

Pavement Preservation Industry Update

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President
FP² Inc.

2016 AASHTO Subcommittee on Maintenance
July 18, 2016
Las Vegas, NV



Presentation Outline

- **What is FP² Inc.?**
 - **Mission**
 - **Supporters**
- **Advocacy**
- **Research**
- **Communications**



What is FP²

- What is FP² Inc?
 - An Industry supported trade association
- Purpose of FP² Inc?
 - Promoting the importance of protecting and preserving the huge investment in our nation's pavement infrastructure



Supporters

- Who supports FP² Inc?
 - Associations
 - Contractors
 - Material Suppliers
 - Chemical suppliers
 - Equipment manufactures
 - Consultants



FP2 Contributors

Corporate Sponsors



Sponsoring Associations



What do we do?

- **FP² Inc. financially supports**
 - **The National Center for Pavement Preservation at Michigan State University**
- **FP² Inc. works closely with**
 - **Regional Preservation Centers in California and Texas**
 - **Regional Preservation Partnerships**
 - **Federal Highway Administration**
- **Publish Pavement Preservation Journal**
- **Participate in ETF and ETG**



What do we do?

- **Mission**

- Advocacy: educate public officials at all levels & involved with legislation.
- Research: Funding partner in NCAT 2012 PG study and 2015 NCAT/MN Road PG project
- Communication: sponsor key events, publish the Pavement Preservation Journal, distribute educational materials



ADVOCACY



Advocacy Effort

- FP² has a contract with Williams & Jensen to represent the Pavement Preservation (PP) industry
- FP² advocated for PP language in MAP 21 and the FAST Act
- Have had many meetings with Transportation committees as well as key Congressmen and staff

MAP-21

- **Pavement Preservation language was included in the policy and definition sections of the statute**
- **Pavement Preservation projects are now eligible to receive federal funds**
- **Helped to frame the debate for Asset Management and Pavement Preservation**



Fixing America's Surface Transportation (FAST) Act

FAST Act passed Congress on Dec 3, 2015

- **5 years**
- **Increases annual federal highway investments from \$40.3 billion to \$46.4 billion by 2020 --a \$20.2 billion increase over 5 years**
- **This equates to a 5.1% increase in formula funds to states in 2016 with annually increases ranging from 2.1-2.4% from 2017 to 2020**



FAST ACT

FAST Act retains program structure and definitional changes enacted in MAP-21 with a few significant changes

- **Creation of National Freight Program (NFP) –new \$6.2 billion, formula-based funding for projects on the National Highway Freight Network (NHFN)**
- **Nationally Significant Freight & Highway Projects Program - \$900 million per year in large scale grants**
- **Converts STP into a new Surface Transportation Block Grant Program (STBGP)**
- **New Federal Permitting Improvement process**



FAST ACT: The Good and the Bad

- Increased annual spending- \$20 Billion over 5 years
- Provides agencies the certainty they need to plan
- Reaffirmed Congress interest in maintaining a federal role in surface transportation
- Continues many aspects of MAP-21
- **NO LONG TERM FUNDING SOLUTION**

What's Next?

- FP2 remains engaged in this process to ensure that preservation outcomes remain as intended
- Next round of legislation-when? 5 years will go by fast
- Discussions and actions by the Senate Finance and Appropriations Committees under way regarding long term funding for transportation
- Highway Trust Fund???
- User Fee Options on the table- Fuel, VMT, Registration, General Fund



RESEARCH

NCAT/MN ROAD Research Partnership

To facilitate high value pavement research that addresses national needs using full-scale pavement testing facilities in both **warm** and **cold** climates on flexible, rigid, and composite pavement structures.



