

# **NCUTCD Bicycle Technical Committee Minutes**

**January 9, 2013, Arlington, Virginia**

Minutes prepared by John S. Allen, September 19, 2013

## ***Attendance***

### **BTC Members**

Richard Moeur, Chair	Dwight Kingsbury
John Ciccarelli, Vice Chair	Dan Lang
John Allen, Secretary	Tim Oliver
Ted Curtis	Nathan Richman
Michelle DeRobertis	Bill Schultheiss
Bill DeSantis	John Schubert
Cindy Engelhart	Craig Williams
Bill Fox	Ron Van Houten
Michael Jackson	

### **Guests**

Lee Stuart, ATSSA	Ken McLeod, LAB
Jim Kalchbrenner, Pexco/Davidson	Andy Clarke, LAB
Mike Coleman, Kittelson & Associates	Gene Hawkins, NCUTCD Edit Committee
Mighk Wilson, Metroplan Orlando	Kevin Dunn, FHWA
Virginia Sullivan, ACA	Jim Shurbutt, FHWA
Josh DeBruyn, Michigan DOT	

## ***Call to Order***

Chair Richard Moeur called the meeting to order at 1:05 PM.

## ***Administrative Issues***

Kevin Dunn is the new FHWA liaison, Bruce Friedman having moved on.

John Ciccarelli is slated to become the new Vice Chair by this evening at the Board of Directors meeting. John LaPlante is still officially a member, but won't be attending meetings, so will be leaving the BTC by June 2014. This is the third meeting David Gleason has missed. Michelle DeRobertis is leaving her government position as of June. Nathan Richman is a new BTC member (from NACE).

Several people are interested in joining the BTC – 3 in the room right now. The larger the committee gets, the harder it is to make a quorum at the summer meeting. The next meeting is Portland, Maine in June.

New members can help with geographic diversity. Ryan Snyder from Los Angeles plans to join us in June.

## ***TCD Handbook***

The 2nd edition of the ITE Traffic Control Devices Handbook has been under development for a long time, and will be in print or for sale by the end of this month. This 2nd edition will be a companion to the 2009 MUTCD. It has a bicycle chapter written by BTC members.

## ***UVC Revisions***

A vote on proposed bicycle- related UVC revisions was postponed till after Rules of the Road Committee meeting this evening due to comments from a member of the RORC and need for discussion at that meeting. .

As to Ron van Houten's proposal for a revised rule for pedestrian crossings, there is the unresolved issue of what is a divided highway – definitions are needed. But this proposal also is to be taken up at tonight's meeting.

## ***FHWA Request for Comments - Structure of New MUTCD***

Gene Hawkins came in as an observer. His issue is FHWA Request for Comments on the structure of the new MUTCD.

The FHWA Docket proposal would create two Manuals, one subject to rulemaking, the other not. We may have more flexibility this way. Our Part 9 is pretty much a model for an efficient MUTCD. All the applications are handled in other references – for example, the SLM is in AASHTO, TCD, NACTO. These other references don't have to go through Federal rulemaking.

Hawkins: we are still at the start line. Nothing has been decided. This is only a request for comments from the FHWA. The decision will be made later. There are several partitioning alternatives. The goal is for practitioners be able to do the right thing.

There was a very long discussion of the possible restructuring, the effects of digital delivery, guidance statements vs. best practice, the size of the book, the cutoff between definitions and examples, easier process, moving support statements to supplement. Or also moving most guidance to the application supplement.

Question: do we support splitting? Should format be as it is now or more like a narrative? Should there be a one-to-one correspondence between the topics in the manual and the supplement?

Should FHWA maintain it? They have only 6 people? We have been down this road before with the TCD manual. But the TCD Handbook isn't getting out to the practitioners?

NCUTCD is recommending no FHWA splitting till we have finished our strategic planning process, in January, 2014 Information on this can be seen at <http://mutcd.tamu.edu>

The BTC undertook some wordsmithing of the last 2 paragraphs of the proposed NCUTCD response to the docket.

## ***MUTCD Update Process***

In the 2009 MUTCD, FHWA inserted a Guidance statement that a hybrid beacon should (not shall) not be used within 100 feet of intersections., creating problems for 49 states in response to one comment from one state. Also, we box ourselves into a trap of spending years on a proposal. Bike box and bicycle traffic signal are the two difficult issues on scope and implementation. (They were discussed at the next day's BTC meeting.)

Data may just not be there on some devices.

There are a lot of safety-neutral bicycle and ped features. There is a perception that they may help. They are not applicable across all possibilities, or all land-use types.

Recent Interim Approvals include green bike lanes. - data indicates they were safety neutral.

