



National Committee on Uniform Traffic Control Devices

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Item No.: 25A-TTC-04

NCUTCD PROPOSAL FOR CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

COMMITTEE / TASK FORCE: Temporary Traffic Control Technical Committee
ITEM NUMBER: 25A-TTC-04
TOPIC: "TTC Zone", "Work Zone", and "Work Space" Consistency
ORIGIN OF REQUEST: TTC Task Force #10
AFFECTED SECTIONS OF MUTCD: 1C.02
6A.01, 6B.01a (formerly 6N.01), 6B.07, 6B.09, 6C.02, 6E.04, 6H.07, 6K.02, 6M.05, 6M.08, 6P.07 (formerly 6N.11) 9A.01

DEVELOPMENT HISTORY:

Approved by Edit TC: 01/08/2025
Approved by Bicycle TC: 01/08/2025
Approved by TTC TC: 01/09/2025
Approved by NCUTCD Council:

This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, options, or support. If approved by the NCUTCD Council, the recommended changes will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.

SUMMARY:

For improved consistency throughout the MUTCD, the term "work zone" was reviewed to see if the term "TTC zone" was more applicable in the context of each section. In parallel, the use of "work area" was reviewed for universal replacement with the term "work space". The definition of the term "Temporary Traffic Control Zone" was also reviewed and updated to reflect the current description provided in Section 6B.02. The definition of the term "work zone" is also recommended for inclusion in Section 1C.02 pointing back to the definition of "Temporary Traffic Control Zone".

32 **DISCUSSION:**

33 A review of the definition of “Temporary Traffic Control Zone” in Section 1C.02 resulted in
34 recommendations to include “planned special events” and “emergency responders”. We are
35 recommending the proposed changes to the definition of “Temporary Traffic Control Zone”
36 presented below and including a definition of “Work Zone” which refers to the “Temporary Traffic
37 Control Zone” definition. TTC presented this proposed definition to the Edit Committee on
38 01/08/25, and with modifications to what was originally presented, was passed unanimously as
39 shown below.
40

41 A review of the term “work zone” in the MUTCD identified 35 occurrences including section
42 titles. Of those occurrences, twelve (12) are recommended to be replaced with “TTC zone” and
43 three (3) replaced with “work space” based on the context. Note that Ballot items 24A-TTC-06
44 and 24A-TTC-02, approved by Council June 2024, already recommended eliminating the
45 phrase “work zone” in Sections 6L.01 and 6M.02, respectively. It is recommended that the
46 fifteen (15) references to “work zone” be replaced as presented in this proposal. Two (2)
47 occurrences are in Part 9 (Traffic Control for Bicycle Facilities). We are coordinating with the
48 Bicycles Technical Committee regarding our recommendation to replaced “work zone” with
49 “TTC zone”.
50

51 A review of the term “work area” in the MUTCD, an outdated term, identified ten (10)
52 occurrences. The correct term is “work space” which is well described in Section 6B.06 (Activity
53 Area) including multiple figures in the MUTCD. It is recommended that nine (9) references to
54 “work area” be replaced with “work space” and one (1) be replaced with “TTC zone” as
55 presented in this proposal. The references to “work area” in Section 4D.11 were previously
56 addressed by the 24A-TTC-06 ballot item in coordination with Signals Technical Committee.
57

58 **RECOMMENDED MUTCD CHANGES:**

59 The following present the proposed changes to the current MUTCD within the context of the
60 current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and
61 proposed deletions from the MUTCD are shown in ~~red strikethrough~~. Changes previously
62 approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double
63 underline for additions and ~~green double strikethrough~~ for deletions. In some cases,
64 background comments may be provided with the MUTCD text. These comments are indicated
65 by [bracketed white text in shaded green]. Deletions made by a technical committee or task
66 force after initial distribution to sponsoring organizations are shown in ~~highlighted red~~
67 ~~strikethrough and Helvetica text~~. Additions made by a technical committee or task force after
68 initial distribution to sponsoring organizations are shown in underline blue and Helvetica text.
69
70

