

Business Session Agenda

- Thank You - Mark McConnell, MS
- Roll Call - Steve Lund, MN
- Resolution History and New – Steve Lund, MN
- Research Ballot Handout – Jon Wilcoxson, KY
- Technical Working Group Reports
- Collect Research Ballots – Jon Wilcoxson, KY
- Region Reports
- TRB and NCHRP Update –Amir Hanna, NCHRP
- Future AASHTO SCOM Meetings
 - Rhode Island - Joe Bucci, RI
- Adjourn - Mark McConnell, MS



Roll Call

- Roll Call (Steve Lund, MN)
 - Voting Member State DOT
 - Present
 - Not Present



Resolution History

Year		Title	Outcome	Approved By
2015	1	Increase AASHTO-EMTSP Annual Contribution	Tabled by SCOH due to a request for additional information on need.	SCOM
2014	1	Technical Services Program Feasibility for Maintenance Quality Assurance and Maintenance Contracting	Work to accomplish this task is a part of a larger task order AASHTO has with FHWA which is under review	SCOM
	2	A Resoution to Create A Research Liaison	The current research liaison is Jon Wilcoxsin, KY DOT	Withdrawn
	3	Formalizing the Attendance of the TSP-2 Regional Bridge Preservation Partnerships at the Annual AASHTO SCOM Meeting	No update at this time	SCOM
	4	Support for the FHWA Pavement Preservation Expert Task Group	A letter was sent to FHWA. The FHWA PPETG has been reinstated.	Withdrawn
	5	Support for Continuing and Expanding Pavement Preservation Research	A letter was written to DOT Directors, Chief Engineers, SCOR & SOM	Withdrawn
	6	Fall Protection Requirements for Highway Bridge Workers on Existing Bridges	A cross disciplinary panel with OSHA and AASHTO is formed to assess the requirements. Chris Keegan, Washington DOT is SCOM rep.	BOD
	7	Invite the North American Association of Transportation Safety and Health Officials to 2015 SCOM Meeting	An invitation letter was sent out	SCOM

2007 found at <http://maintenance.transportation.org/Pages/Resolutions.aspx>

Proposed Resolution

Resolution 16-01

AASHTO HIGHWAY SUBCOMMITTEE ON MAINTENANCE

Resolution to Support the Update of the FHWA Maintenance Leadership Academy - 12 Week Course

WHEREAS, the Subcommittee on Maintenance's (SCOM) vision is to support guidance for the maintenance operations of the evolving transportation system, and address new challenges through leadership and innovation; and

WHEREAS, the Subcommittee's mission is to provide technical and policy guidance to members and support the AASHTO organization in preserving and maintaining a safe and reliable highway infrastructure that meets the expectations of its customers; and

WHEREAS, one of the Subcommittee's Strategic Focus Areas is workforce development and development of a well-qualified and competent workforce; and

WHEREAS, the FHWA's National Highway Institute (NHI) Maintenance Leadership Academy is designed to provide training in highway maintenance changes that have occurred over the years, new technologies that will impact future maintenance practices, and improve managerial techniques through personnel management, budgeting, maintenance planning, etc., and

WHEREAS, the current Maintenance Leadership Academy training materials are over 7 years old, are in need of an update which reflects current technology and standards, and new materials need to be added, based on feedback acquired by trainees and the AASHTO Subcommittee on Maintenance;

NOW, THEREFORE, BE IT RESOLVED, the AASHTO Subcommittee on Maintenance encourages and supports the efforts of the FHWA and its training organization, the NHI, to review and update the 12 week Maintenance Leadership Academy training course.

July 21, 2016
Clark County, Nevada

Submitted by:
AASHTO Subcommittee on Maintenance,

Research Ballot (Jon Wilcoxson)

- 1-Ballot per State DOT
- Scoring
 - 5 – highest priority
 - 1 – lowest priority

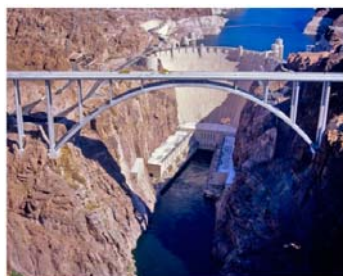
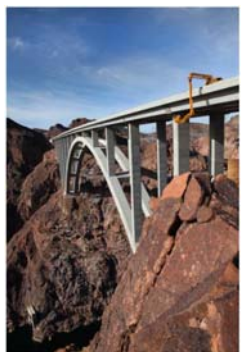


Technical Working Group Reports

- Bridge – Jeff Milton, VA
- Equipment – Tim Cunningham, KS
- Pavement – Anita Bush, NV
- Roadway / Roadside – Jerry Hatcher, TN
- Maintenance Operations – Brad Darr, ND



Bridge Working Group Jeff Milton, VA



2016 Work Plan Accomplishments 1 of 1

Safety

- Promoted the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.
- Worked through the Bridge TWG representative on the Fall Protection Resolution Team to ensure a practical outcome for the states that are affected.



2016 Work Plan Accomplishments 1 of 2

Asset Management

- Monitored the FHWA Rule Making for bridge and pavement condition and for asset management systems.
- Continued to collaborate with FHWA BPETG, and other stakeholders on defining “State of Good Repairs” as it applies to the bridge assets.



