

**Clear Zone – A synthesis of practice and an evaluation of the benefits
of meeting the ten-foot clear zone goal on urban streets**

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Abstract

In urban communities, there are often limited amounts of right-of-way available to establish a large setback distance from the curb for fixed objects. Urban communities must constantly evaluate the cost of purchasing additional right-of-way for clear zone versus the risk of fixed object crashes. Many states have kept the current minimum AASHTO recommendation as their minimum standard; however, others have decided that these recommendations were insufficient and have increased the required minimum clear zone distance to better suit the judgment of local designers.

From 2004 to 2006, fixed object crashes on curbed roads represented 15% of all fatal crashes and 3% of all crashes in the state of Iowa. This paper presents research on the effects of the clear zone on urban curbed streets and was conducted in two phases. The first phase provides a synthesis of practice through a review of the literature and a survey of practices in jurisdictions with development and historical patterns similar to Iowa. The second phase investigated the benefits of a 10 foot clear zone by examining urban corridors in Iowa that meet or do not meet the 10 foot clear zone goal. The results of this study indicate that a consistent fixed object offset results in a reduction in the number of fixed object crashes, a five foot clear zone is most effective when the goal is to minimize the number of fixed object crashes, and a three foot clear zone is most effective when the goal is to minimize the cost of fixed object crashes.

Note: This research was conducted as part of a Center for Transportation Research and Education project