

# National Center for Pavement Preservation

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Kentucky Preventive Maintenance Alliance  
December 6, 2023

# ***QUICK FACTS ON NCPP***

- NCPP was established in 2003 through collaborative efforts of Michigan State University (MSU), FHWA, and FP2 Inc.
- Intent is to provide outreach, education, and research needed to advance state of preservation practice and knowledge.

# QUICK FACTS ON NCPP

- Currently administering AASHTO Technical Services Programs
  - Pavement Preservation
  - Bridge Preservation
  - Equipment Management



# AASHTO Technical Services Program

- ▶ ~~AASHTO TSP2~~ ***PRESERVATION MANAGEMENT***
  - Initiated as an efficient means to disseminate information for preserving the nations infrastructure



# Online Resources

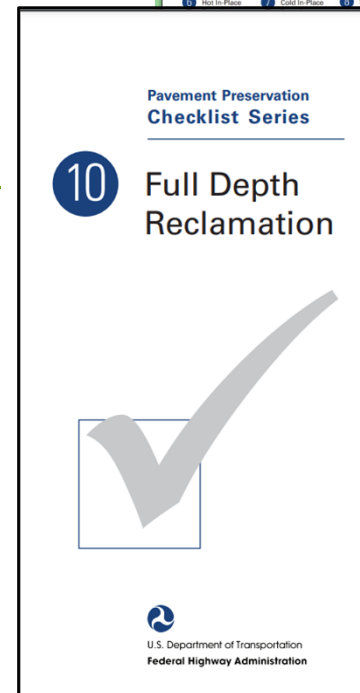
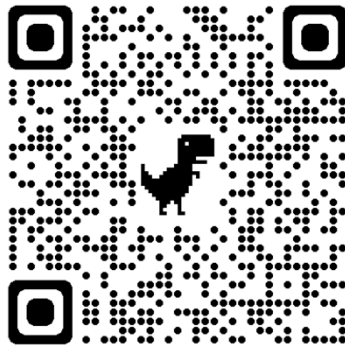
## Pavement Preservation Checklist Series

➤ 23 total treatments included

<https://tsp2pavement.pavementpreservation.org/technical/preservation-checklist/>

### Materials Checks

- A sufficient number of cores and samples are obtained for mix design.
- Samples are evaluated for consistency over the length of the project.
- The recycling agent is compatible with the materials and processes. The recycling agent may be
  - Emulsified asphalt
  - Foamed (expanded) asphalt
- Recycling additives can be added in small amounts to improve mix properties, if indicated by the mix design. Recycling additives may be lime, hydraulic cement, or new aggregates.





# Emulsion Task Force (ETF)

517-432-8220 | ncpp@egr.msu.edu

## TSP2 Emulsion Task Force

About ETF ▾

Meetings

Specifications ▾

NCHRP 20-44(26)

<http://tsp2-etf.org/>

- ETF Website includes
  - AASHTO Specs
  - Construction Guides
  - Best Practices Guides
  - Training



## Specifications

### Draft Construction Guide Specifications

- Construction Guide for 406 Emulsified Chip Seal [2020-09-02] (V-2)
- Construction Guide for 407 Hot Applied Chip Seal [2020-09-04] (V-3)
- Construction Guide for 408 Micro Surfacing [2020-09-02] (V-6)
- Construction Guide for 410 Emulsified Asphalt Fog Seal [2020-09-04] (V-2)

### Construction Guide Highlights

- Chip Seal Construction Guide Highlights (V1.1)
- Fog Seal Construction Guide Highlights (V1.1)
- Micro Surfacing Construction Guide Highlights (V1.1)