2016 Work Plan Accomplishments 2 of 2

Asset Management

- Promoted Bridge Preservation activities by owners.
- Promoted accountability and transparency through performance management and asset management of bridges and structures in conjunction with the other technical working groups with a focus on an accurate and efficient bridge inventory system, appropriate performance measures, clear measurable goals which can be attained, and innovative reporting techniques using common terminology.



2016 Work Plan Accomplishments 1 of 1

Environmental

- Promoted sustainability of the highway bridge environment with a special focus on climate change, mitigation strategies and pollution prevention.
- Promoted the proposed research project titled "Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact".



2016 Work Plan Accomplishments 1 of 5

Workforce Development

- Continued working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners.
- Continued supporting the AASHTO TC3 program.
- Continued serving as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.



2016 Work Plan Accomplishments 2 of 5

Workforce Development

- Continued working with TSP.2, FHWA BPETG, and industry on collection and dissemination of information concerning bridge preservation materials and products.
- Coordinated with FHWA Lead to ensure that the Long Term Bridge Performance Program considers the appropriate bridge maintenance and preservation activities.



2016 Work Plan Accomplishments 3 of 5

Workforce Development

- Continued supporting FHWA's Bridge Preservation Expert Task Group efforts.
- Conducted email exchanges with the Bridge TWG members.
- Continued supporting the efforts of the SCOM leadership to update the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).



2016 Work Plan Accomplishments 4 of 5

Workforce Development

- Updated the Strategic Plan for the BTWG. The Bridge Technical Working Group (BTWG) Strategic Plan was updated and submitted to the subcommittee leadership team on September 18, 2015. The updated plan may be viewed at the AASHTO SCOM website.



2016 Work Plan Accomplishments 5 of 5

Workforce Development

- Continued to coordinate with other committees through Bridge TWG liaisons.



2016 Work Plan Accomplishments 1 of 3

Communication

- Continued supporting implementation recommendations for NCHRP 14-24, Report 742 "Communicating the value of preservation".
- Continued supporting the implementation of SHRP2 Project R06A (Non-destructive Testing to Identify Concrete Bridge Deck Deterioration) and R19A (Designing Bridges for 100 years service life).



2016 Work Plan Accomplishments 2 of 3

Communication

- Supported members in communicating the value of maintenance and system preservation to elected officials, the general public and state DOT executives.
- Promoted communications concerning bridge maintenance and preservation with local agencies.



2016 Work Plan Accomplishments 3 of 3

Communication

- Encouraged regional bridge preservation partnerships to submit proposed research needs statements through the SCOM Bridge Technical Working Group.



2016 Work Plan Accomplishments 1 of 4

Research

- Provided a collaborative environment that encourages new research problem statement ideas.
- Encouraged implementation of research recommendations.
- Reviewed and considered for endorsement research problem statements from other committees.



2016 Work Plan Accomplishments 2 of 4

Research

- Supported Bridge related NCHRP projects and submit research problem statements.
- Supported the work of the TRB Bridge Preservation Committee (AHD37).
- Supported the work of the TRB Structures Maintenance Committee (AHD30).
- Supported the work of the TRB Bridge Management Committee (AHD35).



2016 Work Plan Accomplishments 3 of 4

Research

- Supported the update of the TSP2 Research Roadmap.
- Supported FHWA's Long Term Bridge Performance Program.



2016 Work Plan Accomplishments 4 of 4

Research

- Submitted the proposed research project titled "Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact".

This statement was not selected by AASHTO SCOR as a full project; however, the statement was submitted and selected as a NCHRP 20-07 Project. The Project Panel is currently being formed.



2017 Work Plan 1 of 2

Safety

- Continue to promote the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.
- Continue to work through the Bridge TWG representative on the Fall Protection Resolution Team to ensure a practical outcome for the states that are affected.



2017 Work Plan 2 of 2

Safety

- Encourage member agencies to explore the use of connected and automated vehicles for use in smart work zones.



2017 Work Plan 1 of 2

Asset Management

- Continue to monitor the FHWA Rule Making for bridge and pavement condition and for asset management systems.
- Continue to promote Bridge Preservation activities by owners.
- Continue to promote accountability and transparency through performance management and asset management of bridges and structures.



2017 Work Plan 2 of 2

Asset Management

- Support member agencies in the inspection and maintenance of tunnels and ancillary (traffic, MSE walls, etc.) structures.



2017 Work Plan 1 of 1

Environmental

- Continue to promote sustainability of the highway bridge environment with a special focus on climate change, mitigation strategies and pollution prevention.
- Support the NCHRP 20-07 Project titled “Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact”.



2017 Work Plan 1 of 4

Workforce Development

- Continue working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners through TSP2.
- Continue supporting the AASHTO TC3 program by reviewing the competency matrices for bridge workers.
- Continue serving as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.



2017 Work Plan 2 of 4

Workforce Development

- Support the liaisons from SCOM to other committees. For example:
 - AASHTO SCOBS
 - FHWA BPETG
 - TRB
 - AASHTO STSM&O



2017 Work Plan 3 of 4

Workforce Development

- Continue working with TSP.2, FHWA BPETG, and industry on collection and dissemination of information concerning bridge preservation materials and products.
- Continue coordinating with FHWA Lead to ensure that the Long Term Bridge Performance Program considers the appropriate bridge maintenance and preservation activities.



