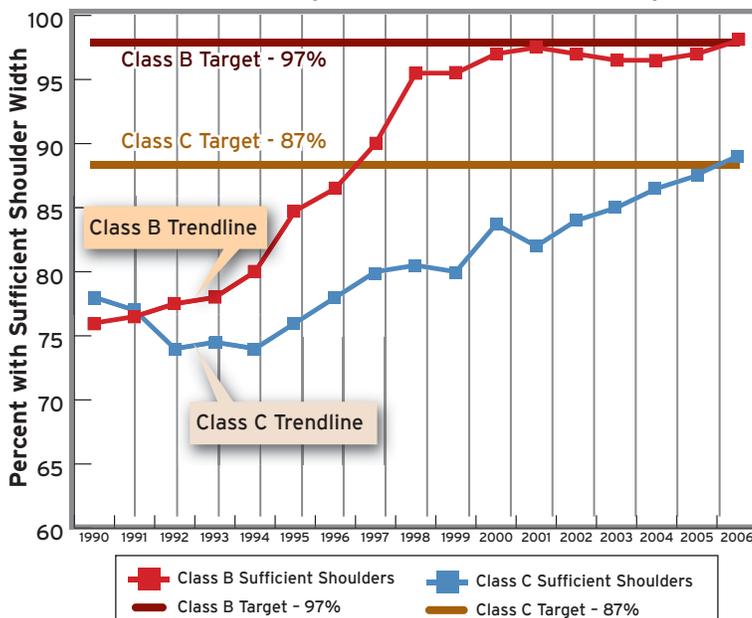


Sufficient shoulder width, such as that along U.S. 75 near Topeka, is an important safety feature of a highway.

## 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



### Snapshot: System Modernization

Modernizing highways makes them safer and more efficient. But modernization has to be achieved within tight budgetary constraints.

There are five classes of Kansas highways, and the state has made progress in the past two decades in adding shoulders that make the busiest rural highways safer. Typically, this kind of work has gone hand in hand with other modernizing improvements, but this year, to save money, KDOT began reconsidering that approach.

Meanwhile, with congestion more evident on both rural and urban roads, KDOT has begun to deploy technological alternatives to adding lanes, given their increasing costliness.

### Practical Improvements

There are five class of roads in Kansas, A through E. A roads are most traveled, E roads least. In the past two years, KDOT has met targets related to shoulder width on class B and C roads – those that carry 2,500 to 3,500 vehicles a day. As Chart 4.1 shows, nearly 90 percent of class C roads now have sufficient shoulder width to be judged “modern” by KDOT standards. Almost 100 percent of Class B roads meet the standard.

In the past, when shoulders were added to highways, KDOT addressed other road deficiencies as well, such

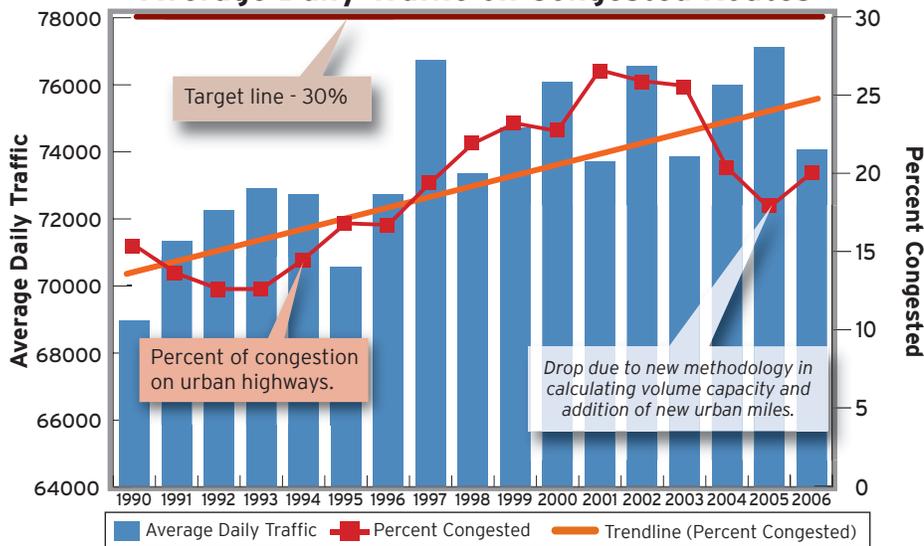
as hills, curves and problems with sight distance. A question arises, however, about the best return on investment, for the greatest number of Kansans, in lean budget times. Might it be practical to install a less expensive shoulder, without the full package of improvements, ultimately freeing up money to modernize more miles of Kansas road? KDOT knows that not every modernization project is a candidate for this kind of approach, but it began this year to develop a process to identify projects whose features made such an approach feasible. That approach has been titled Practical Improvements.



