

NCPP TRAINING AND CERTIFICATION UPDATE

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Today's Topics

- ▶ Rollout of National Training Survey Results
- ▶ NCPP Training and Certification Program.

Results Review of 2023 NCPP Education / Training Survey

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Project Goal

- ▶ Collaborate with Pavement Preservation stakeholders to review existing training and education programs. Identify training gaps and proficiency requirements for Agencies and Industry that should be filled by curriculum updates. Harmonize the overall national training syllabus so language is consistent with current specification and practice.
- ▶ NCPP is NOT interested in controlling, regulating or approving any groups efforts. We are only here to facilitate communication and collaboration.

Implementation Plan

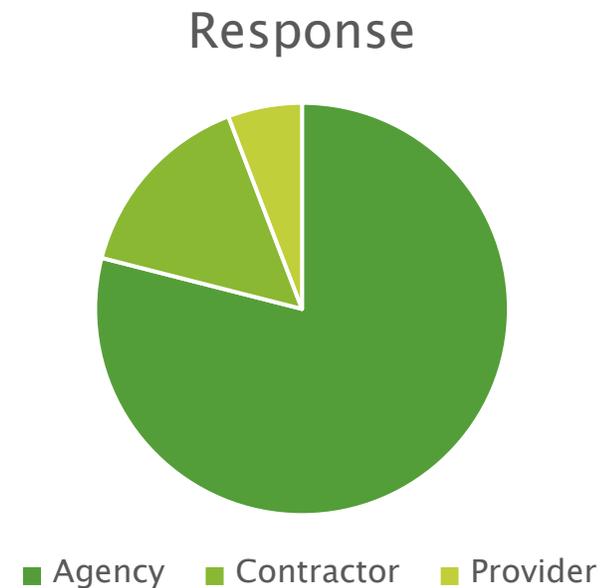
- ▶ Survey
- ▶ Evaluate
- ▶ Compare and Contrast
- ▶ Determine Gaps and Inconsistencies
- ▶ Collaborate to Close Gaps

Survey

- ▶ In January of 2023, NCPP sent out detailed questionnaires to:
 - Training and Education Providers
 - Trade Associations
 - LTAP's
 - FHWA
 - Regional Preservation Organizations
 - Suppliers
 - Training and Education Consumers
 - Agencies – Federal, State and Local
 - Contractors
 - Trade Associations
 - TSP2 Members

Overall Survey Response

- ▶ Responses
 - Agency = 109 or 78.99%
 - Contractor / Agency Applicator = 21 or 15.22%
 - Provider = 8
- ▶ Total = 138 individuals



Average Respondent

- ▶ State DOT Asset Manager with 13.5 years of experience that is somewhat satisfied with available training opportunities (3.5 out of 5). They believe that DOT Inspectors and Contractor Project Managers and Materials Technicians need the most preservation training.

Agency Responses

- ▶ **Question** – On a scale of 1 to 5, with 1 being completely Unsatisfied and 5 being Completely Satisfied; how satisfied are you with **quantity** of available PP training and educational opportunities?
- ▶ Average Score = **3.5** out of 5
- ▶ There were 16 Comments.

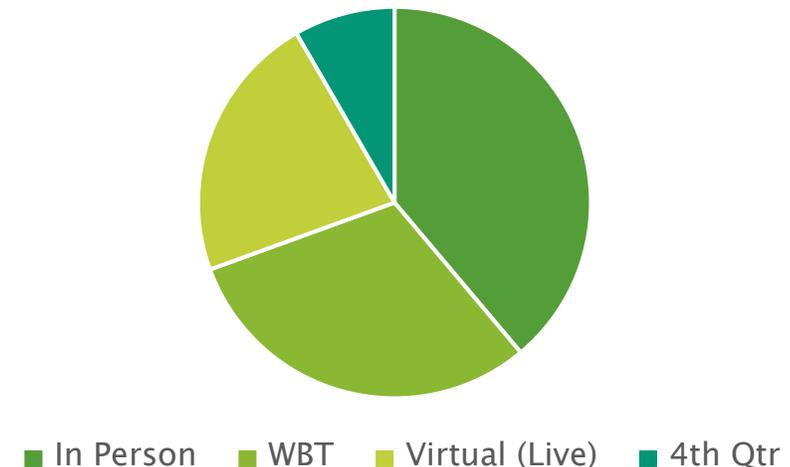
Agency Responses

- ▶ **Question** – On a scale of 1 to 5; how satisfied are you with the **content** (relevance, quality) of available training and educational opportunities?
- ▶ **Average Score = 3.6 out of 5**
- ▶ **There were 17 Comments.**

