US. Department of Transportation Federal Highway Administration

## FHWA Pavement Preservation Strategic Plan

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FHWA is the source of all images in this presentation unless otherwise noted.

### **Pavement Preservation**

• FHWA definition\*:

Work that is planned and performed to improve or sustain the condition of the transportation facility in a state of good repair.

Keeping good roads good

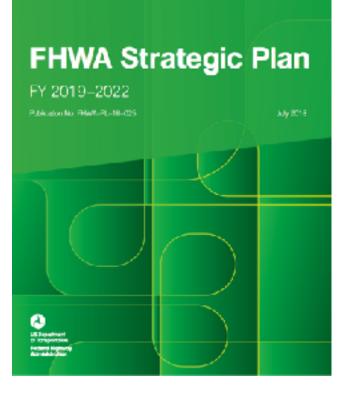




\*Guidance on Highway Preservation and Maintenance memo dated February 25, 2016



## FHWA Pavement Preservation Program Linkages to FHWA Strategic Plan



The 2019-2022 FHWA Strategic Plan states: The FHWA will continue to raise the awareness of proven strategies, such as performance-based practical design, and the **use of preservation techniques** to cost-effectively extend the service life of transportation assets that could further improve investment decision making.

## FHWA Pavement Preservation Program Role of FHWA

- To provide **policy and leadership** (including training and technology transfer) toward effective application of pavement preservation within an overall pavement management process.
- To **demonstrate** the economic, social and environmental **benefits** derived from proper implementation of preservation programs.
- To **conduct and sponsor research** to address pertinent pavement preservation questions and needs of national significance.







## Pavement Preservation PACT Proposals

- Recycled Asphalt Pavement (RAP) Materials for Pavement Preservation: Material Specification and Storage (**starting**)
- Develop Web-based Training for Combination Treatments and to Give an Overview of the Different Individual Treatments that Can be Placed Together to Preserve Asphalt Pavements (**starting**)
- NHI Course 131145 Pavement Preservation: Design and Inspection (Chip Seal, Slurry Seal, Micro Surfacing, and Thin Asphalt Overlay Treatments) (**starting**)
- Development of An Excel Based Tool for Chip Seal Design (starting)

## Pavement Preservation PACT Proposals (Cont.)

- Updating NHI Course 134214 Leveraging Your Maintenance Management Systems (starting)
- Pavement Preservation in Urban Environments: Best Practices in Materials, Technologies, and Applications (**ongoing**)
- 2023 Slurry Systems Virtual Workshop Invitation to Local Agencies (**ongoing**)
- NHI Course 131116 Pavement Management Fundamentals WBT (new)

## FHWA Pavement Preservation Program Key Stakeholders

- Government-Sponsored Organizations: American Association of State Highway and Transportation Officials (AASHTO), AASHTO Emulsion Task Force (ETF), American Public Works Associations (APWA), Transportation System Preservation Technical Service Program (TSP2)
- Industry Organizations: American Concrete Paving Association (ACPA), Asphalt Institute (AI), Asphalt Emulsion Manufacturers Association (AEMA), Asphalt Recycling & Reclaiming Association (ARRA), Foundation for Pavement Preservation (FP<sup>2</sup>), International Grooving and Grinding Association (IGGA), International Slurry Surfacing Association (ISSA), Pavement Preservation & Recycling Alliance (PPRA)
- Academic Organizations: National Center for Pavement Preservation (NCPP), California Pavement Preservation Center (CP2), National Concrete Pavement Technology Center (CPTech)

## FHWA Pavement Preservation Technical Feedback Group (PPTFG)

**Focus:** To convey key challenges and observations from the pavement preservation community that will provide valuable technical information to FHWA's strategic program.

Includes 20 members representing state and local DOTs, industry, and academia

Meets at least twice a year



## FHWA Pavement Preservation Program Opportunities

- Expand the knowledge and experience
- Demonstrate the benefits
- Encourage agencies to become more pavement preservation oriented
- Foster collaboration and cooperation amongst stakeholders and partners



## FHWA Pavement Preservation Program Strategic Elements

**Mission:** Preserving the nation's valuable highway infrastructure by keeping good roads in good conditions by using cost-effective pavement preservation.

