

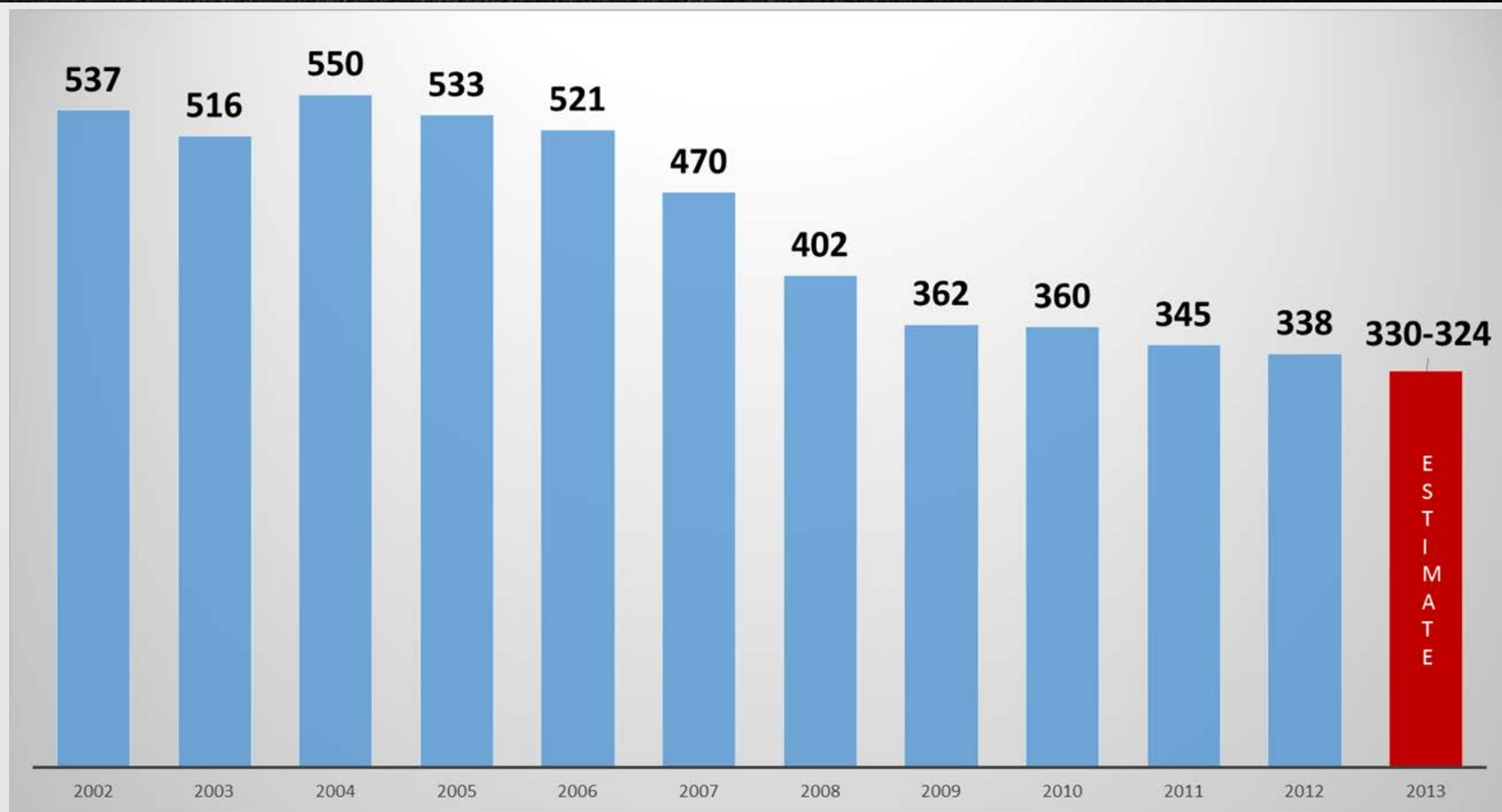


National Perspective on the Asphalt Pavement Industry

Jay Hansen
Executive Vice President

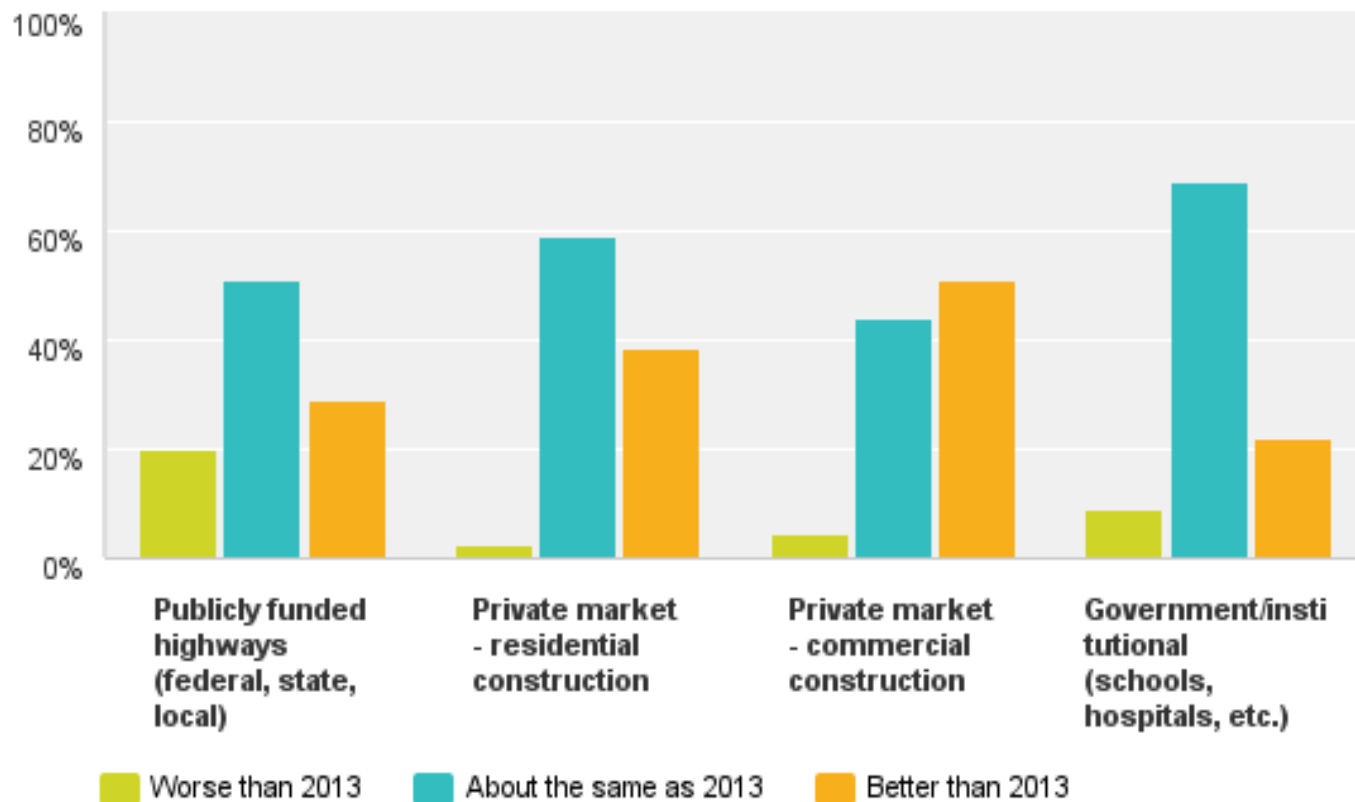


ASPHALT PAVEMENT TONS





OUTLOOK FOR 2014





OUR MISSION IN 2014

- Advance Research & Deploy Innovative Asphalt Technology
- Achieve Significant Progress on PEC Projects
- Strengthen State and National Legislative Support
- Expand Market Share Effort

FHWA-NAPA Cooperative Agreement



FHWA/NAPA COOPERATIVE AGREEMENT

- NAPA has been awarded a \$2.5 million agreement for “Advancement of Innovative Asphalt Technology”
- Partnership provides a mechanism to advance innovative technologies
- Agreement is for 5 years, FY 2014-2018



FHWA/NAPA COOPERATIVE AGREEMENT

- Leverage NAPA's expertise in leading innovation advancement including:
 - Conferences and workshops
 - Presentations at government and industry events
 - Webinars, Publications
 - Surveys for benchmarking
 - Multimedia tools



FHWA/NAPA COOPERATIVE AGREEMENT

- The innovation team includes:
 - NCAT
 - Texas A&M Transportation Institute
 - Advanced Asphalt Technologies
 - Industry Consultants
 - State Asphalt Pavement Associations