### Draft Design Specifications

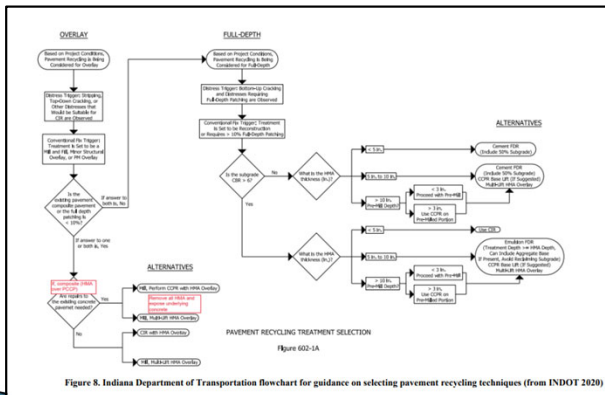
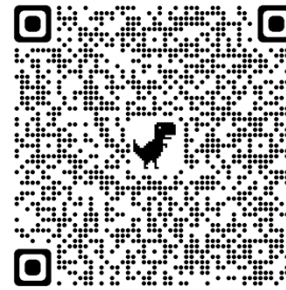
- Design for Chip Seals [2016-05-17] (V-1 Final)
- Design for FDR [2018-07-25]
- Design for Fog Seal [2016-11-04] (V-1 Final)
- Design for Micro Surfacing [2016-07-11] (V-1 Final)
- Design for Sand Seal [2017-11-14] (V-1 Final)
- Design for Sand Seal [2017-12-19] (V-2 Final)
- Design for Scrub Seal [2017-06-02] (V-1 Final)
- Design for Slurry Seal [2016-11-13] (V-1 Final)
- Design for Tack Coats [2016-11-04] (V-1 Final)
- Design for UTBWC [2019-06-04] (V-4.0 Final)

### Draft Materials Specifications

- Materials for Chip Seals [2016-07-11] (V-1 Final)
- Materials for Emulsified Asphalt Scrub Seal [2020-04-23] (V-2 Final)
- Materials for FDR [2018-07-25] (V-1 Final)
- Materials for Fog Seal [2016-11-04] (V-1 Final)
- Materials for Micro Surfacing [2016-07-11] (V-1 Final)

# Emulsion Task Force (ETF)

- Hot off the press!
- Best Practice Guide
  - Cold Central Plant Recycling
  - Cold In Place Recycling



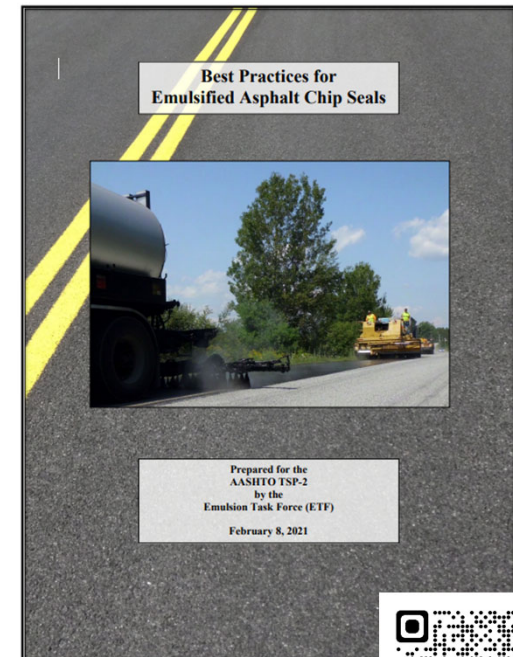
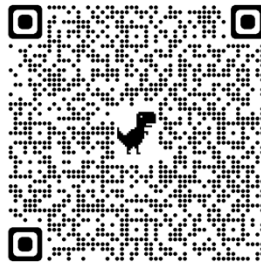
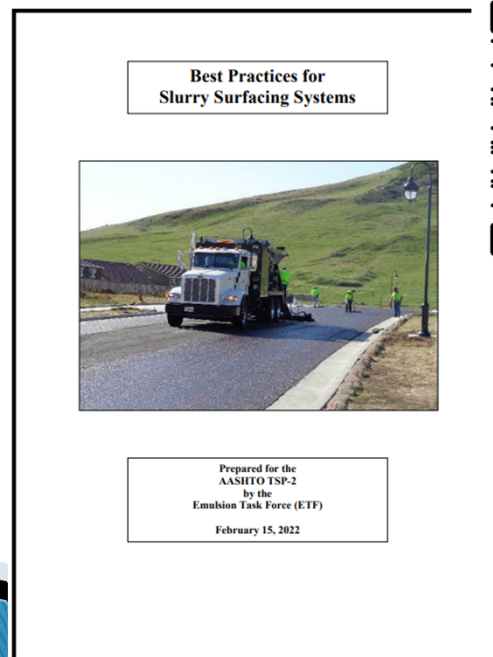
## Best Practices for Construction of Cold Central Plant Recycling and Cold In-Place Recycling of Asphalt Pavements

Prepared for the  
AASHTO TSP-2  
by the  
Emulsion Task Force (ETF)

June 27, 2023

# Emulsion Task Force (ETF)

- ETF also has best practice guides for
  - Chip Seal
  - Slurry Surfacing Systems





