

**Northeast
Pavement Preservation Partnership
Meeting**

NCPP Update

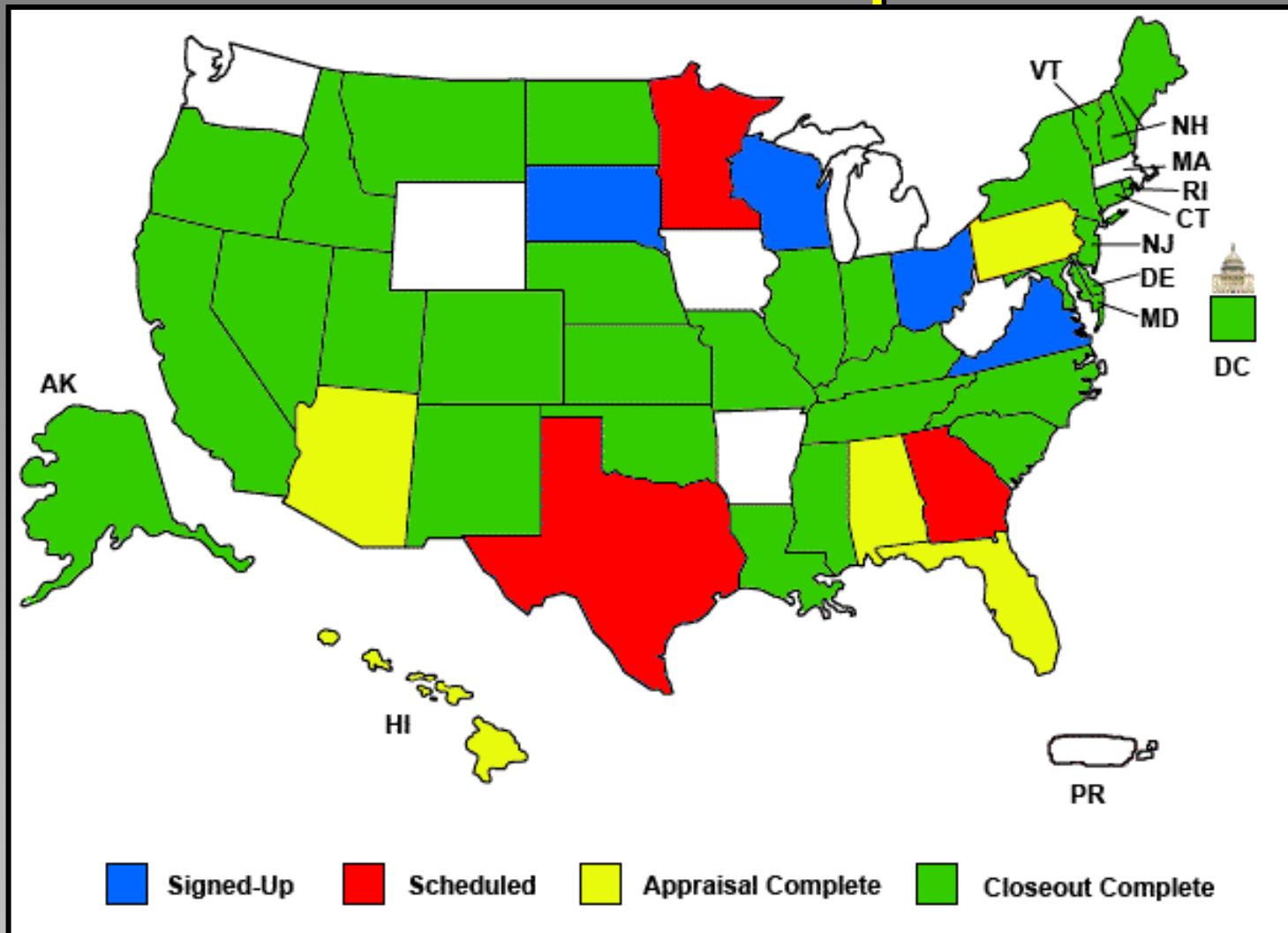
**Larry Galehouse, PE, PS
October 20, 2008
Enfield, CT**



The FHWA Pavement Preservation Technical Appraisal Project

Preliminary Findings

Status Map



Interim Findings

- A recognized need for pavement preservation
- Many agencies in early stage of a preservation program
- Poor experiences with many treatments
- Limited contractor base
- Limited suite of treatments in "toolbox"
- Great need for training and certification.

