North Central Regional Update

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Research & Technology

Market Research & Communications

Deployment

Pavement Economics Committee

• 4 Task Groups

Other Research

- Asphalt Institute
- NCAT

Future Research





Deployment Task Group









ASPHALT PAVEMENT ALLIANCE

To establish asphalt pavement as the preferred choice for quality, performance and the environment.







Mission

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Mixture Quality & Performance

- Best Quality & Competitiveness
- Pavement Preservation
- Private Sector Markets & Local Roads



Life Cycle Cost Analysis

- Pavement Design
- Pavement Type Selection



Life Cycle Assessment

Environmental Sustainability



Legislative







New Task Group Structure

Brand Management

Align with New Task Groups

Create Materials on LCCA, LCA, Mixture Quality & Performance, and

Commercial Markets

✓ Advertising Program

√ Videos & Infographics





2018 Program Plans



85% OF DEATHS IN WORK ZONES ARE DRIVERS AND PASSENGERS IN CARS.

WORK ZONE SAFETY IS YOUR SAFETY, TOO.





PAVEMENT ASSOCIATION

Workzone Safety





Watchfor.us

A Moment Can Save a Life

Every year more than 600 people are killed in roadway work zones. Construction companies are dedicated to ensuring the safety of their workers and the driving public. Roadway work zones use a variety of warning systems, barriers, and other traffic controls to make certain drivers and work zones stay separated, but it just takes a moment of distraction for an accident to happen and for lives to be changed forever.

This is one such story.

A Moment Can Save a Life









National Deployment Strategic Plan - Amy Miller

STRATEGIC AREA 1 – LCCA

- Objective: Advocate the Proper and Appropriate Use of LCCA.
 - Working with the SAPAs and industry members, advocate to DOT audiences, pavement specifiers and political appointees on how to properly formulate and use LCCA.
- STRATEGIC AREA 2 PAVEXPRESS
- Objective: Expand the use of the PaveXpress software by pavement designers.
 - Working with SAPAs, AI Regional Engineers, and other industry partners to expose pavement-design professionals, including public agencies and consulting engineers, to PaveXpress. Simply exposing the design community to PaveXpress has shown to increase usage of the tool.

• STRATEGIC AREA 3 – COMMERCIAL

- Objective: To work with industry and SAPA members to develop national relationships that create opportunities to advocate for the effective use of asphalt.
 - Meetings with engineers and decision makers at the headquarters of national accounts to create relationships and determine what assets they need.
 - Work with state execs and contractors to implement PEC material geared to the commercial market.

Regional Initiatives

Life Cycle Cost Analysis

 GOAL: Adapting standard procedure for LCCA in NC Region that can incorporate state specific input. Gather best practices and deploy best strategies with region

Rehab Competition

GOAL: Create competitive industry message promoting best HMA practices.

Proper Design Thickness

 GOAL: Promote initiatives designed to teach designers how to optimize pavement design while ensuring performance.

Commercial Market Strategy

 GOAL: Implement tools designed to enhance market share in private sector market.



WARNING!

Full Disclosure and and arency



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Action LCCA

Presentations at SAPA Annul Meetings (general sessions) on LCCA

Deploy Educational PowerPoint on LCCA Recommended Practices
Prepare and conduct an APA update on the top three national initiatives:
LCCA, PaveXpress, and Commercial Markets

Meetings with DOTs, appointees, and owners on LCCA in conjunction with industry partners

Understand the LCCA challenges and opportunities in the Northcentral regional states and develop plan with deliverables



Review of Initial Service Life Determination in LCCA Procedures and In Practice – *TRB 2018*

Summary of Middle 90% of Pavement Ages at Time of 1st Rehab

Pavement Type	No.	Avg	Min	Max	Std Dev
AC	206	17.68	7.09	28.93	5.51
PCC	121	23.84	12.88	35.44	5.79

Ride Quality (IRI) Prior to Rehabilitation

	Percent of Total Pavement Sections				
	Very Good**	Good	Fair	Poor	Very Poor
Pavement Type	< 60	61 – 95	96 – 120	21 – 170	> 170
AC Pavements	9.6%	34.3%	24.1%	17.5%	14.5%
PCC Pavements*	1.1%	23.3%	26.7%	34.4%	14.4%

NCAT Source

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#2 Rehab Competition

GOAL: Create competitive industry message promoting best HMA practices.

