

Agenda for SCOD – Technical Committee Reports – Wednesday June 13, 1:00 pm – 2:30 pm

Each Committee will have a 5-10 minute report. Links below correspond to the TC Work Plans from 2012.

- Committee Reports:
  - Geometric Design
    - Committee Chair – Jeff Jones, Tennessee
  - [Cost Estimating](#)
    - Committee Chair – Lesly Tribelhorn, Montana
  - [Environmental Design](#)
    - Committee Secretary – Keith Harrison, FHWA
  - [Hydrology and Hydraulic](#)
    - Committee Chair – Andrea Hendrickson, Minnesota
  - Non-motorized Transportation
    - Committee Member – Tony Laird, Wyoming
  - [Pavements \(Joint Committee\)](#)
    - Committee Member – Phil McConnell, Arkansas
  - [Pre-Construction Engineering Management](#)
    - Committee Chair – Rob Cary, Virginia
  - Project Delivery (Joint Committee)
    - Committee Member – Mike Kennerly, Iowa
  - [Roadside Safety](#)
    - Committee Member – Rod Lacy, Kansas
  - [Roadway Lighting \(Joint Committee\)](#)
    - Committee Member – Mark Leiferman, South Dakota
  - Truck Size and Weight (Joint Committee)
    - Committee Member – Jim Brewer, Kansas
  - [Value Engineering](#)
    - Committee Chair – Terry Berends, Washington State
  - Electronic Engineering Data (Joint Committee)
    - No member in attendance
- Open Discussion
- Adjourn

## **SCOD Technical Committee: Joint Technical Committee on Pavements**

**Chair:** David Nichols, Missouri

**Vice-Chair:** Judith Corley-Lay, North Carolina

**Secretary:** Butch Wlaschin, FHWA

**AASHTO Liaison:** Keith Platte

### **TC Responsibilities**

#### **Publications Responsibility**

The technical committee is responsible for developing and updating the following documents:

- *AASHTO Guide for Design of Pavement Structures*, 1993
- *Pavement Management Guide*, 2000 (currently finalizing ballot process)
- *Supplement to the Guide for Design of Pavement Structures*, 1998
- *Pavement Deflection Data Exchange: Technical Data Guide*, 1998
- *Guide for Pavement Friction*, 2008
- *Mechanistic-Empirical Pavement Design Guide: A Manual of Practice*, 2008 (currently being updated to parallel DARWin-ME)
- *Local Calibration Guide for MEPDG*, 2009
- *Pavement Handbook (beginning review by JTCOP at spring meeting)*

#### **Committee Work Underway/Planned for 2012**

- The Committee will continue to work with FHWA to promote the MEPDG with the FHWA Design Guide Implementation Team (DGIT) and through venues like the Transportation Research Board Annual Meeting.
  - A workshop on MEPDG implementation has been held at the annual meeting of the Transportation Research Board for several years and is supported by the JTCOP and by agencies which are implementing or have implemented the new procedure. The workshop in January 2012 focused on DARWin-ME( the software version of the MEPDG) implementation at five agencies. Vice chairman, Judith Corley-Lay, spoke on the process for implementing new modules and models in DARWin-ME as well as the cost structure. Attendance was estimated at 250.
- The four technical groups have been meeting via telephone conference calls to augment the annual meeting. These include Design and Modeling, Pavement Management Systems, Sustainability and Preservation, and Low Volume and Local Road Systems. These technical groups have lead responsibilities in review of documents assigned to them, and in development of research needs statements. The Design group developed a 20-7 problem statement to resolve issues in the recalibration of the concrete models due to Coefficient of Thermal Expansion. The Pavement Management Group developed a research needs statement on “Quantifying the benefits of PMS”, one of the top needs identified

in the Pavement Management Roadmap. The four technical groups will have face to face meetings at our May meeting.

- AASHTOware has developed and released software for the MEPDG, currently called DARWin-ME (scheduled to be re-branded as AASHTOware Pavement ME-Design). The JTCOP will maintain the final authoritative copy of the Manual of Practice and is intimately involved in the software effort. The technical committee will recommend model refinements and improvements for future DARWin-ME versions. One previous presentation by Dr. Robert Lytton on Reflection Cracking has been moved from the JTCOP to the Product Task Force on DARWin-ME and the first phase of implementation is funded by the Product Task Force.
- The JTCOP will be discussing our Research Needs Statements submitted during the last cycle and methods to improve success in the NCHRP funding process. None of our research needs were funded this cycle and we will discuss methods to strengthen our problem statements.
- Modifications and updating of the Pavement Management Guide will be finalized through the balloting process this year.
- The Guide to Pavement Type Selection will be presented to the JTCOP by P.I. John Hallin at our May meeting for possible adoption as a JTCOP document. This will require the formal balloting process.
- The Pavement Handbook will be presented to the JTCOP by P.I. Dr. Linda Pierce at our May meeting for possible adoption as a JTCOP document. This will require the formal balloting process.

Meetings: Our annual face to face meeting will be held May 15 and 16 in Louisville, Kentucky. The meeting will include member states, liaisons, FHWA attendees and industry representatives from both the asphalt industry and the concrete industry. In addition, three technical presenters will be at the meeting: Linda Pierce (the Pavement Handbook), John Hallin (the Guide to Pavement Type Selection) and Chuck Schwartz (Sensitivity Analysis of MEPDG). Topics will include these technical topics as well as methods to improve research needs and participation in the face of travel restrictions. A webinar is normally held two weeks prior to the annual meeting for FHWA to present their briefings to the JTCOP. Another webinar was held during the year at which P.I. Katie Zimmermann presented the Guide to Pavement Management prior to JTCOP review and balloting. A telephone conference call was held in December 2011. These alternate meeting forms allow participation by most of our members despite travel restrictions.