# Emulsion Task Force (ETF)

- Become a “Friend” of the ETF to receive updates
- Email [ncpp@egr.msu.edu](mailto:ncpp@egr.msu.edu)
- Next meeting – December 12-13, 2023

## TSP2 Emulsion Task Force

Search

About ETF ▾

Meetings

Specifications ▾

NCHRP 20-44(26)

Training

Group Notes

## Friends

### ETF Friends

| Last Name | First Name | Organization                             | Affiliation       |
|-----------|------------|--|-------------------|
| Awwad     | Nathan     | Indiana DOT                              | IN DOT            |
| Senger    | John       | Illinois DOT                             | IL DOT)           |
| Carlson   | Kevin      | Jebro, Inc.                              | Emulsion Producer |
| Cowley    | Shelly     | Ergon / Paragon Technical Services, Inc. | Emulsion Producer |
| Milan     | Russell    | Michigan Paving and Materials Co.        | Emulsion Producer |
| Smith     | Stephanie  | Flint Hills Resources                    | Emulsion Producer |

# *Pavement Preservation Councils*

- **Florida Pavement Preservation Council**
- **Georgia-Carolina Pavement Preservation Council**
- **Missouri Pavement Preservation Council**



# *In Person Training*

- **Preservation Concepts**
  - **Introduction to Pavement Preservation**
  - **Asphalt Pavement Surface Distresses**
  - **Asphalt Preservation Processes**
  - **Putting Preservation into Practice**



# *In Person Training*

- **Cold In Place Recycling**
  - **CIR Basics**
  - **CIR Equipment**
  - **CIR Process**





# *In Person Training*



- **Chip Seal Training and Equipment Calibration**
  - **Introduction to Chip Seal**
  - **Chip Seal Materials**
  - **Equipment Best Practices**
  - **Construction Best Practices**
  - **Optional Distributor Review and Calibration (Hands On)**
  - **Optional Chip Spreader Review and Calibration (Hands On)**

# *In Person Training*



- **Putting Preservation to Work in the Real World**
  - **Definition of Pavement Preservation**
  - **Why develop a preservation mindset**
  - **Using Remaining Service Life to check your progress**
  - **Comparing Preservation to Preventive Maintenance**
  - **Getting Started!**

# *In Person Training*

- **Preservation Treatment Certification Training**
  - **Slurry Surfacing**
  - **Chip Seal**
  - **Crack Treatments**



# *Preservation Training Survey*

- **NCPP has been looking at Pavement Preservation Training**
  - **Survey**
  - **Report**
  - **Collaboration**
- **Project Goal**
  - **Review existing training and education programs**
  - **Identify gaps and proficiency requirements for Agency and Industry**
  - **Harmonize overall syllabus for overall consistency**



# *MPPP Skill Share Webinar Series*

## ➤ Last Webinar – November 9, 2023

### ➤ Previous Topics

- Chip Seal Best Practices
- Utilizing Spray Pavers
- Pavement Management Data
- Scrub Seals
- Cape Seals

### ➤ Recording and PPT's posted at:

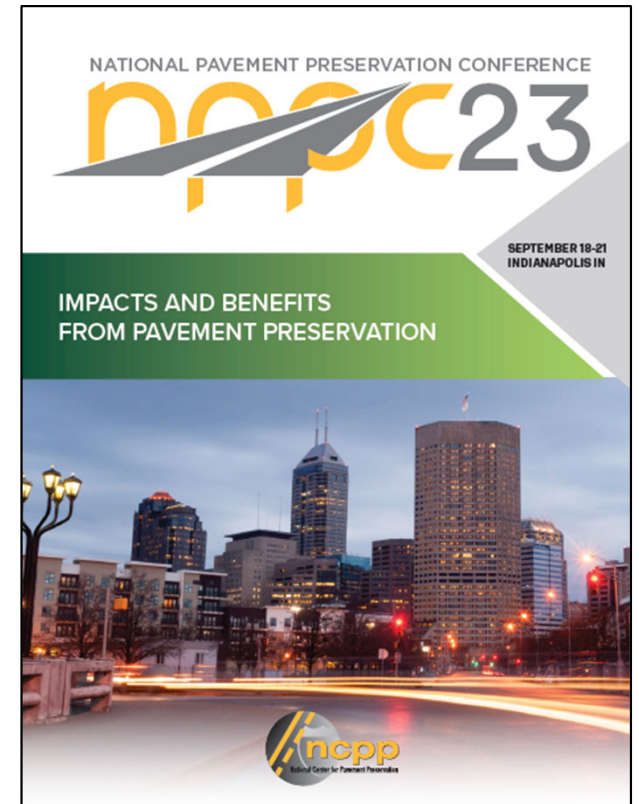
<https://tsp2pavement.pavementpreservation.org/library/videos-powerpoint-presentations/training-education-research/>