Traffic backup on I-70 near Kansas Speedway in Wyandotte County.

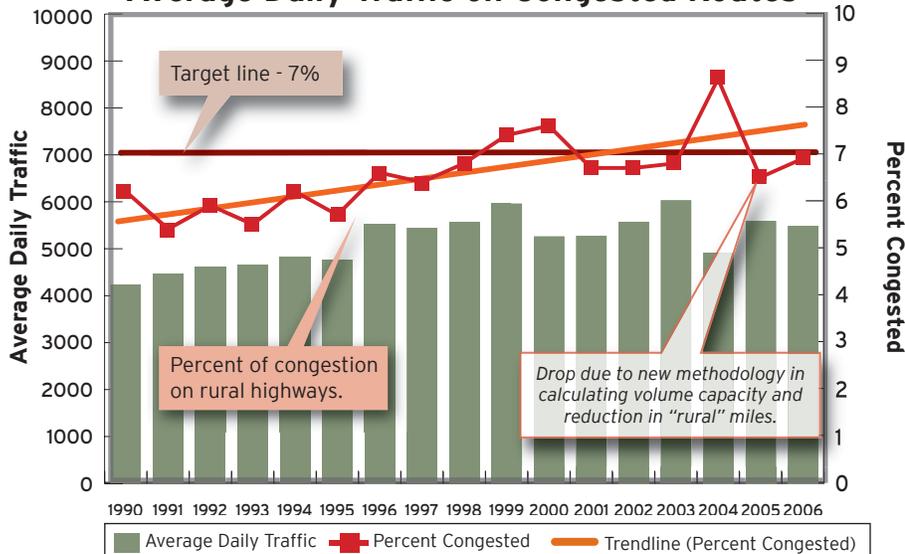
## System Modernization

### 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



### The Cost of Easing Congestion

Traffic congestion costs the United States an estimated \$200 billion a year, a quarter of it the result of such non-recurring incidents and events as crashes and stalled vehicles.

Urban Kansas is growing faster than KDOT can add capacity to carry its traffic. The proportion of the state's urban road miles that are congested (evidenced by slow traffic movement on highways) has doubled since 1991. In urban settings, it costs about \$12 million a mile to add a lane, so KDOT increasingly uses alternative methods, discussed on Page 20, to manage congestion there.

More than 600 miles of rural Kansas highway are considered congested. On two-lane highways, the degree of congestion may be defined by the amount of time one vehicle spends following another at a speed lower than the posted limit. On multi-lane highways, congestion may be defined as the degree of freedom a driver has to make passing maneuvers.

