



Chapter 7

Recommendations

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KDOT has a mission to provide transportation for the people of Kansas and visitors to our state. The broad scope of this mission is achieved by the many policy choices made in shorter-term decisions. In the 1990's, KDOT embarked on a successful and popular Comprehensive Highway Program that continues to influence public expectation of the transportation system. The work conducted to date to develop this statewide long-range transportation plan points to some broad conclusions. This chapter is intended to formulate the information collected during the update process into action items or recommendations. These recommendations should not only guide KDOT's direction for the future, but should be utilized to make the incremental decisions that will be required along the way. The conclusions that have been drawn are not particularly surprising, as they tend to reinforce many of the directions the State embarked upon in the 1990's.

Highways are, and will continue to be the most widely used mode of transportation. The fleet of private and business vehicles is growing. Businesses have come to rely heavily on "just-in-time" inventory control. Kansans will continue to rely on the highway system for the foreseeable future.

A recent national study ranked the Kansas State Highway System as the fourth best in the nation based on percent of road mileage in poor or mediocre condition²⁹. An external survey of the general public in Kansas conducted in 2001 found that 76% of the respondents thought KDOT was doing a good job of providing a state transportation system; another 22% thought KDOT was doing an adequate job. This survey also found that 92% of the respondents thought that transportation funding in Kansas should be increased (44%) or stay the same (48%) over the next five years. The principal concern expressed in the survey is with maintaining what already exists as the number one priority balanced against the need to always modernize and react to emerging needs for enhancements.

There are some emerging concerns related to other modes of transportation as well. The Comprehensive Transportation Program (CTP) provided expanded state funding for public transportation. The interest in public transportation was for expansion of existing service and the addition of service to new areas. Support for air transportation generally comes from two areas, the need for air ambulance services to serve rural areas of the State as well as preserving airports as a way to maintain the economic viability of a community or a region. The CTP also provided state funding for the first time for general aviation airport improvements. There is a strong desire to see that as a state and as a country we do not lose the strength of our rail network. Short-line railroads play an important role in the Kansas economy, and the CTP included a state-funded revolving loan/grant program. There is an interest in intermodal shipments and in supporting the continued growth, strength, and extension of intermodal facilities in Kansas. A segment of the population continues to voice an interest in bicycle and pedestrian facilities.

Technology is playing an increased role in providing transportation services, such as emergency response, traffic management, traveler information, and commercial vehicle operations. Kansas has several examples of these technologies in place or planned, including rural “Mayday” systems, the Kansas City Scout traffic operations center, “511” traveler information hotline, and the Commercial Vehicle Information Services Network.

Future transportation needs will also be influenced by trends not related to specific travel modes. Aging of the population and migration to urban areas are two demographic trends that will have wide-ranging effects on all transportation systems. Safety and efficiency concerns may change the public perception of existing transportation modes or of mobility and trade in general. The shrinking tax base available to fund transportation, particularly on the local rural road & bridge network, will reduce our ability to meet transportation needs.

The following recommendations reflect the broad policy directions toward which the Department of Transportation believes the State should move through 2025. In some cases, the recommendations point to continuing activities that are already underway. In others, they represent taking steps to prepare for emerging areas of concern as well as placing ourselves in a position to recognize and respond to new trends not yet identified.

State Highway System

The input received not only during the revision of this Plan, but also from the External Survey and the Transportation 2000 committee hearings, confirms the fact that highways are, and will continue to be, the most utilized and important mode of transportation in Kansas. Opinions from stakeholders and internally within the agency are in agreement that the State’s first priority should be maintaining and preserving the existing system. In addition, future state transportation programs should provide the opportunity and ability to modernize and enhance the system as needs emerge. The structure of the Comprehensive Transportation Program is very consistent with these priorities.

Traffic on most Kansas highways continues to grow. As traffic volume grows to near capacity for a highway facility, solutions include demand management, access management, intelligent transportation systems applications, passing lanes, and adding lanes in the form of either expressways or freeways. Long-range planning should consider capacity needs of the State Highway System.

When designing a major modification improvement project, KDOT engineers research the environment surrounding the project, and use public input to weigh relative concerns and values. Designers should have the flexibility to consider all feasible and safe options for transportation in the corridor, including accommodations for non-highway modes, such as bicycle lanes, sidewalks, or transit stops. Technology applications should also be considered as a matter of standard practice.