2017 Work Plan 4 of 4

Workforce Development

- Continue supporting FHWA's Bridge Preservation Expert Task Group efforts. For example, reviewing and providing comments for the pocket guides.
- Continue to conduct email exchanges with the Bridge TWG members.
- Continue supporting the efforts of the SCOM leadership to update the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).



2017 Work Plan 1 of 4

Communication

- Continue supporting the implementation of SHRP2 Project R06A (Non-destructive Testing to Identify Concrete Bridge Deck Deterioration) and R19A (Designing Bridges for 100 years service life).
- Continue to promote communications concerning bridge maintenance and preservation with local agencies.



2017 Work Plan 2 of 4

Communication

Develop a marketing package to communicate the value of system preservation to elected officials, the general public and state DOT executives. This strategy will include:

- Implement existing research in order to promote the need for additional funding
- Promote safety
- Promote environmentally friendly practices
- Develop a communication plan that promotes the value of bridge preservation



2017 Work Plan 3 of 4

Communication

- Develop a strategy to better communicate bridge condition information by the media (ENR, Roads and Bridges, ARTBA, etc.).
- Continue to encourage regional bridge preservation partnerships to submit proposed research needs statements through the SCOM Bridge Technical Working Group.



2017 Work Plan 1 of 3

Research

- Continue to provide a collaborative environment that encourages new research problem statement ideas.
- Continue to encourage implementation of research recommendations.
- Continue to review and considered for endorsement research problem statements from other committees.



2017 Work Plan 2 of 3

Research

- Continue to support Bridge related NCHRP projects and submit research problem statements.
- Continue to support the work of the TRB bridge related committees: Bridge Preservation (AHD37), Structures Maintenance (AHD30), and Bridge Management (AHD35).



2017 Work Plan 3 of 3

Research

- Continue to support the update of the TSP2 Research Roadmap.
- Continue to support FHWA's Long Term Bridge Performance Program.
- Work with FHWA to develop research to determine the cost effectiveness of bridge cleaning and washing.



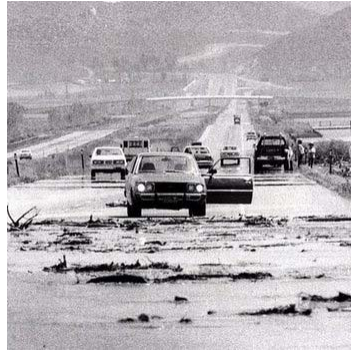
Proposed Research

- Endorse the proposed research titled "Effective Use of Duplex Coating Systems to improve Steel Bridge Structure Durability" that was submitted by the TRB Structures Maintenance Committee (AHD30) and approved by the AASHTO Subcommittee on Bridges and Structures T-9 Technical committee

The Bridge Technical Working Group supports this research and requests endorsement



Pavement Working Group Anita Bush, NV



2016 Work Plan Accomplishments 1 of 6 Safety

- PTWG hosted a webinar on “Safety Benefits of Friction – Current Pavement Treatments for Preservation and Safety”



2016 Work Plan Accomplishments 2 of 6

Asset Management

- Webinar thru TRB on “Current Practices in Conducting Field Inspections for Maintenance Quality Assurance (MQA), NCHRP Synthesis 470: Maintenance Quality Assurance Field Inspection Practices”



2016 Work Plan Accomplishments 3 of 6

Environmental

- PTWG hosted a webinar on “INVEST 1.2 – Self-Evaluation Tool Supporting Roadway Sustainability”



2016 Work Plan Accomplishments 4 of 6

Workforce Development

- Promoted the development of Contractor and Agency Pavement Preservation Treatments Certificate Programs.
- Promoted a webinar on Keyhole Coring and Reinstatement thru the Transportation Learning Network



2016 Work Plan Accomplishments 5 of 6

Communication

- Provided webinars in three focus areas
- New Approaches to Utility Cut Pavement Repair TechBrief, Review and Comment
- Use of Thin-Lift Asphalt Surfaces for Pavement Preservation, TechBrief Review and Comment
- Microsurfacing, Slurry Seals and Chip Seal Quality Assurance Best Practices TechBrief



2016 Work Plan Accomplishments 6 of 6

Research

- Assisted implementation of SHRP-2 products that are useful to pavement preservation and maintenance.



2017 Work Plan 1 of 7

Safety

- Support efforts to quantify the contributions of pavement preservation to safety programs.
- Promote the use of Pavement Preservation Treatments that improve surface characteristics as a tool to reduce crashes.
- Identify best practices for maintaining rumble strips/strips when applying pavement preservation treatments.



2017 Work Plan 2 of 7

Asset Management

- Support efforts to quantify the contributions of pavement preservation to risk-based asset management programs.
- Assist in identifying and promoting Performance Measures to support AASHTO members' pavement preservation program decisions.



2017 Work Plan 3 of 7

Environmental

- Assist in the development and promotion of Pavement Preservation Life Cycle Assessment methodologies, that consider the environmental effects.
- Review the products of FHWA's Sustainable Pavements Program.



2017 Work Plan 4 of 7

Workforce Development

- Support the development of Contractor and Agency Pavement Preservation Treatments Certificate Programs.
- Promote the Transportation System Preservation Technical Services Program (TSP2) to AASHTO members.
- Support TC3 and other groups in the development of various training and certification programs.



