Kansas Department of Transportation

ANNUAL REPORT

January 2005

A Letter From...

Secretary Deb Miller

I am pleased to present the Kansas Department of Transportation's 2005 annual report and very proud of the past year's work that is detailed in the following pages.

I'm happy to write that Kansas' 10-year, $13.2 billion Comprehensive Transportation remains on track after 5½ years, despite some rough going earlier in the year when continued full funding was in jeopardy. I am grateful to Governor Sebelius and the Legislature for supporting the program and their creative approach to continued funding. Through the end of the 2004 calendar year, $6.9 billion had been spent since the program began in 1999 to build, enhance or maintain thousands of miles of road, construct bridges, and support other modes of transportation, including aviation, rail, public transit and bicycle/pedestrian.

Although we feel good about the commitment to the final 4½ years of the highway program, there is concern that the federal transportation reauthorization bill still has not been passed. We are cautiously optimistic that we will have the ability to fund the projects we are committed to completing.

As we continue to focus on our fundamental mission of delivering the CTP, we will develop the plan authorized by the 2004 Legislature to allow other agencies, particularly public safety agencies, to use our sophisticated 800 MHz communications system. The legislation – HB 2756 – also gives KDOT authority to lease radio equipment to those agencies so they can access the statewide radio system. A radio business plan has been completed, rules and regulations have been drafted, and we are now studying the lease costs and access fees.

In the midst of our work on the radio plan and furthering the CTP, we moved the agency headquarters from the Docking State Office Building into a remodeled

building at 700 S.W. Harrison, north of the Capitol. We are proud that Governor Sebelius designated our new home the Dwight D. Eisenhower State Office Building. Not only did the Kansan lead the world in the fight against fascism in World War II, he became president and changed the face of America by authorizing the Interstate highway system. A tribute to this great leader is planned for the lobby of our new home.

We also are planning to increasingly focus on safety issues. Kansas has one of the highest highway fatality rates in the country. And, traffic crashes are the number one killer of our young people. In an effort to reduce the fatalities and the huge emotional and economic toll they take on our state, KDOT is beginning discussions with the Kansas Highway Patrol and the Department of Health and Environment to develop a strategy for improving safety.

We also are continuing the natural progression of the Partnership Project, a top-to-bottom, review of this agency that was started in 2003. During the exhaustive process, we have surveyed hundreds of Kansans and stakeholders both outside and within KDOT, formed sub-teams to study a host of topics, and have established 12 initial priorities. From the process, a phrase emerged that will be used to guide KDOT employees in how they pursue their jobs – responsible and responsive. Our priorities are reflective of that phrase. The following are three examples of the 12 priorities:

- We intend to allow more flexibility and input from cities and counties on speed, signals and access.
- We will consider investing in local roads so they can serve as detours, rather than invest in temporary shoo-fly detours.
- We will consider monetary or other settlements as an option to KDOT making the improvement for road miles that are to be turned back to local partners.

I am proud of the work we did in the year just concluded and look forward to another year of providing quality transportation service to Kansans.

Sincerely,

Deb Miller
Secretary of Transportation

Nearly 120 pages of project listings that have appeared in recent annual reports have been eliminated from this report in an effort to cut printing costs.

The complete project list can be found on KDOT's Internet site at www.ksdot.org/maps/main.html. Paper copies of the project list may be obtained by contacting KDOT's Bureau of Transportation Information at 785-296-3585.

Part A
Who we are, what we do

WHO WE ARE ...

The Secretary of the Kansas Department of Transportation (KDOT) is responsible for coordinating the planning, development, and operation of the various modes and systems of transportation within the state. KDOT is divided into six geographical transportation districts throughout the state and has its headquarters in Topeka. The Headquarters offices are divided into divisions, bureaus, and offices. Each division oversees various bureaus/offices. The Division of Operations also oversees the district offices.

KDOT Executive Staff

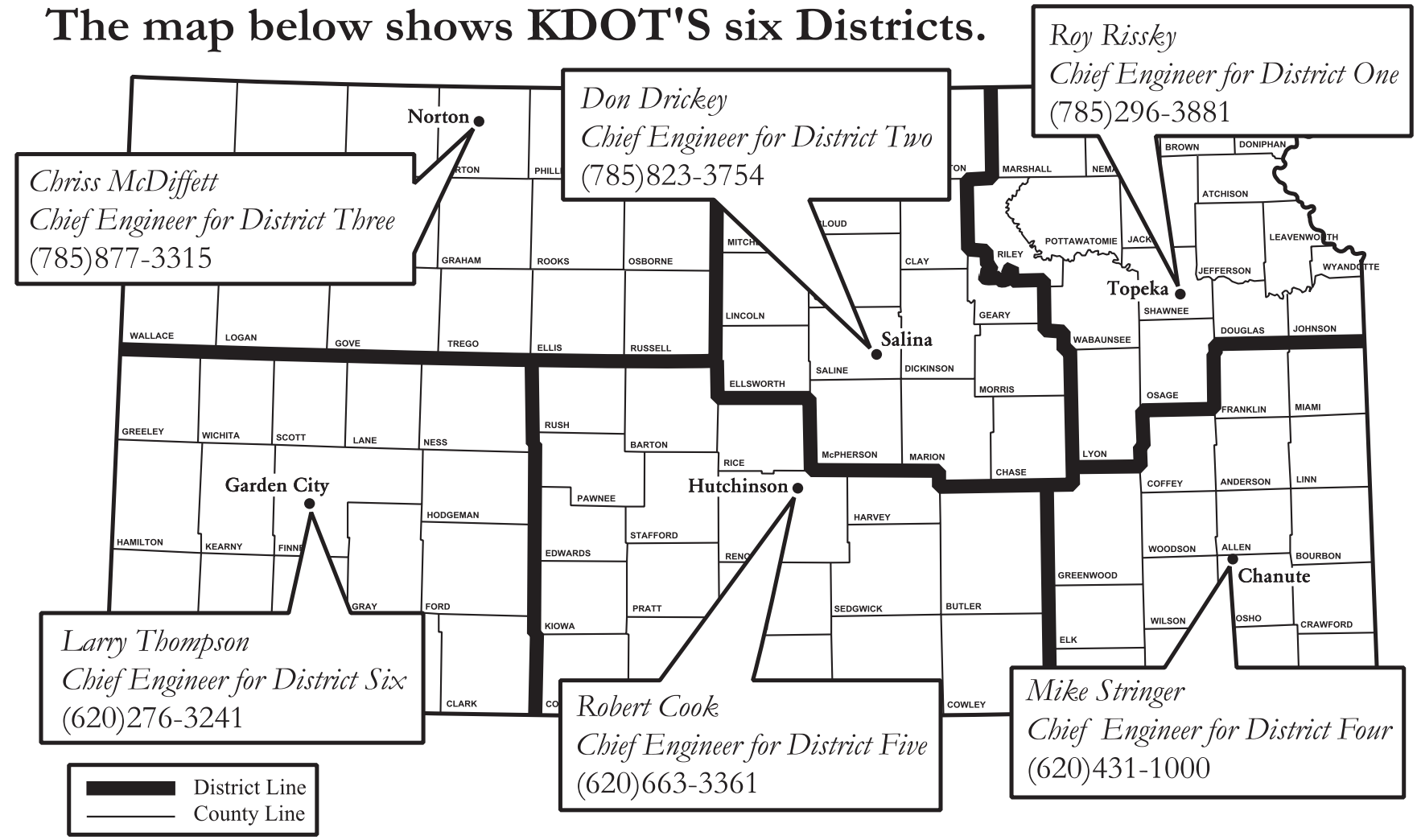
(as of January 1, 2005)

- Deb Miller,
  Secretary of Transportation
- Warren L. Sick,
  Assistant Secretary/State Transportation Engineer
- George Laliberte,
  Director of Aviation
- Julie Lorenz,
  Director of Public Affairs
- David Comstock,
  Director of Engineering and Design
- Bob Stacks,
  Director of Administration
- Terry Heidner,
  Director of Planning and Development
- Sally Howard,
  Chief Counsel
- Gene Robben,
  Inspector General
- Marcia Ferrill,
  Chief of Management and Budget
- Mike Crow,
  Director of Operations

All Executive Staff members can be reached at (785) 296-3566. The mailing address is KDOT, 700 S.W. Harrison, Topeka, KS, 66603-3754.

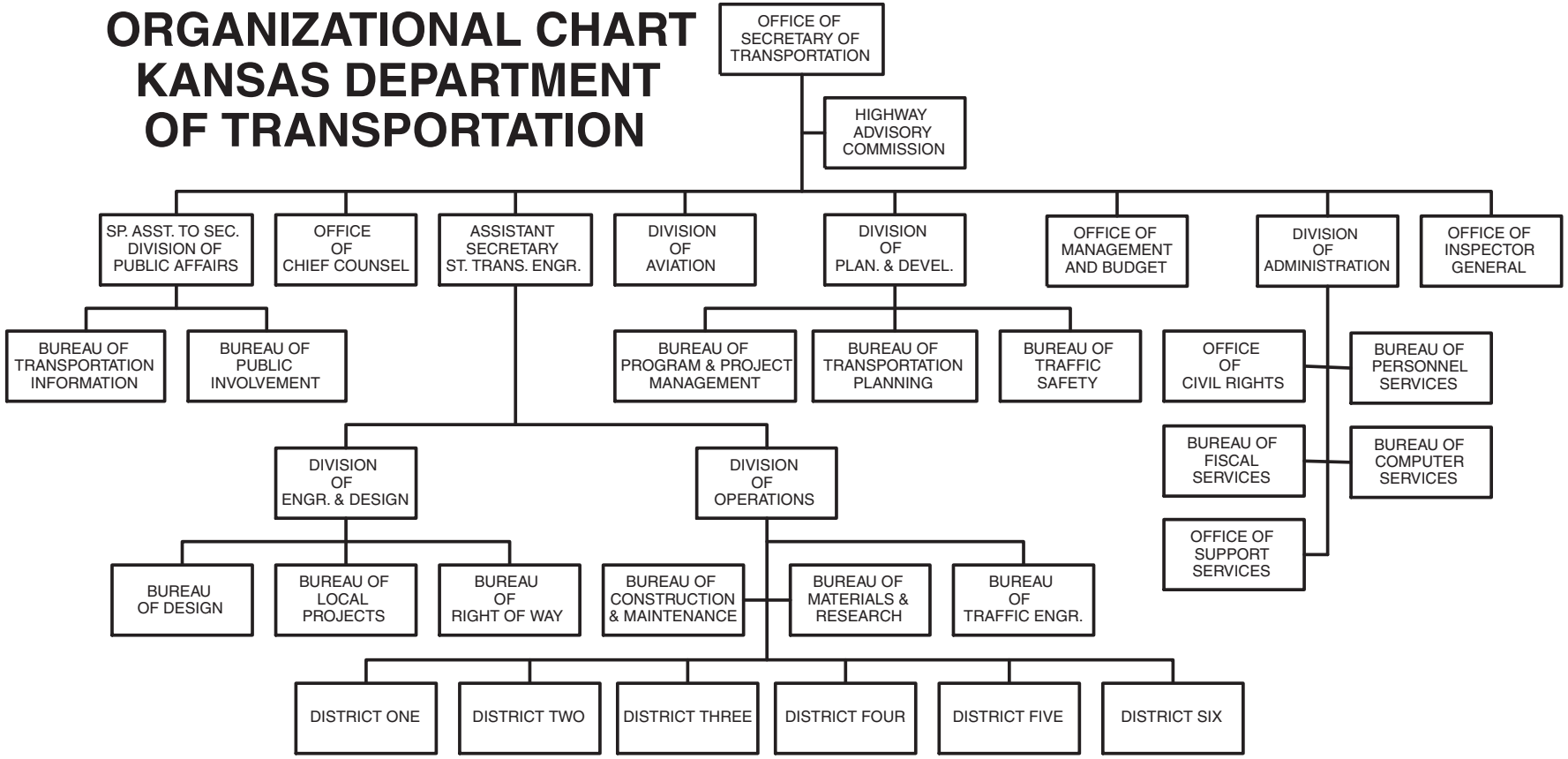
KDOT's experienced workforce has a diverse background. From civil engineers to equipment operators to office assistants to application programmers to engineering technicians, Department employees strive to provide the many quality services necessary for a safe and efficient transportation system in Kansas.

The map below shows KDOT'S six Districts.



Each of the six KDOT Districts is headed by its own District (Chief) Engineer. District Engineers are delegated the responsibility and authority to supervise administration, construction, maintenance, and materials throughout that District. Each District is further divided into several area offices that are headed by Area Engineers. Within each Area are Subarea offices that primarily perform various roadway maintenance activities including snow/ice removal.

ORGANIZATIONAL CHART
KANSAS DEPARTMENT
OF TRANSPORTATION



What we do ...

KDOT's mission is to provide a statewide transportation system to meet the needs of Kansas. We work to achieve that goal each and every day in many different ways. Some of the agency's responsibilities are to:

◆determine project scope, design, and let to construction between 450 to 600 state and local improvement projects a year;

◆identify and study future highway traffic needs through data collection and evaluations across the state;

◆perform necessary road and bridge maintenance activities;

◆administer federal funding, contract compliance, and inspection of material and labor;

◆develop innovative materials through extensive research to lengthen the life span of roadways;

◆provide resources to assist aviation, public transit, local partnership, and rail crossing and service improvement activities.

A Look at the Comprehensive Transportation Program

The following information describes the Comprehensive Transportation Program (CTP) and some of the programs, administrative issues, and federal transportation issues that involve the department.

Components of the CTP

◆State Highway Program
◆Local Transportation Program
◆Other Modal Programs

■State Highway Program

Highways - Kansas has the fourth largest number of public road miles of any state in the nation. The majority of the state's public roads are not maintained by KDOT. KDOT is responsible for maintaining the State Highway System. Only about 9,565 miles, or 7.1 percent of the total number of public road miles, comprise the State Highway System. However, the State Highway System and its 814 miles of City Connecting Links (city streets that connect rural portions of the State Highway System) carry 53.3 percent of the state's total travel. The chart on page A-5 outlines highway jurisdictional responsibilities and fund sources for highway improvements.

◆ *KDOT mission:*
To provide a state-wide transportation system to meet the needs of Kansas. ◆

The CTP requires the Department to spend a minimum of $3 million per county on highway construction improvements over the life of the program.

The State Highway Program portion of the CTP is divided into four main project categories: Major Modification, Priority Bridge, Substantial Maintenance, and System Enhancement. For more details about the projects and project selection, turn to Parts C and D. (Please note that all Major Modification and Priority Bridge projects for the CTP are listed as part of the Legislative record in the debate over HB 2071. KDOT therefore considers these projects to be a commitment to the people of Kansas.)

A description of each category follows.

Substantial Maintenance

The Substantial Maintenance program provides funding to preserve the "as-built" condition of Kansas highways to the best extent possible. Funds are set aside each year for pavement resurfacing programs; bridge and culvert repairs and bridge painting; and safety, signing, lighting, pavement markings, and emergency work. These projects are selected one year at a time.

Major Modification

Major Modification projects are designed to preserve and improve the service and safety of the existing highway system. Examples of work in this category are reconstruction and rehabilitation of pavement, widening traffic lanes, adding or widening shoulders, and eliminating steep hills or sharp curves. Associated bridge work includes widening narrow bridges, replacing obsolete bridges, and modernizing bridge rails and guard fences. In addition to major roadway and associated bridge projects, a number of projects are financed with Major Modification funds set aside each year to address specific concerns such as railroad crossings, corridor managment, and other spot location improvements.

HIGHWAY JURISDICTION AND RESOURCES

Road Category	Jurisdictional Authority	Fund Sources
State Highway System 10,379 miles* 53.3% of total travel	**KDOT**	♦State Highway Fund ♦Federal funds ♦Local funds
Nonstate highway system 124,418 miles 41.6% of total travel**	**Cities and Counties**	♦Special City and County Highway Fund ♦Local Funds ♦State allocated federal funds

**Includes City Connecting Links.*
***The remaining 5.1% of total travel is on the 238-mile Kansas Turnpike.*

Priority Bridge

The Priority Bridge program provides funding to replace or rehabilitate bridges that are in a deteriorated condition or are deficient in load-carrying capacity, width, or traffic service.

State Highway Program Components of the CTP

- *Major Modification*
- *Priority Bridge*
- *Substantial Maintenance*
- *System Enhancement*

System Enhancement

The System Enhancement Program consists of projects that substantially improve safety, relieve congestion, improve access or enhance economic development. Projects must be on the State Highway System or be a logical addition to the State Highway System.

