

Transportation and the Future of Kansas

1.1 A Reliable, Flexible and Affordable System

The Kansas transportation system is complex. It includes roads and rails . . . highways and bridges . . . vans and buses and trains, trucks and planes . . . farm equipment, cars and bicycles. It must be stable enough to connect Kansans reliably to each other, to their workplaces, to the institutions that matter to them and to the services they depend on. The system also must support the state's economic vitality.

The transportation planning process that helps shape the system must be flexible enough to accommodate change. That change will be driven in part by changing Kansas demographics – an aging population and the growth of urban areas. The change also will be driven in part by the effects of globalization and a diversifying economy.

Because of globalization, for example, a significant amount of manufacturing has moved overseas. When goods reach our shores, trucks, planes and trains are needed to carry them across the

country. When Kansas wheat and other products are ready for export, the same modes of transport come into play, carrying the freight in the opposite direction. This roads-air-and-rails pattern for moving goods has already had a large impact on the Kansas transportation infrastructure, as other chapters will document.

The settlement patterns of Kansas residents and the movement of commodities into and out of the state will compound demands on the state's transportation infrastructure. Creating and maintaining a transportation system to meet those needs clearly will require increased funding and new ways of doing business.

The purpose of the Kansas Long Range Transportation Plan (LRTP) is to document the transportation system's needs and examine the trends that will affect transportation over the next 20 years. The plan addresses all modes of the Kansas transportation system, including state highways and the local road network, transit, rail, aviation, and bicycle and pedestrian facilities. The LRTP does not make recommendations about transportation funding. Instead it provides a framework for discussions about a new transportation program.



1.2 The LRTP Process

This plan for the state's transportation system through the year 2030 is based on a year-long dialogue with more than 120 Kansans. They represented many different groups that share a common interest in transportation, including: government officials, both elected and professional staff; those with economic development interests and private businesses; transportation planners; and those who provide transportation services.

As part of the LRTP process, five topical working groups were formed to examine issues and make recommendations regarding: rural and metropolitan transportation; urban transportation; freight; funding and finance; and economic impact. A Policy Advisory Committee and Technical Advisory Committee provided oversight and guidance throughout the LRTP process. More details about the stakeholder engagement process are provided in Appendix A.

The recommendations in this report emerged from a series of more than 40 meetings across the state involving stakeholders, the contributions of the topical working groups and technical analysis from KDOT. In fact, more than 400 stakeholders attended recommendations review meetings, and 300 of them provided written comments. Eighty percent either supported or strongly supported all but one of the major recommendations presented in this LRTP - and that recommendation, related to bike and pedestrian trails, was supported by 58 percent.

KDOT wants stakeholders to remain involved in the planning process beyond the publication of this document and even beyond whatever legislative commitment occurs after its publication. This desire results from a fundamentally new approach recommended for transportation planning set forth in Chapter 6, an approach that would be more flexible and result in more frequent project selection than in the past.



More than 300 people attended the LRTP Transportation Symposium held in Manhattan in January 2007.

Under the Comprehensive Transportation Program (CTP), (which began in 1999 and expires in 2009), a 10-year list of major projects was selected and announced at the beginning of the program. But a globalized, electronically networked world calls for a different approach, a process that allows speedy response to opportunities that arise unpredictably. Ethanol is an example of that unpredictability. A decade ago there was little discussion of ethanol. Today Kansas has 10 ethanol plants and six more under construction. These are transportation-intense facilities whose impact could not have been planned for in 1999. This LRTP, therefore, does not contain a list of

projects. Instead, it distills information about the challenges that stand in the way of addressing stakeholders' core concerns and makes recommendations for tackling those challenges.

1.3 Guiding Principles

Three themes emerged from the strong opinions stakeholders voiced about the state's transportation system.

Preserve the transportation system

The transportation programs supported by the Kansas Legislature over the past two decades have helped Kansas to upgrade its transportation network. For example, more than 700 miles of shoulders have been added to Kansas highways, nearly 1,000 miles of short-line track have been rehabilitated, and public transit is providing 30 percent more rides than at the beginning of the CTP. KDOT must protect the state's investment in its transportation infrastructure.