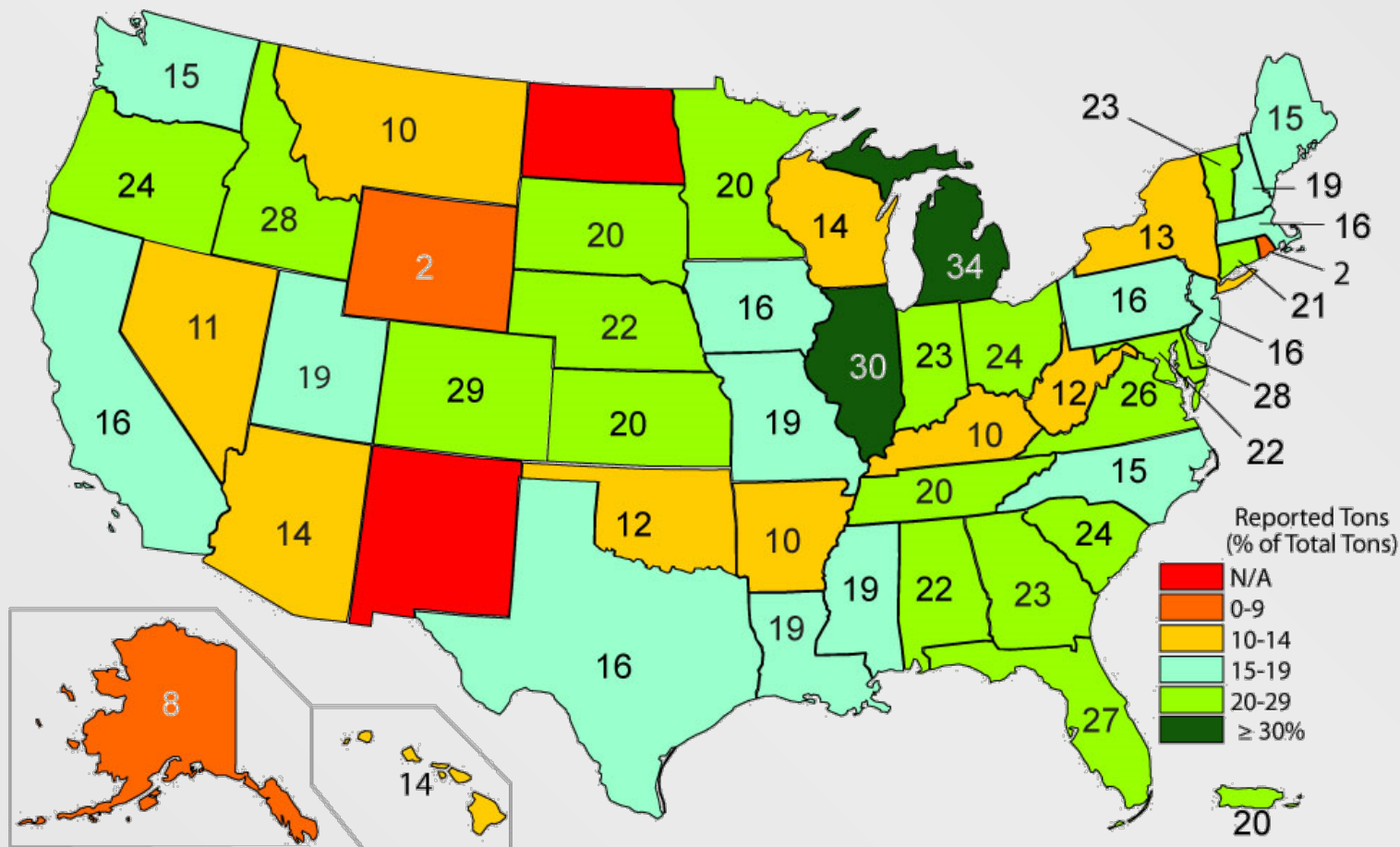


DELIVERABLES

- The deliverables will include
 - RAP, RAS, WMA Survey for 2013
 - RAP Management Best Practices
 - Recycled Tire Rubber Best Practices
 - Mix Type Selection Guide Update
 - Thin Asphalt Overlays Update
 - LCCA Webinar



RAP USE IN THE US - 2012



Pavement Economics Committee (PEC)