Interim Findings

(continued)

- Lack preservation program funding
- Internal resistance to change
- Need to expand public education/awareness
- Better tracking and PMS integration needed
- Need for greater FHWA Division support
- "Worst First" project selection paradigm

Background
of the

AASHTO TSP-2



© ncpp

TSP · 2

an Acronym for -

**Transportation System Preservation
Technical Services Program**

TSP · 2

First Resolution Submitted by the Pavements Task Force

- July 14, 2003
- Duluth, Minnesota

“..to address the needs of Member Departments in the implementation of best practices for managing and preserving transportation infrastructure assets and to provide them technical guidance..”

TSP · 2

Resolution Submitted by Subcommittee on Maintenance

- July 1, 2004
- Bismarck, North Dakota

“..to address the needs of Member Departments in the implementation of best practices for managing and preserving transportation infrastructure assets and to provide them technical guidance..”

TSP · 2

Resolution Submitted to Standing Committee on Highways (SCOH) and Approved by the AASHTO Board of Directors

- May 7, 2005
- Galloway, New Jersey

Phases of TSP.2

1. Establish Pavement Preservation Technical Services Program
2. Form Regional Pavement Preservation Partnerships
3. Rollout Bridge Preservation Technical Services Program and Partnerships

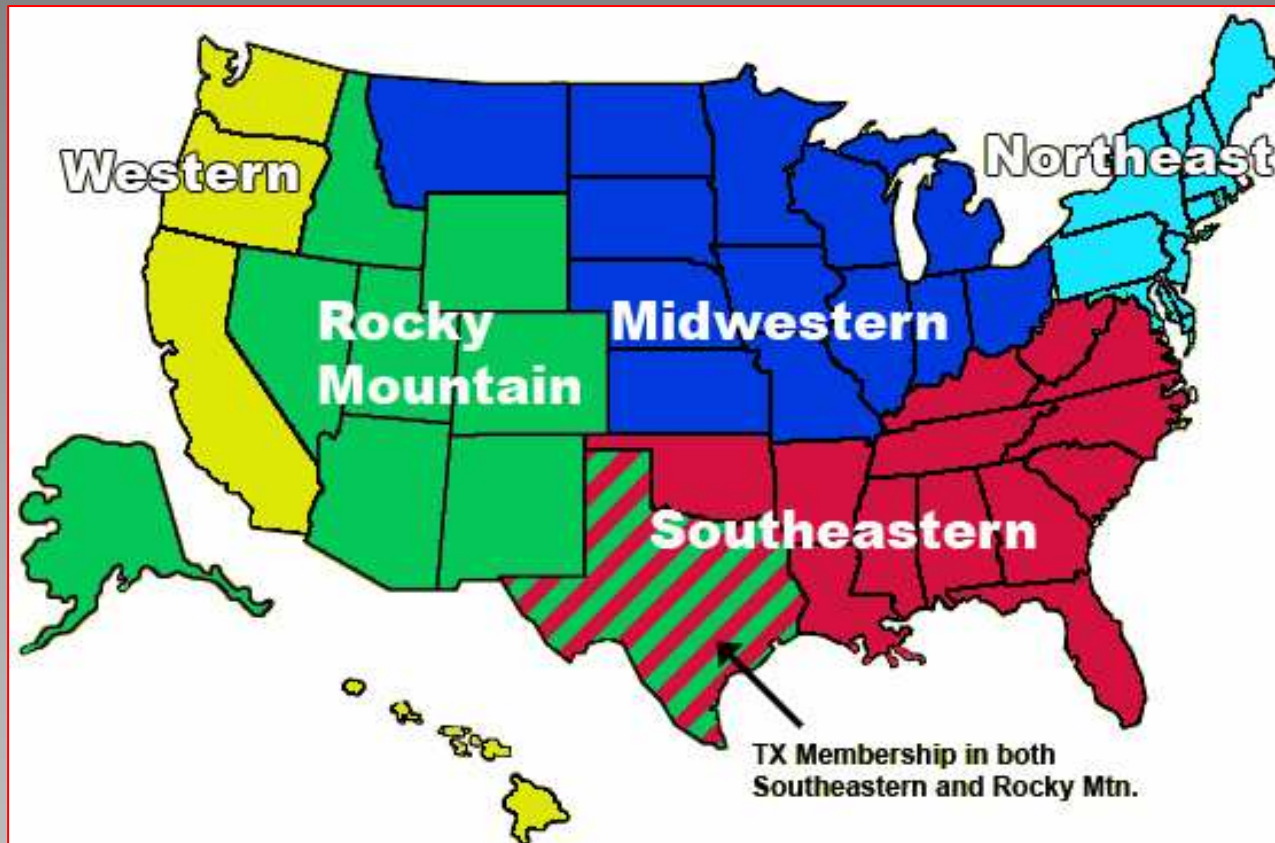
Phase 1: Pavement Preservation Technical Services Program

