

Arizona, in support of this new statement, and one from the NCUTCD suggesting that the word "insufficient" be defined as "less than 180 m (600 feet)." The FHWA agrees and clarifies the OPTION statement in this final rule.

This section also contains a STANDARD statement that if a Double Reverse Curve sign is used, the number of lanes illustrated on the sign shall be the same as the number of through lanes available to road users, and the direction of the double reverse curve shall be appropriately illustrated. The FHWA received two comments from ATSSA and the City of Tucson, Arizona, in support of this new statement, and three comments from Caltrans, the City of Charlotte, North Carolina, and a private citizen suggesting that illustrating the number of lanes on the sign may be complex for multi-lane applications. The FHWA adopts the text in this final rule, because it is important to convey to road users that all of the lanes continue. Two commenters from City of Charlotte, North Carolina, and a private citizen suggested that the size of the W24 series signs be 1200 x 1200 mm (48 x 48 in). The FHWA believes that for one and two lane Double Reverse Curve signs, the 900 x 900 mm (36 x 36 in) signs as proposed in the NPA are appropriate, but that for three or more lanes, larger sizes may be desirable, and there is nothing preventing agencies from using larger sign sizes.

252. In Section 6F.46 Other Warning Signs (numbered 6F.44 in the NPA), the FHWA revises the STANDARD statement to reference Section 6F.02 for exceptions to using black legends and borders on orange backgrounds for warning signs. The FHWA includes this change in this final rule because it is necessary to be consistent with other sections of the MUTCD.

253. The FHWA adds a new section numbered and titled, "Section 6F.47 Special Warning signs." This section contains OPTION and GUIDANCE statements with information regarding the design of special warning signs. The FHWA adds this section to this final rule to remind readers that special word message warning signs may be used. This section parallels a similar section in Part 2 that allows the use of special word signs, and adding the section to Part 6 is necessary for consistency.

254. In Section 6F.48 Advisory Speed Plaque (W13-1) (numbered Section 6F.45 in the NPA), the FHWA received comments from the Ohio DOT opposed to the design of the sign—both the black circle around the numerals on the metric sign and the use of periods between the letters for the acronym "M.P.H." on the English-units sign. The

FHWA disagrees that the black circle around the numerals is confusing, because it is necessary that this sign look different from the English-unit sign in order to avoid confusion. The FHWA adopts the black circle on the sign in this final rule. The FHWA agrees that periods are not necessary in the acronym MPH and removes the periods from the sign images and from the listing in Table 1A-1, to reflect common practice.

255. In Section 6F.50 Guide Signs (numbered Section 6F.47 in the NPA), the FHWA adds to the OPTION statement that guide signs used for temporary traffic control incident management situations may have a black legend and border on a fluorescent pink (referred to as coral in the NPA) background as an alternative to black on orange, to correspond with the change in Section 6F.02 General Characteristics of Signs. The FHWA received one comment from the City of Tucson, Arizona, in support of this change, and three comments from the City of Charlotte, North Carolina, a private citizen, and a traffic engineering consultant suggesting that wording of the STANDARD and the GUIDANCE relating to the color of additional guide signs in temporary traffic control zones was inconsistent and confusing. To clarify, the FHWA revises the STANDARD statement in this final rule to specify that if additional temporary guide signs are used in temporary traffic control zones, they shall have a black legend and border on an orange background. The FHWA also adds a paragraph to the OPTION stating that when permanent directional or street name signs are used with detour signing, they may have a white legend on a green background. This will clarify that street name signs do not need to be on an orange background.

256. In Section 6F.52 END ROAD WORK Sign (G20-2) (numbered Section 6F.49 in the NPA), the FHWA changes the GUIDANCE statement to indicate that the END ROAD WORK sign should be placed near the end of the termination area, rather than specify a distance beyond the end of the temporary traffic control zone as in the 2000 MUTCD. The FHWA received two comments from the NCUTCD and the Wisconsin DOT opposed to this change. The NCUTCD suggested that the wording be changed to indicate that this sign is not always necessary, and the Wisconsin DOT suggested that a placement distance be included. The FHWA agrees with the NCUTCD and adds the phrase "when used" at the start of the GUIDANCE. Rather than specifying a distance, the FHWA further

clarifies that the END ROAD WORK sign should be placed near the end of the termination area, as determined by engineering judgment.

257. In Section 6F.53 Detour Signs and Markers (M4-8, M4-8a, M4-8b, M4-9, M4-9a, M4-9b, M4-9c, and M4-10) (numbered Section 6F.50 in the NPA), the FHWA changes the title to include signs specifically for detouring pedestrians and bicyclists.

Additionally, the FHWA adds to the first OPTION statement that signs used for temporary traffic control of incident management situations may have a black legend and border on a fluorescent pink (referred to as coral in the NPA) background, as an alternative to black on orange, to correspond to changes in Section 6F.02 General Characteristics of Signs. The FHWA received one comment from the City of Tucson, Arizona, supporting this change, and incorporates this change.

Additionally, at the end of the second GUIDANCE statement, the FHWA adds that the Pedestrian/Bicycle Detour (M4-9a) sign should be used where a pedestrian/bicycle detour route has been established because of the closing of a pedestrian/bicycle facility to through traffic. In the NPA, the FHWA proposed that this be a STANDARD, rather than GUIDANCE; however, the FHWA believes that GUIDANCE is more appropriate and is consistent with Section 6F.13 Sidewalk Closed Signs. The FHWA adds a STANDARD statement that if used, the Pedestrian/Bicycle Detour sign shall have an arrow pointing in the appropriate direction.

Additionally, the FHWA adds an OPTION statement at the end of the section that an arrow may be on the sign face or on a supplemental plaque. The Pedestrian/Bicycle Detour (M4-9a) sign or Bicycle Detour (M4-9c) sign may be used where a pedestrian or bicycle detour route (not both) has been established because of the closing of that particular facility to through traffic.

The FHWA received eleven comments from the Florida DOT, the City and County of Denver, Colorado, the City of Tucson, Arizona, the Association of Pedestrian and Bicycle Professionals, and private citizens in support of the changes to include signs specifically for detouring pedestrians and bicyclists.

258. In Section 6F.55 Portable Changeable Message Signs (numbered Section 6F.52 in the NPA), the FHWA adds a sentence at the end of the first STANDARD statement that each character module shall use at least a five wide and seven high pixel matrix, based on research regarding visibility and