2017 Work Plan 5 of 7

Communication

- Enhance internal communications of the PTWG: expand membership and e-mail list; and conduct conference calls and/or webinars involving roundtable discussions for members and industry.
- Conduct webinars to report out results of completed research, promote and support implementation.
- Promote the value of maintenance and successful strategies.
- Reach out and educate the stakeholders.



2017 Work Plan 6 of 7

Research

- Review TRB/NCHRP Completed Research for possible publication as AASHTO Manuals or presentations in a series of “Pavement Preservation Book Club” webinars.
- Assist in implementation SHRP-2 products that are useful to pavement preservation and maintenance.
- Review and Provide Recommendations for NCHRP 14-31 Framework for Pavement Maintenance Database Systems for possible AASHTO publication and assist with implementation.



2017 Work Plan 7 of 7

Other

- Support the Pavement Preservation Expert Task Group.
- Encourage Pavement Preservation Partnerships to provide funding for representatives to attend SCOM annual meeting.



Proposed Research

- Developing a Framework for Cost-Effectiveness Measures for Pavement Preservation
- Guidelines for the Timing of Concrete Preservation Treatments
- Guide Construction Specifications for Cold In-place Recycling (CIR) and Cold Central Plant Recycling (CCPR)



Equipment Working Group

Tim Cunningham, KS



2016 Work Plan Accomplishments 1 of 2

Safety

- Promote awareness of new equipment technologies that enhance equipment operations, workforce and work zone safety
- Communicate safety issues, warranty/recall campaigns and advanced maintenance advisories to assure equipment, workforce, work zone and public safety
- Technical equipment specifications to assist States in procuring equipment and vehicles equipped with current safety technologies and enhancements



2016 Work Plan Accomplishments 2 of 2

Safety

- WBT – New course content which addresses safety issues relating to personnel, shop facilities and equipment PM best practices
- Monitor/disseminate information regarding new and proposed equipment and shop personnel workplace regulatory safety topics



2016 Work Plan Accomplishments

Asset Management

- EMTSP National Performance Measurement Working Group developed and posts State DOT's available equipment metrics to the EMTSP website.
- Facilitate the exchange of current business information, practices and ideas thru the regional partnerships and by posting presentations on the EMTSP.org website



2016 Work Plan Accomplishments

Environmental

- Monitor and disseminate information regarding new and proposed environmental regulatory changes by
 - Hosting presentations
 - Posting and updating information on the EMTSP Website
 - Supporting and participating in related research studies



2016 Work Plan Accomplishments 1 of 3

Workforce Development

- Development of EMTSP approved web-based training courses.
 - Preventative Maintenance Concepts for State Equipment Fleet Management Operations
 - Bench Marking and Best Practices for State Equipment Fleet Management



2016 Work Plan Accomplishments 2 of 3

Workforce Development

- Development of a model training and certification curriculum appropriate for state equipment managers by revising the skills matrix developed by the TC3
- Explore opportunities to develop and implement a model AASHTO-EMTSP Certification Program or Certificate program appropriate for State DOT Fleet Managers



2016 Work Plan Accomplishments 3 of 3

Workforce Development

- Use the EMTSP website as a clearing house of information for professional development self-study on subject related fleet management topics including:
 - Equipment industry communications and updates
 - State and Federal regulatory communications
 - Industry and government white papers
 - Academic Presentations and Webinars
 - Government research papers and presentations
 - Utilize the EMTSP ListServ as a tool for notification purposes or single quick questions



2016 Work Plan Accomplishments 1 of 1

Communication

- The communication of values, roles and importance of professional equipment fleet management through many forums and medias including:
 - Hosting EMTSP regional partnership meetings the 2016 National Fleet Management Conference
 - Continued facilitation of communication between members and the equipment industry via equipment displays and demonstrations
 - Development of an Equipment Technical Specification clearing house on the EMTSP website



2016 Work Plan Accomplishments 1 of 2

Research

- Continue to prioritize and implement the outcome of NCHRP Project 20-07/Task 309, A Strategic Plan for Equipment Management Research
- Ongoing research
 - NCHRP Project 13-04 – Guide for the Development of Highway Operations Equipment Replacement Lifecycle Criteria
 - NCHRP Project 13-05 – Guidelines for the Development of Highway Operations Equipment Utilization Measurement and Management



2016 Work Plan Accomplishments 2 of 2

Research

- Equipment TWG's most recent research problem statement titled – Development of an Automated Tool to Assist in the Formulation and Maintenance of Long Range Equipment Replacement Plans. In March SCOR approved the project and was later approved for funding by the AASHTO Board of Directors.