### **Current Activities**

- The Guide to Pavement Management will complete the balloting process and all comments will be addressed. This is assigned to the Pavement Management Group.
- We anticipate review and balloting of the Guide to Pavement Type Selection and the Pavement Handbook. The Guide to Pavement Type Selection is

linked to the project delivery item in SCOD's Strategic Plan. The Pavement Handbook will be reviewed by the JTCOP as a committee of the whole and its purpose is to provide transfer of knowledge and information to practitioners as state agencies change in the future.

- Development of two or three research needs statements is anticipated. Part of this development process is a discussion of research being conducted within the states and the research roadmaps that have been developed by industry and by collections of states. FHWA funded research is also discussed in the development of research needs. Prioritization will occur by email following the May meeting and the top research needs statements will be submitted to SCOD and SCOM with a request for support.
- The JTCOP will take an active role in development of "next generation" performance measures for pavement. Vice Chairman, Judith Corley-Lay spoke at a TRB workshop on performance measures on the issues and difficulties in developing a measure for structural health of pavements. This topic will support our connections with the Standing Committee on Performance Measures, as well as the performance goals of the SCOH.
- The JTCOP will consider realignment of our technical groups. Two groups have been very active: Pavement design and analysis and Pavement Management Systems. Two other groups have not thus far: Sustainability and Surface Characteristics and Local and Low Volume Roads. The JTCOP may elect to keep the existing groups, or to replace the two with topic areas about which members feel committed to take action. The result of these discussions will be transmitted to SCOD and SCOM in an email report.
- As previously described, two or three research needs statements are anticipated and these will support work in our work plan and in our technical groups. No 20-7 projects are anticipated this year as we have three items in the balloting process or ready to begin review for balloting.

### **Issues/Items**

Attendance at our one face to face meeting each year remains problematic for many of our members. We have kept our registration fee very low and our meetings at 1.5 days to facilitate attendance, but many members face bans on all out of state travel that is not fully funded by others. While we continue to try to use Webinars and teleconferencing to remain in touch, it is increasing hard to make personal connections that move both the members and the JTCOP forward. Support in bringing this item to SCOH might be helpful.



## **SCOD Technical Committee (Value Engineering)**

**Chair:** Terry Berends, Washington State

**Vice-Chair:** Troy Tusup, California

**Secretary:** Ray Petrucci, Delaware

**AASHTO Liaison:** Keith Platte

### **TC Responsibilities**

- List the manuals & other publications the TC is tasked with
  - *Guidelines for Value Engineering*, 2010
- Include TC work plan, and indicate where there is a linkage to SCOD Strategic Plan
  - **#3. “Improve the quality and cost effectiveness of projects”** – The primary function of a Value Engineering Study is to add “Value”.
  - **#5. “Advance the state of the practice”** – A secondary function of a Value Engineering Study is to promote and advocate the Value Engineering practice.
  - **#6. “Foster collaboration within AASHTO and with other organizations and disciplines”** – A secondary function of a Value Engineering Study is to promote and advocate the Value Engineering practice.
- List the meetings conducted and indicate:
  - The type of meeting (F2F, teleconference, web, other):
    - Quarterly Conference Calls, throughout 2012, using technology such as GOTO® or Live® meeting versus face to face.
    - The VE Peer Exchange Workshop Planning subcommittees communicate monthly as the workshop gets closer.
    - Various subcommittees meet depending on work assignments.
    - Additional meetings that some of our members attend:
      - Transportation Research Board, January 2012, Washington D.C.
      - SAVE International Annual Conference, Orlando, June 2012
      - AASHTO Subcommittee on Design, Portland Maine, June 2012
  - Participants (voting members, “friends”, other)
    - The Participants are generally technical committee members and our AASHTO and FHWA partners.

### **Current Activities**

- Describe primary activities underway
  - Plan 2013 AASHTO Value Engineering Conference hosted by Minnesota Department of Transportation.

- Review the VE Final Rule (published on March 15, 2012) in the Federal Register, Docket No. FHWA-2012-0046, on Value Engineering.
- Review and update of the AASHTO Guidelines for Value Engineering published in March 2010, possible publish update/revision in 2013.
- Continuously review and update the AASHTO Value Engineering Technical Committee website to provide information about transportation value engineering.
- Develop performance measurements for VE programs.
- Develop Best Practices for Value Engineering on Alternative Delivery projects.
- Develop a toolbox of best practices for different project types (i.e. Rehab, interchange, widening, bridge, etc...)
- Share lessons learned/best practices at quarterly conference call.
- Listing/status of specific assignments related to SCOD's input to SCOH's Strategic Plan
  - None at this time
- Provide explanation of Research Requests (full research, 20-5, & 20-7) TC wants SCOD support for, and show linkages to:
  - SCOD Strategic Plan
  - TC Work Plan
    - "Best Practices of How/When to Conduct Value Engineering Studies on Transportation Design-Build Projects", this aligns with SCOD's strategic plan #5. **"Advance the state of the practice"**
  - TC Primary Activities
  - Manual/publication updates
  - Other

### **Issues/Items**

- List issues/items that require attention at a higher policy level
  - None at this time
- List issues/items that are national on scope and that discussion at SCOD would be beneficial
  - Improving the use and effectiveness of VE on Design Build Projects
- List of issues/items that the TC has which may require assistance/direction from SCOD to accomplish/resolve
  - None at this time
- Any Resolution that you would like to be discussed by SCOD

- None at this time

Subcommittee on Design  
**Technical Committee on Environmental Design (TCED)**  
**Work Plan**

