

Minutes for NCUTCD Bicycle Technical Committee, June 14, 2000

Present: Richard Moeur, Maggie Cusack, Michelle DeRobertis, Tim Oliver, John, LaPlante, Bob Carrigan, Charles Cadenhead, Bill Fox, Ed Dressler, Ron Van Houten

Guests: Jon Wertjes (City of Minneapolis)

Chapter 9 Docket Comments

There were 80 comments posted to the docket. Most comments were addressed by our January comments.

Comments from New York by Michael King were reviewed. He made the comment that he did not support the “Stop and Dismount” sign. We do not need to respond to this because such a sign does not exist.

Michael King also objected to our recommending that raised barriers, curbs, posts, raised pavement markers be prohibited to separate bike lanes from adjacent travel lanes. We feel that the risk added by the use of these devices may be greater than the problems they are intended to solve. Devices should not be employed in the absence of empirical evidence to support their use. This section does not preclude devices used to separate two-way shared use paths adjacent to roadways.

Floyd Lapp, NYC Department of City Planning, commented that there should be more flexibility in signs used on shared use paths. Our position is that regulatory and warning signs for bicyclists should meet the same standards on shared use paths as they do on the roadway. These signs are designed for the operational characteristics of bicycles which do not significantly change on shared use paths. Using different signs for standard warning or regulatory situations would thus be clearly inappropriate. The signs specified in this section of the manual are not intended to regulate the behavior of pedestrians and skaters. Specifically, his request to limit conformity only to bicycle facilities on streets is in direct conflict with the MUTCD desire for uniformity. His suggestions to relax the lateral sign clearances implies the design of unsafe shared use paths which the manual cannot support. His comment that the guidance on the placement of the bicycle placement signs should be relaxed fails to recognize that since this is a guidance statement and it is already possible to install signs in a different location if there are not other alternatives. We disagree with his comment that the word “KEEP” in the “KEEP RIGHT” sign is unnecessary. With respect to his request for smaller “STOP” and “YIELD” signs on shared use paths, these signs are already reduced to the minimum size required by the potential speed of the cyclist. In addition, these signs should never be embedded in another sign where their shape could be obscured and the message could be confused by the presence of other messages. The use of bicycle hazardous condition warning signs is predicated on the potential speed of the cyclist and not on the walking speed of other shared use path users. His note that bicycle route guide signs are often inadequate and often misinterpreted is precisely the reason the MUTCD has provided guidance for the installation of the D11-1 sign. There is nothing in this section of the MUTCD that requires the use of bicycle route markers where they would not be appropriate. In general, one should never sacrifice safety for aesthetics.

Tunnel Sign

Tim talked about the use of beacons and signs to warn motorists of the presence of a bicycle in an area ahead with poor sight distance. However, no research has been done to evaluate the efficacy of their use.

Action: Tim agreed to gather more information to determine if a sign of this sort should be added to the manual.

FHWA-Approved Research

Studies to support the use of new markings or signs were discussed. Linda Brown explained how things get into the manual. The importance of human factors, lab research and field research was discussed. It was pointed out that field research should go through FHWA and can involve any jurisdiction with authority over the roadway.

Advance Stop Bars

Discussed the bicycle advance stop bars at traffic signals. The committee felt that it conflicted with the dashed bike lane on the right at intersections because we want to merge the bicycles and cars. Even though it would help them at the start of the cycle, it would hinder them during the rest of the cycle.

Bike Specific Traffic Signal Heads

The implication of bicycle specific signal heads was also discussed. We then discussed possible applications of bicycle signals. It was agreed that committee members would approach jurisdictions that are thinking about installing bicycle signals to conduct research on the issue. (See further discussion on 6/15.)

Minutes for NCUTCD Bicycle Technical Committee, June 15, 2000

Present: Richard Moeur, James Mackay, Maggie Cusack, Michelle DeRobertis, Tim Oliver, John, LaPlante, Bob Carrigan, Charles Cadenhead, Bill Fox, Ed Dressler, Ron Van Houten

Guests: Jon Wertjes (City of Minneapolis), Rudy Umbs (FHWA), Ilona Kastenhofer (Virginia DOT State Traffic Engineer), Joel Aguilar (Caltrans)

Shared Use Arrow

JL Arrow is being used across the country but we need data for approval. Has been used for various shared-use conditions - supplements share the road sign, defines bicycle travel corridor in both wide and narrow lanes, can get bikes out of door zone, or to take the lane, inform motorists of the likely presence of bicyclists.

JM Wrong way bicycling countermeasure, bike on sidewalk, etc. in urban environment.

JL Use in conjunction with STR or Bike Route signing - determine effect with or without signs. Need study of how is being used and where.

JM Will find out where they are being used.

RVH Identify users, put together research questionnaire and data collection accordingly. Then request permission to experiment from FHWA. Want to see if reduce wrong way, sidewalk problems along with proper place of the bicyclist in the lane.

JL Put together study outline -define what would be needed from an agency that has never done an FHWA experiment.

Rudy Umbs - Steps for experiment are defined in the MUTCD - identify problem and how will address. Get with Cheri Kittle. See where bicyclists are riding in the lane.

MD See effect on motorists - their position, and treatment of bicyclists.