1. Future transportation programs should continue to place the highest priority on preserving the existing highway system.
2. Future transportation programs should continue to include a modernization component to bring our roads and bridges up to current standards and an enhancement component to address major highway improvements needed to address capacity and operational issues and desired by local governments.
3. Future transportation programs should not predetermine a complete agenda of specific projects, but allow flexibility to reassess road and bridge priorities and address emerging priorities as needs, conditions, and funding change during the life of the program.
4. KDOT should develop a long-range, systematic vision for key corridors.
5. KDOT should continue to use passing lanes to address capacity problems on two-lane highways to provide an interim solution until four lanes are warranted.
6. KDOT should continue to partner with local governments and metropolitan planning organizations on corridor/access management issues, including the possible pursuit of statutory changes to improve the link between local planning requirements and access control.
7. Roadway improvement project development should routinely include consideration of non-highway modes, intermodal connections, and technology applications.
8. KDOT should continue research efforts that improve quality and cost-effectiveness of the State Highway System. New procedures and technologies from both state and national research programs will be evaluated and, if found beneficial, implemented into practice.
9. KDOT should continue support and funding to move toward deployment of the Commercial Vehicle Information System and Network (CVISN) national reporting system.

Aviation

Aviation is a vital element of the State's transportation system. It provides Kansas communities a link to the nation's air transportation system and to the global economy. Aviation manufacturing and its associated industry and suppliers employ thousands of Kansans and generate billions of dollars in economic activity. The 150 public-use airports are essential to towns and cities for economic growth.

The Kansas Airport Improvement Program provides state aid to general aviation airports. Many improvements, which have allowed rural airports to continue to provide service, have been funded through this program. Airports in medium- and small-sized communities and in rural areas provide service such as agricultural application, air taxi, private air transportation, and access to both emergency and specialized medical services. Also, the system of airports makes the fast and efficient mode of air travel available to companies that are considering locating in these areas to take advantage of the high quality, reasonably priced workforce available in the small communities of Kansas.

10. The State should continue to promote aviation to encourage economic development and provide access to rural areas for emergency and specialized medical services.
11. Future transportation programs should continue the Kansas Airport Improvement Program.

Bicycle and Pedestrian

While bicycling and walking have enjoyed increased popularity as forms of exercise, the demand for non-recreational trips is growing as people realize the health benefits of walking and bicycling. KDOT recognizes that, for these to serve as legitimate modes of transportation, greater effort is needed to integrate facilities and coordinate with local agencies to increase opportunities to meet these demands.

KDOT recognizes that local governmental agencies are best equipped to determine where facilities should be located to promote bicycling and walking. Certain areas, such as college and urban environments, tend to be more oriented toward the non-motorized modes. KDOT is willing to work with local agencies to find solutions for local needs and priorities.

12. KDOT should continue to be an advocate for bicycling and pedestrian interests. The agency should continue its efforts to assure that bicycle and pedestrian-friendly transportation facilities are considered in the planning process and constructed whenever feasible.
13. KDOT should continue to assist local governments in planning and promotion of bicycling and walking within the framework of national guidelines and standards.
14. KDOT should continue to consider allowing the construction of bicycle and or pedestrian facilities alongside KDOT facilities where such facilities fit in local and state short- and long-term plans.
15. KDOT should continue to monitor the development of national guidelines to ensure access for pedestrians with disabilities to public rights-of-way.

Rail Transportation

Railroads have historically played an essential part in meeting the transportation needs of Kansas. Many changes have affected the State's rail system over the years, but the railroads continue to serve an important role in freight transportation. It is expected that this will continue to be the case in the future for a number of reasons.

On a national level, these factors include the rapid growth of intermodal freight transport; the ongoing reinvestments by railroads and their suppliers in development of new and improved technologies; the increasing highway congestion in major urban areas around the country; and the environmental, energy conservation, and safety considerations which increasingly favor rail as the heavy freight mode that performs best in minimizing negative impacts of transportation.

Other factors include the improved operating efficiencies for the major, Class I carriers that have resulted from deregulation, mergers, and downsizing; the increased

demand for low sulfur coal by utility power plants, leading to increased shipments by unit train from the western states; and the growing public interest and technological advancements in high speed passenger rail transportation as an alternative to automobile or air travel in congested corridors.

The 16 Class III (short-line) carriers operating in Kansas provide local service on over 1,700 miles of less-heavily traveled rail lines. These short-line railroads connect many Kansas communities to the national rail system and provide freight shippers with choices in transportation.

Programs to address rail-highway accidents have been successful as measured by the reduced number of accidents and fatalities. The decrease in accidents can be attributed to crossing consolidations, crossing safety improvements, grade separation improvements, and safety education campaigns. ITS offers several technology applications that increase safety at rail-highway crossings and provide crossing information to emergency providers.