71 **PART 1. GENERAL**

72
73 **CHAPTER 1C. DEFINITIONS, ACRONYMS, AND**
74 **ABBREVIATIONS USED IN THIS MANUAL**
75

76 **Section 1C.02 Definitions of Words and Phrases Used in this Manual**

77 **Standard:**

78 **01 Unless otherwise defined in this Section, or in other Parts of this Manual, words or phrases**
79 **shall have the meaning(s) as defined in the “Uniform Vehicle Code,” “AASHTO Transportation**
80 **Glossary (Highway Definitions),” or other appropriate publications.**

02 Where a term that is defined in this Section or elsewhere in this Manual has a different definition in another resource or in common use, the definition herein shall govern for purposes of the applicability of the provisions of this Manual.

03 The following words and phrases, when used in this Manual, shall have the following meanings:

[Only affected definitions are shown.]

262. Temporary Traffic Control Zone—an area of a highway, pedestrian or bicycle facility where road user conditions are changed because of a work zone, planned special event, or incident by the use of temporary traffic control devices, flaggers, emergency responders, uniformed law enforcement officers, or other authorized personnel.

291a. Work Zone – an area of a highway, pedestrian or bicycle facility with construction, maintenance or utility work activities (see Temporary Traffic Control Zone).

PART 4. HIGHWAY TRAFFIC SIGNALS

CHAPTER 4D. DESIGN FEATURES OF TRAFFIC CONTROL SIGNALS

Section 4D.11 Temporary and Portable Traffic Control Signals

[For brevity, only paragraphs 06 and 07 of Section 4D.11 are shown.]

Guidance:

~~06 A temporary traffic control signal should be used only if engineering judgment indicates that installing the signal will improve the overall safety and/or operation of the location.~~

~~07 The use of temporary traffic control signals by a work crew on a regular basis in their work area should be subject to the approval of the jurisdiction having authority over the roadway.~~

[Instance of “work area” deleted through 24A-TTC-06.]

PART 6. TEMPORARY TRAFFIC CONTROL

CHAPTER 6A. GENERAL

Section 6A.01 General

[For brevity, only paragraphs 01-02 and 10 of Section 6A.01 are shown.]

Support:

01 Whenever the acronym “TTC” is used in Part 6, it refers to “temporary traffic control.”

Standard:

02 The needs and control of all road users (motorists, bicyclists, and pedestrians within the highway, or on a site roadway open to public travel (see definition in Section 1C.02), including persons with disabilities) through a TTC zone shall be an essential part of highway construction, utility work, maintenance operations, and the management of traffic incidents.

Support:

10 Operational improvements might be realized by using intelligent transportation systems (ITS) in ~~work zones~~ TTC zones. The use of ITS technology in ~~work zones~~ TTC zones ~~of ITS technology~~, such as portable camera systems, highway advisory radio, variable speed limits, ramp metering, traveler information, merge guidance, warning systems for vehicles exiting the work space, and queue detection information, is aimed at increasing safety for both workers and road users and helping to ensure a more efficient traffic flow. The use of ITS technologies in ~~work zones~~ TTC zones ~~of ITS technologies~~ has been

130 found to be effective in providing traffic monitoring and management, data collection, and traveler
131 information.

132 CHAPTER 6B. TEMPORARY TRAFFIC CONTROL ELEMENTS

134 Section 6B.07 Termination Area

136 Support:

137 01 The termination area is the section of the highway where road users are returned to their normal
138 driving path. The termination area extends from the downstream end of the work [space area](#) to the last
139 TTC device such as END ROAD WORK signs, if posted.

140 Option:

141 02 An END ROAD WORK sign, a Speed Limit sign, or other signs may be used to inform road users
142 that they can resume normal operations.

143 03 A longitudinal buffer space may be used between the work space and the beginning of the
144 downstream taper.

145 Section 6B.09 Detours and Diversions

147 Support:

148 01 A detour is a temporary rerouting of road users onto an existing highway in order to avoid a TTC
149 zone.