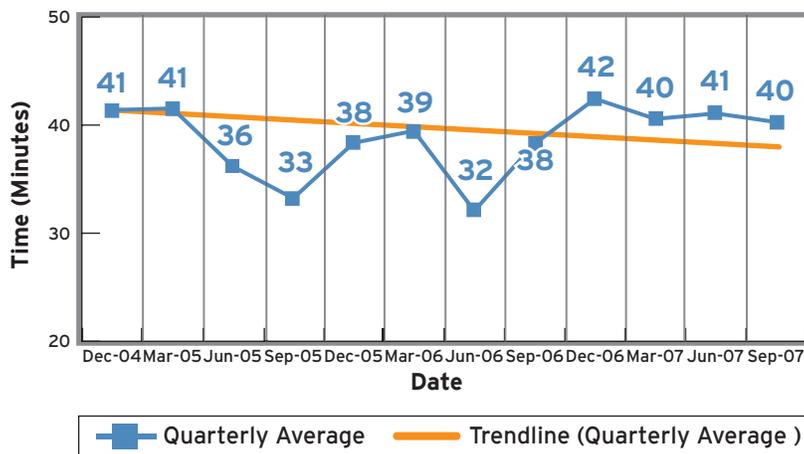
Congestion is also increasing on many commuter routes on the outskirts of urban areas, where acquiring land and building lanes is becoming increasingly expensive (\$3 million to \$4 million a mile).



Travel times were added to Kansas City Scout overhead signs in 2007.

## System Modernization

### 4.4 Time required to clear incidents



### Less Conventional, and Less Expensive, Approaches

KDOT increasingly uses technology to better manage traffic flow. It also attempts to reduce congestion by encouraging other modes of transportation or working to shift roadway demand to times outside peak hours.

The Kansas City Scout traffic management system exemplifies the technological approach. It provides information to travelers for about 90 miles of highways in the Greater Kansas City area. The system, jointly operated by KDOT and the Missouri Department of Transportation, uses cameras, sensors, highway advisory radios, a Web site ([www.kcscout.net](http://www.kcscout.net)) and other tools to monitor traffic conditions.

Large message boards above the freeways convey information to drivers about crashes, lane closures, bottlenecks and construction that's slowing traffic. The information allows drivers to consider alternative exits to their usual choices. In 2007, the system began posting travel times on the message boards.

### 511 Travel Information

The KDOT phone service that provides information on roads - in Kansas, just dial 511 - received its millionth call on the final day of 2006 and had record usage in 2007: It handled twice as many calls as three years before, when it was established. Use of the phone line and Web site spikes during severe weather.



KDOT improved the system in 2007 by adding 511 Mobile, a service for drivers with the proper equipment. The service can be accessed using a Blackberry or other handheld mobile devices, such as Smart phone, to get a text list of closed roads and driving conditions. Learn more about 511 Mobile at <http://511mm.ksdot.org>.



Olathe Area Office Manager Peggy Gott shares information with coworkers Leon Mitchell, center, and David Walter.

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

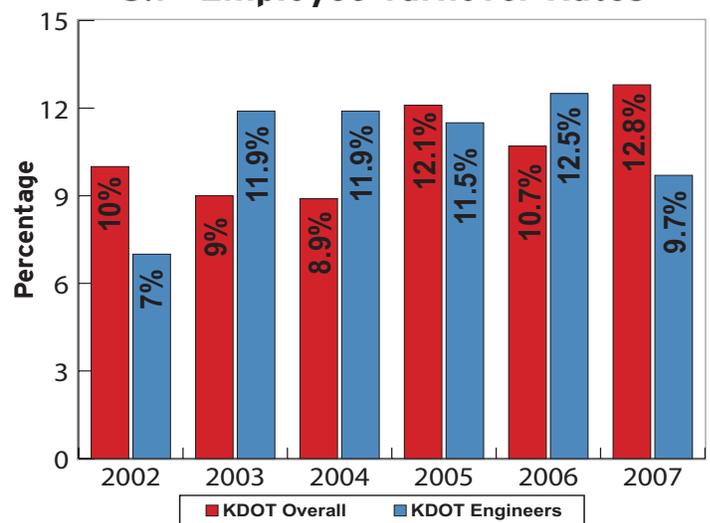
### Worker Retention

The workforces of transportation departments nationwide are marked by turnover. Veteran workers are retiring in large numbers. Many times the private sector offers better salaries and benefits than the public sector. And younger workers change jobs more often than their predecessors.

