

NCUTCD BTC meeting, June 20, 2018

Minutes prepared by John S. Allen

Attendance

BTC members:

Bill DeSantis, Chair
John Allen
Dongho Chang
Mike Cynecki
Dwight Kingsbury
Josh Mehlem
Rock Miller
Richard Moeur

Lou Rabito
Andrea Renny
Stewart Robertson
Craig Schoenberg
Bill Schultheiss
Ryan Snyder
Mighk Wilson
Ron van Houten

Guests:

Tom Bertulis, Design Consultants Inc., pending member
Alex Epstein, Director, Transportation Safety, National Safety Council
Elijah Ferrari, NYC DOT
Eagan Foster, Pedestrian Task Force, (gave announcement at 3:25 PM)
Drew Gingras, VHB, pending member
Gene Hawkins, National Committee Chair (short visit, 2:30 PM)
Bill Lambert, NH DOT (arrived 2:30 PM)
Katy Sawyer, City of Pittsburgh, pending member
Brooke Struve, FHWA
Gabriel Thum, PAG, Tucson, AZ

BTC business

Bill DeSantis called the meeting to order at 1:07 PM. Currently there are 28 members, 17 government, 11 non-government. We have a quorum with 16 members present.

There are three pending members, Tom Bertulis, Katie Sawyer and Drew Gingras. DeSantis welcomed Brooke Struve, who is a Safety & Geometric Design Engineer with FHWA. DeSantis and other BTC members have worked as co-instructors with Brooke in workshops on bikeway design.

A letter sent by several sponsoring organizations to the Secretary of the DOT requesting a Manual update. Since 2010, rulemaking has been defined as significant, and so updating is difficult. This letter generated some discussion in the engineering community, that it wasn't that urgent.

We have no proposals to sponsors from the January 2018 meeting and so nothing to discuss.

Mighk Wilson's presentation

Wilson gave a presentation about research in the Orlando area based on a database of 5,000 crashes, 2011-2017. He noted that Bill Schultheiss gave a presentation in January, that 20% of

urban crashes involve overtaking trucks. But there is a big difference between urban and suburban crash types. Wilson showed the urban service area and highlighted the smaller area he considers actually urban. His report, with speaker notes, is online at [http://john-s-allen.com/ppts/Urban%20v%20Suburban%20Bike Crashes%20Metro%20Orlando.pptx](http://john-s-allen.com/ppts/Urban%20v%20Suburban%20Bike%20Crashes%20Metro%20Orlando.pptx). View in file edit mode to see the notes.

Van Houten: The SHRP study (<http://www.trb.org/StrategicHighwayResearchProgram2SHRP2/Blank2.aspx>) showed that 10% of drivers passing bicyclists are inattentive. He is running a study for NHTSA.

NTSB speed study

NCUTCD Proposal for changes to Section 2B.13 regarding the setting of speed limit sign (R2-1): Regulatory and Warning Signs TC task force conducted a survey on issues related to the speed study. The Texas A&M Transportation Institute (TTI) is also conducting a speed study.

Miller: Speed limits on streets identified as having a high rate of fatal and serious injuries had to be increased by law due to the 85th percentile rule. Legislative authority is needed to change this. The California legislature will probably generate a study. Proposed changes to the California MUTCD would add more criteria to set speed limits.

Review of proposals

Rail Flangeway Warning Sign

There are two safety issues: slipperiness and riding into the flangeway. There is no guidance in the Manual on where to install signs or on their design. The proposal is based on the results of the 2017 FHWA Pooled-Fund Study. There are agencies using signs prohibited by the Manual. Two symbol signs turned out poorly. A rectangular word sign came out best. A rectangular yellow warning sign is permissible. Liability issue: you warn about the condition, not the consequences. The BTC voted by acclamation to accept a proposal for a railroad flangeway gap warning sign to send to RWSTC and RR/LT TC.

Bicycle Service Sign

We had a previous proposal recommended in Jan. 2016 for bikeways, then added advance-turn and directional-arrow signs to go with service signs. This proposal adds a wrench symbol. This was discussed with GMI but narrowly missed approval. Some revisions were made. BTC voted to take this back to GMI with changes (in blue text in the proposal).

