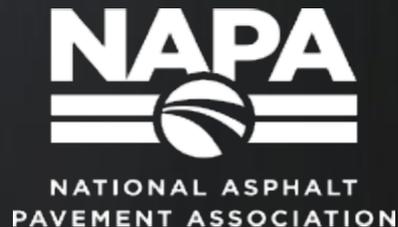


# NAPA UPDATE

JAY HANSEN

**55<sup>TH</sup> Annual WAPA Conference**  
**December 3, 2014**





# ASPHALT PAVEMENT ALLIANCE

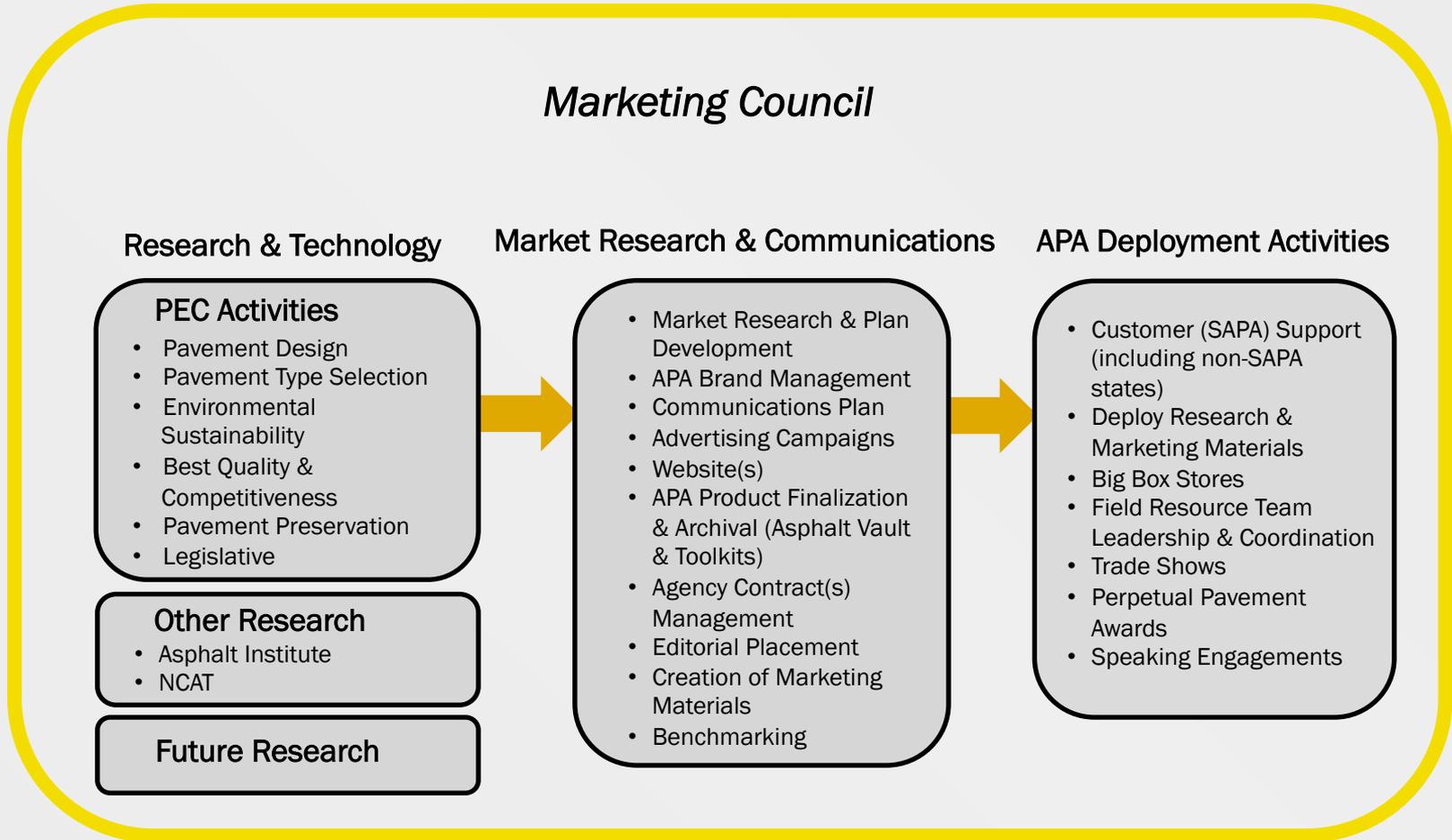


**The APA is a partnership of the Asphalt Institute, National Asphalt Pavement Association, and the State Asphalt Pavement Associations.**





