



Small Agency Pavement Preservation Training

NATIONAL PAVEMENT PRESERVATION CONFERENCE
npoc23
IMPACTS AND BENEFITS FROM PAVEMENT PRESERVATION

ncpp
National Center for Pavement Preservation
MICHIGAN STATE UNIVERSITY

AASHTO
TSP 2
PAVEMENT PRESERVATION

ROCKY MOUNTAIN WEST
PAVEMENT PRESERVATION PARTNERSHIP

SOUTHEAST
PAVEMENT PRESERVATION PARTNERSHIP

MIDWESTERN
PAVEMENT PRESERVATION PARTNERSHIP

NORTHEAST
PAVEMENT PRESERVATION PARTNERSHIP

- ▶ Pavement
- ▶ Drainage
- ▶ Utilities
- ▶ Right-of-Way
- ▶ Permitting
- ▶ Weed Control
- ▶ Safety



How can an Small
Agency Engineer
juggle all of this?



simplify.



Small Agency Pavement Preservation and Pavement Management Training

- ▶ Offered through the LTAP program
- ▶ One-day training
- ▶ Covers
 - Preservation basics
 - Pavement Performance Curves
 - Distresses and Evaluation
 - Preservation Treatments
 - Cost Benefit Analysis
 - Additional Resources



Target Audience

- ▶ County Engineers
- ▶ City/Town Engineers
- ▶ Public Works Directors
- ▶ Roadway Managers
- ▶ Design Engineers
- ▶ Pavement Managers
- ▶ Senior Technicians
- ▶ Others



What is Covered?

- ▶ What is performance?
- ▶ Right Road
- ▶ Right Treatment
- ▶ Right Time
- ▶ Pavement Curves
- ▶ Keep good roads good

Preservation Basics

- ▶ Identify Distresses
- ▶ Distress Severity
- ▶ Types of Condition Surveys
- ▶ Automated vs Windshield
- ▶ Common measurements of pavement conditions

Distress and Evaluation

What is Covered?

- ▶ Plotting pavement condition curves
- ▶ Comparing networks pavements
- ▶ Establishing pavement families
- ▶ Pavement family deterioration curves

Pavement Condition Curves

- ▶ Common asphalt preservation treatments
- ▶ Advantages and Disadvantages of different treatments
- ▶ Matching treatments to distresses

Preservation Treatments

What is Covered?

- ▶ Factors that affect project selection
- ▶ Compare treatments base on cost-effectiveness
- ▶ Strategies for treatments selection

Cost Benefit Analysis

- ▶ Introduction to Lee Road 159 Online tool
- ▶ RoadResouce.org
- ▶ ETF Training coving AASHTO Standards

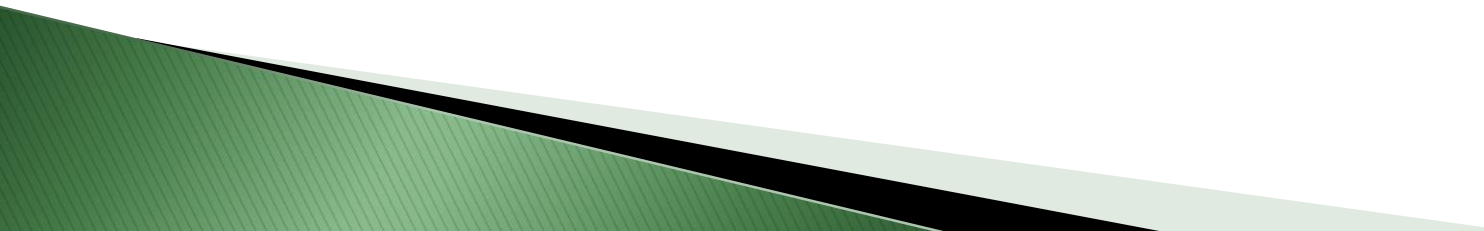
Additional Resources

Intended Learning Outcomes

- ▶ How to identify asphalt pavement distresses,
- ▶ List pavement preservation treatments,
- ▶ Understand concepts and expectations for project selection,
- ▶ Be familiar with guide specifications for some treatments,