150 *Guidance:*

151 02 *Detours should be clearly signed over their entire length so that road users can easily use existing*
152 *highways to return to the original highway.*

153 Support:

154 03 A diversion is a temporary rerouting of road users onto a temporary highway or alignment placed
155 around the work [space area](#).

157 CHAPTER 6C. PEDESTRIAN AND WORKER SAFETY

159 Section 6C.02 Pedestrian Considerations

160 [For brevity, only paragraphs 05 and 10 of Section 6C.02 are shown.]

162 Option:

163 05 If an existing pedestrian route is impacted by a short-duration or a short-term stationary [TTC zone](#)
164 ~~work-zone~~ that is attended with project personnel, establishing an alternate pedestrian route may not be
165 necessary if the work can be stopped and pedestrians can navigate the [TTC zone](#) ~~work-zone~~. Pedestrians
166 may be delayed for a short period of time for project personnel to move equipment and material to
167 facilitate passage. [TTC zone](#) ~~Work-zone~~ personnel may also provide assistance to pedestrians as
168 necessary.

169 Support:

170 10 Figures 6P-28 and 6P-29 show typical TTC device usage and techniques for pedestrian movement
171 through [TTC zones](#) ~~work-zones~~

173 CHAPTER 6E. ONE-LANE, TWO-WAY TRAFFIC CONTROL

174 Section 6E.04 Pilot Car Method

175 [For brevity, only paragraphs 01-04 of Section 6E.04 are shown.]

177 Option:

- 178 01 A pilot car may be used to guide a queue of vehicles through the TTC zone or detour.
179 Guidance:
180 02 The pilot car should have the name of the contractor or contracting authority prominently displayed.
181 **Standard:**
182 03 **The PILOT CAR FOLLOW ME (G20-4) sign (see Figure 6H-1) shall be mounted on the top or**
183 **on the rear of the pilot vehicle (see Section 6H.37).**
184 04 **The pilot car operation shall be coordinated with flagging operations or other methods of**
185 **control at each end of the one lane section of the TTC zone ~~work-zone~~.**
186
187

188 CHAPTER 6H. TTC ZONE WARNING SIGNS

189 Section 6H.07 Lane(s) Closed Signs (W20-5, W20-5a, and W9-3)

190 Standard:

- 191 01 **The Lane(s) Closed sign (see Figure 6H-1) shall be used in advance of that point where one or**
192 **more through lanes of a multi-lane roadway are closed.**
193 02 **For a single lane closure, the Lane Closed (W20-5) sign (see Figure 6H-1) shall use the legend**
194 **RIGHT (LEFT) LANE CLOSED. Where two or more adjacent lanes are closed, the W20-5a sign**
195 **(see Figure 6H-1) shall use the legend XX RIGHT (LEFT) LANES CLOSED.**

196 Option:

- 197 03 The distance legend may be either XX FEET, XX MILES, or AHEAD.

198 Guidance:

- 199 04 *The Interior Lane Shift (W9-3) sign (see Figure 6H-1) should be used in advance of that point where*
200 *work occupies an interior lane(s) and approaching motor vehicle traffic is directed to the right or left of*
201 *the work ~~space zone~~ in the lane(s) by using a shifting taper to route traffic around the closed interior*
202 *lane(s).*
203
204
205

206 CHAPTER 6K. TTC ZONE CHANNELING DEVICES

207 Section 6K.02 Pedestrian Channelizing Devices

208 [For brevity, only paragraph 01 of Section 6K.02 is shown.]

209 Support:

- 210 01 Pedestrian channelizing devices indicate a suitable path of pedestrian travel around or through the
211 ~~work~~ TTC zone.
212
213
214

215 CHAPTER 6M. OTHER TTC ZONE DESIGN FEATURES AND SAFETY DEVICES

216 Section 6M.02 Positive Protection and Temporary Traffic Barriers

217 [Changes to Section 6M.02 previously approved by council in 24A-TTC-02. Only paragraphs 1 through 3
218 are shown.]