Bicycle Passing Clearance Sign

Van Houten had volunteered to conduct testing on a version slightly modified from the one in the FHWA pooled-fund study. It was noted that 40 states and DC have some kind of passing-clearance law. Section 2A.15 in the MUTCD allows a STATE LAW header plaque to be used with this sign. Our proposal was drafted to work with the state laws. There was a discussion of use with buffered bike lanes. Where should this sign be used? Not with separated bikeways. A further revised proposal reflecting issues raised by the RWSTC is attached to DeSantis's e-mail of 6/28/2018, 9:29PM EDT. This proposal, with minor edits, was approved to send to sponsors.

But there was also exchange of e-mails in the BTC discussing details mostly relating to lack of a definition of a separated bikeway.

Exclusion sign

Two additional exclusion signs for motorcycles and ATVs for use at entries to shared-use paths were developed based on results from the FHWA pooled-fund study. BTC approved the proposal for transmittal to RWSTC. For e-bikes, scooters etc. we need word signs because there are too many kinds to depict with images.

Turning-vehicles signs

A bicycle and bike-ped version, the R10-15b, was developed at the June 2014 meeting. Schultheiss suggested the R4-4 sign. This isn't for bike lanes. It is for driveways. Allen: it doesn't say where to yield. Van Houten: The R1-6 in-street sign works better.

The 2014 proposal was for a bike and bike-ped version of the sign. Feedback from Signals TC was that it would contradict a signal installation, and it was being installed at mid-block/unsignalized locations. The proposal and illustration for figure 9C-6 were revised. Signals TC agreed to Revisions to 2B.53 at the January meeting. The BTC voted to approve the revised addition to 9B.14 to send to RWSTC.

Buffered bike lanes

Mehlem developed a proposal. We found in the field that buffers for general-use lanes are generally wider than with bike lanes. We changed the proposal to allow omission of chevrons if the lane is less than 2 feet wide. We are using should statements for diagonals and chevrons, or dashed double yellow. As to contraflow lanes, see example of 1000 G Street NE, Washington, DC. (<https://goo.gl/maps/gmBTmJ7Y4Ft>)

The buffered-bike-lane revision was approved by the BTC, with a note of concern that double white lines narrowly spaced might be perceived as a double solid white line.

Bike-lane extension markings in intersections

Rabito and van Houten had looked through the Massachusetts and Federal separated bike lane guides, reviewing buffered-bike-lane and separated bike lane extension markings. There was a discussion of alignment of extension markings to avoid right hook collisions. It was agreed to replace chevrons with bicycle symbols and revise the offset of the bike lane on its approach.

Report from RW TC

Mike Cynecki reported on his meeting with RW TC. All three of our proposals were approved.

Rail Flangeway Gap sign- was modified to make the sign a portrait-format rectangle and to remove the text regarding shared-lane markings to designate a preferred path across an intersection. But the question was raised, how are engineers to know how to designate the preferred path?

Separated/Buffered Bike Lane Extensions- Figure 9C.06a had a friendly amendment, changing wording to the bicycle passing clearance sign to make it consistent. :

Exclusion signs: Only change; “off-road motorcycles” to “motorcycles”. We had no objection.

Adjournment

The meeting adjourned at 5:03 PM to make way for the Pedestrian Task Force. Tomorrow morning, Tom Bertulis, Katie Sawyer and Drew Gingras should be at the General Session to be inducted as Technical Members. The BTC will reconvene at 1 PM tomorrow.

NCUTCD BTC meeting, June 21, 2018

Minutes prepared by John S. Allen

Attendance

BTC members:

Bill DeSantis, Chair
John Allen
Tom Bertulis
Dongho Chang
Mike Cynecki
Bill DeSantis
Drew Gingras
Dwight Kingsbury
Josh Mehlem
Rock Miller

Richard Moeur
Lou Rabito
Andrea Renny
Stewart Robertson
Katy Sawyer
Craig Schoenberg
Bill Schultheiss
Ryan Snyder
Ron van Houten

Guests:

John Fisher, Signals TC
Gene Hawkins National Committee Chair, 2:40 PM
David Kirschner, FHWA.
Brooke Strube, FHWA
Monica Suter, Bicycle Signals Task Force and Signals TC
Gabriel Thum, PAG, Tucson, AZ

BTC business

Bill DeSantis called the meeting to order at 1:12 pm. There are three new members: Tom Bertulis, Drew Gingras, Katy Sawyer.

