

# UNSIGNALIZED INTERSECTION SAFETY STRATEGIES



## Restrict or Eliminate Turning Maneuvers by Providing Channelization or Closing Median Openings

### WHERE TO USE

Unsignalized intersections with patterns of crashes related to particular turning maneuvers where it is impractical to reduce that pattern of crashes by improving sight distance or providing a left-turn or shoulder bypass lane. Also, at locations where it is possible to restrict or eliminate turning maneuvers by providing channelization or by closing the median opening.



Photo by: FHWA

*This photo depicts a channelizing device that prohibits turning and crossing maneuvers from driveways not visible in the photo.*

### DETAILS

Safety at some unsignalized intersections can be enhanced by prohibiting particular turning movements altogether with the use of channelization or by closing median openings.

### KEY TO SUCCESS

Anticipate the destinations of traffic making the affected turning maneuver and ensure that alternatives that can safely accommodate that traffic are available. It is also important that the turn restriction or prohibition be clearly signed so that motorists become aware of the restriction or prohibition and do not make illegal turns. Furthermore, it will be important to include all stakeholders in the early planning stages, especially business property owners whose access may be made less convenient for customers.



## ISSUES

A potential pitfall of a turn restriction or prohibition is that suitable alternatives may not be available, resulting in drivers taking unanticipated alternative routes through private property or minor local streets. Another potential pitfall occurs where commercial properties are affected and business owners resist the action because of fears of losing business.

A difficulty with this strategy is that it commits the agency to prohibition of turning movements 100% of the time (i.e., this strategy should not be employed to treat temporal or short-lived problems).

## TIME FRAME ●○○○

Turn prohibitions that are implemented by closing a median opening can be implemented quickly, often within 3 months or less. Turn prohibitions requiring the installation of channelization may take from 3 months to 1 year to implement.

## COSTS ●○○○

The cost of this strategy will depend on the treatment. Closing a median opening is considerably less costly than installing channelization.

## EFFECTIVENESS

**TRIED:** Turn restrictions or prohibitions should reduce crashes related to the affected turning maneuver by nearly 100% at the locations where the restriction or prohibition is in effect. However, a complete assessment of the effect of a turn restriction or prohibition on safety requires consideration of the alternatives to which the traffic that desires to make the affected turn is diverted, as well as the potential effect of that traffic on the safety performance of that alternative route. Adequate evaluations of this type are not known.

One study estimated a 51% decrease in crashes where directional medians were installed.

## COMPATIBILITY

This strategy can be used in conjunction with most other strategies for improving safety at unsignalized intersections. It is intended as an alternative to providing left-turn lanes or shoulder bypass lanes, so it is not appropriate for use in conjunction with those strategies.

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

### For more information contact:

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