

Installation of the Beveled Edge

The beveled edge is a mitigation measure for roadway departure crashes, intended to allow a smoother recovery to the roadway for an errant vehicle that has departed the roadway hard surfacing. The beveled edge, a sloping finish to the edge of pavement, is an effective measure, recommended by the Federal Highway Administration (FHWA), to reduce the frequency and severity of run-off-the-road crashes by reducing tire scrubbing and allowing for a smooth re-entry of errant vehicles to the travelled way.

This treatment of the pavement edge is a recognized and recommended crash mitigation measure by the FHWA; therefore, if the average roadway departure crash rate for rural two-lane roads shows the addition of a beveled edge to be safety beneficial, Federal-aid Highway Safety Improvement Program (HSIP) funds may be used for that purpose. This may be done on individual projects or on a system-wide basis. Additionally, per 23 CFR 924.5(c), "Other Federal-aid funds are eligible to support and leverage the safety program. Improvements to safety features that are routinely provided as part of a broader Federal-aid project should be funded from the same source as the broader project." A project specific benefit-cost calculation will not be required. The beveled edge will be installed on projects or segments of projects where the following conditions are met:

1. Rural, high speed (posted speed > 45 mph) segments of the State Highway System.
2. Asphalt concrete and Portland Cement Concrete pavements.
3. 3R, reconstruction and new projects with at least two inches of surfacing placement (the beveled edge will not be used on resurfacing projects where less than two inches of surfacing is placed).
4. Surfaced shoulders less than six feet in width; not including segments of erosion control curbed shoulders.
5. Non-curbed roadways.
6. Other projects in locations identified by Traffic Engineering as a mitigation measure for a crash history.

The beveled edge may be used in conjunction with rumble stripes (8 inches strip embedded in the pavement marking).