2017 Work Plan 1 of 6

Safety – Continue to:

- Promote awareness of new equipment technologies that enhance equipment operations, workforce and work zone safety
- Communicate safety issues, warranty/recall campaigns and advanced maintenance advisories to assure equipment, workforce, work zone and public safety
- Continue to monitor/disseminate information regarding new and proposed equipment, shop personnel and workplace regulatory safety topics



2017 Work Plan 2 of 6

Asset Management

- Maintain to support the EMTSP National Performance Measurement Working Group effort to compile and post each State DOT's available equipment metrics to the EMTSP website
- Continue to provide governmental equipment fleet management and agency executives with the resources, materials and support to promote effective Fleet Asset Management
- Continue to facilitate the exchange of current business information, practices and ideas



2017 Work Plan 3 of 6

Environmental

- Maintain support for environmentally sensitive business considerations in equipment acquisition, shop operations, preventative maintenance, repair methodologies and equipment operation
- Continue to monitor, compile and disseminate information regarding new and proposed environmental regulatory changes that have potential impact upon highway equipment fleets
- Continue to support and participate in related research studies



2017 Work Plan 4 of 6

Workforce Development

- Maintain support and provide professional development by cultivating training opportunities and certifications appropriate for state equipment managers
- Continue the development and completion of the two (2) TC3 training modules
- Continue the exploration of opportunities to develop a model AASHTO-EMTSP Certification Program or Certificate program appropriate for State DOT Fleet Managers



2017 Work Plan 5 of 6

Communication

- Continue to communicate and promote the values, roles and importance for the business practice of Professional Equipment Fleet Management
- Continue to organize and host EMTSP Regional Partnership Meetings
- Continue to develop and incorporate within the EMTSP website updated and appropriate links to industry and government publications, white papers, videos and academic research papers and presentations



2017 Work Plan 6 of 6

Research

- Continue to prioritize and implement the outcome of NCHRP Project 20-07/Task 309, *A Strategic Plan for Equipment Management Research* and develop and submit research problems statements to address those needs.
- Maintain support and assistance for NCHRP program completion of the three (3) NCHRP Research Projects now in process



Proposed Research 1 of 3

New Research Problem Statement

- **Problem Title:** *Guidelines to Calculate Total Cost of Ownership for Fleet Operations*
- **Objective:** Develop a methodology and provide guidance leading to a full and accurate understanding of Total Cost of Ownership to inform fleet customers (both internal and external), fleet services providers, and senior decision makers and to assist in identifying opportunities to optimize these costs.



Proposed Research 2 of 3

New Research Problem Statement

- **Problem Title:** *Guidelines for the Selection and Application of Vehicle and Equipment Warning Light Configurations, Colors, and Markings*
- **Objective:** Update and enhance previous guidelines (NCHRP 13-02). Identify configurations and provide a tool that describes the interrelated effects of highway vehicle and equipment color, light color, combination of lighting systems, flash rate, and markings, with maximum and minimum limits, to make on-road vehicles and off-road equipment quickly and easily recognizable.

Proposed Research 3 of 3

Proposed Domestic Scan Proposal

- **Problem Title:** *Equipment Asset Preservation and Protection Techniques*
- **Benefits Expected:** Document and disseminate information on storage practices, washing facilities and procedures, anti-corrosion techniques, up-fitting, and best practices fleet owners are doing to preserve, protect, and maximize the useful life of their fleets.

Roadway/Roadside Group

Jerry Hatcher, TN



AASHTO
THE VOICE OF TRANSPORTATION

NEVADA
DOT

2016 Work Plan Accomplishments 1 of 5

Safety

- Held a webinar on November 19th that included a presentation on alternate traffic control methods on rural roads
 - some of the methods resulted in less exposure of personnel involved in the flagging operation
 - motorist compliance of each method was evaluated



2016 Work Plan Accomplishments 2 of 5

Asset Management

- Held a webinar on November 19th that included a presentation on NCHRP 20-07, Task 357 Best Practices for Collecting, Processing and Managing Roadway Asset Inventory Data
- Presentation given during SCOM meeting on NCHRP Synthesis 470 Maintenance Quality Assurance Field Inspection Practices



2016 Work Plan Accomplishments 3 of 5

Environmental

- Presentation during SCOM meeting on Establishing and Preserving Pollinators Habitat Along Highways.



2016 Work Plan Accomplishments 4 of 5

Workforce Development

- Support of the NHI Maintenance Leadership Academy.

Communication

- Continued outreach by holding webinars.



2016 Work Plan Accomplishments 5 of 5

Research

- Conducted webinar on recently completed research.
- Submitted research problem statement
“Synthesis of Best Practices of Vehicle Impact Attenuators in Highway Maintenance Work Zones”



2017 Work Plan 1 of 3

Safety

- Provide a forum for the sharing of innovations and ideas to improve worker and work zone safety.

Asset Management

- Support the No Boundaries pooled fund –
Implementing Maintenance Innovations from different Agencies



2017 Work Plan 2 of 3

Environmental

- Support national efforts that preserve and enhance pollinator habitat.

Workforce Development

- Support the NHI Maintenance Leadership Academy.



2017 Work Plan 3 of 3

Communication

- Organize and moderate webinars with a focus on recently completed research and emerging issues.

Research

- Review roadway/roadsides related TRB/NCHRP completed research projects and seek ways to create awareness and support implementation of best practices.



Proposed Research

- Synthesis of practices for protecting and enhancing pollinator habitat on state ROW.
- Synthesis of practices on the use of inmate labor for performing maintenance activities.