219 Support:

- 220 01 Temporary traffic barriers, including portable or movable barriers, are devices designed to help
221 prevent penetration by vehicles while minimizing injuries to vehicle occupants, and to protect workers,
222 bicyclists, and pedestrians.
223

224 Guidance:

225 02 *Except as otherwise required, at a minimum, longitudinal traffic barriers and/or other positive*
226 *protection devices should be considered in ~~work~~ TTC zone situations that place workers at increased risk*
227 *from motorized traffic, and where positive protection devices offer the highest potential for improved*
228 *safety for workers and road users.*

229 Support:

- 230 03 Considerations for positive protection include, but are not limited to, the following circumstances:
- 231 A. ~~Work-TTC~~ zones that provide workers no means of escape from motorized traffic such as tunnels
232 or bridges;
 - 233 B. ~~Long-term stationary work~~ TTC zones with durations of two weeks or more resulting in
234 substantial worker exposure to motorized traffic;
 - 235 C. Projects with anticipated operating speeds of 45 mph or greater, especially when combined with
236 high traffic volumes;
 - 237 D. Work operations that place workers, pedestrians, or bicyclists close to travel lanes open to traffic;
238 and
 - 239 E. Roadside hazards, such as drop-offs or unfinished bridge decks, that will remain in place
240 overnight or longer.
- 241

242 Section 6M.05 Crash Cushions

243 [For brevity, only paragraph 05 of Section 6M.05 is shown.]

244 05 **Truck-mounted attenuators shall be energy-absorbing devices attached to the rear of shadow**
245 **trailers or trucks and shall be used in accordance with the manufacturer’s specifications. If used,**
246 **the shadow vehicle with the attenuator shall be located in advance of the work space area, workers,**
247 **or equipment to reduce the severity of rear-end crashes from errant vehicles.**

248

249 Section 6M.08 Lighting for Night Work

250 Support:

251 01 Utility, maintenance, or construction activities on highways are frequently conducted during *nighttime*
252 periods when vehicular traffic volumes are lower. Large construction projects are sometimes operated on
253 a double-shift basis requiring night work (see Section 6N.18).

254 *Guidance:*

255 02 *When nighttime work is being performed, floodlights should be used to illuminate the work space*
256 *~~area~~, equipment crossings, and other areas.*

257 03 *When used, floodlighting should be installed in a manner that minimizes glare to approaching road*
258 *users, flaggers, or workers.*

259 04 *The adequacy of the floodlight placement and elimination of potential glare should be determined by*
260 *driving through and observing the floodlighted area from each direction on all approaching roadways*
261 *after the initial floodlight setup, at night, and periodically. Lighting should be sufficient so as to give road*
262 *users the capability to identify a worker as a person. Care should be taken to minimize the potential for*
263 *shadows to conceal workers within the work space area.*

264 Support:

265 05 Desired illumination levels vary depending upon the nature of the task involved. An average
266 horizontal luminance of 5 foot candles can be adequate for general activities. Tasks requiring high levels
267 of precision and extreme care can require an average horizontal luminance of 20 foot candles.

268 **Standard:**

269 06 **Except in emergency situations, flagger stations shall be illuminated at night.**

270

271 **CHAPTER 6N. TYPES OF TEMPORARY TRAFFIC CONTROL ZONE ACTIVITIES**

272

273 **Section ~~6N.01~~ 6B.01a Work Duration**

274 [Relocation of Section 6N.01 relocated to 6B.01a in 24B-TTC-03. For brevity, only paragraphs 13-15 of
275 the section are shown.]

276 Option:

277 13 Flags and/or channelizing devices may additionally be used and moved periodically to keep them
278 near the mobile work ~~space area~~.

279 14 Flaggers may be used for mobile operations that often involve frequent short stops.

280 Support:

281 15 Mobile operations also include work activities where workers and equipment move along the road
282 without stopping, usually at slow speeds. The advance warning area moves with the work ~~space area~~.

