

AASHTO Subcommittee on Traffic Engineering Annual Meeting

June 5-8, 2016, Savannah, GA
General and Business Meeting Minutes

Monday, June 6, 2016-SCOTE Executive Board Meeting

Attendees present: Michael Holder, Mark Wilson, Mark Bott, Mark Luszczyk, Neil Boudreau, Kevin Lacey, Gummada Murthy, Mark Kehrli, Jameelah Hayes, Blaine Leonard, and Marty Vitale

Michael Holder began the meeting with introductions.

The group discussed the purpose and need of the SCOTE annual meetings and how they differ from the NCUTCD meetings. SCOTE meetings are generally an opportunity for states to discuss state issues. Wilson mentioned that sponsorship on DMS signs is a current controversial issue in Florida but it may not be for SCOTE. The questions: Should the SCOTE meeting include more MUTCD issues? and What are the issues that are specific to SCOTE? were asked.

The group also discussed developing three items SCOTE should say are the most important for interim MUTCD approvals. It was suggested that the items be critical needs.

Holder stated he would like the strategic plan to include objectives and have tasks associated objectives. He would like it to look at the future and include a focus on safety. It was noted again that the strategic plan should also look at the purpose and need of the technical teams and, in line with Holder's comment about the future, it should incorporate SCOTE's role in autonomous and connected vehicles.

Leonard and Murthy presented the draft Signal Phasing and Timing (SPaT) challenge and asked for SCOTE's support of the upcoming SPaT resolution. The sharing of signal phasing timing data is a low hanging fruit for the connected and autonomous vehicle infrastructure. Holder agreed and said it was a good place for SCOTE to begin its role in the autonomous and connected vehicle roll out. Leonard mentioned that Pennsylvania is already broadcasting SPaT from DSRC and the goal is to have more states do the same. Leonard and Murthy asked to present more detailed information to the Traffic Signals and Roadway Lighting technical team and use them as the contact point for the collaborative effort.

Monday, June 6, 2016

- Welcome and Opening Remarks- Michael Holder, NC, SCOTE Chair
- AASHTO Welcome- Jameelah Hayes

During Holder's opening remarks, he discussed a commitment to traffic safety. SCOTE should work towards reducing fatalities on highways and work zones through engineering, technology, and devices. He also spoke about technology integration in highways and the deployment of technologies that auto manufacturers need. He encouraged cross sharing of efforts and information among sister committees and SCOH to ensure consistency to implement smart highways. He also encouraged improving information sharing with FHWA and other stakeholders. Motoring public is our stakeholder.

- MUTCD Roundtable Discussion
 - Restructuring
 - Next Release
 - Clearview™
 - Horizontal Curve Compliance Date

FHWA gave an overview about the comments they received on restructuring the MUTCD. Not all AASHTO members agree on the manual format. There was some discussion about shall vs should. One comment was show less standards and more guidance to allow for more flexibility. Another comment was the CMS is becoming a big issue with non-MUTCD compliant messaging postings.

No timeline was given for the next release. The comment was made that the delay is affecting some state ADA transition plans. There was subsequent discussion on the MUTCD vs the PROWAG. FHWA issued a memo stating to treat PROWAG as best practice. Some states stated their approaches to dealing with ADA stakeholder and interest groups. FHWA is also looking at revisions vs a new manual. One concern with that approach is the potential of requiring legislative action on every revision vs only once with a new manual. The question was asked what could SCOTE do to help get things moving?

FHWA stated they were surprised by the reaction to Clearview Font termination because they had been moving in that direction for some time and didn't think it was going to be an issue for states. States that were for and against the termination made remarks. NCHRP offered to look into additional research on the issue. The Signing & Marking TC offered to draft a resolution asking FHWA to reinstate the use of Clearview font.

Several states hired consultants to check horizontal curve compliance. In some cases, curves have been addressed by reducing speed limits. Other states are

getting assistance from local governments or cost sharing agreements. Meeting the deadline is a challenge for some.