Pedestrian Task Force

There was a brief discussion of the Pedestrian Task Force meeting. Highlights:

- Dongho Chang gave a report on what Seattle is doing about the safety of pedestrians.
- Mike Cynecki and Kay Fitzpatrick gave a presentation on the use of hybrid beacons on high-speed roadways.
- Rob van Houten gave a presentation on the gateway treatment and pedestrian culture in two additional cities.

New MUTCD version?

There is a possibility of movement on a new version of the MUTCD, so we need to summarize our approved proposals. Theo Petritsch has done most of the work to incorporate approved proposals into a Part 9 compilation.

Edit Committee Report

Dwight Kingsbury noted that EC requested each TC review the References in Section 1A.11, Relation to Other Publications, which need to be updated. Bill Schultheiss and Tom Bertulis are to do this.

Bicycle Signals

Rock Miller gave a presentation on the Bicycle Signals task force meeting held yesterday. There are 558 signal installations on his list, of which 80 are in Canada. He is looking for additional examples. The task force assembled a list of potential future topics that would need to be prioritized:

- Bicycle clearance interval
- Bicycle green early termination
- Bicycle use at HAWK Pedestrian Hybrid Beacons (any input from Tucson on their Bike-HAWK?)
- Bicycle use in scramble phase [BIKE USE PED SIGNAL SIGN]. Scramble helps clear the roadway ahead to for bicyclists.
- Bicycle-only scramble phase (Dutch design or application)
- Flashing yellow bicycle during permitted crossing of pedestrians. (Being used by NYC)

Bicycle Trail Signal Warrant

There is no bicycle signal warrant for trail crossings. This was identified as a high priority for a future proposal item. A warrant for this in California was removed when the FHWA IA on bicycle signals came out.

Bicycle signals at turn lanes

A few changes are being discussed to amend the January, 2014 meeting proposal that was approved by Council. There is an issue from STC with language on lines 218 to 222 about requiring bicycle signals when a bike lane is to the right of a right turn lane or left of a left turn lane. Members of STC think the bicycle signal should be mandatory. The consensus of the joint task force is that this should be a guideline, not a standard.

Moeur expressed concern about right-hook collisions and added risk due to more complicated signalization.

Schoenberg: 6 cities have active requests to experiment (RTEs) for permissive turns across bike lanes. Some of these would be in conflict with a mandatory condition to provide bicycle signals. What is the status? Kirschner - So far the FHWA has had no feedback, and welcomes research results.

Proposed changes

Miller presented a proposed change to indicate that use of bicycle signals would be a “should” condition.

Schultheiss felt that no additional language was needed. He moved to delete the new verbiage in the proposal (lines 218 to 222). The motion did not carry because there were only 11 votes in approval, 13 needed for a 2/3 votes.

Schultheiss moved to accept the addition of revised wording in lines 218 to 222. The motion also did not carry.

Discussion closed on the wording. There may not be consensus with the Signals Committee – will take up at a later date. There was a further discussion of revisions. Miller suggested that we table the issue after talking with John Fisher, returning it to the task force. (*Did this happen after the previous actions?*)

Service Signs

Moeur took the BTC's proposal on service signs to GMITC. Several members said that they would not put any bicycle repair signs in the Manual. There were concerns about their confusing motorists and opening the door to additional signs. This issue will not be pursued for the indefinite future.

Rail Flangeway Gap Sign, Bicycle Passing Clearance and Vehicle Exclusion Signs

Cynecki presented the amended versions of the three signs to RWSTC. Our proposals (and all three pooled-fund signs) passed with no objections

Gene Hawkins Address

NCUTCD Chair Gene Hawkins is visiting all of the technical committees. He described four goals:

- Improve communications
- Promote the National Committee and the MUTCD
- Speed up processing
- Create opportunities for our members.