- ✓ Help Desk Activities
- ✓ Website
- ✓ Speakers Bureau
- ✓ Technical Exchange

Phase 2: Pavement Preservation Regional Partnerships

- ✓ Develop sound preservation practices by sharing information on treatment and repair designs, construction practices, performance measures, and research needs.
- ✓ All partnership members, regardless of affiliation, will be invited to share information.

Regional Pavement Preservation Partnerships



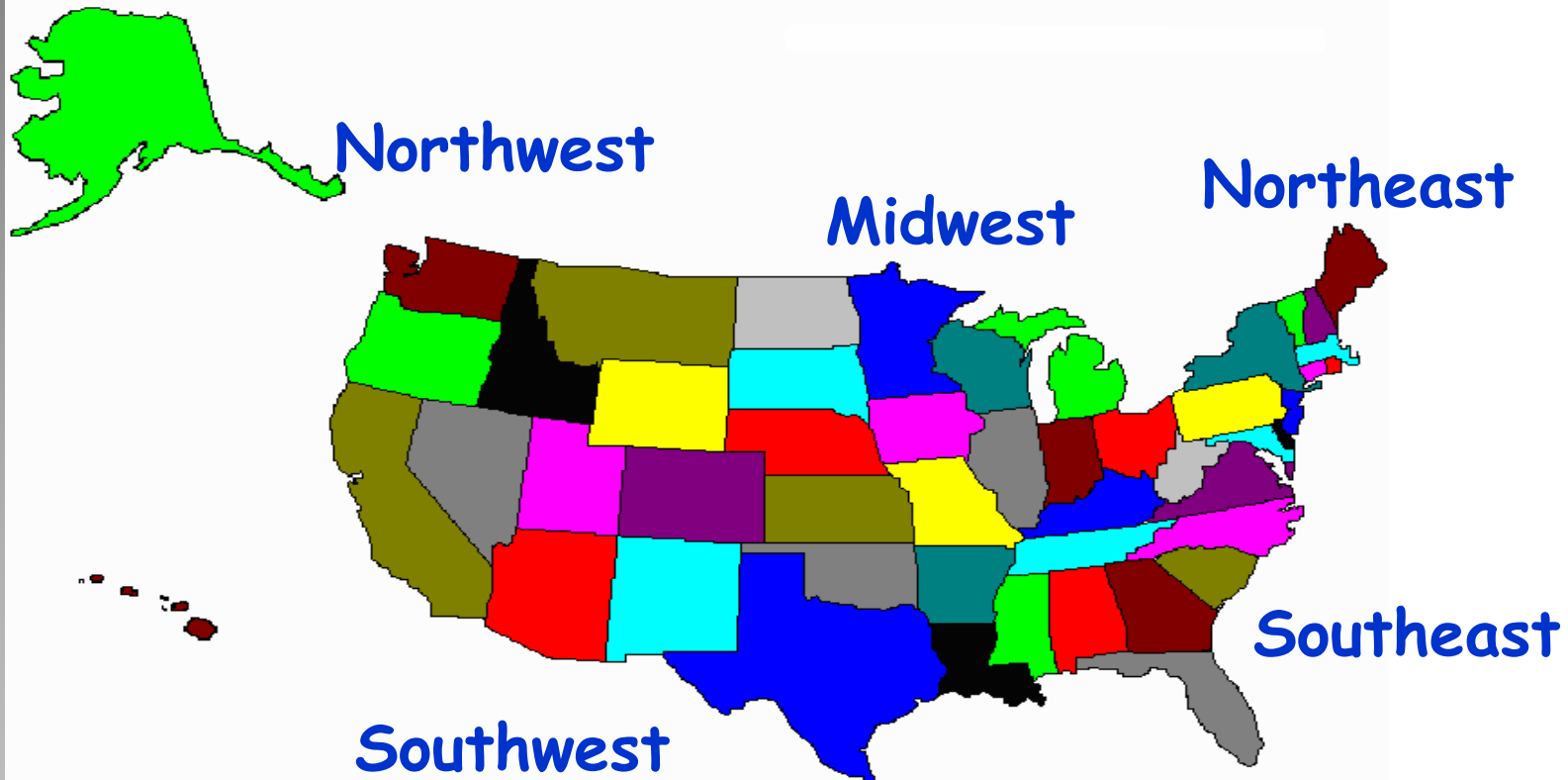
**Pavement Preservation Partnership
Map - May 2008**

