

5-COUNTY REGIONAL TRANSPORTATION STUDY



DOUGLAS • JOHNSON • LEAVENWORTH • MIAMI • WYANDOTTE

Phase 2 Final Report



Section 1: Introducing the 5-County Regional Transportation Study

The Kansas Department of Transportation, the Mid-America Regional Council, and the Lawrence-Douglas County Metropolitan Planning Organization have completed a two-phase study that involved residents, community leaders, and transportation stakeholders to assess changing transportation needs in Douglas, Johnson, Leavenworth, Miami, and Wyandotte counties. This comprehensive study resulted in a set of recommended strategies to serve the region's transportation needs in the next three decades.

WHY IS THE STUDY NEEDED?

The 5-County region, shown in Figure 1-1, is the fastest growing region in the state of Kansas and rapid development in the study area could strain the transportation infrastructure needed to support additional growth. A number of high-impact developments are underway or planned in the region that will significantly impact regional travel patterns. Examples include the BNSF Intermodal Facility in Edgerton and additional growth at Village West in Kansas City, KS.

Construction solutions to changing travel patterns will cost billions of dollars in a time when funding is limited. Because of this, the region must prioritize the needs and employ strategies that can be implemented with future anticipated funding.

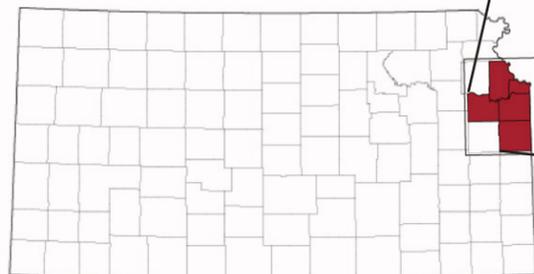
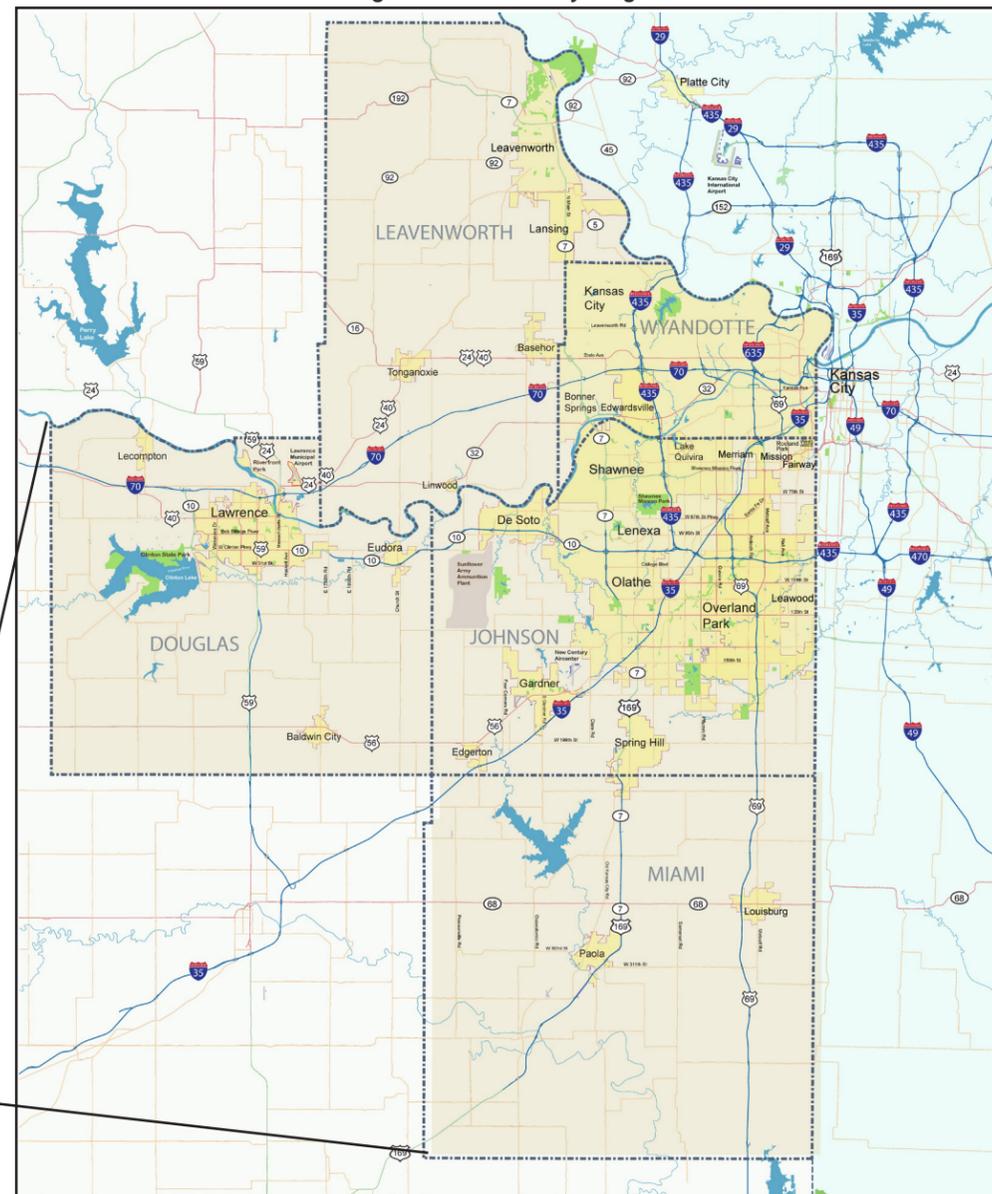


