



MnROAD



Transportation Pooled Fund-5(522), PG3

Improving the Quality of Pavement Preservation Treatment Construction and Data Collection Practices

ETF-Emulsion Task Force Meeting – March 31 & April 1, 2026
Indianapolis, IN



Joel Ulring, Pavement Preservation Engineer
MnDOT Office of Materials and Road Research

mndot.gov

What is PG3 Anyway?

TPF-5(522) - National Partnership to Improve the Quality of Pavement Preservation Treatment Construction & Data Collection Practices

- Pavement Preservation Group Phase 3 Study (Implementation) – PG3
- Pooled Fund Solicitation: <https://pooledfund.org/Details/Study/754>
- PG3 Website: <https://pg3study.org/>

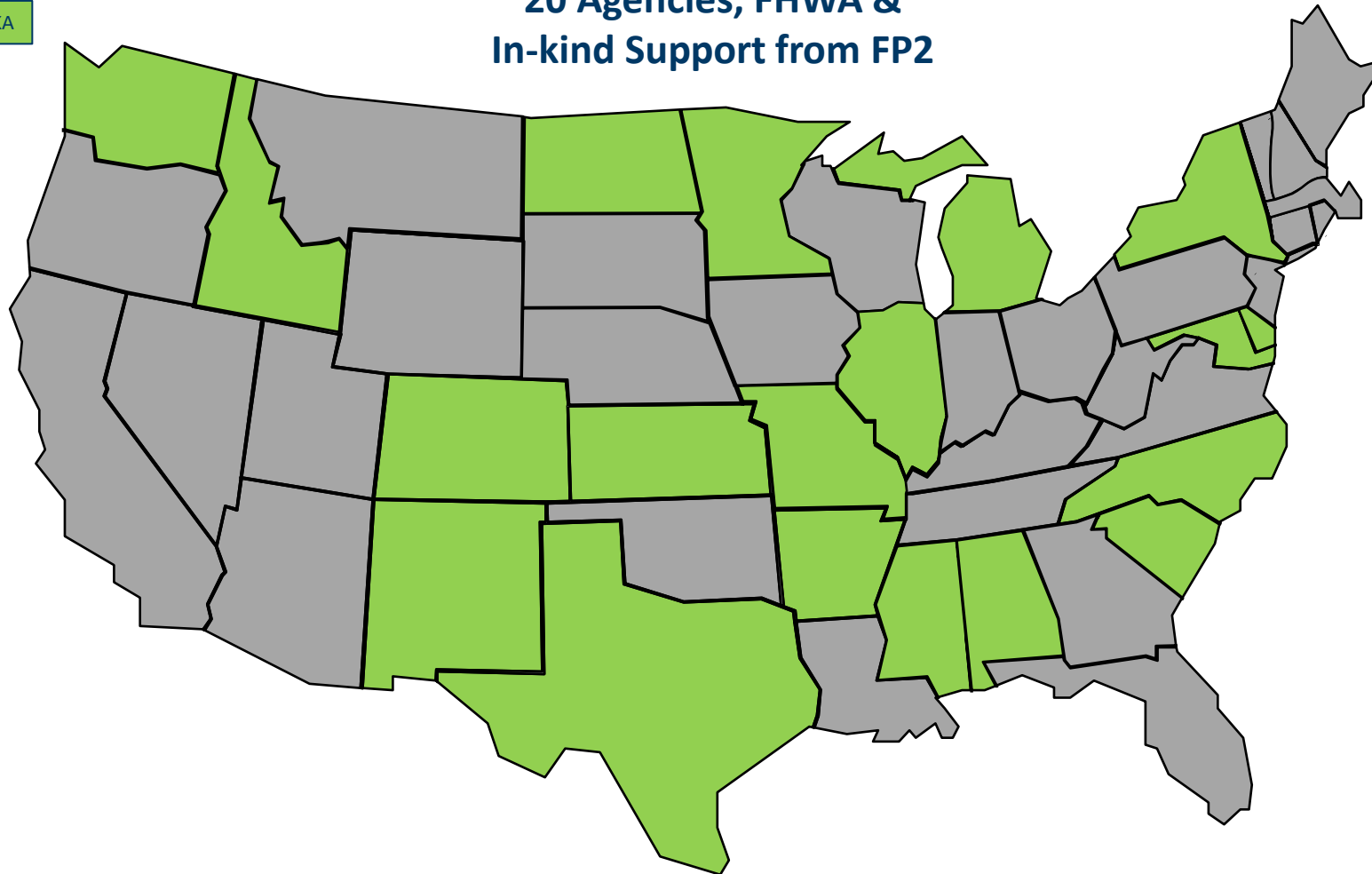


What is PG3 Anyway?