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**2012**

**Chair:** Dan Stewart, Pennsylvania  
**Vice-Chair:** Louis Feagans, Indiana  
**Secretary:** Keith Harrison, FHWA, San Francisco, CA.  
**AASHTO Liaison:** Keith Platte

**TCED Responsibilities**

- *Guide for Transportation Landscape and Environmental Design*, 1991, working with TRB on this update. This links to the SCOD Plan on 2a, 2b, 3c, 3e, 5a
- *Guide on Evaluation and Abatement of Traffic Noise*, 1993, In the process of making plans for update. This links to SCOD Plan on 2b, 3c, 3e
- *Guide to Wetland Mitigation Issues for Transportation Designers*, 1996, Reviewing this document for consideration to update. Need to assess current publications by other committees on this topic. This links to SCOD Plan on 2d, 2c, 2e, 3c
- *Visualization in Transportation*, 2003, Beginning rewrite of this document. This will need to be a web based document to provide better effectiveness. This links to the SCOD Plan on 2a, 2b, 5a, 5b, 5c, 6c, 6e
- Meetings Conducted in 2011-2012:
  - No Face to Face Meeting
  - Webinar Meetings: April 21, 2011, June 16, 2011, October 20, 2011, December 22, 2011
  - Member States

Region 1

Maryland	Karen Coffman
New York	Phil Bell
Pennsylvania	Dan Stewart (Chair)
Vermont	John Narowski

Region 2

Florida	Jeff Caster
Mississippi	Adam Johnson
So. Carolina	Mark Lester
W. Virginia	Greg Akers

Region 3

Indiana	Louis Feagans (Vice Chair)
Robinson	
Iowa	Scott Marler
Minnesota	David Larson
Indiana	Laura Hilden

Region 4

California	Keith
Hawaii	Chris Dacus
Idaho	Greg Vitley
Wyoming	Tim Stark

Other

FHWA (Secretary)	San Francisco, CA.	Keith Harrison
AASHTO Liaison – Design	Washington D.C.	Keith Platte

Friends

AASHTO  
AASHTO

Washington D.C.  
Washington D.C.

Shannon Eggleston  
Kate Kurgan

### **Current Activities**

- Review of the new Draft of the “Guide for Transportation Landscape and Environmental Design” (NCHRP 15-33). This is being done in conjunction with TRB. This will require a ballot this year. Currently waiting for release of document for balloting.
- Researching to rewrite Visualization in Transportation.
- Two topics were submitted September, 2011 by TCED for NCHRP research:
  - Highway and Worker Safety and the Effects of Driver Distraction Caused by Roadside Design
  - Safety Effects of Roadside Mowing Practices

### **Issues/Items**

Transportation funding constraints have severely restricted the ability of Technical Committee members to travel to face to face meetings. There is a strong probability that a face to face meeting to workshop the “Guide for Transportation Landscape and Environmental Design” will be needed within the next year.

## **SCOD Technical Committee on Cost Estimating**

**Chair:** Lesly Tribelhorn, Montana

**Vice-Chair:** Dave Kent, New York

**Secretary:** Edwin Okonkwo, FHWA

**AASHTO Liaison:** Keith Platte

### **TC Responsibilities**

- TCCE is responsible for the new AASHTO Practical Guide for Estimating. The guide was completed through NCHRP 20-07 Tasks 278 and 308. Balloting through SCOD is expected in April-May 2012.
- The TCCE's work plan in serving as a cost estimating focal point is to provide cost estimating resources and guidance for state and provincial DOTs. Our work plan and related activities directly support the SCOD Strategic Plan primarily through the goal to advance the state of practice. However, committee work supports all of the goals through the following strategies: 1 c, d; 2 c; 3 a, b, e; 4 c; 5 a, b, c, d; 6 a, b, c, e.
- 2011-2012 TCCE meetings:
  - Teleconference/webinar meetings are held every 2 months. Attendees include members (see list below) and invited guests, and meeting minutes are posted on the TCCE web page. Recent and upcoming meetings: May 5, 2011; July 14, 2011; September 1, 2012; November 3, 2011; January 5, 2012; March 1, 2012; May 3, 2012. The 2012 annual meeting will be held in Columbus, Ohio on October 9-10.
  - Annual face to face meeting is held in the fall of each year and coincides with the annual Transportation Estimators Association (TEA) meeting. This meeting includes presentations and discussions on current cost estimating topics, including new practices or technologies. Work sessions are also a key part of the annual meeting. The 2011 meeting took place September 20-21 in Minneapolis, MN. Twelve members participated in person and 4 members participated via teleconference and webinar. Fifteen non-members attended in person, including two meeting presenters.
  - Current TCCE members:

<u>Region 1</u>	<u>Region 2</u>
Scott Bickford, Maine	Greg Davis, Florida
Norie Calvert, Maryland	Jim Frick, South Carolina
Alan Ellis, Vermont	Charles Nickel, Louisiana
Dave Kent (Vice Chair), New York	Darrell Richardson, Georgia
<u>Region 3</u>	<u>Region 4</u>

Roger Bierbaum, Iowa  
Mike Ginnaty, Minnesota  
Jeffrey Hisem, Ohio  
Natalie Roark, Missouri

Jay Drye, Washington  
John Riedl, Oregon  
Ken Spear, Wyoming  
Jack Young, California

Other

AASHTO Liaison: Keith Platte  
Secretary: Edwin Okonkwo, FHWA  
Chair: Lesly Tribelhorn, Montana