NCAT Pavement Test Track at Auburn University



- **2012 Pavement Preservation Study**

2012 Preservation Summary

Martin Marietta Quarry

EAP's Auburn Plant

Lee Road 159



2012 NCAT Preservation Group Study

- Seven states and FP2 Inc. were full funding partners for the three year study
- Twenty Five test sections constructed on Lee County, AL 159 in August, 2012
- Several treatments on the NCAT track
- Preliminary results available, with continued monitoring until return to original condition
- Track Conference held March, 2015
- www.pavetrack.com



2012 Preservation Summary

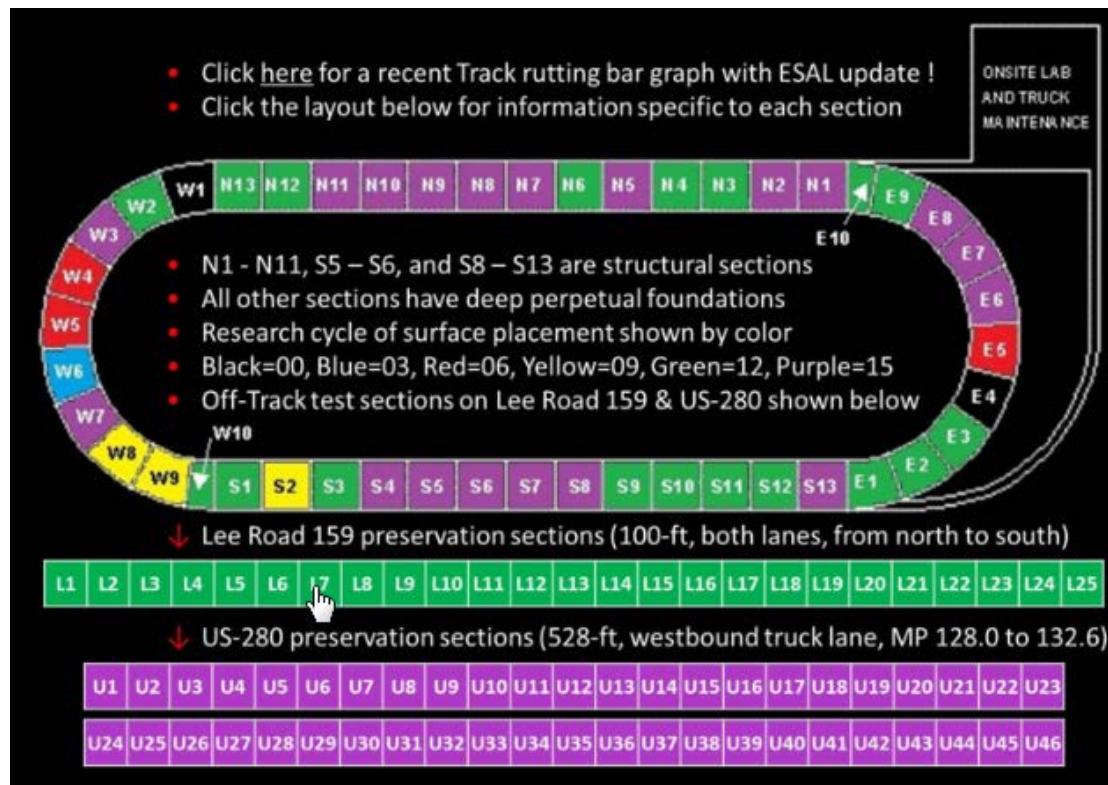
- Crack sealing improves cracking performance
- Differences between route/fill and blow/band
- Scrub seals exhibit both crack & chip seal benefit
- Chip Seal slowed oxidation rate as compared to Control
- Treatments reduce subgrade moisture
- Life extending benefit curves developing nicely
- Extend data collection on Track & Lee Rd 159

2012 Study Performance Data

Step 1:



Step 2:



Example Section Data

Quadrant: L
Section: 7

5/23/2016

Surface Mix and Materials

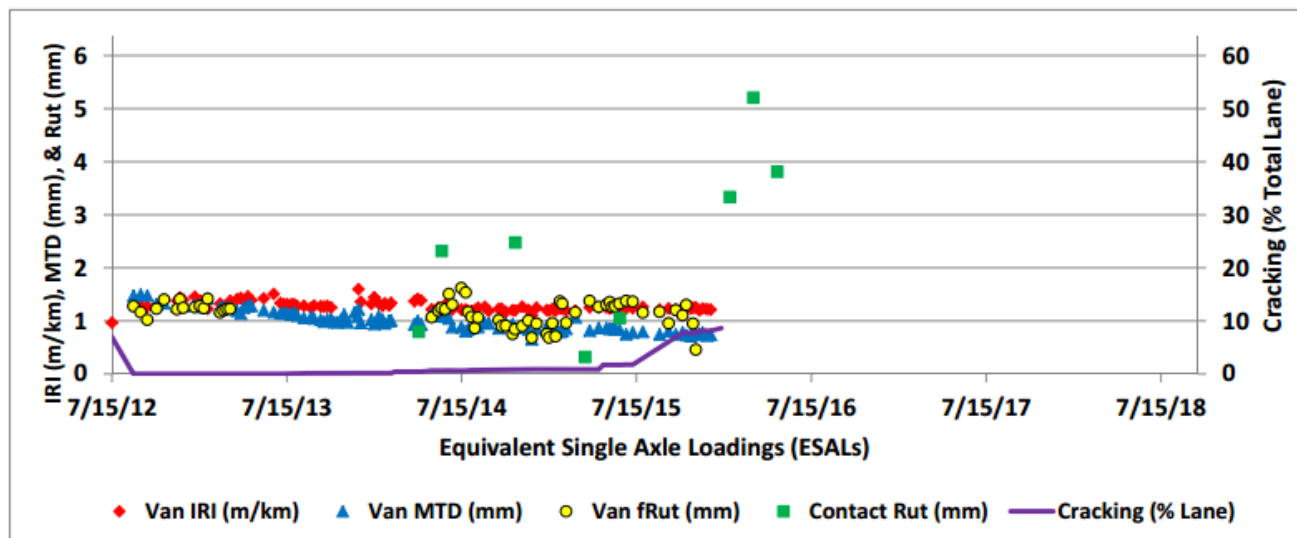
Year of Completion: 2012
Surface Design Method: Chip
Specified Binder: CRS-2HP
Surface Layer Aggregates: 89 Columbus Granite

Structural Buildup Information

Study Layer(s) (in): 0.4
Total Bituminous (in): 5.9
Base Material: Soil Agg
Subgrade: Stiff

