

# Pavement Technical Working Group

AASHTO Standing Committee on Highways, Subcommittee on Maintenance

Monday, July 23, 2018 - 3:30 pm to 5:00 pm

Charlotte, NC



*Anita Bush, Nevada DOT – Chair*

*Scott Capps, North Carolina DOT – Vice Chair*

*Heath Patterson, Mississippi DOT – Vice Chair*

*Jason Dietz- FHWA Liaison*

# Welcome and Opening Remarks

**Anita Bush, NDOT, PTWG Chair**

Please Sign Attendance Sheet

Self-Introductions

# Today's Agenda

## Welcome and Opening Remarks

- Overview of the PTWG
- Vision, Mission and Strategic Goals
- Focus Areas
- 2018 Accomplishments
- Ongoing Research

## PTWG Annual Business Meeting

- Completed Research – Implementation
- 2019 Work Plan
- 2019 Research Problem Statements
- 2019 Resolutions

Adjourn at 5:00 pm

# Overview of Pavement TWG

## Each State is allowed 3 delegates to AASHTO MaC

- One delegate per state (minimum) is recommended for PTWG membership.

Pavements account for approximately 50% of every State DOT budget.

# MaC Vision

Support members with guidance for the maintenance operations of the evolving transportation system, and addresses new challenges through leadership and innovation.

# MaC Mission

Provides technical and policy guidance to members and supports the AASHTO organization in preserving and maintaining a safe and reliable highway infrastructure that meets the expectations of its customers.

# MaC Goals

1. Be committed to fundamentals while embracing new technologies and processes.
  - DOTs are transitioning from a primary focus on capital programs to a primary focus on preservation and operation
  - Excellence in the fundamentals is essential: new technologies/ processes must be incorporated
2. Be recognized as an organizational leader in the maintenance committee
3. Better coordination between MaC and TSPs
4. Improve participation and attendance by MaC member agencies
5. Become more engaged with other AASHTO communities that have influence on maintenance practices and processes

# Handouts

1. DRAFT Charter
2. DRAFT Strategic Direction and Organizational Structure (2018)
3. DRAFT Strategic Plan (previously adopted September 2015)
4. Research Implementation White Paper



# Focus Areas

	Strategic Focus Areas*					
	Safety	Asset Management	Environment	Workforce Development	Communication	Research
<b>Technical Working Groups</b>	Goal: Promote a safe, reliable highway system in a state of good repair.	Goal: Promote a safe, reliable highway system in a state of good repair; Promote accountability and transparency through performance management	Goal: Promote environmental stewardship and compliance	Goal: Promote a well-qualified and competent workforce.	Goal: Promote the communication of the value and role of maintenance.	Goal: Promote research, innovation and technology.
<b>Pavements</b>	Workforce Work zone Equipment operations Public	Performance measures for maintenance including MAP21 Asset management systems Performance management System preservation Accountability and transparency	Regulation and compliance Climate change mitigation and adaptation strategies Life cycle assessment Sustainability Ecosystems (invasive species and endangered species)	Innovative training Knowledge management Succession planning Safety training Implementation of retention strategies Training for technology Support maintenance academies and NHI maintenance courses	Marketing -value of maintenance -successful strategies Outreach to and education of stakeholders including: -elected officials -general public -executives Research products and implementation	Research needs Research findings Adaptation of technology to maintenance Adaptation of maintenance to technology Innovations
<b>Bridges</b>						
<b>Roadway/Roadside</b>						
<b>Equipment</b>						
<b>Maintenance Operations</b>						

**Primary Activities of each Technical Working Group**

Writing Guidelines and Standards, Updating Manuals, Identifying and Communicating Emerging Practices, Project/Program Delivery, Website maintenance, Newsletters, Basic Governance, Technical Service Program (TSP) Coordination

# 2018 Work Plan Accomplishments

- AASHTO Committee on Maintenance Administrative Resolution was passed at the AASHTO Spring meet
- Title: Establish a Collaborative Review Process for Pavement Preservation Treatment Construction Guidance Specifications  
Pavement Preservation Surface Treatments Tech Brief Review and Comment (micro, slurry seal and chip seals).

That the AASHTO Highways Committee on Maintenance recommends to the Highways and Streets Council of the AASHTO Transportation Policy Forum to assign to the Committee on Materials and Pavements, Technical Subcommittee 5b, for a five year period, the responsibility for reviewing, maintaining, and publishing pavement preservation materials standards and pavement preservation treatment construction guidance specifications to the corresponding publications (e.g. AASHTO Materials Book or AASHTO Construction Guide); and that the COMP Technical Subcommittee 5b add 3 to 5 voting representatives from each of the Committees on Maintenance and Construction for the development and review of preservation construction guidance specifications.

