

Asphalt Pavement Alliance and NAPA Initiatives Update

Buzz Powell

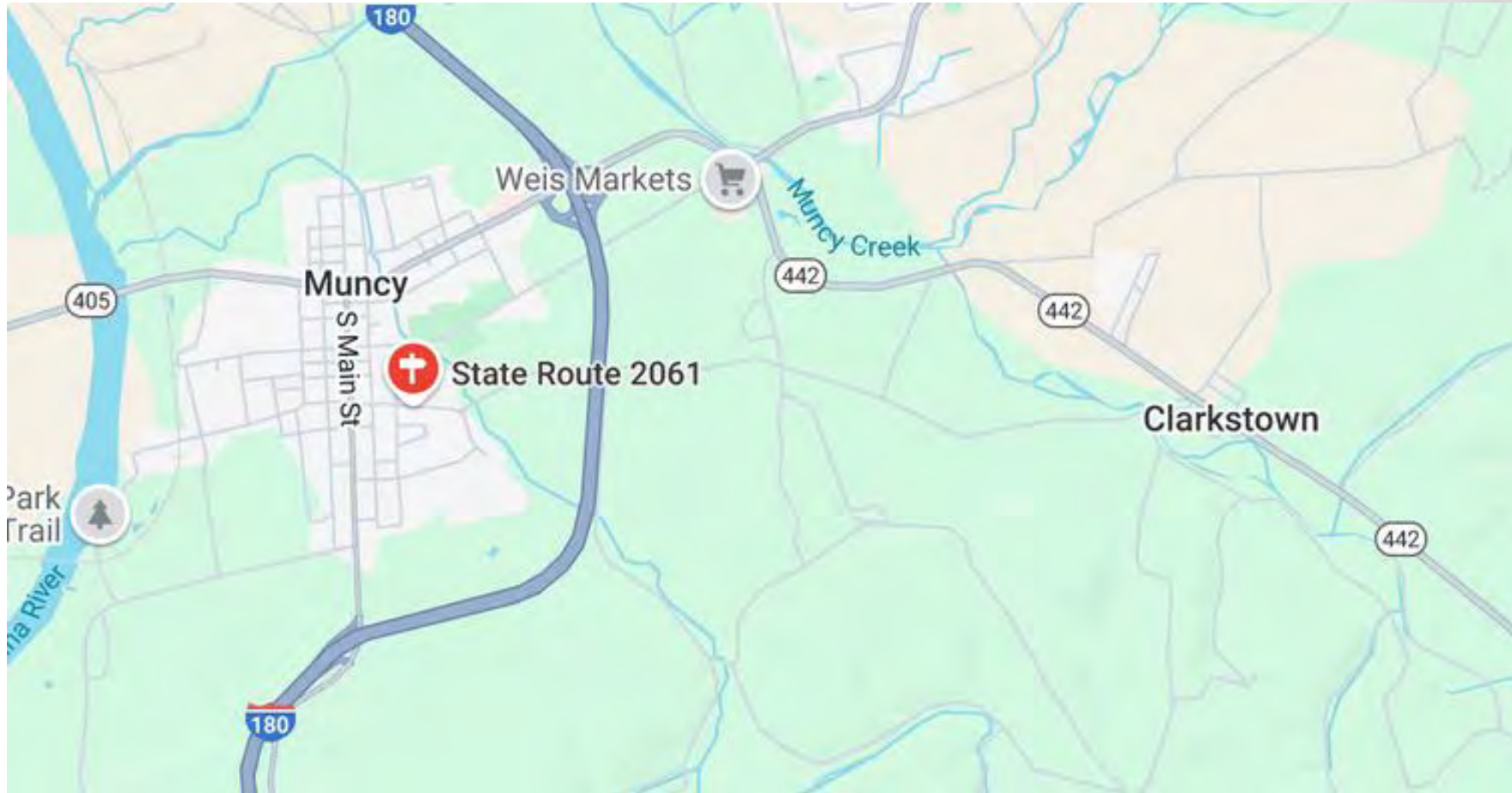
1/21/25



Perpetual Pavement Award: by Performance

- Concept in 1960s, recognized in 2000s, thorough validation
- Perpetual pavement awards by design, performance, or conversion
- Pavement with indefinite structural lifespan (surface work only_{≥13 yrs})
- Evaluations by the National Center for Asphalt Technology (NCAT)
- 181 awards recognized in 32 states since inception in 2001
- 13 perpetual pavements awards in a row for PennDOT!₂₀₁₁₋₂₀₂₃
- SR 2061 in Lycoming County (District 3, Montoursville, PA).