Specific to NC Region Initiative





§ 490.311 Metric Thresholds in Final Rule

Rating	Good	Fair	Poor
IRI (inches/mile)	<95	95-170	>170
PSR* (0.0-5.0 value)	≥4.0	2.0-4.0	≤2.0
Cracking Percent	<5	CRCP: 5-10 Jointed: 5-15 Asphalt: 5-20	>10 >15 >20
Rutting (inches)	<0.20	0.20-0.40	>0.40
Faulting (inches)	<0.10	0.10-0.15	>0.15



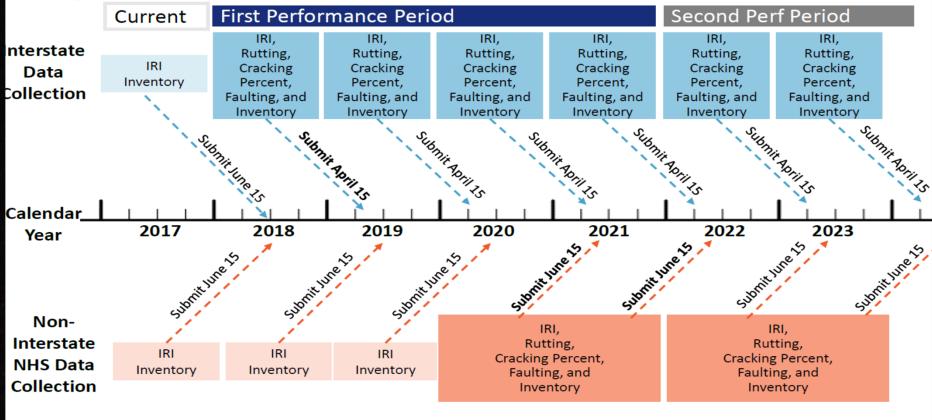
*PSR may be used only on routes with posted speed limit < 40mph.

U.S. Department of Transportation
Federal Highway Administration





§ 490.309 State DOT Pavement Data Submittal





U.S. Department of Transportation

Federal Highway Administration

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The same

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Preserving Performance using Thinlay™

DAN STAEBELL APA NORTHCENTRAL REGIONAL DIRECTOR DSTAEBELL@ASPHALTROADS.ORG

> Thanks for Assistance: Buzz Powell, NCAT Brett Williams, NAPA

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Action #3 Pavement Design Initiative

STRATEGIC AREA 2 – PAVEXPRESS

Objective: Expand the use of the PaveXpress software by pavement designers.

PaveXpress

PAVEMENT DESIGN
Simplified

Means to achieve:

Use PaveXpress to open discussions about structural number and proper design thicknesses in the APA Northcentral, Northeast, and Southeast regions.

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PaveXpress Training

PAVEINSTRUCT Pavement Design Education



Learning Pavement Design with PaveXpress

The PaveInstruct learning module is a web-based pavement design education system with video instruction by leading industry experts. PaveInstruct accompanies PaveXpress, a web-based software created to design flexible and rigid pavements using AASHTO 93/98. The education modules within PaveInstruct correlate with the design modules in PaveXpress and provide technically sound pavement design and instruction.

PAVEInstruct

Instruction

Please click below to enter the PaveInstruct learning module system. Presentations are available in short clips or in full format.

Learning Center

PAVEXpress

Design

Please click below to enter the PaveXpress design system.