# STRUCTURE

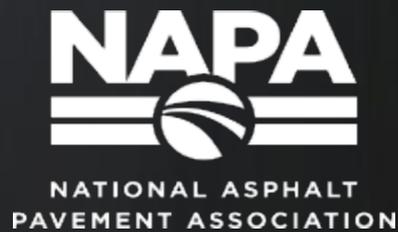


**Pavement Economics  
Committee**

**Go-To-Market  
Task Group**

**Deployment  
Task Group**

# PEC PROJECTS UPDATE



# OPTIMIZED PAVEMENT DESIGN & MATERIALS SELECTION

- Flexible Pavement Design – State of the Practice (report & synopses)
- AASHTO 93 Recalibration Manual
- Refined Limiting Strain Criteria & Approximate Ranges of Max Thicknesses for Designing Asphalt Pavements

Reports posted on: [www.ncat.us](http://www.ncat.us)



Pavement  
Design



Pavement  
Type  
Selection





## Road Construction Updates

Donec id elit non in porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo

## Introduction

The rePave Scoping Tool and accompanying resources located here are the products of the SHRP 2 R23 study to develop Guidelines for Long Life Pavement Renewal. The study, Scoping Tool, and accompanying resources focus on long life options (30-50 years), not pavement preservation activities.

## Resources

Click on the button below to access the wealth of content and resource aids that were developed as a result of this study. This includes a Pavement Assessment Manual, Best Practices for both Rigid and Flexible Pavement Construction and Guide Specifications.

[View Resources](#)



AMERICA RIDES ON US **Asphalt.**

## 1 Project Information

Project Information

## 2 Design Parameters

Design Parameters

## 3 Pavement Surface

Pavement Surface

## 4 Pavement Structure

Pavement Structure

## 5 Equation Results

Equation Results

## Pavement Surface (Asphalt)

Layer Coefficient (a):

Drainage Coefficient (m):

Minimum Thickness:  in.

Surface

Structure

Base



# Pavement Design

Check it out at: [pavexpressdesign.com](http://pavexpressdesign.com)

Back

Next



AMERICA RIDES ON US **Asphalt.**





# LEGISLATIVE

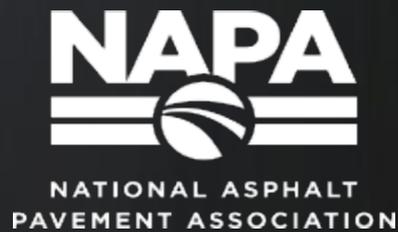
- Federally and State Pavement Mandates Proposed
  - Life Cycle Cost Analysis (LCCA) on all Highway Projects
  - Alternative Bid With No Price Adjustments
  - Mechanistic-Empirical Pavement Design Guide
  - Material-Specific Discount Rate for Asphalt
  - Ready Mixed Checkoff
- PEC Response
  - Beefed up Lobbying Resources
  - Early Warning Legislative Tracking System