# COMP Technical Subcommittee 5b voting representatives

- Mark E. Woods - TN
- Tracy Nowaczyk - KY
- James Stevenson – TX
- Anita Bush - NV

# 2018 Work Plan Accomplishments

## *SAFETY*

- In cooperation with Maintenance Operations TWG – Panel members: NCHRP Synthesis 49-04 VERY SHORT DURATION WORK ZONES FOR MAINTENANCE AND OTHER ACTIVITIES
  - Please respond to survey (telephone interview) request from 'LuAnn Theiss' <l-theiss@tamu.edu> - TTI

## *COMMUNICATION*

- Updated Pavement TWG contact list

## *ASSET MANAGEMENT/ WORKFORCE DEVELOPMENT*

- 2018 National Conference on Transportation Asset Management Conference Organization/ Workforce Track development

# 2018 Work Plan Accomplishments

## RESEARCH

Rank	Potential Problem Statement	Working Group	Average Score
1	Synthesis on DOTs performing conducting safety hardware in-service performance evaluations	Roadway/Roadside	4.41
2	Guidelines for Decision Making for Repair vs. Replacement of Highway Maintenance Equipment	Equipment	4.07
3	Determining Maintenance Implications of Autonomous Vehicles	Roadway/Roadside	3.83
4	Update the AASHTO Guide for Snow and Ice Control	Maintenance Operations	3.75
5	<b>Determining Pavement Preservation Treatment Lives and Related Pavement Life Extension (NOT SELECTED)</b>	<b>Pavement</b>	<b>3.64</b>
6	Protecting Bridge Approaches During Flooding Events	Bridges	3.57
7	Development of Protocols and Procedures for Selecting, Monitoring and Reporting on Pavement Preservation Treatments for Performance Evaluation	Pavement	3.39
8	20-07 on Winter Adaptive Routing	Maintenance Operations	3.28
9	Guide Construction Specifications for Cold In-Place Recycling (CIR) and Cold Central Plant Recycling (CCPR)	Pavement	2.86
10	Test Protocols for Small Movement Bridge Joints	Bridges	2.85

# Ongoing Research

- **NCHRP 14-37:** Guide Specifications for the Construction of Chip Seals, Microsurfacing and Fog Seals  
<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4044>
- **NCHRP 14-38:** Guide for Timing of Asphalt-Surfaced Pavement Preservation  
[apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4045](http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4045)

# 2019 Research Problem Statements

## TOP 5

<u>RESEARCH TOPICS</u>	-	<u>RANK</u>
	-	<u>FINAL</u>
Highway Network Alternatives to Determining High Stress Pavement Safety Hotspots		26
PCCP Joint Sealing Practices & Performance		25
Guide Construction Specifications for Cold In-Place Recycling (CIR) and Cold Central Plant Recycling		21
Guidelines for Incorporating Maintenance Costs into a TAMP		21
Benefit Cost Analysis of Chip Seal Binder Alternatives		16

Due dates for NCHRP – **Two weeks earlier or more to Jon Wilcoxson**

- NCHRP Regular Projects – Mid-October – **October 1<sup>st</sup> to Jon**
- Domestic Scans – September 29 – **September 15<sup>th</sup> to Jon**
- Synthesis Topics – February 16, 2018 – **February 1<sup>st</sup> to Jon**

# Recommendations

<u>RESEARCH TOPICS</u>	<u>Link to publication</u> Click on “View this PDF” and download it as a guest by entering your e-mail address	<u>Recommendation for AASHTO Publication (Yes or No)</u>
NCHRP Project 01-48: Consideration of Preservation in Pavement Design and Analysis Procedures (published as NCHRP Report 810)	<a href="http://www.trb.org/Publications/Blurbs/172941.aspx">http://www.trb.org/Publications/Blurbs/172941.aspx</a>	
<del>NCHRP Project 14-27: Guide for the Preservation of Highway Tunnel Systems (published as NCHRP Report 816)</del>	<del><a href="http://www.trb.org/Publications/Blurbs/173393.aspx">http://www.trb.org/Publications/Blurbs/173393.aspx</a></del>	
NCHRP Project 14-31: Framework for a Pavement-Maintenance Database System (published as NCHRP Report 820)	<a href="http://www.trb.org/Publications/Blurbs/175480.aspx">http://www.trb.org/Publications/Blurbs/175480.aspx</a>	



# 2019 Work Plan – Top 5

- Support efforts to quantify the contributions of pavement preservation to safety programs.
- Support efforts to quantify the contributions of pavement preservation/ maintenance to risk-based asset management programs.
- Support the development of Contractor and Agency Pavement Preservation Treatments Certificate Programs.
- Support TC3 and other groups in the development of various training and certification programs.
- Pavement Preservation Book Club

# 2018 Resolutions

- Proposed Topics from PTWG Membership

# Pavement Technical Working Group

## NEXT MEETINGS



**Tuesday - 10:00 am to 12:00 pm**

**Wednesday - 10:30 am to 12:00 pm**

***Symphony III***