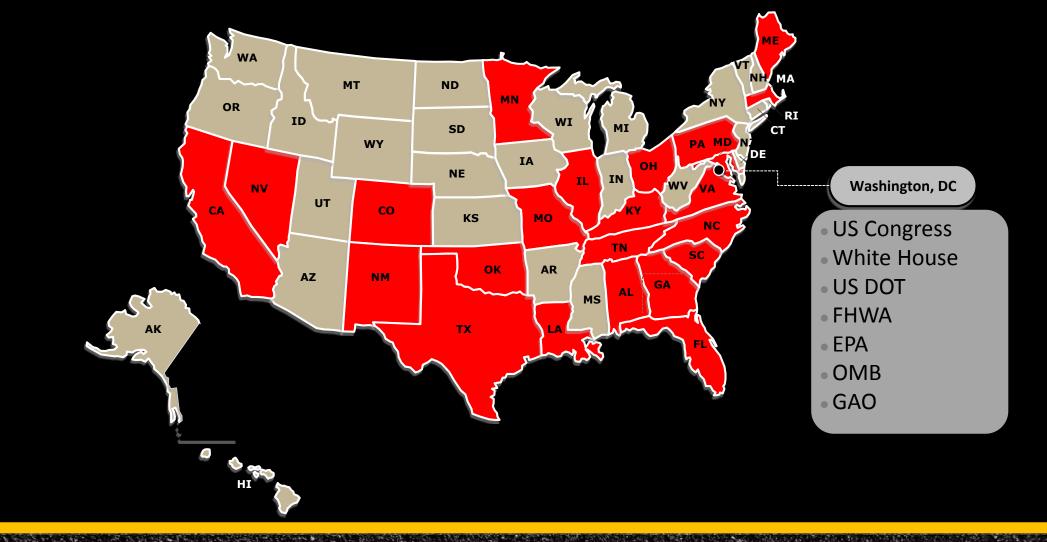
WAPA-NAPA Partnership

Ester C. Magorka WAPA 59th Annual Conference Wednesday, November 28, 2018

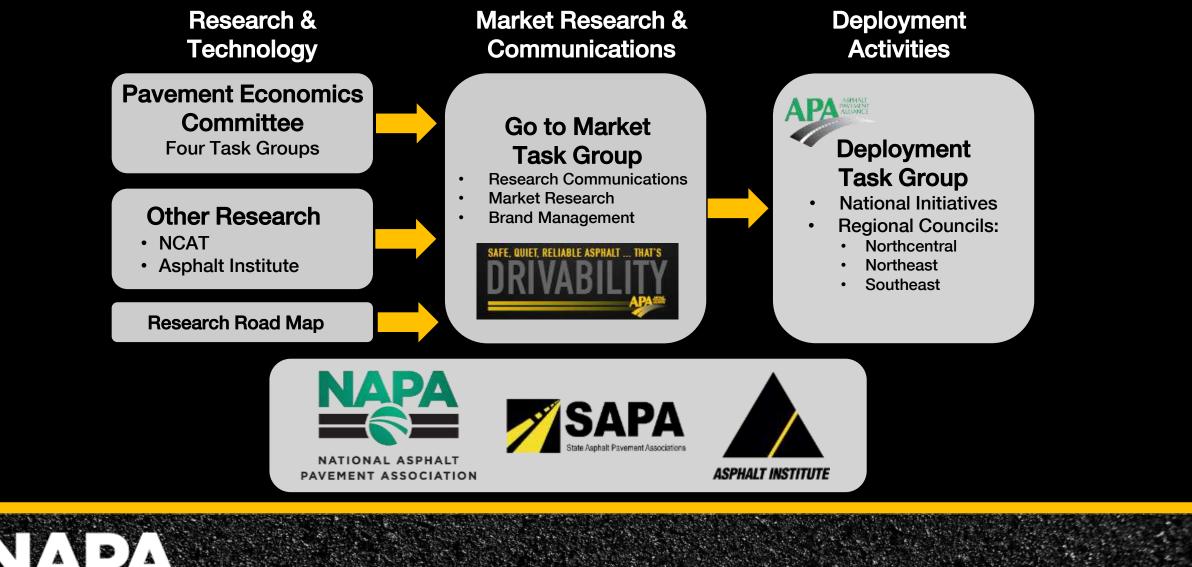
1705%





Competitive Environment

NATIONAL ASPHALT PAVEMENT ASSOCIATION



Market Research Efforts

NATIONAL ASPHALT PAVEMENT ASSOCIATION

Financial status

- •≈\$2.8 Million Approved
- •\$2.2 Million Spent
- 34 SAPAs Supported in 2018

Deliverables status

- 45 Projects Total
- •35 Projects are Complete or Near Completion

The Road Ahead

The Asphalt Pavement Industry Commitment to Research

The Pavement Economics Committee & NAPA-Directed Research 2018 Update



A Powerful Partnership

Formed in 2013, the Pavement Economics Committee (PEC) seeks to devicing the scientific data through research and analysis that positions asphale as the pavement material of choice. The PEC is a partmentip between NAPA and the State Asphat Pavement Associations (SAPA), working with top researchers from across the country, to address market states and competitive isause through research. The projects are typically short-term (under 2 years), science-based research projects that exemme, calibrate, and eases implementation of the core needs of most centers and users. With funding research by NAPA and the SAPAs, the PEC has await able miscures of about \$500,000 per year.

Impact Beyond Research

PEC remembry is supported by a broad industry transwork designed to get the issearch bridings into the bands of practitiones, owners, and the publec. The Ge to Market (GTM) task group synthesizes and develops supporting makerials to communicate PEC research to different statisticitier authences as part of the deployment efforts of the Aughtel Pavement Alliance (APA), NAPA, and the BAPAs. The PEC research will be used to create materials that domonstrate the bornetits and cost effectiveness of exploring and will be utilized by the APA deployment. effort for advocesy, Physics to out effect defendences.

competitor's claims or develop metrics which antify the benefits of using asphalt pave The PEC also strengthens grassroots activilies and insulates industry from harmful legislation or policies at the local, state, and federal level.

at Exceeding Expectations & Creating Opportunities