**Current Activities**

- The Technical Committee on Cost Estimating is completing practical guidance on cost estimating based on state of the practice methods used by state DOTs. The guidance is intended to cover estimating from planning through construction. In addition to basic estimating methods and procedures, the guide includes bid review and evaluation, cost index and inflation guidance, performance measures and tracking ideas, and information on bidding strategies for improving competition. Content was determined through outreach to the DOT estimating community via conference attendance and AASHTO surveys. This activity supports 1 c; 3 a, b; 5 a, b, c, d; 6 b.
- Work continues to improve the TCCE webpage to create a web-based clearinghouse for cost estimating guidance and resources, including a contact list of state DOT estimating experts, and links to research, publications, and estimating guidance and tools. This work falls under 1 c; 3 e; 5 a; 6 b, e.
- The TCCE has been involved with FHWA to improve the new National Highway Construction Cost Index which was first introduced in late 2010. Our committee continues to interact with the authors of the index so that we can develop recommendations on the appropriate use of the index, as well as comparisons to individual DOT construction cost indices. TCCE members provided input on questions for the updated AASHTO/FHWA Survey on Construction Cost Increases and Competition 2012 and also participated in completing the survey for their individual states. TCCE is also available to assist with FHWA cost estimating peer reviews when needed and we will continue to provide input on new policies as needed. This directly supports 1 d and indirectly supports many of the other strategies
- The committee will continue to work with the Transportation Estimators Association (TEA) to ensure that our work will support the needs for state and provincial DOT estimators. Beginning in 2011, TCCE and TEA will integrate our annual meetings to reduce the repetition of presentations and maximize the benefit of information exchange. This supports 1 a; 2 c; 3 e; 5 a, c, d; 6 a, c, e.

- The TCCE chair attends the annual SCOD meeting when approved for travel and coordinates with other technical committee chairs to share information, determine overlapping interests, and co-sponsor research proposals. TCCE has presented current work activities to the SCOD and solicited input on cost estimating needs for the design community through SCOD. In addition, the TCCE chair has documented work activities related to specific SCOH and SCOD strategic plan goals and strategies to ensure that our work meets AASHTO's vision and mission. This directly supports goal 6, strategies a, b, c, e; and indirectly supports many of the other goals and strategies.
- TCCE has proposed several 20-7 research project in coordination with other technical committees in the past which may be updated and revisited for the 2012 cycles:
  - Maximizing Contractor Competition for Design/Bid/Build Contracts would build on our best practices guidance and would meet 1 a, c; 2 a, b, c; 3 b, c; 4 c; 5 b, d; 6 e. Information gathered through this effort would be incorporated into updates to our guidance manual and would serve design and construction goals.
  - Identification of Best Practices in the Estimation of Preliminary Engineering Costs is a joint proposal between TCCE and TCPEM to develop best practices for estimating preliminary engineering costs, particularly for consultant work. This effort would serve 1 a, c; 3 a, b; 5 a, b, c, d; 6 b, c, e.
  - Best Practices for the Analysis and Approval of Contractor Bids proposal was recognized as a subject in need of further investigation by TEA and AASHTO members. Research data from this effort would enhance one of the chapters included in the guidance document that is currently under contract. Although there is good information included in the guidance already, we feel that new practices are being developed by state and provincial DOTs that warrant additional study. This effort will be coordinated with Construction and would fall under 1 c; 2 c; 3 b; 4 c; 5 a, b, c, d; 6 a, b, c, e.
  - Research will be proposed for identifying best practices and for implementing strategies and/or policies for cost and risk management as a result of the CE/CM workshop held in Minneapolis in August, 2010. This effort will involve SCOP and will likely be full research requests. Work is underway to identify the needs and develop the joint proposals. This falls under goals 1, 3, 5, and 6.

### **Issues/Items**

- Cost and risk management is an important topic that can span from planning through construction. For full policy integration, SCOH and SCOP will need to lead the effort. However, there are pieces that can be guided from the SCOD

and TCCE level. At this time, the message for SCOH is that there is great value for DOTs in the department-wide integration of cost and risk management and that support is needed throughout the organization.

- Balloting through SCOD and SCOH are anticipated in early 2012 for the AASHTO Practical Guide to Estimating. Our goal is to produce an official AASHTO guidance document for use by planning, design, and construction staff.

## **SCOD Technical Committee on Hydrology and Hydraulics (TCHH) Work Plan**

**Chair:** Andrea Hendrickson, MnDOT  
**Vice-Chair:** Karuna Pujara, MDSHA  
**Secretary:** Joe Krolak, FHWA  
**AASHTO Liaison:** Kelley Rehm

### **TCHH Responsibilities**

The TCHH is responsible for developing and updating the following documents:

- *Highway Drainage Guidelines, 2007.*
- *Model Drainage Manual, 2005.*

### **TC Work Plan**

The Highway Drainage Guidelines were last published in 2007. TCHH is currently working on the Model Drainage Manual. The 2005 Model Drainage Manual is being replaced by two publications with the intent of expanding the usefulness to a broader audience, making the manual more user friendly, reducing the clutter, and making it more accessible. The model drainage manual is expected to consist of several documents as below:

- AASHTO Drainage Manual, Volume 1, Policy
- AASHTO Drainage Manual, Volume 2, Procedures.

Majority of manual revisions for the Volume 1 and Volume 2 are essentially completed. We hope to complete and produce camera-ready publication for Volume 1 and Volume 2 by July 2012.