- Roundtable Discussion
 - Wrong-Way Countermeasures
 - Pavement Ghost Lines
 - WZ Safety Best Practices

States discussed their countermeasures to wrong way crashes. Connecticut recently completed modifications at ramps to address bright strips and sign adjustments. Florida is looking at active detection warning with blank-out signs. Pennsylvania is considering rumble strips and Massachusetts lowered their signs.

To address ghost lines, North Carolina suggested thin overlays, improved planning, increased tape, and utilization of high performance markings on new line black polymer surface coating. Connecticut is trying out a black aggregate type epoxy resin application while Massachusetts is using recessed markings. Oregon cautioned that some methods for avoiding ghost lines might trigger ADA.

Massachusetts suggested several best practices to address work zone safety:

- Positive protection
- Temporary barrier - updated flare rates
- Pedestrian hazards - developed ped accommodation policy in WZ
- Bicycle hazards - developed bike accommodations guidance
- Work area lighting - transition to diffused lighting
- Sequential drum lights on tapers
- Temporary portable rumble strips
- Smart Work Zones
 - ✓ Queue warning systems
 - ✓ Dynamic merge system - will pilot this year
 - ✓ Lane closure system - needs experimental use approval in WZs
 - ✓ Driveway assistance device
 - ✓ WZ intrusion system
 - ✓ Speed Feedback Signs
 - ✓ Automated Enforcement

States commented on the pros and cons of lights on barricades and sequential drum lights.

- Strategic Plan Update

Gene Hawkins, the PI on the Strategic Plan provided an update. The NCHRP 20-7 (370) is a 1 year contracted project effort. The current SCOTE charge focuses primarily on TCDs; today's Traffic engineers deal with much more than TCDs. Right now SCOTE isn't a leading advocate in Transportation engineering. The exchange of information is good in SCOTE but the committee doesn't promote the use of that information. SCOTE should consider becoming more involved in policy-based

decisions and not just technical decisions. The goal is to develop a 5-year plan. To get more feedback that is detailed from the members, Hawkins passed out a questionnaire and asked that they be returned to him by July 15th.

The Port of Savannah technical tour was canceled due to weather so Christopher Novack of the Port Authority presented instead. The meeting adjourned to technical team meetings after his presentation.

Tuesday, June 7, 2016

- Connected and Autonomous Vehicle Roundtable Discussion
 - Connected and Autonomous Vehicles and Pavement Striping
 - Wet Pavement Markings
 - Retroreflectivity and Durability of Pavements

Following the CV/AV presentations there was a discussion on the benefits and challenges of connected and autonomous vehicles. Virginia is struggling with management replacing hard assets that will be irrelevant when CV/AV rolls out. Washington is working to establish a cyber security task force that will establish consumer trust and reliable accurate data. North Carolina mentioned the issue of liability. "What can SCOTE do to help?" The response was stay engaged and informed, be available as resource, be an advocate, and encourage deployment of modern signal equipment. "What can states do to help?" The response was create a forum to encourage dialog to discuss and develop standards, comment on the RFC concerning reserving spectrum space, or become a member of the CV/AV pooled fund study, but most importantly deploy.

One challenge to pavement striping is manufactures are asking for more consistency in pavements markings and signal orientation. Proper vehicle lane detection can have greater impacts on safety versus infrastructure treatment like rumble strips. There is a need for more coordination between manufactures and DOTs in developing standards. Durability is still an issue with wet retroreflective markings except for tape. Specifications should no longer reference ASTM E2176 because it has been withdrawn and replaced with ASTM E2832.

- Preview Business Items
 - The Control City Requests for I-22 from Tupelo, MS, Birmingham, AL, and Memphis, TN was presented.
 - An update of the SCOH ballot on the Guide Signing Booklet was given.

Closing remarks and adjournment

Wednesday, June 8, 2016

- Roundtable Discussion
 - Variable Speed Limits
 - Pedestrian Safety
 - Bicycle Safety
 - Survey Summaries

States discussed their usage of variable speed limits. Some states had difficulty enforcing them, while others had public relations issues or communication issues between the TMC and the local authorities on activation. Maine uses variable speed limits. New Hampshire implemented advisory variable speed limits. Delaware has regulatory variable speed limits on I-495. Wyoming has seen reductions in crashes and North Carolina has had positive experiences with them in work zones. Connecticut on the other hand would need a statutory change to do regulatory variable speed limits and other states are only using them for weather related events.

