Tech Topic

Signage and Placement Standards

The Manual on Uniform Traffic Control Devices (MUTCD) specifies all elements of the design, placement, and maintenance of traffic signs. The level of detail spans hundreds of pages, but some key physical characteristics are primary drivers for compliance. Some of those characteristics are described below.

Sign Design. Each sign permitted by the MUTCD is specified in exacting detail, including its background and legend (lettering) colors, the fonts to be used, the symbols to be used, and the dimensions of the sign background material.

Mounting. Ground-mounted signs (versus Overhead signs, normally restricted to state or interstate highways) must be mounted a minimum of five feet or seven feet above the paved surface in the case of rural or business/residential areas, respectively. All signs within the Clear Zone (generally, a roadside area free of obstacles that may pose a threat when a vehicle leaves the paved surface) must be mounted on a yielding or breakaway anchor. Edge of signs must be placed a minimum of two feet from the edge of pavement in the case of closed section (curb and gutter) streets and six feet from the edge of pavement for open section designs (MUTCD, Section 2A.19). Visibility can be affected by trees, bushes, a bent sign post, and many other deficiencies. Providing for a driver to see a sign from the greatest distance enables a driver to know what to expect at an intersection or along a stretch of roadway.

Retroreflectivity. Most signs are now required (effective January 2012) to be constructed with minimum retroreflectivity and be maintained or replaced in accordance with those levels (MUTCD, Section 2A.08, et seq.). For more information on retroreflectivity, see the Tech Topic on this issue.

Suggested Further Reading and References:

- Federal Highway Administration MUTCD: http://mutcd.fhwa.dot.gov/pdfs/2003r1r2/mutcd2003r1r2complet.pdf
- State of Delaware MUTCD: http://www.deldot.gov/information/pubs_forms/manuals/de_mutcd/index.shtml

The Delaware T² Center's full-time Engineer position was established with the primary mission of providing transportation advice and technical assistance to Delaware municipalities. Contact Matt Carter at matheu@udel.edu or at (302) 831-7236 for assistance.