PG3 Partners

20 Agencies, FHWA &
In-kind Support from FP2

ALASKA



Sponsor States

- Alabama
- Alaska
- Arkansas
- Colorado
- Delaware
- Idaho
- Illinois
- Kansas
- Maryland
- Michigan
- Minnesota
- Mississippi
- Missouri
- New York
- New Mexico
- North Carolina
- North Dakota
- South Carolina
- Texas
- Washington

MnDOT / NCAT Partnership Preservation Group Study

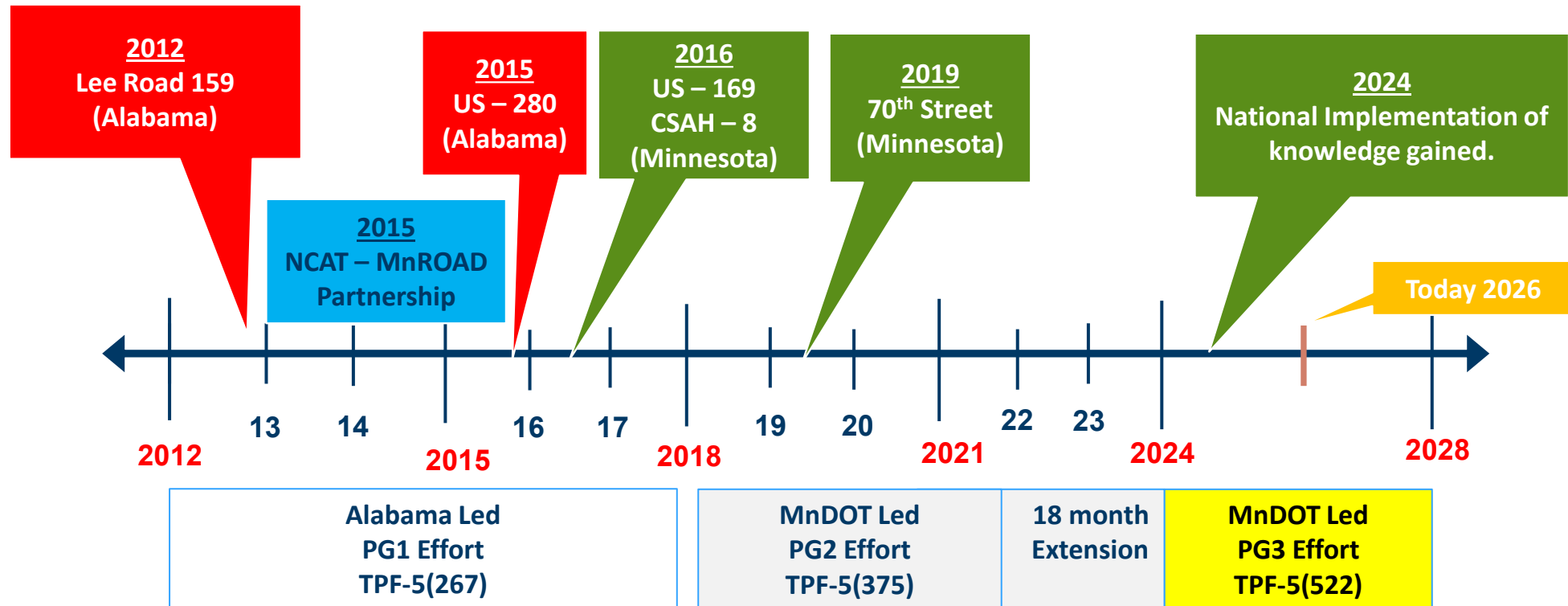
NCAT started it all in 2012 by placing 23 Preservation Treatments on Lee Road 159 near Auburn, Alabama

Dead end county road with a few homes and two moderate sized contractors having heavy truck traffic.