Intended Learning Outcomes

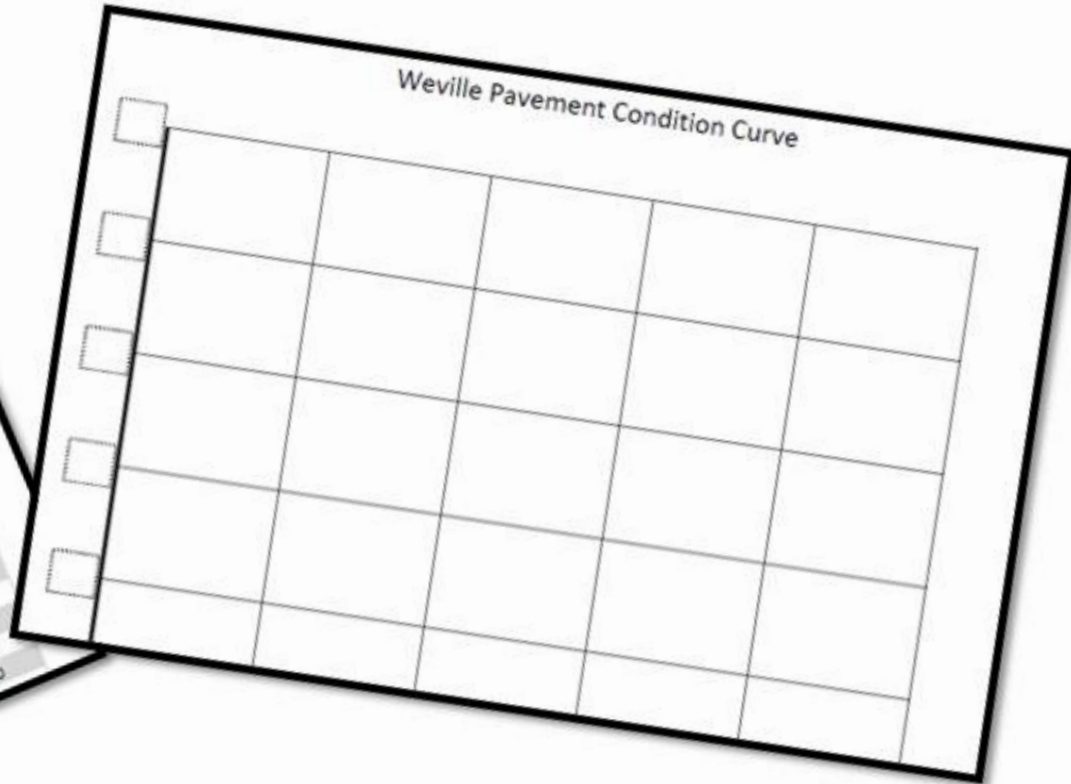
- ▶ Identify simple and complex methods for pavement condition data collection,
 - ▶ Plot pavement condition curves over time,
 - ▶ Identify trends in pavement families to predict pavement performance over time,
 - ▶ Understand preservation timing and cost–benefit offsets.
- 

Workshop Time

- Given a set of pavement data,
- Plot pavement curve(s) to answer upcoming questions

Weville Pavement Data

Route	Year of Const	AADT	Year of Survey	Age	Cracking	Ride	Rutting	Composite
CR 5	1998	6250	2019	21	0.5	3.0	4.8	47
CR 119	2006	960	2019	11	3.1	3.7	4.6	73
CR 54	2011	3260	2019	8	4.2	4.5	4.9	89
CR 382	2009	8570	2019	1	5.0	4.8	5.0	98
CR 159	2014	9110	2019	5	4.1	3.2	3.9	74
CR 280	2013	10190	2019	6	4.6	4.6	5.0	93
CR 18	2007	820	2019	12	3.8	1.9	4.8	94
CR 21	2007	7960	2019	12	4.0	3.2	4.7	65
CR 41	2011	7780	2019	8	3.5	4.6	4.5	76
CR 59	1999	1220	2019	20	1.1	1.7	4.3	83
CR 76	2016	1990	2019	3	4.7	4.8	4.5	40
CR 382	2004	3020	2019	15	2.5	1.9	4.3	96
CR 11	2001	1650	2019	18	2.7	2.1	4.1	52
CR 29	2009	11230	2019	10	3.9	3.4	4.5	56
CR 14	2009	8290	2019	10	3.7	3.2	4.7	77
CR 768	2010		2019	9	3.8	4.0	4.4	80