Legislative

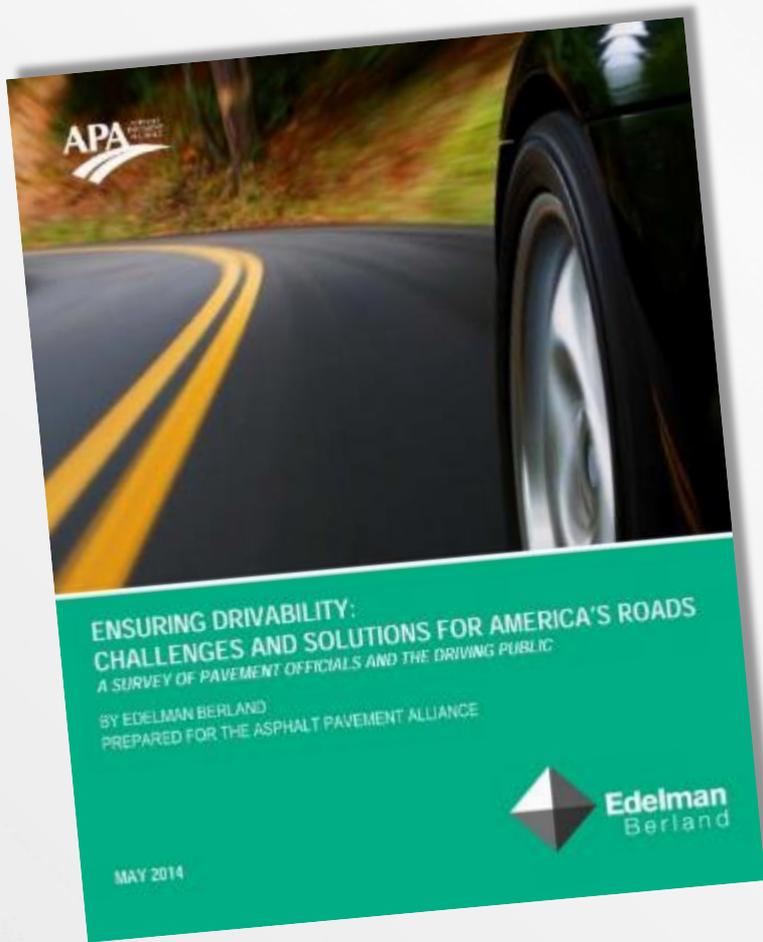


# GO-TO-MARKET UPDATE





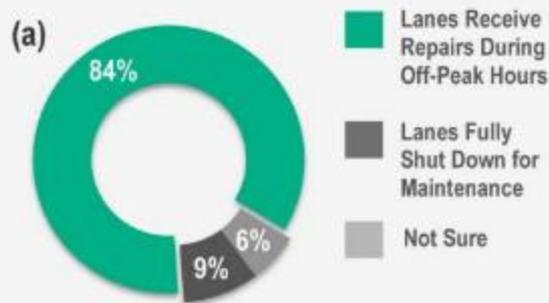
# GUIDED BY MARKET RESEARCH



- Background Document
- What Drivers Want
- What Road Owners Want
- Funding & New Revenues

Figure 7: Maintenance Preferences

Q: Which of the following do you prefer?



### Truckers

Off-Peak Repairs (73%)  
Fully Shut Down (20%)  
Not Sure (6%)

# SURVEY SAYS...

## What Do DOTs Want?

- Long-Lasting, High Quality Roads
- Cost-Effective to Own & Maintain

## What Do Drivers Want?

- Smooth, Safe, Quiet Roads
- Kept in a State of Good Maintenance
- Without Being Inconvenienced by Road Work

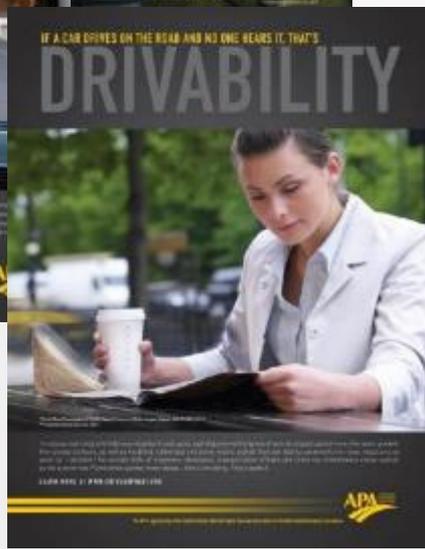
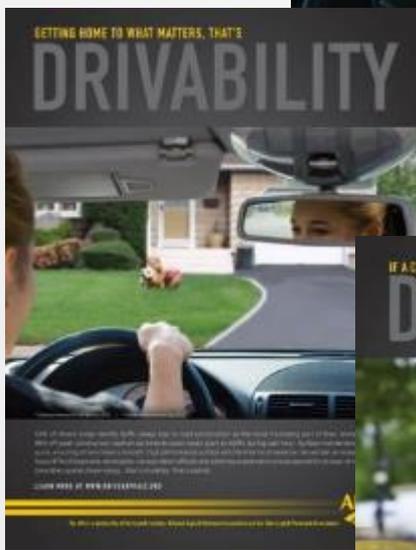




# FOCUS ON POSITIVES

## Own and Define Drivability Focus on the Human Element

- Print & Online
- Trade Publications
  - Engineers
  - Pavement Designers
- Available for use by State Associations





# COMPELLING VIDEOS

- “Place to Be”
- “Road Age”



Visit the “Resources” page of the [DriveAsphalt.org](http://DriveAsphalt.org) website for access to the videos.