PAVEMENT ECONOMICS FUND

**Six NAPA-
SAPA Task
Groups**

**\$1
Million
Program**

**Funded by
NAPA & SAPAs
with 100%
SAPA
Participation**



PEC TASK GROUPS

Six NAPA-SAPA Task Groups



Best Quality and
Competitiveness



Environmental
Sustainability



Legislative



Pavement
Design



Pavement
Preservation



Pavement
Type
Selection



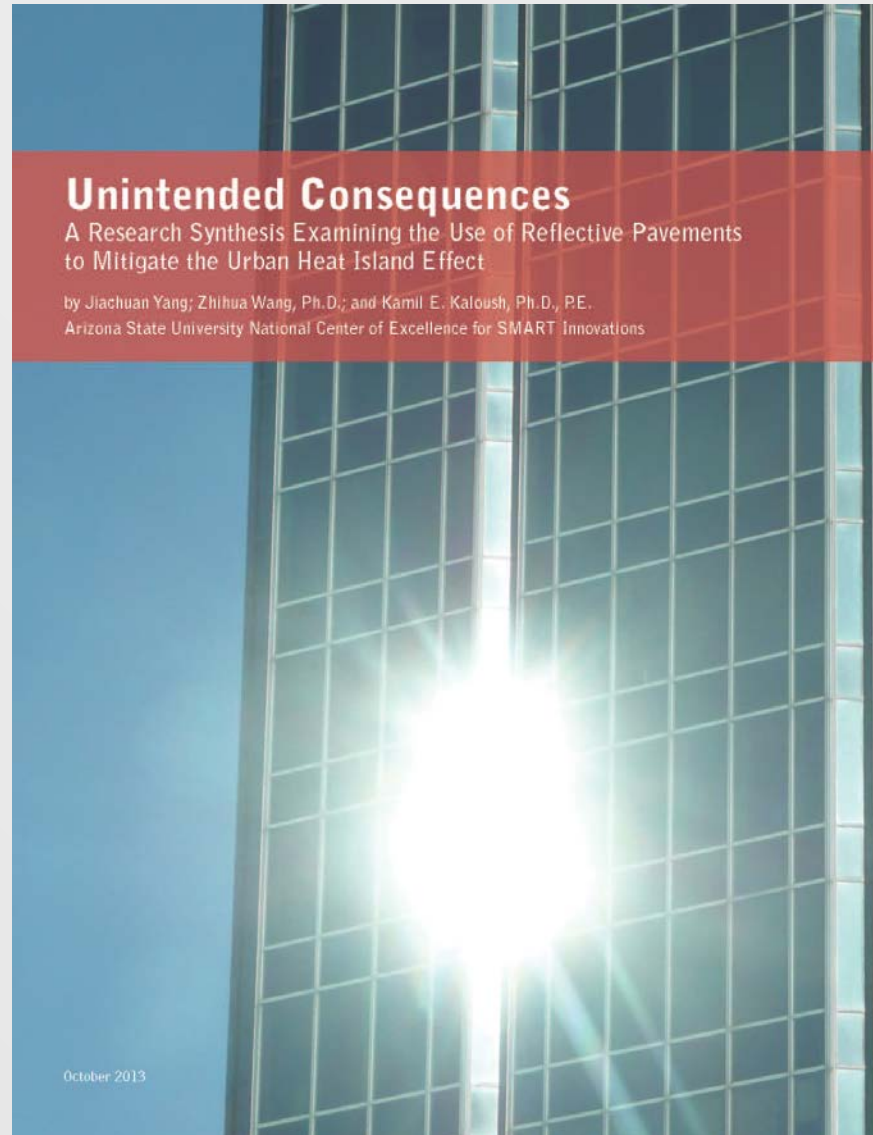
PEC DELIVERABLES

Examples of PEC Projects

- **Optimize Pavement Design & Materials**
- **Enhance Life Cycle Assessment Software to Include Pavement Smoothness**
- **Unintended Consequences of Reflective Pavements**
- **Develop Thinlays with High Recycled Content**
- **Prevent Passage of Pavement Type Mandates at State and National Level**



UHI – UNINTENDED CONSEQUENCES



Unintended Consequences

A Research Synthesis Examining the Use of Reflective Pavements
to Mitigate the Urban Heat Island Effect

by Jiachuan Yang; Zhihua Wang, Ph.D.; and Kamil E. Kaloush, Ph.D., P.E.
Arizona State University National Center of Excellence for SMART Innovations

October 2013

UHI – UNINTENDED CONSEQUENCES



Reflective Pavements and Urban Heat Island

Do reflective pavement mandates make sense?

Legislative efforts to mandate reflective pavements have been introduced in some areas, but the scientific evidence doesn't clearly support the use of reflective pavements to address the urban heat island effect. While these pavements do redirect some energy from a pavement's surface, much of it ends up interacting with buildings, pedestrians, and cars — leading to potential unintended negative consequences.

ROOFS
MOST OF THE SCIENCE SURROUNDING REFLECTIVITY AND UHI FOCUSES ON ROOFS, WHICH ARE AT THE TOP OF THE URBAN ENVIRONMENT. PAVEMENTS ARE NOT ROOFS.

REFLECTIVE CONCRETE PAVEMENTS MIGHT NOT WORK AS CLAIMED TO REDUCE THE URBAN HEAT ISLAND EFFECT

SURFACE TEMPS	SUMMER	WINTER	PEDESTRIANS
DIFFERENCES IN SURFACE TEMPERATURES HAVE MINIMAL BEARING ON AIR TEMPERATURE.	REFLECTED RADIATION CAN INCREASE COOLING LOADS FOR SURROUNDING BUILDINGS IN THE SUMMER.	LIGHT-COLORED PAVEMENTS REQUIRE MORE DE-ICING CHEMICALS IN WINTER TO CONTROL SNOW AND ICE.	REFLECTIVE PAVEMENTS CAN BOOST THE THERMAL UPL FLUX STRAIGHT UP, BOOSTING PEDESTRIAN EXPERIENCE BY 39 TO 39 CELSIUS, AS WELL AS INCREASE ULTRAVIOLET RADIATION EXPOSURE.

NAPA
NATIONAL ASPHALT
PAVEMENT ASSOCIATION

NAPA
NATIONAL ASPHALT
PAVEMENT ASSOCIATION

SAPA
State Asphalt Pavement Associations

Sources: Veig, A, Wang, Z, and Kulkarni, R. 2013. Unintended consequences? A research synthesis examining the effect of reflective pavements to mitigate the urban heat island effect. Kansas State University National Center of Excellence for Smart Infrastructure. <http://nhi.org>