As indicated through surveys of the SAPAs and through informal feedback from NAPA members, the PEC program has need or exceeded expectations for the investment. PEC deliverables develop robust information about applicitly competitive advantages and provide support for market growth in parentwent design, necycles, environmental impact, presenvation, and speed of constructions. And the PEC deliverables are creating tuture opportunities in the analor (pavement persistivation and environmental surveiting).

"They (the PEC Deliverables) are touching on the most critical issues facing our industry: "

- SAPA Executive Survey Respondent

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The Read Disease 2710 ()

www.AsphaltPavement.org/PDFs/NAPA_Research_Update_2018.p



NATIONAL ASPHALT PAVEMENT ASSOCIATION

Pavement Economics Committee





Mixture Quality & Performance



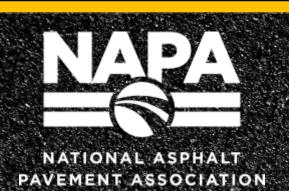
Life-Cycle Cost Analysis



Legislative



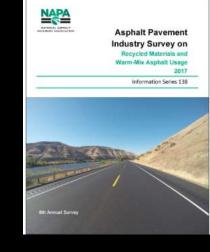
Life Cycle Assessment



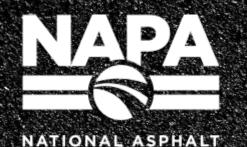


Key Research

- LCCA Guidance Report (Under FHWA Review)
- Optimizing Flexible Pavement Design Project (www.ncat.us)
- Thinlay Guidance Document (www.ThinlayAsphalt.com)
- 2017 RAP, RAS, WMA Survey (www.asphaltpavement.org/recycling)
- Effects of Asphalt and Concrete Pavement Rehabilitation or Users and Businesses During Construction (https://www.eng.auburn.edu/civil/research/)







The Science: Pavement Economics Committee

PAVEMENT ASSOCIATION

NAPA Talks Webinars

www.AsphaltPavement.org/webina

Webinar Series

- Back to Basics
- Best Practices in Paving
- Performance Under Pressure: Heavy Duty Pavements
- Safety in the Workplace
- Sustainability Specialization





Pavement Economics to Go to Market to APA Deployment



NATIONAL ASPHALT PAVEMENT ASSOCIATION PEC and Thinlay

standardsity without contentating perhautance. So where we laft door that provider, we are saily talking altered a sproughness of solutions for any parameter Three regulate secondary, this all preservations resultances, are designed for our or pressure that are selectionly name and its good creatment. Its more core, where a coul is only in lat condition, an example, the existing remove surface discusses due preparent preferences o



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THIN**LAY**

SAFE. SMOOTH. DURABLE.