# INFOGRAPHICS

## 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**

|  |  |  |   |
|--|--|--|---|
| <p><b>SURFACE TEMPS</b><br/>DIFFERENCES IN SURFACE TEMPERATURES HAVE MINIMAL BEARING ON AIR TEMPERATURE.</p> | <p><b>SUMMER</b><br/>REFLECTED RADIATION CAN INCREASE COOLING LOADS FOR SURROUNDING BUILDINGS IN THE SUMMER.</p> | <p><b>WINTER</b><br/>LIGHT-COLORED PAVEMENTS REQUIRE MORE DEICING CHEMICALS IN WINTER TO CONTROL SNOW AND ICE.</p> | <p><b>PEDESTRIANS</b><br/>REFLECTIVE PAVEMENTS CAN BOOST THE TEMPERATURE PEDESTRIANS EXPERIENCE BY 3° TO 5° CELSIUS AS WELL AS INCREASE ULTRAVIOLET RADIATION EXPOSURE.</p> |
|--|--|--|---|

Source: Tong, J., J. Wang, & R.E. Rothstein (2016). Unintended consequences: A research synthesis examining the use of reflective pavements to mitigate the urban heat island effect. Indiana State University National Center of Excellence for Smart & Innovative Towns. <http://bit.ly/1950z0d>

The APA is a partner of the Impact Institute, National Asphalt Pavement Association, and the State Asphalt Pavement Association.





# SCIENTIFICALLY SUPPORTED

**APA**

## America depends on high-performing, safe roads.

LEARN MORE

As our nation's infrastructure ages, and the demands upon our transportation network grow, smart decisions need to be made for our economic future. Asphalt pavements offer cost-effective, high performing solutions. Taking into account today's limited budgets, asphalt offers the return on investment required to meet the needs of road users and pavement designers.

**Asphalt pavements ensure the smooth, quiet, and safe ride drivers demand.**

Asphalt pavements also provide the flexibility and solutions necessary to improve, repair, or change the road system as traffic volume and demands change. With asphalt, maintenance and repair can be handled cost effectively with minimal impact on road users.

The Asphalt Pavement Alliance is a partnership of the **Asphalt Institute**, **National Asphalt Pavement Association** and the **State Asphalt Pavement Associations**.

## Resource for Pavement Engineers

- Speed of Construction
- Smoothness
- Noise
- Safety
- Sustainability
- Pavement Technologies
- Resource Library





# DEPLOYMENT ACTIVITIES

- **Field Resource Team Leadership & Coordination**
- **National Accounts Program**
- **Perpetual Pavement Awards**
- **National Trade Shows**
- **Deployment of PEC & GTM Materials**

