Pavement Preservation – Need and Return

James S. Moulthrop, P.E. Executive Director FP² Inc.

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Presentation Outline

- What is FP² Inc.?
 - **≻**Supporters
- Pavement Preservation-what is it?
- Project Selection & Flexible Techniques
- The NEED
- The RETURN
- **Q/A**



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**





What do we do?

Purpose

- Advocacy: educate public officials at all levels.
- Promotion: sponsor key events, publish the Pavement Preservation Journal, distribute educational materials
- Research: promote the U.S. Federal Highway Administration System (FHWA) Preservation Roadmap; serve on several Transportation Research Board (TRB) committees

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 Center in California
 - ➤ Regional Preservation Partnerships in the Northeast, Southeast, Midwest, and Rocky Mountain West
 - > Federal Highway Administration



Pavement Preservation-what is it?

"A program employing a <u>network level</u>, <u>long-term strategy</u> that <u>enhances pavement performance</u> by using an integrated, <u>cost-effective</u> set of practices that <u>extend pavement life</u>, improve safety and meet motorist expectations"

- FHWA Pavement Preservation Expert Task Group



Pavement Preservation-what is it?

 Most agencies practice some form of pavement preservation

Not universally programmatic at this point

Lack of funding has had an impact



Pavement Preservation-what is it?

- Some agencies have established a Pavement Preservation Engineer position
- Significant progress in the last 5 years
- Continued support from FHWA and others
- MAP-21 language



Project Selection



Project Selection



Treatments for Flexible Surfaces

Seals

- Crack Sealing
- Thin Cold Seals
 - ➤ Fog Seal
 - > Chip Seal
 - **>** Slurry Seal
 - > Scrub Seal
 - Microsurfacing
 - Cape Seal

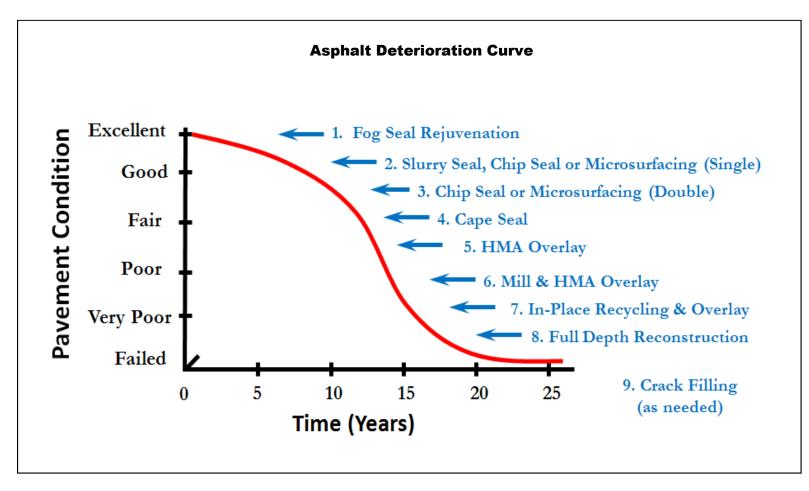
CIR-HIR

Plant Mixes

- Thin/Ultra Thin Hot Mix Asphalt Overlays
 - > Warm Mix
 - > Dense Graded mixes
 - Porous Friction
 Courses
 - Bonded wearing course
 - > AR modified
 - > RAP-RAS
 - > Dalumare



The NEED





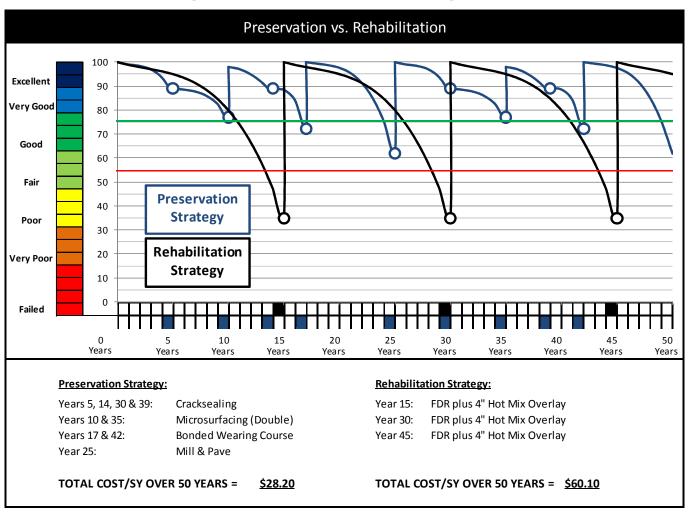
The NEED (Treatment Limitations)

- ➤ A robust Pavement Management System
- ➤ Lack of QA requirements for non-HMA/WMA treatments
- > Loss of knowledge in agencies
- > Qualified contractors
- **≻**Poor project selection →
- > Lack of Performance Related Specs



The NEED

Progressive Pavement Management





The NEED

- Current budgets constraints all agencies
- Pavement Condition TRIP reports
- Data from the FHWA/NCPP assessments
- Training for agencies
- Contractors QC capabilities



"The cost-efficient approach to keeping good highways in good condition is well proven. It's far more expensive, as much as 20 times more costly, to rebuild a road once it has failed"

¹ Commissioner Christopher D. Clement, Sr. New Hampshire Department of Transportation



- Economics
- Sustainability
- Customer satisfaction





Economics

- > Maximize pavement life at minimum cost
- ➤ Money spent early in the life of the pavement-PCI > 70
 ➤ Can save as much as 4 times the amount if
- Can save as much as 4 times the amount if the pavement reaches a PCI of 40



- Sustainability
 - >Less use of natural resources
 - >Use of reclaimed materials
 - **✓RAP**
 - **✓RAS**
 - > Energy savings
 - Use of environmentally-friendly products



- Customer satisfaction
 - ➤ Smoother, durable, longer lasting pavement
 - >Improve functional characteristics
 - ➤ Technics are rapid get→in get→out stay
 - **→out**



Comments!!

Questions?

