The 3 P’s - Pavement Preservation Policy

- **P³**: Pavement Preservation Policy
  - by Mark Waits

- The NEW ALDOT P³
  - by Mark Waits

- NEW ALDOT Pavement Preservation Policy

- WHY PAVEMENT PRESERVATION?
WHY PRESERVATION?

PREPARE TO STOP

WHY PRESERVATION?

STOP

WHY PRESERVATION?

YOUR SPEED

WHY PRESERVATION?

DAVE911.COM

WHY PRESERVATION?

SO, ... HOW'S YOUR DAY BONES?
The 3 P’s - Pavement Preservation Policy
WHY A PAVEMENT PRESERVATION POLICY?

According to the Federal Highway Administration (FHWA), pavement preservation is “a program employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety and meet motorist expectations.” (Geiger, September 2005)

Why a Pavement Preservation Policy?

As pavement preservation became more prevalent and accepted, many States had no planned strategy. ALDOT is one of the few States that has established a PPP.
Why a Pavement Preservation Policy?

ALDOT Pavement Preservation Policy defines Preservation as

“a planned strategy of cost-effective treatments to preserve an existing roadway system....

Why a Pavement Preservation Policy?

The evolution of ALDOT’s PPP began in 1998...

Why a Pavement Preservation Policy?

In 1998; Memo from Design was issued for

“Interstate Maintenance Scopes of Work”

The memo streamlined plan development of safety items for IM projects.

Why a Pavement Preservation Policy?

In 2000, memo was approved by the Chief Engineer

“IM Safety Projects”
Why a Pavement Preservation Policy?

"IM Safety Projects"

This memo outlined 2 definitive categories for safety upgrades targeting pavement rehabilitation.

But still no “planned strategy of cost-effective treatments to preserve an existing roadway system....”

Why a Pavement Preservation Policy?

These memos covered Interstate resurfacing scopes for safety upgrades...

WHY A PAVEMENT PRESERVATION POLICY?

In 2005, GFO 5-26 was issued

“Preventative Maintenance Procedures”

• Actual Preventative Maintenance Guidelines

• It defined preventative maintenance as planing, providing a wearing layer and/or binder layer, and an OGFC if warranted.

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WHY A PAVEMENT PRESERVATION POLICY?

“GFO 5-26: Preventative Maintenance Procedures”

- Actual Preventative Maintenance Guidelines
- It defined preventative maintenance as planing, providing a wearing layer and/or binder layer, and an OGFC if warranted.
- Interstates were excluded

GFO 5-26 never provided any safety upgrade cost relief to preservation projects nor did it address Interstate projects.

And no planned strategy of cost-effective treatments to preserve an existing roadway system....

Why a Pavement Preservation Policy?

These memos and GFO required a lot of safety upgrade requirements on a Resurfacing Project...even if it were a simple Pavement Preservation Project
Why a Pavement Preservation Policy?

After 2005, with all the memos and GFO, ALDOT still had no:
- Actual Preventative Maintenance Application Guidelines
- Relief from safety items upgrade requirements
- Interstates were not included
- And no planned strategy of cost-effective treatments to preserve an existing roadway system.

So, in 2007, ALDOT began the process developing a true PPP.
After a couple of years of development, a Policy was developed and jointly approved by the FHWA and ALDOT, on August 7, 2012. This policy defined pavement preservation and eligible treatments. The policy identified certain safety upgrades as “outside the purview of preventative maintenance.” The safety upgrade exclusions allowed more funds to be used on pavement maintenance and encouraged pavement preservation practices.
Out with the Old….in with the NEW

Out With the Old?

WHY THE NEW?

WHY A CHANGE?

The 3 P’s - Pavement Preservation Policy
WHY THE CHANGE?

• Several items in the 2012 policy conflicted with Federal Law, AASHTO and/or FHWA recommendations
• Pavement preservation techniques and applications have evolved since the development of the 2012 policy

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  • 2016 AASHTO/FHWA joint agreement for MASH

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WHY THE CHANGE?

DOJ issues ADA Ruling essentially distinguishes alterations from maintenance based on the type of road treatment

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WHY THE CHANGE?

- 2016 AASHTO/FHWA joint agreement for MASH
- Urged Agencies to replace later than NCHRP 350 or non-tested safety hardware
- Encouraged Agencies to replace beyond repair damaged hardware or have an individual Agency policy

WHY THE CHANGE?