Work



Together

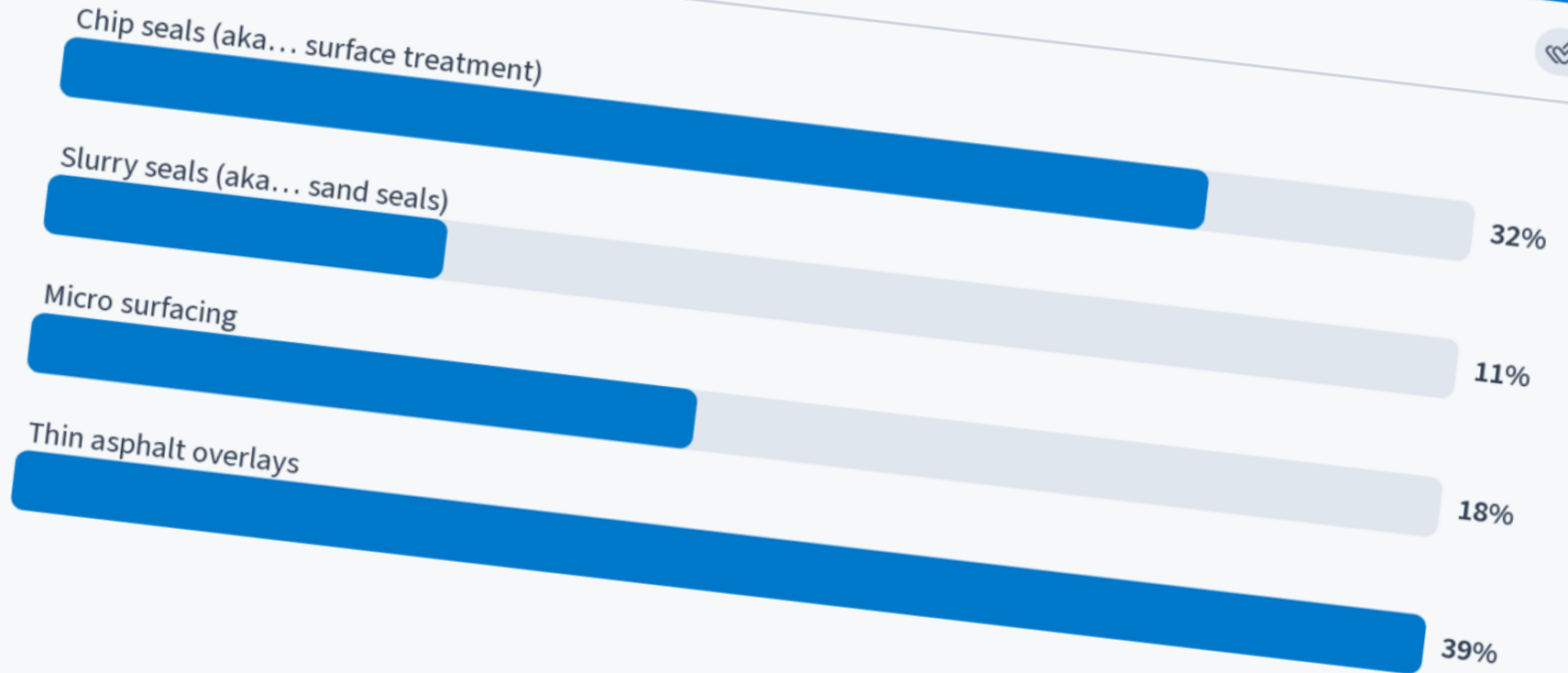
Connected

Survey

When poll is active
Text

Q4. What preservation treatments do you use?

