



**AI**

**Sustainability**

**Autonomy**

# Modified Asphalt Research Center (MARC) 2<sup>nd</sup> Future Research Focus Workshop

## Purpose of the Workshop

This workshop aims to initiate discussions on emerging opportunities and challenges in road infrastructure. It will focus on setting a new research agenda, identifying potential resources, and fostering collaboration among stakeholders. The goal is to investigate existing challenges in road infrastructure and propose new solutions. This could include developing sustainable materials and construction techniques to reduce environmental impact, and leveraging automation and AI to upgrade or transform the design and management of road infrastructure systems (e.g., creating efficient and reliable virtual platforms for design and optimization, and developing automated construction and maintenance technologies).

## Agenda

Morning Session	8:30-8:40 a.m.	Welcome and Opening Remarks
	8:40-9:10 a.m.	Update from MARC Team
	9:10-10:30a.m.	Presentations from FHWA and state DOTs
	10:30-10:50 a.m.	Break
	10:50-12:10 p.m.	Presentations from Industry Companies
Afternoon Session	12:10-1:30 p.m.	Lunch
	1:30-3:30 p.m.	Research Needs and Collaboration Discussion Session; Development of MARC Advisory Board
	3:30-4:00 p.m.	Break
	4:00-5:00 p.m.	Summary and Tour of Center Labs

## Key Topics

- Low-carbon transportation material and alternative asphalt.
- The impact of AI and automation in transforming material testing and structural design.
- Optimizing traffic operations and enhancing roadway construction and maintenance.
- Strategies for monitoring and predicting smart traffic and pavement performance.
- Innovations in automating road construction and maintenance.

## Attendees

The workshop will host stakeholders from the Federal Highway Administration (FHWA), state Departments of Transportation (DOTs), industry partners, and academic researchers.

## Registration

<https://forms.gle/DTqeaxC7LhMJxs8e6>



**Parking** (covered by UW-Madison): Lot 6 Helen C. White Garage, 600 N Park St, Madison, WI

**Lodging:** Wisconsin Union Hotel, Hilton Garden Inn, Hampton Inn, Hyatt Place Madison/Downtown

**Date: February 20, 2025**

**Location: Room 213, Pyle Center, 702 Langdon Street, Madison WI**