This appendix explains how the Kansas long range transportation planning process and other Kansas Department of Transportation activities address the new planning provisions contained in federal surface transportation legislation (SAFETEA-LU).

SAFETEA-LU indicates that the long-range planning process must address the following issues:

1. Safety
2. Visualization techniques
3. Security
4. Environmental protection, energy conservation, quality of life, and coordination of transportation improvements and growth
5. Operation, management, and system preservation
6. Coordination and consultation

The following sections indicate how the long-range planning process and other state and DOT-level activities address these SAFETEA-LU provisions. Relevant language from SAFTEA-LU is included in each section.
1. Safety

**SAFETEA-LU Requirements**

The security and safety planning provisions from previous federal requirements were decoupled in SAFETEA-LU with each receiving more emphasis in the state long-range transportation planning process. The specific SAFETEA-LU language for the safety requirement follows:

23 CFR Section 450.206(a) – Each State shall carry out a continuing, cooperative, and comprehensive statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will address the following factors: (2) Increase the safety of the transportation system for motorized and non-motorized users;

23 CFR Section 450.214(d) – The long-range statewide transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects contained in the Strategic Highway Safety Plan required by 23 U.S.C. 148

**Safety in the statewide planning process**

Safety is a major priority for the Kansas Department of Transportation. The Planning and Partnership chapter of the long range transportation plan indicates that KDOT is developing new planning tools to put “safety first”. These tools will help KDOT build and operate a system that assures the greatest possible safety for all users.

In addition to emphasizing the importance of planning for safety, the long range transportation plan also calls for actions to address several mode-specific safety issues:

- **Address safety at-grade railroad crossings.** There are 5,414 active railroad crossings in Kansas where trains and cars share the same right of way, leading to delay and safety issues. Safety issues are expected to mount as rail freight traffic increases. The long-range transportation plan calls for KDOT to expand its efforts to improve the safety of at-grade railroad crossings through activities such as resurfacing, adding lights and/or gates, building grade separations, or closing crossings to highway traffic. KDOT also will create a State Railroad Crossing Ombudsmen and work to establish a dialogue with railroads to prioritize crossing improvements and explore options for increasing investment in crossing improvements (e.g., through a dedicated revenue source or tax incentives to railroads).
• **Emphasize bicycle and pedestrian safety.** The long range transportation plan calls for KDOT and its partners to enhance education for both cyclists/pedestrians and highway users about safe practices for sharing facilities.

• **Manage access.** The long range plan calls for KDOT to strengthen its highway access policies in order to avoid negative impacts to system operations, capacity and safety.

**The Strategic Highway Safety Plan**

Planning for safety issues is also underway through the Strategic Highway Safety Plan (SHSP). The SHSP process began in February 2006, when a group of stakeholders held a summit for the purpose of identifying major safety problem areas in the state. Using data to support the decision process, the group identified six key emphasis areas. These areas provide the greatest potential for reducing fatalities and serious injuries on Kansas roadways.

- Impaired Driving
- Occupant Protection
- Lane Departure
- Intersections
- Inexperienced/Novice/Teen Drivers
- Driver Behavior and Awareness

Stakeholder groups, including KDOT, have worked to develop a set of strategies to meet the goals defined in each emphasis area. Future work will include prioritizing those strategies and developing action plans for each. More information on transportation safety in Kansas can be found on the Kansas DOT web site at [http://www.ksdot.org/burTrafficSaf/default.asp](http://www.ksdot.org/burTrafficSaf/default.asp).
2. Visualization Techniques

**SAFETEA-LU Requirements**
The SAFETEA-LU rule includes the following new definition and requirement for visualization techniques:

23 CFR Section 450.104 Definitions. Visualization techniques means methods used by States and MPOs in the development of transportation plans and programs with the public, elected and appointed officials, and other stakeholders in a clear and easily accessible format such as maps, pictures, and/or displays, to promote improved understanding of existing or proposed transportation plans and programs.