PEC DELIVERABLES

RESEARCH PROJECT SUMMARY

JANUARY 2014



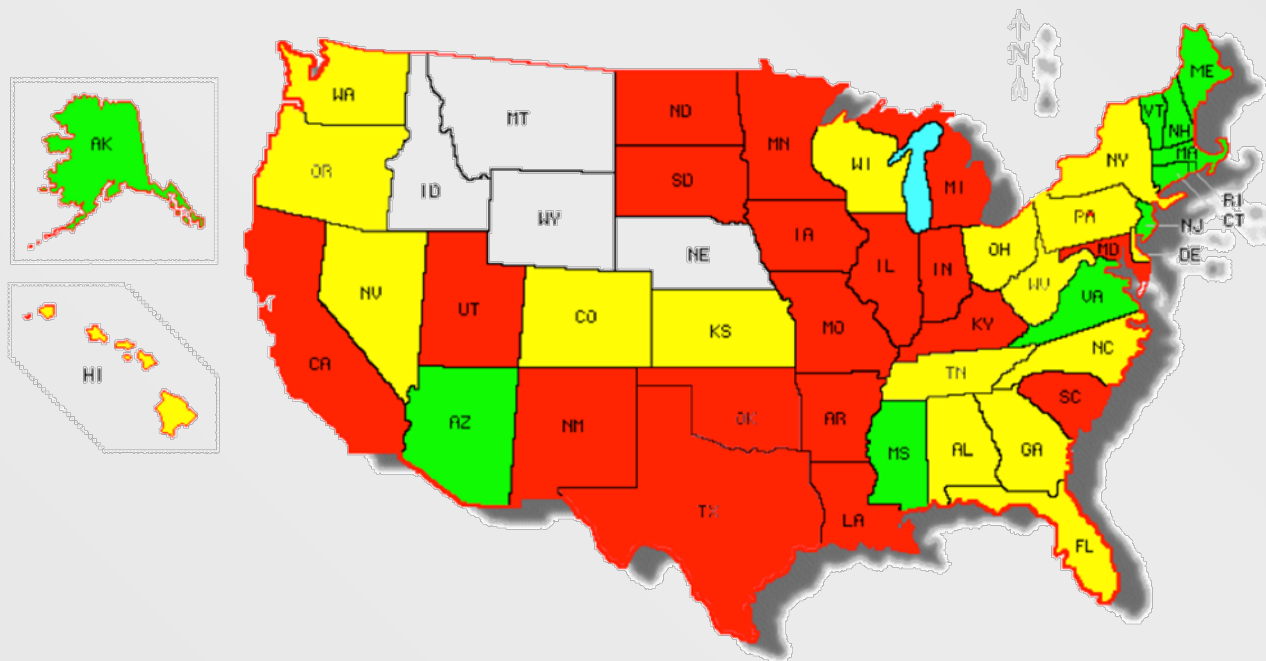
Legislative



INCREASED PRESSURE FROM PCC INDUSTRY

Competitive Environment with PCC

- = Very Competitive
- = Competitive
- = Not Competitive





LCCA ISSUES IN WASHINGTON

- MAP-21
 - Mandate LCCA, A-B and MEPDG
 - GAO Study, FHWA Updating LCCA Guidance
- Financial Services Appropriations Bill
 - Mandate Material-Specific Discount Rates
- Water Resources Development Act
 - Mandate LCCA on Corps Projects
- Surface Transportation Reauthorization
 - Mandate LCCA on all Federal-aid Highway Projects



STRENGTHEN STATE & NATIONAL LEGIS. SUPPORT

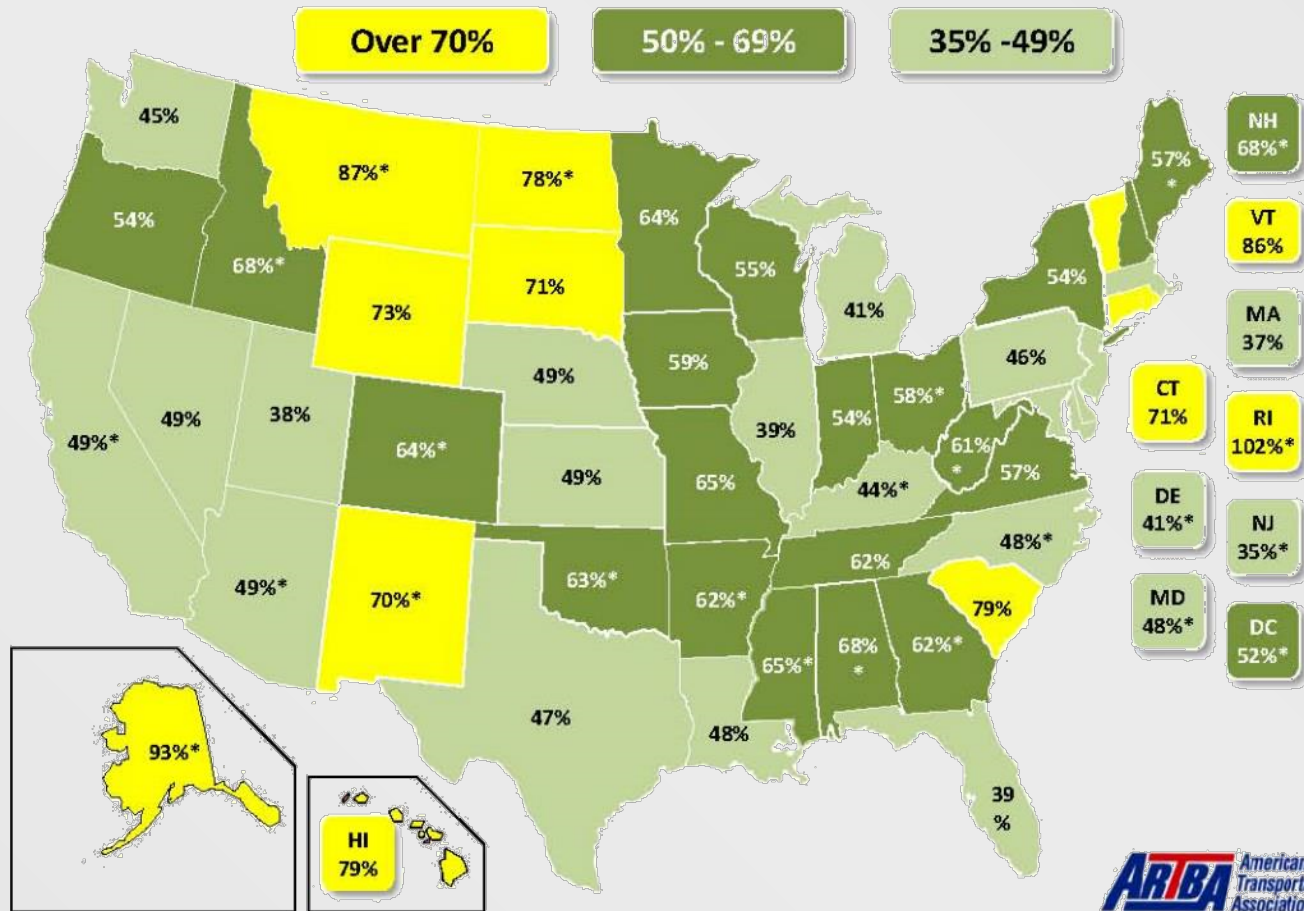
- Implemented State Legislative Tracking System
- Strengthened Staff and Hired Lobbyist Firm
 - Michele Stanley and Whitmer & Worrall
- Advocacy Handbook Completed
- Plant/Project Tours & Constituent Meetings
- Conducted First Asphalt Fly-In
- Grow NAPA PAC