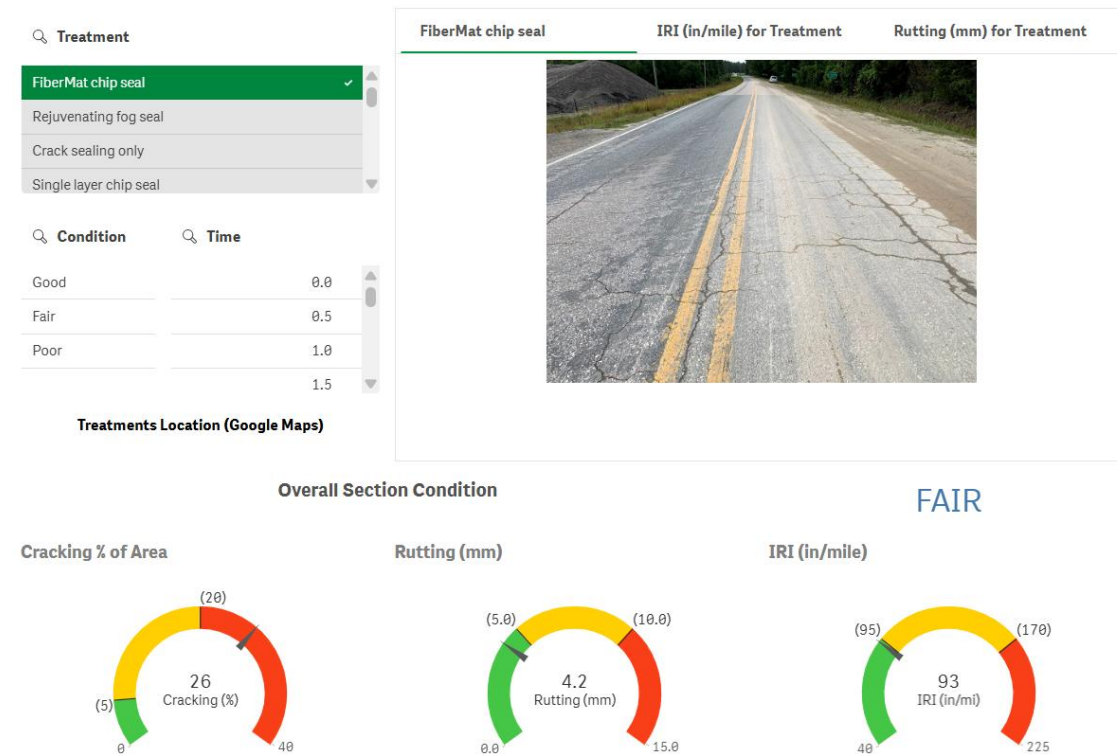
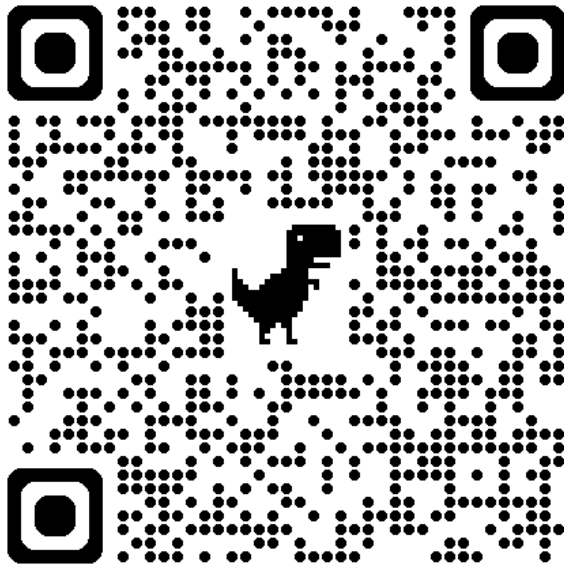
MnDOT / NCAT Partnership Preservation Group Study

History of Preservation Group Studies



MnDOT / NCAT Partnership Preservation Group Study

- Long Term Performance Dashboard
 - <https://eng.auburn.edu/research/centers/ncat/testtrack/preservation/observed-performance.html>

