

- I. Start mtg at 1:00 PM
- II. Self-introductions
- III. Circulation of sign-in sheets and rosters (**Attachment A**)
 - A. Wednesday - 25 members present
 - B. Thursday - 26 members present
 - C. Total of 12 visitors
- IV. Approval June 2001 minutes:
 - A. Minutes approved
- V. Ken Opiela - FHWA Research on retroreflectivity
 - A. Looking at updating minimum retro values because of newer headlamp technologies
 - B. U. of Iowa looking at wet mrkg retro with a program called TARVIP
 - C. Studying RRPMS and how they impact minimum pvmt mrkg retro values
 - D. Hans Jensen- Is 5 seconds (from Older Driver Handbook) FHWA's official value? No. There are other things in the Older driver Handbook that the visibility group within FHWA does not agree with.
 - E. Jim Ellison - How far are we from a rule on mrkgs? Early next year.
 - F. FHWA still wrestling with special cases (e.g., RRPMS, transverse markings, etc.)
- VI. Ernie Huckaby
 - A. NPA explanation
 1. on web page will be complete revised proposed MUTCD (rule-making link?)
 2. March time frame
 3. change list will also be included (differences between Dec 28 2001 version and proposed version)
 4. Federal register will not have all of change list ... only significant changes
 - B. "NCUTCD January 2002 meeting agenda attachment"
 1. Things that the MTC should consider but not in the NPA
 - C. Status of the 4 MTC letters (drafted by Bolt & Bemelen) sent in August to Shelly? (**Attachment B**)
 1. They were included if they were submitted by Sept. 2001
 - D. 508 changes mandate that FHWA make everything compliant
 1. we will need to develop tags for the figures in Part 3
 - E. ITE Journal about optical horizontal bars - Steve Bolt handling for MTC
- VII. NC Task Force assignments:
 - A. Older Driver task force
 1. Robbie , Bill Wilshire
 - B. Pedestrian task force
 1. Joel Marcuson, Jim Kalchbrenner

- C. Urban task force
 - 1. Dave Woodin, Jim Ellison
 - D. develop descriptions for Part 3 figures
 - 1. MTC members interested will call Ernie Huckaby directly
- VIII. Neil Hodson - ASTM activities
- A. handout about D04.38 activities
 - B. discussed E12 retroreflectivity activities
 - C. Hans added a comments about sampling for measuring pvmt mrkgs with hand-held instruments – Hans looking for people who have developed their own method
- IX. Paul Carlson – FHWA color boxes
- A. to be out in NPA this March ... Will include signs and pvmt mrkgs
- X. Steve McDonald - NCHRP Project: Safety of RRPMs
- A. Steve is the panel chair
 - B. only had one proposal – I-Trans out of Canada
 - C. Project just starting
 - D. Completion date = May 2003
- XI. NCHRP project - Yellow RRPMs (Paul)
- A. will be funded
 - B. get on the panel if interested (see instructions on NCHRP's web page)
- XII. Tim Cox - Wider pvmt mrkg study
- A. will be presented at TRB
 - B. American Glass Beads Assoc will be publishing the study, which is a state-of-the-practice
 - C. responses from all 50 states and 8 countries
 - D. cost-benefits were not quantified
 - E. discussion about brightness versus width??
 - F. more research is needed
 - 1. what do drivers do with different widths of line ... in simulation
 - 2. Colorado tried some of this stuff before without success
 - 3. wider lines usually used on Interstates only or toll roads
- XIII. 3D pvmt mrkg presentation and demo
- A. Greg Larson
 - B. two year study in Netherlands
 - 1. report at www.sixeightenterprises.com
 - 2. 6 of 9 study sites had reduced accidents
 - C. another study was done in Japan
 - 1. accident reduction was 40 to 50 percent

- D. If the pattern has a patent, then it will not be MUTCD - Ernie
 - E. Seems like the pattern is restricted to one-way roads
 - F. If they want to proceed, they will have to get with a jurisdiction and need to get approval for experimentation which will include a release of the patent. - Ernie
 - G. Scott W - Another thing to consider is hiring researchers to study the device.
- XIV. Gene Hawkins - NCHRP All-White Project
- A. Appears like people get the idea about broken and solid lines
 - B. Arrows seems to help driver understanding a lot
- XV. 5:15 PM Adjourn meeting until tomorrow after General Session.

