







Transportation Pooled Fund-5(522), PG3

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

AASHTO TSP2 - Emulsion Task Force Meeting June 5, 2025



Cold & Warm Climate Pavement Preservation Research

MnDOT/NCAT Preservation Group Studies - History:

- NCAT Lee Road 159
 Pavement Preservation Study (2012-Present)
- TPF-5(267) PG1

Accelerated Performance Testing for the NCAT Pavement Test Track (2015-2018).

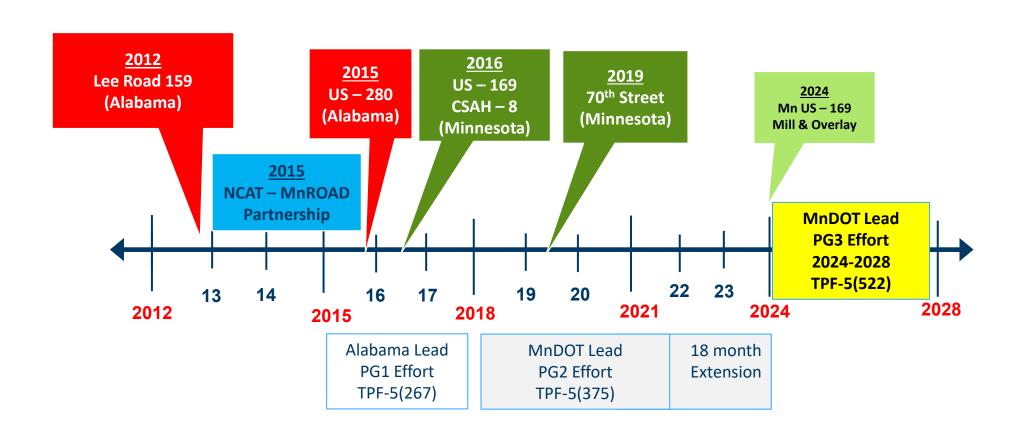
- Alabama Lee Road 159 & US 280
- Minnesota Mille Lacs County CSAH 8 & US 169
- TPF-5(375) PG2

National Partnership to Determine the Life Extending Benefits of Pavement Preservation Techniques (2018-23).

- 70th Street NE Rehabilitation & Thinlay Treatments
- TPF-5(522) PG3

National Partnership to Improve the Quality of Pavement Preservation Treatment Construction and Data Collection Practices (2024-2028).

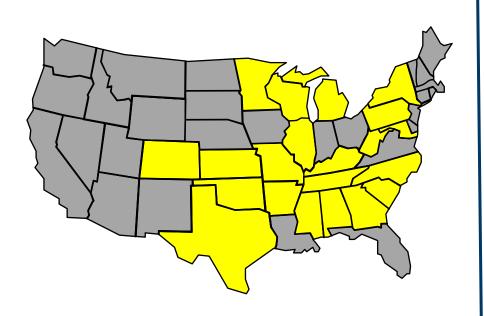
MnDOT / NCAT Partnership



Pavement Preservation Research Update

PG Phase II Partners

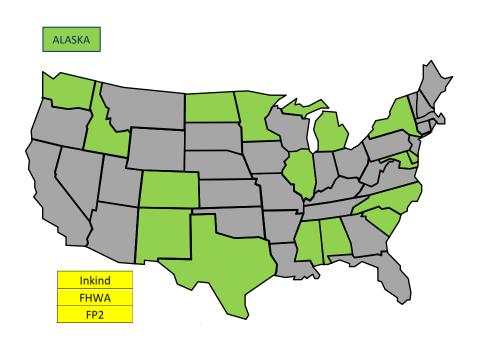
21 Agencies/FHWA/FP2 \$5,150,000 Completed!



PG Phase III Partners

17 Agencies

Commitment Level: \$50,000/yr., Minimum 3 years Current budget \$4,500,000



Alabama

Alaska

Colorado

Delaware

Idaho

Illinois

Maryland

Michigan

Minnesota

Mississippi

New York

New Mexico

North Carolina

North Dakota

South Carolina

Texas

Washington

Phase III or PG3 (Jan 2024-Dec 2028)

- TPF-5 (522) PG3
- Focus on State Implementation of Pavement Preservation Treatments
 - Specification review
 - Preconstruction technical support & training (virtual)
 - Construction support (on-site)
 - Performance monitoring
- Contracts with both NCPP and NCAT to support the effort
- Technical Advisory Panel Led (Agencies)
 - Guidance from NCPP, NCAT, FP2, FHWA
 - Sponsor meetings
 - Two in-person/year
 - Two virtual/year
- Pooled Fund Started January 2024 extending to December 2028
- Web Page: https://pg3study.org

Proposed Treatment Types:

- Rejuvenator
- Chip Seal
- Double Chip Seal
- RAP Chip Seal
- Scrub Seal
- Cape Seal
- High Polymer Modified Slurry Seal
- Micro Surfacing
- 1" HiMA Thinlay

Scheduled Projects for 2025

• Delaware Micro Surfacing (Shoulder Treatment – Buggy Ruts)

Idaho
 RAP Chip Seal

• Michigan? Chip Seal/SAMI (Stress Absorbing Membrane Interlayer)

Minnesota Cape Seal

Mississippi Cape Seal

North Carolina Rejuvenator (Spray Applied)

Future Projects

Alaska Thinlay HMA

• Colorado Rejuvenator? (Spray Applied)

Illinois
 Polymer Modified Slurry Seal

Maryland Scrub Seal

New Mexico RAP Chip Seal

North Dakota Highly Modified Micro Surfacing

South Carolina
 Scrub Seal

• Texas CIR

• Washington Chip Seal (Modified Double Chip Seal Rut Treatment)

6/13/2025

MINNESOTA

THANK YOU!

Joel Ulring
joel.ulring@state.mn.us
(651)366-5432