CTP authorizing legislation, House Bill 2071, specifies that $1.05 billion of state funds are to be expended or committed to be expended for the period July 1, 1999, through June 30, 2009, for System Enhancement projects. The bill also states that KDOT "shall utilize the selection methodology developed by the Department to select System Enhancement projects."

Local governments submitted projects for funding in one of six categories: Rural Corridor, Rural Bypass, Rural Interchange, Urban Corridor, Urban Bypass, and Urban Interchange. KDOT received about $5 billion in project requests. Projects were compared only to other projects in their category.

The Economic Development Review Panel, appointed by Governor Bill Graves and chaired by Lt. Governor Gary Sherrer, reviewed and scored each project based on potential economic impact. Each project was also carefully reviewed by KDOT and given a score based on objective engineering factors such as traffic volume, safety, and design. The 29 projects selected to receive System Enhancement funding were announced August 4, 2000. (Since then, sponsors have withdrawn two projects.)

Construction of these projects is contingent upon funding as provided in HB 2071, the legislation creating the CTP. For a project list and details about project selection, turn to Part C.

Local Transportation Program

The Local Transportation Program portion of the CTP includes five categories: Special City and County Highway Fund; Local Federal-Aid Projects; Local Partnership Program; City Connecting Link Payments; and Transportation Enhancement. A description of each category follows:

Special City and County Highway Fund

State motor fuels tax revenue received through the Special City and County Highway Fund (SCCHF) is one source of transportation funds for local units of government. On average, about 35.6 percent of Motor Fuels Tax receipts go to the SCCHF. It provides about $160 million per year to local units of government. The SCCHF is distributed directly to cities and counties quarterly by the State Treasurer.

Local Federal Aid Projects

Local units of government as well as the state are provided federal aid through the Transportation Equity Act for the 21st Century (TEA-21) through Federal Fiscal Year (FFY) 2003. KDOT will continue its policy of sharing federal aid with local

units of government. It provides about $51 million per year to local units of government.TEA-21 provided a 45 percent increase to cities and counties resulting in about $17 million per year additional funding for FFY 1998-2003. Local units of government are responsible for programming these projects. Congress is in the process of reauthorizing the federal aid provisions. Although the final outcome of the new federal aid authorization is unknown, KDOT will continue to share the authorized federal aid with local units of government.

Local Partnership Program

The Local Partnership Program includes three categories: City Connecting Link (KLINK) Resurfacing, Geometric Improvement, and Economic Development. Project applications are solicited from cities and counties each June.

The KLINK Resurfacing Set-aside Program provides funding for resurfacing projects on City Connecting Links. KDOT funds these projects on a 75 percent state/25 percent local match basis for cities with less than 10,000 population. For cities greater than 10,000 population, KDOT funds resurfacing projects on a 50/50 basis. The maximum state participation is $200,000 per project.

Geometric Improvement projects help cities widen pavements and add needed turning, acceleration, and deceleration lanes on City Connecting Links. KDOT funds these projects on a 75 to 100 percent state share depending on the size of the city.

Economic Development projects are highway and bridge construction projects that enhance area economic development in Kansas. KDOT funds these on a maximum of 75 percent state/25 percent local match basis.

Local Transportation Program components of the CTP

- *Special City and County Highway Fund*
- *Local Federal Aid Projects*
- *Local Partnership Program*
- *City Connecting Link Payments*
- *Transportation Enhancement*

City Connecting Link Payments

Cities receive payments from KDOT to maintain their City Connecting Links. The CTP increased payments for maintenance of City Connecting Links from $2,000 per year per lane-mile to $3,000 per year per lane-mile.

Transportation Enhancement

Federal statute requires that a minimum of 10 percent of the state's Federal Surface Transportation Program funding be set aside for Transportation Enhancement (TE) projects. These projects fall into three major categories: historic, scenic and environmental, and pedestrian and bicycle facilities and must be directly related to a surface transportation system. This program is funded based on an 80 percent federal/20 percent local match. Applications are solicited from cities, counties, and other public entities and are evaluated based on the intent of the program. In 2003, KDOT awarded projects for Federal Fiscal Year 2004 and 2005. These projects were awarded in anticipation of the continuance of the TE program under the new Federal Highway Act that will replace TEA-21.

Other Modal Programs

Kansas Airport Improvement Program

When time is of the essence, no other means of travel can fulfill time-sensitive requirements the way that air transportation does. Airports serve an important role in the state transportation system. The foremost role is the economic activity generated by companies that rely on airports in the daily conduct of their business. Also important are medical services, both fly-in by professionals and emergency evacuations. In addition, agricultural application, charter, a link to the national air transportation system private air travel, and many other services are available only because of airports.

Other Modal Programs of the CTP

- *Kansas Airport Improvement Program*
- *Rail Service Improvement Program*
- *Public Transportation*

The goals of the Kansas Airport Improvement Program include:

- preserving and improving the state's airport infrastructure;
- minimizing surface travel time to air ambulance pick-up locations;
- increasing safety by improvements to taxiways, ramps, and lighting;
- enhancing community economic development appeal.

A key element of the program is a matching requirement of between 10 to 50 percent, which is determined by community population. The program's $3 million per year in state funds, combined with local matching funds, results in $4 to $4.5 million in improvements per year. Over the course of the program, the average runway pavement condition in Kansas is expected to improve from a "fair" rating in 1999 to a "very good" rating by 2008.

To date, the program has supported 145 projects at 81 public-use airports. These projects are listed in Section C.

Rail Service Improvement Fund

Many areas of the state no longer have service from Class I railroads. Short line railroads provide rail service to such areas, provide an alternative to trucks for freight (primarily grain) shippers, and keep rural areas of the state connected to the national rail network as well as national and international markets for Kansas grains and products. This alternative provides competition and helps keep shipping rates down. It also reduces the number of trucks that would otherwise be on Kansas roads and highways. This in turn avoids increased maintenance and rehabilitation costs for those roads.

Prior to the CTP, KDOT had been operating a small revolving loan program with federal dollars that are used for track rehabilitation. There were no state funds available for rail projects at that time.

The Rail Service Improvement Fund component of the CTP receives $3 million per year for eight years (through State Fiscal Year 2007) and is administered by KDOT's Rail Affairs section. The fund makes available to short line railroads operating in Kansas low-interest, long-term (ten-year) loans and grants to be used primarily for track rehabilitation projects. Funds may also be used for financing and acquisition activities.

At the end of the eight-year period, the Rail Service Improvement Fund will be able to sustain new loans for a few years.

During FY 2004, four short-line railroads used the Rail Service Improvement Fund to undertake seven rehabilitation projects. The rehabilitation projects included the replacement of ties, ballast, rail, anchors, and spikes along various segments encompassing 77 miles of track running through 10 counties. (Section C has project listings.)

Public Transportation

One state and three federal public transit programs provide services to the citizens of Kansas who depend upon public transportation. Without these programs, many citizens would have no way to make medical appointments, hold a job, shop, or be self-sufficient.

KDOT: Responsible and responsive.

Federal Transit Administration (FTA) 49 U.S.C. 5311 provides federal monies to support nonurban area (under 50,000 population) transportation programs that serve elderly persons and persons with disabilities while also providing the general public with an equal opportunity to utilize the services. The program augments existing transportation services and enhances access for participants. About $4.0 million is available yearly to Kansas under the program. FTA 49 U.S.C. 5310 provides federal monies to private nonprofit corporations and associations or public bodies approved by the state to purchase vehicles and related equipment to meet the special transportation needs of elderly persons and persons with disabilities. Urbanized areas and nonurban-areas under 50,000 population are eligible. About $1.0 million is available yearly to Kansas under this program.

FTA 49 U.S.C. 5309 is a capital investment program with annual funding about $3 million depending on Congressional earmarks. Assistance is available for the purchase of vehicles and vehicle related equipment and/or facility construction and/or renovation. Currently there are four facilities that will be built across the state. The facility in Salina has been completed and is now in use. The facility in Hays is under construction and should be completed in the spring or early summer of 2005. Ground breaking for the facility in Girard is scheduled for the autumn of 2004 and Hutchinson is in the process of obtaining the land for where their facility will be built.

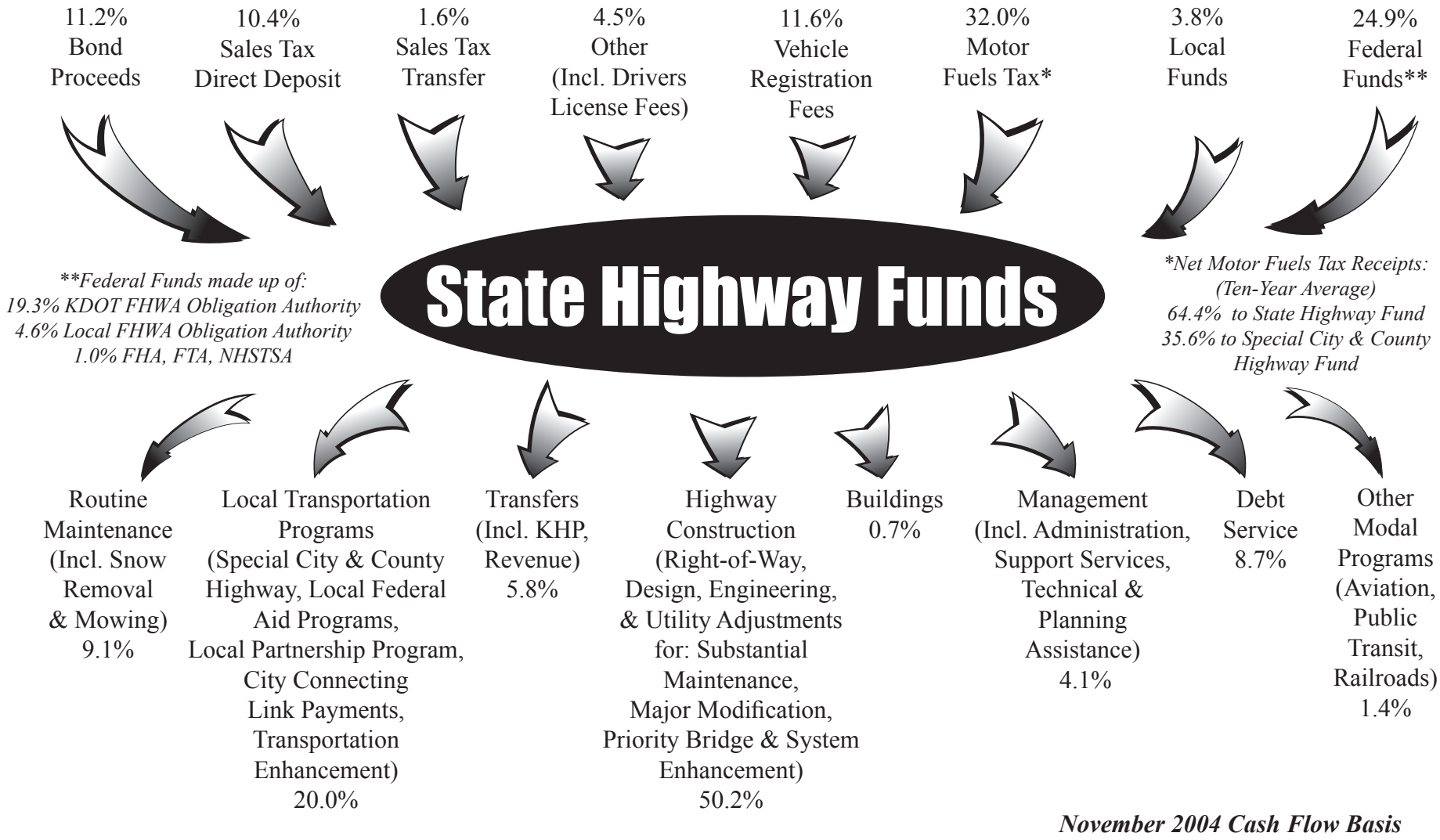
Funding for the state program is available from the Elderly &Disabled Coordinated Public Transportation Assistance Fund. Under the CTP , the state program provides $6 million a year for needed transportation in areas of the state lacking service and to expand and enhance existing services.

During FY 2004, the state program provided a total of $3.8 million to the urban transit authorities in Topeka, Lawrence, Wichita, Johnson County, and the Unified Government of Wyandotte County/Kansas City, Kansas. Rural transit providers received $2.2 million in FY 2004.

The urban transit authorities used the funds for expanding and enhancing service by adding new routes, longer hours of operation, and more service on weekends, and increased para transit service. Rural providers also expanded and enhanced service by extending hours, adding weekend service, and running more routes.

A list of providers and amounts they received is in Section C.

Kansas Department of Transportation Fund Sources and Disposition
FY 2000-2009



November 2004 Cash Flow Basis

FUNDING

The Department is funded with revenue from a combination of sources that include motor fuel taxes, vehicle registration fees, sales tax, bond proceeds supplemented by federal-aid and local funds in some categories.

The 2004 Legislature changed the method by which sales tax revenues is provided to the State Highway Fund by permanently eliminating the sales tax transfer from the State General Fund and increasing the direct deposit of sales tax revenues to the State Highway Fund from a .25 percent tax rate to a .38 percent tax rate in FY 2007 and a .65 percent tax rate in FY 2008 and thereafter. The Legislature also provided for the issue of $150,000,000 million in bonds to be paid by appropriations from the State General Fund for the CTP. An additional $60,000,000 in State General Fund appropriation backed bonds was authorized as a contingent funding if projected federal receipts do not meet estimates.

Current revenue projections are based on estimates from the State Consensus and Highway Revenue Estimating Groups and current statutes. Estimated motor fuel tax collections were down from previous consensus estimates with the decrease for diesel and gasoline reflecting the impact of higher fuel prices. Future growth in motor fuel is expected to be minimal. Registration fees have been strong because of the economy but future increases are expected to be less than two percent per year. Sales tax projections for FY 2004 and FY 2005 have been revised slightly to reflect the slowly recovering economy.

The long term interest and inflation rate projections were revised slightly to reflect current economic projections.

The Department issued $347 million bonds in November 2004, the balance of the State Highway Fund bond authorization for the CTP.

The Department continues to estimate available Federal Highway Trust Funds at 90 percent of apportioned funds.

Much of the State Highway Fund's revenue is not sensitive to inflation and remains basically flat over time. It should be noted that the sales tax is the only source sensitive to inflation. Because of inflation the amount of work that can be done by the same amount of money is reduced.

Given the long term nature of revenue projections and the downturn in the economy and subsequent effect on state funding, the Secretary is concerned with the State's ability to complete the Comprehensive Transportation Program as promised.

TRANSPORTATION REVOLVING FUND

The Transportation Revolving Fund was authorized by the 1999 Comprehensive Transportation Program. The purpose of the fund is to provide flexible, low-cost financial assistance to local governments for qualified transportation projects. The fund provides another way for the State to assist local governments to meet their priority transportation needs. The assistance is available even if the project is not a part of the state highway system.

The fund began accepting applications for projects on December 12, 2003. Each borrower is limited to a maximum of $6 million in financial assistance each year for road and bridge projects. Project applications will be accepted at anytime during the year. The fund can provide financial assistance for any phase of a qualified project.

■Communication System Revolving Fund

The 2004 Legislature established the Communication System Revolving Fund and authorized the Department of Transportation to purchase and lease communication equipment to public safety agencies and to provide access to governmental and non-governmental entities to the extent such access is not required by the Department or public safety agencies. The Secretary is authorized to use debt financing to effect the purposes of the act. The Department is currently drafting the necessary rules and regulations for the program.

■Real Property/Real Estate Transaction Inventory Systems

During the 2001 Legislative Session, House Bill 2406 was enacted requiring the Secretary to report annually on the efforts to enhance the Department's inventory system of records pertaining to all real property owned by the Department of Transportation and all real estate transactions engaged in by the Department of Transportation. Each report is to describe the current status of the inventory system and the steps taken during the past year to improve the inventory system.

The Department is continuing to develop an automated database system to record and manage information pertaining to its real property inventory and real estate transactions. Since January 1, 2000, existing right-of-way has been inventoried and entered into the inventory database along with required new right-of-way on projects as they arrive in the Bureau of Right of Way. An inventory of requests received for the release of potential excess right-of-way beginning January 1, 2000, has also been prepared and updated as requests are received. In addition, an inventory of properties identified as uneconomic remnants has been identified and completed. This information is also in a database for tracking and reporting. Over time, these systems and databases will enable the Department to provide timely annual inventory updates at the same time that historical information is being systematically captured and entered into the system.