A different procedure for interim approval would be helpful.

Our homework on upcoming proposals is to go to <http://mutcd.tamu.edu/white-papers> and read white papers.

### ***TTC Proposal on Work Zones***

The Temporary Traffic Control proposal on work zone figures for bikeways s discussed and revisions were made, to send to TTC. (Also see the next day's discussion).

### ***Adjournment***

The meeting adjourned at 5:00 PM to make way for the Pedestrian Task Force.

# **NCUTCD Bicycle Technical Committee Minutes**

**January 10, 2013, Arlington, Virginia**

Minutes prepared by John S. Allen, September 20, 2013

## ***Attendance***

### **BTC Members**

Richard Moeur, Chair  
John Ciccarelli, Vice Chair  
John Allen, Secretary  
Ted Curtis  
Bill DeSantis  
Bill Fox  
Michael Jackson  
Dwight Kingsbury

Dan Lang  
Tim Oliver  
Nathan Richman  
Bill Schultheiss  
John Schubert  
Craig Williams  
Ron Van Houten

### **Guests**

John Hansen, ITS help/LEDDARTECH  
Josh DeBruyn, Michigan DOT  
Ginny Sullivan, Adventure Cycling Association  
David Vega-Barachovitz, NACTO  
Jameelah Hayes, AASHTO  
Mighk Wilson, Metroplan Orlando

Mike Coleman, Kittleson & Associates  
Jim Kalchbrenner, Pexco/Davidson  
Lee Stuart, ATSSA  
Jim Shurbutt, FHWA Safety R&D  
Kevin Dunn, FHWA

## ***Call to Order***

Chair Richard Moeur called the meeting to order at 1:00 PM.

## ***LEDDARTech presentation***

John Hansen gave a presentation on LEDDAR™ bicycle and pedestrian detection, which uses an infrared radar method. He claimed 98.7% detection, directional sensing, low cost and low maintenance. This was the only system successfully to pass a test in Davis, California. The detector unit has to be rigidly mounted, preferably 14 to 18 feet above the surface. It also includes a video camera, but LEDs are used to send the detection signal.

## ***Signals Task Force report***

The meeting the previous night went till after 10 PM. Much was accomplished, answering STC questions, with dialogue, questions and answers. Schultheiss reported a breakthrough: they are willing to look at bicycle signals and decide what they are trying to accomplish. They punted on the HAWK beacon. The Task Force is moving toward the idea that bicycle signals are only to be allowed for protected phases, to avoid confusion. Theory is to make these phases free of conflict with motorists, same as arrow indications.

Allen mentioned that he had examples from Portland, Oregon online, and one is confusing.

Jackson noted that a proposal for bicyclist and pedestrian crossing only on fresh green (by stopping bicyclists who arrive late at the intersection) got blowback from advocates.

## ***Raised devices***

A task force meeting tonight will look into raised devices for bicycle facilities. Schultheiss is not ready to develop a proposal -- maybe by June. Example from Boston: parking was stripped off the entire street to install a bikeway - the agency wanted flexposts, but Toole Design advised against them due to width available and the unknown need prior to experiencing operation of the curbside bike lane. The discussion in Chapter 3D regarding preferential lanes might be used as a template.

Moeur: Where are these being used? There are very different risk issues - there is a documented problem with some types of raised devices in the traveled way. Some devices are very forgiving. A performance specification could help.

Jackson: will this cover bollards on trails, and gates? There are horror stories of people running into them. They were removed from a 13.5 mi section of the [Baltimore & Annapolis Trail](#). FHWA heavily discourages bollards.

Cicarelli: There is an optimal gap spacing for raised devices in bike lane buffers – close enough to discourage motorists from crossing but wide enough so bicyclists can cross. San Francisco has many examples. They should be offset toward the motor vehicle area; there should be no buffer w/o transverse marking.

## ***Uniform Vehicle code pedestrian crossing proposal***

Van Houten made a couple of changes to his earlier proposal to changed pedestrians' right-of-way in crosswalks so drivers on both sides of a street have to yield unless there is a median: added definitions of island and median. Whether the installation works depends on education, enforcement etc.

Questions were raised about grass and unpaved. (undrivable) medians, width of the median, passing distance laws. How does the median interact with other dimensions of the roadway?

Cicarelli noted that a 4-foot median width is minimum for a wheelchair, but may be inadequate for a baby stroller.

There was a discussion of keeping the language simple to keep design guidance out of the UVC.

There was also a discussion of coming up with a best definition of 'pedestrian refuge'. Ciccarelli and Van Houten will craft the definition, get back to the BTC, then we approve and send it out to the RORC and sponsors.