TCHH is actively considering and will further explore possibility of additional publications such as

- State of Practice: Highway Hydrology and Hydraulics (Tool and technology)
- Research in Progress (listing and tracking of research activities by States, FHWA, NCHRP or others)

### **Recent Meetings**

Meetings conducted since the last update, agendas are provided in the Appendix:

- Spring 2011 – Teleconference providing discussion of current issues and manuals, March 11, 2011

- Fall 2011 – A meeting was held in Florida November 15 – 17.
- Spring 2012 - Teleconference providing discussion of current issues and manuals, March 27, 2012

**Current Activities**

- Revisions to the Highway Drainage Manual – Policy and Procedures are underway. TCHH members have written the technical content of the numerous topics under our purview. The TCHH consultant’s primary tasks are to unify the manual’s language, remove duplications, and prepare the manual for publication.
- Development of 20-07 research project requests, TCHH voted on top three topics for the 20-07 research which are listed below. The problem statement No 1 ranked as a top priority and will be submitted through OUR AASHTO Liaison to SCOD for review and further ranking.

<b>Problem Number</b>	<b>Title</b>
<b>1</b>	Hydrology for Water Quality Analysis and Design
<b>2</b>	Current Technology and Research Pertaining to the Dependability of NEXRAD Reflectivity for use by Highway Hydrology Engineers
<b>3</b>	State of Practice for Unknown Foundation Bridge Plans of Action

- Development of Research Requests - The TCHH has historically been very active and successful in targeting research needs. In the past, bridge scour has been the dominant topic of our proposed research, but recently, difficult environmental stormwater and environmental stream stabilization issues are provoking needed research. Thus, the TCHH collaborated actively with the Standing Committee on the Environment (SCOE) and the TRB AFB60 Committee in submitting the last round of research needs statements. Several topics suggested by TCHH are also topics highly recommended by SCOE. TCHH invited member of AASHTO Center for Environment (CEE) to its fall meeting with intent to collaborate its work with CEE and SCOE.

- The TCHH expects that, as national stormwater, permit, and other natural resource related issues continue to become more challenging, we will have increasing involvement with SCOE.

### Issues/Items

- AASHTO Structure - The breadth of the TCHH's responsibilities takes us into active involvement with topics related to both the Subcommittee on Bridges and Structures (SCOBS), Standing Committee of Design (SCOD) and the Standing Committee on the Environment (SCOE). This has been especially prevalent in research issues. These same interdisciplinary functions often exist within the state DOTs, where hydraulic engineers are working as a team with structural and environmental offices. TCHH desires a continued partnership and communication with SCOE, SCOBS as well as SCOD. TCHH will pursue various ways to initiate and maintain such lines of communication.

In that regard, TCHH discussed its role and functions at a great length during its fall meeting. A consensus was reached to function as a technical committee and continue to enrich transportation industry with technical guidance, publications and documents related to hydrology, hydraulics and environmental hydraulics.

- Water Quality, Environmental Permits, and Transportation – The ongoing new and proposed national regulations from EPA and other resource agencies often conflicts with State regulations that are crafted to address uniqueness of the states' environmental resources. As an example, the EPA science behind its regulations appears to be hastily developed and may have severe impacts to state DOTs. To remediate these issues, TCHH members are teaming with SCOE in developing national dialog among itself and with the EPA.

During winter months of 2011, TCHH members actively participated in preparing response to EPA request in regards to the effluent limitations. TCHH remains committed to such participation as the need arises. TCHH recognizes that similar efforts may be needed for the changes proposed by ACOE related to resource permitting. It is recognized that the Corps proposed changes to Nationwide permits will likely affect DOT projects.

- Climate change and impacts on drainage systems – The TCHH continues to endorse prudent response to climate change issues. Discerning statistical changes in sea level and in hydrology is good engineering, but we are concerned that climate change concerns do not become politically elevated in contradiction to sound engineering and balanced fiscal priorities. Many of our member states

are supporting updating of rainfall statistics and stream flow statistics as tactics to address possible changing hydrology.

TCHH membership is an on-going area of concern given the desire to produce technical guidance and documents and the recent number of resignations and retirements. TCHH continues to seek new members and awaits nominations and approval of few new members.

## **SCOD TC on Pre-Construction Engineering Management 2012 Work Plan**

Chair: Robert H. Cary, Virginia  
Vice Chair: Barry Horst, Missouri  
Secretary: John Obenberger/Scott Wolf, FHWA  
AASHTO Liaison: Keith Platte

### **TC Responsibilities**

- The objective of this technical committee is to provide a focal point and working group charged with developing guidelines for effective management of preconstruction engineering processes. These guidelines are intended to provide a systematic approach to managing resources such as time, funds, and personnel. The technical committee has developed work statements on four preconstruction engineering topics that have been prioritized for future work by the Technical Committee. These topics include: best practices in estimating preliminary engineering costs, best practices in receiving and accepting bid proposals, project management best practices among states and best practices for the use of performance measures. The technical committee has work been working extensively and on preconstruction cost estimating information.
- Publications which are the responsibility of the technical committee include:
  - AASHTO Guidelines for Preconstruction Engineering Management, (1991);
  - Guide to Quality in Preconstruction Engineering Management, (2002); and,
  - Guide to Consultant Contracting, (2008).

These publications are consistently reviewed and the need for their update evaluated by the technical committee. Additionally, the Technical Committee reviewed the Guidelines for Preconstruction Engineering Management, (1991), to determine subjects in this guide that the Technical Committee believes should be updated and reissued. This approach will allow more frequent, focused work product from the Technical Committee for the benefit of all AASHTO member agencies.

- In accordance with the SCOD's Strategic Plan initiative to *Improve the quality and cost effectiveness of projects*, the Technical Committee on Preconstruction Engineering Management is focused on efficient and effective project delivery by:
  - Supporting performance management objectives within the design phase of project delivery, including the identification and recommendation of appropriate performance measures for design activities.

