



The National Academies of
SCIENCES • ENGINEERING • MEDICINE



**Sustainable Resource
Conservation & Recovery in
Transportation Workshop
July 14-16, 2019**

NATIONAL ACADEMIES OF SCIENCES, ENGINEERING AND MEDICINE
2101 Constitution Avenue, NW
Washington D.C.

DRAFT AGENDA (As of July 9, 2019)

DAY 1 - SUNDAY, JULY 14

2:00-5:00pm Registration Opens and Exhibitor Setup
National Academy of Sciences (NAS) Building, Washington D.C.
<http://www.nationalacademies.org/>

3:00-5:00pm Committee Business Meeting (*All Registered Attendees Welcome!*)
NAS Building, Washington D.C.

- Use of Rice Husk Ash in Flowable Fill Concrete Mix, *Zahid Hossain, Arkansas State University*
- Carbon Sequestration By Soils and Plants on IH-35 in Bexar County, Texas, *Samer Dessouky, University of Texas at San Antonio*
- ASCE's Roadmap to Sustainable Development, *Alex Rosenheim, ASCE's Committee on Sustainability*

6:00-8:00pm **Opening Reception and Registration**
State Plaza Hotel, Washington D.C.
<https://www.stateplaza.com/>

DAY 2 - MONDAY, JULY 15 – National Academy of Sciences Building

7:30-8:30am Registration* (light continental breakfast will be served)

8:30-12:30pm **Morning Program**

8:30-9:00am Welcome and Keynote address

9:00-10:00am **Federal Perspectives**
Moderated by Suzanne Boxman, U.S. Environmental Protection Agency

- Federal Highway Administration, *Tina Hodges, Sustainable Transportation and Resilience Team*
- U.S. Army Corps of Engineers, *Jeff King, Deputy National Lead for Engineering with Nature Initiative*
- U.S. Environmental Protection Agency, *Nicole Villamizar, Chief, Materials Management Branch, Resource Conservation and Sustainability Division, Office of Resource Conservation and Recovery*

10:00-10:30am Coffee/tea/water break (in room with exhibitors)

10:30-11:30am **DOT Perspectives**

Moderated by David Wilson, Virginia Department of Transportation

- Delaware Department of Transportation, *James Pappas, Deputy Director, Performance Management*
- Maryland Department of Transportation, *Earl Lewis, Deputy Secretary of Transportation*
- Virginia Department of Transportation, *Robert Cary, P.E., L.S., Chief Deputy Commissioner*

11:30-12:30pm **Local/Transit Perspectives**

Moderated by Antoinette Quagliata, Federal Transit Administration

- Washington Metropolitan Area Transit Authority, *Rachel Healy, Director, Office of Sustainability*
- Alexandria Transit Co., *Josh Baker, General Manager*
- Delaware Transit Corporation, *John Sisson, Chief Executive Officer*
- Maryland Transit Administration, *Lauren A. Molesworth, Environmental Planning Division Manager*

12:30-1:30pm Lunch (included with registration)

1:30-5:00pm **Afternoon program**

1:30-3:00pm **Reuse and Recycling in Transportation Infrastructure**

Moderated by Burak Tanyu, George Mason University

- A New Outlet for Recycled Glass Cullet: Exploring the History, Manufacturing, Properties, and Projects of Foamed Glass Aggregate, *Theresa Loux, AeroAggregates*
- Recycling Recycled Asphalt Pavement: A Path to Sustainable Infrastructure, *Emre Akmaz, George Mason University*
- Affecting Parameters on Tufa Precipitation from Recycled Concrete Aggregate, *Aiyoub Abbaspour, George Mason University*
- Drainage Performance of Recycled Concrete Aggregates as Mechanically Stabilized Earth Wall Backfill, *Bu Wang, University of Wisconsin-Madison*

- Evaluation of Recycled Concrete Materials for Oyster Aquaculture, *Dong Hee Kang, Morgan State University*

3:00-3:30pm

Break (refreshments will be provided)

3:30-5:00pm

Per- and Poly-Fluoroalkyl Substances (PFAS) and Transportation
Moderated by Helen Corley, Wood Environment & Infrastructure, Inc.