Phase 3: Bridge Preservation Technical Services Program and Partnerships

- ✓ Help Desk
- ✓ Website
- ✓ Technical Exchange

October 18, 2008 Approval by SCOH

Regional Bridge Preservation Partnerships



TSP · 2 Oversight Panel

- ✓ Steve Varnedoe, NCDOT, Chair
- ✓ Peter Weykamp, NYSDOT, NASHTO - Rep.
- ✓ John Vance, MDOT, SASHTO - Rep.
- ✓ Roy Rissky, KDOT, Mississippi Valley Rep.
- ✓ Tom Raught, NMDOT, WASHTO Rep.
- ✓ Bruce Johnson, ODOT, Subcommittee on Bridges & Structures
- ✓ Judith Corley-Lay, NCDOT, Subcommittee on Design,
Joint Technical Committee on Pavements
- ✓ Colin Franco, RIDOT, Subcommittee on Materials
- ✓ Leonard Evans, ODOT, Subcommittee on Transportation
Asset Management
- ✓ Jim Sorenson, FHWA Liaison
- ✓ Ken Kobetsky, AASHTO Contact

TSP-2 Strategic Plan

Mission

To serve as the leading resource to the SHA members of AASHTO for advancing and improving highway preservation practices.

Vision

Use highway preservation techniques to achieve sustainable network condition levels that satisfy user needs cost-effectively.

TSP-2 Strategic Plan

Major Elements

- I. Improve Highway Preservation Effectiveness
- II. Facilitate the Exchange of Preservation Information
- III. Assist States with Implementation of Preservation Practices
- IV. Support Improvements to the Knowledge of Highway Preservation

AASHTO
THE VOICE OF TRANSPORTATION

TSP.2

*Is Needed to Improve
the Practice of Preservation*

Polymer Modified Emulsions Technology Deployment Study



Purpose

Currently, no national standards to help guide pavement practitioners on the use of Polymer Modified Emulsions (PME).

Background

- ✓ Sponsored by FHWA Central Federal Lands Highway Division and FHWA Office of Asset Management
- ✓ NCPP contracted to develop best practice guide and model specifications
- ✓ NCPP actively working with a consortium of industry experts

Issues

- ✓ Emulsion physical & chemical properties do not always correlate with performance
- ✓ High distillation temperatures can alter physical properties of asphalt emulsion residue, including polymer structure
- ✓ New testing methods may delay shipping and application of emulsions
- ✓ Superpave PG specs do not address failure mechanisms of emulsion applications

Industry Experts

- ✓ GHK, Inc.
Dr. Gayle King
- ✓ BASF Corporation
Dr. Koichi Takamura & Chris Lubbers
- ✓ PRI Asphalt Technologies
Dr. Laurand Lewandowski
- ✓ Colorado State University
Dr. Scott Schuler

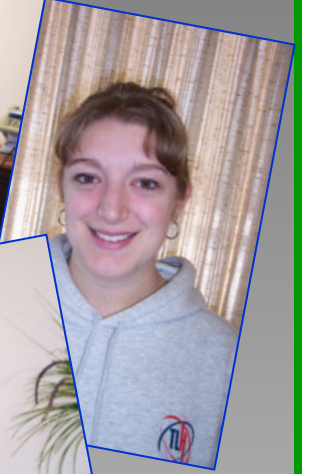
Goal #1

- ✓ Develop performance-related specifications for polymer modified:
 - Chip Seals
 - Slurry Systems
(includes Microsurfacing)
 - Cape Seals

Goal #2

- ✓ Create a framework for performance-based asphalt emulsion specifications that address problematic issues.
 - New Residue Recovery Method
 - New Tests to Measure Polymer Modification
 - Longer Time Necessary for Testing
 - Specifications that Reflect Actual Field Performance

TSP-2 Staff



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Questions ?

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Thank You !



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