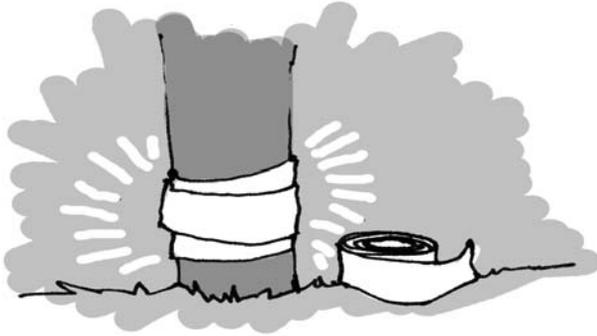


Breakaway or Yielding Supports



Breakaway supports have been required on the National Highway System since 1998. A “Breakaway” sign support separates from its base and is knocked ahead of or up and over vehicles when struck.

A “Yielding” sign support bends when struck and allows the vehicle to run over it. Many sign supports are yielding at low speeds and breakaway at high speeds.

Revisions in the 2000 MUTCD changed the wording from “should” to “shall” regarding the use of breakaway supports for signs located within the clear zone.

The clear zone is the total roadside border area, starting at the edge of the traveled way, available for safe use by errant vehicles. This area may consist of a shoulder, a recoverable slope, a nonrecoverable slope, and/or a clear run-out area. The desired width is dependent on the traffic volumes and speeds and on the roadside geometry.

Section 2A.19 Lateral Offset

The minimum lateral offset for overhead sign supports, from the edge of the shoulder (or edge of pavement when there is not a shoulder) to the overhead sign supports shall be 6 ft.. If within the clear zone, overhead sign supports shall have a barrier or crash cushion.

Ground-mounted sign supports shall be breakaway, yielding, or shielded with a longitudinal barrier or crash cushion if within the clear zone.

The 2003 MUTCD establishes dates for implementation on certain roads: “Section 2A.19 Lateral

Offset crashworthiness of sign supports for roads with posted speed limit of 50 mph or higher-
January 17, 2013.”

On roads posted less than 50 mph there is no target date, but agencies must implement a program to replace non-breakaway supports within the clear zone in its long term plans. Highway agencies ought to consider installing breakaway supports when replacing signs.

Breakaway or yielding supports must conform to the requirements of *NCHRP Report 350* or the *AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals* (1985 or 2001 editions). ❖

Sources:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/breakaway.htm

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt.350b.pdf pg. 109 August 15, 2006

Highway Safety and Trees DVD Available

The Federal Highway Administration (FHWA) DVD *Highway Safety and Trees* is available. “FHWA produced this DVD to explore the issue of trees along our country’s roadsides. The video stresses that the design of highway projects should be a cooperative effort involving the highway agency, concerned communities, organizations, and individual citizens.”

The DVD is described as “Trees are the single most commonly struck ‘objects in serious roadside crashes. Vehicle collisions with trees account far more than 4,000 fatalities and 100,000 injuries each year...”

To get a copy of *Highway Safety and Trees: The Delicate Balance (FHWA-SA-06-13)*, send an e-mail to report.center@fhwa.dot.gov, or fax a request to (301) 577-1421.

Also, see the FHWA Road Departure Safety web site <http://safety.fhwa.dot.gov/roadwaydept>.

Sources:

The Road Ahead, June 2006, p. 3