A HIGHLIGHT OF ACCOMPLISHMENTS IN 2004

The Kansas Department of Transportation is involved in many ongoing initiatives to be more responsible and responsive to the traveling public, partners, and its employees. From innovative research techniques to 800 MHz communications to flexible work schedules, KDOT strives to provide quality service. The following highlights cover a variety of topics and illustrate a small sampling of KDOT accomplishments in 2004.

CONSTRUCTION

In Fiscal Year 2004, KDOT let to construction 451 projects at an estimated $542.2 million. They included 1,636.5 miles of roadway to be resurfaced, 99 miles of roadway to be reconstructed or rehabilitated, and 42 bridges to be replaced. Significant accomplishments include:

◆***Projects as promised:*** Several major construction projects were completed across the state such as the US-400 bypass near Parsons in July, the Water Well Road interchange in Salina in September, and the I-635 project in Kansas City in December, which was the largest project let to construction by KDOT to date. These and the many other projects completed in 2004 show KDOT's commitment to complete the Comprehensive Transportation Program.

◆***Partnering efforts praised:*** KDOT's Marysville grade separations, levee, and railroad relocation project received a Bronze Award in the Partnering Category from the 2004 National Partnership for Highway Quality (NPHQ). Project team members included KDOT, the City of Marysville, Union Pacific Railroad, U.S. Army Corps of Engineers, and Kirkham Michael Consulting Engineers.

COMMUNICATION

TRAVEL INFO

KDOT focuses on using technology to enhance your ability to communicate more conveniently and effectively. Some examples include:

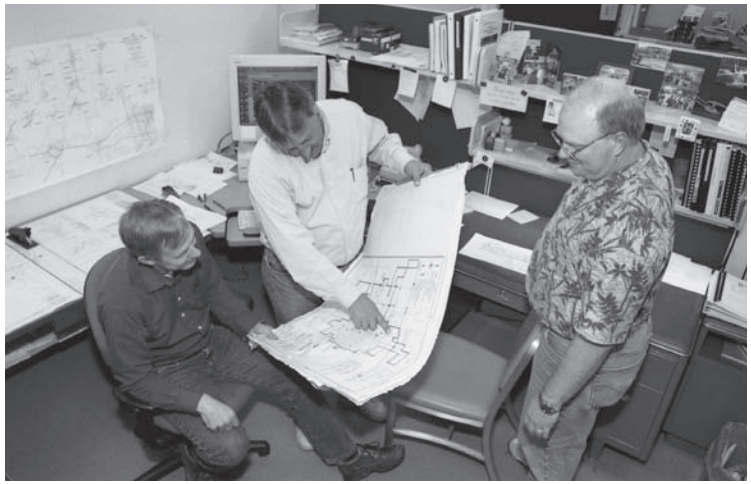
◆***511, KanRoad assist motorists:*** 511, the Advanced Traveler Information System, was launched in Kansas in January 2004. You can call 511 for voice activated information on route-specific road conditions, construction detours, and travel weather information for the State Highway System and the Kansas Turnpike. System information is accessible 24 hours a day, 365 days a year from a landline or cellular phone, free of charge. This road condition information is also available at http://511.ksdot.org.

◆***Electronic manuals save time, money:*** KDOT has electronically published several manuals on the KDOT Internet web site: Road Design Manual, Bridge Design Manual, Bridge Construction Manual and the Hydraulics Manual. It is expected to save thousands of dollars in distribution and updating costs, as well as make the information more readily available to KDOT field offices, contractors, and consultants.

◆***800 MHz increases communications:*** House Bill 2756 was passed during the 2004 legislative session. This bill recognized the importance of the existing State of Kansas 800 MHz communication system infrastructure as a solution to radio communication system needs for public safety users such as law enforcement and emergency responders throughout the state. The bill permits KDOT to increase the number of users on the communication system by leasing 800 MHz radio equipment to local governments and public safety users who otherwise couldn't afford it. Currently, details are being finalized.

◆***Project information available:*** KDOT successfully implemented the Project Information Portal (PIP), which displays information about studies and upcoming major construction projects to the public via the Internet. Projects can be searched by region, county, route, improvement type, and year scheduled. The address is www.ksdot.org/projects/search.asp.

LOCAL ASSISTANCE



Working with city and county governments on local roadways or state highways is an important partnership. Some examples of KDOT improving our work with locals include:

◆***Transportation Revolving Fund:*** In September, KDOT began making flexible, low-cost loans to local governments to fund local street and bridge projects on or off the state highway system. There were 22 applications approved by the Secretary during 2004 with an approximate value of $30 million. Examples of loans for projects include street resurfacing, bridge replacements, and railroad grade separations. Local government interest in the program remains high. The Transportation Revolving Fund has the potential to become an important component of transportation funding for Kansas communities.

◆***Local agreements improved:*** KDOT worked with county officials and consultant representatives to update and combine the master county federal-aid Secondary Road and Off System Roads agreements into one master county federal aid agreement. One agreement benefits everyone involved by saving time, better defining local and KDOT responsibilities, and explaining the current design, right-of-way, environmental, signing, construction inspection, and payment provisions being used.

◆***KDOT assists community:*** The KDOT Pittsburg office responded to a call for assistance from the City of Oswego after a tornado struck the community on July 4, 2004. Several employees assisted in getting US-160 and US-59 cleared and opened the first day. For the next eight days, employees used two loaders and five dump trucks to clear city streets and help residents haul away debris.

◆***Lewis & Clark signs direct travelers:*** KDOT worked with the State Lewis & Clark Committee to ensure signing was in place for the Lewis & Clark Trail as well as each of the historical sites in Kansas. The agency also provided temporary event signing for the Lewis & Clark Bi-Centennial event.

◆***Airports improved:*** Five of Kansas' worst runways were replaced through the Kansas Airport Improvement Program (KAIP) during 2004. Thirteen runways have been totally replaced during the first six years of the program. These runway pavements had completely failed and represented a danger to the flying public. These runway replacements greatly enhance the state airport system and enables med-evac flights into communities previously considered inaccessible.

IN-HOUSE IMPROVEMENTS, MILESTONES

KDOT strives to improve its processes to better serve the public and other state agencies as well as its employees. Some accomplishments worth noting are mentioned below:

◆***Celebrating 75 years of service:*** Former Governor Clyde Reed signed a bill on April 1, 1929, giving the highway commission responsibility for the State Highway System and allowing continued federal funding of road projects. Although this was not the beginning of the agency, it was the "birth" of how the agency has functioned for the past 75 years. KDOT also moved its headquarters offices in 2004 to 700 S.W. Harrison in Topeka. Governor Kathleen Sebelius announced that the building would be named the Dwight D. Eisenhower State Office Building.

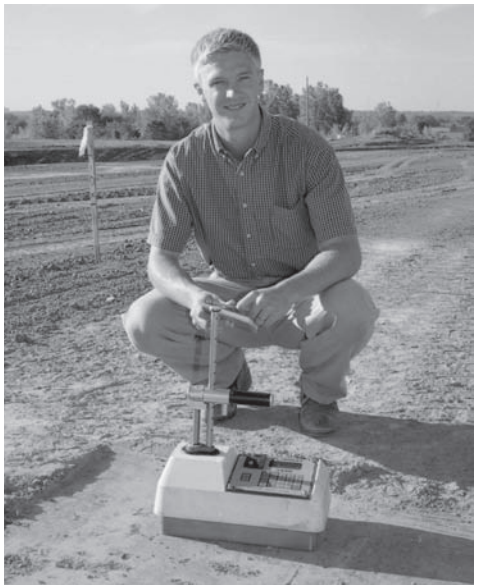
◆***Making state government work better:*** The Partnership Project (P2) is designed to help KDOT employees be more responsible and responsive to the traveling public and to the needs of our partners and employees. This "top-to-bottom" review of our agency resulted in more than 50 short-term recommendations to improve consumer service and, at the same time, become a more efficient agency. Many of these recommendations allow greater flexibility when working with our partners.

◆***Educating agencies:*** KDOT employees attend Quarterly Coordination Meetings with natural resource agencies such as U.S. Environmental Protection Agency, U.S. Army Corp of Engineers, Kansas Water Office, Kansas Department of Wildlife and Parks, State Conservation Commission, and Kansas Department of Health and Environment. This forum promotes a cooperative working relationship leading to streamlined environmental processes.

◆***Automating processes:*** KDOT's Human Resources group has automated many processes this year resulting in time and cost savings. Examples include routing employment information to targeted minority organizations; on-line accident reporting and routing of forms needed to process internal and external accidents involving KDOT property and worker's compensation forms; quicker notification of departing employees for tuition assistance reimbursement and computer systems security; public access computers for state job applications; and a learning management system to provide a single point of contact for all learning activities, meetings and conferences.

◆***Improving work schedules:*** KDOT now offers more work schedule options to help employees balance the demands of work and personal life. The alternate Flexible Work Schedule program includes new options such as four 10-hour day weekly schedules, "every other Friday off" schedules, and more flexible start and end times in work days. Offering more flexible schedules can be used as a tool to recruit and retain employees. This change was based on a recommendation coming out of the KDOT Partnership Project.

◆***Improving employee benefits:*** KDOT actively participated in statewide teams to improve the State's human resources processes and programs. Leadership roles included co-presenter of a new compensation system proposal to top level management in the Department of Administration and the Governor's staff; and chairing the development of the STAR (State Thanks and Recognition) program.



INNOVATIVE TECHNIQUES

KDOT is a leader in research and is always looking for ways to improve materials, increase efficiency, and reduce costs. Some examples include:

◆***New box culvert procedure increases efficiency:*** KDOT maintenance employees in Osage City and Topeka removed and replaced an existing concrete box culvert with a precast concrete box culvert on K-31 about 3.5 miles east of Osage City in late September. This relatively new procedure that uses precast box culvert sections decreased the time the road would normally be closed to traffic from three weeks to five days as well as significantly reduced costs.

◆***Technological advances extends bridge life:*** The foundation support for two bridges on US-81 in Ottawa County was improved by using an auger to construct a pile (shaft) under the existing foundation instead of replacing the bridges.The added support will extend the life of these structures which was being threatened by degrading foundation conditions. KDOT estimates that this project saved more than $1.3 million. The Federal Highway Administration has stated that this technological advance results in significant cost-savings in regards to similar projects across the nation.

◆***Economical load testing procedure:*** A new method of testing bridge foundation strength has been developed. Instead of the normal static load test, this procedure consists of dropping heavy weights from varying heights onto the head of the shaft and measuring the instantaneous deflection and deformation. This new load testing procedure costs a third to an eighth the price of other load tests yet provides the same information about load capacity. Because this procedure is quicker and cheaper, KDOT can test more locations.

◆***Microwave energy utilized:*** KDOT has developed and refined a way to age asphalt cements using microwave energy. This procedure saves about 20 hours over the conventional methods and is being reviewed for national acceptance as an alternative method. In addition to the time savings, this test confirms that the high temperature properties specified are being achieved, which helps to ensure that hot mix asphalt pavements will perform as expected.

SAFETY

Last year in Kansas, more than 450 people were killed and more than 2,000 people suffered disabling injuries in vehicle crashes. Improving safety will be a key initiative in 2005. Some examples include:

◆***Click It. Or Ticket:*** KDOT joined the national Click It. Or Ticket campaign. This was the first year for Kansas to take part in the program and it produced promising first year results in seat belt usage. Seat belt usage rates climbed for this year from 64 to 68 percent.

◆***Seat belt initiative improves safety:*** KDOT funded seat belt media campaigns targeting specific highway corridors each month from July through November. During these campaigns, more than 75 percent of the law enforcement agencies along these corridors (police departments, sheriff's departments, and the Kansas Highway Patrol) have taken part in increased enforcement in an effort to make the traveling public in Kansas safer. This demonstrates the great relationship KDOT has developed with the law enforcement community and the dedication of Kansas law enforcement officers to keep people safe on Kansas highways.

◆***Safety program receives national award:*** KDOT received a national 2004 Bronze Anvil award from the Public Relations Society of America for Press Kits/Media Kits-Services in conjunction with the agency's Care Call Program "Care Call Holiday Gift Bag." This media kit helps to raise awareness across the state on the need to reduce underage drinking.

Part B
Project Selection Criteria

Project Selection Criteria

The Fiscal Year (FY) 2000-2009 Comprehensive Transportation Program (CTP) has four program categories that were originally established by the FY 1990 - 1997 Comprehensive Highway Program: Substantial Maintenance; Major Modification; Priority Bridge; and System Enhancement. Within each of these major categories are funding and/or project-type subcategories. The selection criteria used in developing projects are tailored to the intent and funding constraints of each program component.

Substantial Maintenance

Substantial Maintenance projects, the first major component, are intended to protect the traveling public and the public's investment in its highway system by preserving the "as built" condition as long as possible. These projects are financed with funds that are reserved (or set aside) for specific purposes.

Without proper maintenance, the cost for major repairs and/or replacement at a later date can be several times greater than the cost of timely maintenance. The Substantial Maintenance set-aside funds include Non-Interstate Resurfacing, Interstate Resurfacing, City Connecting Link (KLINK) Resurfacing, Contract Maintenance, Safety Projects, Emergency Repair, Bridge and Culvert Repair, Bridge Painting, Signing, Pavement Marking, and Lighting.

Non-Interstate Resurfacing

Approximately 1,200 to 1,400 miles of two-lane non-Interstate pavement are resurfaced or repaired annually through this set-aside program. The program's intent is to maintain non-Interstate pavements in adequate condition and keep rideability at an acceptable level.

These projects are selected by using the Pavement Management System (PMS). PMS is an integrated set of procedures that was developed by KDOT and Woodward-Clyde Consultants. It recommends pavement maintenance and rehabilitation strategies on both a network and a project level. PMS consists of three interconnected subsystems:

The Pavement Management Information System (PMIS) is a data base and supporting computer programs and tools

Substantial Maintenance Components of the CTP

which contain network and project-level survey results, information downloaded from the planning database, and output from the Construction Priority System. Information from the planning database includes data on geometric features, traffic, and truck load information. Information is regularly transferred between these multiple data sources.

The Network Optimization System (NOS) models the highway network and determines the action for each one-mile segment of the entire system to produce the optimal statewide benefit. The system can operate in either a "desired- performance" mode or a "fixed-budget" mode. In the desired- performance mode, the system selects actions to achieve the selected performance level at the lowest cost. In the fixed-budget mode, the system selects the set of projects that produces the "best" total system performance for the fixed-budget level. A linear programming model is used to minimize the long-term expected average cost of rehabilitation, subject to certain short-term requirements. Program development is a two-part process. NOS selects "locations only" for projects to be let to contract two years following the survey year. The second process (described below) develops scopes for resurfacing projects for the year following the pavement survey.

The Project Optimization System (POS) will serve two functions. First, it is a comprehensive design system for pavement structural sections on new grades. Second, it utilizes site-specific cost and material parameters to revise tentative project scopes from the NOS. Alternative rehabilitation strategies for a single project, or for groups of projects which meet cost and performance constraints from the NOS, are further evaluated. The POS selects the strategy which minimizes the need for future maintenance.

Interstate Resurfacing

Approximately 20 center-line miles of divided Interstate roadway (40 miles of two-lane pavement) are resurfaced or repaired annually through the Interstate Resurfacing set-aside program. Input from the Pavement Management System is used to decide which sections of Interstate are to be resurfaced.

City Connecting Link "KLINK" Resurfacing

This is a Local Partnership Program. The KLINK Resurfacing set-aside program provides funding for resurfacing projects on city streets that connect two rural portions of state highway (called City Connecting Links). These projects are funded under a 50 percent state/50 percent city funding matching arrangement for cities with greater than 10,000 population and a 75 percent state/25 percent city ratio for cities with less than 10,000 population. The maximum state share for a project is $200,000.

KDOT annually solicits requests for eligible projects. All State Highway System City Connecting Links are eligible except those on the Interstate System and fully-controlled access sections on the Freeway System. Cities requesting projects are encouraged to review the proposed projects with the KDOT District Engineer or designated representative before submitting applications. If requested funds exceed available funds, projects are prioritized and selected on the basis of pavement survey conditions.

Contract Maintenance

Maintenance activities are undertaken to offset the effects of weather, deterioration, traffic wear, damage, and vandalism.

Eligible projects are those that KDOT is not adequately staffed or equipped to perform. Due to the diverse types of actions and/or geographic location, contracting for the service is the most cost-effective approach for the agency.