- PFAS: Challenges to the Transportation Sector, *Nikki Delude Roy, Golder Associates*
- Atmospheric Deposition as a Source of Contamination at PFAS-Impacted Sites, *Anjuliee M. Mittelman, U.S. DOT/Volpe Center and Stephen Zemba, Sanborn | Head & Associates, Inc.*
- Impacts of the Emerging Contaminants Per- and Polyfluoroalkyl Substances (PFAS) on NHDOT Construction Projects and Maintenance Operations, *Stephanie Monette, New Hampshire Department of Transportation*
- Subsurface Transport Phenomena of PFAS, *Aamir Ahmad, George Mason University*
- A Review of PFAS Remediation Technologies and the Current State of the Practice, *Bonani Langan, Wood Environment & Infrastructure Solutions, Inc.*

6:00-9:00pm

Dinner (included with registration at **Clydes of Gallery Place**)

<https://clydes.com/gallery-place>

(Transportation to/from restaurant not included – Metro is nearby)

DAY 3 (TUESDAY, JULY 16) National Academy of Sciences Building

8:00-9:00am

Registration* (light continental breakfast will be served)

9:00-12:30pm

Morning Program

9:00-10:30am

Contaminant Waste Management and Remediation

Moderated by Zahid Hossain, Arkansas State University

- Streamlining the Use of Marginal Contaminated Soil in Transportation Projects, *Jeffrey Obrecht, RK&K - Rummel, Klepper & Kahl Master Account AICC*
- Investigation, Remediation, and Risk Management at Legacy Asphalt Core Testing Sites, *Jeff Gernand, KCI Technologies, Inc.*
- Evaluation of the Longevity of Liner Systems Commonly Used to Line Salt Water Detention Ponds, *Sandarva Sharma, George Mason University*
- Development of a Liquid-Deicing Tank Inspection and Integrity Evaluation and Program, *David Wilson, Virginia Department of Transportation & Scott Simons, Maryland Department of Transportation*

- Liner System for Aggressive Coal Combustion Product Leachates, *Binte Zainab, George Mason University*

10:30-11:00am Break (refreshments will be provided)

11:00-12:30pm **Advancements in Sustainable Transportation**

Moderated by Aiyoub Abbaspour, George Mason University

- Evolution of an Environmental Compliance Program, *David Wilson, Virginia Department of Transportation*
- Lessons Learned From Implementing PennDOT's Strategic Recycling Program, *Steve Young, Rummel, Klepper & Kahl and David Condo, Pennsylvania Department of Transportation*
- Energy Storage System in Direct Current Powered Rails, *Abdul Bari, Maryland Transit Administration*
- Recommendations for Designing Roadside Vegetation Barriers to Improve Local, Near-Road Air Quality, *Rich Baldauf, U.S. Environmental Protection Agency*
- New Technology Enables Waste Materials Use in Infrastructure Construction and Maintenance, *Simon Bruce, Matrix Materials*

12:30–2:30pm Lunch (included with registration) including Poster Session with workshop presenters

3:30–8:00pm **Tours** (no additional cost but transportation to/from not included)

Union Station Tour (3:30-5:00pm): In 1907, the opening of D.C.'s opulent Union Station energized the city and forever changed how Washingtonians traveled. Over a century later, the station still buzzes with travelers, trains, and history. The Union Station Redevelopment Corporation will host a tour that will introduce you to the secrets of this D.C. Daniel Burnham masterpiece. As you climb up steps and open doors into areas where the public is not normally granted access, you'll also learn what's being done to preserve this venerable hub of D.C. transportation for years to come. Union Station is accessible from the Metro's Red Line. NOTE: This tour will be about 1.5-hours long and will consist of a considerable amount of walking. Tour is limited to 30 people on a first requested, first accommodated basis.

Anacostia River Explorers Tour (6:00-8:00pm): Explore the river while riding in an open-air motorized boat as part of the Anacostia River Explorers program. Anacostia Watershed Society staff will take participants on a two-hour tour of the river while discussing natural and cultural history along with restoration efforts. You will experience the joy of being out on the water while observing this beautiful local area. The tour will depart from Diamond Teague Park, which is a ½ mile walk from the Navy Yard-Ballpark Station on the Metro's Green Line. Tour is limited to 20 people on a first requested, first accommodated basis.

*Registration will be open throughout the day's scheduled program