# *National Pavement Preservation Conference*

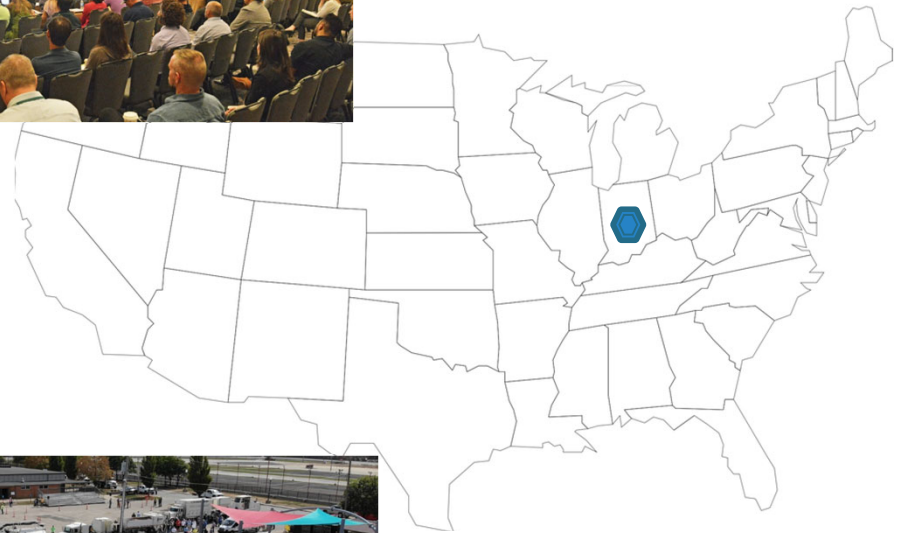
**National Pavement Preservation Conference**  
**September 18<sup>th</sup> – 21<sup>st</sup>, 2023**  
**Indianapolis, IN**

<https://nationalpavement2023.org/>



# National Pavement Preservation Conference

- ▶ September 18–21, 2023
- ▶ Indianapolis, Indiana
- ▶ Over 660 Attendees
  - ~340 Industry and Academia
    - 47 National Members
  - ~320 Agency and Federal
    - 188 DOT's
    - 119 LPA's
    - 11 FHWA
- ▶ Over 80 technical and plenary presentations



National Pavement Preservation Conference

**npcc23**

IMPACTS AND BENEFITS FROM PAVEMENT PRESERVATION  
September 18-21 • J.W. Marriott Hotel • Indianapolis, Indiana