Selection is based on priority as seen from a statewide perspective. Basic criteria for contract maintenance projects are: 1) inability to perform necessary actions with existing maintenance forces; 2) not eligible for other maintenance programs; 3) not anticipated (generally the result of weather or traffic conditions). Projects are selected on the basis of statewide need for corrective action, not on a balanced distribution between districts.

Safety Projects

This set-aside program provides for improvement of intersections or spot locations where major improvement is not required. The addition of left-turn lanes, traffic signals, signing, and pavement marking can be cost effective in reducing crashes at these locations.

The Bureau of Traffic Engineering conducts studies on the physical and operational characteristics of locations. These studies:

1. identify the reason the particular location is being reviewed;
2. identify pertinent conditions;
3. identify concerns;
4. identify possible causes of the concerns;
5. identify possible solutions;
6. estimate cost of each possible solution;
7. rank each solution on the basis of engineering judgment;
8. consider effects on like or similar areas (uniformity factor);
9. provide benefit/cost analysis for each solution;
10. recommend action.

Once projects are identified, they are ranked in descending order by average annual net return. KDOT determines the average annual net return for each location by subtracting the average annual cost from the average annual benefit. First priority is given to the location with the highest average annual net return.

Exceptions to this order are sometimes necessary because city matching funds are unavailable, future projects encompass the selected location, approximate locations are grouped into one project, or several smaller projects are combined resulting in a total net return larger than the return for one project. Projects are scheduled until the available Safety Project funds are exhausted.

Emergency Repair

Funds are set aside annually for emergency repairs that occur as the result of accidents or disasters. Allocation of these funds is authorized by the State Transportation Engineer when accidents/weather-related causes occur.

Bridge and Culvert Repair

The Bridge Repair and Culvert Repair set-aside programs supplement the Priority Bridge program (see B-11). The program aims to restore the structural integrity of bridges and culverts. Bridge repair work includes: overlaying concrete decks; replacing or resetting expansion joints; resetting bearing devices; repairing abutments, piers, or girders; and repairing damage from external sources.

Each District, using the Bridge Management Engineer's

recommended repair list, submits prioritized lists of candidate bridge and culvert projects to the Bureau of Construction and Maintenance and the Bureau of Design. Each candidate project is reviewed for the structure's condition history and latest inspection to confirm necessary repairs or replacement. Statewide lists are prioritized using such factors as maintenance effort, safety, traffic, and engineering judgment. The lists are submitted to the Bureau of Program Management for review to confirm that the candidate structures are not programmed for future work under any other KDOT program. The prioritized lists are merged to create the yearly statewide repair list.

Bridge Painting

There are approximately 800 bridge structures on the Kansas State Highway System that require periodic painting of the structural steel to slow corrosion. These structures contain nearly 242,000 tons of structural steel. They are categorized into two groups:

Group A:

Structures which have 10 tons or more of structural steel.

The Bridge Management Engineer prioritizes these structures (approximately 760 bridges) according to the Bridge Inspection Manual's "Paint Condition Rating." The statewide prioritized list is reviewed by the Bureau of Program Management to confirm that each candidate structure is not programmed for future work under any other KDOT program. Projects are then scheduled in order of priority until available funds are exhausted.

Group B:

Structures having less than 10 tons of structural steel.

Each District is responsible for the painting of these structures (approximately 40 bridges statewide).

Signing

This program was established in 1996 to address necessary sign replacements on the State Highway System due to pending new federal requirements for minimum retroreflectivity of signs. This program schedules sign replacements based upon highway route mileage statewide and the total mileage of all the routes in each District for that year. This program excludes signs on any other state projects that include sign replacement for that highway route in the same year. This program also excludes any signs that were replaced within seven years of the scheduled date of the replacement project.

Pavement Marking

This set-aside program was established in FY 1996 to address pavement marking necessary due to pending new federal requirements for minimum retroreflectivity of pavement markings. Improvements in this category utilize high-performance, long-life pavement marking materials. Efforts are also made to identify those marking materials with wet-weather retroreflectivity. This program is limited to projects that do not have high-performance markings included under any other KDOT program. Projects are selected by the Bureau of Traffic Engineering based upon a roadway's traffic volumes, past performance of marking material, geometry, surface condition, surface type, crash history, and, in the case of new marking materials, the research benefit.

Lighting

Because lighting is beneficial to the safety and operation of the highway system, this set-aside program was established in FY 2000. Projects are selected by the Bureau of Traffic Engineering based on the roadway's volume and night-time crash history. This program is limited to projects which are not included under any other KDOT program. Projects are scheduled until the available lighting funds are exhausted. (At other locations, lighting may be installed by the local unit of government by obtaining a highway permit. In general, the local entity bears the cost of installation, maintenance, and operation.)

■Major Modification

The Major Modification program is the second major component of the FY 2000-2009 CTP. It is designed to improve the service, comfort, capacity, condition, economy, or safety of the existing system. It includes a number of set-aside programs: Economic Development; Geometric Improvement; and the federal-aid Railroad/Highway Crossing and Safety programs. Only a portion of the Railroad/Highway Crossing and Safety funds are included in the state program because most of the projects are off the State Highway System. Two new set-aside programs, Guard Fence Upgrades and Railroad Grade Separations, were established in FY 1996 and 1998 respectively.

For the CTP, four additional new set-aside programs were established: Corridor Management; Railroad Crossing Surfacing; Local Partnership Railroad Grade Separations; and Intelligent Transportation Systems (ITS).

Non-Interstate Roadway and Associated Bridges

Construction Priority System - Major Modification Interstate and Non-Interstate roadway and Priority Bridge projects are selected using the Construction Priority System. It ranks roadway sections and bridges for improvement by the seriousness of their deficiencies.

The system was developed by KDOT and Woodward-Clyde Consultants in 1981. The system originally consisted of two formulas – one for roads and one for bridges – that used input from KDOT's planning data base to measure the relative need for improvement of all roads and bridges. Both the roadway and the bridge formulas have since been modified by KDOT, and a third formula, for Interstate roadway rehabilitation projects, has been developed by modifying the original roadway formula to apply to Interstate roadway sections only. All three formulas are currently under review.

KDOT runs the three priority formulas annually to update priority ratings by using updated survey information. The output from the formulas, prioritized lists of roadway control sections and bridges, are used to identify logical projects. Projects with the highest relative need are programmed for improvement first within available funding and based on scheduling considerations. This process was used to select projects in the CTP Major Modification program and Priority Bridge program. These are the basic steps used to develop the multiyear program:

1. Develop funding estimates.
2. Identify and prioritize projects, determine improvement scopes, and prepare cost estimates.
3. Earmark set-aside funds.
4. Balance project costs and funding by fund class and

obligation limit within each fiscal year.

5. Prepare summary of project costs and funding by fund class and fiscal year.
6. Review of draft program, cost, and funding summary data by Program Review Committee.

Non-Interstate Projects - Roadway work in this category includes reconstruction/heavy rehabilitation of pavement, widening traffic lanes, adding or widening shoulders, and improving alignment (i.e., eliminating steep hills or sharp curves). Associated bridge work includes widening narrow bridges, replacing obsolete bridges, and modernizing bridge rails for bridges within the limits of each project. Non-Interstate roadway projects were prioritized using the Non-Interstate Roadway Priority Formula. A schematic of the formula is shown on page B-19.

Interstate Roadway and Associated Bridges

Roadway work in this category includes resurfacing, restoring, rehabilitating, and reconstructing pavement on the Interstate System. A separate priority formula was developed for Interstate roadway rehabilitation by KDOT in January 1988. A schematic of the formula is shown on page B-20.

The Interstate Roadway Formula was reviewed prior to selecting projects for FY 1998. As a result of this review, use of the formula was suspended due to data-related issues and the need for the formula to more accurately reflect the structural condition of Interstate pavements. KDOT is in the process of reviewing both current data used in the formula and computer procedures for new data that evaluate pavement by pavement layer type, thickness, age, and axle loadings. For FY 1998-2009, Interstate Roadway projects were selected based on the age of the underlying pavement, pavement deterioration requiring frequent and repeated Substantial Maintenance projects, and system rehabilitation continuity.

Major Modification Components

of the CTP

Economic Development

Economic Development projects are highway and bridge construction projects intended to enhance the economic development of the State of Kansas. This is a Local Partnership Program in which a project's cost is shared by the state and a local unit of government. Local support must be at least 25 percent of a project's total cost. Eligible projects must have the potential to significantly enhance the income, employment, sales receipts, and land values in the surrounding area.

KDOT annually solicits requests for eligible projects. Applicants are encouraged to review proposed projects with the KDOT District Engineer or a designated representative prior to the submission of the application. Upon submission, KDOT's Bureau of Program Management reviews the proposed project

scope and estimate. All projects are then assembled in a single package and presented to the Kansas Highway Advisory Commission. Staff from KDOT and the Kansas Department of Commerce and Housing assist the Highway Advisory Commission by evaluating the projects. The Highway Advisory Commission recommends a set of projects to the Secretary of Transportation who makes the final selection.

Geometric Improvement

This is a Local Partnership Program. Funds are set aside annually to assist cities in funding geometric improvements on City Connecting Links (city streets which connect two portions of rural state highway). Geometric improvements are designed to widen pavements, add or widen shoulders, and add needed turning, acceleration, and deceleration lanes. The minimum local funding can range from 0 percent to 25 percent of the project cost, depending on the size of the city. The maximum state share ranges from $700,000 to $950,000.

KDOT annually solicits requests for eligible projects. Cities are encouraged to review proposed projects with the KDOT District Engineer or a designated representative before submitting the application. Upon submission, KDOT's Bureau of Program Management reviews the proposed project scope and estimate. All projects are then assembled in a single package and presented to the Highway Advisory Commission. KDOT staff assists by providing project-related information and design criteria. The Highway Advisory Commission recommends a set of projects to the Secretary of Transportation, who makes the final selection.

Surface Transportation Program Safety Funds

The 1998 federal Transportation Equity Act for the 21st Century (TEA-21) sets aside a minimum of 10 percent of a state's Surface Transportation Program (STP) funding for use on safety construction projects, including safety projects and railroad/highway crossings. These programs are described below.

Railroad/Highway Crossing

This federal-aid program funds protective device installation and hazard elimination at railroad/highway grade crossings on public roads. Federal-aid finances up to 100 percent of the cost of these projects.

In accordance with Section 130 of the 1973 Federal-aid Highway Act, KDOT has established a state rail crossing inventory and formula to prioritize all 6,200 at-grade public crossings in Kansas.

The priority formula "hazard index" is used to rate the relative hazard potential for all crossings and is based on highway traffic, train traffic, and a warning device factor. A schematic of the formula is shown on page B-20.

Each year a number of the highest ranked crossings that have not been addressed in prior programs are selected for review. A preliminary review of these crossings is conducted to verify crossing inventory information.

Crossings from this list that pass the preliminary review are scheduled for on-site diagnostic reviews. The diagnostic review team consists of KDOT, railroad, and local government staff. This team makes recommendations for each crossing as to type of warning system, crossing surface work, approach roadway improvements, drainage improvements,

and brush and timber clearing. A rough cost estimate of the recommendations is developed for each crossing.

The on-site review is sent to the local government officials who have maintenance responsibilities for the highway or roadway. When crossing projects receive a commitment from local government, railroads, and the State, a project implementation procedure is started that leads to improvements at the crossing. With the implementation of prior federal transportation acts, KDOT now utilizes 100 percent federal funding for these railroad/highway crossing safety projects.

In conjunction with the United States Department of Transportation's national highway/railroad crossing safety initiatives, KDOT is also addressing railroad corridor highway/railroad crossing safety projects. For corridor project approval there must be a reasonable number of highway/railroad crossing closures. The highest priority highway/railroad crossings in the corridor are improved with active flashing light and gate signal systems.

STP Safety Projects

These federal-aid projects provide safety improvements on all federal-aid systems. Federal STP Safety funds provide 90 percent of these projects' construction and construction engineering costs. The Bureau of Traffic Engineering administers the majority of the STP Safety program. The Bureau of Local Projects administers a small portion of the program for projects on county roads and for cities under 5,000 population.

Four categories of roadway systems have been established for location analysis and funding to ensure that all roadway systems can benefit from federal-aid safety improvements. Each category is allotted a portion of the total amount of STP Safety funds available at the beginning of each federal fiscal year.

Jurisdiction-Location	Population	Funding Split
N Metropolitan	Kansas City/Wichita	38 percent
U Urban	Over 5,000	30 percent
K Rural State Hwys.		20 percent
C County Rds. and other Roadways	Less than 5,000	12 percent

(These figures are not intended to be rigid. The percentages may vary by a few points in any given year. In addition, funds that cannot be utilized in one category may be transferred to another category.)

Identification of High-Crash Locations - For Jurisdictions U and N, cities are requested to submit two years of crash data for up to five high-crash locations on federal-aid routes within their areas. High-crash locations are determined and ranked by descending equivalent-property-damage-only (EPDO) accident rate. The top 50 (approximately) are considered high-crash locations warranting further analysis. Projects in these categories are financed with federal-aid and local matching funds.

For jurisdiction K, to determine if a location is a high-frequency crash location, a comparison is made between the actual crash rate and the statewide average rate for similar highways. The Bureau of Traffic Engineering conducts county-wide road safety audits. From these audits and from traffic studies, high-crash locations are established. High-crash locations are ranked in descending EPDO crash rate order. The top ten are considered high-crash locations warranting further analysis. Projects in jurisdiction K on the rural State

Highway System are financed with federal-aid and state funds.

Jurisdiction C projects are financed with federal-aid and local matching funds rather than state funds. These projects are selected by local units of government and are subject to Federal Highway Administration approval. They are administered by the Bureau of Local Projects.

Prioritization - The identified high-crash locations are prioritized on the basis of the average annual net return for each location. The average annual net return is a dollar amount found by subtracting the average annual costs from average annual benefits. First priority is given to the location with the highest average annual net return. Remaining projects are scheduled in descending order until funds are exhausted. Exceptions to this might be caused by the unavailability of city matching funds, future projects that may encompass the selected location, a grouping of proximate locations into one project, or combining several smaller projects for a total net return larger than one project.

Railroad Grade Separations

This program was established in FY 1998 to replace state highway railroad at-grade crossings with grade separation structures. To be eligible for this program crossings must be:

- a rural or City Connecting Link state highway crossing;
- main line railroad traffic, excluding industrial spur tracks; and
- route classification must be "B" or "C" or be on the National Highway System (NHS).

Eligible at-grade crossings are prioritized using KDOT's priority formula hazard index. This is the ranking formula also used for the Major Modification Railroad/Highway Crossing projects. The formula is based on railroad and highway operational characteristics. Projects are funded with a combination of federal, state, railroad company, and local monies.

Guard Fence Upgrades

This program was established in FY 1996 to address guard fence upgrades on Interstate and selected high-priority corridors where guard fence is not a part of any other Major Modification or Priority Bridge project. This set-aside fund is necessary due to federal requirements.

It is anticipated that the program will require several years to be completed. Locations of individual sites for the program are determined and grouped into projects according to proximity. Prioritization is based on traffic exposure with locations having the highest traffic volumes being scheduled for construction in the earlier years followed in subsequent years by routes with lower volumes.

Corridor Management

The Corridor Management set-aside program was created to address the growing need for KDOT, cities, and counties to jointly manage transportation corridors, particularly in high-growth developing areas. This fund is divided into two subcategories with two-thirds going to a project subcategory and one-third to a contingency subcategory. To be eligible for either category of funds, a corridor must be designated in the district plan, there must be a partnering agreement between the Secretary, city, and county, and there must be a binding corridor master plan in place.

The contingency subcategory of funds is designed to

address rapidly developing areas or sites where transportation infrastructure changes must be made to better accommodate changes in demand. This fund requires a minimum 50 percent local match for state monies. There is also a per-project maximum of $200,000.

The project subcategory of funds is designed to assist newly developing areas in meeting the master plan or to retrofit established areas to master plan standards. Projects are solicited annually and require a minimum 33 percent local match for state monies. There is a per-project maximum of $250,000.

In addition, Corridor Management funds may be used for advance right-of-way acquisition or corridor studies in some special cases.

Railroad Crossing Surfacing

This program was established in FY 2000. Projects under this program will be for at-grade highway/railroad crossing approach and surface upgrades. Eligible crossings will be rural State Highway System crossings and State Highway System City Connecting Link crossings in cities up to 2,500 population.