LCCA KEY MESSAGES

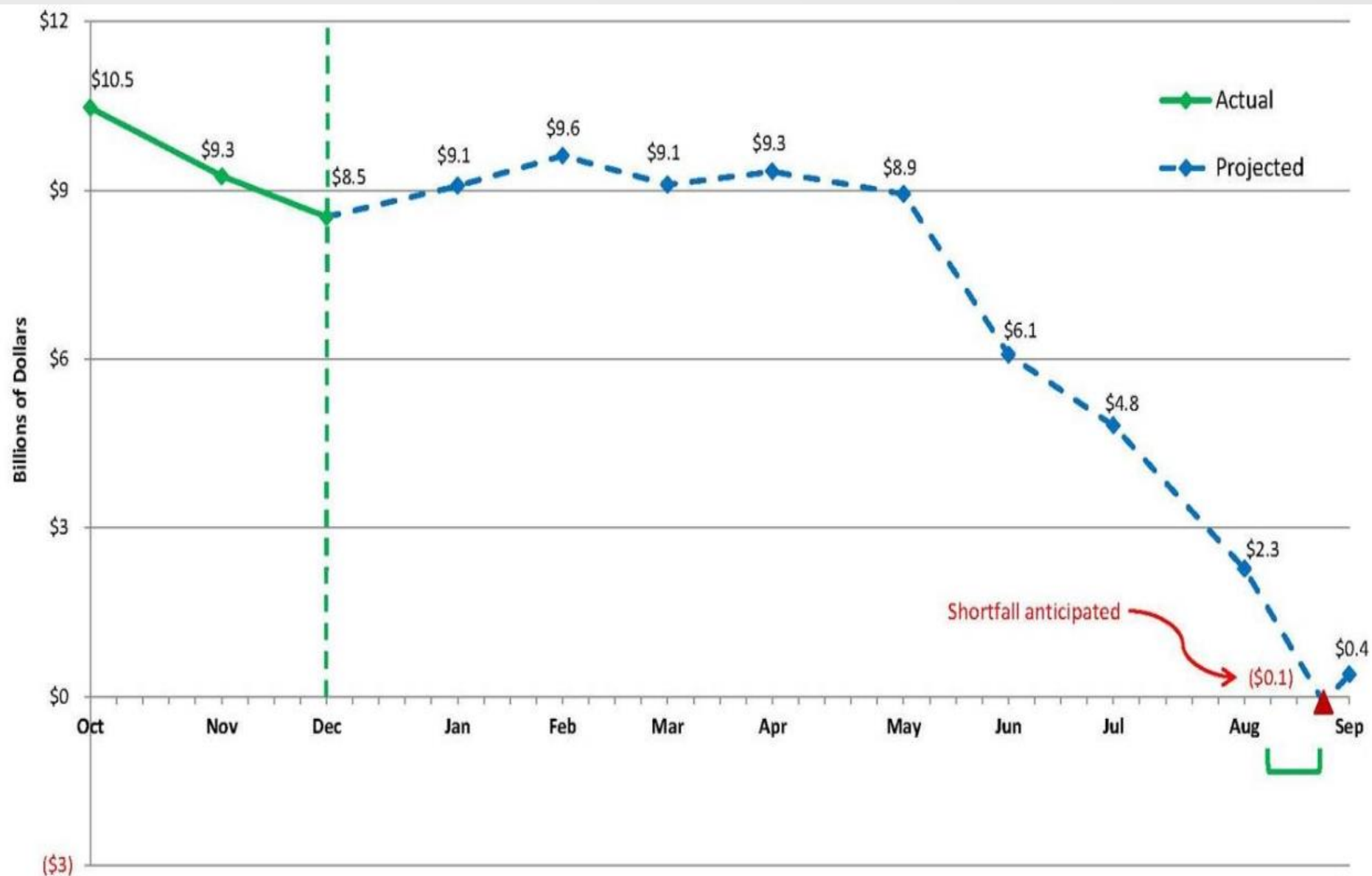
- Pavement design issues should be left to state highway engineers