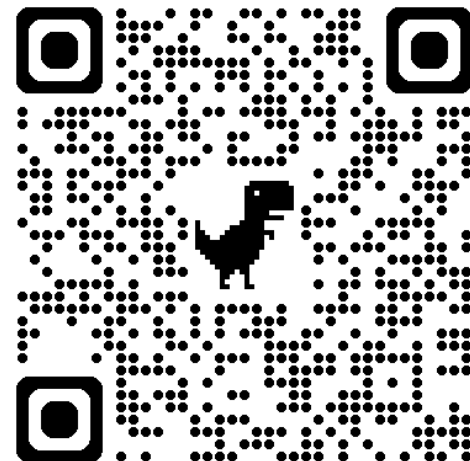


Pavement Preservation Future

Improving the Quality of Pavement Preservation Treatment Construction and Data Collection Practices

Phase III or PG3 (Jan 2024-Dec 2028)

- TPF-5 (522) – PG3 Led by Minnesota
- Focus on State Implementation of Pavement Preservation Treatments
- Contracts with both NCPP and NCAT to support the effort
- In-Kind Support from FP2
- Technical Advisory Panel Led (Agencies)
 - Sponsor meetings
 - Two in-person/year
 - Two virtual/year
- Web Page: <https://pg3study.org>



Insert FP2 Logo

PG3 Project Support

- **Specifications**
 - Review existing
 - Help draft new
- **Training**
 - DOT and Contractor Staff
 - Inspection
- **On Site Support during Construction**
- **Performance Monitoring**



Idaho Fun Group

Pavement Preservation Future

Improving the Quality of Pavement Preservation Treatment Construction and Data Collection Practices

Completed Projects for 2025

- **North Dakota** **Multiple Treatments (Built 2023)**
- **Mississippi** **Cape Seal (Scrub Seal + Microsurfacing – June 2025)**
- **Idaho** **RAP Chip Seal (July 2025)**
- **Minnesota** **Cape Seal (Scrub Seal + Microsurfacing – August 2025)**
- **North Carolina** **Rejuvenator (Spray Applied – Sept. 2025)**
- **Delaware** **Micro Surfacing (Sept. 2025)**

North Dakota (Constructed 2023)

Variety of preservation treatments utilizing RAP

- Double Chip Seal
- Cape Seal (Chip Seal covered with micro-surfacing)
- Double Micro Surfacing
- Ultra Thin Bonded Wearing Course
- HMA Thin Lay



Treatment – Scrub Cape Seal

Spec Review
12/13/24





Construction
6/4/25 (Scrub)