Projects will be selected from applications for crossing surface improvement projects submitted by railroad companies and Districts. Project scopes will include all necessary materials and activities required for long-term crossing surface and approach improvements. These projects will be funded with 50 percent state and 50 percent railroad company monies.

Local Partnership Railroad Grade Separations

This is a new program established for the CTP. The Local Partnership Railroad Grade Separation Program addresses highway/railroad at-grade crossings off the State Highway System and crossings on the State Highway System, which are on lower priority routes (Route Class "D" and "E"). Project applications will be solicited from local units of government. The project sponsor will be responsible for providing 10 to 20 percent of the project funds, depending on the population of the city or county. Funds provided by the railroad company will be counted as part of the local match funds; the project sponsor will be responsible for negotiating with the railroad.

Projects will be selected based on KDOT's priority formula hazard index. This is the ranking formula also used for the Major Modification Railroad/Highway Crossing projects. The formula is based on railroad and highway operational characteristics. Additional selection consideration will be given to projects with relatively higher rates of local and railroad match finding in order to leverage state dollars. The project selection process will also give consideration to the overall positive effects on communities.

Intelligent Transportation Systems (ITS)

The ITS set-aside program was established to meet the funding needs of ITS/technology-related projects in Kansas. The funding is available to apply technology such as advanced sensor, computer, electronics, communications, and management strategies to increase the safety and efficiency of the transportation system. The funding is available to both state and local agencies and is not necessarily limited to agencies that are transportation oriented. ITS has applications in urban areas, rural areas, transit, and commercial vehicle operations, and consideration for funding will be given to all

of these areas.

The Bureau of Transportation Planning, along with the ITS Steering Committee, establishes project rankings based on:

- project support and integration risks;
- telecommunication considerations;
- design considerations and factors of success;
- funding sources and evaluation consideration;
- cost effectiveness and benefits; and
- local funding match percentage.

Projects are solicited annually and selected based on the criteria listed above.

Priority Bridge

The Priority Bridge program, the third major component of the 2000-2009 CTP, is designed to replace or rehabilitate substandard bridges. Substandard bridges are those in a deteriorated condition or with deficiencies in load-carrying capacity, width, or traffic service. Special consideration is given to replacing one-lane bridges (bridges with roadway width less than 20 feet), restricted vertical clearance bridges, and cribbed bridges (bridges with temporary structural supports to keep them in use).

Priority Bridge Compoments of the CTP

- ***Bridge Replacement/Rehabilitation***
- ***Bridge Deck Replacement***
- ***Culvert-Bridge***

Priority Bridge projects are selected using the Bridge Priority Formula. The formula was developed by KDOT and Woodward-Clyde Consultants in 1981. It was modified by KDOT in July 1987 and again in September 1988. Bridges with the highest relative need are programmed for improvement first within available funding and based on scheduling considerations. A schematic of the formula appears on page B-20.

Bridge Deck Replacement and Culvert-Bridge

Both of these categories expand the Priority Bridge program. The Culvert-Bridge program addresses culverts that are beyond the scope of a Substantial Maintenance project but do not qualify for the Priority Bridge Replacement/ Rehabilitation program. The Bridge Deck Replacement program addresses bridges where the bridge superstructure and substructure are in satisfactory condition, but the bridge deck has deteriorated to the point where a Substantial Maintenance project would not be adequate.

Each District, using the Bridge Management Engineer's recommended repair list, submits prioritized lists of candidate projects to the Bureau of Design. Each candidate project is reviewed for the structure's condition history and latest inspection to confirm necessary repairs or replacement. Statewide lists are prioritized using such factors as maintenance effort, safety, traffic, and engineering judgment. The lists are submitted to the Bureau of Program Management for review to confirm that each candidate structure is not programmed for future work under any other KDOT program. The prioritized lists are then merged to create the yearly statewide repair list.

System Enhancement

The System Enhancement Program is the fourth major component of the CTP. Legislation authorizing the CTP, House Bill (HB) 2071, provides that the Secretary of Transportation shall include in the CTP "system enhancement projects which include additions to the system of highways or which substantially improve safety, relieve congestion, improve access, or enhance economic development. It is the intent of the Legislature that, as nearly as possible, the amount of $1.05 billion shall be expended or committed to be expended for the period beginning July 1, 1999, through June 30, 2009." It also states KDOT "shall utilize the selection methodology developed by the Department to select system enhancement projects."

CTP System Enhancement projects were selected using the same approach that was successfully used for the Comprehensive Highway Program System Enhancement Program in 1990. Project applications were solicited from local units of government. Candidate projects were submitted in three separate categories: Corridor Improvements, Bypass Construction, and Interchange/Separation Improvements.

Each category had unique, objective selection criteria primarily based on engineering and safety factors. Additional credit was given to a candidate project's score for local match funding, lane-miles removed from the State Highway System, and partially complete project development. Local match is a way to measure a local community's support for a project based upon their willingness to invest money in it. Lane-miles removed from the system are a way to gain local cooperation in removing redundant miles from the State Highway System. Credit for projects where project development is partially complete takes into account projects that have previously been determined to be a priority but for which funding has been unavailable.

Only city/county governments or coalitions of city/county governments were allowed to submit an application for a System Enhancement project. System Enhancement projects must be on the State Highway System or a logical addition to the State Highway System.

All of the selected System Enhancement projects for the CTP were announced August 4, 2000. Construction of these projects is contingent upon funding as provided in HB 2071. Any reduction of the HB 2071 funding commitments could negatively impact the System Enhancement projects.

Fund Distribution - No single set of criteria could be used to rate the three very different types of projects. Likewise, a distribution of the funds available had to be made to the various project types. Furthermore, a distribution of funds had to be made between the urban and rural regions of the state.

Funds were distributed between urbanized and nonurbanized counties on the basis of vehicle miles of travel. The breakdown was based on 1997 Annual Average Daily Traffic (AADT) counts that showed approximately 35 percent of all vehicle miles traveled on the State Highway System are in the five urbanized counties. The urbanized counties are Douglas, Johnson, Sedgwick, Shawnee, and Wyandotte. Vehicle miles of travel are used because they are a measure of both the source of highway revenues and highway usage, which in turn relate to need.

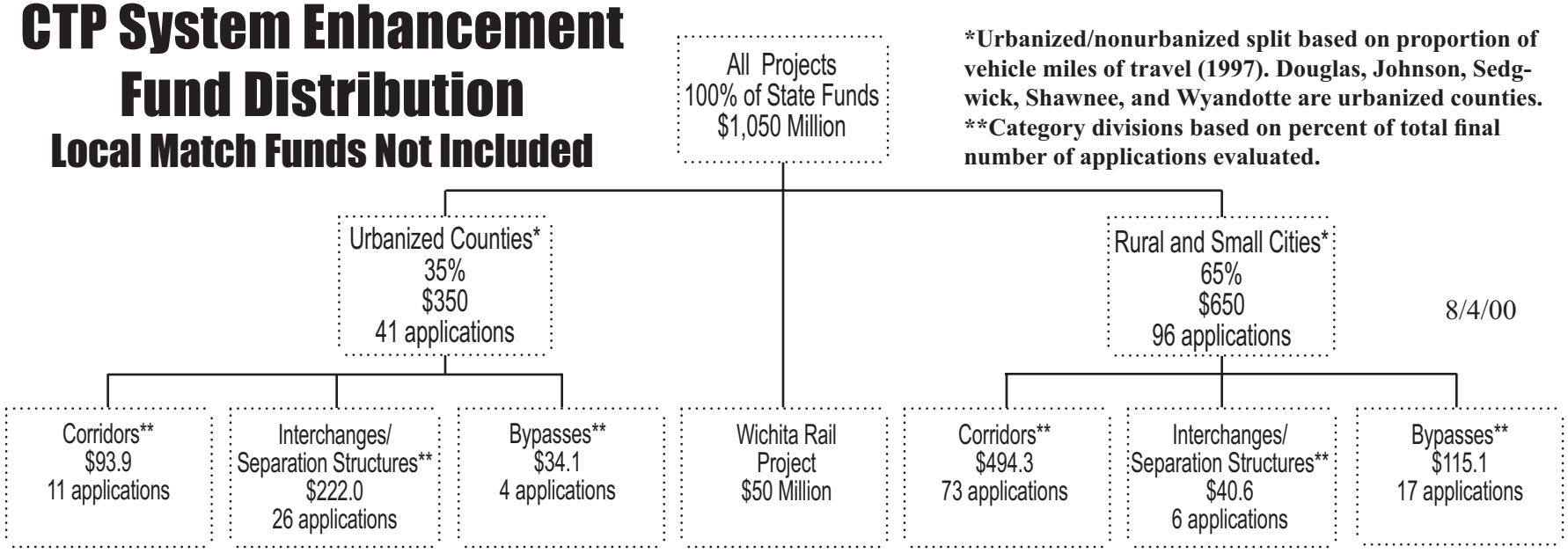
The urban and rural fund allocations were further divided

between the Corridor Improvements, Bypass Construction, and Interchange/Separation Improvements categories based on their percent of the total final number of applications received in each category. In addition, $50 million of the System Enhancement funds were earmarked for the Wichita Rail Project. The chart below shows the fund distribution.

Economic Development Review Panel (EDRP) - An independent group of experts reviewed the economic development potential of the candidate projects. Governor Bill Graves appointed the EDRP in July 1999, and members included Lt. Governor Gary Sherrer (Chairman), Topeka; James M. AuBuchon, Pittsburg; Mary Birch, Overland Park; Sheryl Dick, Garden City; Don A. Hill, Emporia; John G. Montgomery, Junction City; John L. Rolfe, Wichita; Billie Jo Smart, Washington; and Lavern D. Squier, Hays. Based on their own knowledge and experience, their observations, and the information provided by the applicant, the panel assigned the Economic Development Enhancement Rating to each project. The panel could assign a score up to 20 points for each project.

Project Evaluation - As specified in HB 2071, KDOT evaluated and ranked the eligible project requests based on criteria developed by the Department.

KDOT developed a score for each project based on objective engineering criteria, considering such factors as current and projected traffic volume, design, and safety issues. This score could be a maximum of 80 points. The EDRP considered a project's potential for economic development and



assigned a project score of up to 20 points.

These scores were combined and then any points earned through "extra credit" categories were added to the score. A project sponsor could earn extra credit in one of three ways: offer to take over responsibility of lane miles currently on the State Highway System once the System Enhancement project is completed and open to traffic; offer a percentage of the project cost as local matching funds; or submit a project where a portion of the project may already be complete. The combination of these three numbers - KDOT score, EDRP score, and extra credit points - created the project's final score. It was then prioritized against the other projects in its category, and projects were funded from the top down until dollars in that category were exhausted.

KDOT received more than $5 billion in project requests for the $1 billion System Enhancement pool. KDOT did decide to fund some projects that were ranked lower than other candidates because these projects could be fully funded with the remaining dollars available in the category. KDOT also decided to partially fund some projects. All of these decisions were made to make the best use of the dollars available.

Corridor Improvements

Eligibility for Corridor Improvements - Each proposed project must be either on the currently approved State Highway System or must be eligible to be added to the System as determined by KDOT in accordance with the established guidelines. Eligible projects must also substantially improve the capacity and serviceability of significant segments of the route. Design standard continuity and significant traffic volume changes are considered in determining eligibility. Projects in this category might include such improvements as replacing a two-lane facility with a four-lane facility, adding a new two-lane or four-lane corridor, or improving significant segments of a major thoroughfare in an urban area.

Criteria for evaluating corridor candidate projects:

Evaluation Attributes	**Percent Relative Weight**
Economic Development Enhancement	20
Current Volume/Capacity Ratio	25
Estimated Future Volume/Capacity Ratio	20
Average Trip Length Index	5
Accident Rate	5
Fatal Accident Rate	5
Priority Formula Rating	10
Truck Traffic	10
Sub-Total	**100**

Extra-Credit Factors	
Lane-Miles Removed	Unlimited
Percent Local Match	0 to 100
Partially Complete Project Development	0 to 18

Bypass Construction

Eligibility for Bypass Construction - Each proposed project must be either on the currently approved State Highway System or must be eligible to be added to the System as determined by KDOT in accordance with the established guidelines. When the bypass is constructed and open to traffic, the existing route through the city will be removed from the State Highway System.

Criteria for evaluating bypass candidate projects:

Evaluation Attributes	Percent Relative Weight
Economic Development Enhancement	20
Estimated Future Traffic Volume	15
Percent Through Traffic	20
Current Volume/Capacity Ratio	20
Accident Rate	10
Truck Traffic	15
Sub-Total	**100**

Extra-Credit Factors	
Lane-Miles Removed	Unlimited
Percent Local Match	0 to 100
Partially Complete Project Development	0 to 35

Interchange/Separation Improvements

Eligibility for Interchange/Separation Improvements

- All Interchange/Separation Improvements must be on the currently approved State Highway System. For this System Enhancement category only, the project sponsor must provide 100 percent of the total cost of preliminary engineering, right of way, and utility adjustment.*

Criteria for evaluating interchange/separation candidate projects:

Evaluation Attributes	Relative Weight
Economic Development Enhancement	20
Safety Enhancement	20
Operational Enhancment	15
Cost Effectiveness	15
Traffic Served	30
Sub-Total	**100**

Extra-Credit Factors	
Lane-Miles Removed	Unlimited
Percent Local Match	0 to 100*
Partially Complete Project Development	0 to 47

A Note About System Enhancement Project Estimates

Project sponsors submitted an estimated total project cost in FY 2000 dollars as a part of their application. The FY 2000 cost estimate was used in the local match calculation. One point of extra credit was given for each percent of local match offered. In order to compare "apples to apples" when calculating the local match credit, local match payments were converted to FY 2000 dollars and divided by the submitted FY 2000 total project cost resulting in the percent local match.

Separate from the local match calculation, each project scope was reviewed to ensure that the appropriate design criteria and all project components were included in the cost estimate. Some project scopes and cost estimates were modified to reflect these requirements and ensure that the cost estimate was appropriate. Also, before the list of selected projects could be finalized, project costs had to be adjusted to FY 2009 dollars to account for inflation. The majority of projects will be let to contract at the end of the program because of their size and complexity.

KDOT had to estimate for the highest potential costs to ensure that there will be adequate funds to construct the projects as promised. For large complex projects specific alignments, lane configurations, and scopes are not known at this time. These factors, along with new bridge locations and right of way and environmental issues, have a substantial impact on cost.

KDOT's estimates are just that - estimates. If money becomes available over the life of the program because of cost savings on the 29 originally selected System Enhancement projects, KDOT will need to carefully consider where those

additional dollars should be allocated. The first priority would be to make sure that the originally selected projects are fully funded. Several selected projects were only partially funded, and those projects would need to be reviewed to see if there would be other work that could or should be done. Funding projects beyond the original 29 System Enhancement projects would depend on the status of the already selected projects and the amount of money available. It will be several years before it is known whether additional System Enhancement funds will become available due to cost savings.

System Enhancement Project

◆**US-24/40 State Avenue**
US-24/40 (State Avenue) in Wyandotte County from west of the K-7 interchange, east to 118th Street. This project will reconstruct the roadway to a five-lane section, improve the US-24/40 & K-7 interchange, and complete any turnback work on US-24/40/73 from K-7 east to I-70 near KS-MO state line.

◆**I-35 & US-69 Interchange with 87th Street**
I-35 and US-69 interchange with 87th Street in Lenexa and Overland Park. This project will reconstruct the interchange to current design standards and increase traffic capacity.

◆**US-40 (6th Street) Lawrence**
US-40 (6th Street) in Lawrence from K-10 (South Lawrence Trafficway) east through the Wakarusa Drive intersection. This project will reconstruct the roadway from two lanes to four lanes.

◆**US-50 / 400 Garden City West**
US-50/400 from Gray/Finney County line east to junction with US-83. This project will complete the design for a four-lane access-controlled facility within the project limits and construction from one mile west of Holcomb east to junction with US-83.

◆**US-50 Newton Interchange**
US-50 and K-15 interchange in Newton. This project will improve and signalize the intersection of K-15 and 15th Street.

◆**US-50 South Hutchinson Interchange**
East US-50 and K-96 interchange in South Hutchinson. This project will reconstruct the interchange to improve traffic flow and capacity.

◆**US-54 El Dorado Bypass**
Southeast of El Dorado: new alignment from US-54/77, northeast to US-54. This project has been **cancelled** at the request of the project sponsors.

◆**US-54 Woodlawn Interchange**
US-54 (Kellogg) from Sylvan Lane east to Mission Road. Reconstruct US-54 to six-lane freeway section and construct interchange at Woodlawn Road.