THURSDAY -- Reconvene @ 1:20 PM

- I. Task Force reports
- A. Pvmt Mrkg Tapers - Steve Bolt
 - 1. look at Jim Sparks - how to accomm tapers in WZs
 - 2. Broader issue was to look at tapers
 - 3. Nothing to report but will have something for June
 - B. Older Driver Report - Bill Wilshire
 - 1. handout that has been updated from the one the web site
 - 2. they reviewed the first version of the Older Driver Handbook
 - 3. Task Force remain in place and will review current OD Handbook
 - 4. Need 3 recommendations based on task forces' eng judgement
 - a. right now, 5-10 years, and things needed to be researched
 - 5. MTC to discuss and finalize the recommendations in June
 - 6. Members: Bill Wilshire, Tim Taylor, John Bemelen, Robbie, Paul C., Neil H.
 - C. Handicapped Accessible Design - Dan Navone (for Gary)
 - 1. Reviewed international markings for accessibility without finding much that could be used directly in the US
 - 2. Handout from Ernie - Making changes to MUTCD for parking lots
 - 3. Are there things we need to change in the MUTCD now to get in compliance with ADA? Nothing that Dan found.
 - 4. Hans - width of crosswalk - we say 6 ft, ADA says 8 ft. Not sure about this?
 - 5. Billie Louise Bentzen with Accessible Design for the Blind
 - a. Presentation "Detectable Warnings: Synthesis of US and International Practices"
 - b. tactile surfaces (being placed on median and islands) - Stop sign for the blind
 - c. Is it a traffic control device? Not an easy answer.

- II. New Task Force - NPA review (expected in March)
 - A. Steve Bolt, Bill Lambert & John Bemelen

- III. Future of MTC - (presentations posted at <http://tcd.tamu.edu/documents/tcd-mtc/mtc.htm>)
 - A. Hans Jensen
 - B. Joel Marcuson
 - C. John Bemelen
 - D. Examples from Ronnie Bell with red, white, blue markings
 - E. Glen has pictures of Germany

- IV. Colored crosswalks
 - A. Mid-block and intersections crosswalks need to be delineated the same way - Murray Bodin
 - B. FYG school crossing – MTC reply needed?
 - 1. Steve Bolt to write MTC response to FHWA

- V. Curb Delineation
 - A. MTC ok with FHWA letter

- VI. DO NOT BLOCK intersections
 - A. KISS
 - B. square white box with lines of 12 in width
 - C. may use with sign
 - D. intersection envelope
 - E. white box to delineate the area that should not be blocked
 - F. Jim Ellison will write letter to FHWA

- VII. Green Bike Lanes
 - A. MTC ok with FHWA correspondence

- VIII. Roundabout
 - A. Reconvene his task force to get a two-lane and three-lane diagram
 - B. Joel Marcuson, Dave Woodin, & John DuFresne,

- IX. John LaPlante - BTC
 - A. “Shared Use Lane Symbol”
 - B. need some wording to give young engineer some advice about where to place it laterally within wide versus standard width lanes

- X. Fred Ranck’s response to OhioDOT
 - A. delineator
 - 1. 3D.03 -- get rid of A.2 (unanimous)
 - 2. PC - to prepare request to change manual (see Attachment C)

- B. no-passing zones
 - 1. no MTC action required
 - C. roundabout striping
 - 1. probably an editorial change
 - 2. we need to check to see if MTC sent the fix to FHWA
- XI. Robbie's comment about traveled width
- A. Scott Wainwright will take care of as an editorial comment
 - B. PC - check with Scott to see if he has followed up
 - 1. (talked to Scott after general session Friday – he has taken care of this)
- XII. extension of lane lines thru intersections
- A. how/why did we add width to the line extension statement?
 - B. MTC did add it ... not FHWA
 - C. PC - develop a response documenting why we added the width criteria
 - D. "best practices"
 - E. consistent
 - F. good practice
 - G. easier to install this way for some
- XIII. school delineators
- A. not a delineator ... a sign ... MTC did not discuss further
- XIV. speed bumps
- A. not a traffic control device ... MTC did not discuss further
- XV. Murray Bodin's handout on crosswalks and Chevrons
- A. tabled until June
- XVI. adjourn mtg – 6:00 PM
- XVII. Next mtg
- XVIII. June 17-21 – St. Paul, MN

Paul Carlson, MTC Secretary