Research Objective: Single layer chip seal with crack sealing

Preliminary Field Performance Data for the 2015 Research Cycle



NCAT Preservation Group Study

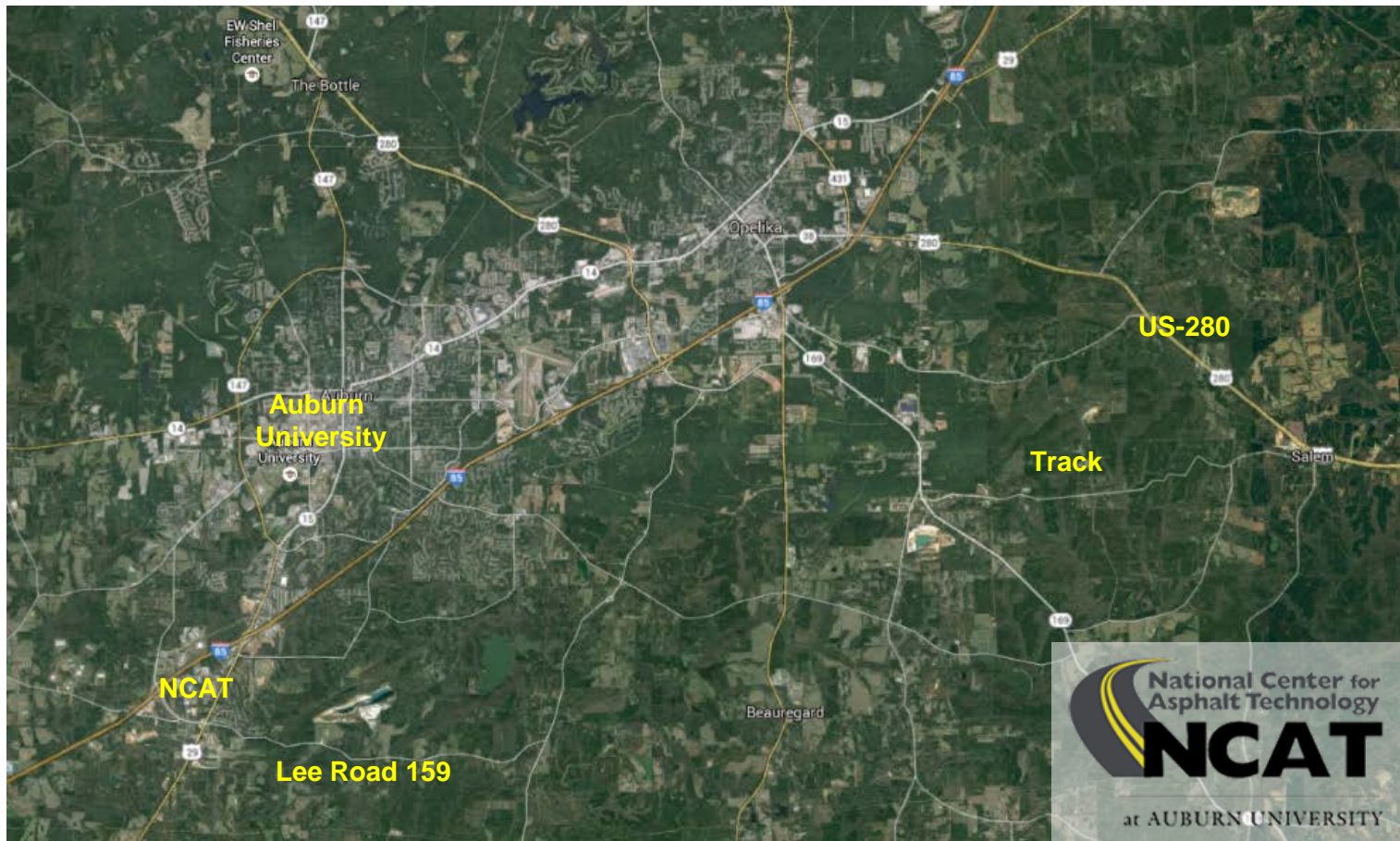
- Continued monitoring of Lee Road 159 under current contract
- “Trigger Values” for preservation treatments on the track and Lee Road 159 have been set with the funding partners and treatments will be applied when they are reached

2015 NCAT/MN Road Preservation Group Study

- NCAT partnering with MN Road for the 2015/2016 PG study & FP² is a full funding partner
- Completed treatments on US 280 near Auburn for 2015 PP study
- MN DOT placing treatments on low & high traffic volume roadways in August, 2016