Learn More

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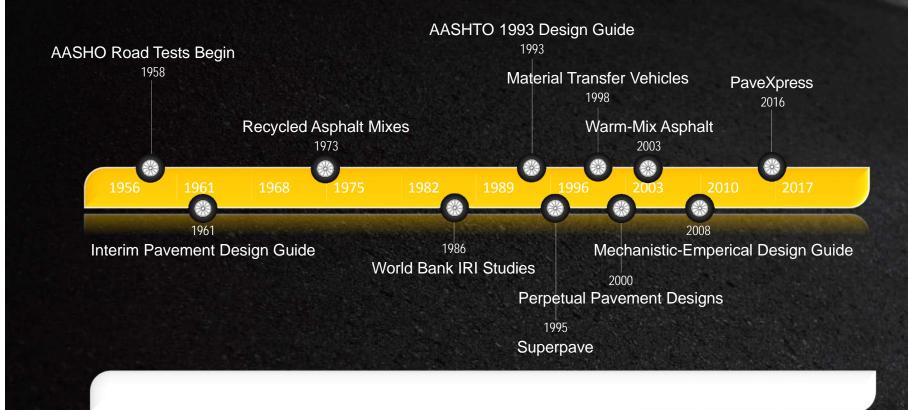
AMERICA RIDES ON US

PaveXpress
PAVEMENT DESIGN
Simplified





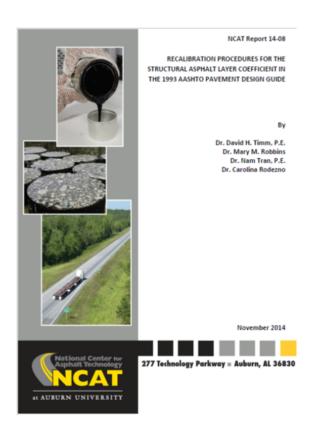
The Path to Today





NCAT PEC Pavement Design Study

- SN Values today reflect .50-.54 vs .44
- Local review encouraged
- The asphalt layer coefficient originally recommended by AASHO in 1962 (1) is not necessarily applicable in all situations. Studies in Alabama (8) and Washington (11) found a higher value better reflected actual performance. The values in each state (Alabama = 0.54; Washington = 0.50) were remarkably similar despite geographical
- Local agencies or municipalities that may not have all the information required for recalibration could still perform recalibration by utilizing existing information available through state or other local agencies for similar roadways in their geographic regions.



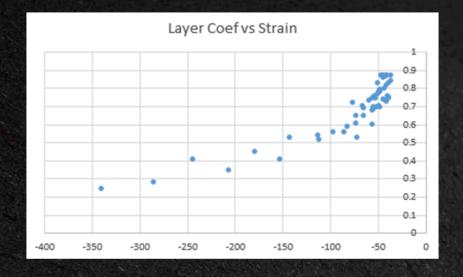
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Iowa SN work

HWY 100 SN Estimate

"When you have a perpetual pavement <100 microstrain, you can't get there without at least a 0.5 layer coefficient.
Specifically for HWY 100 I would estimate 0.58 SN"
S. Schram IA DOT



A PA ASPRALI PAVEMENT ALLIANCE

What does Optimized Design mean?

SN Value .52

SN Value .44

	Surface
Surface (AC) 2.00"	Binder/Interm
Binder/Intermedia (e A.) 2.00"	Danet
Base (A) 1.50"	Base
Aggreate Base 6.00"	lggrega
Subbas 0 0 S	aving

Surface (AC)	2.00"
Binder/Intermediate	2.00"
Base	3.00"
ggregate Base	6.00"
a Vinose	

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Action #4 Commercial

STRATEGIC AREA 3 – COMMERCIAL

Objective: To work with industry and SAPA members to develop national relationships that create opportunities to advocate for the effective use of asphalt.

 Work with state execs and contractors to implement PEC material geared to the commercial market.





ASPHALT: THE SMOOTHEST WAY TO WELCOME CUSTOMERS

Whether at a business, a shopping center, a school, house of worship, recreation area or apartment building, a PARKING LOT is one of the first things a person sees when arriving at their destination. First impressions matter, and a poorly constructed or maintained lot can reflect negatively on an establishment. A well-maintained parking lot is also safer and easier for both pedestrians and drivers to negotiate. Asphalt pavements are the superior choice for parking lots because they are quick to construct, long-lasting, sustainable and easy and cost-effective to maintain. Plus, because asphalt is everywhere, there are qualified and capable asphalt paving companies in every community across the nation.



Construction and maintenance activities can be done guickly and at night, which eliminates inconvenience for customers and business operations.





PERFORMANCE

Long-life asphalt pavements are designed in layers so that they never need full-depth repair or reconstruction.