16. Future transportation programs should continue the State Rail Improvement Program to preserve and upgrade short-line railroads in Kansas, providing an alternative mode of freight transportation for rural Kansas and minimizing damage to Kansas roads.
17. Future transportation programs should continue the Grade Separation and Grade Crossing Safety Programs.
18. KDOT should continue to work with local governments and metropolitan planning organizations to utilize a corridor approach to rail-highway crossing improvements, with a continued emphasis on elimination of grade crossings where possible through cooperative agreements.
19. Educational safety programs should be aimed at corridors with heavy train traffic.
20. KDOT should advocate for federal assistance for short-line railroads to accommodate the increased axle loads of railcars associated with the 286,000-pound hopper car.

Public Transportation

Public transportation is a vital service that provides mobility to those who would otherwise be homebound and it provides a needed alternative to personal automobile use.

The Kansas Legislature passed a law in 1992 requiring that transit providers receiving Federal or state grant funds be members of a Coordinated Transit District (CTD). The intent of the state law is to foster greater coordination and cooperation among transit providers. This has occurred, but there is still potential for more partnerships and sharing of resources. KDOT will continue working with the Federal Transit Administration and the CTDs to help overcome any institutional and administrative barriers to more effective transportation.

By itself, public transportation cannot significantly reduce congestion in urban corridors. However, if transit is made more accessible and practical as an alternative,

especially on unusually congested corridors such as in construction areas, it can reduce the number of vehicles on that facility.

21. KDOT should work with its partners in federal and other state government agencies to remove any administrative or regulatory barriers to sharing and effective use of transit resources.
22. KDOT should proactively seek out opportunities to partner with local transit agencies where park and ride facilities would be viable to encourage carpooling and transit ridership.
23. KDOT should coordinate with public transit providers to utilize public transportation as a way to mitigate congestion during large transportation construction projects in metropolitan areas including the possibility of reduced fares.
24. KDOT should evaluate the Coordinated Transit Districts for possible enhancement of their role to improve the effectiveness and efficiency of the delivery of transit services.

Water Transportation

The U.S. Army Corps of Engineers, which regulates virtually all policy implementation on the Missouri River, is contemplating several policy changes that could significantly affect the future use of the Missouri River system for water transportation. These policy changes are currently on hold, but if adopted, could curtail commercial use of the Missouri River as a transportation option.

25. KDOT should continue to monitor any policy changes regarding navigability of the Missouri River to determine impacts on barge transportation.

Intermodal Transportation

In recent years, transportation professionals have become more aware of the need to view the movement of passengers and freight from a perspective of the "total trip." This provides policymakers with the same view as the transportation user who selects the combination of modal choices to be used for a trip. To be most effective, transportation investment decisions should be made while considering the impacts these decisions will have on other transportation systems and ultimately the user.

It is important that both the points of interconnection between one or more modes and the links or system network of each of the modes are considered when planning improvements. The connections at major intermodal facilities are, therefore, critical points where adequate access by the modes is important. But, also important is the capacity of modal links to handle the volumes needed to maximize efficiency of the entire intermodal system. Transportation professionals must be aware of new technology and trends that will affect the performance of either the intermodal connections or the ability of a modal network to operate efficiently.

26. KDOT and other transportation partners should continue to be involved in intermodal planning. Programs and projects should be developed from an

intermodal perspective so that users are provided with an integrated system of transportation.

Local Issues

Local governments are faced with a difficult task. Infrastructure needs exist at the local level, yet limited funds are available to address the needs. This is true for all local governments in Kansas, but is of particular concern when the declining tax base of many counties is considered. Thirty-four counties have populations under 5,000, making it virtually impossible to raise the resources within their own counties to address their existing road and bridge needs.

Of particular concern at the local level are bridge needs. Cities and counties have jurisdiction over 20,000 bridges in Kansas. Many of these bridges are nearing the end of their design life, and over half of all bridges under local jurisdiction are 40 years old or older.

Local governments have access to some funding and programs to assist them with their infrastructure needs. Cities and counties receive 37.7 percent of the state motor fuels tax receipts through the Special City and County Highway Fund and they receive a share of the federal transportation dollars that come to the State of Kansas. In recognition of the difficult plight of local governments, KDOT began its Local Partnership Program 17 years ago. The Local Partnership Program is comprised of three programs: City Connecting Link (KLINK) Resurfacing, Geometric Improvements on City Connecting Links, and Economic Development. In addition, KDOT administers safety programs that aid local governments. These programs allow local governments to apply for state and federal funds to improve roadways under their jurisdiction. Though not adequate to address all of the needs, these programs have been very beneficial for local governments.