283

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CHAPTER 6P. TYPICAL APPLICATIONS

286

287 **Section ~~6N.11~~ 6P.07 Work within the Traveled Way of a Multi-Lane, Non-Access**
288 **Controlled Highway**

289 [Relocation of Section 6N.11 relocated to 6B.7 in 24B-TTC-01. For brevity, only paragraph 13 of the
290 section is shown.]

291 Option:

292 13 If operating speeds are 40 mph or less and the space approaching the work ~~space area~~ does not
293 permit moving traffic over one lane at a time, a single continuous taper may be used.

[For brevity, only the affected Typical Applications, and affected portions of those TAs, are shown.]

Notes for Figure 6P-36—Typical Application 36
Lane Shift on a Freeway or Expressway [Approved in 24B-TTC-01.]

Guidance:

1. *The lane shift should be used when the work space extends into either the right-hand or left-hand lane of a divided highway and it is impracticable, for capacity reasons, to reduce the number of available lanes.*

Support:

2. When a lane shift is accomplished by using (1) geometry that meets the design speed at which the permanent highway was designed, (2) full normal cross-section (full lane width and full shoulders), and (3) complete pavement markings, then only the initial general [TTC work-zone](#) warning sign is required.

Notes for Figure 6P-38—Typical Application 38
Interior Lane Closure on a Freeway

Standard:

1. **An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.**
2. **If temporary traffic barriers are installed, they shall comply with the provisions and requirements in Section 6M.02.**
3. **The barrier shall not be placed along the shifting taper. The lane shall first be shifted using channelizing devices and pavement markings.**
4. **For long-term stationary work, existing conflicting pavement markings shall be removed and temporary markings shall be installed before traffic patterns are changed.**

Guidance:

5. *For a long-term closure, a barrier should be used to provide additional safety to the operation in the closed interior lane. A buffer space should be used at the upstream end of the closed interior lane.*
6. *An arrow board displaying an arrow pointing to the right should be placed on the left-hand shoulder at the beginning of the taper.*
7. *For long-term use, the broken lane lines should be made solid white in the two-lane section.*

Option:

8. As an alternative to initially closing the left-hand lane, as shown in the typical application, the right-hand lane may be closed in advance of the interior lane closure with appropriate channelization and signs. The Interior Lane Shift Ahead symbol sign may be mirrored to indicate a right lane shift.
9. A short, single row of channelizing devices in advance of the vehicular traffic split to restrict vehicular traffic to their respective lanes may be added.
10. DO NOT PASS signs may be used.
11. If a paved shoulder having a minimum width of 10 feet and sufficient strength is available, the left-hand and center lanes may be closed and motor vehicle traffic carried around the work space on the right-hand lane and a right-hand shoulder.
12. A work vehicle with a truck-mounted attenuator may be used within the closed interior lane between the buffer space and the work [space area](#).
13. Positive protection devices may be used per Section 6M.02.

Guidance:

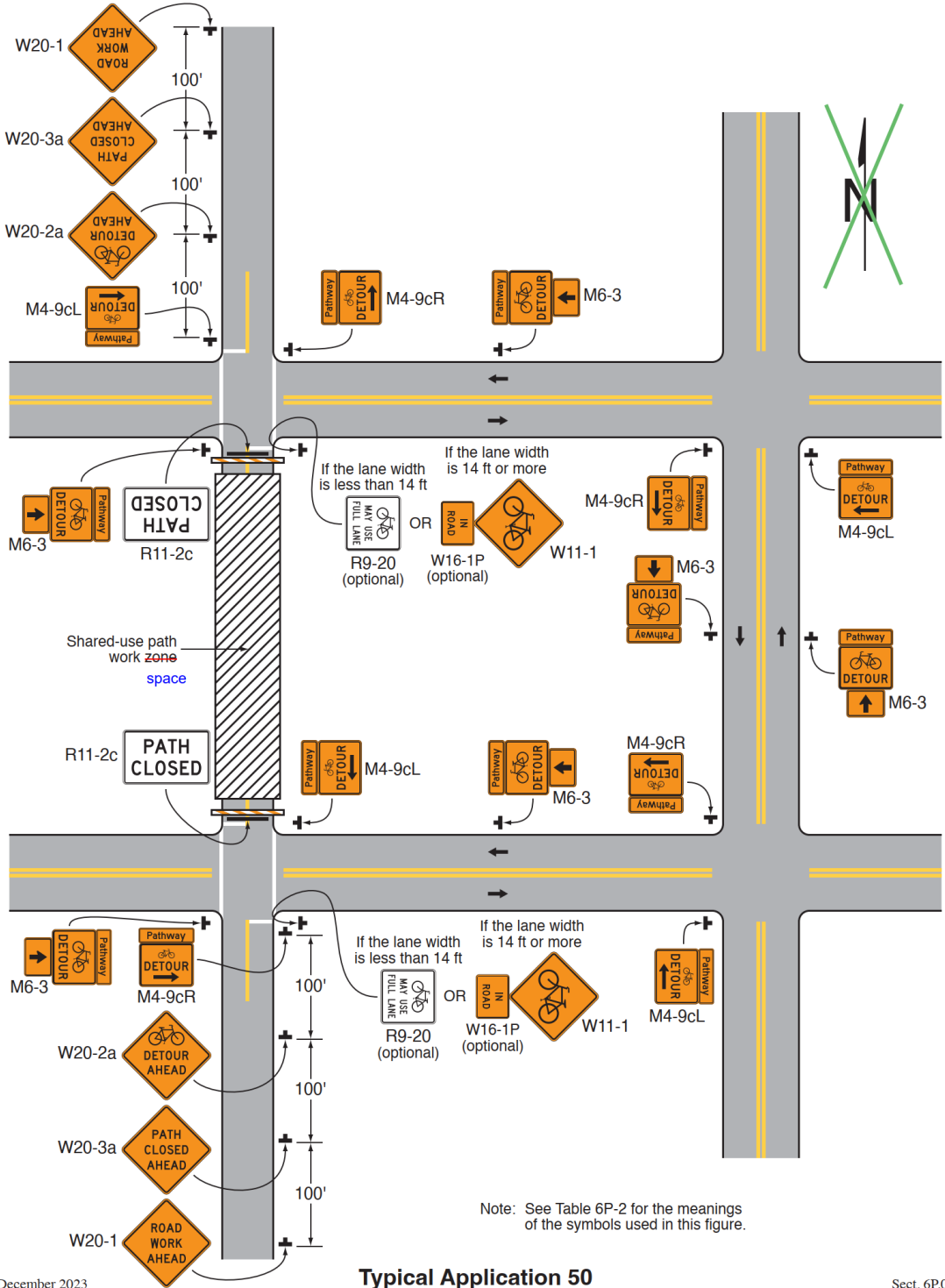
14. *When a shoulder lane is used that cannot adequately accommodate trucks, trucks should be directed to use the normal travel lanes.*

345

Figure 6P-50. On-Road Detour for a Shared-Use Path (TA-50)

346

[North arrow deletion approved by Council in 24A-TTC-03]



347

December 2023

Typical Application 50

Sect. 6P.01

348

349 **PART 9. TRAFFIC CONTROL FOR BICYCLE FACILITIES**

350
351 **CHAPTER 9A. GENERAL**

352
353 **Section 9A.01 General**

354 Support:

355 01 Part 9 covers signs and pavement markings specifically related to bicycle operation on roadways,
356 separated bikeways, and shared-use paths. In jurisdictions where small, low-speed, human or electric-
357 powered transportation devices (often referred to as a micromobility devices) are allowed to use bicycle
358 facilities, they can be regulated by signs, pavement markings, and other traffic control devices related to
359 bicycle operations. Part 4 contains information on highway traffic signals and bicycle signal faces. Part 6
360 contains information on [TTC zones](#) ~~work-zones~~ for bicycle facilities and the mitigation of impacts to
361 bicycle travel through [TTC zones](#) ~~work-zones~~.