

# AASHTO – SCOE – CEE

National Stormwater Practitioners Meeting  
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## Overview of Research

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# Presentation Outline

- AASHTO's SCOE serves many important functions, including supporting research on significant environmental issues. Each year, SCOE selects 12-20 environmental research topics for funding consideration.
- The process starts with the Transportation and Environmental Research Ideas (TERI) database.
- SCOE Research Task Force – responsible for overseeing the SCOE research process and the development of NCHRP research statements.
- SCOE/NCHRP research process timeline
- Status of select NCHRP studies



# Research Programs

## NCHRP

- Two to three years and \$100,000 - \$750,000
  - Research involving field tests
  - Developing national manuals
  - Developing models

## NCHRP 25-25

- Less than one year and \$100,000
  - Improvements to analytical methods
  - Decision support tools
  - Procedures
  - Techniques employed by practitioners in support of transportation planning, programming, and development



## What is the TERI Database?

### Transportation and Environment Research Ideas

- Central storehouse (database) for tracking and sharing new transportation and environmental research ideas
- Used by AASHTO committees, federal and state transportation agencies, Transportation Research Board (TRB) committees, universities and other research centers
- Managed by the AASHTO Center for Environmental Excellence
- Prioritized TERI research ideas are converted into research statements and submitted to the TRB's National Cooperative Highway Research Program (NCHRP) for funding consideration



## What is the TERI Database...continued

The TERI database can be accessed at:

[http://environment.transportation.org/teri\\_database/](http://environment.transportation.org/teri_database/)

- Existing research ideas can be viewed by clicking in “View Ideas”
- New ideas can be submitted by clicking on “Suggest an Idea”
- Information required is fairly simple: brief title, rough estimate of cost, summary of the idea, and a description of the benefits and urgency of the research

Why use TERI?

Database is managed to keep it current, accessible to the national transportation community, direct connection to NCHRP, and focused on supporting transportation/environmental practitioners



## ***What is the SCOE Research Task Force (RTF)?***

The RTF is a SCOE research advisory group, formed in April 2013, that includes a chair (Kevin Walsh of MassDOT) and representatives from each SCOE subcommittee (Air Quality, Climate Change, and Energy; Communities and Cultural Concerns; Environmental Process; and Natural Resources).

Stormwater research ideas are considered by the Natural Resources subcommittee. The RTF is responsible for providing expertise and guidance during each step of the SCOE research process.

## ***Why was the RTF Created?***

To place more focus on research. Folks are busy and research often falls to the bottom of everyone's to-do list. The RTF was created to help engage SCOE members in research, create more transparency in the process, and maintain a focus on research throughout the year.



# 2014 SCOE Research Timeline

**Friday, June 20<sup>th</sup>** – Collect votes from subcommittees

**Week of June 23<sup>rd</sup>** – SCOE annual meeting, research ideas discussed in subcommittee meetings

**Weeks of July 7<sup>th</sup> or July 14<sup>th</sup>** – Subcommittee chairs schedule & hold conference calls with their subcommittees to discuss results of voting and identify priority research topics. Select subcommittee members to lead research statements, with assistance from RTF members.

**July/August** – complete research problem statements

**September 15<sup>th</sup>** – submit full NCHRP statements

**Autumn** – NCHRP 25-25 statements are typically due later in the fall



# The continuum of research databases...

1. TERI

2. Research projects underway:

TRB's *Research in Progress* (RiP)

3. Completed research:

US DOT and TRB's *TRISOnline* catalogue





# Recently Completed NCHRP Studies

Project	Title
<a href="#"><u>25-30</u></a>	Temporary Bridging to Avoid or Minimize Impacts to Waters and Wetlands During Highway Construction
<a href="#"><u>25-31</u></a>	Guidelines for Evaluating and Selecting Modifications to Existing Roadway Drainage Infrastructure to Improve Water Quality in Ultra-Urban Areas
<a href="#"><u>25-32</u></a>	Measuring and Removing Dissolved Metals from Storm Water in Highly Urbanized Areas
<a href="#"><u>25-40</u></a>	Long-Term Performance and Life-Cycle Costs of Stormwater Best Management Practices **
<a href="#"><u>25-42</u></a>	Bridge Stormwater Runoff Analysis and Treatment Options

# NCHRP 25-25: Recently Completed Studies

Task	Title
82	Permeable Shoulders with Stone Reservoirs
83	Current Practice of Post-Construction Structural Stormwater Control
86	Toxicological Effects of Chloride Based Deicers in the Natural Environment

# On-going NCHRP Studies

Project	Title
<a href="#"><u>25-37</u></a>	A Watershed Approach to Mitigating Stormwater Impacts **
<a href="#"><u>25-41</u></a>	Guidance for Achieving Volume Reduction of Highway Runoff in Urban Areas

# NCHRP 25-25: On-going Studies

Task	Title	Report Exp'd
85	Nutrient (Nitrogen/Phosphorous) Management and Source Control	Aug '14
95	SCOE Strategic Plan and Research Plan for SCOE Areas of Interest	Nov '14
92	Transferability of Post-Construction Stormwater Quality BMP Effectiveness Studies	June '15
93	Long-Term Construction and Maintenance Cost Comparison for Road Stream Crossings: Traditional Hydraulic Design vs. Aquatic Organism Passage Design	April '15
94	Integrating Extreme Weather and Adaptation into Transportation Asset Management Plans	June '15