- Promoting project management techniques to improve quality and cost effectiveness.
- Identifying the need for and delivering technical and policy publications and other timely information regarding efficient and effective preconstruction programs.
- List the meetings conducted and indicate:
  - The Technical Committee on Preconstruction Engineering Management will be meeting at the 2012 SCOD on the evening of June 11<sup>th</sup> at the annual meeting.
  - During the last year, the Technical Committee held four conference calls to continue the TC's work. These calls were held in August, September and October. Unfortunately, face-to-face meetings did not occur due to the TC member's limited ability to travel during difficult economic times.
  - Participants in the Technical Committee's teleconferences included:
    - Scott Wolf, FHWA
    - Saeed Choudhary, Ontario Ministry of Transportation
    - David Smith, New Hampshire
    - Ray Sanders (Friend of TC), Oklahoma
    - Keith Platte, AASHTO
    - Jeff Clanton, Indiana
    - Chuck Hasty, Georgia
    - Barry Horst, Missouri
    - Tom Lauer, Oregon
    - Monica Crider, Idaho
    - Jon Obenberger, FHWA
    - Debbie Farrell, Maine
    - Rob Cary, Virginia

### **Current Activities**

The Technical Committee on Preconstruction Engineering Management worked diligently to submit both 20-7 and full NCHRP research proposals on estimating preconstruction (preliminary engineering) costs. The objective of this research is to develop a guidance document on cost estimating for preconstruction services (performed by agency staff and/or consultants). While this guide will address cost estimating for all types of preconstruction services, the guide will address the issues specific to engineering and design related services required for highway improvement projects (e.g., surveying, preliminary engineering, environmental activities, final design engineering). This guide will also assess the policies, procedures, systems, functions, guidance, other resources, innovative

practices, and initiatives that could enhance the capacity and cost estimating practices of a DOT or local agency. Work in this area was undertaken at the direction of SCOD to examine preconstruction cost estimating. While there is much data available on project cost estimating, there is limited data available with regard to developing cost estimates for the development of projects prior to their advertisement to contractors for bidding. While the 20-7 proposal in this same subject area was not selected, the full NCHRP research proposal on this topic was selected for funding. The project is **NCHRP project 15-51 entitled *Preconstruction Services Cost Estimating Guide***. The project was awarded **\$425,000** and the NCHRP staff member assigned to the project is **Andrew C. Lemer**.

### **Issues/Items**

- The Technical Committee will be supporting NCHRP project 15-51 entitled *Preconstruction Services Cost Estimating Guide* as needed and will be submitting potential panel members to support the work of this important project.

The Technical Committee will be supporting the Strategic Plan of the Subcommittee on Design through continued focus on the publications we are responsible for and through ongoing research in the areas of preconstruction engineering management and most immediately related to preconstruction cost estimating.

## **Joint Technical Committee on Roadway Lighting 2012 Work Plan**

(Includes membership from both SCOD and SCOTE)

April 2012

**Chair:** Mark Luszcz, Delaware

**Vice Chair:** Ed Sansing, Mississippi

**Secretary:** Ken Wood, FHWA

### **TC Responsibilities**

- **AASHTO publication responsibility:** Roadway Lighting Design Guide (October 2005).
- **Summary of Work Plan:**
  - Identify the changes in technologies, methods or procedures that may impact the *Guide* and require the *Guide* to be revised.
  - Champion research to identify current best practices being used by DOTs and local agencies to design and deliver lighting projects.
  - Perform a comprehensive review of existing *Guide*, and determine the areas that may need to be updated, modified or eliminated, or added.
  - Identify additional short or long term research that would assist in modifying the *Guide*.
  - Develop and maintain a list of recommendations on revisions to the *Guide* that should be included in addendum or revisions to the *Guide*.
  - Establish a schedule for updating the *Guide*, with interim milestones.
  - Coordinate with other entities (such as FHWA and IES) on these topics.
  - Develop other methods of disseminating current information on the subject of roadway lighting, beyond the *Guide*.
- **Meetings:**
  - Since its inception, the committee has met on the following dates, normally by conference call:
    - 8/24/10, Kick-Off Meeting #1
    - 10/5/10, Kick-Off Meeting #2
    - 11/10/10, Meeting #1
    - 12/8/10, Meeting #2
    - 1/12/11, Meeting #3
    - 2/9/11, Meeting #4
    - 3/9/11, Meeting #5
    - 4/13/11, Meeting #6
    - 5/11/11, Meeting #7
    - 6/20/11, Meeting #8 (no quorum)

- 7/13/11, Meeting #9
- 9/14/11, Meeting #10 (no quorum)
- 10/12/11, Meeting #11
- 11/16/11, Meeting #12 (no quorum)
- 1/11/12, Meeting #13 (no quorum)
- 2/8/12, Meeting #14 (no quorum)
- 3/14/12 (Executive Committee only)
- The next meeting is scheduled for 5/2/12.
- Meeting minutes are available upon request.
- Attached is a list of committee members.

### **Current Activities**

- ***Describe primary activities underway:***
  - Work through AASHTO process to become officially recognized as a JTC. SCOD and SCOTE have both voted in favor of our resolution and charge statement. SCOH voted in favor of our resolution and charge statement in spring 2011. The Board of Directors did not object to SCOH's approval of the JTC, as of May 2011. Therefore, the JTC is officially recognized by AASHTO and this item is complete.
  - Guide review. Committee members have been assigned individual chapters to review, and we are working through them during our committee meetings. All chapters have been reviewed and discussed in committee meetings. Chapter leads are working on various follow-up items from each chapter. Currently, revised Chapters 1 and 2 are distributed to the committee for final comments.
  - Gather information on current research in roadway lighting.
  - Monitor the progress and results of NCHRP Project 20-7, Task 305. This research project was an initiative of the JTC and getting approval of the project was one of the JTC's first accomplishments. Several committee members are on the research panel for this NCHRP project. The NCHRP project has not yet begun.
  