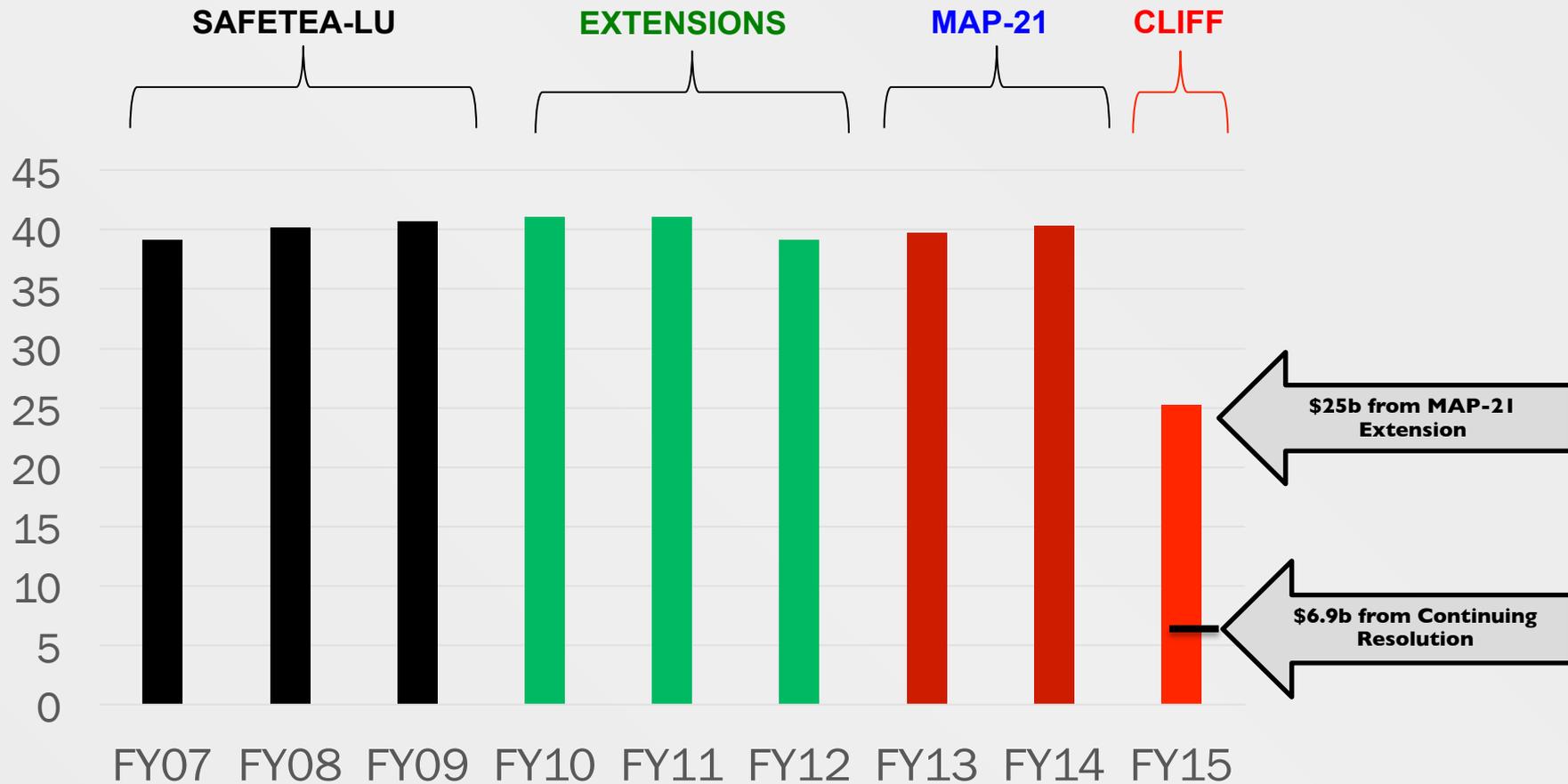


# HIGHWAY FUNDING





# FEDERAL HIGHWAY FUNDING: WHAT IS KNOWN





# HIGHWAY TRUST FUND UNCERTAINTIES

- 5 revenue shortfalls in the last 7 years.
  - The next HTF cash crisis will occur in May 2015.
- 11 extensions in last 6 years.
  - Current authorization expires May 31, 2015.
- *The continued uncertainty about federal surface transportation funds is hindering the ability of the states to plan and the private sector to deliver needed infrastructure improvements.*



# WISCONSIN HIGHWAY PROJECTS AT RISK

- 55% of highway spending in Wisconsin comes from the Federal Government
  - US-41 Stadium Freeway repaving, shoulder repair, and bridge deck replacement
  - I-90 construction in Monroe County
  - I-39 construction and resurfacing in Columbia County
  - US-41 construction in Brown County
  - STH 23 resurfacing and construction in Fond Du Lac County



# FOUR OPTIONS

- More General Fund Bailouts
  - Unlikely in new GOP-led Congress.
- Align Spending with Revenues
  - Cut highway spending – not popular.
- Devolve Program to States
  - WI Legislature and Governor would have to raise its own gas tax by 17 cents per gallon to make up difference.
- Raise the Federal Gas Tax
  - 10 cents to make the HTF solvent and more to maintain and improve conditions.



