Section 12:
Regional Framework for Decision Making

Transportation investment decisions should take into account the vision for the region's future transportation system that was developed by stakeholders in Phase 1 of the 5-County Regional Transportation Study.

The shared vision of local officials, technical staff, and other transportation stakeholders in the region stated that:

"The future 5-County transportation system should…"

- *Provide efficient movement of people and goods*
- *Provide users with the choice to utilize multiple modes of transportation*
- *Support a strong regional economy*
- *Be safe and reliable*
- *Be financially efficient and affordable*
- *Enhance the environment*
- *Improve public health*
- *Allow every citizen to participate fully in society*
- *Enhance the quality, livability, and character of communities*

FRAMEWORK FOR INVESTMENT DECISIONS

To accomplish this vision, the Stakeholder Advisory Committee developed "9 Desired Outcomes" to guide decisions for future transportation investments. Decisions must consider the funding limitations for transportation infrastructure and services.

A regional framework for transportation investment decisions was developed with guidance from the Stakeholder Advisory Panel. Decisions should follow the framework shown in Figure 12-1 and described below:

1. Maintain existing transportation facilities and services before giving consideration to other expenditures: Within this framework, maintaining and operating the existing roadways, bridges, transit services, and bicycle/pedestrian facilities comes first. Maintenance first has been a practice of KDOT and has been determined as the number one priority of residents and stakeholders in the 5-County region.

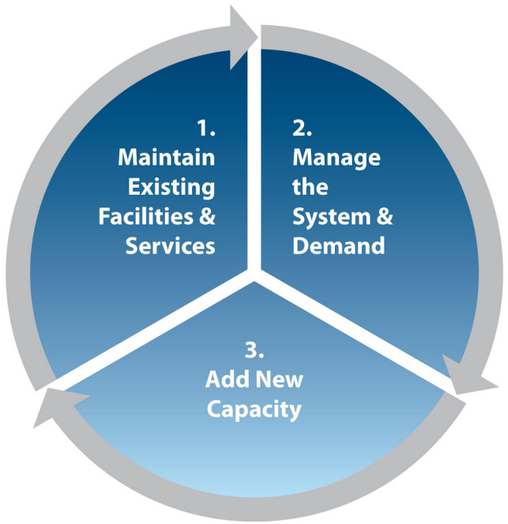
2. Manage travel demand and the operation of the transportation system before considering more costly strategies: Within this framework, the next step is to consider a wide variety of lower-cost strategies that can maximize the efficiency of the existing system and reduce the demand for use.

3. Add new capacity to the transportation system: The final step within this framework is the consideration of new infrastructure and service capacity improvements. Within this framework it is understood that new capacity improvements lead to new maintenance and system management costs.

RECOMMENDED PRACTICES

Traditionally, mobility and safety were the primary factors considered when making transportation investment decisions. With the state-funded T-WORKS transportation program, KDOT also considered the economic impacts of transportation projects and the input of local priorities as presented by city and county representatives.

Figure 12-1: Framework for Transportation Investment Decisions



During the 5-County Study, stakeholders confirmed that those factors are important, but added other Desired Outcomes that should be considered as decisions are made. These additional factors include: choice of modes, impacts to the environment, impacts on public health, social equity, community livability goals, and the efficient use of funding resources.

In applying this decision making framework, the following practices are recommended for the region.

MAINTAIN EXISTING FACILITIES AND SERVICES

1. Maintain existing infrastructure and services before considering system expansion. Maintaining and operating the existing roadway infrastructure and transit services is the foundation for the region's transportation system of the future. Transportation funds must first address the existing system. Feedback from stakeholders and the general public indicates that maintenance and preservation should be a top priority.

2. Consider life-cycle costs when making investment decisions. The life-cycle costs to maintain as well as construct an improvement should be considered as decisions are made.

MANAGE TRAVEL DEMAND AND OPERATION OF THE TRANSPORTATION SYSTEM

3. Maximize the efficiency of existing roadways before considering lane additions. Knowing that transportation needs outweigh the expected funding, it is imperative that strategies consider maximizing the efficiency of existing roadways before more costly projects such as adding travel lanes.

Transportation System Management (TSM) strategies such as ramp metering, variable speed limits, traffic signal optimization, and access management can improve a roadway's ability to move higher volumes of traffic.

4. Strategies should focus on moving people more than moving vehicles during peak commute times. Recurring congestion occurs during the weekday commute periods;

while during the remainder of the day, roadways have adequate capacity to serve traffic. As commuters are daily travelers, strategies that promote carpooling and transit use can significantly reduce the demand on major roadways and therefore delay or eliminate the need for added lanes. The public survey conducted in the region indicated a strong desire for enhanced transit service particularly when higher fuel costs were considered.

Transportation Demand Management (TDM) strategies such as Park & Ride facilities, transit services, ride sharing, and bicycle and pedestrian facilities should be considered before the significantly more expensive option of widening a roadway.