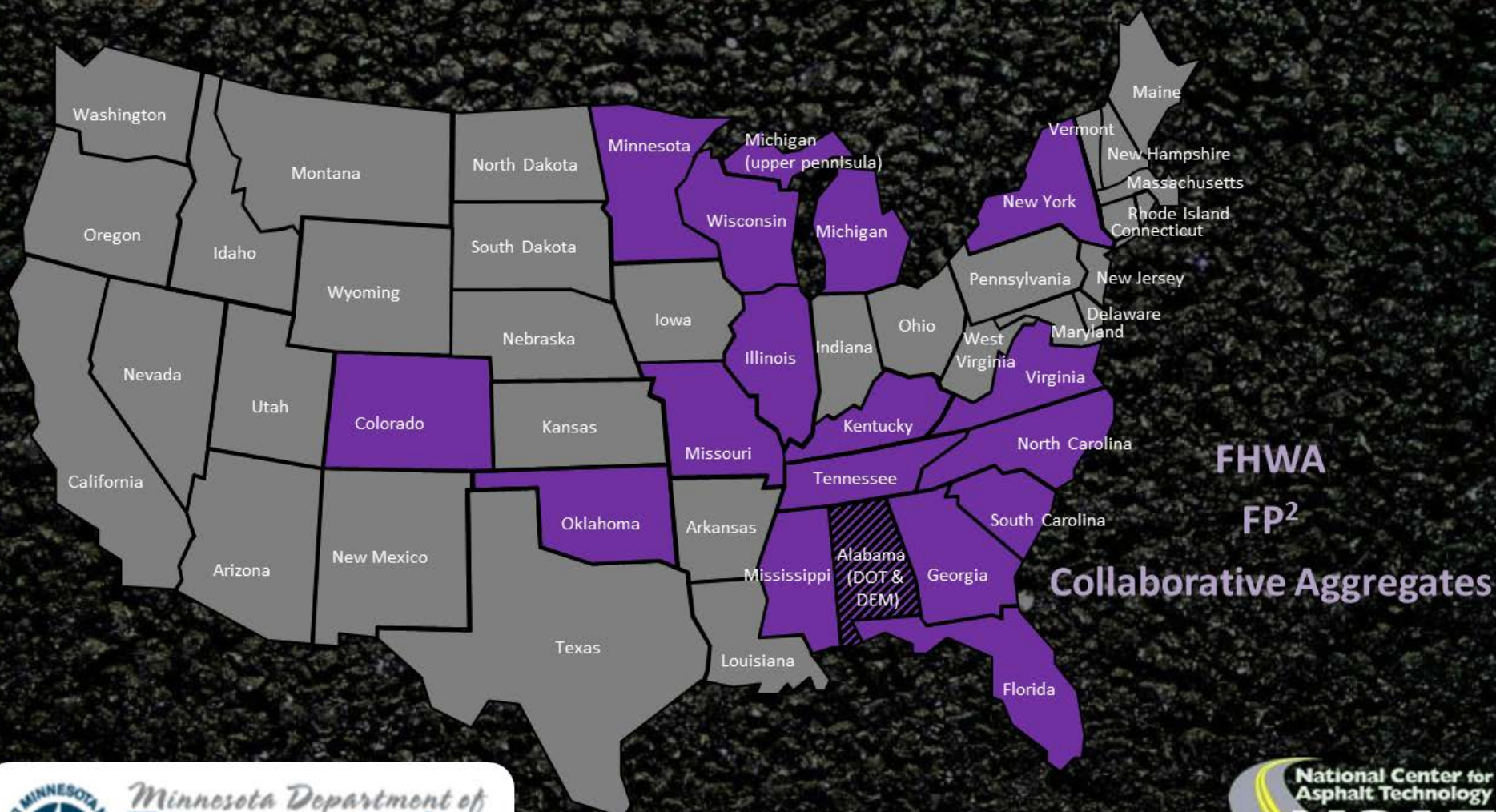


2015 Preservation Group (“PG15”)





2015 Track Research Sponsors



US 280

- 
1. Fog Seal
 2. Rejuvenating Fog Seal
 3. Crack Sealing
 4. Single Layer Chip Seal
 5. Single Layer Chip Seal with Crack Sealing
 6. Triple Layer Chip Seal
 7. Double Layer Chip Seal
 8. Cape Seal (Micro Surface over Single Chip Seal)
 9. Single Layer High Polymer Micro Surface
 10. Single Layer Highly Flexible Micro Surface
 11. Single Layer Micro Surface
 12. Single Layer Micro Surface with Tack
 13. Single Layer Micro Surface with Crack Sealing
 14. Double Layer Micro Surfacing
 15. FiberMat Cape Seal
 16. FiberMat Chip Seal
 17. Scrub Cape Seal
 18. Scrub Seal
 19. Scrub Cape on a Foamed CIR Base