Action: Four things for follow-up:

JM – Usage

RVH – Questionnaire for users

RVH – Experiment format

MC – Take to NYC; MD – Take to SF & Caltrans; JM – Take to ProBike

MD June CTCDC meeting canceled. She will go back in August. She has spoken with UNC research people. Will not proceed with experiment until CTCTD concurs.

Rudy Get the generic experiment defined, and then solicit additional agencies to request participation, reference previous study defined.

Advance Stop Bars

JL Committee determined that this is not an appropriate device for this country at this time. Right turn on red does not exist in Europe. (See previous discussion on 6/14.)

Bike Specific Traffic Signal Heads

JL There are concerns about misinterpretation. (See previous discussion on 6/14.)

Action: MD will check with Caltrans for warrants for signals that have been installed. Jon will experiment in Minn. Cara S. may do in Cambridge also.

Bikes and Roundabouts

JL Charles will look at guide on Internet.

CC Bike treatments are defined in the geometrics section.

JL Multilane roundabouts have much higher bike accident rates than single lane roundabouts.

Action: No further action until more people have had a chance to review the new FHWA Roundabout Design Guide.

Solid Colored Bike Lanes

JL Portland did a study.

RM Portland study included enhanced signing - we may want to explore both or sign only treatment.

MD Portland study showed that motorist slowing and yielding increased, but bicyclist scanning decreased.

Action: MD will review Portland results and possibly discuss with UNC researcher.

MC Will try to find a NYC location for an experiment.

Wheels and Heels Trails

JM Concept works in Denver. He presented proposed text and signing for MUTCD.

RM Changed title and some definitions.

JM Change support language to have “can” instead of “May” in text.

Action: RVH will do Human Factors study on different skater symbol signs. MD suggested using skater’s legs version as an alternate for the human factors. JL said that the language acceptable. We can take to National Committee in January with human factors results.

Bus/Bike Lanes

Action: MD will check with Minneapolis, Toronto, and Edmonton

Right turn only lanes

JL Noted that there are four examples in the AASHTO guide which was excerpted from the MUTCD, but then MUTCD dropped them. It was decided to do nothing further at this time.

Tunnel Sign

JL Action plan discussed and defined 6/14.

Other Issues

Rumble Strips

RM Rumble strips are a roadway safety feature. They reduce run-off-road type crashes by up to 70%. Gaps are an option to allow bicyclists to maneuver out of the shoulder. Use of ten-foot gaps to correlate with dashed striping could make installations easier. Current policies allow for RS treatments even when shoulders are narrower than standard. Need studies on the design and impacts of RS - determine widths, possible gaps, etc. Might be able to incorporate with edge lines - could reduce impacts onto the shoulder. Raised profile thermoplastic lane stripes can be used in narrow shoulder situations - these are traversible by bicyclists. Are being used for urban gore striping.

Raised Pavement Markings

MC Reported on a Research Committee initiative for raised pavement markings. This is a concern for the Bike Committee. Alternative treatments should be considered.

JL Will take this matter to Jonathan Upchurch, Chair of the Research Committee.

Electric Bikes, Electric Scooters

ED Raised concerns based on problems in Ohio.

Jon Minneapolis decided to prohibit on off-street facilities.

JL Committee is not considering any future action at this time.

Four-Wheel Bicycles

JL Present definition already covers four-wheel bikes.

Skid-Resistant Thermoplastic Pavement Markings

MD We need analysis of slipperiness for bikes, peds, motorcycles.

RVH Zebra crossings no better than other crosswalk treatments.

JL This is primarily a pavement markings topic. He will discuss with Dan Centa, Chair of Pavement Markings Committee

Pedestrian Issues

Lead Pedestrian Phase

RVH Already has a study for TRB on lead phase and conflict reductions. The lead ped phase is consistent with the current manual. He is working with Richard Retting, Senior Engineer with the IIHS.

Action: RVH will see if the present data is sufficient to justify inclusion in the Manual. We can then discuss with the Signals Committee to see if there is anything that would need to be in MUTCD.

Exclusive “Scramble” Pedestrian Phase

MC Ped exclusive phases could be useful during peak ped. movements.

JL Diagonal crosswalk markings and heads may need to be defined.

MC Use single hatched markings to define the gridlock box portion of the intersection in NYC.

JL We need information on signals, signing, and markings from cities that may be presently using it: Denver, Pasadena, Baltimore, New Haven, Tucson, Miami, Berkeley, and SF.

MC Have an NYC auto-free zone at lunchtime for six blocks.

Action: MC will work with Bill Fox? or someone on this.

Ped Countdown Signal Heads

JL Studies are still underway. Impacts on accidents and conflicts are still to be determined. Might increase the number of people starting illegally.

Roaming Eyes

RVH Passed by National Committee last January. It is on the Federal docket - uncertain if will be in the Millennium Manual.

Midblock Ped Crossing Signs

JL RVH is working on new regulatory sign with Yield sign inset.

RM It is simply a reconfiguration of existing signs and icons from Manual.

JM May need a left-hand (optional) version for median side mount.

Peds and Roundabouts

JL Roundabout concerns from the blind community. Can get from FHWA (or even their website). Look at ped coverage to see if there are any topics for the manual, i.e. splitter islands as a TCD. He will personally look at pedestrian topics as part of AASHTO Ped Guide research.

Action: No further action until more people have had a chance to review the new FHWA Roundabout Design Guide.

Next Meeting Date

JL Next NCUTCD meeting will be 1/3/01.