The retention of engineers is a particular concern. The stark fact is that universities are graduating fewer engineers and the nation's pool of technical workers is shrinking. Retaining engineers who've been recruited is vital.

KDOT took several steps in 2007 to address retention and recruitment, beginning with a survey of employee attitudes toward their work and working environment. Work will continue in 2008 to develop additional performance measures regarding KDOT's efforts to recruit and retain a well-qualified work force.

### 5.1 Employee Turnover Rates



	Overall	Engineers
2002	3,113	317
2003	3,097	306
2004	3,080	299
2005	2,984	274
2006	2,938	254
2007	2,905	240

### The Work Climate

More than two-thirds of some 3,000 KDOT workers completed a voluntary, confidential survey in April. It focused on perceptions of KDOT by its employees. The findings have helped supervisors see how those they supervise experience the workplace "climate" of the agency.

All but two of the 20 survey statements received positive responses from 50 percent or more of the workers surveyed. Statements that received the highest approval were "I clearly understand what is expected of me and what my responsibilities are at work" (79 percent), "I plan to be working

at KDOT one year from now" (75 percent), and "I have the tools and equipment needed to do a good job" (68 percent).

The two statements with the lowest rate of positive response were these: "In the past week, I received praise or positive feedback for doing good work" (43 percent positives) and "My supervisor finds ways to celebrate accomplishments" (30 percent).

Survey results are baseline data for assessing future performance.



*Engineering Associate Kelly Hovey, right, looks over construction plans with State Corridor Engineer Chief Chris Huffman while participating in the Rotational Training Program.*

## Workforce Priorities

### **Feedback from Current Employees . . .**

The survey gave rise to new plans and practices to provide feedback and show appreciation to employees. A newly begun practice of the Division of Engineering and Design serves as an example. The division will begin work-squad van trips so employees can view completed projects and discuss design details with supervisors. The review of what worked well and what didn't can serve as the basis for improved future performance.

### **. . . New Ones . . .**

KDOT wants state employment to be more attractive to entry-level engineers. A new Engineering Rotational Training Program is one strategy for achieving that. All Engineering Associates, or EAs, who are recruited into the program will gain experience in the course of a year in various specialties, including field construction and design, planning and traffic engineering. At the end of the year, the EAs will receive permanent assignments based both on the needs of the agency and on their individual interests.

### **. . . And Those Who Leave**

Turnover is costly. The expense is rising as recruitment and training costs rise. KDOT is working to increase and improve the interviews that are conducted when an employee leaves the agency. "More and better exit interviews will give us clues to retention, help us improve workplace climate and pinpoint the reasons people leave," said Lea Ann Curtis, who heads the Bureau of Personnel Services.

### **A Word About Training**

Training improves job performance and helps retain employees. Last year, the Organizational Development Unit, or ODU, offered 62 training courses. KDOT training hours totaled 31,210. The ODU provided 12,905 of those hours, 7,214 of them for supervisors. In October 2006, training in essential Spanish was offered for the first time. By the end of June 2007, 105 employees had finished the class.



*KDOT maintenance employees Danny Edington and Aaron Cowdin grease a mower part in the Area Four shop in Topeka.*



KDOT issued more than 2,400 superload permits in 2007, a 55 percent increase over 2006.

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



I-35 in Kansas City is a major arterial route.

### Snapshot: Economic Impact

"KDOT is going to great lengths to develop future plans that make the agency an even more important partner in the economic viability of Kansas. Quite frankly, we need more agencies throughout the state to step forward to be a partner in making the economy of Kansas a priority."