◆**US-54 Rock Road Interchange**
US-54 (Kellogg) from Mission Road to Heather Street. Reconstruct US-54 to six-lane freeway section and construct interchange at Rock Road.

◆**US-54 Goddard Bypass**
US-54 from existing US-54 freeway section west of

Goddard east to near 167th Street. Design and corridor preservation for a freeway section.

◆**US-54 Corridor from Kingman to Pratt**
US-54 from west of Pratt, east to the existing four-lane section east of Kingman. The System Enhancement recommendation is to complete the preliminary engineering and right-of-way acquisition for the entire corridor. Construction will begin approximately 4 miles east of the Pratt/Kingman County line and proceed east for 10 miles.

◆**US-59 Atchison River Bridge**
US-59 the Amelia Earhart Bridge over the Missouri River in Atchison. This project will replace the current bridge with a four-lane improvement.

◆**K-61 Corridor from Hutchinson to McPherson**
K-61 from four-lane section in Hutchinson, north to existing four lanes south of McPherson. This project will construct a four-lane access controlled improvement with bypasses at Inman and Medora.

◆**US-69 Corridor in Johnson County**
US-69 from 119th Street, north to I-35, and then on to 75th Street. This project will complete the design work and right-of-way acquisition for a reconstruction to six lanes. Construction will be determined as funding permits.

◆**I-70 Junction City Interchange**
I-70 and Exit 298 interchange with East and Chestnut Streets. This project will reconstruct interchange to increase vertical clearance over the sideroad.

◆**US-73 / K-7 (Main Street) Lansing**
US-73/K-7 (Main Street) from south of Gilman Road, north to Connie Street. This project will widen the roadway to five lanes and add lighting, landscaping, and access control.

◆**US-75 Jackson County Interchange**
US-75 and County Road 150 intersection just south of Mayetta. This project will construct a new diamond interchange and frontage roads.

◆**US-77/US-166 Arkansas City Bypass**
US-77 bypass of Arkansas City in the southeast part of town. This project is the continuation of the plans started under the Comprehensive Highway Program. It will construct a four-lane bypass of US-77.

◆**US-81 (47th Street) in Wichita**
US-81 (Broadway Avenue) from 48th Street, north to 47th Street, then east on US-81 (47th Street) from Broadway Avenue east through the I-135 interchange. This project will complete a preliminary engineering study for future corridor improvements.

◆**US-83 Liberal Corridor Preservation**
US-83 on the east side of Liberal from US-54 north to north of Liberal. This project has been **cancelled** at the request of the project sponsors.

◆**I-135 Salina Interchange**
I-135 and Waterwell road overpass. This project, located approximately 1 mile south of the Shilling Road interchange, will construct a diamond interchange utilizing the existing bridge.

◆**US-169 Coffeyville** (two System Enhancement projects)
US-169 from the junction with US-166 north to County Road 2800. This project will construct a four-lane access-controlled improvement.

◆**US-183 Hays**
US-183 from south of I-70 ramp terminal, north through 55th Street. This project will construct a four-lane access-controlled roadway.

◆**K-254 Northwest Bypass in Sedgwick County**
This new alignment will start from US-54 near 167th Street proceeding north and east to K-96 near 45th Street North. This project will acquire the right-of-way for a corridor preservation of a freeway section.

◆**US-400 Dodge City Bypass**
This new alignment will start from the junction of US-50/US-50B, proceeding south and east to US-56 west of Dodge City. This project will construct a two-lane bypass on four-lane right-of-way with access control.

◆**US-400 Parsons Bypass**
This new alignment begins approximately 3.5 miles west of Parsons, proceeding around the city to the north to 2.5 miles east of Parsons. This project will construct a two-lane bypass on four-lane right-of- way.

◆**US-400 Study**
US-400 from junction with US-83 near Garden City in Finney County, south and east to east of Mullinville in Kiowa County. This project will complete a location and design concept study for future four-lane improvements of this corridor.

◆**I-435 Antioch Interchange**
I-435 and Antioch overpass in Overland Park, Johnson County. This project will construct an interchange with Antioch Road in conjunction with I-435 widening and required work on US-69.

Formula referred to on page B-6

[1] **Average Annual Daily Traffic** – The number of vehicles per day on a roadway segment averaged over one year.

[2] **Substandard Stopping Sight Distance** – A stopping distance for a vehicle that is less than the agency standard. The standard is a function of the design speed which is based on the Kansas Route Classification and AADT group.

[3] **Substandard Horizontal Curve** – A sharp curve on a roadway segment on which the design speed cannot be maintained; the segment has a posted speed limit that is less than the design speed.

[4] **Capacity Adjusted AADT** – Adjusted for number of lanes and capacity so that different roadway types can be evaluated on a comparable basis.

Non-Interstate Priority Formula (Attributes/Adjustment Factors)

		Adjustment Factors							
		Accident Rate (See below)	Posted Speed (See below)	Facility Type		Shoulder Type		Route Class (See below)	AADT[1] (See below)
Attribute (Need Value)	Relative Weight	*	*	Divided	Undivided	Stabilized	Unstabilized	*	*
Driver Exposure Attributes: No. of Narrow Structures Per Mile	0.086	0 to 1	0 to 1					0 to 1	0 to 1
Shoulder Width	0.089	0 to 1	0 to 1	0.54	1.0	0.607	1.0	0 to 1	0 to 1
No. of SSSD[2] Per Mile	0.069	0 to 1	0 to 1		1.0			0 to 1	0 to 1
Lane Width	0.101	0 to 1	0 to 1	0.5				0 to 1	0 to 1
No. of SHC[3] Per Mile	0.099	0 to 1	0 to 1				0 to 1	0 to 1	
Volume/ Capacity (Maximum Default Value = 1.15)	0.091							0 to 1	0 to 1
Commercial Traffic (Maximum Default Value = 725)	0.065			0.376	1.0	0.519	1.0	0 to 1	0 to 1
Rideability	0.088						0 to 1	0 to 1	
Pavement Structural Evaluation (PSE)	0.208							0 to 1	0 to 1
Observed Condition	0.104							0 to 1	0 to 1
Sum of All Weights	**1.000**								

* Non-Interstate Priority Formula (Adjustment Factors)

Accident Rate	Adjustment Factor	Posted Speed	Adjustment Factor	Route Class	Adjustment Factor	Capacity -Adjusted AADT[4]	Adjustment Factor
High	1.0	≥ 55 MPH	1.0	A	1.0	20,000	1.0
Medium	0.858			B	0.9	10,000	0.925
Low	0.734	< 55 MPH	Varies from	C	0.7	6,000	0.895
			0 to 1	D	0.5	2,000	0.865
				E	0.3	0	0.850

Formulas referred to on pages B-6, B-7, and B-11

Interstate Priority Formula (Attributes/Adjustment Factors)

Attribute Relative (Need Value)	Weight	Adjustment Factors					
		Facility Type		Shoulder Type		Route Class (See B-20)	AADT[1] (See B-20)
		Divided	Undivided	Stabilized	Unstabilized		
Commercial Traffic	0.140	0.376	1.0	0.519	1.0	0 to 1	0 to 1
Rideability	0.189					0 to 1	0 to 1
Pavement Structural Evaluation (PSE)	0.447					0 to 1	0 to 1
Observed Condition	0.224					0 to 1	0 to 1
Sum of All Weights	**1.000**						

[1] **Average Annual Daily Traffic** – The number of vehicles per day on a roadway segment averaged over one year.

Bridge Priority Formula (Attributes/Adjustment Factors)

Attribute (Need Value)	Rel. Weight	Adjustment Factors
		AADT[1] (See B-20)
Bridge Width (Driver Exposure Attribute)	0.222	0 to 1
Deck Condition	0.169	0 to 1
Structural Condition	0.359	0 to 1
Operating Rating	0.250	0 to 1
Sum of All Weights	**1.000**	

[1] **Average Annual Daily Traffic** – The number of vehicles per day on a roadway segment averaged over one year.

Priority Formula For Railroad Crossings

Hazard Index = AADT x T x W

AADT = Average Annual Daily Traffic
T = Average Trains per day
W = 0.1 for gates
W = 0.6 for flashing lights
W = 1.0 for cross bucks

Part C
Project Listings

PROJECT LISTINGS

Included in this section are two maps showing Comprehensive Transportation Program state highway system projects, and maps involving aviation, public transit, and rail. A detailed explanation of the methods or criteria employed in the selection of highway projects can be found in Part B. An explanation of changes from last year's Annual Report project list is also included.

K.S.A. Supp. 68-2315, as amended, requires information concerning construction work completed in the preceding fiscal year, construction work in progress, and planned projects for future years.

These project listings are available on KDOT's Internet site at www.ksdot.org/maps/main.html, in the 2005 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.

The listings include projects scheduled for improvement during FY 2000-2009, the projects completed in FY 2004, and projects under construction as of October 31, 2004, organized in alphabetical order by county. 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.

Explanation of Changes To/From 2004 Annual Report

Comprehensive Transportation Program FY 2000-2009
Major Modification Interstate and Non-Interstate and Priority Bridge Projects Only
Assumes funding provided for in HB2071(April 1999), HB3011 (May 2002), and SB384 (April 2004)

New Priority Bridge Deck Replacement Projects (Identified Only One Year at a Time) Followed by Program Category

K-2	Barber	Medicine River Bridge 2 miles northeast of K-8 (Annual addition for Redeck set-aside program)	PB
K-18	Wabaunsee	Ks. River Drainage 1 mile east of RL-WB county line (Annual addition for Redeck set-aside program)	PB
K-99	Lyon	Bridge over KTA, 5 miles north of I-35 (Annual addition for Redeck set-aside program)	PB
US-166	Montgomery	Bridge over MP RR 14 miles east of US-75 (Annual addition for Redeck set-aside program)	PB

Project Additions/Deletions Due to Changed Conditions Followed by Program Category

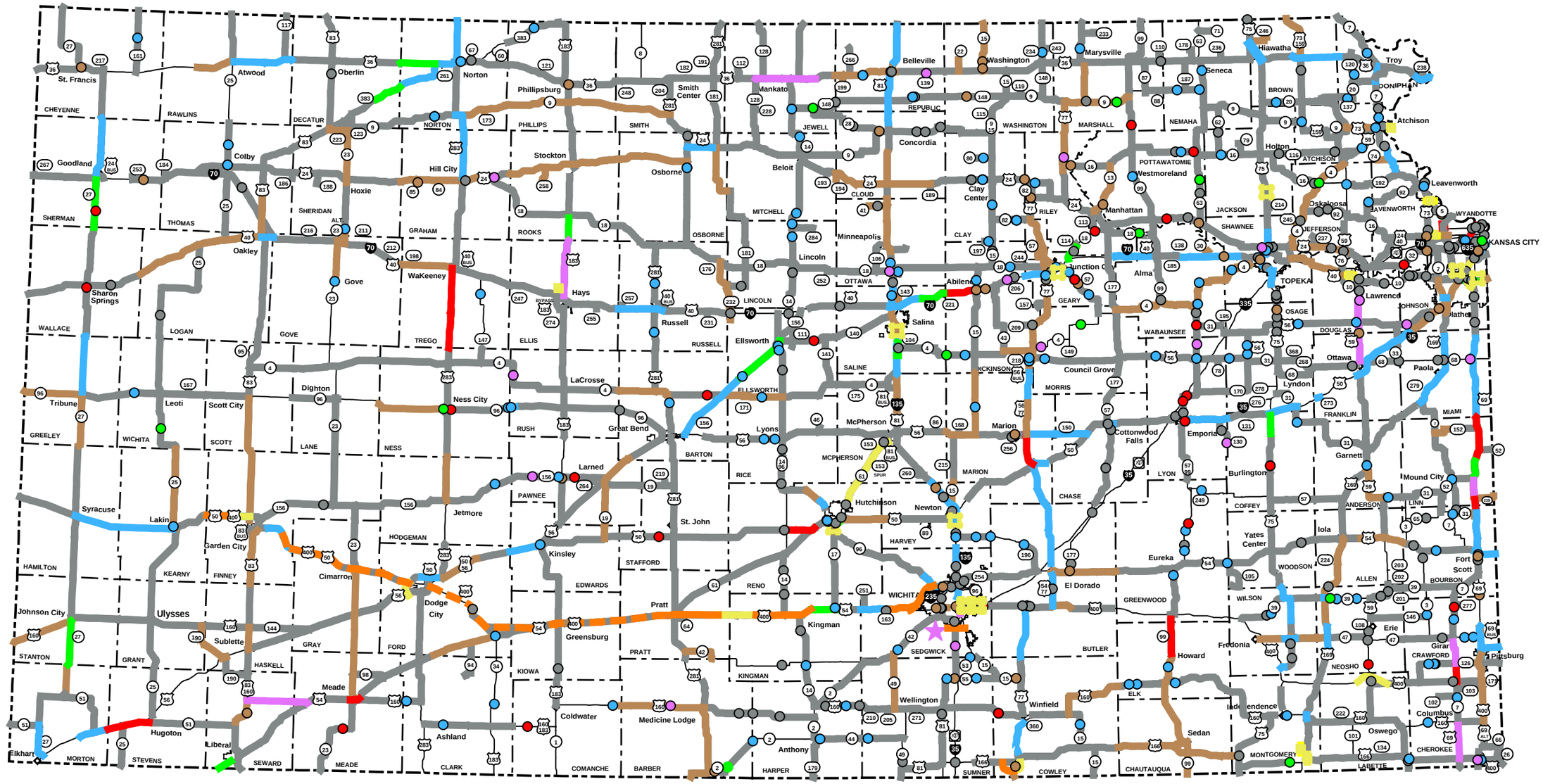
K-4	Dickinson	Hobbs Creek Drainage Bridge east of DK-SA county line (Added as a result of deteriorated bridge condition)	PB
K-4	Morris	Parkers Creek and Lands Creek Drainage (four bridges) between White City and Dwight (Added as a result of deteriorated bridge condition)	PB
K-28	Jewell	Buffalo Creek Drainage Bridge 6 miles east of K-14 (Added as a result of deteriorated bridge condition)	PB
K-156	Pawnee	Sawmill Creek (two bridges) 6 and 8 miles east of the PN-HG county line (Added as a result of deteriorated bridge condition)	PB
US-166	Cherokee	Spring River Drainage, 5 miles east of US-69 (Added as a result of deteriorated bridge condition)	PB

Project Category Changes Due to Scope Refinement Followed by Program Category

US-69	Cherokee	Oklahoma-Kansas state line to US-166 (Converted to maintenance/monitoring project due to mining void subsidence risk)	MM

12/01/04 KDOT

FY 2000-2009 COMPREHENSIVE TRANSPORTATION PROGRAM *



Major Modification Interstate and Non-Interstate and Priority Bridge

	2000 - 2004	2005	2006	2007 - 2009
Bridge	●	●	●	●
Roadway	▬	▬	▬	▬

Substantial Maintenance

2000 - 2004	2005
▬	▬

Substantial Maintenance Projects are selected one year at a time, and the remainder of the CTP Substantial Maintenance projects have not been selected.