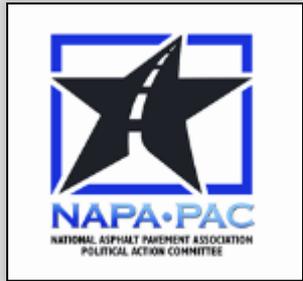


# LAME DUCK ACTIVITIES

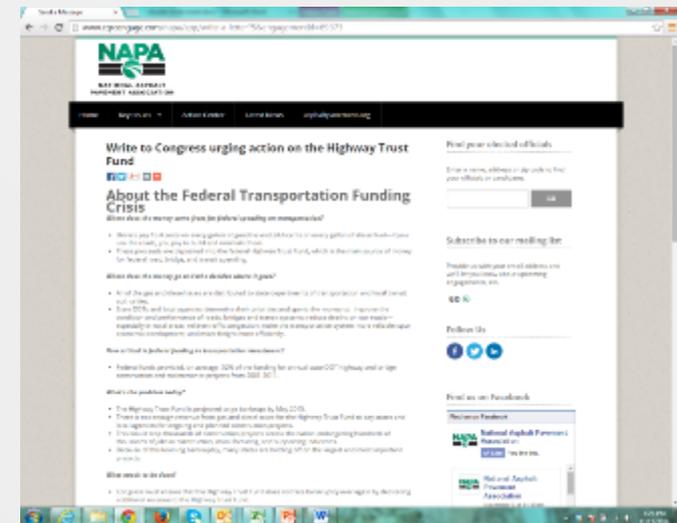
- NAPA
  - Member outreach
  - Tax committee briefing
  - 2015 strategy planning
  - World of Asphalt
- Highway Materials Group
  - Letter to Congress
  - Senator McConnell meeting
  - TRIP reports
  - Devolution meetings



# HOW YOU CAN MAKE A DIFFERENCE



- New member of Congress district meetings
- Continue plant tours
- Participate in email campaign
- Direct people to NAPA websites
- Donate to NAPA PAC