- · An asphalt parking lot allows an owner to keep their "welcome mat" crisp and inviting.
- · Long term serviceability is easily and quickly maintained when utilizing asphalt pavements.
- · Asphalt pavements are extremely versatile and can be easily adapted to suit any pavement application.
- · Asphalt is the most recycled product in
- · Asphalt parking lots are economical and can be used in light and heavy-duty

Contact us today for assistance.





A business's exterior appearance influences the decision of where to shop for 95 percent of consumers.1



ear

gree in

envir

1. Morpace (2011). Consumers Are Influenced by the Physical Appearance of a Retailer. Morpace Omnibus Report: April 2011, Morpace Inc., Farmington Hills, Michig

ASPHALT: The Right Choice







Private Sector

Markets &

Local Roads

The APA is a partnership of the **Asphalt Institute, National Asphalt** Pavement Association, and the State **Asphalt Pavement Associations.** We were formed over 10 years ago.

APA's mission is to establish asphalt pavement as the preferred choice for quality, performance and the environment.

Amy Miller, P.E., National Director amiller@asphaltroads.org

Dan Staebell, Regional Director, Northcentral Region

2233 Park Avenue, Ste. 200U Orange Park, FL 32073

www.asphaltroads.org



Parking Lot Flyer



Agenda

- 7 Keys to Success
- Critical Pavement Design
- Reconstruction
 - When
 - How
- Porous Asphalt
- LEED and Sustainable Practices

Asphalt. AMERICA RIDES ON US





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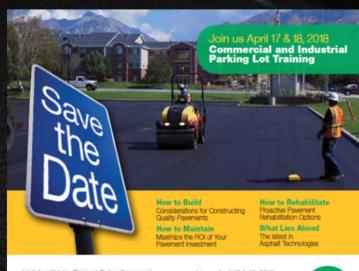
Upcoming Commercial Training

- Professional Instructor's
 - Tim Murphy PE
 - Mike Groh-



INTEGRATION

- April 17-18th Chicago
 - Future locations:
 - KC and MSP
- Focus: "How To"
 - Build
 - Maintain
 - Rehabilitate



In today's world, being efficient and effective with resources is the name of the game to keep your oustomers and tenants returning year after year. Join us for in depth training and education related to the unique requirements of your commercial and industrial parking

From construction to maintenance, materials to proper pavement design, learn what is required to keeping your facility in tip-top shape

Instructors

Murphy Pavement Technology, Inc.

Tim promotes best practices within the asphalt industry on local, regional, and regional levels. He works collaboratively with agencies. associations, consultants, suppliers, and contractors to ensure asphalt quality construction at the most economical price.



Michael has been associated with the paving industry for four decades is experience has been as a contractor, material supplier, and consultant with over twenty of his 40+ years working in the consulting industry.

Dan Staebell, Northcentral Regional Director, APA

Dan has 35 years+ of Asphalt Paving knowledge working in all facets ranging from Estimating, Project Management, Construction, Liquid Binder Technologies, and Marketing. Dan works with APA Partners; NAPA, Al and the Regional State Asphalt Paving Associations.

Join us April 17 & 18, 2018 **Commercial and Industrial Parking Lot Training**

NIU Naperville Conference Center 1120 E Diehl Rd, Naperville, IL 60563



Space is limited. To reserve your spot today contact the Asphalt Pavement Alliance office - Sandy Hager at shager@asphaltroads.org or 904.446.0758

Additional 2018 Training Locations Kansas City and Minneapolis Location and dates TRD







Women of Asphalt

WHO IMPROVE OUR INDUSTRY

Please join us for the debut of

women of aspha

World of Asphalt

Houston Convention Center

March 6, 2018 | 3-5 pm

Mixer (Free wine and beer) APA booth (#3455) and Al booth (#3457)

March 7, 2018 | 1-3 pm Women of Asphalt Council forum

Room 360 A&B

Discussion on the WOA council and a roundtable with ladies in the industry, plus a presentation from Dr. Audrey Copeland, NAPA VP for Engineering, Research and Technology

For more information, contact Asphalt Pavement Alliance at 904.446.0758.

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Create an Environment



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