Agency Responses

- ▶ **Question** – What training / educational format works best for you and your team?
- ▶ **Result** –
 1. In-Person – 28
 2. Web Based Training – 22
 3. Virtual (Live) – 16
 4. Virtual (Rec.) – 6

What Training / Educational Format Works Best



Agency Responses

- ▶ **Question** – Who in your agency needs more effective PP training and education? Please rank 1 through 5; lowest need to highest need.
- ▶ **Score** – Most to least amount of training
 1. Inspectors – 233
 2. Field Staff – 223
 3. Designers – 217
 4. Materials – 192
 5. Asset Managers – 177



Agency Responses

- ▶ **Question** – What important training and educational needs are not being met?
 - 36 Individual Responses
 - We have broken these responses into two categories.
 - Staff Alignment: Who in the agency the training would be directed to.
 - Topic Alignment: What preservation topics are most relevant to the response.
 - Note – Responses may have been relevant to more than one Staff or Alignment.

Training Alignment

Staff Alignment						
Most					Least	

Original Score	Construction Inspectors	Field Staff	Designer / Specifier / PM	Materials Lab	Asset Managers
		5	4	3	2
Count	22	22	26	8	20
Percentage	34%	34%	41%	13%	31%
Score	4	4	5	1	2

Training Alignment

		Staff Alignment				
		Most				Least
Original Score		Construction Inspectors	Field Staff	Designer / Specifier / PM	Materials Lab	Asset Managers
			5	4	3	2
Count		22	22	26	8	20
Percentage		34%	34%	41%	13%	31%
Score		4	4	5	1	2

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Percentage		34%	34%	41%	13%	31%
Score		4	4	5	1	2

*Based on 64 responses. Some responses fit multiple categories

Training Alignment

		Staff Alignment				
		Most				Least
Updated Score		Designer / Specifier / PM	Construction Inspectors	Field Staff	Asset Managers	Materials Lab
		5	4	4	2	1

Topic Alignment

		Topic Alignment				
		Most				Least
		Inspection	Pavement Management	General Knowledge	Design	Materials
Count		22	22	22	19	7
Percentage		34%	34%	34%	30%	11%
Score		5	5	5	2	1

*Based on 64 Responses. Some responses fit multiple categories

Agency Responses

- ▶ **Question** – In your experience, which contractor employees need more effective PP training and education? Please rank 1 through 5; lowest need to highest need.
- ▶ **Score** – Most to least amount of training
 1. Field Leaders (Foremen / Operator) – 261
 2. Field Personnel – 229
 3. Superintendents – 204
 4. Materials – 204
 5. Estimators - 164

Contractor / Applicator Responses

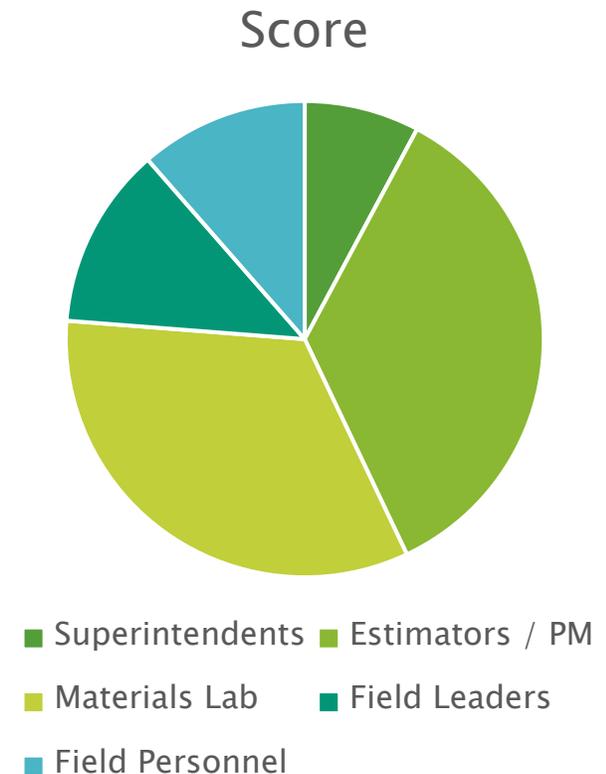
- ▶ **Question** – On a scale of 1 to 5, with 1 being completely Unsatisfied and 5 being Completely Satisfied; how satisfied are you with **quantity** of available PP training and educational opportunities?
- ▶ **Average Score** – 3.8.
- ▶ There were seven comments