As agencies plan for future transportation improvements, stakeholders should take advantage of opportunities to participate early in the process. There are opportunities for regional coordination between KDOT and the metropolitan planning organizations of northeast Kansas that border each other. Decisions made in the Lawrence area can affect transportation in Topeka and the Kansas City region. There are also opportunities to better integrate land use with transportation on an even smaller scale, with local planning departments.

27. KDOT planning staff should encourage and facilitate coordination between and among the Northeast Kansas MPOs, including Kansas City, Lawrence and Topeka.
28. KDOT should work with the small cities to coordinate local planning, land use practices, and decisions with the state transportation system.
29. KDOT should continue the Local Partnership Programs.
30. KDOT should continue to simplify and streamline, to the greatest degree possible, the processes, schedules, contacts, and knowledge required for local governments to do business with the agency.

31. KDOT should ensure that Technology Transfer is provided between the State and local levels of government and continue its involvement with the Local Technical Assistance Program.
32. KDOT should work with counties to resolve issues regarding the recruitment and retention of county engineers.
33. KDOT should continue to encourage local governments to improve the quality of bridge inspection data and the collection of road information, which can be used to more efficiently document needs and allocate resources.
34. KDOT should implement the Transportation Revolving Fund low-interest loan program to assist local governments in funding needed improvements.

Financial Implications

Until recently, financing for transportation improvements has normally been provided by user fees at the state and federal level and by a combination of road and bridge fees and property taxes at the local level. The exception to this has been the creation of toll authorities to finance, build, and operate toll facilities.

It appears that future levels of revenue from existing sources are uncertain. Future motor fuel taxes will probably be flat or declining due to anticipated improvements in fuel economy of cars and trucks. It is also possible these revenues will be further impacted by the increased use of alternative fuels, which may be subsidized or not taxed at all. Therefore, in the future, transportation officials must look to innovative methods of financing.

As future transportation funding programs are developed, decision-makers will need to be aware of the debt service from the Comprehensive Highway Program and the Comprehensive Transportation Program that must be accommodated. Further, Kansas could lose the use of federal transportation dollars if state matching funds are not maintained at an adequate level.

35. The State should closely monitor usage of alternative fuels, improvements in the fuel economy of the fleet, and their effect on transportation revenues. Revenues should be monitored to assure that they will be adequate to meet the needs for the future.
36. The State should assure that state funds remain adequate to match federal transportation allocations, in order to take full advantage of federal programs.
37. Transportation programs beyond Fiscal Year 2009 must take into account debt service from the Comprehensive Highway Program and the Comprehensive Transportation Program.

Public Communications

The public has a desire to have significantly more information available to them than ever before. In this time of concern with taxes and the size of government, it is imperative that there is strong public support and commitment to our transportation goals. The need to have frequent and high quality public information provided was seen in the development and the implementation of the Kansas Comprehensive Transportation Program (CTP).

Strong public involvement and support helped to convince the Kansas Legislature that the program was needed. Significant public involvement is important in the policy development stages of any program to ensure that the program designed is the right program and that it will continue to have public support and acceptance.

Strong public involvement is important at the project development level as well. Once the process has shifted to individual project development, individuals who are affected by the project are frequently concerned at a very personal level, and it is important that these people have access to timely and high quality information. KDOT must also identify populations that may not be sufficiently reached by traditional methods of outreach, such as non-English speaking communities and Indian Nations. Further, technology has made it possible for citizens and businesses to access a greater level of information than ever before. Safety concerns and business needs drive the desire to have specific, up-to-date information on the transportation network.

38. In order to foster better communication between KDOT and the Indian Nations of Kansas, KDOT should participate in annual meetings with the tribes.
39. Public involvement should be sought in the transportation planning process and throughout project development to ensure that opportunity for input is available before projects are designed.
40. KDOT should perform a demographic analysis of minority, low-income, and disabled populations in Kansas to use as a resource to effectively involve those populations.
41. KDOT should continue to develop and implement technologies that enhance the agency's ability to inform and interact with the public.
42. KDOT should continue to conduct External Surveys on a regular basis to maintain feedback from the general public on the performance and direction of the agency.

Personal Mobility Needs

In providing a transportation system for Kansas, KDOT wants to ensure that the personal mobility needs of all citizens are accommodated, to the extent that is feasible.

There is a major shift occurring in the Kansas population age distribution, resulting in a higher percentage of older adults. A primary concern of people age 65 and older is the ability to maintain their personal mobility.