Figure 1-1: 5-County Region



PURPOSE

The purpose of the 5-County Regional Transportation Study was to assess the changing transportation needs of the region and identify key strategies to enhance the regional transportation system in a sustainable way. Difficult choices will need to be made, and this study will serve as a guide and help to shape the future for the region.

STUDY SPONSORS

Three transportation agencies joined to conduct the 5-County Regional Transportation Study to provide a responsible, holistic view of the region's transportation future.

The **Kansas Department of Transportation (KDOT)** is responsible for the planning, development, and operation of various modes and systems of transportation within the state.

The **Mid-America Regional Council (MARC)** is an association of city and county governments and, as the designated metropolitan planning organization (MPO) for the 8-county bi-state region, is responsible for the transportation planning process, including four of the five counties in the study.

The **Lawrence-Douglas County Metropolitan Planning Organization (LDC MPO)** is responsible for shaping the transportation planning process for all of Lawrence and Douglas County.

A **Core Team** of staff from each of the study sponsors provided oversight for the study process.

Figure 1-2: 5-County Transportation Study Process

Study Sponsors provided the following Guiding Principles for the 5-County Study

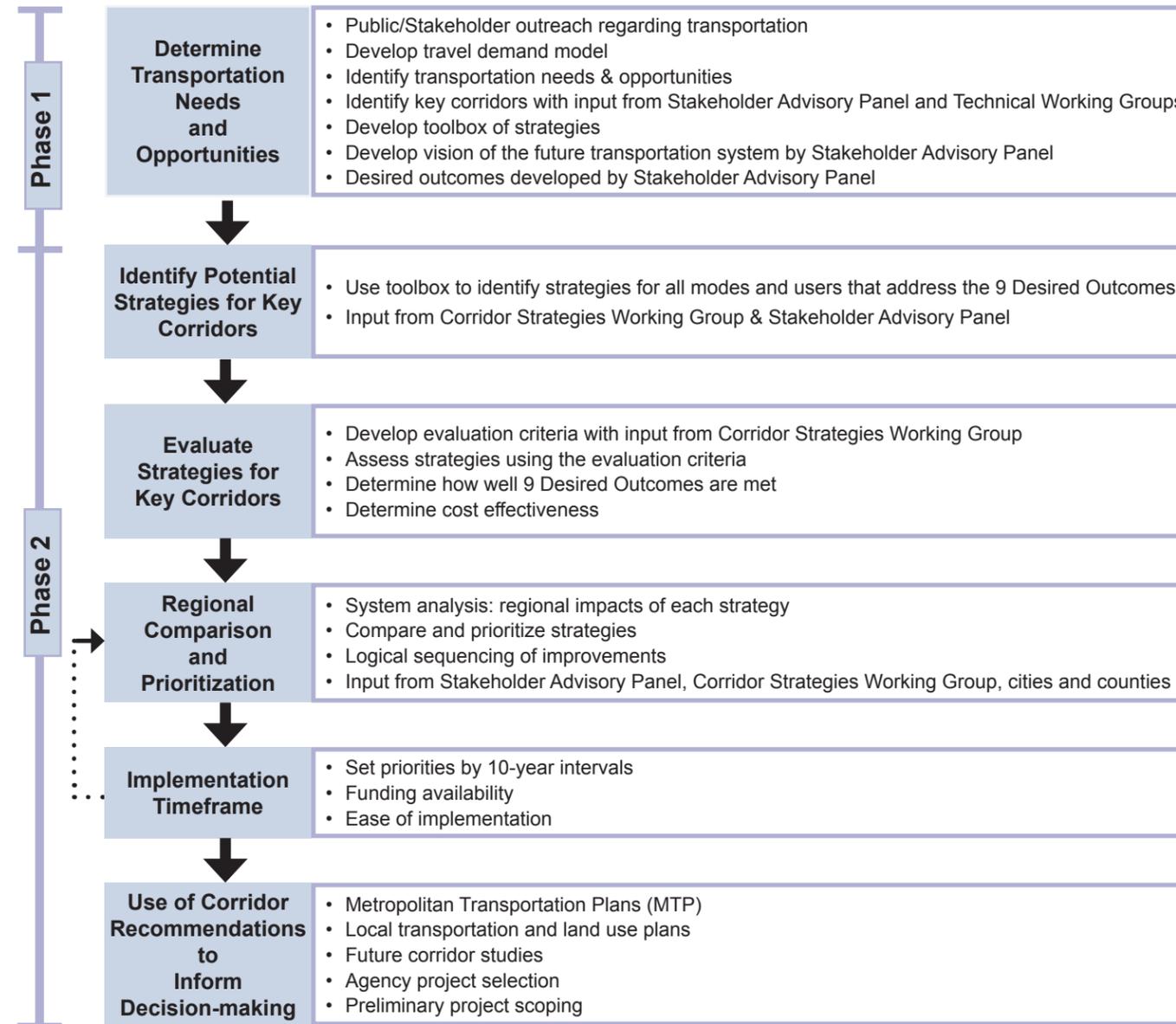
The 5-County Regional Transportation Study will assess the region's multimodal needs and develop strategies that are:

- Regionally Based
- Technically Feasible
- Politically Acceptable
- Financially Realistic
- Sustainable

THE 5-COUNTY STUDY PROCESS

The 5-County Study captured comprehensive stakeholder input, the existing challenges that travelers face in the region, and defined changes projected over the next three decades. The study analyzed, in detail, the transportation features of the system, and considered peer cities and their transportation successes and challenges. Finally, the issues, stakeholder needs, anticipated changes, and potential strategies were evaluated within key corridors. This evaluation resulted in regionally-based strategy packages that could be feasibly implemented to create the region's future transportation system.

The complete 5-County Study process development is shown in the flow chart in Figure 1-2. Phase 1 consisted of the first box "Determine Transportation Needs and Opportunities." Phase 2 consisted of the remaining boxes and defines the full evaluation process. A timeline of the study and other major transportation milestones is shown in Figure 1-3.



Phase 1

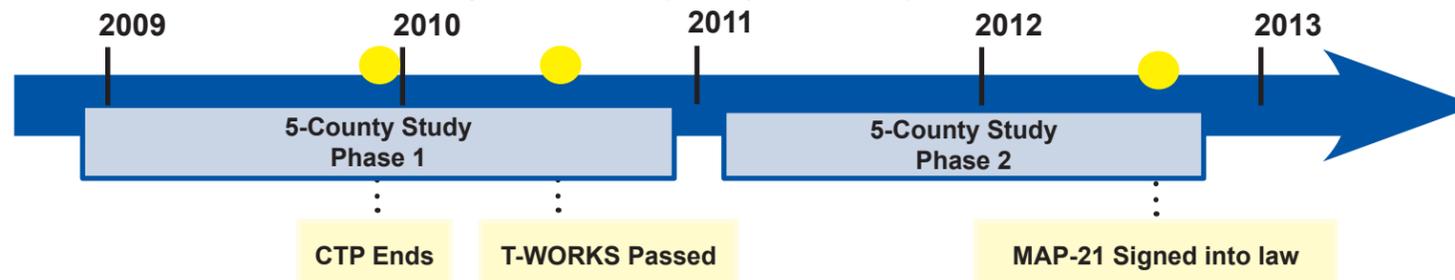
Phase 1, a two-year process completed in December 2010, provided a complete assessment of the multimodal transportation needs for the 5-County region.

Stakeholder outreach was a major component of Phase 1 of the study, where the study team worked to develop stakeholder relationships to instill support and trust in the process. Public participation efforts were organized to provide the citizens of the 5-County region with a comprehensive and consolidated opportunity to help identify transportation trends/challenges and discuss solutions for all transportation issues. During Phase 1, a broad range of stakeholders were involved, including elected officials, local governments staff and the general public through a Stakeholder Advisory Panel, a variety of technical working groups, stakeholder interviews, a region-wide survey and public meetings. Through these outreach efforts stakeholders shared what they thought was important and helped to shape the outcome of the study.

As a result of the Phase 1 stakeholder outreach, five primary themes emerged and have been used to guide the study recommendations:

1. Create a multimodal transportation system that provides choice and supports the economic vitality of the region.
2. Focus on moving people and freight, rather than on moving vehicles.
3. Invest in a transportation system that promotes the region's long-range vision and community goals and objectives.
4. Seek to maximize the vitality of social, economic and environmental systems when making transportation investments.
5. Maintain and invest in the existing transportation system.