23 CFR Section 450.210(a)(1) - The State’s public involvement process at a minimum shall: (v) To the maximum extent practicable, use visualization techniques to describe the proposed long-range statewide transportation plan and supporting studies; (vi) To the maximum extent practicable, make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information.

**Discussion of visualization requirements**
The emphasis in the legislation is on strengthening public participation by making LRTP and STIP information more accessible and easier to understand. While many states have extensive experience in using visualization techniques for specific projects, fewer states have experience in using visualization to convey information about transportation plans and programs. A variety of visualization techniques that state DOTs can consider using range from simple illustrations and charts to sophisticated simulation tools. The statute is not prescriptive in the types of visualization that should be used and states could select those techniques that are effective for their purposes. For example, the use of flow charts to explain the planning process is a simple and effective application of visualization. Appropriate tools according to SAFETEA-LU requirements may include:

- Artist renderings;
- Computer modeled images;
- Computer simulation;
- Drawings;
Flowcharts;
Interactive GIS systems;
Maps;
Models;
Photo manipulation;
Scenario planning tools;
Simulated photos;
Sketches;
Videos; and
Visual preference surveys.

Visualization techniques include on-line information, maps, and links to documents of draft and final plans, reports, corridor studies, and web-based lists of projects in a STIP. Further information about visualization including noteworthy practices can be found at the FHWA web site (http://www.fhwa.dot.gov/planning/vip/index.htm).

**Visualization techniques in statewide planning and programming**

KDOT uses a variety of visualization techniques in its public involvement process to help illustrate and explain concepts and information related to statewide planning and programming.

In the current Kansas Long Range Transportation Plan process, KDOT has conducted a series of eight regional workshops, a series of four meetings each with five Topical Working Groups (metropolitan, metropolitan and rural, freight, economic impact and finance), a statewide symposium on January 18, 2007 and numerous meetings with Policy, Steering and Technical Committees. These various meetings included the use of visualization tools such as maps, graphs, charts, drawings, pictures, flow charts, electronic presentations and other methods to make the analysis and planning process easy to understand. This information is conveyed using the KDOT Web site, specific links to statewide plan and project web sites, as well as hard copy and electronic presentation material. The documents and presentations produced as part of this long range transportation planning process can be found at (http://www.kansaslrtp.org/ListEvents.do)

In the programming area, KDOT’s web-based GIS tool for visualization, KGATE, is available to KDOT staff on the agency’s intranet. KGATE is designed to promote data sharing of information stored in many different locations throughout KDOT. The portal links to geo-referenced and non geo-referenced data, including digital images, multiple data bases, imagery, and other raster data. Point and linear data is displayed simultaneously on a map of Kansas. The tool streamlines data access and research,
expands access to new users, and allows planners to visualize multiple data sets simultaneously. Through queries, users can access for specific locations aerial photos, related reports, video logs, and incident data, among other information.

KDOT is beginning to explore how the agency’s planners can use the KGATE tool during the planning process. The system is grounded in a strong document management system and the availability of information from data sources throughout the agency. They are also working with the state GIS committee to share data across state agencies, and may consider purchasing data from commercial sources in the future to augment public data. KDOT is working with their legal office to determine how to manage public access to KGATE data. Some data is sensitive and needs to be restricted, such as data regarding protected species.

**Figure 1**

*Kansas DOT designed a GIS web portal for the KDOT intranet that enables users to visualize multiple data sets simultaneously.*
3. Security

**SAFETEA-LU Requirements**

The security and safety planning provisions from previous federal requirements were decoupled in SAFETEA-LU with each receiving more emphasis in the state long-range transportation planning process. The specific SAFETEA-LU language for the security requirement follows:

23 CFR Section 450.206(a) – Each state shall carry out a continuing, cooperative, and comprehensive statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will address the following factors: (3) Increase the security of the transportation system for motorized and non-motorized users;

23 CFR Section 450.214(e) – The long-range statewide transportation plan should include a security element that incorporates or summarizes the priorities, goals, or projects set forth in other transit safety and security planning and review processes, plans, and programs, as appropriate.