-Howard D. Partington,  
City Administrator  
Great Bend

*Transportation spending isn't just about getting from point A to point B. In more than 40 meetings across Kansas hosted by KDOT in 2007 - the prelude to developing a long-range transportation plan for the state - the agency heard from many stakeholders that transportation is crucial to the state economy.*

*Directly, transportation construction projects employ thousands of Kansans. The indirect impact is linked to economic opportunities. Commerce today requires access and mobility. Those with a solid transportation infrastructure in place have a leg up in the competition to attract business.*

*"Infrastructure" besides roads and highways has an economic impact.*

*The Kansas economy also depends on rail, which has increased the freight it carries by 150 percent in the past 30 years; on aviation, which transports both freight and passengers; on public transit - increasingly important as a lifeline for the elderly and for persons with disabilities in some parts of Kansas, and a way to work in others; and even bicycle and pedestrian paths, which are among the health-preserving amenities that commercial interests, searching for sites where they can locate, find attractive.*



Fort Riley near Junction City is expanding.



About 300 million bushels of wheat were harvested in Kansas in 2007. The wheat and other agricultural products transported on Kansas highways are a big part of the state economy.

## Economic Impact

### The Direct Impact: Jobs

In fiscal year 2007, KDOT construction projects sustained an estimated 30,000 jobs in the state. These projects also increased the efficiency of the highway system.

### The Indirect Impact: Economic Development

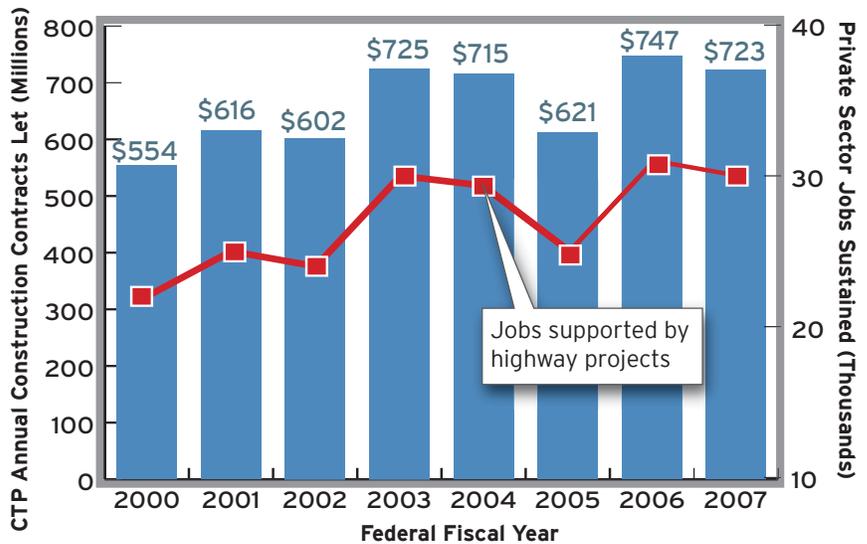
Changes in regional, national and global markets and rapid technological innovation will continue to offer Kansas new economic opportunities. Seizing them can require substantial investments in transportation that allows efficient access to materials, labor, equipment and markets.

For example, the Kansas City region is emerging as a hub for large warehousing and distribution facilities where containerized freight is transferred to trucks from rail. The prosperity of this industry in Kansas depends on reliable access by trucks to roads that are relatively free of congestion.

Other recent examples underscore the need for a quick and flexible response from KDOT and other state agencies. Among these are the expansion at Fort Riley (it had 10,000 soldiers in 2005 but is projected to have 18,000 within the next three years, an influx with an economic impact of more than \$1.25 billion), as well as emerging opportunities in biotechnology.

Such windows of economic opportunity can open and

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



close rapidly, and capitalizing on them may depend on transportation. To bring jobs to Kansas, KDOT must respond to opportunities with timely transportation investments. Spending must be carefully targeted because resources are limited.

Better aligning transportation improvements to support the Kansas economy was one of the key recommendations of the state's recently-developed Long Range Transportation Plan. From more rigorously evaluating economic impacts in the selection of major projects to refocusing KDOT's existing economic development program, KDOT will expand the use of economic impact performance measures in the coming years. As those measures are developed, they will be added to future editions of this annual report.