- ***Listing/status of specific assignments related to SCOD's input to SCOH's Strategic Plan:***
  - **3. Improve the quality and cost effectiveness of projects.** Evolving technologies in roadway lighting may result in significantly reduced power costs, resulting in reduced maintenance resource needs and better system efficiency. Incorporation of these new technologies into the Guide is a key effort of this committee. We are also considering alternate

delivery methods, such as the AASHTO web site, to disseminate information in a timely manner.

- **4. Improve safety for the traveling public and the workforce.** Installation of roadway lighting has a proven, significant safety benefit. This committee will endeavor to keep the Guide up-to-date with best practices in this area.
  - **5. Advance the state of the practice.** In addition to the items listed with #3 above, the committee promotes information sharing between federal, state, and local agencies, as well as between public sector, consulting, industry, and academic representatives.
  - **6. Foster collaboration within AASHTO and with other organizations and disciplines.** In addition to the response to #5 above, this committee is by definition a team effort between SCOD and SCOTE. We have also had some coordination with the Environmental Design TC.
- Provide explanation of Research Requests (full research, 20-5, & 20-7) TC wants SCOD support for, and show linkages to:
    - Our committee has no pending research requests.
    - NCHRP 20-7, Task 305, Analysis of New Highway Lighting Technologies, was approved in 2010. This is a \$75,000 project and Rensselaer Polytechnic Institute is the selected researcher. As of April 2012, the project has not yet begun. Once initiated, the project should take approximately one year to complete.

### Issues/Items

- Over the last 6 months, we have been having significant problems in getting participation from the committee in meetings, and have been unable to achieve quorum. Our committee leadership in brainstorming ways to re-motivate the committee. One item that we are implementing is reducing the meeting frequency.
- Our primary near-term objectives are to complete our review of the existing Guide and complete the proposed NCHRP 20-7 research. Based on the outcomes of these activities, it will be determined how best to proceed with a new version of the Guide. We are currently considering several options: 1) update the Guide now, knowing that it may need to be updated again in a few years due to ongoing research efforts, 2) do an addendum to the Guide, or 3) hold off on updating the Guide until more research is completed (at least the 20-7 research). The consensus of the committee was to follow Option 1 and update

the Guide as soon as it is ready to be published. However, given the issues noted in the first bullet point above, the decision may be revisited.

- Add relevant information to AASHTO web site and publicize.

# AASHTO Task Force for Roadside Safety Work Plan

**Chair:** Keith Cota, NH

**Vice Chair:** Steven Walker, AL

**Secretary:** Nick Artimovich, FHWA

At the fall 2011 meeting in Rapid City, South Dakota, the Technical Committee Roadside Safety (TCRS) identified the following action plan for the forthcoming year. Specific deadlines are identified for some items.

## Research Project Roster and Chapter Team Assignments

- Chairman to update listing
- Frequency of RDG Update is dependent upon value of research
  - Clear Zone
  - LON
  - Place of barrier on slopes
  - Slope traversibility with ditches
  - Test level selection guidance
  - RSAP guidance
  - Drainage grate
  - Road Departure data
  - Tree evaluation in rural and urban system
  - Slip base testing under MASH
  - Pier protection
  - Maintenance practice of hardware systems
  - Barrier updates to MASH
  - Super elevation effects on barriers
  - Short radius barrier transition update (TL 2 & 3)
  - Transition to 36 in bridge rails
  - Pre-cast portable barrier research
  - Pinning of portable barrier systems
  - Definition of low volume
  - More data for practical experience in support low volume applications
  - Cross reference to Highway Safety Manual and its approaches

- New Areas of RDG interest
  - Motorcycle research
  - Maintenance
  - Roadway/alignment delineation counter-measures (i.e.: signage, markings, rumble strips, etc.)
  
- RDG Guide Re-organization
  - Subcommittee to review re-organization (Members: Albin, Poole, Lacy, Jones, Wilder, Herritt)
  - On-line – Comment and feedback built in RDG. Frequently asked Question components to be discussed with Chairman, Vice Chair and chapter lead to provide recommended guidance answer.
  - Units (dual)
  
- TCRS - RDG Support
  - On-line Word documents for errata and update (strength)
  - NCHRP 20-7 Funding Support (consultant) at end (strength)
  - AASHTO Ballot comments and editor review process to TCRS (weakness)
  - Word editing and formatting (weakness – better conformance to publication protocol within the AASHTO style guide)
  - Photo selection and availability (weakness)
  - Cover photos to be reviewed by TCRS (weakness)

#### **Liaison Membership on TCRS**

Keith P. to look into the possibility for NACE and/or APWA to appoint a member liaison to TCRS to broaden the interest in rural and urban guidance and needs.

#### **FHWA-AASHTO-NTSB Findings**

FHWA will provide copies of NTSB findings to TCRS chairman for distribution to members. TCRS Chairman will add to meeting agenda for a review of NTSB reports and actions taken to address the findings over the past year. This will be a future item to be placed on each year's agenda for summary of findings by FHWA and AASHTO liaisons.

#### **NCHRP 22-14(04) Cable Median Testing on Median Slopes**

Set test parameters for MASH for establishing procedure and approach to test on slopes. TCRS set up subcommittee to assist in input to TTI Roger Bligh (Subcommittee Members: Meza, Jones, Opiela, Ayton, Julian, Lacy, Roger Bligh, Ron Faller) to also discuss need for additional funding.

## **NCHRP 22-24 Validation and Verification of Computer Simulation**

Chairman will develop an endorsement letter to FHWA and NCHRP for use of this procedure for V&V. The letter to go out once web base set up by NCHRP. Long-term action, proceed to update as an appendix to MASH. Determine if NCHRP 20-07 funding may be necessary to assist in this effort (i.e.: 2012/13 update).