5. Expand programs that focus on non-recurring congestion. Non-recurring congestion due to vehicle break downs and crashes can occur at any time of the day and can significantly impact the system's ability to move people and goods. Non-recurring congestion can be addressed through strategies such as expanding the KC Scout traffic management system, motorist assist programs, and incident management plans.

6. Manage lanes rather than build new lanes. Recognizing the difficulties in expanding a roadway within a developed urban area, consideration should be given to managing the travel lanes and making the most effective use of the full pavement width before a decision to add lanes. Strategies include active lane-use control that can incorporate the use of the shoulder as a driving lane during peak traffic conditions, High-Occupancy Vehicle (HOV) lanes, and High-Occupancy Toll (HOT) lanes.

7. Focus on correcting bottlenecks before considering widening a roadway. Many times congestion on a roadway can be traced to an operational or geometric feature at a given spot. Geometric improvements focused on these spots can often have significant impacts on the traffic flow along large sections of the road system. Examples include an auxiliary lane between an on-ramp and an off-ramp, lengthening an acceleration lane, and adding or lengthening a turn lane at an intersection.

ADD NEW CAPACITY

8. When additional lanes are recommended on freeways, HOT/HOV operation during peak periods should be considered. The ability to widen roadways is becoming increasingly more difficult. Therefore, when a decision is made to construct additional lanes on a freeway, consideration should be given to incorporating High Occupancy Vehicle (HOV) / High Occupancy Toll (HOT) features as part of the improvement. This will provide KDOT more flexibility and control to increase the throughput of persons in these lanes when needed.

9. Develop a right-of-way preservation program. While often a difficult choice to make from a short-term funding standpoint, preserving necessary right-of-way for future improvements can result in large cost savings in the long-term picture. Right-of-way preservation has the added benefit of guiding development to be compatible with future transportation infrastructure.

10. Develop a program to supplement local funds for the improvement of routes that parallel a highway. Many drivers make use of the freeway system for short distance trips, adding to congestion during peak periods. Partnerships between cities and the state to improve local streets that parallel state highways may bring congestion relief to the highways if short-distance trips can be encouraged to stay on the local roadway system.

IMPLEMENTING THE FRAMEWORK

Decisions on how to invest in the region's transportation system are made by the Study Sponsors and many of the stakeholders that were involved in the 5-County Regional Transportation Study. The lessons learned during the study and the framework for decision making that has been presented should provide important input to each of these organizations:

KDOT

The Kansas Department of Transportation will be scheduling the update of its Long Range Transportation Plan (LRTP) . The 5-County Study will provide important input to the LRTP regarding the Kansas City metro area and surrounding counties.

Goal setting and the identification of future strategies in the LRTP should distinguish the many differences between urbanized areas and rural areas.

There are many process steps completed through the 5-County Study that could be implemented statewide. This includes: the use of a transportation toolbox; identifying a broad range of issues; tying goal statements to evaluation methodology; and using diverse metrics to select appropriate strategies.

In addition to using this information for the LRTP process, it is recommended that the output from this study be used as part of the project selection and scoping process in the 5-County region.

Since a few of the key corridors in the study cross the state line into Missouri, a discussion with MoDOT regarding the results of the study is recommended.

Metropolitan Planning Organizations

KDOT staff works closely with MARC and Lawrence-Douglas County MPO staff on their planning processes. This will continue after the 5-County Study, with specific attention focused on the Metropolitan Transportation Plans. The Lawrence/Douglas County MPO just completed their MTP update. As their process has progressed, they have worked to make sure there are consistencies between both studies (specifically as it relates to network connection points and the identification of regional transit along I-70).

MARC will begin updating their MTP in 2013. Because of this, MARC will be able to use this study as input to their planning process. This will include using the list of strategies identified in this study and providing general project descriptions.

Kansas City Scout

Many of the systems management strategies identified in this study would be implemented as part of the KC Scout traffic management system. Because of this, it will be important to have targeted conversations with KC Scout about the study and its results. Since this study provides direction on the regional goals for this system, the output should be used for the identification of future sites for technology upgrades.

Local Transit Operators

The local transit operators were included throughout the study process and they should be informed of the results of the study, so that they can use this output as part of the transit system planning process. Many of the transit recommendations that were identified will require cross-agency coordination. As a result of this process, cross-agency implementation plans should be considered for all identified regional routes.

Cities/Counties

Throughout the process, City and County staff and officials were included and provided essential feedback. As the process comes to a close, these participants should be informed of the results. As these communities move forward with identified strategies, they should work closely with partner cities in order to make sure there is a unified set of strategies for a corridor as a whole.

As municipalities seek assistance from MPOs in the form of State or Federal dollars, the MPOs should consider strategies identified within the 5-County Study as those of priority in project selection. Policies may be enacted that require substantial local resources for projects that aren't included in the strategy list (along the identified corridors).

Cities and Counties should consider the context of new land use development and its relationship with the transportation strategies recommended in this report. The concept of "place making" should be incorporated into land use decisions to capitalize on the community's vision, assets and potential.