Contractor / Applicator Responses

- ▶ **Question** – On a scale of 1 to 5, with 1 being completely Unsatisfied and 5 being Completely Satisfied; how **satisfied** are you with the content (relevance, quality) of available training and educational opportunities?
- ▶ Average Score = **3.8** out of 5
- ▶ There were four comments related to this question

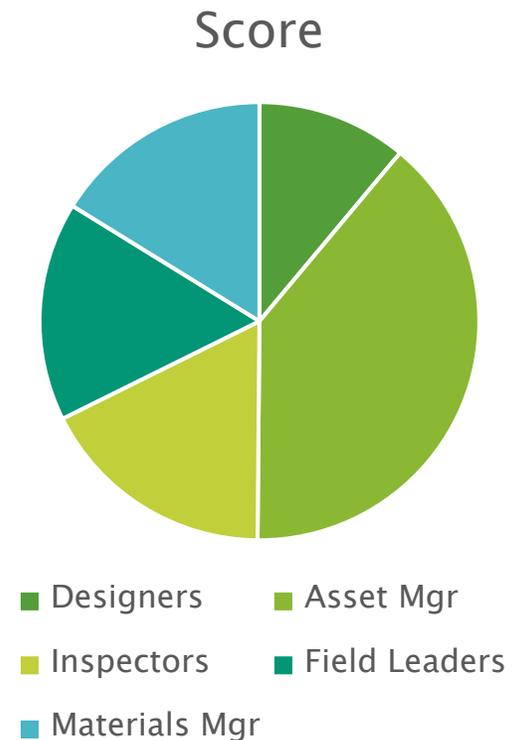
Contractor / Applicator Responses

- ▶ **Question** – Who in your team needs more effective PP training and education? Please rank 1 through 5; lowest need to highest need.
- ▶ **Score** – Most to least amount of training
 1. Superintendents - 43
 2. Estimators / Project Managers– 37
 3. Materials Lab – 35
 4. Field Leaders – 13
 5. Field Personnel – 12



Contractor / Applicator Responses

- ▶ **Question** – In your experience, which agency employees need more effective PP training and education? Please rank 1 through 5; lowest need to highest need.
- ▶ **Score** – Most to least amount of training
 1. Designers/Specifier/PM - 36
 2. Asset Managers - 29
 3. Inspectors - 13
 4. Field Leaders – 12
 5. Materials Manager - 12



Initial Conclusions

1. Agencies and contractors are moderately satisfied with the pavement preservation training available to them.
2. Most agency and contractor training is aimed at the field but from reviewing comments it appears that Designers and Specifiers need additional training aimed at their skill sets.
3. It appears that “Just In Time” training should be developed for agency personnel who will be involved in preservation projects.
4. The number of responses from training providers was less than anticipated. NCPP will work to resurvey national training providers in a many that provides additional data.