## **NCHRP 17-43 Long Term Accident Data Collection Program & LON**

Clay Gabler to provide white paper to Keith Platte for AASHTO for support of NASS/FARS data development

## **CRITICAL RESEARCH FOR MASH UPDATE**

- NCHRP Project 22-24 Verification and Validation of Crash Simulations in Roadside Applications
- NCHRP Project 22-14(04) Cable Median Testing on Median Slopes

## **CRITICAL RESEARCH FOR RDG**

NCHRP Project	Description	RDG Chapter
12-90	Guidelines for Design and Shielding of Bridge Piers	5, 6
16-05	Development of Cost Effective Roadside Ditches Treatments	3, 5
17-11(2)	Development of Clear Recovery Area Guidelines	3, 4, 5, 6
17-43	Long Term Accident Data Collection Program & LON	1
17-44	Factors Contributing to Median Crashes	6
17-54	Consideration of Roadside Design and Roadside Features in Highway Safety Manual	4/A
17-55	Guidelines for Slope Traversability	3, 5
17-61	Effects of Work Zone on Crash Risks and Guidelines for Counter Measures	9
22-12 (3)	In-Service Evaluation of Bridge Rails and Development Of Guidelines for the use of TL-2, 3, 4, 5 Bridge Rail	7, 6
22-20 (2)	Design of TL 4-5 Roadside Barrier System on MSE Walls	5
22-21	Median X-Section Designs for Rural Div Highway	6,3
22-22	Place. Of Traffic Barriers on Roadside and Median Slopes	5, 6
22-25	Guidelines for Selection and Use of Cable Barrier	6, 5
22-26	Factors Related to Motorcycle Crashes Factors Related to Motorcycle Crashes	1 (13?)

22-27	Roadside Safety Analysis Program (RSAP) Update	2, A
22-28	Continuation of NCHRP 22-23, Criteria for Restoration of Longitudinal Barriers	5, 6
22-29	Performance of Longitudinal Barriers on Curved, Super-Elevated Roadway Sections	5, 6
15-30	Median and Median Intersection Design	3, 6
16-04	Synthesis of Crash Tested PCB and Anchoring Method	9, 5
22-12(2)	Warranting Criteria for Roadside Barriers	3, 5, 6
22-19	Aesthetic Concrete Barriers	5
22-20	Design of TL 3 Roadside Barrier Systems on MSE Walls	5
22-23	Criteria for Restoration of Longitudinal Barriers	5

### **FHWA Potential Initiatives**

Strategic Planning – marketing of tree impacts for safety, maintenance practice for road safety

### **FHWA/AASHTO Protocol for NCHRP 350 Hardware Not Meeting Mash Crash Test Criteria**

- FHWA/TCRS Task Force Subcommittee to develop joint action
- Identify which and type of barrier retrofits for design - Computer Simulations by Turner Fairbanks Research;
- Guidance memo(s) for devices not meeting MASH with suggested continued use or resultant reductions in service performance (i.e.: TL 3 to TL 2). Nick to draft memo and provide to Chair of TCRS for review by TCRS members for input before final distribution. Timeline: End of calendar year.

### **FHWA Turner Fairbanks**

Ken Opiela will provide electronic list of publications completed and available to date. TCRS members to review to determine which publications may be usable for RDG update or development of problem statement.

### **Meeting Hosts for 2012, Anticipated Location for 2013 & 2014 Meeting**

2012 – Joint Meeting model with AFB 20 for critical research review every three years. First meeting in Irvine, California for July or August 2012 (Host Coordinator- Dick Albin and Kevin Herritt)

2013 Meeting Host – Region 2, Paul Fossier, Louisiana (New Orleans); Target date is late July or early August, 2013

2014 Meeting Host – Region 1, Richard Wilder, New York (Lake George)

**Research Project Roster and Chapter Team Assignments**

Keith Cota will update rosters for NCHRP research roster and Chapter Team Assignments and distribute to TCRS members. Keith Platte and Keith Cota will coordinate quarterly telephone conference calling for TCRS for updates.

**Proposed Problem Statements for 2013 NCHRP Research Program**

The following Problem Statements have been adopted and will be recommended by TCRS to NCHRP. The assigned monitors will coordinate the final development of research statements by Friday, September 30<sup>th</sup> and email final Problem Statements to Keith Cota for distribution by Chairman to NCHRP by October 7, 2011 (emailed to Chuck Niessner and Keith Platte). The problem monitors will also assist in further responses to NCHRP reviews. TCRS member (Drew Boyce) was appointed by the TCRF to serve on the Traffic and Safety evaluation team for discussion of research proposals – meeting in early November.

PROBLEM STATEMENT	SCOD RANKING	TCRS RANKING	MONITORS
<b>Characteristics of Injury and Fatality of Run-Off-Road Crashes on Low Volume Roadways</b>	7	1	Clocksinn
<b>Development of Relationships Between Police Reported Crash Severity and Impact Conditions for Use in RSAP</b>	28	6	Cota
<b>Guidelines for Upgrading In-Situ W-Beam Guardrail when subjected to Maintenance</b>	11	2	Jones
<b>In Service Evaluation of End Terminals</b>	5	7	Meza
<b>Roadside Encroachment Data for High-Volume Roads and Associated Crash Data Collection and Analysis</b>	9	5	Blaine
<b>Injury and Fatality Causation During Rigid Barrier Impact</b>	19	4	Lacy
<b>Safety Effects of Roadside Mowing Practices</b>		8	Poole
<b>Crash Risk of Trees within the Clear Zone</b>		3	Herritt