MONDAY, NOVEMBER 5, 2018

10:00 – 10:20 am
Welcome
SPEAKERS:
Russell McMurry, P.E., Commissioner, Georgia Department of Transportation
Pete K. Rahn, Maryland Secretary of Transportation

10:20 – 10:45 am
Opening Remarks—SMA’s Place Today
Stone mastic (matrix) asphalt was first placed fifty years ago in 1968 near Kiel, Germany, while the United States implemented this premium technology over 25 years ago. As one of the individuals responsible for bringing SMA to the United States, Mike Acott will explain why the industry looked to this product in the 1990s and why it is still a product truly engineered for performance today.
SPEAKER:
Mike Acott, President, National Asphalt Pavement Association

10:45 am – 12:00 pm
International Panel—Why SMA?
The opening panel sets the conversation for the conference. Hear from industry and agencies about why SMA is a critical component of ensuring asphalt pavement performance in their region.
PANELISTS:
Pete K. Rahn, Maryland Secretary of Transportation
Danny Gierhart, Senior Regional Engineer, Asphalt Institute
Knut Johannsen, Head of MPA at EUROVIA Services GmbH, Germany
Matthew Corrigan, Asphalt Pavement Engineer, Federal Highway Administration
Helen Bailey, Managing Director, The Driven Company

12:00 – 1:00 pm
Lunch

1:00 – 1:30 pm
SMA—The History
This presentation will cover the further development of SMA and SMA based mixtures during the last 50 years and will show new possibilities such as noise reduction and structural layers. The speaker will provide additional information regarding the spread of SMA around the globe.
SPEAKER:
Horst Erdlen, Manager Business Unit bei J. Rettenmaier & Söhne, Germany

1:30 – 2:00 pm
SMA—Theory and Practice
What is it about the design of SMA mixes that helps them achieve levels of performance beyond those of traditional mixtures? Attend this session to gain a better understanding of the theory behind SMA mix designs and how these designs provide an unparalleled level of performance in the field.
SPEAKER:
Dr. Ray Brown, Director Emeritus, National Center for Asphalt Technology (NCAT)

2:00 – 2:30 pm
SMA in PennDOT’s Long Life Pavement Program
The Pennsylvania Department of Transportation is one DOT in the US that knows SMA can be a part of its Long Life Asphalt Pavement Program. Today, PennDOT uses WMA SMA in all 11 PennDOT Engineering Districts.
SPEAKER:
Neal Fannin, Pavement Materials Engineer, PennDOT

2:30 – 3:00 pm
Break

3:00 – 3:30 pm
Performance and Life-Cycle Cost Benefits of Stone Matrix Asphalt
This presentation highlights a study undertaken to quantify the performance and life-cycle cost benefits of SMA versus those of polymer-modified Superpave dense-graded mixtures used on similar trafficked highways.
SPEAKER:
Fan Yin, Assistant Research Professor, NCAT

3:30 – 4:00 pm
Best Practices: Plant Production
This session will highlight best practices for producing SMA at common asphalt plants to ensure the mixture that arrives at the job is the mixture which was designed to perform.
SPEAKER:
Terry Roof, Assistant General Manager of Asphalt Plants, Superior Paving

SMA has been used worldwide for nearly a half century. Introduced into the U.S. 25 years ago, today only a handful of states have adopted it. This conference will track advancements in SMA technology since its introduction and explore the potential for broader applications.
4:00 – 4:30 pm
Best Practices: Construction
Learn the best practices for ensuring that SMAs achieve the desired density in the field to help ensure performance. A brief comparison of field compaction approaches in North America and Europe and how they impact SMA construction will be also be presented.
SPEAKER
Todd Mansell, Product Application Specialist, Caterpillar Paving

4:30 – 5:00 pm
SMA’s Evolution: Rubber Modified SMA’s
The field performance benefits of gap-graded asphalt mixtures such as SMA have been well documented in terms of improved permanent deformation and cracking resistance. This presentation summarizes findings from several research studies conducted at Arizona State University on rubber-modified and asphalt rubber mixtures. The unique engineering properties of gap-graded asphalt rubber mixtures are discussed along with recommendation on how to use them in current pavement design practices.
SPEAKER
Kamil E. Kaloush, PhD, PE, Professor, Arizona State University

TUESDAY, NOVEMBER 6, 2018

7:00 – 8:00 am
Breakfast

8:00 – 10:00 am
Concurrent Breakout Session: Historical Perspectives and Case Studies Part 1
- SMA — A Temperamental Diva from Germany
- SMA — Virginia’s 25 Year Journey
- SMA in Argentina — Lessons Learned
- Historical Review and Construction of Durable SMA Pavement in Chicago, Illinois