The Federal Highway Administration (FHWA) understands that states are at different stages of addressing and adopting security elements in their planning processes. As with all long range transportation plan elements and because the states very often have unique security priorities, FHWA expects that each state will develop very different security elements to meet this requirement. Therefore, FHWA has stressed the importance of documenting actions such as initiating dialogue with stakeholders through new consultations, and designing and developing plans that meet this SAFETEA-LU requirement.

**Security in the statewide planning process**

The apparent scale and redundancy of the Kansas transportation system gives a false sense of security, but in many parts of the State that system is straining to keep up with the transportation demands of society and the economy. Any kind of serious event affecting the State’s transportation infrastructure, whether caused by a natural disaster or a terrorist attack, could be catastrophic in terms of loss of life and economic disruption. In response to the threat of terror, KDOT is adapting and expanding its traditional functions to better protect transportation systems and preserve user safety. Foremost among KDOT’s expanded roles are:

- **All Hazards Transportation Security Management.** KDOT has always played a vital support role in emergency planning, response, and recovery situations. Today it is working to ensure terrorism-specific challenges are met.
• **Critical Asset Protection.** KDOT is conducting assessments, investing resources, and incorporating new practices on an agency-wide basis to ensure protection of critical assets it oversees.

**Other security related activities**

The Kansas DOT is working to address security issues in several of its day-to-day activities and planning processes. A few of its activities are listed below:

• **KDOT serves as the lead agency for Emergency Support Functions 1, 2, and 3 in the National Response Plan.** In Homeland Security Presidential Directive, the president called for the development of a new National Response Plan (NRP) to coordinate incident management activities (e.g. prevention/preparedness/response to terrorism, natural disasters, and other emergencies) among Federal, State, local, and tribal organizations. The National Response Plan includes 15 Emergency Support Function (ESF) areas. An Emergency Support Function is a grouping of government and certain private sector capabilities into an organizational structure to provide support, resources, and services. The Kansas Department of Transportation is the lead agency for ESF 1 (transportation), ESF 2 (communications) and ESF 3 (engineering). For example, as the lead agency for ESF 2 – communications, KDOT takes charge of the “Communications on Wheels (COW)” tower that provides alternative communication capabilities in the event of an emergency. To coordinate and plan for the ESF areas, KDOT staff meet regularly with the Kansas branch of the department of Homeland Security. The KDOT liaison to Homeland Security is Mark Krentz, Emergency Coordinator, Bureau of Construction and Maintenance (785-296-7136.)

• **KDOT established the Communication System Revolving Fund.** The Communication System Revolving Fund (CSRF) was authorized by the 2004 Kansas Legislature as a method for the Kansas Department of Transportation to provide radio communication equipment-cost effectively, to local public safety and public service users. The project, which will be in a 17-county area of Southeast Kansas, is the first step toward statewide deployment of an interoperable communications system. First responders frequently can’t talk directly with other emergency service agencies because their radio systems are not compatible. Upgrades to the communications system in Southeast Kansas will enable the region’s many first responders to directly communicate with one another.

• **KDOT established the 511 telephone service to broadcast security alerts.** The 511 telephone service allows travelers to call in and receive information about road conditions, construction detours, and travel weather. KDOT also uses the 511 line to broadcast active AMBER, General Transportation or Homeland Security Alerts.
4. Environment, energy, quality of life, and consistency between transportation improvements and growth

**SAFETEA-LU Requirements**

The final planning rule for SAFETEA-LU revises the previous planning factor, requiring state and Metropolitan Planning Organizations (MPOs) to promote consistency between transportation improvements and planned growth and economic development patterns. Specifically, these requirements are as follows:

**23 CFR Section 450.206(a)** – Each state shall carry out a continuing, cooperative, and comprehensive statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will address the following factors: (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.

**23 CFR Section 450.206(b)** – Consideration of the planning factors in paragraph (a) of this section shall be reflected, as appropriate, in the statewide transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation systems development, land use, employment, economic development, human and natural environment, and housing and community development.

