

Illinois

Bituminous Paving Conference

ILLINOIS BITUMINOUS PAVING CONFERENCE

DEC. 5-6, 2023

I Hotel and Conference Center in Champaign, IL

This conference offers unique opportunities for transportation professionals to share a broad array of knowledge and perspectives, discuss the latest technical information, review field reports in the area of hot-mix asphalt and explore flexible pavement advancements.

The University of Illinois Urbana-Champaign's Illinois Center for Transportation is responsible for planning and hosting this event.

CONFERENCE

IL Airport Hot-Mix Asphalt: FAA and IDOT Specifications, Mix Design, Construction, Testing and Payment



Bill Eves is the Bureau Chief of Airport Engineering for the Division of Aeronautics at the Illinois Department of Transportation. He has been with IDOT Aeronautics for over 9 years, with prior

roles including the Section Chief of Airport Construction and Materials.



Uthman Mohamed Ali is a Senior Research Engineer at UIUC's Illinois Center for Transportation. He has four years of research experience in evaluating and improving the performance of asphalt

binder, asphalt mixtures and Portland cement concrete.

The Role Environmental Product **Declarations Can Play in Payement Operations, Performance and Optimization**



Joseph Shacat is Director of Sustainable Pavements at the National Asphalt Pavement Association. His role includes directing research projects related to asphalt pavement sustainability and resilience,

educating the asphalt industry about sustainability and how to incorporate it into organizations, working with external stakeholders such as government agencies, and green rating.



Will Gallagher is the Vice President of Operations at Gallagher Asphalt. Gallagher is responsible for all operations, encompassing asphalt plants, construction, project management, quality

control, trucking, shop, purchasing, and continuous improvement.



James Cassem is the Plant and Crushing Operations Manager for Curran Contracting. He applies his asphalt production knowledge to enhance operational efficiency

in managing the plant and crushing operations daily. Cassem is an active member of ABATE and ENERGY STAR's APEX Group.

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IDOT Update

Omer Osman is the Secretary of Transportation for IDOT. His role reflects three decades of engineering and management experience.

His vast experience includes advancing complex projects and assessing resources, aiming to create a multimodal system that supports economic development and travel for Illinois residents.



FHWA Update

David Snyder is the Federal Highway Administration's Illinois Division Administrator. He leads a staff of transportation professionals

responsible for delivering Illinois' \$2.25 billion federal-aid highway program



Pavement Surface Texture and Friction to Improve Highway Safety

Shane Underwood is Professor and Associate Head of Undergraduate Programs

at North Carolina State University. His research focuses on developing improved pavement systems and understanding the vulnerability of these systems to climate and technology uncertainties.



Overlay Design for **Controlling Reflective** Cracking

John Senger is IDOT's Bureau Chief of Research. Before joining the transportation

agency's ranks, Senger was a consulting engineer, working on a wide range of projects.



Impact of Fuel, Anti-Strip, Asphalt Binder, WMA, FRAP on EPD

Joseph Shacat is the Director of Sustainable Pavements at the National Asphalt

Pavement Association.



Local Aggregate Use in

Greg Heckel is IDOT's District 6 Program Development Engineer.



Local Aggregate Use in **SMA**

Javier García Mainieri is a UIUC doctoral candidate in the Al-Qadi research group. His research focuses on

optimizing stone-matrix asphalt by using local aggregates.



Bituminous Materials in **Military Applications**

Jeb Tingle is a Senior Scientific Technical Manager and Program Manager in the Geotechnical and Structures

Laboratory at the U.S. Army Engineer Research and Development Center. Tingle leads large multidisciplinary teams to solve complex engineering problems.



Effect of HMA Surfaces on Rolling Resistance **Emission**

Imad Al-Qadi is the Grainger Distinguished Chair in Engineering at UIUC and ICT

Director. Al-Qadi's research efforts have developed new tests, testing specifications, and advanced modeling and simulation of pavement loading and crack development.



EPDs for Sustainable Project Delivery

Dennis Bachman is the Asset Management/ Pavement & Materials Engineer for the

FHWA's Illinois Division and is a professional engineer.



EPDs for Sustainable Project Delivery

Kelly Morse is Chief Chemist for IDOT's Central Bureau of Materials. Prior to that.

she worked as the Analytical Chemistry Lab Supervisor in the Analytical Chemistry Laboratory at IDOT's Bureau of Materials and Physical Research.



Continuous Density Measurements of **Flexible Pavement** during Construction

Lama Abufares is a UIUC doctoral student in the Al-

Qadi research group. Abufares' research interests include nondestructive testing and evaluation techniques.



IDOT HMA Technical Update

Brian Hill is the Hot-Mix Asphalt Operations Engineer at IDOT's Central Bureau of Materials.



