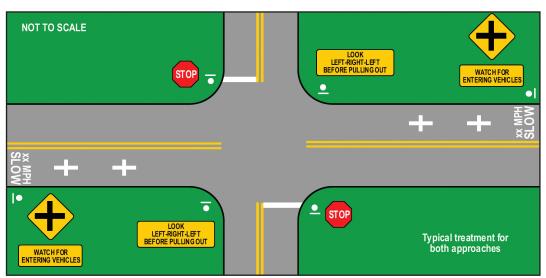
UNSIGNALIZED INTERSECTION SAFETY STRATEGIES



Provide Innovative Signs and Markings to Assist Drivers in Judging the Suitability of Available Gaps for Making Turning and Crossing Maneuvers

WHERE TO USE

Unsignalized intersections where crash data shows a high occurrence of crashes where vehicles on secondary roadways intersecting at grade misjudge the gap between approaching vehicles.



This diagram represents one example of how such a system of pavement markings and signs may be used.

DETAILS

The lack of adequate sight distance at unsignalized intersections may reduce the ability of drivers to see an approaching vehicle and/or judge the suitable available gap for making turning and crossing maneuvers. Even where sight distance is adequate, drivers may ignore traffic control devices such as stop or yield signs and may misjudge available gaps in traffic. Thus, intersection crashes may occur because drivers are unable to judge adequately the distance and time to an approaching vehicle. This strategy involves the use of innovative signing and passive markings to assist drivers in deciding when to accept a gap. The markings could take the form of pavement markings placed in the field of view of a driver observing the approaching traffic stream. Drivers would need to be told, by signing or through a public education campaign, not to proceed when an approaching vehicle is closer to the intersection than the pavement marker.

In the illustration above, the entire treatment consists of the following components:

- 1. Placement of legend SLOW, MPH recommendation, and the cross-style markers on the primary roadway.
- 2. Placement of appropriate signs outlined below on the secondary roadway.



KEY TO SUCCESS

It is very important that a driver on the secondary road, while stopped to make the decision whether to enter the intersection, can clearly view the "Look Left-Right-Left Before Pulling Out" warning sign. If the warning sign is not easily viewed from the decision point on the secondary road, it should be shifted to a more visible location.

ISSUES

This strategy is considered experimental. If an agency desires to pursue its application, it is recommended that the agency proceed with caution, conducting pilot tests in conjunction with a carefully planned evaluation.

TIME FRAME

Time frame for implementation can generally be short if right-of-way is available.

COSTS •OOO

Costs are generally low for a simple system but will increase for more complex systems.

EFFECTIVENESS

EXPERIMENTAL: This strategy has been experimented with in few locations with no conclusive results. Pennsylvania has experimented with a similar type of countermeasure.

COMPATIBILITY

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

SUPPLEMENTAL INFORMATION

The information in this fact sheet differs from that presented in the NCHRP Report 500 Volume 5. The countermeasure discussed in the report was found to not increase safety and therefore is not recommended.

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

For more information contact:

FHWA Office of Safety Design Washington, D.C. 20590 (202) 366-9064 http://safety.fhwa.dot.gov

FHWA Resource Center - Safety and Design Team E71, 1200 New Jersey Avenue SE 19900 Governor's Drive, Suite 301 Olympia Fields, IL 60461 (708) 283-3545 http://www.fhwa.dot.gov/resourcecenter