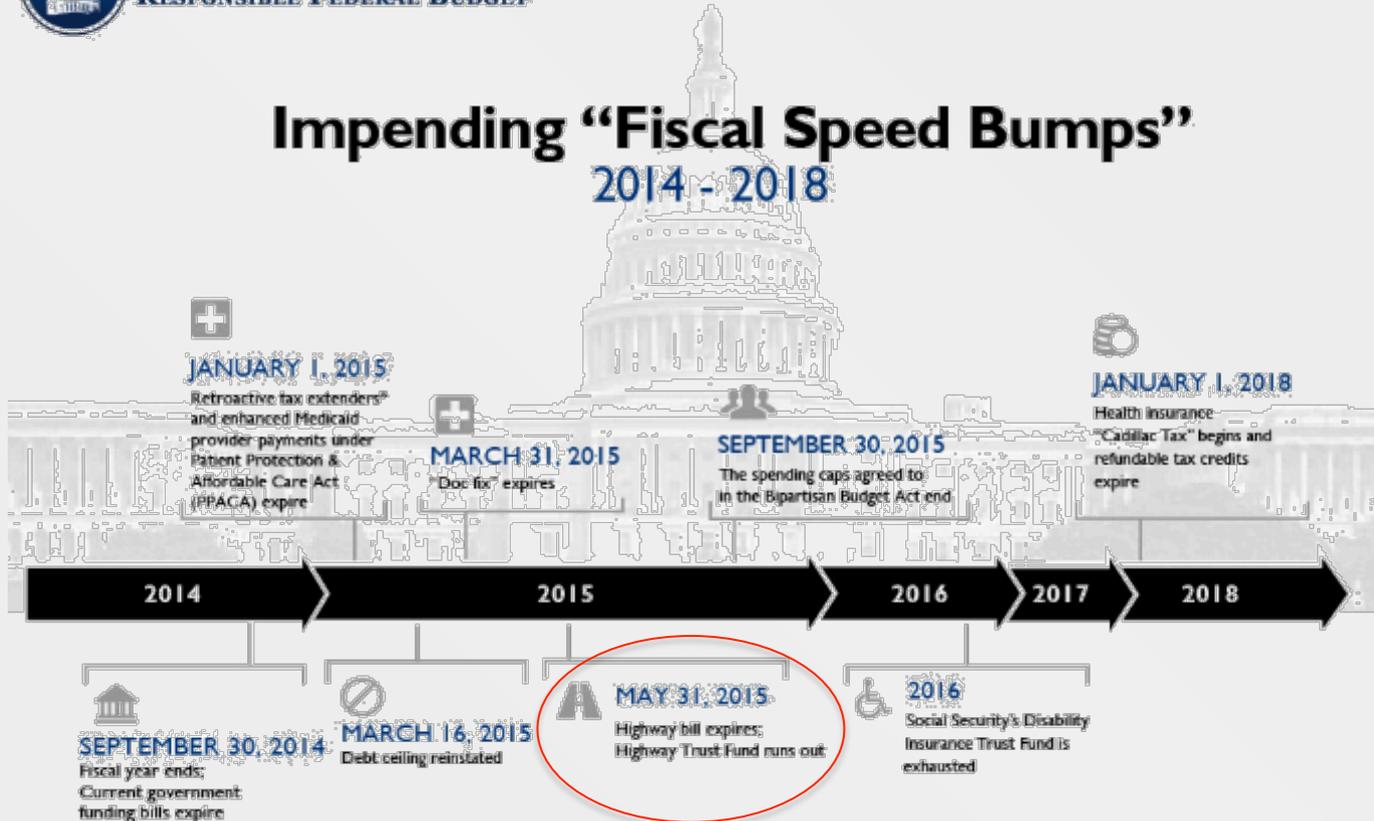


# TIMETABLE



THE COMMITTEE FOR A  
RESPONSIBLE FEDERAL BUDGET

## Impending "Fiscal Speed Bumps" 2014 - 2018





# TCC FLY-IN: APRIL 14-15, 2015



## The Transportation Construction Coalition Invites You To Plan Now For The 2015 Legislative Fly-In

April 14-15, 2015  
Hyatt Regency Washington  
400 New Jersey Ave NW  
Washington, DC 20001  
(202) 737-1234

TCC Fly-In Room Rate: \$315 per night  
TCC Fly-In Registration Fee: \$175\*

### **Schedule**

#### Tuesday, April 14, 2015

- 9:00am to Noon – Association Meetings
- 2:30pm to 5:00pm – TCC Legislative Briefing
- 5:30pm to 7:00pm – TCC Capitol Hill Reception

#### Wednesday, April 15, 2015

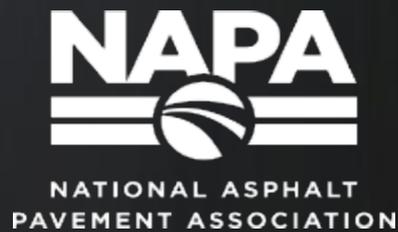
- 7:00am to 8:00am – TCC Breakfast
- 8:00am to 5:00pm – Congressional Visits

Registration information and other meeting details  
will be available closer to the event date at  
<http://www.transportationconstructioncoalition.org/>.

*\*Subject to Change*



**REGULATORY**





# EH&S ISSUES

- Material Safety Data Sheets (MSDS)
- Work Zone Safety
- Trucking Hours of Service
- Greenhouse Gas Regulations
- Waters of the US Definition
- Spill Prevention Counter Control (SPCC)
- Green Construction Codes
- Community Activism
- Crystalline Silica



# Crystalline Silica Rule

- Known Hazard
- Top Priority for OSHA
- Issued Draft Rule
  - Respirators Required During Roadway Milling
- We Have a Better Solution: Engineer Out the Dust



# Modifications to Milling Machines

- New Milling Machines
  - By about 2017 – Built-in Vacuum Control & Enhanced Spray Systems
- Existing Milling Machine (Up To 5 Years Old)
  - Retrofit Spray System Available
- According to NIOSH, Both Systems Will Meet the Proposed New Permissible Exposure Level



# Other NAPA Activities

- **FHWA Cooperative Agreement for Advancement of Asphalt Pavement Technologies**
- **Japan High RAP Industry Tour**
- **Performance Task Group**



# NAPA MEETINGS



**NAPA**  
NATIONAL ASPHALT  
PAVEMENT ASSOCIATION

**JANUARY 25-28, 2015**  
**MARCO ISLAND MARRIOTT**  
**MARCO ISLAND, FLA.**

**DRIVING PERFORMANCE**

**FOR YOUR BUSINESS**  
**FOR YOUR CUSTOMERS**  
**FOR THE PUBLIC**

**60TH ANNUAL MEETING**



**World of Asphalt**  
**2015**  
SHOW & CONFERENCE

**THE BASE OF INNOVATION**

**March 17-19, 2015 • Baltimore, MD, USA**

**THANK YOU**

**[www.asphaltpavement.org](http://www.asphaltpavement.org)**



**@NAPATweets**

**[jhansen@asphaltpavement.org](mailto:jhansen@asphaltpavement.org)**