HMA Production to Placement: Best QC/QA **Practice**

Tim Murphy is President of Murphy Pavement Technology, Inc. Before

founding Murphy Pavement Technology, he worked for IDOT, the Asphalt Institute and Chicago Testing Laboratory.

MODERATORS



Kevin Burke is the Executive Vice President of the Illinois Asphalt Pavement Association.



Ramez Hajj is an Assistant Professor at UIUC's Department of Civil and Environmental Engineering.



Brian Hill is the Hot-Mix Asphalt Operations Engineer at IDOT's Central Bureau of Materials.



Dan Gallagher is the CEO at Gallagher Asphalt Corporation and serves on the IAPA Board of Directors.



Laura Heckel is the Asset Management Engineer at IDOT.



Bill Pine is the Quality Control Director of Asphalt Technology for Heritage Construction and Materials.

EXHIBITORS





























POSTER SESSIONS

The following Illinois Center for Transportation projects are sponsored by the Illinois Department of Transportation.

- 1. R27-203: Truck Platooning on Illinois Flexible Pavements
- **4. R27-231:** Evaluation of the Asphalt Mixture Design Framework for Airfield Pavements in Illinois
- R27-SP43: Aggregate Subgrade Improvements Using Quarry By-Products: A Field Investigation

- **2. R27-216:** Optimizing the Use of Local Aggregates in Stone-matrix Asphalt
- **5. R27-233:** Mechanistic Empirical Design Procedures for Flexible Pavements
- 8. R27-SP56: Investigating the Use of Reclaimed Asphalt Pavement in Pavement Preservation Treatments

- **3. R27-227:** Moisture Content and In-Place Density of Cold Recycle Treatments
- **6. R27-240:** Development of Potential Strategies for Unmarked and Low Traffic Volume Roadways in Illinois

PROGRAM

TUESDAY, DECEMBER 5

Location: Chancellor Ballroom & Heritage Hall

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2:30 – 3:45 PM	IL Airport Hot-Mix Asphalt: FAA and IDOT Specifications, Mix Design,Construction, Testing and Payment Bill Eves, Illinois Department of Transportation Uthman Mohamed Ali, Illinois Center	9:30 – 10:00 AM 10:00 – 10:30 AM	BREAK
			Exhibits & Poster Session Open
			Overlay Design for Controlling Reflective Cracking
			John Senger, IDOT
3:45 – 4:00 PM 4:00 – 5:15 PM	for Transportation BREAK The Role Environmental Product Declarations Can Play in Pavement Operations, Performance and Optimization Joseph Shacat, National Asphalt Pavement Association James Cassem, Curran Contracting Company Will Gallagher, Gallagher Asphalt Corporation	10:30 – 11:00 AM	Impact of Fuel, Anti-Strip, Asphalt Binder, Warm-Mix Asphalt and Fractionated Reclaimed Asphalt Pavement on EPD
			Joseph Shacat, NAPA
		11:00 – 11:30 AM	Local Aggregate and Stone-Matrix Asphalt
			Greg Heckel, IDOT Javier J. García Mainieri, ICT/UIUC
		11:30 – 12:00 PM	Bituminous Materials in Military Applications
5:15 - 7 :30 PM	Reception Exhibits & Poster Session Open		Jeb Tingle , U.S. Army Engineer Research & Development
		12:00 – 12:15 PM	AWARDS
WEDNESDAY, DECEMBER 6 Location: Heritage Hall		12:15 – 1:30 PM	LUNCH
			Exhibits & Poster Session Open
7:30 – 8:05 AM	Registration, Poster Session, & Exhibits	1:30 – 2:00 PM	Effect of HMA Surfaces on Rolling Resistance Emission
	Continental Breakfast Available		Imad L. Al-Qadi, UIUC Grainger
8:05 – 8:10 AM	Welcoming Remarks	2:00 – 2:30 PM	Distinguished Chair & ICT Director
	Imad L. Al-Qadi, Conference Chair, ICT/ University of Illinois Urbana-Champaign		Sustainable Project Delivery
8:10 - 8:30 AM	IDOT Update		Dennis Bachman, FHWA Kelly Morse, IDOT
2	Omer Osman, Secretary of Transportation, IDOT	2:30 – 3:00 PM	Continuous Density Measurements of Flexible Pavement during Construction
8:30 - 8:50 AM	FHWA Update		Lama Abufares, ICT/UIUC
	David Snyder , Division Administrator, Federal Highway Administration	3:00 – 3:30 PM	IDOT HMA Technical Update
			Brian Hill, IDOT
8:50 – 9:30 AM	Pavement Surface Texture and Friction to Improve Highway Safety	3:30 – 4:00 PM	HMA Production to Placement: Best QC/QA Practice
	Shane Underwood, North Carolina State University		Tim Murphy , Murphy Pavement Technology, Inc.

SPONSORS



