8:00 – 10:00 am
Concurrent Breakout Session: SMA Sustainability
- Sustainable Successes in SMA Mixtures
- Evaluation of Alternative Materials in SMA
- Utilization of Reclaimed Asphalt Pavement in Design of SMA Mixtures
- Effect of Rejuvenators on RAP Based SMA
- Road Trials of Low Noise, High Performance Asphalt Surfacings
- Development of a High-Performance SMA Suited to the Surface Course of National Highways in Japan’s Cold, Snowy Regions
- Ontario’s Journey to Overcome SMA Low Early Skid Resistance
- The Effect of Flat and Elongated Properties on SMA Performance

10:00 – 10:30 am
Break

10:30 am – 12:00 pm
Concurrent Breakout Session: Aggregate and Innovations
- SMA Mixes with Local Aggregates
- Test Method of Analysis from Different Types of Fillers
- Accelerated Testing of Alternative Aggregate SMA Mixtures on the NCAT Test Track
- SMA with Ground Tire Rubber — A Contractor’s Perspective
- SMA Innovations at the Tollway

12:00 – 1:00 pm
Lunch

1:00 – 3:00 pm
Concurrent Breakout Session: Historical Perspectives and Case Studies Part 2
- Forensic Investigation of Premature Rutting
- Stone Matrix Asphalt Case Study, Thornton, Illinois
- A Study on the Effect of Rejuvenator in RAP Based SMA
- Case Study in Washington State: Evaluation of Long-Term Performance of SMA
- Benefits of SMA: A Maryland Case Study

1:00 – 3:00 pm
Concurrent Breakout Session: SMA and WMA
- WMA Mix SMA — Early Age Opening
- Design of Stone Matrix Asphalt Using Warm Mix Technology
- Short-Term Performance of Modified SMA with WMA
- Evaluation of Fracture Resistance of Warm SMA Mixes Utilizing RAP and Plastic Waste

3:00 – 3:30 pm
Break

3:30 – 5:00 pm
Concurrent Breakout Session: Laboratory Evaluations of SMA
- Development and Performance of “Fiberless” SMA
- Laboratory Performance Evaluation of SMA in Virginia
- Laboratory Performance of Fiberless SMA 0/11S WMA in Brazil
- A Performance Driven Laboratory Evaluation of SMA

5:45 – 6:45 pm
Networking Reception
End your day with an opportunity to drink, snack and mingle with everyone and discuss the events of the day.
7:00 – 8:00 am
Breakfast

8:00 – 8:30 am
Racetracks: SMA on the Indianapolis Motor Speedway
The most recent rehabilitation occurred in 2004. This presentation will inform the audience as to why SMA was chosen, what the designs looked like along with field results, how the project went and how it’s been performing today. The existing racing surface will be 14 years old this fall and has lasted longer than any full resurfacing placed to date, which is directly attributable to the use of SMA.

SPEAKER
William J. Pine, P.E., QC Director of Asphalt Technology, Heritage Construction & Materials, Heritage Research Group @ The Center

9:00 – 9:30 am
Danish Experience with Low Rolling Resistance SMA: From the Lab to the Road
While stone matrix asphalt is a mixture of choice for durability, it is also becoming the sustainable choice in Denmark. The Danish Road Directorate (DRD) has recently developed an SMA mixture designed to reduce the rolling resistance of the pavement. This presentation will provide the latest information regarding the DRD and their low rolling resistance mixture.

SPEAKER
Matteo Pettinari, PhD., Specialist in Asphalt Materials & Flexible Pavements, DRD

9:30 – 10:00 am
Thin Is In: Thin Stone Mastic Asphalt
Transport Scotland has been successfully placing SMA less than 30 mm (1.18 inches thick). This session will highlight why Transport Scotland is looking at thinner SMA applications and how they plan to effectively use this tool for network management.

SPEAKER
Martin McLaughlin, Engineering and Programme Manager, Transport Scotland

10:00 – 10:30 am
SMA: Wide-Open on the Autobahn
In the past, when the Autobahn was repaved, the entire roadway was shut down and multiple pavers were used in echelon to provide a high quality surface; however, on the latest SMA repave, the entire leveling and surface courses were paved full width (one paver) to eliminate joints. This presentation will discuss why SMA was chosen in this application and how this “wide open” paving was completed.

SPEAKER
Larry Michael, Larry L Michael, LLC

10:30 – 10:50 am
Break

10:50 – 11:50 am
Panel Session: The Future of SMA
After seeing what SMA can do, let’s find out what the future looks like. Are there challenges that lay ahead for more widespread adoption? What are the next steps in SMA’s evolution? Come hear from SMA experts to see what the future holds for SMA.

PANELISTS:
Dennis Bonds, PE, Director of Quality Control, APAC-MS, Inc.
Carsten Karcher, Director for the European Asphalt Pavement Association
Matteo Pettinari, PhD., Specialist in Asphalt Materials & Flexible Pavements, DRD
Horst Erdlen, Manager Business Unit bei J. Rettenmaier & Söhne, Germany

11:50 am – 12:00 pm
Conference Wrap-up

SPEAKER
Richard Willis, Ph.D., Director of Pavement Engineering & Innovation, NAPA

12:00 pm
Conference Closes