Maintenance Operations

Brad Darr, ND



2016 Work Plan Accomplishments 1 of 6

Safety

- **Promoted training of Traffic Incident Management Responders from SHRP2**



2016 Work Plan Accomplishments 2 of 6

Asset Management

- **Promoted performance measures accountability and transparency by implementing the findings of NCHRP and Clear Roads studies.**



2016 Work Plan Accomplishments 3 of 6

Environmental

- Promoted the results of the revised Chapter 8 on Environmental Stewardship Practices, Procedures and Policies for Highway Construction and Maintenance (NCHRP 25-25)
- Promoted the Salt Best Management Practices



2016 Work Plan Accomplishments 4 of 6

Workforce Development

- Presented preliminary report on new synthesis project relating to maintenance training and certification
- Investigated other maintenance operations technology transfer needs using interactive Computer-based Training
- Worked with TC3 to locate or develop new training materials



2016 Work Plan Accomplishments 5 of 6

Communication

- **Completed planning for the 2015 Winter Maintenance Peer Exchange in MN, including committee participation**
- **Communicated with Aurora and Clear Roads**
- **Worked with SICOP including establishing relations with AASHTO STSMO**



2016 Work Plan Accomplishments 6 of 6

Research

- **Developed NCHRP research statement related to impact of winter maintenance LOS on economy (not selected but resubmitting)**



2017 Work Plan 1 of 6

Safety

- **Support FHWA's EDC-3 Smarter Workzone Initiative**
- **Support FHWA's EDC-4 Weather Savvy Roads Initiative**
- **Continue to support Traffic Incident Management Responder Training Initiative**



2017 Work Plan 2 of 6

Asset Management

- **Promote implementation of Clear Roads Best Practices Guidance on Corrosion Prevention for DOT Equipment**



2017 Work Plan 3 of 6

Environmental

- Continue to seek out examples of winter maintenance practices and programs that demonstrate sustainability, and posting appropriate results on the Center for Environmental Excellence website
- Promote the use of FHWA's INVEST tool and the Climate Change Adaptation Guide for Transportation Systems Management, Operations, and Maintenance
- Promote APWA's Sustainability in Public Works Conference
- Promote the use of the Salt Institute's Safe and Sustainable Snowfighting Handbook.



2017 Work Plan 4 of 6

Workforce Development

- Continue to work and liaise with TC3 to locate or develop new training materials
- Support the update of the Maintenance Leadership Academy



2017 Work Plan 5 of 6

Communication

- **Continue collaboration with Aurora and Clear Roads**
- **Solicit candidates to serve as liaisons between the SCOM and other committees, coalitions, and groups such as STSMO, and the V2I Coalition.**
- **Begin planning for the 5th Winter Maintenance Peer Exchange (2017)**
- **Worked with STSMO liaison on research and common Connected Vehicle issues**



2017 Work Plan 6 of 6

Research

- **Support proposed Domestic Scan on Best Maintenance Facility Design Practices**



Proposed Research

1. **Factors Influencing State DOT's in Systematically Setting and Managing Winter Maintenance Levels of Service**
2. **Making a Business Case for Winter Maintenance Actions including establishing the impacts of winter maintenance LOS on the economy- second attempt**
3. **Synthesis of (Very) Short Duration Work Zone Safety for Maintenance Activities**



Collect Research Ballot

Jon Wilcoxson

- **Reminder:**
 - 1-Ballot per State DOT
 - Scoring
 - 5 – highest priority
 - 1 – lowest priority



Region Reports

- NASTO – Russ Yurek, MD
- SASHTO – Heath Patterson, MS
- MAASTO – Steve Cook, MI
- WASHTO – Lonnie Hedrix, AZ



NASHTO Regional Meeting

Russ Yurek MD

- SICOP Strategic Plan
- Urban Snow Removal - Blizzards
- Safety - best practices using attenuators
- Employee retention and winter operations
- Snow removal contracts
- Pollinators and mowing



SASHTO Regional Meeting

Heath Patterson, MS

**SOUTHERN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION
OFFICIALS**



SASHTO Regional Meeting

Heath Patterson, MS

- **General Discussion & Flash Polls**
 - Safety First: Mowing follow vehicle
 - Mowing practices / pollinators
 - MASH implementation
 - 811 permitting requirements
 - Transportation Asset Management Plans
 - Winter Maintenance Budgeting



KICK-OFF SAFETY POLL



Follow vehicle:

- No state required an attenuated following vehicle for mowing operations.
- Several states required a follow vehicle if mowers encroach upon the shoulder or travel lane as if it were a mobile lane closure.



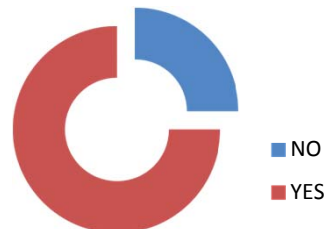
SASHTO Regional Meeting

Heath Patterson, MS

Pollinator Habitats

- Who has a Pollinator Program?
- Who makes adjustments to mowing patterns to accommodate pollinators in some way?

Accommodate Pollinators



Mowing Practices:

- Many states have use initial swath cut mowing to accommodate.
- Some maintain as before and establish dedicated pollinator habitat areas that are omitted from mowing.



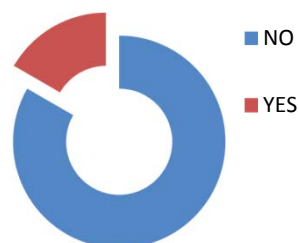
MASH Implementation

Which states have set up capitol programs to upgrade safety hardware NCHRP-350 rated or older ?

