TECHNICAL COMMITTEE: Temporary Traffic Control Technical Committee in association with Bicycle Technical Committee

TOPIC: Accommodating Bicyclists Through Temporary Traffic Control Zones

STATUS OF ACTION:
BTC Drafts and Review: January 2011, June 2011, and January 2012
TTCTC Review: January 2011, June 2011, and January 2012
BTC Approval: January 2012
TTCTC Approval: January 2012
Transmitted to Sponsors: September 2012
Council Approval: June 28, 2013

ORIGIN OF REQUEST: NCUTCD Temporary Traffic Control Technical Committee (TTCTC) in association with NCUTCD Bicycle Technical Committee (BTC)

AFFECTED SECTIONS OF MUTCD: 6G.05 and 6H.01

SUMMARY:
This proposal includes additions to Section 6G.05, Work Affecting Pedestrians and Bicycle Facilities and Section 6H.01, Typical Applications to provide additional guidance for accommodating bicycles through TTC zones.

DISCUSSION:
As more and more people travel by bicycle, it is increasingly important that TTC plans accommodate bicyclists. Safety concerns and disruption of travel are magnified for the bicyclist when the roadway or bikeway is under construction or repair. Unfortunately, it is far too common that TTC Plans do little or nothing to provide for bicycle travel through work zones, and the 2009 MUTCD has limited information specific to accommodating bicycles through TTC zones.

This proposal provides guidance and support in Section 6G.05 on the importance of providing bikeway continuity through or around a TTC zone. The proposed five new Typical Applications (TAs) in Section 6H.01 will illustrate providing this continuity under
differing circumstances. In all cases, the new TAs utilizes traffic control devices that are already in the MUTCD.

This proposal originated in the Bicycle Technical Committee, was reviewed and refined by a task force in the Temporary Traffic Control Technical Committee, and was reviewed and approved by both Technical Committees.
RECOMMENDED MUTCD REVISIONS

Note: Proposed content will be new to the MUTCD, and so is shown as a default in **underline blue**.

**Additions to Section 6G.05  Work Affecting Pedestrian and Bicycle Facilities**

**Guidance:**
*The continuity of a bikeway should be maintained through the TTC zone if practical.*

**Support:**
The continuity of a bikeway through the TTC zone is particularly important where bicyclists have been traveling on a shoulder, bike lane, or shared-use path adjacent to a lane (having a speed limit greater than or equal to 45 miles per hour) and there would be a significant safety concern if bicyclists were to share that lane through the TTC zone.

On roadways which are not bikeways but where bicyclists (when present) typically share lanes with motor vehicle traffic, the TTC plan and Typical Applications for general traffic will usually be adequate for bicyclists as well.

In order to maintain room for bicycle lanes through the TTC zone on a multi-lane roadway, one or more travel lanes could be closed.

**Guidance:**
*If a bikeway detour is unavoidable, it should be as short and direct as practical.*

On-road bicyclists should not be directed onto a path or sidewalk intended for pedestrian use except where such a path or sidewalk is a shared-use path, or where no practical alternative is available (such as might be the case on a bridge in the course of a rehabilitation project).

If a portion of a bikeway is to be closed due to construction activities and the detoured bikeway follows a complex path not in the original bikeway corridor, then a full detour plan should be developed and implemented. The TTC for the detour of the bikeway should include all necessary advance warning (W21 series) signs, detour (W4-9 series) signs, and any other TTC devices necessary to guide bicyclists along the detour route.

**Support:**
Figures 6H-xx – 6H-xx (TA-B1 – TA-B5) provide examples and contain additional information for accommodating bicycles through or around typical work zones.