Perpetual Pavement Award: by Performance





The Asphalt Pavement Alliance (APA) is a coalition of the Asphalt Institute, the National Asphalt Pavement Association (NAPA), and the State Asphalt Pavement Associations. The APA operates nationally and serves as a unified voice for the asphalt pavement industry. It focuses on promoting the benefits and uses of asphalt pavements through engineering, research, technology development, and educational programs.

The Asphalt Pavement Alliance aims to communicate the advantages of asphalt, such as sustainability, durability, cost-effectiveness, and the ability to be recycled. The APA also engages in various initiatives to advance and improve the quality of asphalt pavements used in road construction across the United States. The slogan "America Rides on Us" reflects the APA's commitment to enhancing the nation's road systems through superior asphalt pavement solutions.



Unified Voice

Mission Statement:
Champion,
Support, and
Promote Quality
Asphalt
Pavements



Core Pillars:

- Innovation
- Collaboration
- Education



APA Team



Buzz Powell



Brittyn Heisler



Reed Ryan

APA Online Resources (DriveAsphalt.org)

The screenshot displays the website's navigation and content. At the top, there are menu items: RESOURCES, EVENTS & TRAINING, AWARDS, and CONTACT US. A search icon is located in the top right corner. The main content area features a large image of a road with a yellow center line. Overlaid on this image is a black box with the text "Welcome to PAVEExpress" and two buttons: "Login" and "Create Account". To the right of the road image is a dark grey dropdown menu with the following items: PAVEXPRESS, PAVEINSTRUCT, PERPETUAL PAVEMENT, COMMERCIAL APPLICATIONS, and LIBRARY. Below the road image, there is a smaller image of two people outdoors, and a yellow box with the text "SUSTAINABILITY" and "Asphalt: The Sustainable Material".

- Roadways
- Parking Lots
- Airports
- Racetracks.

APA Strategic Plan

- **Innovation** - promote **data** driven research findings, fair-market principles, and best practices (Pavement Economics Committee, [#BuzzOnAsphalt](#))
- **Collaboration** – unified, **trusted** voice for stakeholders through consistent communications, resourceful information, organizational excellence, and lasting industry relationships ([Perpetual Pavement Awards](#))
- **Education** – objective and **credible** educational opportunities for specifiers, agencies, and owners (strategic tradeshow, [presentations](#), webinars, workshops, lunch-and-learns)