CTP SE PROJECTS

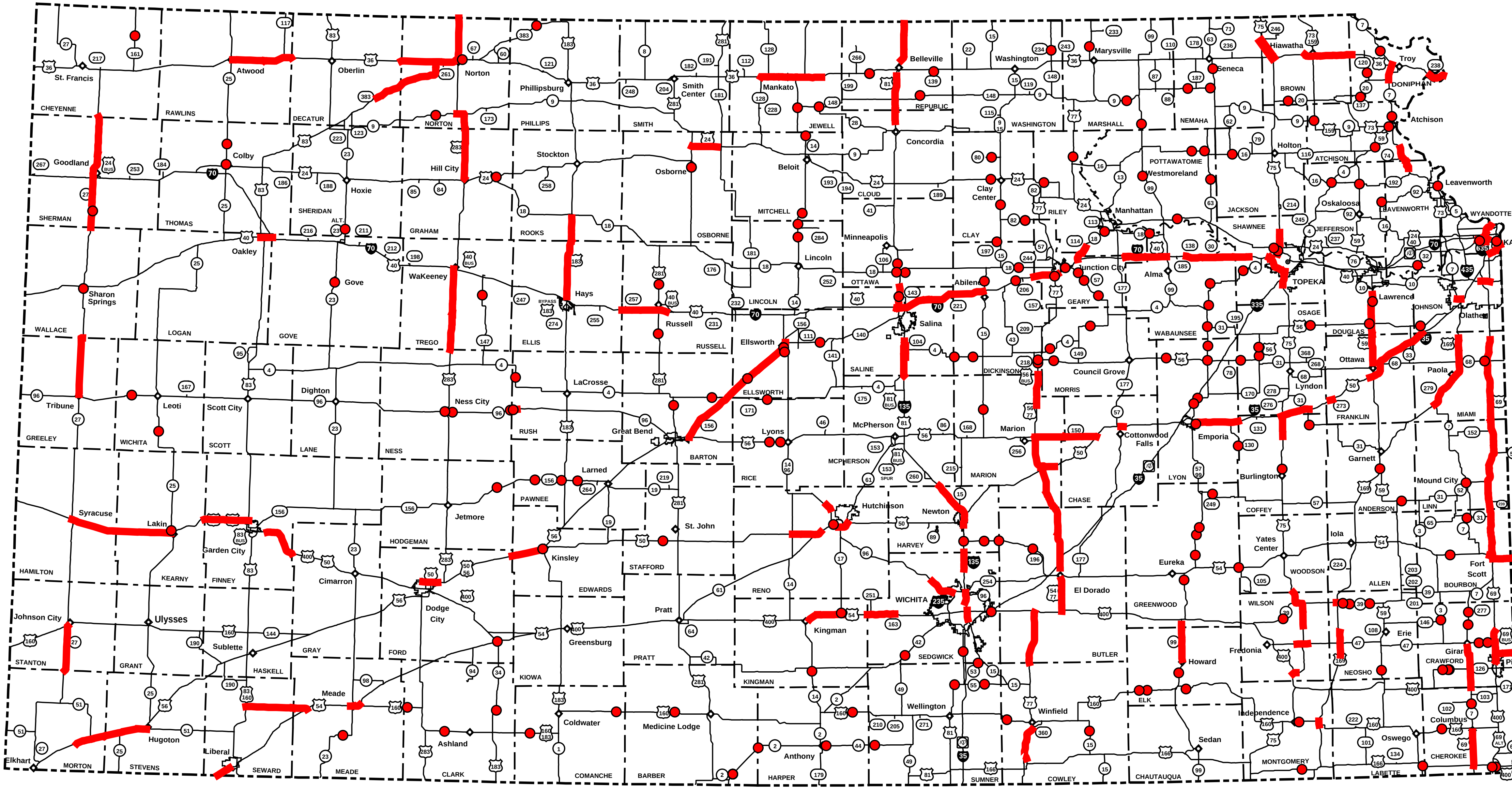
- Interchanges
- Corridors & Bypasses
- Corridor Studies
- Preliminary Engineering and / or Right of Way Only
- Wichita Rail Project

10 0 10 20 30
MILES

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
CTP_SE_110404.DGN NOVEMBER 4,2004
USING CANSYS DATABASE BPPM/CPMS DATA 11/01/04

* Assumes Funding provided for in HB2071 (April 1999), HB3011 (May 2002), and SB384 (April 2004).

COMPREHENSIVE TRANSPORTATION PROGRAM FY 2000-2009 *
Major Modification Interstate and Non-Interstate and Priority Bridge Only



See project list for more specific project information.
See separate list for explanation of changes from 2004 annual report map.

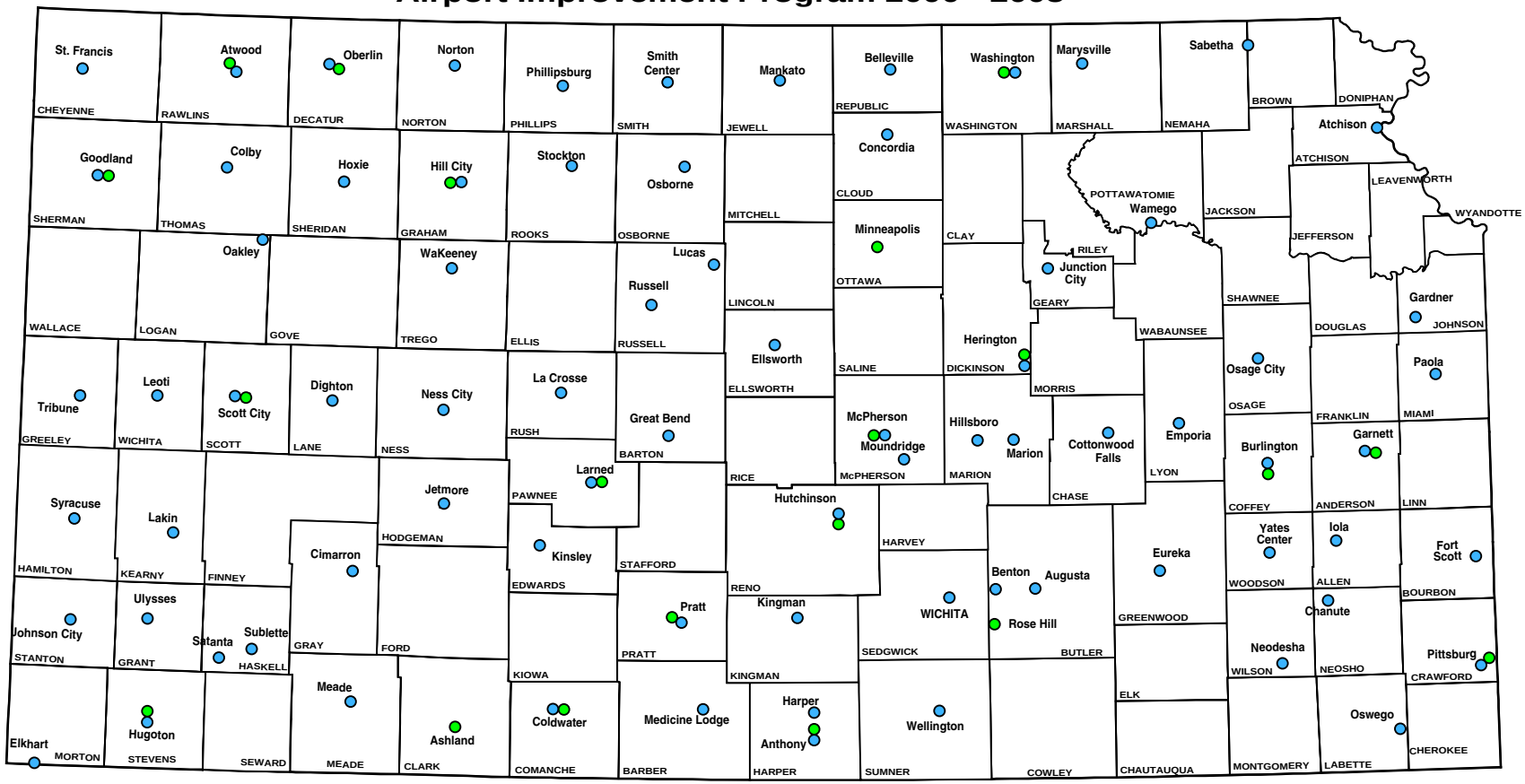
* Assumes Funding provided for in HB2071 (April 1999), HB3011 (May 2002), and SB384 (April 2004).

Bridge ●
Roadway ▬

10 0 10 20 30
MILES

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
CTP_RED_110404.DGN NOVEMBER 4, 2004
USING CANSYS DATABASE BPPM/CPMS DATA 11/01/04

KANSAS
Airport Improvement Program 2000 - 2005



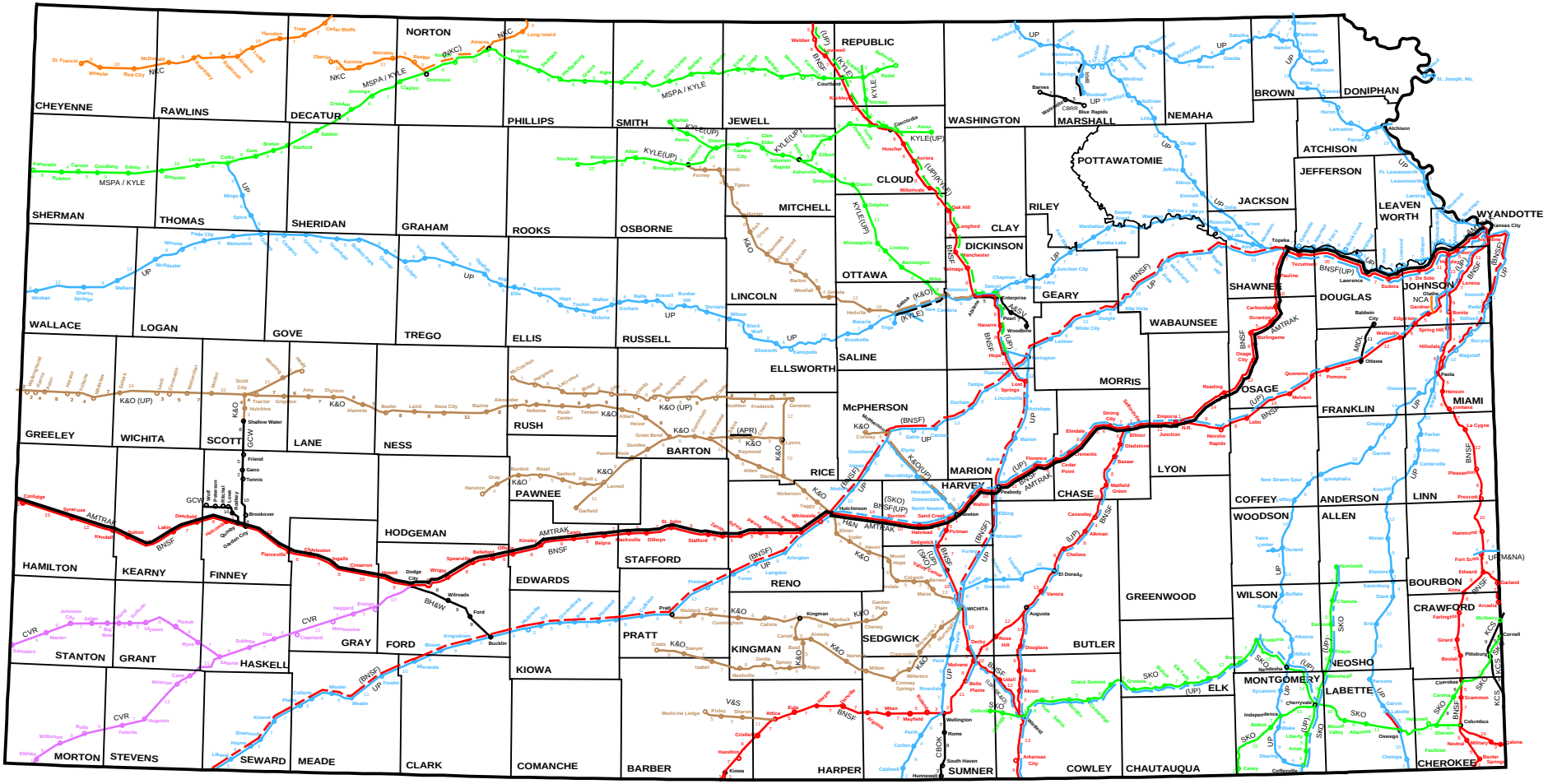
KDOT makes no warranties, guarantees, or representations for accuracy of this information and assumes no liability for errors or omissions.

2000 - 2004

2005

KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
04ANNRPTAIR.DGN SEPTEMBER 17, 2004

Kansas Railroad Map 2004



	RAILROAD	MILEAGE
A&SV	ABILENE & SMOKY VALLEY RAILROAD	18
APR	ATLANTIC & PACIFIC RAILROAD & TRANS. CO. (TRACKAGE RIGHTS ONLY)	
BH&W	BOOTHILL & WESTERN	26
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY	1,237
CBRR	CENTRAL BRANCH RAILROAD	12
CVR	CIMARRON VALLEY RAILROAD	182
CBOK	CITY OF BLACKWELL OKLAHOMA	18
GCW	GARDEN CITY WESTERN	45
H&N	HUTCHINSON & NORTHERN	3
K&O	KANSAS & OKLAHOMA RAILWAY	616
K&O (UP)	KANSAS & OKLAHOMA RAILWAY (LEASED FROM UP)	167

	RAILROAD	MILEAGE
KCS	KANSAS CITY SOUTHERN	18
KCTR	KANSAS CITY TERMINAL RAILWAY	5
KYLE (MSPA)	KYLE RAILROAD SYSTEM	
KYLE	KYLE (OWNED)	16
	LEASED FROM MSPA	255
KYLE (UP)	LEASED FROM UP	176
MIDL	MIDLAND RAILWAY	11
M&NA	MISSOURI & NORTHERN ARKANSAS	8
NKC	NEBRASKA KANSAS COLORADO	122
NCA	NEW CENTURY AIRCENTER RAILROAD	5

	RAILROAD	MILEAGE
NS	NORFOLK SOUTHERN RAILWAY (TRACKAGE RIGHTS ONLY)	
SK&O	SOUTH KANSAS & OKLAHOMA	308
UP	UNION PACIFIC SYSTEM (MKT, MP, OKT, UP)	1,505
UP (BRR)	LEASED FROM BLUE RAPIDS RR	10
V&S	VICTORIA & SOUTHERN RAILWAY	21
WTA	WICHITA TERMINAL ASSOCIATION	2

Mileage figures are owned main line route miles unless indicated otherwise
KDOT makes no warranties, guarantees, or representations for accuracy of this information and assumes no liability for errors or omissions.

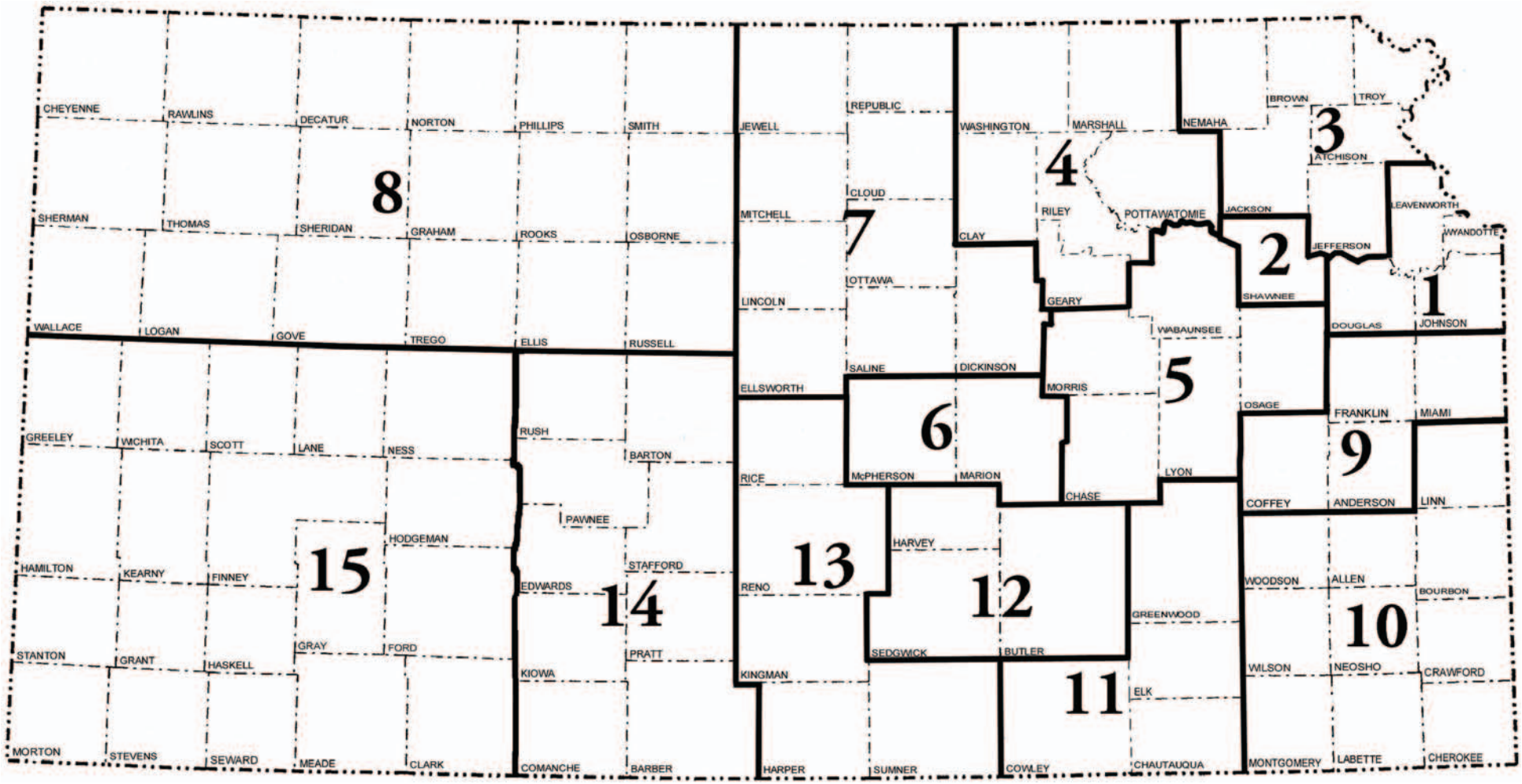
10 0 10 20 30 MILES

KANSAS DEPARTMENT OF TRANSPORTATION
RAIL AFFAIRS UNIT
AND
BUREAU OF TRANSPORTATION PLANNING
RRMAP102504.DGN REVISED 10/25/04

— — — DASHED LINES INDICATE TRACKAGE RIGHTS ONLY

——— AMTRAK

Kansas Coordinated Transit District Map



Part D
Financial Report

Financial Compliance ...