Toolkit

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Contact: Dan Staebell & Brandon Strand

BREFERRE.

T



With limited funding and aging roads, agencies need cost-effective, longlasting pavement preservation techniques. Thinlays are a suite of asphalt overlays that are developed for pavement preservation using proven pavement design principles. Early Thinlays have performed for more than ten years, double the life expectancy of other pavement preservation options.

While Thinlays are not a cure for failed pavements, they do offer life extension to "good" or "fail" pavements. Designers and road owners should be aware of best opportunities to employ Thinlays, how to design and specify, best practices for construction and quality control along with performance measures. The material referenced within this document is a culmination of information from around the industry that will aid in the proper education of Thinlay application. The intended audience of this material is engineers and road owners.

Promotional Cards and Flyers

Promotional cards and flyers are an easy to distribute, cost effective medium that conveys customized information to an intended audience. Consider using these cards and flyers at industry events, trade show booths, in mailings, or as flyers around your office lobby to educate stakeholders about the benefits of Thinlay.

 New Jersey Asphalt Pavement Association (NJAPA) has faced intense competition from other pavement preservation techniques. So NJAPA produced an arsenal of products, including this flyer citing the benefits of Thinlays. This can be customized to use in other states at events focused on road owners making pavement preservation decisions.



- Lowest overall annual cost
 Guieter rate for drivery and the reigh borhos
- Guideer ride for drivers and the neigh to
 Smoother made and better rideability
- Improved salety from corrected surface
- irregularities and better skid resisterer
- 100% Recyclable materials flar environmental sustainability

Minth Surfacing and Surr

28

- Higher enrual cost
 Rougher and louder ride
- Needs expensive, specialized equipment to install
- Dees not correct surface imagularities
- Requires aggregate from see sources not recycled material

NAPACEM

Deployment and Thinlay







Go to Market Asphalt Promotion

Goals

Build Collaborative Partnerships Promote Performance















Performance demands sustainability.

PER

NSPY

Asphalt pavements are designed, produced, constructed and maintained to conserve natural resources, reuse materials and deliver the smooth ride drivers demand. This makes asphalt the best choice for sustainability and TODAY performance, today, tomorrow and into the future.

79.6M≊ of reclaimed asphall. pavement is used annually in new roads and parking lots.

► TOMORROW

\$1.300 in maintenance costs is saved every year for each lane-mile of smooth asphalt."

4.5% less fuel is consumed by vehicles driving on smooth asphalt surfaces1.

\$2.2B

the pavement not just

as well

is saved every year by using

recycled asphalt --- making

environmentally sustainable

but economically sustainable

which saves drivers about

per gallon.

APA

When it comes to

sustainability

www.DriveAsphalt.org

of an asphalt pavement is reusable and contains the raw aterials for the next generation of roads, runways, trails or parking lots.

100% 🤇

FUTURE



in energy will be saved by 2020 by using warm-mix asphalt, according to U.S. Department of Transportation estimates.

TODAY

94% of U.S. roads are surfaced with asphalt¹

Asphalt contractors are in every community: ≈3.500 asphalt plants operate in the U.S.

400K jobs connected to asphalt across the country



12+ year gain in service life from a thin asphalt overlay at an annualized cost as low as 25 c

A 2 inch asphalt overlay can improve IRI by 100 -

When it comes to long-term

value

ASPHALT PERFORMS

FUTURE

is the average 18 sa service life for new asphalt pavements*

The structural life of a $\mathbf{0}$ property designed. constructed and INFINATE maintained Perpetual Pavement.⁷

Asphalt's superior performance and value make it today's pavement of choice across America. With local producers in every community, road owners have a competitive marketplace for the smooth, long-lasting pavements drivers demand Asphalt is the best choice for value and performance, today tomorrow and into the future.





A Moment Can Save a Life





104,000 Social Media Impressions 3,016 Shares I I I In 2,172 Website Views #WatchForUs > #NWZAW 13 Partners



www.WatchFor.Us

DOLO THOTH AND DO

Golin and National Asphalt Pavement Association

www.WatchFor.Us/toolki

Events or Observances Seven Or Fewer Days Associations/Government/Nonprofit O

award

Phoenix

2018

on Behalf of National Pavement Association One Moment Can S Work Zone Safety

PRSA Awards

External Video category Events or Observances – Seven or Fewer Days

Future Plans

I PAVE FOR

2019 NWZAW

"I Pave For _____" Campaign



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