**23 CFR Section 450.208(a)** – In carrying out the statewide transportation planning process, each state shall, at a minimum: (2) Coordinate planning carried out under this subpart with statewide trade and economic development planning activities and related multi-state planning efforts.

*Environmental protection, energy conservation, and quality of life in the statewide planning process*

One of the primary ways in which the Kansas Long Range Transportation planning process addresses environmental protection, energy conservation, and quality of life issues is through multi-modal planning. Through its multi-modal approach, KDOT ensures that Kansas citizens and shippers have access to energy efficient and environmentally friendly modes of travel such as mass transit, freight rail, and non-motorized modes. Having access to a variety of transportation choices also improves Kansans’ quality of life.
The long range plan chapter dedicated to multi-modal planning describes how KDOT is supporting the development of mass transit, freight rail, and non-motorized modes.

Mass Transit. Mass transit services provide an energy efficient mode of travel to Kansas citizens. KDOT is working to support mass transit by:

- Developing a comprehensive rural transit system plan. In close coordination with its partners, KDOT will undertake a full-scale review of rural transit to find ways for making sure that service is better funded and more efficiently operated. This review will include examining the role of – and improvements to – shared maintenance and dispatch, as well as inter-county transit sharing agreements, Coordinated Transit Districts, regional transit hubs, marketing and information services and transit provider consolidation.
- Reassessing state formulas for distributing transit funds. KDOT will review whether factors other than – or in addition to - population should be used for determining how transit funding is distributed. Particular attention will be paid to mechanisms that better allocate funds by needs.
- Improving integration of transit, land use and highway decision-making. KDOT will take a leadership role in making sure transit considerations are included early during the planning and design for roadway projects, and in making sure broader land use decisions support efficient use of transit resources. The Department will take a leadership role to increase transit use and the efficiency of the overall system.
- Improving collection and use of transit data. A lack of data regarding rural transit use and demand for service limits the state’s ability to help effectively plan for rural transit needs. KDOT will lead an initiative to better collect, analyze and act on transit data. For example, KDOT will develop a statewide park-and-ride study. Ridesharing helps improve mobility, save energy, and reduce air pollution. Availability of safe, conveniently located and appropriately sized park and ride lots can help promote ridesharing. KDOT will undertake a study of park and ride needs in Kansas that will address issues such as latent demand, potential locations, as well as implementation costs and funding options.

Freight rail. Shipping freight by rail, rather than by truck, substantially reduces air pollution and energy use. It also reduces wear-and-tear on highways, which reduces the need for energy-intensive roadway maintenance. KDOT is working to support freight rail by:

- Improving rail freight communication and coordination. KDOT will devote additional resources to improve communication and coordination of freight issues so that Kansas can more ef-
fectively meet its rail freight challenges. It will work closely with private-sector partners in establishing future freight investment priorities.

- Developing a statewide freight plan. KDOT will develop a statewide plan that assesses freight-related challenges and investment needs and includes recommendations regarding improving state support for short lines and overall flexibility of support for freight needs. The Department will include a commodity flow assessment of current and projected freight movements, and existing and potential bottlenecks.
- Expanding efforts to mitigate at-grade railroad crossing issues. The Department will work with local partners and private-sector interests on developing a long-term plan for evaluating the needs surrounding rail crossing improvements, setting targets for making improvements statewide and prioritizing the funding of crossing improvement activities such as resurfacing, adding lights and/or gates, building grade separations, or closing crossings to highway traffic.

**Bicycle and pedestrian modes.** Non-motorized modes of travel, such as walking and bicycling, leave essentially no environmental impact. They also provide an opportunity for improved quality of life and healthful physical activity. KDOT is supporting the development of bicycle and pedestrian travel by:

- Improving bike/pedestrian accommodation. KDOT and its partners will work to ensure that appropriate consideration is given to bike and pedestrian needs during the planning and design of transportation projects.
- Emphasizing bicycle and pedestrian safety. KDOT and its partners will enhance education for cyclists, pedestrians, and highway users on safe practices for sharing facilities.