**Objective:** To help agencies strategically consider and implement pavement preservation in a data-driven and systematic manner to optimize pavement performance, maximize the use of available funding, and incorporate effective stakeholder engagement.



## FHWA Pavement Preservation Program Strategy 1

# Explore and disseminate pavement preservation fundamentals

<u>Tactics & Activities</u>
Conduct Benchmarking Study
Evaluate impacts of current programs
Propose standard metrics to quantify PP benefits
Identify gaps in decision-making practices

Increase pavement preservation understanding

- •Update website
- Publish educational and reference materials
- Facilitate education and training





## FHWA Pavement Preservation Program Strategy 2

## Encourage effective pavement preservation programs

Develop & deploy pavement tools

- Provide construction and inspector training
- Identify pavement preservation considerations during pavement design activities.

Integrate with performance management and asset management

• Maximize use of pavement management systems

• Provide techniques and tools to identify appropriate preservation, rehabilitation, and reconstruction options

Leverage industry and other stakeholder resources

- Promote construction certification programs
- Partner on project showcases



## FHWA Pavement Preservation Program Strategy 3

## Facilitate strategic pavement preservation research and implementation efforts

<u>Tactics & Activities</u> Implement Research Roadmap

- Lead or support critical research & development projects
- Develop fact sheets and research reports

Implement coordinated preservation pavement program •Execute communication and marketing plans

•Engage stakeholders through FHWA participation and sponsorship of various activities such as conferences, workshops, and webinars



#### Overview

The Patient Highway Administration, in partnership with the Pleasmant Plenservation and Respelling Altance, presents the Planement/Preservation Webstar Socies. This sense of webman is designed to help State lighway and local agencies imprevening their investment in readeway, enhance selety, andread paramentility, improve functional performance, and contribute to invested wer selected on the prevent prevent prevent performance. And cost back is an end on white them, his or principle or prevents prevention in Recent peed needs good.



### Upcoming Webinars

Webinass are tentatively acheduled for the third Thursday of each month at 2 p.m. (CST)









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Asphalt Rocycling and Internatio Reclaining Association (AFSIA) Association

International Sturry Surfacing Associative (ISSA) Design and Inspection Manual

### Target Audience

Ishool for Alatin sightway and initial superpotenties agencies, industry supplies, consultants, and academic All webiance are testablished scheduled for the fixed Thursday of such records of 2 g.m. 2571 system is invited to physics approximately.

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### Recorded Webhars

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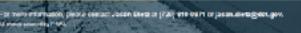
Feb. 17: Masizziooi DOT Micro-Burlaking Project Vielda High Elebon. pt. Investment

Mar. 17. Scale Snal Parwrount Tenatoreste

Apr. 21: Agency Experiences with Exection Preservation Textments and Research

May T.J. Project Kelerton and Design of Ir. place Heaveling

Seat. 15: Proven Preservation Statlegies for Year Network



## FHWA Pavement Preservation Program Measurable Outcomes

Strategy	Measurable Outcome
1) Explore and disseminate	Conduct benchmarking study.
fundamentals of pavement	Develop metrics definition
preservation	document and outreach program.
2) Encourage effective pavement preservation programs	Lead transportation pooled fund study to demonstrate integrated systems approach to pavement preservation.
3) Facilitate strategic pavement	Initiate research projects with States
preservation research and	on benefits of pavement
implementation efforts	preservation.

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## FHWA Pavement Preservation Program Strategic Plan Next Steps

- Share approved strategic plan
- Assess strategic plan for 2022 updates
- Continue to carry out activities in implementation plan



Improving the Quality of Preventive Maintenance Construction and Data Collection Practices – Solicitation#1581 (Joel Ulring MNDOT)

This **new** pooled-fund study is being established to provide direction and funding that will unify the strategies, address implementation efforts, develop best construction practices for national pavement preservation, and use suggested procedures for <u>long-term monitoring</u> of pavement preventive maintenance treatments. This data would then be available for public distribution through an online system such as the Long-Term Pavement Performance (LTPP) InfoPave web portal. It is expected that this study will be completed within 6 years.

**Any State Interested?** 



## FHWA Pavement Preservation Program Area Team

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## FHWA Pavement Preservation Program



https://www.fhwa.dot.gov/preservation/