Pedestrian safety continues to become more of a high priority. Florida stated that as of May 2016, there have been 210 pedestrian, 53 bicycle, and 83 motorcycle deaths. To address these, the state is looking into adding more crossings, Hawks, and overhead rectangular rapid flashing beacons on high volume roads. North Carolina has used fences to control pedestrian crossing locations. Delaware sees more pedestrian problems in higher speed suburban corridors. Georgia has had problems identifying what treatment to use and when.

Bicycle Safety like pedestrian safety has its challenges. North Carolina discussed the challenges it ensued after House Bill (H) 232 was passed which allowed passing bicycles on double yellow under otherwise safe conditions. Arizona stated that bicycle passing crashes is very small percentage; in many cases, passing vehicle believes there is enough room to pass, but often doesn't due to unexpected oncoming traffic. Virginia legislature passed law to allow vehicles to cross double yellow to pass bicycles.

Holder encouraged members who send out surveys to compile the responses and send out a follow-up summary. The surveys are posted on the SCOTE webpage so to avoid repeats, check the website first.

- Technical Team Reports
 - Safety
 - ✓ Discussed data requirements from HSIP rule—plan required 2017.
 - ✓ Discussed in-service evaluations for roadside hardware—proposing PFS or NTPEP. May reach out to NCHRP for a collaborative effort.
 - ✓ Discussed FHWA eligibility letter on testing roadside products. May ask SCOTE for additional comments
 - ✓ Discussed non-infrastructure use of HSIP funds (FAST Act)

- Signing and Markings
 - ✓ Discussed final draft of Supplemental Guide Signing Booklet
 - ✓ Developed a draft resolution on the termination of Interim Approval for Clearview™ font
 - ✓ Oregon DOT presentation on LIDAR technology
- Work Zones
 - ✓ Presentation on tool to evaluate WZ capacity and delay
 - ✓ TTI presentation on “Alert and Alive” program for worker fatalities
 - ✓ Discussed AWARE WZ intrusion system
 - ✓ Discussed FHWA EDC updates
- Signals and Lighting
 - ✓ Discussed the Joint Committee on Roadway Lighting and solicited membership
 - ✓ Discussed the status of the update to the Roadway Lighting Guide
 - ✓ Discussed current and ongoing NCHRP research
 - ✓ Discussed accessibility concerns due to inconsistencies between MUTCD and draft PROWAG
- Traffic Design, Regulation, Management
 - ✓ Discussed MUTCD multiple revisions vs. interim approvals
 - ✓ Discussed the purpose and need of the technical team
 - ✓ Members preferred a Task Team concept where one would be created based on task specific issues and then disbanded.
- SCOTE Role in NCUTCD
 - The members of the SCOTE delegation on the NCUTCD were recognized.
 - The importance of voting as a block was explained.
 - The group discussed the three NCUTCD technical team recommendations that would be voted on at the NCUTCD meeting.

Business Meeting

In order to reach a quorum, the following states called in:

Nevada (Tom Moore), Illinois (Kyle Armstrong), Wyoming (Joel Meena), Colorado (Charles Meyer), Tennessee (Jason Oldham), and North Dakota (Shawn Kuntz)

- Proposed Resolutions
 - Reinstatement of Interim Approval for Clearview™ Font (passed)
- Control City Requests
 - New Route I-22 through Tupelo, Birmingham and Memphis (passed)

➤ Future Meetings

- 2017 SCOTE Meeting-June 25-28, 2017, Pittsburgh, Pa.
- 2018 SCOTE Meeting-Colorado (Joint meeting with Western ITE and Texas ITE who will meet in Keystone, CO)

During his closing remarks, Holder reiterated that safety is #1 priority. Millions of people are consumers of our work products; their safety is in our hands. Decisions on signs and markings influence whether someone has a crash. Make logical decisions, using science, and always in the best interest of the traveling public.

Meeting adjourned