

regarding lens sizes that some agencies and other individuals involved with highway-rail grade crossings may not be aware of. The FHWA adopts this change as proposed in the NPA. The FHWA received four comments, primarily from railroad companies, opposing the guidance for choosing the size of the background behind the lenses because Part 4 does not contain specified background sizes for any traffic signal. The FHWA agrees and withdraws this proposal.

330. In Section 8D.04 Automatic Gates, the FHWA received a comment from a private citizen suggesting that the second paragraph of the STANDARD statement be revised to include consideration for the unique requirements associated with constant warning time and other advanced system devices. The FHWA believes that it is appropriate to make this change because the features of constant warning time and other advanced systems do not necessarily provide for an operation of the gates exactly as described in the paragraph. The FHWA believes that requiring constant warning time and other advanced systems to have gate operations exactly as described would be an unreasonable burden on jurisdictions and is not practical or necessary. Accordingly, the FHWA revises the second paragraph of the STANDARD statement to provide an exception to the requirements of this paragraph when a constant warning time or other advanced system requires otherwise.

331. In Section 8D.05 Four-Quadrant Gate Systems, the FHWA revises and adds to the GUIDANCE statement information to describe the various operating modes of exit gates and how they should be used. The FHWA received five comments suggesting terminology changes that the NCUTCD Railroad and Light-Rail Transit Committee endorsed. The FHWA agrees and includes those terminology changes in this final rule. The Committee also suggested that the GUIDANCE statement regarding placement of exit gates to provide a safe zone be deleted because this practice is seldom used. Because Four-Quadrant Gates are a relatively new concept to grade crossings, the FHWA believes that if space is available, the exit gates should be set back at least one design vehicle length from the nearest rail in order to reduce the chances of a vehicle becoming trapped on the tracks. The FHWA adopts the changes as proposed in the NPA.

Additionally, the FHWA revises the third paragraph of the STANDARD statement to accommodate constant

warning time or other advanced systems, for the same reasons as discussed above in Section 8D.04.

Based on a comment from a railroad company, the FHWA revises the third and fourth paragraphs of the GUIDANCE statement to include coordination with the affected railroad company when determining the operating mode of exit gates and the Exit Gate Clearance Time.

Additionally, the FHWA changes the title of Figure 8D-2 from "Typical Location Plan for Flashing-Light Signals and Four-Quadrant Gates" to "Example of Location Plan for Flashing-Light Signals and Four-Quadrant Gates." There were no comments regarding this change, and the FHWA adopts this change.

332. In Section 8D.07 Traffic Control Signals at or Near Highway-Rail Grade Crossings, the FHWA received comments from a private citizen regarding text in the first OPTION and STANDARD statements related to the use of traffic control signals instead of flashing-light signals at industrial highway-rail grade crossings and mainline highway-rail grade crossings. The commenter suggested that the text include additional language specifying train speeds as part of the criteria. These comments go beyond the scope of this rulemaking and would need to be addressed in a future rulemaking.

Following the second paragraph of the second STANDARD statement, the FHWA adds additional GUIDANCE, STANDARD, GUIDANCE, and OPTION statements to better describe the use of pre-signals to improve safety at highway-rail grade crossings at locations in proximity to intersections controlled by traffic control signals. The FHWA received one comment from the City of Tucson, Arizona, supporting the overall changes to this section. One comment from the Wisconsin DOT expressed general support for the new language for preemption, but expressed concerns regarding the use of pre-signals when the crossing is within 15 m (50 ft) (or within 23 m (75 ft) for a highway that is regularly used by multi-unit vehicles) of an intersection controlled by a traffic control signal. This comment is unique to the State of Wisconsin because they use near-side signal displays at all intersections. The FHWA believes it is inappropriate to change the MUTCD in this case to accommodate the practices of one State.

Additionally, the FHWA adds to the last OPTION statement that at locations where a highway-rail grade crossing is located more than 15m (50 ft) (or more than 23 m (75 ft) for a highway regularly used by multi-unit vehicles) from an

intersection controlled by a traffic control signal, a pre-signal may be used if an engineering study determines a need. The FHWA feels that this addition may improve safety for this type of highway-rail grade crossing.

The FHWA establishes a phase-in target compliance date of 10 years for existing installations to minimize any impact on State or local governments.

Discussion of Adopted Amendments to Part 9—Traffic Controls for Bicycle Facilities

333. In Section 9A.03 Definitions Relating to Bicycles, the FHWA adds to the first STANDARD statement a definition for "Bicycle Facilities" because the term is frequently used in Part 9. The FHWA revises the definition slightly from that proposed in the NPA to respond to comments suggesting that "made by public agencies" be removed because there are bicycle facilities that are operated by non-governmental agencies. The FHWA also removes the definition for "Bicycle Path," and removes the remaining occurrences of "bicycle path" from the MUTCD because "shared use path" appropriately covers the term. The FHWA also revises the definition for "Shared Use Path" to clarify that it is outside the traveled way. The FHWA renumbers the remaining items accordingly.

334. In Section 9B.01 Application and Placement of Signs, the FHWA removes the first SUPPORT statement as it only references Figure 9B-1. The FHWA now references Figure 9B-1 in the first STANDARD statement because the sign installation standards shown in Figure 9B-1 are discussed in this STANDARD. The FHWA received two comments from the NCUTCD and the City of Tucson, Arizona, in support of the changes to this section.

Two commenters opposed the standards for sign size, mounting height and lateral clearance. The New York City DOT stated these standards are infeasible in dense urban areas, and a traffic engineering consultant stated that the minimum vertical clearance of 8 feet is less than the ITE Guidelines for Major Street Design,⁶² which specifies 8.2 feet. While the FHWA recognizes the importance of these two comments, these suggestions go beyond the scope of this rulemaking and would need to be addressed in a future rulemaking.

335. In Section 9B.02 Design of Bicycle Signs, the FHWA replaces the

⁶² "Guidelines for Urban Major Street Design", Institute of Transportation Engineers, 1984. It may be purchased from the Institute of Transportation Engineers bookstore at the Web site <http://www.ite.org>.