**Other environmental protection related activities**
The Kansas DOT is working to address environmental issues in several of its day-to-day activities and planning processes. A few of its activities are listed below:

- KDOT does basic checklist-type corridor-level environmental reviews, even when environmental documentation is not required.
- KDOT works to ensure attainment of clear air standards. At the current time, the state of Kansas is in attainment of the standards of the Clean Air Act. KDOT will work closely with the appropriate MPOs and air quality agencies to ensure that the state remains in attainment.
- KDOT has chosen to share its Congestion Mitigation Air Quality Improvement (CMAQ) funds with the metropolitan planning organizations in the two largest metropolitan regions in the state (Kansas City and Wichita). This helps ensure the metro areas can maintain good air quality.
- KDOT implemented a prairie ecosystem restoration initiative, which was recently recognized
Appendix C — Kansas Long Range Transportation Plan

by the FHWA as an Exemplary Ecosystem Initiative. The initiative was enacted in February 2004 in cooperation with the Kansas Department of Wildlife and Parks, Kansas Department of Agriculture, and the Audubon Society of Kansas. At the inception of the initiative, new seed mixes and erosion control practices were developed for KDOT to more closely represent and protect vegetation found in that particular region during roadside restoration processes and to best suit the habitat needs of area wildlife.

- KDOT has implemented a new, environmentally sensitive mowing policy as part of its roadway maintenance program. The policy encourages planting of native grasses and wildflowers along roadsides, and designates mowing heights and times to ensure vegetation is mowed on a schedule to enhance plant growth and protect wildlife habitat. KDOT also has agreed to abstain from mowing on high-ozone alert days. KDOT coordinates its roadside management program with the Department of Wildlife and Parks, the Natural Resource Conservation Service, and conservation groups.

- KDOT supports environmentally-friendly modes of travel, such as bicycle and pedestrian planning and development of pedestrian and bicycle infrastructure.

  - Statewide, Kansas has banked 700 miles of former rail right-of-way that could be converted to trails in the future. Several trails are under development with 120 miles developed so far.
  - Through its Transportation Enhancements (TE) program, for example, KDOT has spent $66 million since 1991 on trails and other transportation features that support greater bicycle and pedestrian travel in Kansas.
  - The Department currently spends about $6 million per year on pedestrian projects. Statewide, about 120 miles of trails have been developed under the TE program and nearly 1,000 miles of additional trails have been proposed by communities.
  - KDOT recently initiated the Safe Routes to Schools program, which provides funding for infrastructure projects and education programs to assist localities in encouraging children to walk or bicycle to school more safely.
  - KDOT supports the policy of the Mid-America Regional Council (MARC), which is the metropolitan planning organization for the bi-state Kansas City region, to consider bicycle and pedestrian needs in the planning and design of all bridges within the seven-county MARC planning area that crosses the Missouri River. KDOT has agreed to support this policy.
  - Sharing of Transportation Enhancements (TE) program funds. KDOT shares almost 100 percent of its TE funds with cities and counties. Most of these funds are used on bicycle and pedestrian projects.
**Coordinating transportation improvements and planned growth in the statewide planning process**

The Kansas Long Range Transportation Plan aims to promote consistency between economic development patterns and transportation improvements. To serve this end, the plan describes the demographic trends and economic conditions that will shape growth and development patterns over the next decades. The goal of the plan is to predict the transportation investment needs resulting from future growth and economic development, and to describe how those needs will be met. The “local consult” approach in the long range planning process provided the opportunity for KDOT to work closely with a local planning and development agency, and consider local plans and development.

Additionally, the Long Range Transportation Plan calls for KDOT to improve integration of transit, land use and highway decision-making. KDOT will take a leadership role in making sure transit considerations are included early during the planning and design for roadway projects, and in making sure broader land use decisions support efficient use of transit resources. The Department will take a leadership role to increase transit use and the efficiency of the overall system.