## ***Work zone***

A modified proposal was discussed and minor changes were recommended. TTC was happy with the BTC proposal.

## ***Bike boxes***

Schultheiss presented a proposal. There was a long discussion of options, variations and problems. Issues addressed included:

- There was concern about right hooks on green with reference to a fatality in Portland which occurred where a downhill bike lane leads to a bike box.
- Discussion centered on the need to prohibit RTOR as it might result in more conflicts or collisions on green.

- The research shows that a small percentage of cyclists arriving on the red occupy the bike directly in front of stopped motorists. Bicyclists are predominantly stopping ahead of motorists in the extended bike-lane area. Concerns were stated that the bike box could cause bicyclists to weave in front of stopped cars leading to collisions. The research thus far has not found this to be an issue.
- Questions were raised regarding the cyclists' decision process to enter the box. Do they look at cross-street traffic, do they look at pedestrian signals, etc?
- Questions were raised regarding the efficiency of using the bike box to transition to the leftmost lane on a multi-lane road. It was discussed that this is a relatively rare use of bike boxes. Discussion of a Phoenix bike box design followed with comments indicating it was not seen as a good solution for these maneuvers: perhaps a two-stage queue box is more appropriate. Phoenix installation (not the usual bike box) results in excessive delay (videos [here](#) and [here](#)).
- To address concerns about cyclists' swerving in front of stopped motorists before the onset of green, the use of a pre-green traffic-signal warning was discussed, particularly when cyclists cross multiple lanes. It was highlighted that there is no evidence that this is a problem.
- The need for each component of the lane was discussed: ingress lane, reservoir including bike lane extension, also egress lane.
- Discussion followed to consider the use of shared-lane markings instead of a bike lane for ingress, to discourage right hooks during the stale green.
- We have current interim approval of green pavement for bike lanes, not the transition or storage area.
- There is potential to use the manual to oversell the device
- There is need for some standard guidance.

People are using these devices inappropriately. This is evolving faster than we can move. We can discuss in Portland, send to sponsors in fall 2013.

### ***Uniform Vehicle Code, BTC proposals***

Allen presented the BTC's proposal for revisions of the Uniform Vehicle Code, with minor revisions by the Rules of the Road Task force in its meeting the previous evening. The BTC suggested additional minor revisions.

The BTC's revisions:

- Electrically-assisted bicycle definition: suggested change to 20 mph limitation rather than power limitation, which would limit hill-climbing and acceleration.
- 11-301 – slow vehicle law: easy to reverse the intent. Justification needs revisions: indicate that this section is being expanded to include all slow-moving vehicles.
- 11-303: Improve justification to point out that occupying a lane is not unnecessarily obstructive if another lane available.
- 11-601: Take out "motor" in "motor vehicle"; change section numbering. D becomes B, B C and E become 1-3 under A.

- 11-606 – go back to original wording and eliminate “shall.”
- 11-1208 Section b, two-step left turn,: follows letter of the law rather than the spirit. Ciccarelli is to wordsmith this.

(As of May 22, the latest version, has been posted for review by sponsors at <http://www.ncutcd.org/rulesroad042013.shtml>. A few sections which are still under discussion are omitted from this version.)

### ***Rulemaking and Schedule for next MUTCD***

FHWA has indicated that rulemaking for a new edition of the MUTCD could start as early as 2014-2015. We probably have to have new proposals approved by Council and to FHWA by June 2014.

### ***Stop and yield signs***

Chapter 9 and Chapter 2B.04 are not consistent; however, the BTC determined that no changes are needed to 9B.04 at this time.

### ***Beyond Share the Road; Research funding***

There is a proliferation of the 'pogo-stick' sign (bicyclist & car side by side, viewed end-on). There was an Arizona proposal to study this sign, but it wasn't funded.

Santa Cruz, CA refused to use the R4-11 BMUFL sign and used a warning sign with a 'pogo stick' ahead of a car. A "CHANGE LANES TO PASS" plaque could be helpful.

Fox – how do we get approval & funding for our studies. How do we not get shoved aside?

Moeur: NCHRP 20-7 projects, up to \$ 100,000, may be an option, but must be sponsored by an AASHTO committee, and the FHWA Committee on Research has to approve them.

Schultheiss: Can we send a letter to the NCUTCD Council asking for approval with this?

Moeur will draft a research proposal to the FHWA.

### ***Service signing***

This is another topic which we might address as it applies to shared-use paths.

### ***Adjournment***

The meeting adjourned at 6:30 PM. Next meeting will be at the Holiday Inn by the Bay in Portland, Maine, June 26-28, 2013. A show of hands indicated that it appears there will be a quorum at that meeting. Allen and DeSantis will contact Portland-area cyclists about activities.