FEDERAL SHARE OF HIGHWAY FUNDING



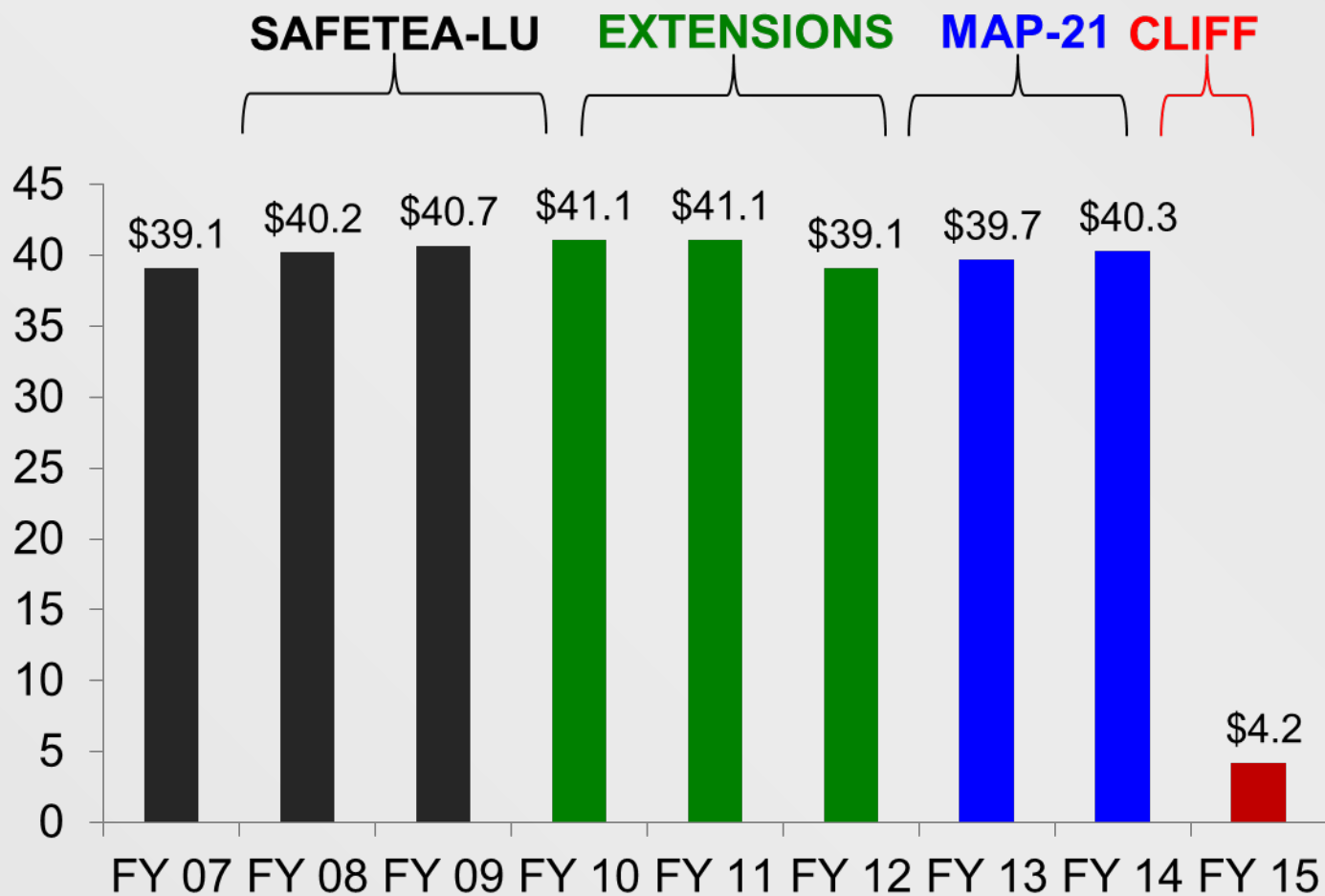


SOLVE HIGHWAY TRUST FUND CHALLENGE



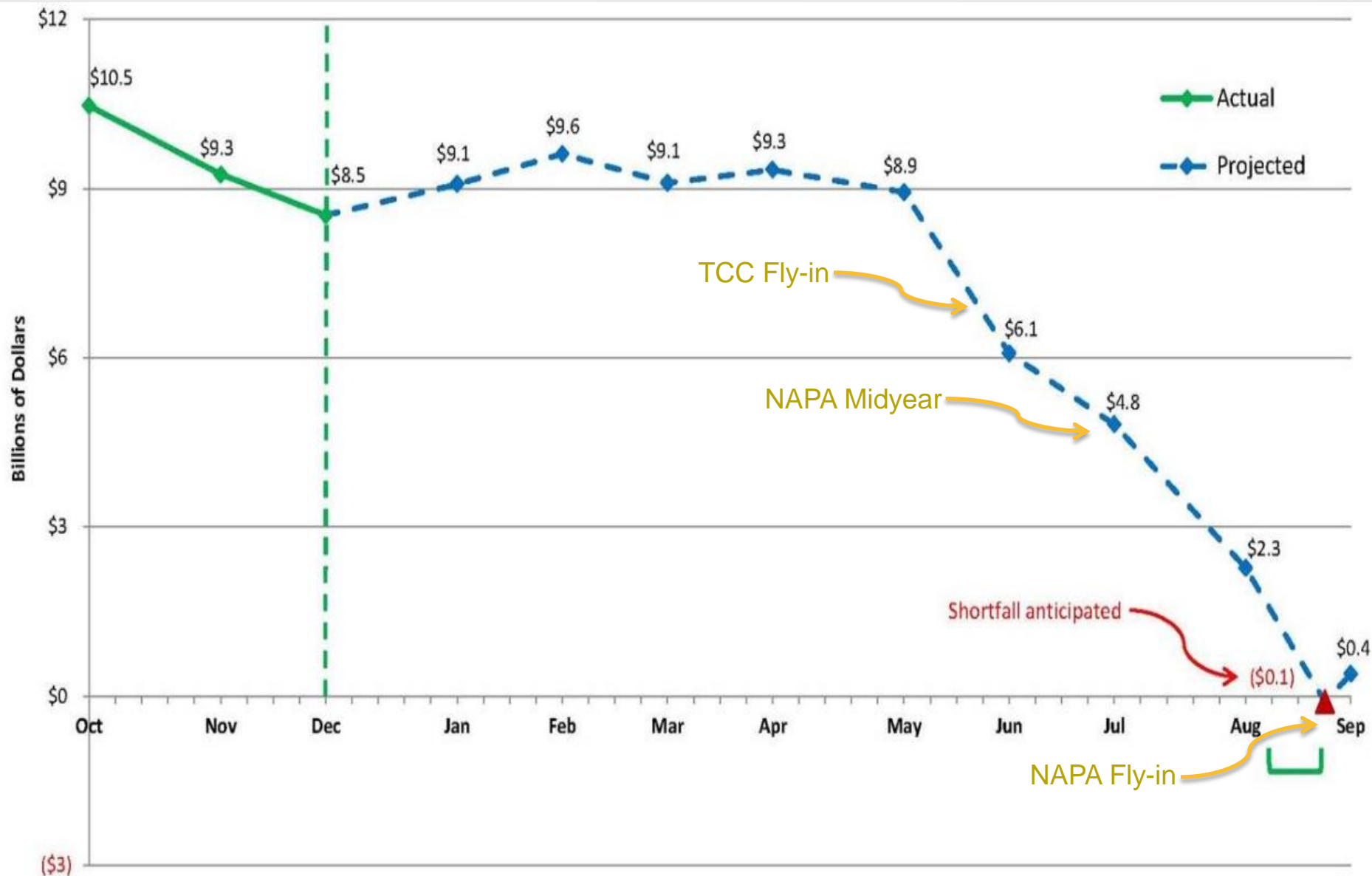


FEDERAL-AID HIGHWAY FUNDING IN 2015





HTF BALANCE THRU 2014





Highway Funding Key Message

- Urge Congress to swiftly enact a six-year, user-fee funded Surface Transportation Authorization bill to stabilize and grow the Highway Trust Fund.



BECOME AN ASPHALT AMBASSADOR

- Plant Tours
- District Meetings
- Letter to the Editor
- Participate in Fly-In



Expand Market Share



GO-TO-MARKET PLAN

- **Expand Program**
- **Increase Financial Support**
- **Leverage Strengths of All Industry Resources – NAPA, SAPAs, APA, NCAT, AI**
- **Leverage the Power of the Asphalt Industry's Grassroots**





GO-TO-MARKET PLAN DEVELOPMENT

- Agreement with Edelman
- Guided by Market Research
- Media Analysis
- Leverage PEC Projects



MARKET RESEARCH

Qualitative and Quantitative research, measure attitudes, and opinions

- State DOTs, design/build firms, tollways, public works, engineering firms
- In-Depth Interviews
- Online survey distributed to 650+ respondents
 - 221 responses received



INDUSTRY PERCEPTIONS

The asphalt pavement industry is considered an important partner helping to address the issues facing agencies today.

- Pavements are a significant investment for agencies and they look to the industry as technical experts