**Other activities relating to coordination of transportation and planned growth and economic development**

Kansas works to coordinate transportation and economic growth in some of its day-to-day activities. A few of these activities are listed below:

**Coordination with metropolitan planning organizations (MPOs).** KDOT routinely coordinates with metropolitan planning organizations through its urban planning unit. The unit is primarily responsible for working jointly with the larger metropolitan and urban areas to develop short-range and long-range transportation plans in accordance with the Federal “3-C” (cooperative, comprehensive, and continuing) transportation planning process.

Some of these MPOs are also making efforts to integrate transportation investments and planned growth. For example, the Wichita MPO’s 2030 Long Range Transportation Plan includes an element on decision making. The element describes the importance of coordinating development decisions, which occur at the local level, with transportation investment decisions, which occur primarily at the regional and state level.

To further coordination efforts between land use and planning, KDOT has added a new staff position in the Bureau of Transportation Planning. The staff person is responsible for coordinating transportation and land use in the Kansas City metropolitan area. In addition, KDOT will coordinate any new capacity


expansion projects it is considering with all Transportation Management Areas in the state. Transportation Management Areas are areas with populations exceeding 200,000. These areas are required by federal law to have a Congestion Management Process.
5. System Operation, Management, and Preservation

**SAFETEA-LU Requirements**

The final planning rule for SAFETEA-LU requires state Long-Range Transportation Plans to facilitate the efficient management and operation of the existing system. Specifically, these requirements include:

**23 CFR Section 450.206(a)** – (7) Promote efficient system management and operation; and (8) Emphasize the preservation of the existing transportation system.

**23 CFR Section 450.214(b)** – The long-range statewide transportation plan should include capital, operations and management strategies, investments, procedures, and other measures to ensure the preservation and most efficient use of the existing transportation system. The long-range plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the state’s transportation system.

To further clarify, **23 CFR Section 450.104** defines Operational and Management strategies to mean actions and strategies aimed at improving the performance of existing and planned transportation facilities to relieve congestion and maximize the safety and mobility of people and goods.

**System operation, management, and preservation in the statewide planning process**

KDOT’s long range transportation planning process is focused on effective management of the existing transportation system in order to maximize its value in future years. “Preserving what we have” is a major tenet of the plan. Improving mobility by reducing congestion is also an important goal.

The long range transportation plan indicates that KDOT will work to preserve and maximize the value of its existing highway infrastructure by modernizing its roadways and expanding capacity where needed. To preserve and modernize the existing system, KDOT will:

- Use a practical design approach to get the most maintenance value out of its highway dollars. Since fully upgrading roadways with low traffic volumes may yield little overall benefit at great expense, KDOT is developing a practical design approach for incrementally improving a lesser-used facility without over-designing them for conditions that don’t affect that particular roadway.
• Add system capacity. KDOT will pursue capacity additions to the Kansas transportation system with a mix of strategies including bottleneck elimination, additional lanes, new passing lanes, and new or improved interchanges.

• Make existing capacity and capacity improvements more effective through the use of Intelligent Transportation Systems (ITS); access management; and land use policies. Other approaches, including public transportation; bicycle and pedestrian movement; and carpooling and staggered business hours should be expanded and promoted, especially in urban areas.

• Clear accidents more quickly. Traffic jams on Kansas roadways often are caused by “non-recurrent congestion” which generally is caused by unanticipated incidents, such as crashes, that temporarily reduce normal highway capacity. KDOT will work closely with partners in clearing traffic accidents more quickly and in removing institutional barriers that hinder improvement in this area.

• Develop better tools for measuring and forecasting capacity needs. As Kansas’ congestion grows, KDOT will develop and apply advanced techniques for better analyzing the causes and impacts of current and potential problems, as well as the feasibility and benefits of alternative solutions. The goal will be to provide sophisticated analysis that gives Kansas decision makers the tools and information they need for better identifying and prioritizing critically important projects with disproportionately large transportation, economic or other benefits.
6. Coordination and Consultation

**SAFETEA-LU Requirements**

SAFETEA-LU expands upon prior coordination requirements, requiring inter-agency consultations in the transportation planning process which previously considered non-metropolitan consultations. The following sections of the 23 CFR pertain to interagency consideration, cooperation, and consultation:

**23 CFR Section 450.208(a)** – In carrying out the statewide transportation planning process, each state shall, at a minimum: (3) Consider the concerns of Federal land management agencies that have jurisdiction over land within the boundaries of the state; (4) Consider the concerns of local elected and appointed officials with responsibilities for transportation in non-metropolitan areas; (5) Consider the concerns of Indian Tribal governments that have jurisdiction over land within the boundaries of the state; (6) Consider related planning activities being conducted outside of metropolitan planning areas and between states;

**23 CFR Section 450.214(f)** – Within each metropolitan area of the state, the long-range statewide transportation plan shall be developed in cooperation with the affected MPOs.

**23 CFR Section 450.214(g)** – For non-metropolitan areas, the long-range statewide transportation plan shall be developed in consultation with affected non-metropolitan officials with responsibility for transportation using the state’s consultation process(es) established under Section 450.210(b).

**23 CFR Section 450.214(h)** – For each area of the state under the jurisdiction of an Indian Tribal government, the long-range transportation plan shall be developed in consultation with the Tribal government and the Secretary of the Interior consistent with § 450.210(c).

**23 CFR Section 450.214(i)** - The long-range statewide transportation plan shall be developed, as appropriate, in consultation with state, tribal, and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. This consultation shall involve comparison of transportation plans to state and tribal conservation plans or maps, if available, and comparison of transportation plans to inventories of natural or historic resources, if available.
Coordination and consultation in the statewide planning process

As part of the long range planning process, KDOT undertook extensive consultation with local, regional, and tribal partners. Consultation was accomplished through the formation of several topical working groups and through an extensive public outreach process.

Topical working group participants included representatives of city, county, and regional/metropolitan level governments as well as private sector and nonprofit participants. Working group members had the opportunity to provide extensive input into the development of the transportation plan. Working group representatives from city, county, and regional/metropolitan level governments included:

- City governments, including the cities of Atchison, Derby, Dodge, Gardner, Great Bend, Garden City, Kingman, Kiowa, Kansas City, Lawrence, Leawood, Liberal, Newton, Olathe, Overland Park, Salina, Sharon Springs, Topeka, and Winfield.
- County representatives: Allen County, Ellis County, Ford County, Greely County, Johnson County, Harvey County, Labette County, Miami County, Sedgwick County, Shawnee County, Thomas County, and Washington County.
- Metropolitan and Regional level organizations: Wichita Area Metropolitan Planning Organization; Mid-America Regional Council; Southwest Kansas Regional Transportation Council.

In addition to organizing the topical working groups, KDOT also conducted a public outreach process to ensure cooperation and coordination with metropolitan level governments, tribal governments, and representatives of federal and state agencies. These meetings provided an opportunity for stakeholder groups to comment on the Long Range Planning Process. Meetings were arranged with:

- Metropolitan-level governments: Lawrence-Douglas County Metropolitan Planning Office; St. Joseph Transportation Study Organization; Metropolitan Topeka Planning Organization; Wichita Area Metropolitan Planning Organization; and the Mid-America Regional Council.
- Tribal governments: Iowa Tribe, Kickapoo Tribe, Prairie Band of Potawatomi Nation, Sac & Fox Nation of Missouri in Kansas and Nebraska.
- Tribal organizations: Indian Tribal Governments, National Congress of American Indians, Council of Energy Resource Tribes; National Tribal Environmental Council; Native American College/University; and Tribal Technical Assistance Program.
- Federal and state agency partners: Department of Health and Environment; Natural Resource Department of Fish and Wildlife; Department of Health and Environment; State Historic Preservation Office; and United We Ride.

A complete list of participants in the public outreach process and a detailed description of that process are contained in an appendix of the long range plan.
7. Environmental Mitigation

**SAFETEA-LU Requirements**

SAFETEA-LU requires that state long-range transportation plans include a discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan. The following section of the 23 CFR pertains to environmental mitigation.