#BuzzOnAsphalt Keys to Pavement Performance

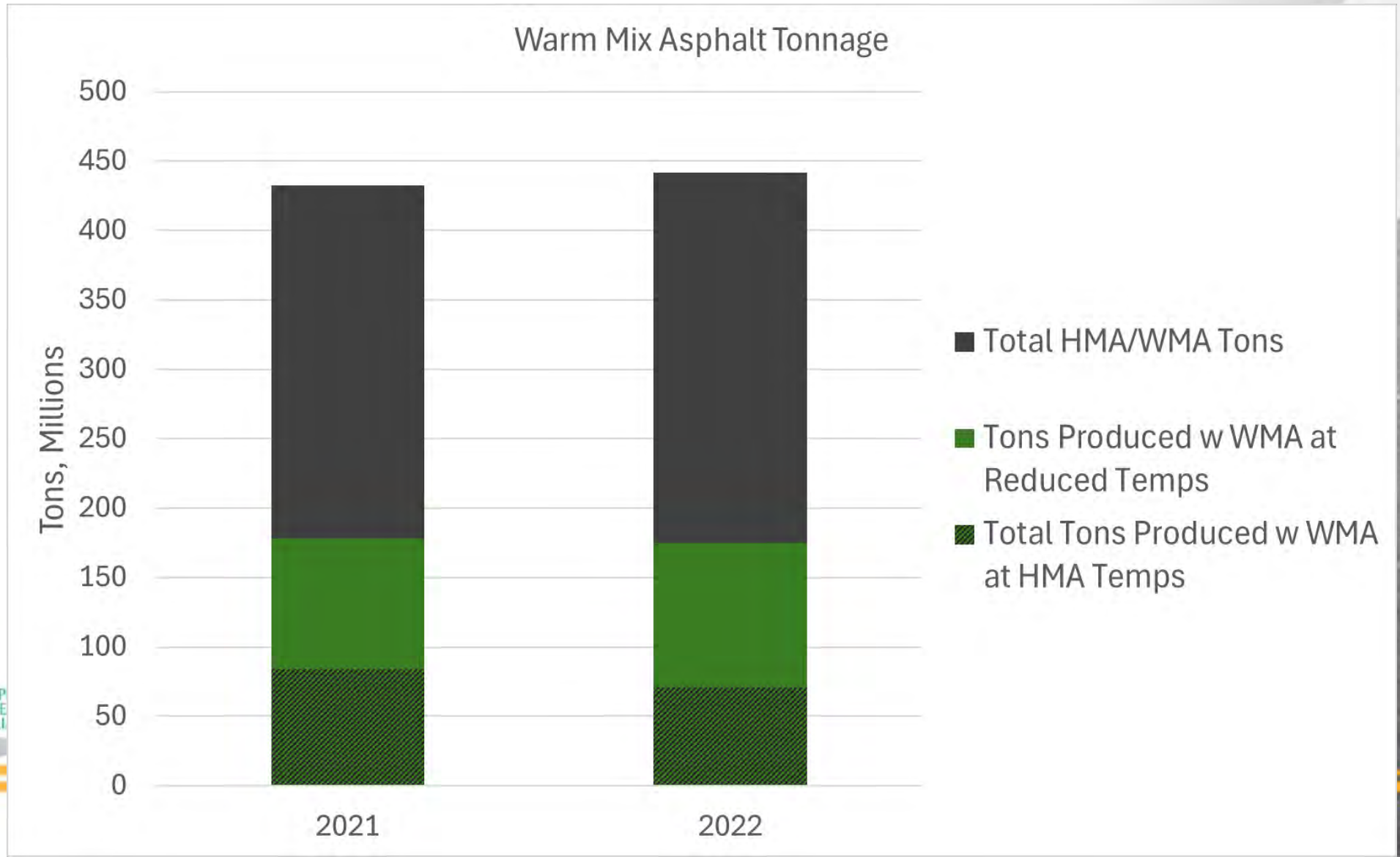
An aerial photograph showing a winding asphalt road through a dense green forest. In the lower right, there is a building with a dark roof and a parking lot. The road curves and then straightens out towards the right side of the frame.

- Mix/materials – meeting specific needs of each layer
- Thickness design – preventing non-surface cracking
- Preservation – safe, durable, renewable surface
- Materials, design, construction effort, inspection.

APA Objectives (with National Priorities/Trends)

- Improve the quality of asphalt pavement (BMD)
- Collaborate with partners and stakeholders (Perpetual)
- Support strategic innovation deployment (ThickLay, WMA)
- Provide technical support to industry, agencies (HiMod)
- Deliver relevant and timely education content (EPD)
- **Champion, support & promote quality asphalt pavement!**

