

due to the comments received and the need to clarify the proper use of arrow panels.

The FHWA also adds an OPTION at the end of the section to indicate that a portable changeable message sign may be used to simulate an arrow panel display. The FHWA received one comment from the Illinois DOT opposed to this new OPTION, stating that it should be deleted because portable changeable message signs are not nearly as conspicuous as arrow panels. The FHWA disagrees because portable changeable message signs are often used as a supplement to arrow panels well in advance of the arrow panels where long queues are expected. The FHWA adopts this new OPTION in this final rule.

260. In Section 6F.58 Channelizing Devices (numbered Section 6F.55 in the NPA), following the first SUPPORT statement, the FHWA proposed adding a STANDARD statement, GUIDANCE statement, and another STANDARD statement defining the use of channelizing devices to channelize pedestrians and that they need to be detectable to users of long canes. While there were eight comments from the City and County of Denver, Colorado, and private citizens in support of these new statements, the City of Charlotte, North Carolina, and a private citizen suggested that use of these devices should only be necessary at locations that are likely to be used by pedestrians with visual disabilities. Lake County, Illinois, opposed this change, stating that the individual highway agencies should have more flexibility in meeting the ADA Guidelines. Several representatives of the blind community recommended rewording to include that the devices should be detectable not only to users of long canes, but also visible to persons having low vision, because many persons who are severely visually impaired do not travel with the aid of a long cane or a guide dog, but rely on their diminished vision for travel information. Channelizing devices that are made highly visible by strong contrast are accessible to pedestrians with low vision. The FHWA agrees and revises the STANDARD statement accordingly. The FHWA changes the proposed GUIDANCE to an OPTION, because it was inadvertently classified as a GUIDANCE in the NPA. The FHWA also modifies this statement, increasing the maximum gap size between the bottom rail and the ground to 150 mm (6 in) (proposed as 38 mm, 1.5 inches in the NPA) to facilitate drainage.

The FHWA revises the first GUIDANCE statement by removing the phrase "in the immediate area" from the

last sentence regarding fragments or other debris from channelizing devices or ballast. The NCUTCD disagreed with removing this phrase, but did not cite a reason. The FHWA adopts the sentence as proposed in the NPA because debris and fragments pose a hazard to road users and workers, even if not in the immediate area. The City of Charlotte, North Carolina, and a private citizen suggested that this statement should be a STANDARD and that all channelizing devices shall be crashworthy. The FHWA disagrees because not every channelizing device is required to be crashworthy. The FHWA adopts the language of this statement as proposed in the NPA.

Additionally, the FHWA adds a note to Figure 6F-7 (numbered 6F-14 in the NPA), (Sheet 1 of 2) that if drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices, in order to create a continuous bottom, and the height of each individual drum, cone, or tubular marker shall be no less than 915 mm (36 in) to be detectable to users of long canes. The FHWA received three comments from the NCUTCD, the City of Charlotte, North Carolina, and a private citizen opposed to this new note, suggesting that it be revised to indicate that criteria apply only at locations where the presence of disabled pedestrians is likely. The FHWA addresses this comment by beginning this note with "if" rather than "when" in this final rule.

Additionally, the FHWA adds a note to Figure 6F-7 (numbered 6F-14 in the NPA), (Sheet 2 of 2) that if barricades are used to channelize pedestrians, there shall be continuous detectable bottom and top rails with no gaps between individual barricades to be detectable to users of long canes. The bottom of the bottom rail shall be no higher than 150 mm (6 in) above the ground surface. The top of the top rail shall be no lower than 915 mm (36 in) above the ground surface. The FHWA received three comments from the NCUTCD, the City of Charlotte, North Carolina, and a private citizen opposed to this new note, suggesting that it be revised to indicate that criteria apply only at locations where the presence of disabled pedestrians is likely. The FHWA addresses this comment by beginning this note with "if" rather than "when" in this final rule.

The FHWA received comments from the NCUTCD, the City of Charlotte, North Carolina, and a private citizen suggesting that the footnote regarding nominal lumber dimensions on each of the figures not be removed as was

proposed in the NPA. The FHWA removes this footnote because devices constructed of lumber have not passed NCHRP 350 crashworthy criteria.

Additionally, in the 2000 MUTCD a new recommendation was established in this section that channelizing devices in temporary traffic control zones should be crashworthy. No special phase-in target compliance date was established at that time. Based on comments that agencies are encountering difficulties and economic impacts given the extensive testing of devices that has to occur in accordance with NCHRP Report 350⁵² in order to determine and certify crashworthiness, the FHWA determines that a special phase-in target compliance date is required for the crashworthiness provision in this section. Therefore, in this final rule, the FHWA establishes a special phase-in target compliance date of January 17, 2005, for when channelizing devices in temporary traffic control zones should be crashworthy. The FHWA believes this target date of four years from the effective date of the 2000 MUTCD provides agencies with a reasonable period in which to phase in the use of compliant channelizing devices in temporary traffic control zones.

In the NPA, the FHWA proposed a phase-in target compliance date of five years from the effective date of this final rule for the changes in this section regarding pedestrian accessibility (detectability by users of long canes). Because a five year phase-in target compliance date has been established for Sections 6D.01 Pedestrian Considerations and 6D.02 Accessibility Considerations, which in turn affect many other sections throughout Part 6, a special phase-in target compliance date just for Section 6F.58 is not necessary. Accordingly, the FHWA withdraws the proposed five-year phase-in target compliance date for accessibility requirements of this section.

261. In Section 6F.59 Cones (numbered Section 6F.56 in the NPA), the FHWA adds to the STANDARD statement that retroreflectorization of cones that are more than 900 mm (36 in) in height shall be provided by horizontal, circumferential, alternating orange and white retroreflective stripes that are 100 to 150 mm (4 to 6 in) wide. Each cone shall have a minimum of two orange and two white stripes with the

⁵² NCHRP Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features," 1993, is available for downloading from the Transportation Research Board at the following URL: http://gulliver.trb.org/publications/nchrp/nchrp_rpt_350-a.pdf.