Make travel safer

At 1.54 deaths per hundred million vehicle miles traveled in 2006, the state's highway fatality rate is moving downward. Nevertheless, it is persistently higher than the national rate, which was 1.42 deaths per hundred million vehicle miles traveled in 2006. In the last five years, 2,331 people lost their lives on Kansas roads. KDOT must do more to improve the safety of travelers.

Support economic growth

Transportation is often a support for economic opportunities that would benefit all Kansans. These windows of opportunity may open and close rapidly, however. To help bring jobs to Kansas, KDOT must be nimble and able to make responsive transportation investments – and those investments must be strategic because resources are limited.

1.4 Transportation Trends and Challenges

In the next 20 years, six factors are likely to have significant influence on transportation needs in Kansas. These factors shape the analysis and recommendations in the remainder of the LRTP.

Growth in truck and auto travel will increase highway preservation and capacity needs

As shown in Figure 1.1, while the Kansas population has consistently grown, vehicle and truck miles have grown faster. This trend is expected to continue. The population is projected to increase by 11 percent in the next 20 years, while statewide growth in vehicle and truck traffic is projected to increase by 44 percent and 97 percent respectively. This growth will significantly impact the needs of the Kansas highway system. The increase in truck traffic, related to the transportation demands of a globalized economy, will cause the state's roads and bridges to deteriorate more quickly. The increase in vehicle and truck traffic will increase the need for more capacity



on both the rural and urban highway systems. More than 15 percent of urban state highways and 6 percent of rural state highways are already near or exceed the capacity for which they were designed.

Fast-moving economic opportunities will require more flexible decision-making processes

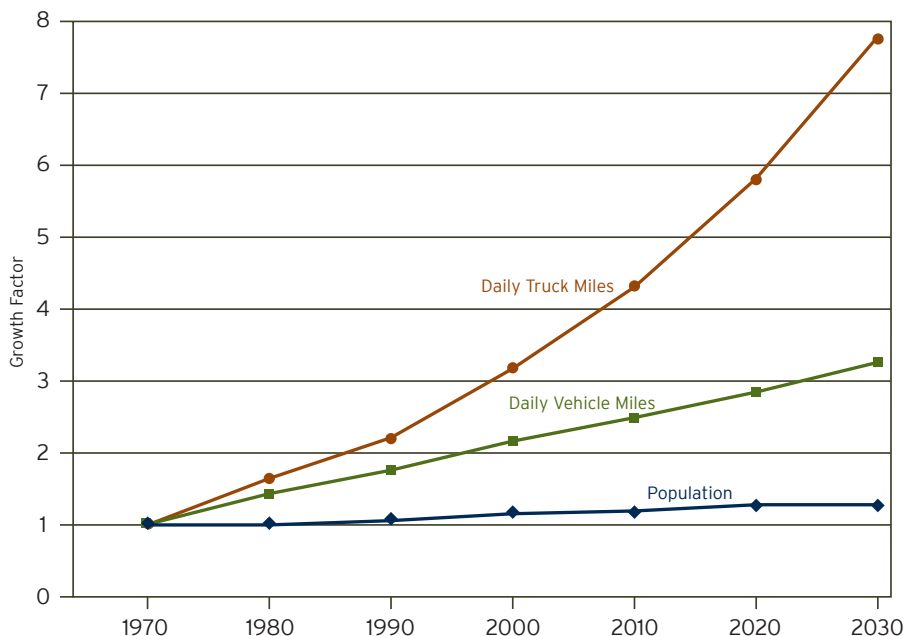
Changes in regional, national and global markets and rapid technological innovation will continue to offer the state new economic opportunities. Seizing them can require substantial investments to improve transportation accessibility and mobility. For example, the Kansas City region is emerging as a hub for large warehousing and distribution facilities where containerized freight is switched from rail to trucks. The prosperity

of this industry in Kansas depends on reliable access by trucks to roads that are relatively free of congestion. Other recent examples that exemplify the need for quick and flexible response include the emergence of biotechnology opportunities and the expansion at Fort Riley (expected to grow from 10,000 soldiers in 2005 to 18,000 by 2011, creating an economic impact of more than \$1.25 billion on the Kansas economy).