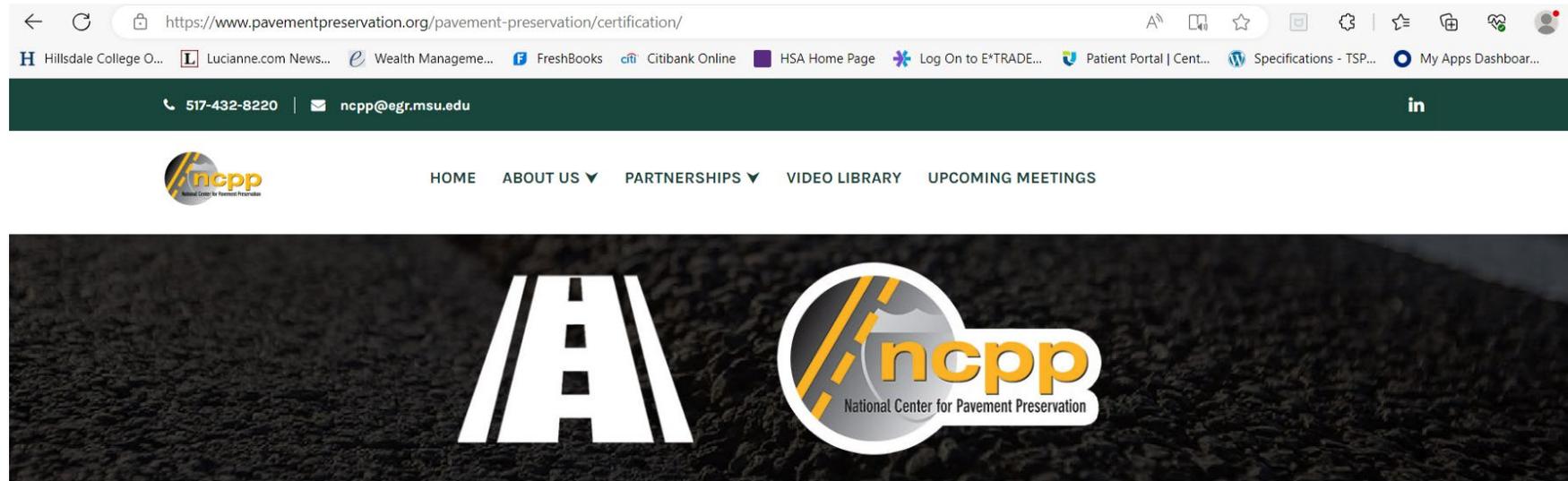
NCPP Training and National Certification



NCPP Preservation – Training and National Certification Update

- ▶ Training
 - NCPP Website Upgrade
 - NCPP Training Opportunities
 - Industry Training Opportunities
- ▶ Testing
- ▶ Certification

NCPP Website Upgrade



CERTIFICATION

Introduction

Pavement preservation plays a critical role in safeguarding America's highway system from the detrimental effects of sun, water, and ever increasing traffic. Pavement preservation is a pillar of sound asset management and ensures that the overall condition of the road network can be sustained at a desired level. Therefore, the successful placement and performance of pavement preservation treatments has a dramatic impact on long-term financial planning and the ability

Pavement Preservation

- Partnerships
- Councils
- Emulsion Task Force
- Certification



NCPP Website Upgrade

[Why Is Certification Important?](#)

With the implementation of performance measures through MAP-21 and the Fast Act, states are going to be held accountable for the condition of their road network. With the accountability comes tremendous opportunity to use pavement preservation treatments as the most cost-effective method to improve network conditions. By the same token, poor treatment performance may reduce or eliminate an agency's use of that treatment since the potential ramifications of missing network condition targets are substantial.

[Web-Based Training](#)

[State & Local Agency Certification \(External Link\)](#)

[Contractor Employee Certification \(External Link\)](#)

[Company Certification \(External Link\)](#)

[Certified Employees \(External Link\)](#)

QUESTIONS?

Contact us for more information.

[CONTACT US](#)

ABOUT PAVEMENT PRESERVATION

QUICK LINKS

NCPP INFORMATION

The nation's Pavement Preservation Program and

National Center for Pavement Preservation



NCPP Hosted Training

- ▶ Certification Study Guides
 - Chip Seal Guide
 - Slurry Surfacing Guide
- ▶ ISSA / FHWA Web Based Training
 - Hosted on NCPP Website
 - Slurry Surfacing, Chip Seal , Crack Seal
 - Update Project
- ▶ ETF / NCHRP Demo Training
- ▶ NCPP On-Site Training
 - Standard Training
 - Refresher Only

Slurry Systems Certification



Session Guide

**National Center for Pavement Preservation
Michigan State University**



Chip Seal Certification



Session Guide

**National Center for Pavement Preservation
Michigan State University**





International Slurry Surfacing Association

Slurry & Micro Surfacing, Chip Sealing & Crack Treatment

How to Construct High Quality Chip Seal Treatments



Chip Seal Treatments

Outline

Notes

Search

Slide Notes

Welcome to the chip seal treatment training module "How to Construct High Quality Chip Seal Treatments." This training is sponsored by the Federal Highway Administration (FHWA) and the International Slurry Surfacing Association (ISSA).