- The asphalt industry is viewed positively
- Respondents are particularly interested in the cost effective advancements in pavement technologies
- Decisionmakers pay attention to Stakeholders (Drivers)



NEXT STEPS

[Intro](#)[Construction](#)[Smoothness](#)[Noise](#)[Safety](#)[Sustainability](#)[Innovation](#)

America depends on high-performing, safe roads.

[LEARN MORE](#)



NAPA MEMBERSHIP

- Three reasons why you should join.
 1. NAPA's professional staff become extensions of your staff.
 2. NAPA is always on the cutting edge of technology and thus NAPA members are typically more competitive than non members.
 3. NAPA protects your investment by making sure you have a market to operate effectively in.

TOGETHER!

WE WILL WIN THIS BATTLE NATIONALLY
WE WILL WIN THIS BATTLE LOCALLY





QUESTIONS

2014 Midyear Meeting: July 14 – 16, Nashville
NAPA Asphalt Fly In: September 9 – 10, 2014
Young Leaders Conference: Fall 2014
2015 Annual Meeting: January 25 – 28, Marco Island

SAVE THE DATES

2014
UPCOMING
NAPA EVENTS
2015



NAPA's meetings are renowned for their educational content—ideas that attendees can take home and use directly to make their businesses grow. They are also the asphalt industry's premier gathering places, with unique networking and forums for information exchange.



Questions?
Call (888) 468-6499

WWW.ASPHALTPAVEMENT.ORG