K-99 ribbon cutting ceremony

*"We believe we now can safely transport our children to and from school, that we can deliver our crops and livestock to market, our families to and from work, our sick to the hospital, and bring guests and visitors to our county. We hope this highway will enable others to come live here."*

**-Liz Hendricks**  
Elk County Commission

### K-99 widening, Elk County

K-99 reconstruction in Elk County, which was dedicated in July, resulted in a widened 10-mile section of the highway north of Howard.

## Economic Impact



The Hays Welcome and Visitor Information Center

### Hays Welcome Center

Travelers who stop at the Hays Welcome and Visitor Information Center, funded in part through KDOT's Transportation Enhancement program, learn about regional events, tourist attractions, scenic byways and more.

*"The City of Hays is fortunate to have had the opportunity to partner with the Kansas Department of Transportation through its Transportation Enhancement program to see this project through to fruition. The new Welcome Center is truly an asset to Hays."*

**- Brenda G. Herrman**  
Director of Public Works  
City of Hays

*"In addition to making the corridor safer and more efficient for motorists, great attention was placed on the aesthetics of the bridge to make it a visually appealing gateway to our communities."*

**-Lenexa Mayor Mike Boehm**

### 87th Street Parkway and I-35 Interchange project

The \$66 million 87th Street/I-35 Interchange is designed to improve east-west traffic flow between Lenexa and Overland Park on 87th Street Parkway, as well as access to and from I-35/U.S. 69.



Allen County Airport

## Economic Impact

### The Moving Parts: Rail, Plane, Public Transit and Legs

#### Might Take a Train . . .

Kansas has the sixth largest rail-freight network in the country made up of 2,790 miles of Class 1 track and nearly 2,000 miles of shortline railroad track. The economic viability of local industries relies heavily on easy access to rail-freight facilities and the connections that rail lines provide to national and global transportation systems. As Class 1 trains are increasingly focused on long-hauls, shortlines are becoming more important to the Kansas economy. It's worth noting that shortline track has increased fivefold since 1990, in part, due to the KDOT administered revolving loan program to help shortlines rehab track.

KDOT has safety oversight at the 5,864 sites in Kansas where highways and railroads cross paths.



The amount of goods shipped to, from and within Kansas continues to increase.

#### . . . A Plane . . .

Our state operates the eighth largest public-use airport system in the country.

This year, the percentage of Kansas runways rated "good" or better has increased to 83 - up from 49 in 1999 - in large part because of the Kansas Airport Improvement Program KDOT administers. To date, CTP aviation funding has paid for 209 projects at 90 public-use airports.

Kansas airports carried more than 243 million tons of freight and more than 800,000 passengers in 2006.



### Employee Spotlight:

**Michael Terry** *Construction Engineer, Atwood*

Community service is important to Michael and his family. Along with his father, he coaches the Atwood-Rawlins County High School Lady Buffaloes basketball team. He and his brother, Brent, Engineering Technician Specialist in Atwood, are members of the Atwood Ambassadors, who put up Atwood's downtown Christmas lights and promote other civic activities.



The K-10 Connector transports students between Johnson County and the University of Kansas.

## Economic Impact

### ... A Bus or Van ...

Public transit is a lifeline, especially in rural areas. KDOT-supported transit gives access to health care, employment, education, shopping and other services. Private nonprofit corporations and associations receive funds for the purchase of vehicles and related equipment to improve mobility for the general public, the elderly and persons with disabilities.

New projects include fixed route services in Garden City and Pittsburg, as well as Johnson County Transit buses that run between the University of Kansas Edwards campus and a KU park-and-ride lot on the Lawrence campus.

Statewide, about \$19 million will be allocated to 200 transit providers to address public transit needs in state fiscal year 2008.