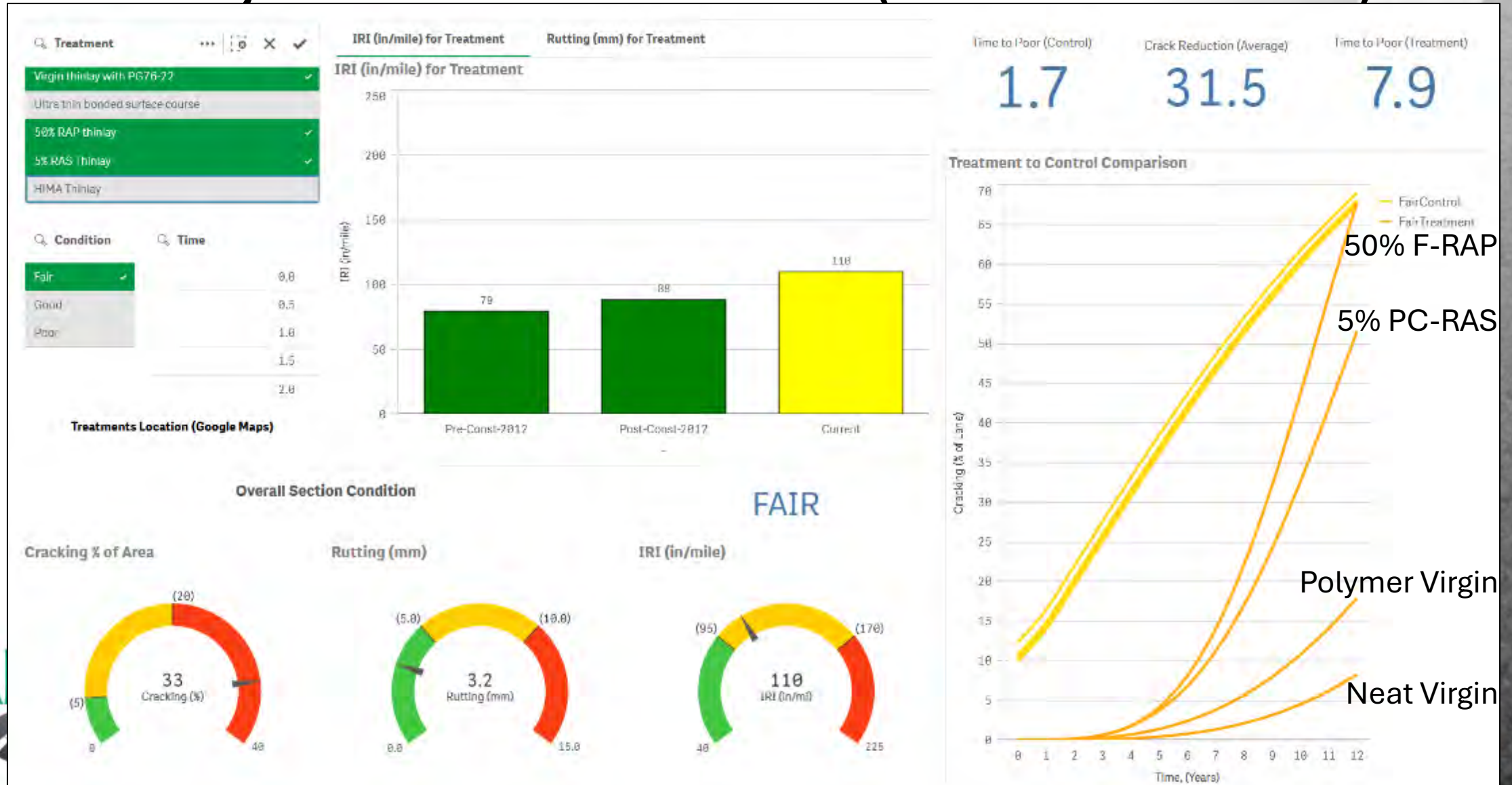
Warm Mix Asphalt



Quality Improvement

- Pavement management systems decade after 2008...
- Help states implement the right kind of change
- Promote real innovation opportunity for industry BMD
- We know how to build long lasting asphalt roads!
- Level playing field for competitive bidding, building
- Ensure quality, respect workforce, incentivize innovation.

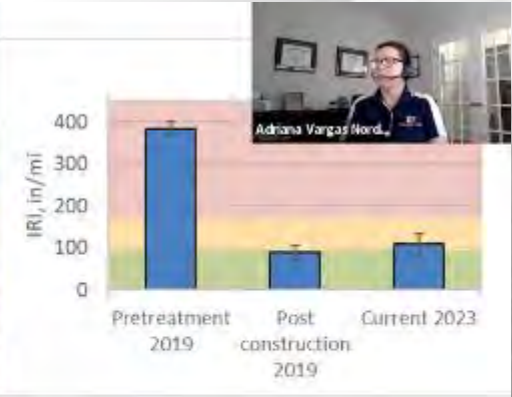
ThinLays on Lee Road 159 (www.NCAT.us)



Healthy ThinLays on 70th Street at MnROAD

Control (Thinlay)
 Pretreatment: Poor
 @ Year 4: 24%

70TH ST NE



Parameter	Value	Rating	Overall Condition
Cracking, %	24	POOR	FAIR
Rutting, mm	5	FAIR	
IRI, in/mi	122	FAIR	



