

UNSIGNALIZED INTERSECTION SAFETY STRATEGIES



Post Appropriate Speed Limits on Intersection Approaches

WHERE TO USE

Unsignalized intersections experiencing a high frequency of speed related crashes.



DETAILS

Speed is often cited as one of the major contributing factors to crashes. It is not necessarily the rate of speed that a vehicle is traveling that causes a crash, but the speed variance between vehicles. In a review of speed and crash probability, one study indicates that there is extensive evidence that speed variance increases crash probability. Due to the number of speed-related crashes, it is important for agencies to post appropriate speed limits on intersection approaches to convey consistent messages to drivers. Posting an appropriate speed limit on an approach may involve reducing the speed limit in the vicinity of the intersection or posting an advisory speed.

KEY TO SUCCESS

Determine the appropriate speed limit for intersection approaches (based upon the functional class of the roadways, average operating speeds, traffic volume, geographical area, and roadside characteristics) and determine whether the speed limit should be reduced in the vicinity of the intersection.



ISSUES

Several potential difficulties exist. First, the posted speed limit on an approach may be appropriate, but some studies have shown that this does not guarantee that speeds will change. Second, when it is determined that the current posted speed limit is inappropriate and should be changed, significant variances in speed may occur in the transition period after the new speed limit is posted until drivers become accustomed to the new posted speed.

TIME FRAME ●○○○

The implementation time for posting appropriate speed limits should take 3 months or less.

COSTS ●○○○

The costs involved in posting appropriate speed limits on intersection approaches are minimal. The costs involve conducting the necessary speed studies and replacing the signs.

EFFECTIVENESS

TRIED: The safety effectiveness of posting appropriate speed limits on intersection approaches has not been quantified.

COMPATIBILITY

This strategy can be used in conjunction with most other strategies for improving safety at intersections, especially targeted speed enforcement, so that drivers obey the posted speed limit.

SUPPLEMENTAL INFORMATION

Legislated speed limits by road classification are determined by state legislatures and city councils for state and local roads, respectively. There may be a need to revise existing laws.

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

For more information contact:

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