### ... a Bike or Path

KDOT promotes projects for bicyclists and pedestrians, including shared-use paths, bicycle lanes and education programs. This reduces congestion and pollution. It also provides health benefits and adds in an intangible way to quality of life.

KDOT administers federal funds for bicycle/pedestrian projects in more than 50 communities. Since 1994, it

has created nearly 300 miles of paths and lanes at a cost of more than \$100 million. Eighteen Kansas communities - five of them major metropolitan areas - are seeking ways to help bicyclists and other forms of transportation share the roads.



Bicycle/pedestrian trail near Lake Shawnee in Topeka.

## Employee Spotlight: Beverly Sidman *Receptionist, Norton*

When her daughter and son-in-law were serving in the U.S. Air Force in different parts of the country and in Iraq, Beverly provided childcare for her then 8-month-old grandson Jacob for 12 months. During this time, she also began her job as the District receptionist and shared her computer skills by helping the Lenora Public Library with their new computer card catalog system.





KDOT employee Kyle Schneweis outlines details of the Long Range Transportation Plan to an advisory group.

## Long Range Transportation Plan



### The Future

KDOT conducted extensive consultation with transportation stakeholders in 2007, continuing work begun in 2006. The result is a Long Range Transportation Plan, or LRTP, due to be published in 2008. The plan emerged from extensive dialogue between KDOT and 150 Kansans representing diverse interests. They evaluated the status and future needs of all modes of the Kansas transportation system and weighed likely transportation trends for the next 20 years.



Planning for the future will help the Kansas economy to expand.

### Stakeholders emphasized three priorities:

- *Preserve the transportation system* - KDOT must protect the state's investment in its transportation infrastructure.
- *Make travel safer* - KDOT must work with stakeholders and the public to make state highways and local roads safer and work diligently to promote safe driving.
- *Support economic growth* - Transportation is often a catalyst for economic opportunities that benefit all Kansans.

A draft of the LRTP was published for public comment in January 2008. Information about the LRTP can be found at [www.kansaslrtp.org](http://www.kansaslrtp.org). The LRTP planning process is designed to meet the requirements of the federal surface transportation act (SAFETEA-LU) as well as the needs of the State of Kansas and KDOT.



## Employee Spotlight:

**Diane Handke** *Office Assistant, Horton*

Preserving the past is important to Diane. When the 150-year-old Saint Mary's Church of Purcell needed window repairs, she helped to obtain a \$90,000 grant for the project. The work will fix the windows while keeping the historic church's original stained glass intact.



Many highways had snow drifts several feet high like K-27 south of Sharon Springs.

## Blizzard hits western Kansas



Travel on snowpacked roads in western Kansas was extremely limited for several days.

### Shut Roads, Downed Lines? KDOT Answers

A severe winter, including a historic late December/early January storm that dumped up to 32 inches of snow in western Kansas, disrupted travel and required a massive response from KDOT. During that first storm of the season, which also included ice, approximately 10,500 power poles were downed and 60,000 people left without power. During the height of the storm, 18 sections of roads were closed in western Kansas, including Interstate 70 from Salina to the Kansas-Colorado border.

Virtually all of western Kansas was declared a disaster area with 44 counties impacted by the storm, resulting in \$380 million in damage.

While KDOT crews worked around the clock to remove snow and treat roads, the public relied on another agency service to keep them informed - KDOT's 511 Traveler Information System.

Here's a numbers look at how the 2007 winter season impacted KDOT (December storm numbers not included):  
**115,735** tons of sand used (the 5-year average is 98,825)

**124,148** tons of rock salt applied (the 5-year average is 93,977)  
**\$18 million** total winter season expenses, including labor, equipment and materials (the 5-year average is \$12 million)

KDOT crew plows snow on K-25.



Kansas 511 broke the storm event call volume record during the historic storm that raged in western Kansas over the New Year's holiday. Travelers made almost 133,000 calls during a four-day period. One of the calls marked the millionth call to 511 since KDOT began the system in 2004.