Asphalt Innovation & Implementation Workshop

- \$3B+ capacity and improvement on I-70 from St. Louis to Kansas City
- 6 projects, at least 4 design/build, 2 may be traditional design/bid/build
- 14” of traditional asphalt lost to 11” of concrete on the first project
- Missouri SAPA reached out to APA with request for training seminar ^{5/14}
- Discussion on need to innovate in bids on remaining projects
- E.g., ThickLay paving for speed, HiMA binder for thickness, etc.
- Desire to include NCAT for LCCA and/or structural pavement design
- MAPA, APA, NCAT, AI, agency collaboration on seminar ^{Summer/Fall 2024}



Workshop Agenda

- Background and overview
- Perpetual asphalt
- HiMod as ThickLayer
- Lane additions with
- Strategically increased
- Stabilization for improved
- Panel discussion with

MAPA Missouri Asphalt Pavement Association

673 followers

3d • 🌐

It's a great day to host an innovative asphalt pavement strategies workshop! Lots of conversation on tools and innovations available for design-build teams and completing projects. A special thanks to our expert speakers from [Asphalt Pavement Alliance](#), [Asphalt Institute](#), and [National Center for Asphalt Technology at Auburn University](#).

#BuzzOnAsphalt

Learn more at www.moasphalt.org.



1 to 3:00 PM

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Buzz

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ASPHALT INNOVATION
& IMPLEMENTATION
WORKSHOP



HB 1524 at Virginia House of Delegates on 9/4/24



Buzz Powell • You

Safe and sustainable asphalt pavement at the lowest possible life cy...

1w •

Today I was honored to serve as an objective technical reference for the Virginia House of Delegates as they consider HB 1524 regarding a proposed tax credit for machinery and equipment used to reclaim, recycle, or reprocess existing asphalt materials from pavements and roadways. [#BuzzOnAsphalt](#)



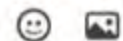
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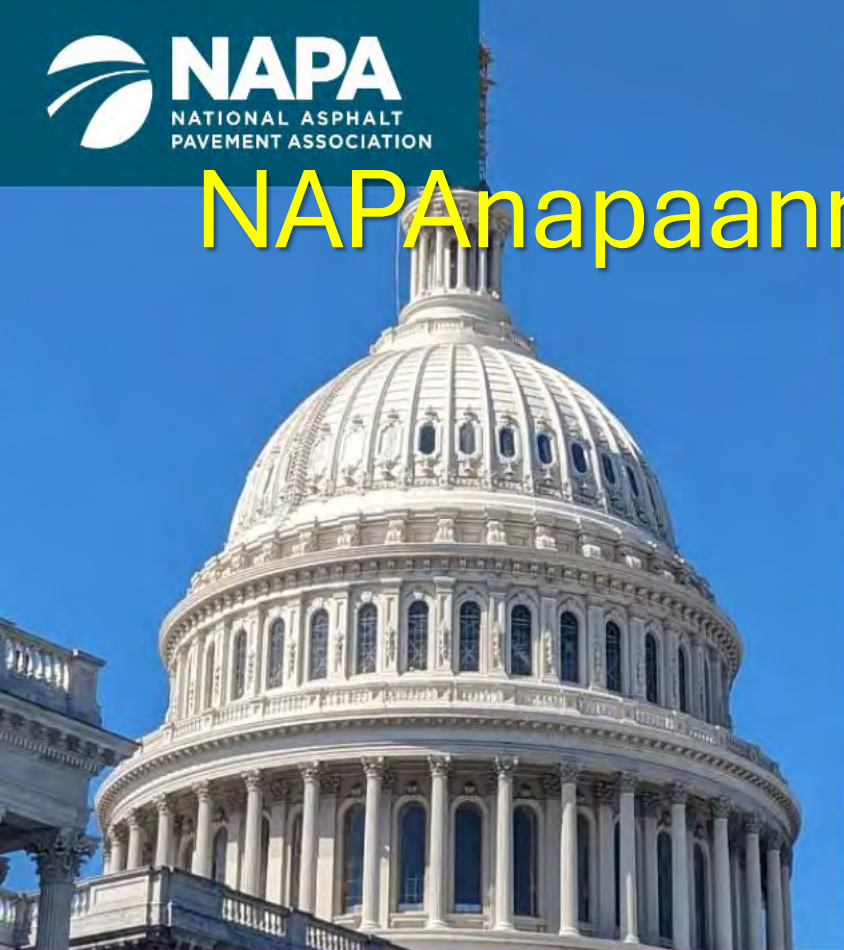


Add a comment...