- Several items in the 2012 policy conflicted with Federal Law, AASHTO and/or FHWA recommendations
- Pavement preservation techniques and applications have evolved since the development of the 2012 policy

WHY THE NEW?

- Pavement Preservation Policy Committee formed in December, 2016 (Conner, George, Glass, Walker, Blackburn, Waits)
- After many meetings, mega petabytes of data collected and several tree farms depleted, a draft was developed and all of God’s men said “AMEN”!
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WHY THE NEW?
• The new Policy was signed and approved on July 2, 2019

WHY THE NEW?
• Thanks to the committee members and a special thanks to our FHWA Division

WHY THE NEW?
• What are the major changes?
• What can we expect?

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• ADA requirements updated
• Pavement Preservation Policy essentially serves as ALDOT’s roadway safety hardware upgrade policy
• CrossSlope & Superelevation must be addressed on all routes
• Rigid Pavements have been included
• PM1, PM2 and PMR milling parameters and selection of treatments have changed
WHY THE NEW?

• What are the major changes?
  • ADA requirements updated
  • Pavement Preservation Policy essentially serves as ALDOT's roadside safety hardware upgrade policy
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WHY THE NEW?

• What are the major changes?
  • ADA requirements updated
  • Now meets the DOJ’s definition of Alterations vs Maintenance
  • Pavement Preservation Policy essentially serves as ALDOT's roadside safety hardware upgrade policy
  • Cross-Slope & Superelevation must be addressed on all routes
  • Rigid Pavements have been included
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WHY THE NEW?

• What are the major changes?
  • ADA requirements updated
  • Pavement Preservation Policy essentially serves as ALDOT’s roadside safety hardware upgrade policy
  • Should satisfy most of the issues with the 2016 MASH AASHTO/FHWA joint agreement
  • Cross-Slope & Superelevation must be addressed on all routes
  • Rigid Pavements have been included
  • PM1, PM2 and PMR milling parameters and selection of treatments have changed

WHY THE NEW?

• What are the major changes?
  • ADA requirements updated
  • Pavement Preservation Policy essentially serves as ALDOT’s roadside safety hardware upgrade policy
  • More aggressive approach to upgrade roadside safety devices than in the past
  • Cross-Slope & Superelevation must be addressed on all routes
  • Rigid Pavements have been included
  • PM1, PM2 and PMR milling parameters and selection of treatments have changed
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### Major Changes within New Policy

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<thead>
<tr>
<th>Item</th>
<th>Current Policy</th>
<th>New Policy</th>
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<tbody>
<tr>
<td>Flexible Pavement</td>
<td>PM1 PM2 MR</td>
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<tr>
<td>Milling</td>
<td>0” SAFETY LAYER</td>
<td>½ WS EXCL. SAFETY LAYER</td>
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<td></td>
<td>½ WS</td>
<td>1 Binder, 1 WS EXCL. SAFETY LAYER</td>
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<td>0” SAFETY LAYER</td>
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<td>Rigid Pavements</td>
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<td>Guardrail/End Anchors</td>
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What are the major changes?

• Safety hardware surveys on any category of preservation projects
• Long term safety upgrade benefits
• Hopefully not an abuse of HMA thin lift projects...remember right application for the right roadway.
• Confidence on how to maintain rigid pavements (esp. IM projects)
• Ability to analyze preservation program

What can we expect?

• More interest to perform preservation projects
• More percentage of PM 1 and PM 2 projects—saves $
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WHY THE NEW?

What can we expect?

• Ability to analyze preservation program more efficiently
  - Preservation projects have their own special Work Codes
  - Develop better lane mile cost estimates
  - Ability to compare rehabilitation strategies
  - Non-pavement related costs do not contaminate actual lane mile cost

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What can we expect?

• All project plans submitted with target date 14 weeks from approval date should adhere to the new Policy
• Safety hardware surveys on any category of preservation projects
• 1st year uncertainty on how to approach safety upgrades with alternative funding sources
• Long term safety upgrade benefits
• Material Reports need to be consistent with preventative maintenance matrix
• Hopefully not an abuse of HMA thin lift projects...remember right application for the right roadway.
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Questions?

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