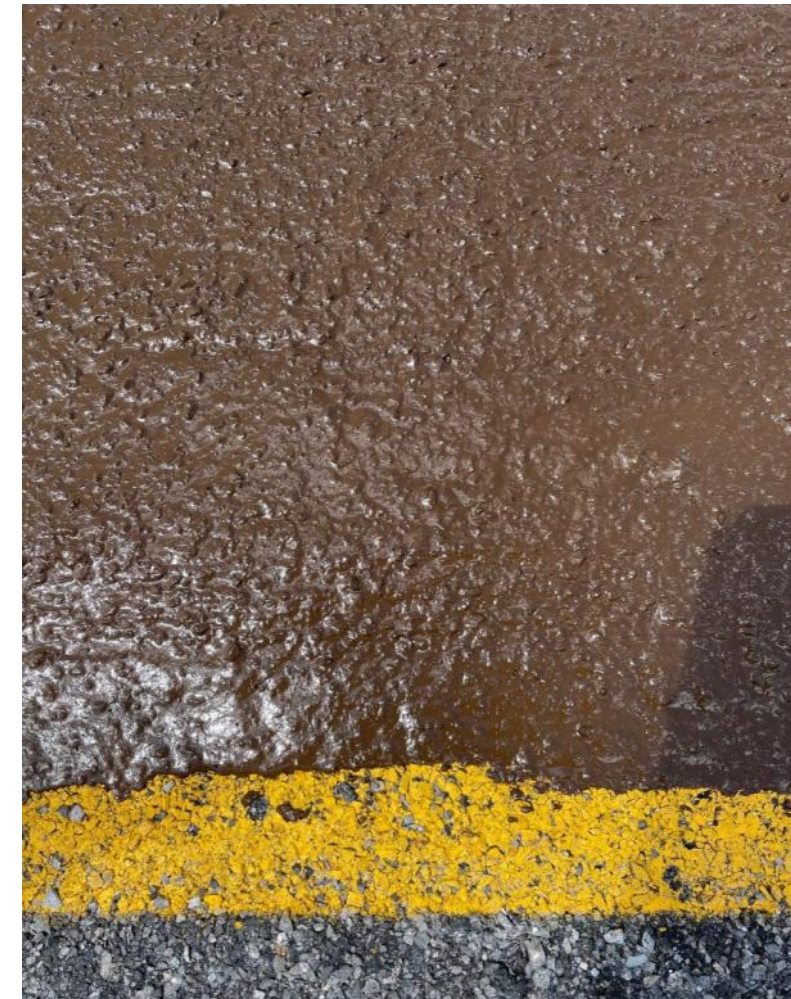


Training 5/8/25



- Test Cell = Scrub Seal + 1 lift Micro Surface
- Control Cell = Untreated

						
Barriere South Shore Asphalt Group				DATE: 12/9/2024		SUBMITTAL NO. S.0 <small>(Electronic Submittal via Email)</small>
SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS						
TO: Nicole M. Buranzone, CFM Aptim Sr Project Manager 2304 Engineers Rd Belle Chase, LA 70037		FROM: Christian Valetton BARRIERE CONSTRUCTION CO., L.L.C. 1268 LA 3327 Boutte, LA 70039		PROJECT NO.: 240081.000 H.015185		CHECK ONE: <input checked="" type="checkbox"/> New Submittal <input type="checkbox"/> Resubmittal of
SPECIFICATION SEC. NO. P-609		PROJECT TITLE AND LOCATION Harry P Williams Memorial Airport Runway and Taxiway Overlay and Striping St Mary's Parish				
ITEM NO	DESCRIPTION OF ITEM SUBMITTED <small>(Type, size, model number/etc.)</small>	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE
a.	b.	c.	d.	SPEC. PARA NO. e.	DRAWING SHEET NO. f.	g.
1	Distributor Calibration			P-609		
REMARKS: Please Return 1 Copy - email: christianv@barriere.com				I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.		
Supplier: Barriere & Entyre Contractors: RJM McQueen				 NAME AND SIGNATURE OF CONTRACTOR Christian Valetton, Project Manager		
SECTION II - APPROVAL ACTION						
ENCLOSURE RETURNED <small>(List by Item No.)</small>		NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY			DATE	



Treatment – 100% RAP Chip Seal

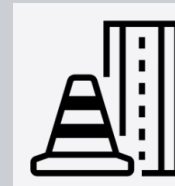


Spec Review
4/4/25



Training
7/11/25

Construction
7/28/25



- **Test Cell = PMRE (Polymer Modified Rejuvenating Emulsion)**
- **Control Cell = CRS-2P**



Treatment – Scrub Cape Seal

*Spec
Review
2/28/25*

*Construction
8/7/25*



*Training
7/9/25*



- **Test Cell = Scrub Seal + 1 Lift Micro Surface**
- **Control Cell = Scrub Seal Only**



Treatment – Spray Applied Rejuvenator (Reclamite) on new HMA Overlay

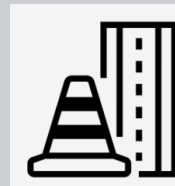
Spec Review
10/19/24



Construction
9/24/25



Training
6/12/25



North Carolina



North Carolina

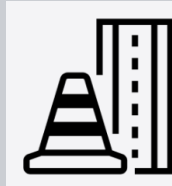
- **Test Cell = Treated**
- **Control Cell = Untreated (end of job)**



Treatment – Shoulder Micro-surfacing Rut Fill for Amish Buggy & Horseshoe Damage.

Spec Review
4/9/25

Construction
10/15/25



Training
9/10/25



- **Test Cell = Rut Fill + 2 Lift Micro Surface**
- **Control Cell = Untreated**



2026 Planned Projects

- **Alabama - Scrub Cape Seal**
- **Washington – Modified Chip Seal (Wheel Track Rut Fill)**
- **Alaska – Chip Seal**
- **New York – Cold In Place Recycling with Rejuvenator**
- **Maryland – Scrub Seal**

Pavement Preservation Future

Improving the Quality of Pavement Preservation Treatment Construction and Data Collection Practices

Other Future Projects

- **Colorado** Rejuvenator (Spray Applied)
- **Illinois** Polymer Modified Slurry Seal
- **Michigan** Chip Seal/SAMI (Stress Absorbing Membrane Interlayer)
- **New Mexico** RAP Chip Seal
- **North Dakota** Highly Modified Micro-surfacing
- **South Carolina** Scrub Seal
- **Texas** CIR (Cold In-place Recycling)
- **New York** CIR (Cold In-place Recycling with Rejuvenating Agent)