Changing demographics

The proportion of Kansans age 65 and older is expected to grow by almost 50 percent by 2030. More than 25 percent of residents will be 65 or older in about a quarter of all Kansas counties by 2030. This trend will be most pronounced in rural areas. An aging population will increase demand for specialized transit service. Further, popula-

Figure 1.1 - Population and Travel Growth Trends



tion migration from rural areas to urban areas means it will increasingly difficult to maintain an extensive local road network in rural areas as there are fewer people to fund the maintenance of that local system. At the same time, capacity needs will become increasingly more urgent and expensive in urban areas.

Agriculture will remain a transportation-intensive sector

Kansas is the nation's largest wheat producer and third largest livestock producer. With 200,000 agricultural jobs, mainly in rural Kansas, agricultural products contribute \$9 billion to the state's gross domestic product – 10 percent of the total. The prosperity of agriculture, a critical part of our economy, depends on an extensive network of local roads, state highways and rail lines to bring products to market.



Grain elevators like this one on US-160 near Copeland in Western Kansas are just one part of the broad-based Kansas agricultural economy.

Anticipated revenues won't meet all projected transportation needs

To meet all estimated transportation needs in Kansas would require \$2.9 billion annually (in

2006 dollars) through 2030. State and federal revenues are projected to be approximately \$1.4 billion – which meets less than half the need.

Eroding purchasing power is widening the gap between our transportation needs and the funds available to address them

The U.S. inflation rate averages 3 percent. That means that a dollar saved in 2007 will be worth 97 cents in 2008. In Kansas, projected annual inflation between now and 2030 is 2.8 percent; the annual transportation revenue growth, from all sources, is at 1.7 percent. In other words, inflation will grow 37 percent faster than funding every year. This plan examines ways the state could offset the inflation-revenue gap by stretching transportation dollars and by seeking new revenue sources.

1.5 The Chapters to Come

The remainder of the LRTP examines

- current conditions and future needs of the state highway system (Chapter 2), the local road network (Chapter 3), and multi-modal transportation systems (Chapter 4);
- the estimated statewide transportation funding gap (Chapter 5) and estimated funding needs, projected revenues and options for closing the gap between them (Chapter 6);
- creation of a more flexible and accountable transportation decision-making and implementation process, one that supports the Kansas economy (Chapter 7); and



- national and global issues and opportunities that will affect Kansas and its future transportation needs (Chapter 8). Appendices to this plan include descriptions of the public engagement processes, transportation needs analysis, and required federal planning information.

A Web You Don't Notice – Unless It Breaks

Many forms of transportation, funded by many different agencies, promote the quality of life and economic vitality in Kansas communities. The city of Great Bend is an example where residents and businesses benefit from an integrated transportation system.

The city maintains an extensive network of local roadways supported, in part, by KDOT. Several state highways, including Kansas Route 156, link Great Bend with the state and nation. Van services help elderly and disabled residents to be mobile. A small airport links businesses like Fuller Brush and Venture Corporation to Denver and Kansas City and provides air ambulance service in emergencies. Local farmers and others with products to ship depend on rail. A 5.5-mile paved recreational trail improves the city's image as a place to live.

City, state and federal funds make this possible. About 40 percent of Great Bend's annual budget for local road maintenance and operations comes from the state-funded Special City-County Highway Fund. KDOT provides nearly \$75,000 per year to help Great Bend maintain state highways that pass through the city. Transit service is supported by operating subsidies and capital replacement grants that either come from state funds or federal transit dollars that KDOT administers.

KDOT also provides state-funded aviation grants to assist with taxiway improvements. It funded the public-sector share of several railroad crossing safety projects using a mix of state and federal funds. Great Bend also has benefited from state support for a shortline railroad that serves it.

Finally, creation of a recreational trail along the Arkansas River was possible because of a sizable KDOT grant of federal transportation enhancement funds to the city.