These materials and documents are disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in these materials. The U.S. Government does not endorse products or manufacturers.

Trademarks or manufacturers' names appear in these materials only because they are considered essential to the objective of the training.

The ISSA's Board of Directors have authorized this training development to provide an educational tool that could be used by persons possessing limited familiarity with chip seal treatments.

Throughout this training, you will be able to move to the next screen or review a prior screen by selecting one of the small directional arrows in the control bar located in the bottom of your screen.

A printer-friendly version of the course slides can be downloaded by selecting the paperclip icon in the lower section of the control bar. If the control bar is minimized, expand it in order to view the paperclip icon. You can expand or collapse this control bar by selecting the icon which looks like a movie camera on the right. When selected, the icon opens a pane on the right side of the screen that contains tabs to access the course outline, narration text, and a search function.

73 Minutes 57 Seconds Remaining



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U.S. Department of Transportation
Federal Highway Administration



International Slurry Surfacing Association

Slurry & Micro Surfacing, Chip Sealing & Crack Treatment

How to Construct High Quality Slurry Seal & Micro Surfacing Treatments



Slurry Seal and Micro Surfacing - Part 1

Outline

Notes

Search

Slide Notes

Welcome to "How to Construct High Quality Slurry Seal and Micro Surfacing Treatments - Part 1." This training is sponsored by the Federal Highway Administration (FHWA) and the International Slurry Surfacing Association (ISSA).

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Throughout this training, you will be able to move to the next screen or review a prior screen by selecting one of the small directional arrows in the control bar located in the bottom of your screen.

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55 Minutes 48 Seconds Remaining



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International Slurry Surfacing Association

Crack Sealing Training Module



Crack Treatment Part I Presentation

Outline Thumb Notes Search

Slide Title Duration

Crack Sealing Traini... 01:37

Disclaimer 00:45

Source Material 00:16

Module Objectives 00:35

Module Introduction 00:47

Lesson Objectives 00:31

What is a Crack Trea... 00:27

What is Crack Fillin... 00:56

What is Crack Fillin... 01:33

What is Crack Fillin... 00:07

What is Crack Fillin... 01:22

Benefits 01:03

Benefits 01:15

A Pretreatment for S... 01:20

Fill in the Blanks: ... 00:25

Knowledge Check Debr... 00:21

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Knowledge Check Debr... 00:12

73 Minutes 47 Seconds Remaining



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Employee Certification

- ▶ Slurry Systems
- ▶ Chip Seal
- ▶ Crack Seal

- ▶ Contractor
 - Must score above 70% on 80-question test.
- ▶ Agency
 - Must score above 70% on a 50-question test.

- ▶ Certification belongs to the employee
- ▶ Valid for 3-Years



Certification Testing

- ▶ On-Line
 - Register on the Pavement Preservation.org
 - Test is taken using Proctored Software (*Respondus LockDown Browser*)
- ▶ On-Site
 - Customers Location
 - ISSA Slurry Systems Workshop
 - 2023 TSP2 National Pavement Preservation Conference
 - 2024 TSP2 Annual Meetings

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

Contractor Certification – Additional Requirements

- ▶ Contractor must develop and submit a full Quality Management plan that includes:
 - Quality Control Team
 - Material Sourcing and Review
 - Mix Design Responsibility and Review
 - Quality Control of Specific Materials (Aggregate, Emulsion, Mineral Filler, Additives, Water)
 - Compliance with Job Mix Formula (JMF)
 - Equipment Requirements and Inspection
 - Application Quality Control (Application Rate, adherence to JMF, surface preparation, surface aesthetics)
 - Traffic Control as it relates to project quality
 - Weather Limitations
 - Problem Solving

How Contractor Certification Benefits the Agency

- ▶ Here are the 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.

How Agency Employee Certification Benefits the Agency

- ▶ Here are the 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.

Final Thoughts

- ▶ Contractors make a significant investment to become certified. Individual testing and certification costs \$300 per person plus training expenses. Company certification costs \$ 1,000 per year plus individual certification costs. A large company with multiple crews could easily spend over \$ 10,000 to gain their first certification.
- ▶ We encourage agencies to require either certified employees or a certified contractor when bidding on preservation contracts. Please note that it would take a contractor at least 2 months to certify their employees and up to 4 months to obtain company certification.



Questions?