PG3 Outreach and Information Dissemination

- Pavement Preservation Journal Articles – Quarterly
- Pavement Preservation Partnerships
- TRB
- ISSA Workshop
- AASHTO
 - MaC – Maintenance
 - COMP – Materials & Pavement
- Kentucky Fall PMA Meeting
- AEMA-ARRA-ISSA Annual Meeting

HOW FP² WORKS FOR YOU

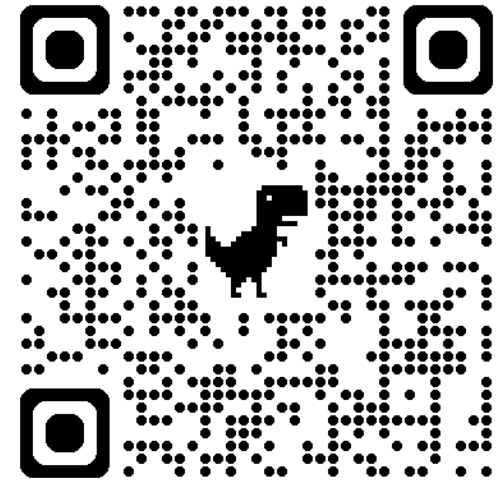
Mississippi Boasts First PG3 State-Sponsored Project

BY ALEX MIDDLETON, P.E. TODD SHIELDS, P.E. AND MARK WAITS



The 2025 construction season is seeing the first state PG3 projects being built.

Phase 3 of the *National Partnership to Improve the Quality of Pavement Preservation Treatment Construction & Data Collection Practices*, commonly referred to as PG3, is a pooled fund of currently 19 state DOTs. The project provides technical assistance with specifications, training and on-site expertise during project construction.



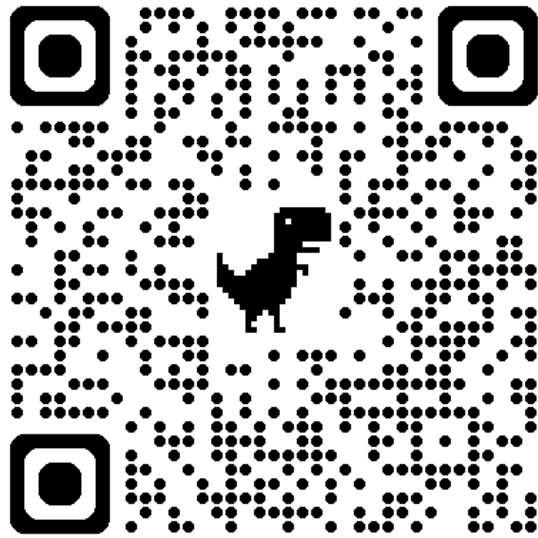
What is a State's Commitment?

Time

- **Technical Advisory Panel (TAP) meets quarterly**
 - 2 are virtual (next up in July 2026)
 - 2 are in person
 - May 7, 2026 in conjunction with NEPPP, Springfield, MA
 - October 6-7, 2026 at MnROAD in Minnesota

National Pavement Preservation Conference 2027

- ▶ Held every 4 years
- ▶ August 30 – September 2, 2027
- ▶ Grand Rapids, Michigan



NATIONAL PAVEMENT PRESERVATION CONFERENCE

nppc27

ncpp Preserving Our Transportation Assets

Permanent Preservation Partnerships

Networking Opportunities with Fellow Practitioners
Three Concurrent Technical Tracks on Preservation Topics
Live Treatment Demonstrations
Equipment Parade
Pre-Staged Treatment Displays
Much More to be Announced!

FOR MORE INFORMATION:
WWW.NATIONALPAVEMENT2027.ORG

ROCKY MOUNTAIN WEST
PAVEMENT PRESERVATION PARTNERSHIP

MIDWESTERN
PAVEMENT PRESERVATION PARTNERSHIP

SOUTHEAST
PAVEMENT PRESERVATION PARTNERSHIP

NORTHEAST
PAVEMENT PRESERVATION PARTNERSHIP

August 30 - September 3, 2027
DeVos Place - Grand Rapids, Michigan

MINNESOTA

THANK YOU!

Joel Uring, PE

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