Most have established some policy to upgrade to damaged hardware MASH, but few have capital upgrade program.

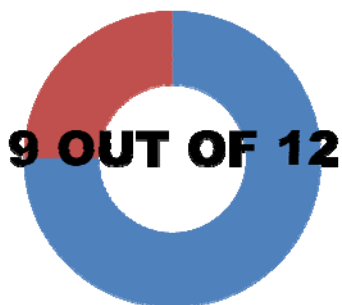
Most everyone is concerned with the liability of having NCHRP-230 still in place .

MASH Upgrade Project



Maintenance Leadership Academy

Which states recently participated in Maintenance Leadership Academy?

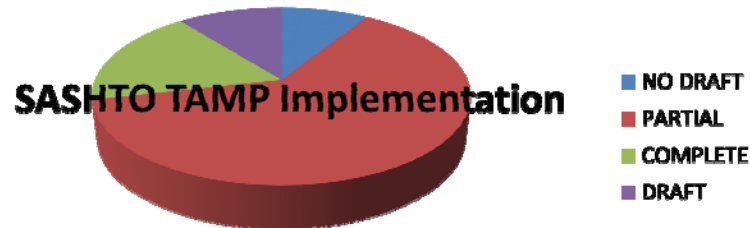


Most state are in favor of the resolution to update the curriculum and non-participating states are interested in getting involved.



Transportation Asset Management Plan (TAMP) implementation

Where are SASHTO state in drafting TAMPs and how are they proceeding...

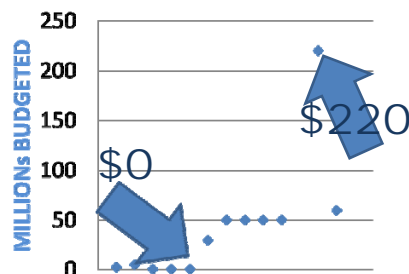


Most states have collaborated with a third-party for assistance or are in RFP stage.

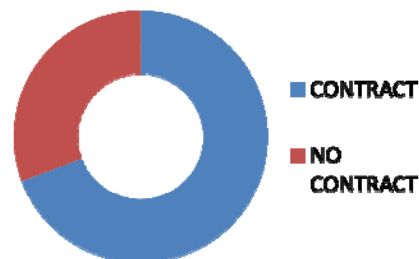


Winter Maintenance Budgeting


WINTER MAINTENANCE BUDGETING



WINTER MAINTENANCE CONTRACTING

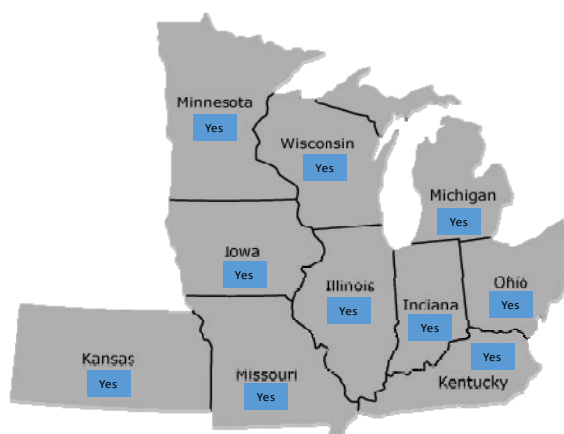


Reverse Bid Procurement (KTC)

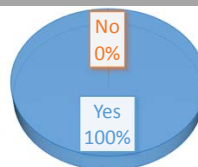
- Kentucky establishes negotiated winter maintenance contracts for the use of over **400** plow trucks at rates around **\$20k - \$35k** annually for **7** year contracts
- Set-up online low bid auctions per truck 
- Bidders could not see the low bid amount , just there own bid standing and time left in the auction.
- A quality bonus was given to bidders based on age of equipment that would be awarded after bids were closed.



MAASTO Regional Meeting Steve Cook - MI



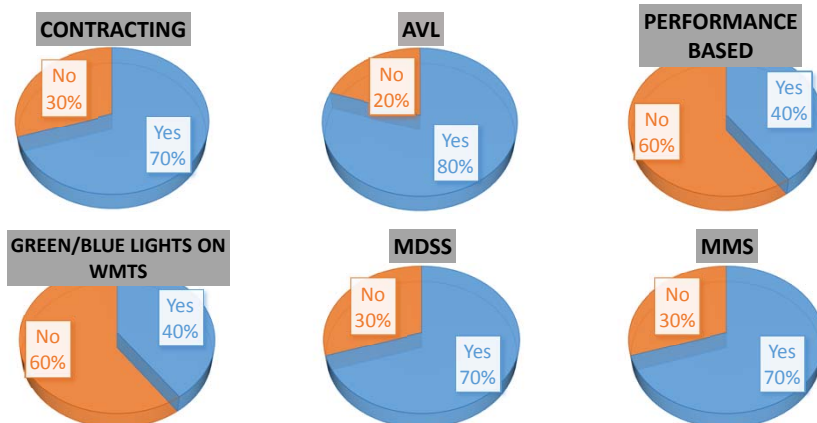
MEMBER ATTENDEES



MAASTO
MID AMERICA ASSOCIATION OF
STATE TRANSPORTATION OFFICIALS



MAASTO Members Using



MAASTO Regional Meeting Discussion Topics

1. Salt reduction efforts

- Training
- Technology
- Alternative chemicals

2. Effective staffing practices to provide winter/summer operations

- Staff 2 persons per route/truck
- Utilize limited term & temporary workers
- Utilize existing staff in other classifications