# 2024 Regional Pavement Preservation Partnership Meetings



March 19–21, 2024  
▶ Hot Springs, Arkansas



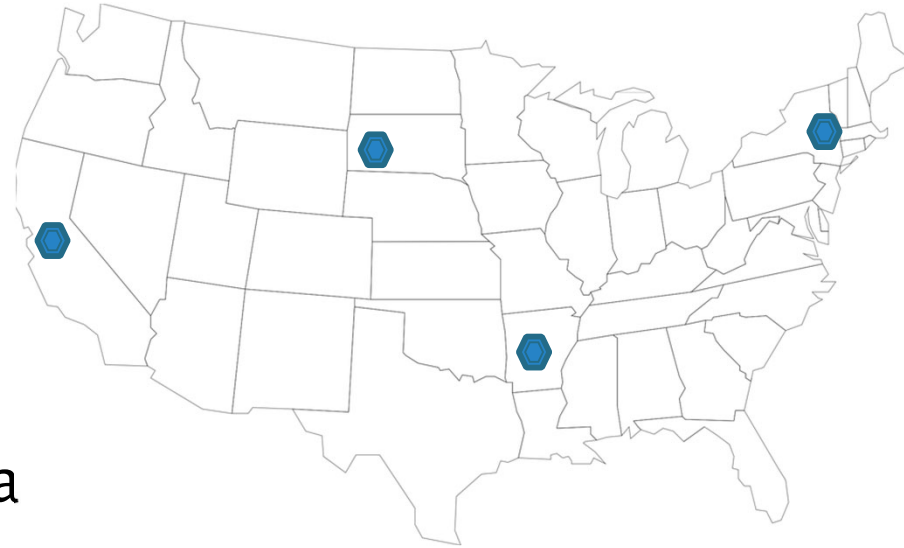
May 21–23, 2024  
▶ Albany, New York



October 2024  
▶ Deadwood, South Dakota



November 2024  
▶ Sacramento, California



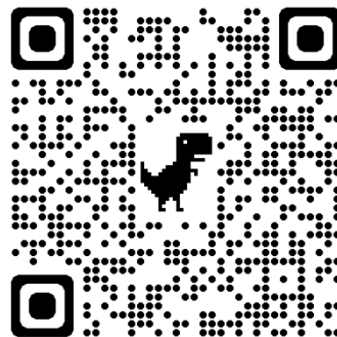


# National Bridge Preservation Conference

- **Multi-Track Sessions**
- **Informative Presentations**
- **Outdoor Demonstrations**
- **Networking**

September 2024 in Salt Lake City

<https://www.nbppc2024.org/>



plan now to attend

NATIONAL BRIDGE PRESERVATION PARTNERSHIP CONFERENCE 2024

**nbppc**

BRIDGE PRESERVATION: Innovation for Infrastructure Resiliency

SEPTEMBER 10th -13th, 2024 GRAND AMERICA HOTEL · SALT LAKE CITY, UTAH  
[www.nbppc2024.org](http://www.nbppc2024.org)

SR-95 over the Colorado River  
Garfield County, Utah

|  |  |   |
|--|--|---|
| PRACTITIONERS & TECHNICAL EXPERTS NETWORKING & SHARING | MULTIPLE TECHNICAL TRACKS                              | BRIDGE PRESERVATION PARTNERSHIP COLLABORATION     |
| <b>BEST PRACTICES</b>                                  | CASE STUDIES: EFFECTIVENESS OF PRESERVATION TREATMENTS | PROFESSIONAL DEVELOPMENT HOURS                    |
| NEW MATERIALS, EQUIPMENT, TECHNOLOGIES, & RESEARCH     | WORKSHOPS FOR DEVELOPING PRESERVATION TOOLS            | LIVE DEMONSTRATIONS! BRIDGE PRESERVATION PRODUCTS |

# *Preservation Treatment Certification*

- **Three Treatments – Agency and Contractor**
  - Crack Treatment
  - Chip Seal
  - Slurry Systems
- **Overall have certified nearly 700 employees**
- **Currently >150 certified employees**



➤ <https://www.pavementpreservation.org/pavement-preservation/certification/>



# *Preservation Treatment Certification*

## ➤ **How to obtain your certification?**

- Need to complete online ISSA training for the treatment you are going for
- This training is free of charge

## ➤ **Register to take the exam**

- In person exams offered at various meetings throughout the year
  - ISSA Slurry Workshop – January 2024
  - 2024 Regional Pavement Preservation Partnership Meetings
- Test can be taken online
- Spanish language versions available
- Cost = \$200/treatment Agency, \$325 Contractor/Consultant

## ➤ **Certifications are valid for 3 years**

# *How Agency Employee Certification Benefits the Agency*

- ▶ Benefits of certifying your Agency employees:
  - They understand how to design and specify preservation projects.
  - They understand the points of the Contractor Quality Management Plan.
  - They can immediately identify when the contractor starts having issues and can suggest solutions to change the trajectory of the project.



# ***Contractor Company Certification***

- ▶ Contractors are Certified Yearly
- ▶ Contractor must provide a statement from executive leadership that commits to the program.
- ▶ They Must Prove:
  - ISSA Web Based Training and/or
  - NCPP Training and/or
  - Internal Training

# *How Contractor Certification Benefits the Agency*

- ▶ Benefits to you as an Agency for requiring a Contractor Company Certification:
  - Assurance that the majority of the contractor employees are trained.
  - A good percentage of those employees have passed an 80-question test.
  - The executive team commits to quality.
  - The company has a Quality Management Plan that tells the employees what to do and what not to do in many situations. The plan also tells them what to do when they have a problem.
    - The project Quality Management Plan should be submitted to the agency during the pre-construction process.

# *Question – Stripping with Surface Treatment?*



# *Secrets to a Long, Healthy Life.....*

1. Always stop eating when you are still a little hungry
2. Always wake up when you are still a little sleepy
3. Always stop talking when you still have a little bit to say

# Questions???



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