ACCESS MANAGEMENT

MOVING TRAFFIC

The Effects of Traffic Signal Spacing

- Decreasing signal spacing from four to two per mile **decreases total delay** by nearly 60%
- A four-lane divided arterial with 1/2 mile signal spacing and strict access management can carry the same traffic as an arterial with 1/4 mile signal spacing and a low level of access control.

Signals Per Mile	Increase in Travel Time (%)
2	-
3	9
4	16
5	23
6	29
7	34

Non-traversable barrier median with no access points

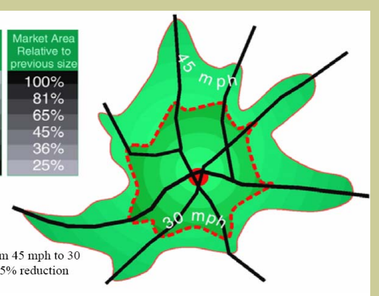
Grass median with limited access points and backage road

Grass median with no access points and frontage road

Access Points per Mile	Reduction in Free-Flow Speed
0	0.0
10	2.5 mph
20	5.0 mph
30	7.5 mph
40 or more	10 mph

Excessive access points causes confusion and delay.

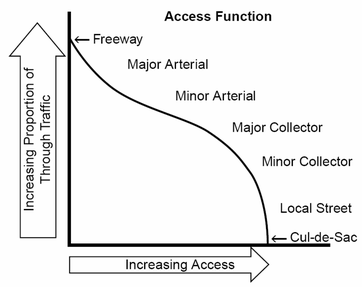
Reduction in Avg. System Speed	Market Area Relative to previous size
0%	100%
10%	81%
20%	65%
30%	45%
40%	36%
50%	25%



Dropping from 45 mph to 30 means over 45% reduction

Keeping traffic moving is critical for business by maximizing market areas.

What is Access Management?



Access management is a set of techniques used to control access to state highways. The techniques used depend on the function of the road. These tools are designed to increase capacity, manage congestion, and reduce crashes.

- Driveway location spacing & design
- Traffic signal and roundabout spacing
- Medians
- Median openings spacing & design
- Turning lanes
- Backage & frontage roads
- Land use policies to limit access to highways
- Fair & consistent decision making processes

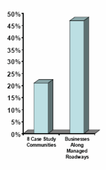
Top 10 Reasons for Access Management

1. Protects the investment in publicly-owned roads.
2. Reduces the frequency of reconstructing and rebuilding roads.
3. Provides the safest driving environment possible.
4. Reduces traffic congestion and improve traffic flow.
5. Improves driving environment with fewer decision points.
6. Increases market area for businesses.
7. Creates safer walking environment for pedestrians.
8. Creates safer bicycling opportunities.
9. Reduces travel times and delay for transit.
10. Looks so much better.

ECONOMIC VITALITY

Businesses affected by access management projects in Iowa tended to do at least as well in terms of growth in retail sales, but usually better than those in surrounding communities, after the projects were completed. Most of these Iowa business proprietors said that sales were similar or greater following the completion of the projects. Only five percent reported a sales decrease *(6)*.

Impact of Access Management on Retail Sales Growth



Business Proprietors' Reported Sales Comparisons

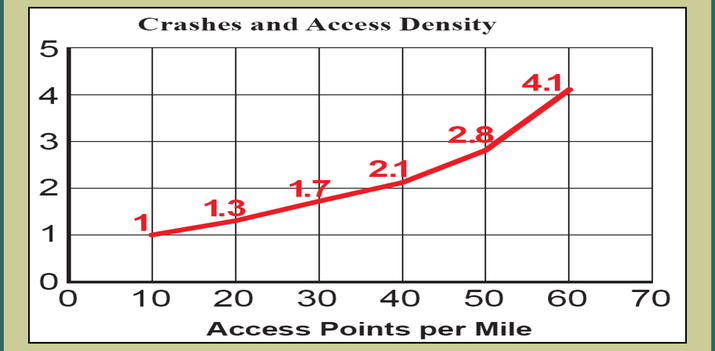
A study of property values on **Texas** corridors with access management projects found that land values stayed the same or increased, with very few exceptions *(7)*.

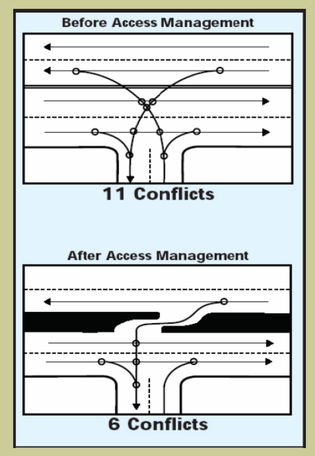
More than 70% of the businesses impacted by a project in **Florida** involving several median opening closures reported no change in property value, while 13% reported some increase in value *(8)*.

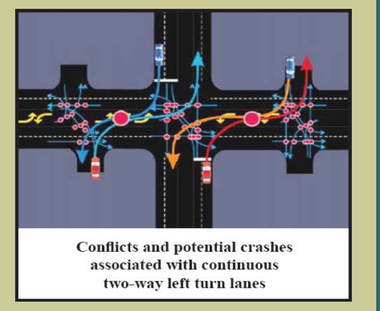
A 2005 study of commercial property values along a major access management project in **Minnesota** found that property values depend more on the strength of the local economy and the general location of the property in the metropolitan area; changes in access seemed to have little or no effect on the value of parcels *(9)*.

A study of **Kansas** properties impacted by access changes found that the majority were suitable for the same types of commercial uses after the access management project was completed. This was true even for businesses that had direct access before the project and access only via frontage roads after project completion *(10)*.

SAFETY





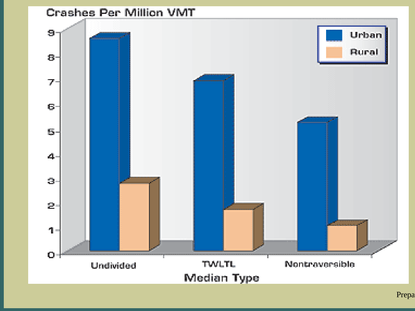


Conflicts and potential crashes associated with continuous two-way left turn lanes

Left-turn lanes reduce crashes by 50% on average

Having an access management program in Kentucky could save road users $950 million per year, $240 million of which from reduced crashes.

Remove left-turn conflicts to decrease crashes



TWLTL (above) converted to non-traversable median (below)

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