Each year the Department provides to the Governor and the Legislature summary financial information and a statement of assurance that the Department has prepared a comprehensive financial report of all funds for the preceding year. The financial report must include a report by independent public accountants attesting that the financial statements present fairly the financial position of the Department in conformity with generally accepted accounting principles (GAAP).

The Department has prepared a Comprehensive Annual Financial Report (CAFR) for Fiscal Year (FY) 2004. Included in the CAFR is the report of the independent public accountants, Berberich Trahan & Co., P.A. and Allen Gibbs & Houlik, L.C. attesting that the financial statements present fairly the financial position of the Department in conformity with accounting principles generally accepted in the United States of America. Also included in the report is a certificate of achievement awarded to the Department for excellence in financial reporting for the 2003 CAFR. The award for 2003 marks the 16th consecutive year the Department has received the award for excellence in financial reporting. The FY 2004 CAFR has been submitted for consideration of the award.

The complete CAFR for FY 2004 is available upon request by contacting KDOT's Bureau of Transportation Information, 700 S.W. Harrison, Topeka, KS, 66603-3754, or by telephone 785-296-3585 (Voice)/(TTY). The CAFR is also available at www.ink.org/public/kdot/publicinfo/.

Transportation Program Information

The Comprehensive Transportation Program (CTP) is a program for all modes of transportation: highways, aviation, rail, and public transit. For highways, the 10-year CTP will provide nearly $1.8 billion for the substantial maintenance program, $3.9 billion for major modification and priority bridge programs, and $1.3 billion for system enhancement projects. In addition, the CTP will provide approximate state funding of $30 million for the aviation program over 10 years, $60 million for the public transit program over 10 years, and $24 million for the rail program over eight years.

Local support includes $1.5 billion over 10 years in the distributions of the Special City and County Highway Fund; local federal aid projects (including required local matching funds) of $717 million over 10 years; local partnership programs (including required local matching funds) which consist of resurfacing programs, economic development and geometric improvements of $242 million over 10 years; and city connecting link maintenance payments of $31 million over 10 years.

The Comprehensive Transportation Program is based on 10-year projections. The schedule below is a snapshot solely comparing FY 2004 revenues and expenditures to FY 2003 revenue and expenditures.

FY 2004 Financial Information

The following schedule is a summary of revenues and expenditures for FY 2004 and the amount and percent of increases or decreases in relation to prior year amounts. All amounts are in thousands.

REVENUES	2004	Percent of Total	Increase (Decrease) from prior year Amount	Percent
Motor Fuel Taxes	$ 420,456	41 %	$ 12,261	3 %
Vehicle Registrations and Permits	156,916	15	4,178	3
Intergovernmental	327,267	32	(78,027)	(19)
Sales Tax Transfer	0	0	0	0
Sales and Use Taxes	90,664	9	1,715	2
Investment Earnings	3,754	1	(31,229)	(89)
Motor Carrier Property Taxes	0	0	(5,032)	(100)
Other	13,055	1	4,180	47
Transfers from Other State Funds	3,333	1	(15)	(0)
Total revenues	$ 1,015,445	100 %	(91,970)	(8) %

Expenditures	2004	Percent of Total	Increase (Decrease) from prior year Amount	Percent
Current Operating				
Maintenance	$ 265,010	20 %	$ 16,079	6 %
Construction	563,125	43	82,723	17
Local Support	281,388	22	28,571	11
Rail, Air and Public Trans.	9,310	1	(1,952)	(17)
Management	54,104	4	(836)	(2)
Debt Service				
Principal	28,350	2	(26,060)	(48)
Interest and fees	53,530	4	(8,145)	(13)
Transfers to Other State Fund	53,711	4	(10,743)	(17)
Total expenditures	$ 1,308,528	100 %	$ 79,637	6 %
OTHER FINANCING SOURCES (USES)				
Revenue Bond Proceeds	$ 675,739	290	462,335	217
Paid to Bond Escrow Agent	(442,780)	-190	181,817	(29)
Total other sources (uses)	$ 232,959	100 %	$ 644,153	(157) %
Excess (Deficiency) of Revenues and Other Sources Over Expenditures	$ (60,124)	100 %	$ 472,546	514 %

Part E
Reference Information

REFERENCE INFORMATION

Catch KDOT
on the web:

WWW.KSDOT.ORG

Connect with any KDOT office from anywhere in Kansas, toll-free 8 a.m. - 5 p.m., Monday through Friday. Closed holidays.

KDOT Connection: toll-free, 1-877-550-KDOT (5368)

Call 511
or go to
www.kanroad.org
or http://511.ksdot.org
Find out route specific road conditions, construction/detour, weather, and emergency road closure information 24 hours a day.

KDOT'S WEB SITE HAS DETAILS ON MANY TOPICS INCLUDING:

- ◆KDOT offices throughout the state;
- ◆City, county, and state maps;
- ◆Other modes of transportation;
- ◆Latest road condition information;
- ◆News releases;
- ◆Various publications;
- ◆Safety information;
- ◆Career Opportunities;
- ◆Information for highway contractors, design consultants, vendors, and other organizations.

GLOSSARY OF COMMONLY USED KDOT TERMS

At-grade intersection - An intersection with two or more roadways that provide for the movement of traffic on the same level.

City Connecting Link (KLINK) - A city street that connects two rural portions of state highway. Normally a city is responsible for maintaining the connecting link.

Culvert - Generally a drainage structure constructed beneath an embankment. Box sections, pipes, and arches are examples of various culvert shapes.

Deck - That portion of a bridge that provides direct support of and the riding surface for vehicular and pedestrian traffic. The deck distributes traffic and deck weight loads to the superstructure elements.

Expressway - Multilane; divided highway where access is allowed at public roads via at-grade intersections.

Fiscal Year - A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. The State of Kansas fiscal year (FY) is July 1 through June 30. The federal fiscal year (FFY) is October 1 through September 30.

Freeway - Multilane highway where access is provided only at grade-separated interchanges.

Geometric Improvement - A project that includes roadway improvements other than a surface treatment, such as shoulder and lane widening, curb and gutter work ,or roadway alignment.

Intersections - Where two or more roadways meet. An interchange has two or more roadways that provide for the movement of traffic on different levels (grade separated). An at-grade intersection has two or more roadways that provide for the movement of traffic on the same level.

Kansas Turnpike Authority - A 238-mile toll highway facility extending from Kansas City west and south past Wichita to the Kansas/Oklahoma state line. It is supported by user toll fees and is operated by the Kansas Turnpike Authority. KDOT has no jurisdiction over the KTA.

Let - Advertise and award a contract to the lowest responsible bidder.

Major Modification - Program of projects to improve the service and safety of the existing highway system.

Pavement Management System (PMS) - A program of data gathering and analysis used by KDOT to select surface preservation locations and actions. The system can be used to determine actions to achieve the best pavement surface conditions possible using available funds or alternatively to determine the minimum cost to achieve a given level of performance.

Priority Bridge - Program of projects to replace or rehabilitate bridges that are deteriorated or have deficiencies in load carrying capacity, width, or traffic service.

Reconstruction - Type of improvement designed to replace the existing roadway or bridge when it has reached the end of its useful life. Often accompanied by improvements to the functional and operational capacity of the highway.

Rehabilitation - Type of improvement designed to preserve and extend the service life and enhance the safety of an existing roadway or bridge when total replacement is not warranted.

Retroreflectivity - Light reflected back to the driver's eye from reflective material on pavement marking or signing.

Rideability - A measure of the smoothness and riding characteristics of a road surface.

Right of Way - Land or property used specifically for transportation purposes.

Route Classification System - A detailed classification system that groups all state highway routes into five levels:

Class A - the Interstate System.

Class B - Routes that serve as the most important statewide and Interstate corridors for travel.

Class C - Defined as arterials, these routes are closely integrated with Class A and B routes in service to all of the state.

Class D - These routes provide access to arterials and serve small urban areas not on a Class A, B, or C route, or access to county-seat cities.

Class E - Primarily used for local service only, these routes are typified by very short trips.

Routine Maintenance - The activities to preserve the "as built" condition of Kansas highways to the best extent possible by KDOT personnel. These activities include pot-hole patching, drainage work, guardrail repairs, highway striping, right-of-way mowing, and snow and ice control.

Set-aside - A program of funds reserved for a specific purpose.

Separation Structure - A bridge that separates the grades of two or more intersecting roadways or a highway and a railroad.

State Highway System - All state, US, and Interstate roadways in Kansas. State routes have K prefixes (K-7, K-99, etc.); US routes are designated such as US-54, US-283, etc; Interstates have I prefixes (I-70, I-35, etc.).

Substantial Maintenance - Program of projects selected annually to protect the investment in the State Highway System by preserving existing roadways and bridges.

Substructure - The abutments, piers, or other constructed bridge elements built to support the span of a bridge superstructure. The substructure transfers loads from the superstructure to the foundation soil or rock.

Superstructure - The entire portion of a bridge structure which primarily receives and supports traffic loads transmitted through the bridge deck. The superstructure carries these loads across the span and then transfers them to the bridge substructure.

Surface Preservation - Projects designed to preserve the "as-built" condition of roadways. This work can include a variety of actions (overlay, milling, crack repair, patching, edge drains, or mudjacking).

Surface Reconstruction - Projects designed to replace only the existing surface of a roadway whose geometric characteristics meet current standards.

System Enhancement - Program of projects to relieve congestion, improve access, enhance economic development, or improve safety on major segments of the State Highway System. Projects are in three basic categories - corridors, interchanges/separations, and bypasses. The program was originally established by the Comprehensive Highway Program and was reauthorized on a one-time only basis for the CTP FY 2000-2009. Projects were submitted by local governments and were selected after being ranked according to scores based on engineering criteria, a project's potential for economic development, and the local government's contribution to the project. Each project was prioritized against the other projects in this category, and projects were funded from the top down until dollars in that category were exhausted.

TEA-21 - Congress passed the Transportation Equity Act for the 21st Century (TEA-21) on June 9, 1998. It provided authorizations for highways, highway safety, and mass transit.

Work Zone - A designated area where highway construction or maintenance is taking place.

Commonly-used Acronyms and Abbreviations

Abbreviation	Description
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ACPA	American Concrete Paving Association
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APE	Advanced Preliminary Engineering
APTA	American Public Transit Association
APWA	American Public Works Association
ARTBA	American Road and Transportation Builders Association
ATSSA	American Traffic Safety Services Association
BAC	Blood Alcohol Content
BEST	Basic Effective Supervisory Training
BR	Bridge
CADD	Computer-Aided Design and Drafting
CAM	Computer-Aided Mapping
CANSYS	Control Section Analysis System
CASE	Computer-Aided Software Engineering
CDBG	Community Development Block Grant
CDL	Commercial Driver's License
CE	Civil Engineer, Construction Engineering
CL	County Line
C/L	Centerline
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMS	Contract Management System or Construction Management System
COLA	Cost of Living Adjustment
CONST	Construction
CPMS	Comprehensive Program Management System
DBE	Disadvantaged Business Enterprise
DE	District Engineer
DEIS	Draft Environmental Impact Statement
DOS	Disk Operating System
DOT	Department of Transportation
DUI	Driving Under the Influence
E	East
EA	Environmental Assessment, Environmental Agency, Engineering Associate
EB	Eastbound
ED	Economic Development
EEO	Equal Employment Opportunity
EIS	Environmental Impact Statement
EIT	Engineer in Training
EMS	Equipment Management System
EO	Equipment Operator
ET	Engineering Technician
EWS	End of Wearing Surface
FAA	Federal Aviation Administration
FARS	Fatal Accident Records System
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Administration
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FIMS	Financial Information Management System
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration

FY	Fiscal Year (State)
GAAP	Generally Accepted Accounting Principles
GASB	Governmental Accounting Standard Board
GI	Geometric Improvement
GIS	Geographic Information System
GPS	Global Positioning System
HAC	Highway Advisory Commission
HAZMAT	Hazardous Materials
HEEP	Highway Engineering Exchange Program
HMMS	Highway Maintenance Management System
HPMS	Highway Performance Monitoring System
IMMS	Integrated Maintenance Management System
INK	Information Network of Kansas
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation System
KARS	Kansas Accident Records System
KCC	Kansas Corporation Commission
KDOT	Kansas Department of Transportation
KHP	Kansas Highway Patrol
KLINK	City Connecting Link Resurfacing
KPERS	Kansas Public Employees Retirement System
KQM	Kansas Quality Management
KTA	Kansas Turnpike Authority
LAN	Local Area Network
LPA	Local Public Authority
MARC	Mid-America Regional Council
MCSAP	Motor Carrier Safety Assistance Program
MIS	Managment Information System, Major Investment Study
MM	Major Modification
MMS	Maintenanc Management System
MPO	Metropolitan Planning Organization

MUTCD	Manual on Uniform Traffic Control Devices
N	North
NB	Northbound
NHI	National Highway Institute
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NRC	National Research Council
NSC	National Safety Council
OSHA	Occupational Safety and Health Association
PB	Priority Bridge
PE	Preliminary Engineering, Professional Engineer
PI	Public Involvement, Point of Intersection
PMS	Pavement Management System
PS&E	Plans, Specifications and Estimates
QA	Quality Assurance
QC	Quality Control
RCB	Reinforced Concrete Box
ROW	Right-of-Way
RR	Railroad
S	South
SB	Southbound
SCCHF	Special City/County Highway Fund
SE	System Enhancement
SEIS	Supplemental Environmental Impact Statement
SEP	System Enhancement Program
SHA	State Highway Agency
SHRP	Strategic Highway Research Program
SM	Substantial Maintenance
SMP	Strategic Management Plan
SRA	Safety Rest Area
STIP	State Transportation Improvement Program
STP	Surface Transportation Program

TE	Transportation Enhancement
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TRB	Transportation Research Board
TRIP	The Road Information Program

TTY	Telecommunications Device for the Deaf
W	West
WB	Westbound

Kansas Transportation at a Glance - 2003

Background of Kansas	
105 counties, 635 cities, 4 MPOs	
133,825 miles of public roads (4th)	
Land area (sq. miles)	81,823
Population (2000 census)	2,688,418
Annual highway fuel use (1,000s gal.)	
Gasoline (est.)	1,164,129
Diesel	403,966
Gasohol (est.)	50,071
Total	1,618,166
Registered vehicles	
Autos	1,389,193
Pickups & trucks	675,270
Trailers	100,624
Motorcycles	51,130
Motorized bikes	13,641
Special registrations	166,759
Total	2,401,843
Licensed drivers	1,967,455
Annual vehicle miles of travel (in 1,000s)	29,047,136

State tax rates (cents/gal.)	
(Effective July 1, 2002)	
Gasoline	24
Diesel	26
Gasohol	24
Public road miles	
Rural	124,420
Urban	10,597
Total	135,017
Accidents and fatalities	
Total accidents	74,993
Fatal accidents	421
Fatalities	471

Airports	
Public use	143
Commercial service	9
Bridges	
Structurally deficient	3,311
Functionally obsolete	2,582
Non-deficient	19,513
Not rated	498
Total	25,904
Rail	
Miles operated	3,939
Waterways	
Terminals	8

National Rankings

Public Road Miles	4th	Highway Fuel Use	33rd
Population	32nd	Public Use Airports	8th
Bridges	3rd	Registered Vehicles	30th
Vehicle Miles of Travel	33rd	Land Area	13th
Rail Miles	6th	Licensed Drivers	32nd