

Update on work zone signing rules

There are several changes for work zone signing in the federal *MUTCD* and Wisconsin's Supplement to it. These two manuals offer guidance on traffic control devices so that they are used uniformly throughout the state.

"The changes are fairly minor," says Tom Notbohm, Traffic Operations Engineer with the WisDOT Bureau of Highway Operations. Sign spacing and sign mountings have been modified. Also, there are new standards regarding coordinating workzone traffic control with nearby railroad crossings, and using Yield signs at one-lane, two-way work sites. Other items address shoulder drop-off signs, street names with detour arrows, and trailer devices.

Sign spacing On urban roadways with 25-30 mph speed limits, the *MUTCD* continues to recommend 200-ft spacing for advance warning signs. However, a new provision permits spacing as short as 100 ft if needed because of conditions at the site—existing signs, trees in the terrace, closely spaced intersections, or driveways that might make it more difficult to maintain a 200-ft sign spacing and still have good visibility of the sign.

"This just gives a little bit more flexibility in where to place a sign," says Notbohm. "People should remember that the sign spacings in the *MUTCD* are just guidelines. We encourage anyone setting up the signs to use judgment in the field in determining the best place to set up a sign so it will be visible and give drivers time to react."

Sign mounting The minimum mounting height of signs placed on posts has been changed. The *Wisconsin Supplement* now says that signs should be post mounted rather than on a portable stand if they will be in place for more than 7 continuous days and nights. Signs on posts should be a minimum height of 5 feet to bottom of the sign in rural areas. The height remains 7 feet in urban areas and commercial/residential districts. Previously, the *MUTCD* called for 7 feet regardless of the location.

Crashworthiness Sign supports and channelizing devices are to be crashworthy according to language in the *MUTCD*. However, agencies can use existing devices through their normal

service life. WisDOT has set an end date of January 2005 for fully phasing in crashworthy sign supports on its projects. "We suggest that as agencies are purchasing new sign supports and devices, they should get devices that meet the standards," says Notbohm.

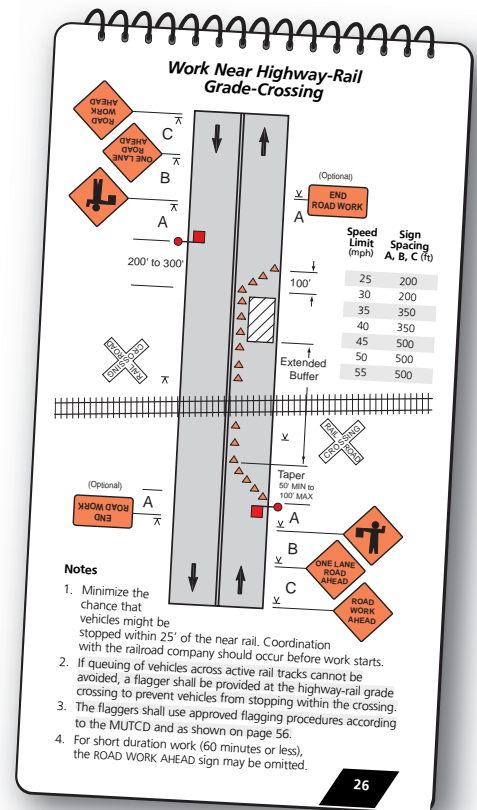
RR X-ings "There have been some serious crashes in other states with trains hitting vehicles stopped on the tracks in a line of cars waiting to go through a work zone," says Notbohm. As a result, the *MUTCD* has a new standard that temporary work operations shall not create conditions where vehicles can be stopped on the RR tracks with no means of escape.

To address this situation, place the lane closure taper and flagger before the RR tracks. If this setup would cause lane closures to be too long for effective flagging operations, the Manual requires a law enforcement officer or a flagger be provided at the crossing to prevent vehicles from stopping on the tracks.

Yield signs On some low-volume two-lane roads a Yield sign is useful for controlling traffic when one lane is closed. The *MUTCD* has a typical application drawing for it and the *Wisconsin Supplement* has clarified the conditions under which it may be used. It is applicable only when traffic volumes are low (typically 400 ADT), and for a short work area with good sight distance so that traffic can see beyond the work area.

This method shall not be used on a state trunk highway or other officially designated through highway since state Statutes do not allow yield signs on those roadways. Also, the Yield sign shall only be used with permission from the agency having jurisdiction over the roadway. "Previously this Yield sign control method was discouraged by the *Wisconsin Supplement*," says Notbohm. "Now we do recognize that there may be some conditions where this is a good alternative to flagging or some other means of traffic control."

Shoulder drop-offs A new standard in the *MUTCD* requires a sign for shoulder drop-offs more than 3 inches deep. The FHWA recommends using a word message sign saying: "Shoulder drop-off." A



low shoulder sign is only allowed if the drop-off is 3 inches deep or less.

Detour signs When a local road is detoured onto a state trunk highway, and an arrow is part of the detour sign, the *Wisconsin Supplement* now requires placing a street name sign with the detour arrow sign. "The goal is to make it clear to drivers that state highway traffic is not being detoured," says Notbohm. "In fact, it's a good idea to use name signs on any type of street, not just state highways, to minimize confusion."

Trailer devices/PCMS A trailer with a device such as an arrow panel or portable changeable message sign (PCMS) should be delineated with reflective cones or drums, unless it's behind a barrier or beam guard. Messages on the PCMS should be brief and convey the complete message in no more than two different screens. This is Wisconsin's interpretation of the *MUTCD* statement that the entire message should be readable by drivers at least twice as they approach at the posted speeds.

The Wisconsin Supplement to the MUTCD is accessible on the WisDOT website: www.dot.state.wi.us. If you cannot access the Wisconsin DOT website contact: Matt Rauch, 608/266-0150, matt.rauch@dot.state.wi.us