Snyder: government isn't keeping up with technology. Hawkins: would like to get government out of the way. A suggestion box is a live feature on the Web site. Suggestions should go there, not directly to Hawkins.

Cynecki suggested that there should be fewer topics per e-mail from NCUTCD. Hawkins is promoting efficiencies in e-mails; hidden addresses, no e-mails sent after 2 PM or on Friday.

Bicycle signals redux

Additional changes

Monica Suter and Rock Miller prepared some alternative wording during the Committee break that greatly expanded the number of options in addition to or instead of bicycle signals. The proposal was resurrected with lines 218 to 222 as a Support statement. Schultheiss moved, Bertulis

seconded; it passed unanimously. Suter and Miller took the item to the Signals Committee, which also unanimously passed the proposal. The change is ready to go to sponsors.

Monica Suter then worked with Signals TC and moved to have us approve new language, lines 218-222 of the bicycle signals proposal. There was discussion and the wording was additionally modified with friendly amendments. Miller moved, Wilson seconded and the BTC voted approval. (The proposal was unanimously approved by Signals Committee and can be sent out to sponsors.)

Schultheiss: this is our third attempt to get FHWA to be more permissive. Suter thinks we'll get a yes from the General Council, but Schultheiss feels that FHWA will not budge on this.

Bicycle crossing Signal Warrant redux

DeSantis showed the California MUTCD 4C.102 bicycle signal warrant (see www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-Chap4C.pdf) that was unintentionally taken out of the California MUTCD when the FHWA issued an IA on bicycle signal faces which was silent on a warrant for a traffic signal based on bicycle considerations. The CA bicycle signal warrant had the following provisions:

- Volume - When $W = B \times V$ where $W > 50,000$, and $B > 50$
- Collisions – when 2 or more bicycle/vehicle collisions susceptible to correction by a bicycle signal occurred over a 12 month period and the responsible public-works official determines that a traffic signal will reduce the number of collisions.
- Geometric - (a) where a separate bicycle/multiuse path intersects a roadway. (b) At other locations to facilitate a bicycle movement that is not permitted for a motor vehicle.

This proposal will be taken up in a conference call to develop potential language for the MUTCD.

R10-15 (yield to pedestrians and bicycles) redux:

We drafted a proposal in 2014. We got comments from Signals TC that it could contradict a signal installation and also is being used at unsignalized intersections. The proposal was sent to the R/W Signs TC. Michael Moule from R/W Signs helped to wordsmith the proposal based on comments from the R/W Committee. (No vote, but a consensus was achieved). We could also add provisions in 9B for unsignalized intersections.

Connected and Autonomous Vehicles

Snyder: FHWA is looking at MUTCD modifications such as increasing the width of lane stripes from 4" to 6" to make them more visible to autonomous vehicles. Other concerns are pavement seams and retro-reflectivity. FHWA wanted to know whether the BTC had any thoughts or ideas that would affect Part 9 of the MUTCD

Future work

Theo Petritsch has compiled changes to Part 9. DeSantis will send the compilation to the BTC. Do not circulate it out of our group.

Based on our current pace, there could be 30 recommended changes to incorporate into a new Part 9. BTC would need to review the NPA version for Part 9. DeSantis suggested that we assign the task to three working groups as follows:

- For R/W (Cynecki),
- For GMI (NEED A VOLUNTEER)
- For Markings (Schultheiss).

Be prepared to respond to changes. DeSantis will send out an organizational chart. It will be an “All Hands on Deck” effort.

Other issues to explore at future meetings:

- Add bicycle travel time to guide signs, instead of distance.
- 2-way bicycle crossing sign (similar to the two way “<- LOOK ->” sign)
- Bike/Ped combo version of the R1-6
- Advisory bike lanes

Adjournment

The meeting adjourned at 5 PM.

Next meeting is in Arlington, Virginia, January 9-11, 2019. Summer 2019 meeting will be in Columbus, Ohio, date not yet set.