US 280

20. 4.75 NMAS Thin "Screenings" High ABR Mix on Foamed CIR

21. 4.75 NMAS Thin "Screenings" High ABR Mix on Emulsion CIR

22. 4.75 NMAS Thin "Screenings" High ABR Mix on Foamed CCPR

23. 4.75 NMAS Thin "Screenings" High ABR Mix on Emulsion CCPR

24. 4.75 NMAS Thin "Screenings" High ABR Mix on HIR

25. HMA Cape Seal (4.75 NMAS Thin "Screenings" High ABR Mix over FiberMat Chip Seal)

26. HMA Cape Seal (4.75 NMAS Thin "Screenings" High ABR Mix over Scrub Seal)

27. HMA Cape Seal (4.75 NMAS Thin "Screenings" High ABR Mix over Chip Seal)

28. 4.75 NMAS Thin "Screenings" High ABR Mix

29. 4.75 NMAS Thin "Screenings" High ABR Mix on Crack Sealed Surface

30. 4.75 NMAS Thin "Screenings" High ABR WMA on Crack Sealed Surface

31. 4.75 NMAS Thin "Screenings" High ABR Mix Placed with a Spray Paver

32. 4.75 NMAS Thin "Screenings" High ABR Mix with UltraFuse tack

33. 4.75 NMAS Thin "Screenings" Virgin Mix

34. OGFC on Crack Sealed Surface

35. OGFC Overlay

36. OGFC Overlay with UltraFuse Tack

37. OGFC Overlay Placed with a Spray Paver

38. OGFC Inlay after Micro-Milling

Crack Sealing



Chip Seal Application



Verifying Aggregate Application Rate



FiberMat Application



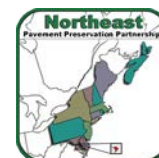
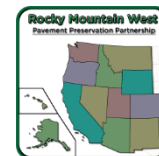
Scrub Seal Equipment



Project Team

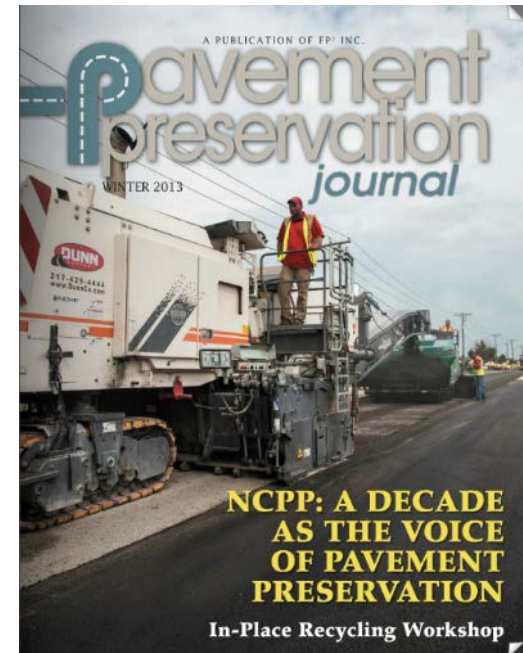
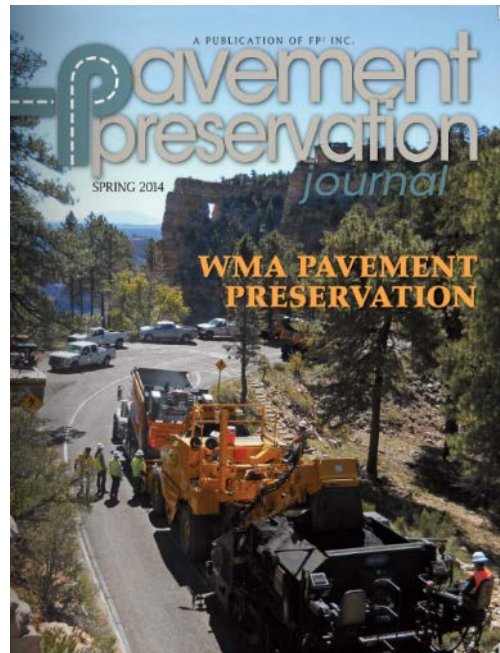


FP2- 2015 NCAT/MnRoad Contributors



COMMUNICATION

Communication Efforts



- **FP2 Inc. Website – fp2.org**



James B. Sorenson Excellence in Preservation Award



Jim Sorenson

Past Sorenson Award Winners

- 2005-City of Los Angeles
- 2006-Fredrick County, MD
- 2007-City of Nashville, TN
- 2008-California Department of Transportation
- 2009-Putnam County, NY
- 2013-New Hampshire Department of Transportation
- 2014-Charleston County, SC
- 2015-City of Los Angeles



FP² Inc. - What's next?

- Oct 11-14, 2016 NPPC in Nashville
- Oct 26-27 Fall NCAT/ MN Road PP Partnership meeting in Minneapolis
- Engage with Congress on next transportation legislation
- Planning for the 3rd International Pavement Preservation Conference, Paris, FR, February, 2019
- Review Strategic Plan



FP² Contributors

Corporate Sponsors



Sponsoring Association



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Questions?