SIGNALIZED INTERSECTION SAFETY STRATEGIES



Restrict Access to Properties Using Driveway Closures or Turn Restrictions

WHERE TO USE

Signalized intersections with high crash frequencies related to driveways adjacent to the intersection. Generally, driveways within 250 feet of the intersection are the greatest concern.



DETAILS

Restricting access to commercial properties near intersections by closing driveways on major streets, moving them to cross streets, or restricting turns into and out of driveways will help reduce conflicts between through and turning traffic. Such conflicts can lead to rear-end and angle crashes related to vehicles turning into and out of driveways and speed changes near the intersection and the driveway(s).

Locations of driveways on both the cross street and major street should be determined based on the probability that a queue at the signal will block the driveway. Directing vehicles to exits on signalized cross streets will help eliminate or restrict the access to the main roadway. Restricting turns to right-in and right-out only will address conflicts involving vehicles turning left from the road and left from the driveway.

Restricting access to properties is also discussed in greater detail in NCHRP Report 500: Volume 5.

KEY TO SUCCESS

Agencies should work with owners of adjacent properties to assure them that some restriction of access to their properties will improve safety and will not affect their ability (or, in the case of a retail business, their customers' ability) to reach their properties. Where practical, these strategies should be implemented as part of a comprehensive corridor access management plan.



Access restrictions could cause some owners of retail businesses to lose (or to think they will lose) customers. This is highly dependent on the type of business and the nature of the access restriction. Such impacts need to be carefully considered by highway agencies before implementing this strategy. It is advisable to involve stakeholders at the early stages of planning for these improvements.

TIME FRAME

Implementation of driveway closures and relocations can require three months to three years. While an extensive project development process usually is not required, discussions with affected property owners must be carried out to reach agreement on access provisions. Essential aspects of such an agreement may include driveway permits, easements, and driveway-sharing agreements. Where agreement cannot be reached, the highway agency may choose to initiate legal proceedings to modify access rights; such contested solutions are undesirable and require considerable time to resolve.

COSTS OOO

Costs are highly variable. These costs mostly involve acquiring access or constructing replacement access.

EFFECTIVENESS

TRIED: Further evaluations are needed to quantify the safety effectiveness of this strategy. Some of the states that have implemented access management policies include lowa, Minnesota, and Florida.

COMPATIBILITY

This strategy can be used in conjunction with most other strategies for improving safety at signalized intersections and, in particular, those strategies discussed in the signalized fact sheet F2 (Restricting Cross Median Access).

SUPPLEMENTAL INFORMATION

Highway agencies should establish formal access management policies to guide the planning and permitting process and to provide a basis for remedial treatments at existing locations where driveway-related safety problems occur. For more information on access management, visit www. accessmanagement.gov.

For more details on this and other countermeasures: http://safety.transportation.org

For more information contact:

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