

SIGNALIZED INTERSECTION SAFETY STRATEGIES



Restrict Cross-Median Access near Intersections

WHERE TO USE

Approaches to signalized intersections with a high frequency of crashes involving drivers making turns across medians.



Photo by: FHWA

DETAILS

When a median opening on a high-volume street is near a signalized intersection, it may be appropriate to restrict cross-median access for adjacent driveways. For example, left and U-turns can be prohibited from the through traffic stream, and left turns from adjacent driveways can be eliminated. Restrictions can be implemented by signing, by redesign of driveway channelization, or by closing the median access point via raised channelization. When access patterns are changed or restricted, the movements restricted in that location should be accommodated at a safe location nearby.

The optimal situation is to avoid driveway conflicts before they develop. This requires coordination with local land use planners and zoning boards in establishing safe development policies and procedures. Avoidance of high-volume driveways near congested, or otherwise critical, intersections is desirable. Driveway permit staff within agencies need to have an understanding of the safety issues related to driveways.

KEY TO SUCCESS

Provision of alternative locations for turning maneuvers is a key to the successful restriction of access at a median opening. Care should be taken to prevent the safety problems related to the median opening from being transferred to another location.

It is also important for land owners and affected persons to be involved early in the planning process. The quadrants of many signalized intersections are developed with commercial land uses that rely



on pass-by traffic. Demonstrating a linkage to the safety of their customers as well as the operational efficiency of the street serving their business can be a key to overcoming resistance to this strategy.

The most successful access management techniques rely on physical barriers to restrict movements. Reliance on signing and pavement markings only requires strong enforcement to be effective, which in many cases will not be feasible.

ISSUES

Restricting access at one location will cause turning movements to shift to another location. Care should be taken to ensure adequate capacity and access are provided to accommodate this and that the diversion to alternative access points will not create a safety problem.

Adjacent land owners, particularly commercial businesses, are generally opposed to closing and restricting access, which they believe will adversely affect their businesses.

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. Contested solutions are undesirable and require considerable time to resolve.

COSTS ●○○○

Costs of closing median access points are low, but the cost of providing access in other locations can vary. The materials and labor needed to install signing or additional median curbs or barriers may be low, but relocation of driveways could increase costs.

EFFECTIVENESS

TRIED: Restricting cross-median access is expected to eliminate conflicts related to vehicles using the median opening, as well as related rear-end and angle crashes.

COMPATIBILITY

This strategy can be used in conjunction with the other strategies for improving safety at signalized intersections.

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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