Access Management in Kansas

The Corridor Management Policy adopted by the Kansas Department of Transportation (KDOT) is directed at achieving best use of the state highway system. The purpose of this policy is to assist local governmental units, KDOT employees, metropolitan planning organizations, architects, consulting engineers, contractors, developers and the general public with the criteria and procedures necessary to obtain reasonable access to abutting properties while maintaining safety and efficiency in the movement of people and goods on the state highway system. The policy is also meant to establish uniformity in the management of other state corridors in Kansas. The provisions of this policy do not constitute a specific set of legal requirements. Rather, the act sets minimum standards for access installations and establishment of protected corridors. The main purpose of this policy is to establish methods of corridor management that lead to a minimization of vehicle conflicts, improvements in safety and traffic operations, a reduction of delays and smaller major capital expenditures.

The Corridor Management Policy specifies four categories of access management in conjunction with the state highway system.

- In order to minimize the number of conflicts, eliminate driveways by combining access points or providing access from other roads.
- Achieve better separation of conflict points by providing wide spacing between driveways and keeping driveways away from intersections.
- Allow for slower deceleration through geometric changes.
- Provide exclusive turning lanes so that turning vehicles and queues are separated from through traffic.

KDOT can also purchase access rights to property or additional right-of-way. When choosing the strategy for access control, KDOT considers a wide range of factors, such as patterns of development, travel demand, environmental issues and efficient use of resources. All issues pertaining to corridor management are reviewed and managed by the Corridor Management Committee. The KDOT coordinates its efforts with local agencies and landowners in order to effectively implement the guidelines specified in this policy.

1 Corridor Management Policy; Kansas Department of Transportation. p. 1.
2 Ibid., p. 2.
3 Loc. cit.
4 Loc. cit.
6 Loc. cit.
Route 16 Corridor Protection in New Hampshire

Route 16 in New Hampshire is a major north-south highway along the eastern edge of the state. The Route 16 Corridor Protection Study stands an example of how land use and transportation can be integrated to initiate more efficient land use patterns. Some of the problems experienced by this corridor in the last few decades are:

- Urban sprawl and low-density development in the form of commercial strip development.¹
- Growing traffic congestion and pollution.
- Uncontrolled access and development along the corridor, which negatively impacts safety and visual quality.²

Parts of this route have become fully developed commercial strips, while other parts are quickly approaching this stage.³ The access management component of the Route 16 study addresses the interaction between land use and transportation.⁴ The New Hampshire Department of Transportation identified the following solutions in its study:

- Reduce new highway commercial development directly fronting on the corridor, but allow development in higher density areas that are served by consolidated access points.
- Stimulate higher density development by down-zoning existing commercial strips.
- Predefine and limit access points through joint local/state access management plans for both existing and planned commercial development areas.
- Improve and connect pedestrian, bicycle and transit facilities.
- Encourage land uses that generate fewer vehicle trips.⁵

Like other developing corridors in growing urban areas, Route 16 is also facing several obstacles to implementing more appropriate land use policies.⁶ There are advocacy groups whose interests differ with regard to development on this corridor. Some local residents would like to see more development in this corridor to enhance the local tax base, while the governing body would like to protect the corridor by implementing policies that control unlimited and unplanned growth. There is also a need to integrate the efforts of the local and state planning authorities in order to make effective, long-standing changes to the land use patterns in this corridor.

¹ “Route 16 Corridor Protection Study”; Land Use and Transportation Issue Summary; p. 2. July 1997.
² ibid., p. 1.
³ ibid., p. 3.
⁴ Loc. cit.
⁵ ibid., p. 3-4.
⁶ ibid., p. 4.
Some of the possible outcomes of effective access management cited by New Hampshire are:

- *Increase highway capacity.*
- *Reduce the need to spend tax money on capacity expansion.*
- *Protect the economic viability of parcels adjacent to arterials by preventing congestion that will discourage users from coming.*
- *Reduce travel and delay times.*
- *Reduce vehicle emissions by reducing acceleration, deceleration, and stops.*
- *Maintain a community’s character.*

New Hampshire’s local and state authorities are taking steps to control the number, spacing, and design of driveways and to remove turning vehicles from the travel lanes of arterial roads.\(^2\) They are also paying special attention to the safety and mobility of pedestrians and people in vehicles and on bicycles. NHDOT is working actively with local agencies to create an effective and active access management program, which will achieve both its long-term and short-term goals of protecting and enhancing the existing highway system. New Hampshire does not yet have the legal or administrative structure to exercise strong access management statewide, but NHDOT plans to actively seek these mechanisms.\(^3\)

**Access Management Techniques**

The NHDOT recommends the following access management techniques as means to resolve the traffic problems in different situations.

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\(^1\) Ibid., p. 2.
\(^2\) Loc. cit.
\(^3\) Ibid., p. 6.
Gain a safe minimum distance between driveways by limiting the number of access points, thereby reducing conflicts between turning vehicles and vehicles in the travel lanes.¹
Where possible provide corner lot access from the adjacent collector road.
Place limits on the number of driveways to any given property.

Create shared driveways to combine access points for residential and nonresidential sites and reduce conflicts on the arterial.²

Encourage interconnecting site developments to allow employees and customers to move from site to site without entering and exiting the arterial.³

¹ Ibid., p. 16.
² Ibid., p. 17.
³ Ibid., p. 18.
Increase throat length on driveways to parking lots to allow vehicles to move away from the access point and permit other vehicles to easily enter and exit the site.

Where warranted, provide both exclusive right-turn lanes and left-turn lanes to isolate decelerating vehicles from through vehicles or employ simpler driveway design methods to minimize the impact of a turning vehicle on other vehicles.

Reduce conflicts by separating the entrance and exit for a site.

Increase the turning radii to and from the arterial so that turning vehicles can maintain a higher speed.¹

¹ Ibid., p. 22.
Assessing Benefits of Access Control

The benefits of access control relate primarily to the orderly flow of traffic on higher-order facilities. Theoretically, benefits could be assessed quantitatively at the project level, but the effort of performing the necessary analysis for assessment of general statewide policies or programs may not be worthwhile. The same measures of effectiveness that are used for judging the value of a project can be used for statewide program evaluation. These include time savings, crash reduction, emissions reductions, costs to public for access right purchases and direct or indirect cost increases to landowners. The cost difference between roads with and without access control is also relevant. However, the cost savings associated with being able to build a smaller cross section to carry the same amount of traffic would constitute a double counting of time savings and emissions reductions benefits.

For statewide program evaluation it is also necessary to account for induced demand in the measures of effectiveness. That is, improvements in capacity or speeds can result in more travel, thereby offsetting reductions in emissions and energy consumption.