Most disabled citizens desire to use the same transportation facilities as the general public, such as regularly scheduled bus service. Sometimes breakdowns in the integration of transportation networks hinder their ability, such as lack of continuous, well-maintained sidewalks leading to bus stops. These issues generally fall under the jurisdiction of local governments and transit providers, but KDOT encourages a comprehensive examination of these facilities.

43. KDOT should review its policies and procedures to look for opportunities to better accommodate the needs of the elderly (both drivers and transit-dependent).

44. Dialogue with other state agencies that assist the elderly and disabled should be initiated to discover possibilities for cooperation and coordination in service.
45. KDOT should continue to investigate the use of enhanced visibility pavement marking materials and enhanced lighting, as well as reflective material and increased lettering size for road signs at intersections and interchanges.
46. KDOT should explore methods for the collection of demographic data and impact analysis in order to determine social costs and benefits of transportation projects.

Safety and Security

Safety of the traveling public has always been a top priority for KDOT. KDOT continually looks for ways to make highways safer through design construction and maintenance practices, research, and application of traffic control devices such as signals, signs, and pavement markings. However, in many cases driver behavior is the only preventable cause for crashes. Public safety information programs, such as “Kansas Driving: Safe. Not Sorry”, “Put the Brakes on Fatalities Day”, and “Give ‘Em a Brake” have successfully raised public awareness. Seat belt usage also gets a boost from education programs, but perhaps the ability to enforce seat-belt laws would also get more Kansans to buckle up for safety. Innovative enforcement techniques may also improve driver compliance at traffic signals and railroad gate crossings.

KDOT’s Director of Operations serves on the state Commission on Emergency Planning and Response. The governor created this commission in 1999 to facilitate a more coordinated effort for the planning, preparation, response, and mitigation of emergencies for the state. In the heightened security awareness of today, the efficient transfer of information and resources is critical. In the event of an emergency, better routing information can lead to shorter response times. The state’s 800 MHz system could be enhanced to provide data transfer, which would support these efforts.

47. KDOT should continue to educate the public about safety issues and influence driver behavior.
48. KDOT should continue to participate in the state Commission on Emergency Planning and Response.
49. KDOT should support the enhancement of the 800 MHz system to facilitate inter-agency communication for improved emergency response.
50. KDOT should explore the benefits and costs of establishing a Statewide Traffic Operations Center.
51. KDOT should continue the Road Safety Audit program as a proactive means to review current roadway geometry, traffic control, and safety, and to identify locations for improvement.
52. KDOT should continue its efforts to increase the use of safety restraints in automobile travel, including the continued pursuit of a primary seat-belt law.
53. KDOT should continue to work with municipalities to investigate the benefits of video enforcement of red-light running and railroad gate enforcement.
54. KDOT should create a Safety Steering Committee to coordinate the many safety-related activities currently underway and to consider the development of a strategic highway safety plan for Kansas.

Environment

Transportation projects, increased vehicle miles, and construction techniques can all have detrimental effects on the environment. It is extremely important during construction that care be taken to mitigate these effects on habitat, and water and air quality. The Kansas City and Wichita metropolitan areas may exceed new air quality standards that could have implications for the transportation system. Efforts to reduce vehicle emissions and other pollutants resulting from construction practices are extremely important to the future air quality of these regions.

Water quality and habitat are sometimes threatened by the expansion of highways. Compliance with the National Environmental Policy Act helps reduce the impacts, but there are opportunities to better integrate projects into natural settings. Efforts to enhance the environment can often occur during the design phase of projects such as identification of opportunities for wetland mitigation banking. Also, roadside management that incorporates natural vegetation can reduce mowing, maintenance costs, and provide erosion control.

55. KDOT should continue its use of biodiesel fuel where available, and consider the use of other alternative fuel vehicles when practical.
56. KDOT needs to be sensitive to the air quality impacts of its construction practices in the metropolitan areas, including but not limited to burning, and product and equipment emissions. KDOT should also take a more active role in managing air quality by collecting and sharing information with KDHE and air quality agencies.
57. KDOT should continue to explore opportunities for wetland mitigation banking as projects are designed.
58. KDOT should continue to explore the intent to adopt an Integrated Roadside Vegetation Management program to reduce maintenance costs, to foster native vegetation, and to mitigate water runoff impacts.
59. KDOT should continue to make cost-effective use of recycled materials in construction without compromising quality.
60. KDOT should continue to assess environmental impacts of solutions to transportation needs early in project development, thus giving environmental concerns consideration in the decision-making process.