Debris is placed in a KDOT truck by a Kansas National Guard loader.

## Tornado strikes Greensburg



Greensburg after the tornado.

### A Fast Response to an F-5

The evening of May 4, an F-5 tornado devastated Greensburg, destroying 95 percent of the city and killing 12 people.

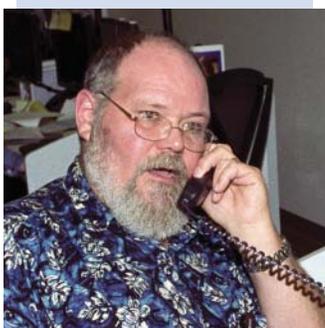
Within 30 minutes, KDOT was there. Search and rescue started.

The next day, KDOT equipment and workers removed debris.

The agency lent a hand, in various ways, until July 13.

*"It's amazing how quickly KDOT responded to this disaster, pulling together as a team working hard to help the community recover. We were there to serve our customers and certainly got the job done."*

KDOT Emergency Coordinator Mark Krentz



KDOT and the Kansas Highway Patrol worked together on traffic control on U.S. 54.

## Numbers tell the story of KDOT's mission of being responsive and responsible to the city of Greensburg

- The agency hauled **17,168 dump truck loads** of debris, or 41 percent of the entire debris removal.
- Almost 300 employees pitched in to help for a total of **35,548 hours**.
- KDOT provided 65 dump trucks, 20 heavy equipment loaders, five dozers, one motor grader and eight mechanized brooms to assist with the clean up.
- KDOT's **Communications on Wheels** was operational in Greensburg soon after the storm providing an invaluable communications tool. The agency also distributed 100 handheld radios.
- **U.S. 54 was closed for one month** with KDOT manning three detour checkpoints around the clock.
- KDOT's sign shop made **341 street signs** for the city of Greensburg.
- KDOT's equipment storage building was turned into an animal shelter holding up to 200 animals.



KDOT maintenance employees stop traffic at the east U.S. 166/U.S. 169 junction east of Coffeyville due to flooded highways.

## Flood severely impacts state



KDOT trucks and other vehicles are flooded at the truck service center near I-70 in Salina.

### Roads Became Rivers

On June 27 a slow-moving storm began pushing across Kansas. Within days, 20 southeast Kansas counties would be declared federal disaster areas. Some 21 inches of rain fell near Fredonia, and, near Moline in Elk County, more than 12 inches of rain were recorded in 24 hours.

From Osawatomie to Coffeyville, widespread flooding forced hundreds of people from their homes. State highways sustained at least \$6 million in damage as swift floodwaters eroded turf, rock and paved shoulders. The waters even lifted the top layer from some roads. More than 20 highway routes were closed due to high water and related damage.

*"Some of my guys couldn't even get home because of the high waters. They had to stay with other family members or book motel rooms between their shifts. They just did an outstanding job that was way above and beyond the call of duty."*

Wayne Gudmonson, Independence Area Engineer



KDOT workers stop traffic on U.S. 169 just south of Chanute.



Sections of the U.S. 160 pavement east of Elk Falls were torn apart by the flooding.



*Kansas Highway Patrol Trooper Tim McCool presents a bicycle to a Put the Brakes on Fatalities Day poster contest winner.*

## 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 to promote 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 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 2008 Annual Report and the appendix are available on KDOT's Internet site at <http://www.ksdot.org/publications.asp> under the 2008 Annual Report listing.

If you would like a copy of either publication, please contact KDOT's Bureau of Transportation Information office at 785-296-3585, or send an e-mail to [publicinfo@ksdot.org](mailto:publicinfo@ksdot.org).

According to Senate Bill 357 from the 2007 Legislative session, state agencies should only print a limited number of paper copies of this annual report for those individuals who request paper copies and copies that would be needed for historical and archival purposes.