**23 CFR Section 450.214(j)** - A long-range statewide transportation plan shall include a discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the long-range statewide transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The State may establish reasonable timeframes for performing this consultation.

**Discussion of potential environmental mitigation activities and potential areas to carry out these activities**

As discussed in Chapter 8 of the Kansas Long Range Transportation Plan, KDOT already considers environmental issues in many of its policies and practices. Some of these environmental practices are discussed above in #4 of this appendix concerning environmental protection and consultation is discussed in #6. However, since the KDOT is essentially a policy plan, KDOT relies on corridor planning for its more detailed planning discussions of environmental impacts and mitigation activities. The corridor planning process plays an important part in engaging resource agencies early in the process to help identify environmental issues and potential mitigation measures prior to the formal NEPA process. This process is used to inform the NEPA process and to screen alternatives. KDOT is engaged in several corridor-level planning activities to manage infrastructure needs in growing areas and as part of those efforts addresses environmental mitigation. For example:

- KDOT is conducting a corridor study in the rapidly growing K-7 corridor. KDOT has been meeting with local planners in the 12 cities and counties along K-7, including Leavenworth, Lansing, Leavenworth County, Basehor, Bonner Springs, Unified Government of Wyandotte County and Kansas City, Shawnee, Lenexa, Olathe, Johnson County, Spring Hill and Miami County. The goal of the study is to set a blueprint that KDOT and the cities can work toward as new development occurs.
KDOT and the Kansas Turnpike Authority conducted a Major Corridor Study between Topeka and Kansas City to determine future travel needs. One of the goals of the study was to identify environmental issues that may impact future improvements. The evaluation process included an evaluation methodology that screened alternatives based on environmental criteria that would minimize negative environmental effects.

KDOT conducted a corridor study in northwest Wichita which evaluated a need for a potential freeway or expressway connection between US-54 and K-96. This was a proposal initially evaluated by the Wichita-Sedgwick County Metropolitan Area Planning Department, the agency designated as the MPO. This corridor study included the following environmental goal and objectives:

**Goal:**
Provide a transportation system that avoids / minimizes / mitigates adverse environmental impacts and fosters positive environmental effects.

**Objectives:**
- Avoid/minimize, or if unavoidable, mitigate adverse impact on environmentally sensitive areas
- Improve air quality
- Minimize energy consumption
- Foster environmental justice.

The study included an analysis and discussion of the environmental impacts that would need to be studied in detail in further analysis. It included an evaluation matrix of environmental and cultural concerns for each alternative.

A study of future improvements for the K-10 highway corridor between the cities of Lawrence and Kansas City was sponsored by KDOT, the Mid-America regional Council (MARC) and the Lawrence-Douglas County Metropolitan Planning Commission. The study included an examination of existing environmental resources along with potential impacts and mitigation activities. The study discussed a number of environmentally sensitive areas including several wetlands, floodplains, parks, HAZMAT sites and existing pedestrian/bicycle trails. The study recommended possible mitigation activities such as buffer areas between the K-10 right-of-way, and future development to minimize noise issues, landscape improvements, and the provisions for a pedestrian/bicycle trail.
In addition, the MPOs in Kansas conduct special studies and corridor studies in cooperation with KDOT, which discuss environmental mitigation activities. For instance,

- MARC conducts numerous special studies to better understand transportation and its relationships in the Kansas City region. These studies focus on issues such as congested corridors, problematic interchanges, and future transit possibilities. Example corridor studies conducted by MARC in Kansas include the Metcalf Corridor Study in Overland Park, KS, South Metro Connection in Johnson County, and the U.S. 24-40 Corridor Study in Leavenworth County, KS. These studies look at the need for future mobility and consider land use and environmental sustainability and community values.

- MPOs also provide supporting environmental information to support corridor and special studies. For example, MARC has the Natural Resources Inventory and has developed the Metro�� Corridors Map. MPOs are also in constant contact and consultation with their area’s resource agencies.

Additional environmental work will be conducted during the implementation of the Kansas Long Range Transportation Plan.