136



Additional Resources Shared

Roadresource.org



[ABOUT US](#)

[TREATMENT TOOLBOX](#)

[NETWORK OPTIMIZATION](#)

[PAVEMENT PRESERVATION](#)

[RECYCLING](#)

[EMULSIONS](#)

[RESOURCES](#)

Build A Better Network

With the Optimized Approach



IMPROVE YOUR
OVERALL NETWORK
CONDITION



GET THE LOWEST
LIFE CYCLE COST
PER ROAD



MAXIMIZE
YOUR ECO
BENEFIT

Additional Resources Shared

tsp2-etf.org

TSP2 Emulsion Task Force

- About ETF
- Meetings & Presentations
- Specs & Checklists**
- NCHRP 20-44(26)
- Training
- Members
- Site Map

Home Page



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

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- Checklists
- Specifications**
- Best Practices

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Meeting 519 D | Meeting 520 | Meeting 521 | Meeting 519

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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 \(V1.1\)](#)

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Training

Fog Seal Training - Power Point - with voice

Chip Seal Training - Power Point - no voice

Chip Seal Training - Power Point - with voice

Micro Surfacing Training - Power Point - with voice

TSP2
EMULSION
Task Force

Fog Seal

AASHTO Construction Guide Specification 4.10

Construction
Guide
Specification

Micro Surfacing

TSP2
EMULSION
Task Force

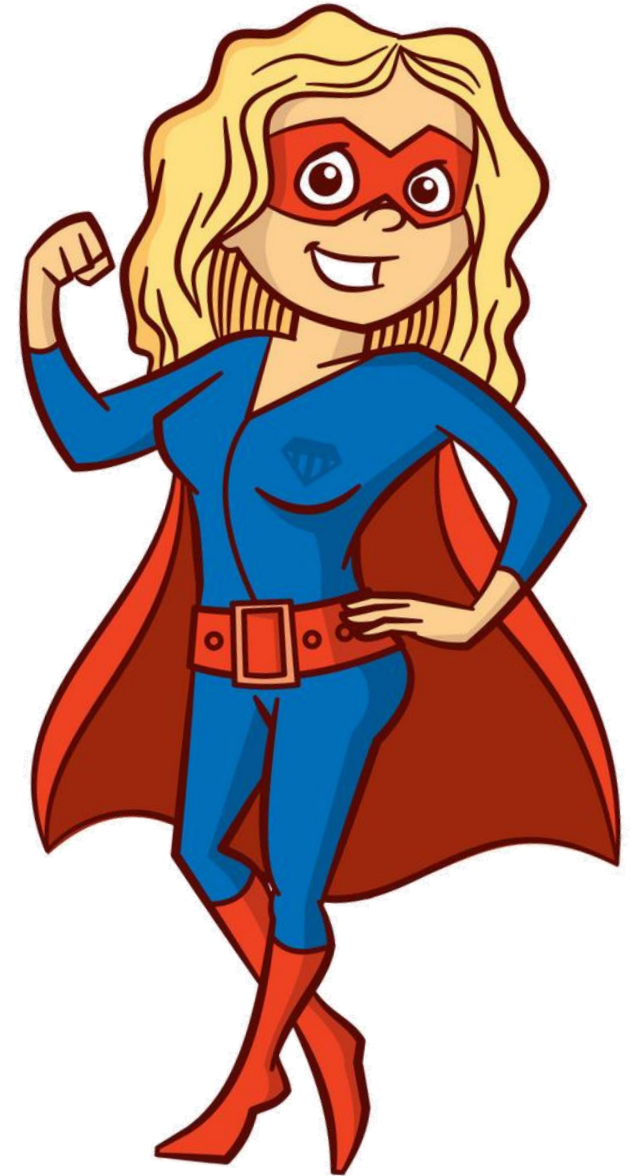
Emulsified
Asphalt
Chip Seal

Construction Guide



Summary

- ▶ Understand that small agencies have many responsibilities
- ▶ Simplify
- ▶ Resources exist, help people find them
- ▶ Be a champion
- ▶ Engage a Champion





Questions

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