Figure 1-3: 5-County Transportation Study Timeline



5-County Vision

The Stakeholder Advisory Panel helped to develop the goals and objectives of the study, which were then transformed into the following vision statement:

“The future 5-county transportation system should

- *Be a seamless system allowing the user the choice to utilize multiple modes of transportation in a single trip.*
- *Efficiently move people and goods.*
- *Support a strong regional economy.*
- *Be safe and reliable.*
- *Be financially efficient and affordable for agencies and users.*
- *Enhance the environment.*
- *Improve public health.*
- *Enable all people access to good jobs, education and training, needed services, and recreational and community attractions.*
- *Allow every citizen to participate fully in society whether or not they own a car and regardless of age, ability, ethnicity, or income.*
- *Enhance the quality, livability and character of communities and support revitalization without displacement.”*

The Stakeholder Advisory Panel also developed 9 Desired Outcomes (listed to the right) to be used as a framework for making decision about transportation investments and to evaluate strategies.

Phase 1 also presented approaches to facilitate a collaborative planning approach, examine innovative concepts in transportation technology, and consider multimodal transportation solutions and the idea of sustainable transportation investments.

9 Desired Outcomes

The Study’s Stakeholder Advisory Panel and Working Groups developed a list of 9 Desired Outcomes during Phase 1. These outcomes were used to evaluate strategies during Phase 2.

Mobility: *Move people and goods in an efficient manner where they want to go, when they want to go. Focus on minimizing person delay across modes rather than focusing exclusively on minimizing vehicle delay.*

Safety: *Reduce crash rates, severity of crashes (fatalities, serious injury crashes), and reduce conflict points. Improve the perception of safety and user-confidence.*

Regional Prosperity: *Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets. Provide access to systems, facilities, and modes. Support sustainable economic development through transportation investments.*

Efficient Use of Resources: *Evaluate the affordability of transportation investments by considering the initial investment to plan, design, and construct; the life-cycle costs to maintain and operate; and the economic benefits to the community. Enhance and maintain the existing transportation system.*

Choice: *Invest in a multimodal transportation system that maintains our existing primarily roadway system but also allows individuals the choice of using other modes of transportation such as sharing a ride, using public transportation, bicycling, or walking. Support the independence of persons with disabilities through transportation investments.*

Environment: *Rather than mitigate the impacts upon the environment, transportation system investments should seek to enhance air and water quality, reduce climate impacts and the region’s carbon footprint, and protect high priority natural resources.*

Public Health: *Reduce the impacts to public health by improving traffic safety, improving air quality, promoting physical activity and fitness, increasing community cohesion, improving access to medical services, and increasing transportation affordability.*

Social Equity: *Consider the investment benefits and impacts on all population groups within communities. Support civil rights through transportation investments. Create jobs through transportation investments. Minimize personal transportation expenses in ways that support wealth creation. Look for opportunities to employ economically disadvantaged persons in the development of the transportation system.*

Livability: *Integrate the transportation system with the community desires. Balance mobility goals with the livability of the community including social equity.*

Specific tasks included:

- Describe the existing and planned transportation system
- Analyze the historic, current, and year 2030 population, employment, and land use
- Analyze the current and year 2030 traffic characteristics
- Analyze the current and year 2030 transportation system performance
- Understand the public/stakeholder perceptions of transportation needs

Finally, Phase 1 identified 13 key corridors in the region in which to evaluate transportation strategies and their effectiveness in those corridors. The Phase 1 report and complete appendices can be accessed at: http://kdotapp2.ksdot.org/5CountyStudy/get_more_info/reports.aspx

Phase 2

Phase 2, completed in October 2012, used the goals developed in Phase 1 to prioritize the region’s needs and identify strategy “packages” that are *regionally based, technically feasible, financially realistic, sustainable and politically acceptable*, for 17 key corridors plus a potential outer loop. (Some of the 13 key corridors from Phase 1 were divided to create the 17 key corridors evaluated in Phase 2. Figure 1-4 shows the corridors evaluated in Phase 2.)

Engagement efforts with the Stakeholder Advisory Panel, the Corridor Strategies Working Group, the Travel Demand Model Technical Committee, elected officials and local government staff continued throughout Phase 2.

The Stakeholder Advisory Panel (SAP) was a group of informed stakeholders and decision-makers representing various interests and was responsible for recommending transportation goals and providing input on decision-making criteria. The SAP built on its work from Phase 1, developing a prioritized plan with preferred strategies and potential projects as well as a toolbox to help communities and KDOT implement the plan. The Advisory Panel integrated community needs and values into the study dialogue and deliberation.