Some APA Goals for 2025

- Continue support for industry (stakeholders) and agencies
- Meaningful **#BuzzOnAsphalt** social media content
- 3 Innovation Workshops for LCCA-based alternate bidding
- 1 Asphalt Basics Workshop (Asphalt Institute MS-2)
- 1 (new) Plant Basics Workshop (newly developed)
- Publish perpetual pavements e-book (with LCCA focus)
- Reinvention of the Asphalt Vault industry resource.



LEADERSHIP

Lead the industry by advancing the national legislative, regulatory, and policy interests of the asphalt pavement industry, serving as trusted experts, and increasing participation in NAPA's advocacy strategy.



STEWARDSHIP

Grow the industry by delivering expertise and programs that advance the safe, sustainable, responsible, and resilient production and construction of asphalt pavements and promote excellence.



MEMBERSHIP

Connect the industry by engaging members in NAPA'S crucial role advancing the asphalt pavement industry and convening the industry to address top issues.



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https://asphaltepdp.org/



Welcome to the Emerald Eco-Label EPD Tool

Portable Plants

The portable plants function is now live! Check out our [recent webinar](#) to learn more about this and other new features.

Each company is required to designate a primary/technical lead. Prior to being granted access to use the tool, each primary/technical lead must watch two webinars and take and pass the corresponding quiz for each webinar. The webinars are [Environmental Product Declarations: What they are and how to use them](#) and [How to Use Emerald](#)



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Find a mix with an Environmental Product Declaration

Help

Available mixes

View by Organization

State	Organizations	Plants	Mixes	Declarations
PA	20	74		1522
AR	4	8	48	See EPDs
AZ	3	4	45	See EPDs
BC <i>Canada</i>	2	4	21	See EPDs
CA	7	34	216	See EPDs
CO	13	37	144	See EPDs
CT	1	4	46	See EPDs
DC	2	2	66	See EPDs
DE	1	2	25	See EPDs

Pavement Economics Committee (PEC)

- Fall 2012, to quantify/highlight asphalt's competitive advantage
- Economics, engineering, environmental benefits of asphalt
- Projects completed in 1 to 2 years with implementable products
- Legislative transition 118th → 119th Congress, reauthorization, states
- Life cycle assessment (LCA) smoothness emissions reduction
- Life cycle cost analysis (LCCA) non-state thickness design catalog
- Mixture quality and performance (BMD Resource Guide)
- Projects underway versus future projects being balloted.

PEC Projects on Life Cycle Assessment (LCA)

- Framework for Quantifying GHG Emissions Reduction Through Improved Pavement Smoothness
- Warm Mix Best Practices and Half-Warm Mix State of the Knowledge
- Green Procurement Policies: State of Practice
- Comparative Life Cycle Assessment for Asphalt and Concrete Pavements – Threat Assessment
- Mix Production Temperature Allocation Methodology for EPDs
- Tool to Account for Work Zone Congestion in Pavement LCA.

PEC Projects on Non-LCA Topics

- **Life Cycle Cost Analysis (LCCA)**
 - Asphalt Pavement Mixture Types Selection Guide
 - The Flexible Pavement Design Catalog for Non-State DOT Roadways
- **Mixture Quality & Performance**
 - Balance Mix Design Web Resource Guide Maintenance and Enhancements.

PEC Projects Currently Under Ballot

- Government affairs team access expanded for state associations
- MS-23 Thickness Design: Asphalt Pavements for Heavy Wheel Loads
- Innovative materials for high stress pavement (Utah style HiMod)
- Carbon sequestration in asphalt versus concrete (actual science)
- Balanced Mix Design Resource Guide interactive information.

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Takeaways

- Perpetual pavements have indefinite structural lifespan
- APA exists as a unified voice & resource for the asphalt community
- Mission = champion, support & promote quality asphalt pavement
- 3 pillars = innovation, collaboration, and education
- Strategic planning developed under Reed's leadership 2025+
- NAPA pillars are leadership, stewardship _{PEC}, membership
- PEC for economics, engineering, environmental benefits of asphalt
- **Safe, sustainable asphalt pavement at lowest possible life cycle cost!**

#BuzzOnAsphalt

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