MAASTO Regional Meeting Discussion Topics

3. Electronic data capture/asset management

- Specialty Systems: Herbicide/Paint Striping
- Moving towards enterprise transportation asset management systems

4. Management of maintenance budgets for winter/summer priorities

- Winter rules
- Varying budget structure (if don't use lose, cut back summer activities)

5. Snow plow route/truck station location optimization

- Performed by internal staff/universities/contractors
- Increased efficiency



WASHTO Regional Meeting

Lonnie Hendrix, AZ

- 30 in attendance, 13 states
- Presentations
 - Kevin Griffin, UDOT - Winter Maintenance Performance Measure
 - Kyle Lester, CDOT – ROAD X, safety and reliability through technology
- The future of RWIS, which direction to go
- Cross-training maintenance personnel, lessons learned



WASHTO Regional Meeting

Lonnie Hendrix, AZ

- Equipment Fleet
 - Underutilization, leasing, idle time
- Traditional Highway Maintenance/New Technologies
 - Affording Technology Advances and Cost
- AASHTO / Vehicle Manufacturers
 - Collaboration on technology and infrastructure needs
- Commercial truck parking /rest areas



National Cooperative Highway Research Program (NCHRP) Research on the Maintenance of Highway Infrastructure

NCHRP Liaison: Amir N. Hanna

ahanna@nas.edu

202-334-1432



NCHRP FY 2018 Problem Statements

- Follow NCHRP Problem Statement outline.
- Suggest a short, clear title.
- Provide a clear description of the problem or need (highlight results of the literature search to show that the proposed research will not duplicate other research but will build on completed research, etc.).
- Provide a clear, concise statement of the objective (i.e., outcome/ product of the research).
- Delineate the tasks (or scope of work) that are required for achieving the objective.
- Provide a reasonable estimate of required funding.
- Discuss potential benefits of the research.
- Submit by October 14, 2016 (firm deadline).
- Provide ranking of SCOM problem statements.



Moving Research Into Practice

- NCHRP is a practical, applied research program that produces implementable products addressing the day-to-day problems faced by transportation practitioners and managers.
- NCHRP is seeking SCOM adoption of relevant products to encourage implementation/use by highway agencies:
- Pavement-Maintenance Database System
- Assessing, Coding, and Marking of Highway Structures in Emergency Situations
- Guidelines for Maintaining Small Movement Bridge Expansion Joints



2017 Rhode Island – Joe Bucci, RI



Beautiful
Rhode Island
Providence

CAN'T WAIT TO WELCOME YOU!



Rhode Island may be the smallest state in the union, but ...

- We have so much to offer!



Iconic landmarks

The Pell Bridge in Newport with the
Rose Island light house



The Towers In Narragansett

Spectacular beaches



Waterfront and harborside views



Bristol, RI

A popular leisure & dining spot



Galilee

Where many RI fishing vessels call their home port



Warwick

Dockside view from a popular tavern

Museums and attractions

Tall Ship Oliver
Hazard Perry in
Fort Adams
Park, Newport



Plenty of things to see & do with the family



Gilbert Stuart
Museum



Roger Williams
Park Zoo



Providence
Children's
Museum



Point Judith Light House,
Rhode Island State House
and the Ocean House in
Westerly



Newport
Mansions



Other interesting places



International
Tennis Hall of
Fame

Newport RI



Historic
Cemeteries

And Veterans' monuments



Quonset

Home of the SeaBees

Whatever your tastes



Kayaking &
boating



Festivals



Lovely parks

Places to visit



Wickford Village, left, and Block Island



We have wonderful foods & great places to eat



Federal Hill

Providence's Little Italy



Hot wieners

Be sure and order yours "all the way"



Fresh seafoods

Stuffies and calamari are local favorites

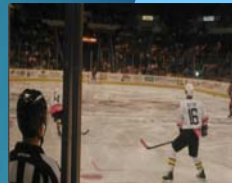
Sporting events



Providence College Friars



Pawtucket Red Sox



Providence Bruins hockey

Interesting characters



'The Big Blue Bug'




NIROPe of Cardi's Furniture



Shopping



RI Department of Transportation can't wait to show you



Our people

Ribbon-cutting of new Providence-to-Newport ferry



Our projects

Working hard on the Great Island Bridge in Narragansett



Our state

Vice President Joe Biden's visit

About us

The Rhode Island Department of Transportation (RIDOT) designs, constructs, and maintains the state's surface transportation system.

With a staff of more than 700 transportation professionals, RIDOT serves as the steward of a statewide multimodal transportation network, consisting of 3,300 lane miles of roadway, 1,154 bridges, five rail stations, and more than 60 miles of bike and pedestrian paths.



RIDOT can't
wait to
welcome you!
We're just over
the rainbow



Future SCOM

- 2018 North Carolina
- 2019 Michigan
- 2020 Colorado
- 2021 Maine



Adjourn

Be SAFE and
see you next year in Rhode Island!