**Option:**
If an on-street bikeway had a wide travel lane or lanes (lanes having a width of at least 14 feet) in which bicycles traveled side by side with motor vehicles prior to construction, and construction activities reduce the lane width(s) to less than 14 feet through the TTC zone, then the Bicycles May Use Full Lane (R4-11) sign may be used.
Standard:
The minimum TTC sign and plaque sizes for shared-use paths shall conform to those shown in Table 9B-1. The minimum TTC sign and plaque sizes for on-street bikeways shall conform to Chapter 6F.
Notes for Figure 6H-xx – Typical Application B1
Bicycle Lane Closure without Detour

Guidance:

1. If a bicycle lane on a roadway having a speed limit of 45 mph or higher is closed and conditions are not appropriate to direct bicyclists into a shared lane, a separate bicycle facility or detour route should be considered. Refer to TA-B2 or TA-B5.

Option:

2. If a bicycle lane on a roadway having a speed limit of 40 mph or less is closed, and the adjacent travel lane is less than 14 feet wide, then Bicycles May Use Full Lane (R4-11) signs may be used.

3. If a bicycle lane on a roadway having a speed limit of 40 mph or less is closed, and the adjacent travel lane is at least 14 feet wide throughout the TTC zone, then Bicycle Warning (W11-1) signs in association with SHARE THE ROAD (W16-1) plaques may be used.
Figure 6H-xx, Bicycle Lane Closure without Detour (TA-B1)

Notes:
1. See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
2. See Table 6H-4 formula for determining taper length. Speed(s) shall be motor vehicle speeds.
Notes for Figure 6H-xx – Typical Application B2
Bicycle Lane Closure with On-Road Detour

Guidance:

1. A detour route for bicycle traffic where a section of bicycle lane is closed should use the most direct route practical on roadways where conditions are appropriate for bicycling.

2. Bicycle related regulatory and/or warning signs should be considered along the bicycle detour based on engineering judgment and traffic conditions.

3. A Street Name sign or Bike Route Name sign should be mounted with the Bike Detour sign. The Street Name sign or Bike Route Name sign may be either white on green or black on orange.

   **Standard:**

4. **Where used, the Street Name sign or Bike Route Name sign shall be placed above the Bike Detour sign.**
Figure 6H-xx, Shared-Use Path Closure with a Diversion (TA-B3)

Note:
1. See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Temporary Path

Typical Application B3
Notes for Figure 6H-xx – Typical Application B3
Shared-Use Path Closure with a Diversion

Guidance:

1. This plan should be used where a detour is provided for a shared-use path onto a temporary paved shared-use path.
2. The temporary paved shared-use path should be at least as wide as the shared-use path that was temporarily closed.
Notes for Figure 6H-xx – Typical Application B4
On-Road Detour for Shared-Use Path

Guidance:
1. This plan should be used where an on-road detour is provided for bicycle traffic using a shared-use path.
2. The on-road detour route for bicycle traffic should use the most direct route practical on roadways where conditions are appropriate for bicycling.
3. Bicycle related regulatory and/or warning signs should be considered along the bicycle detour based on engineering judgment and traffic conditions.
4. A Street Name sign or Bike Route Name sign should be mounted with the Bike Detour sign. The Street Name sign or Bike Route Name sign may be either white on green or black on orange.

Standard:
5. Where used the Street Name sign or Bike Route Name sign shall be placed above the Bike Detour sign.
Figure 6H-xx. On-Road Detour for Shared-Use Path (TA-B4)

Note:
1. See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application B4
Option:
1. This plan may be used where a paved shoulder is closed and a temporary paved path is provided for bicyclists.

Guidance:
2. *This plan should be used where a paved shoulder is closed on a roadway having a speed limit greater than or equal to 45 mph that is part of a bikeway system (local, county or state) and a temporary paved path is provided for bicyclists.*
3. *The A, B, C dimensions should be based on anticipated bicycle speeds.*
Figure 6H-xx. Paved Shoulder Closure with Bicycle Diversion onto Path (TA-B5)

Notes:
1. See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
2. See Table 6H-4 for determining taper length. Speed(s) shall be motor vehicle speeds.

Typical Application B5

Based on specific site conditions and work durations, refer to TA-5 or TA-33 for guidance regarding additional traffic control devices and/or placement of barrier for motor vehicle traffic.