

# AID-PT

Accelerated Implementation & Deployment of Pavement Technologies

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*AID-PT program celebrates 10 years.  
What's the key to success?*

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*Mobile Pavement Technology Centers  
reach more audiences than ever.*

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The FHWA Pavement Materials Team was on hand at the unveiling of the new Mobile Asphalt Technology Center. *Source: FHWA*

# Summer

# NEWSLETTER 2023



U.S. Department of Transportation  
Federal Highway Administration



Crews install overlays in Maine. Source: Shreenath Rao, ARA, Inc.

## Teamwork and customer service — keys to AID-PT success

The Accelerated Implementation and Deployment of Pavement Technologies (AID-PT) program is celebrating a decade of success. Those involved attribute it to teamwork and customer service.

“Our pavements program has gone through many changes over the past five to ten years,” said FHWA Pavement Materials Team Leader Gina Ahlstrom. “There is a greater emphasis on collaboration and working across boundaries. Folks sometimes don’t even know which office people work in because we all work so well together.”

“Our team is great—not just my team, but FHWA’s entire pavements and materials discipline,” said FHWA Pavement Design and Performance Team Leader LaToya Johnson. “It’s a group of people who really love what they do and are passionate and committed. It’s fun working with these folks and our external stakeholders.”

Congress established the AID-PT program in 2012 to document, demonstrate, and deploy innovative pavement technologies. The program encourages highway agencies to adopt and implement new technologies that save money, enhance safety, improve performance and quality, increase efficiency, and enhance road user satisfaction.

“In some public agencies, program areas are siloed,” said Johnson. “They don’t cross barriers. We’ve tried bringing those barriers down and pushing our teams to work across program areas.”



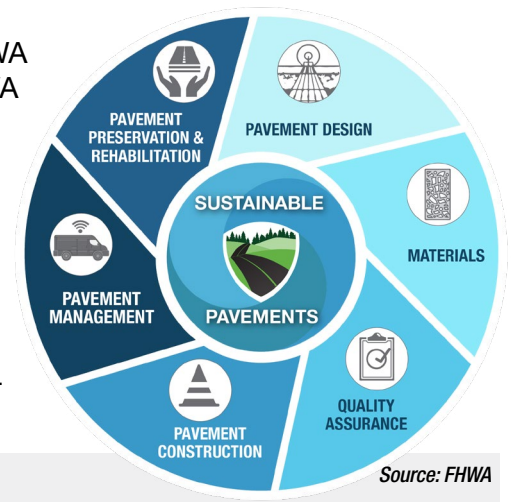
Seven program areas comprise the FHWA Pavement and Materials Program: [Pavement Design](#), [Materials](#), [Quality Assurance](#), [Pavement Construction](#), [Pavement Management](#), [Pavement Rehabilitation & Preservation](#), and [Sustainable Pavements](#).

Within these programs, FHWA technical experts from the Office of Infrastructure headquarters office work collaboratively with experts from the Resource Center, Turner-Fairbank Highway Research Center, Office of Federal Lands, and Division Offices to meet stakeholders’ needs.

< [Watch the AID-PT overview video](#). Source: FHWA

AID-PT funding allows FHWA to give States grants to try new things. FHWA can also showcase new equipment in the field and develop training. FHWA Resource Center Pavements and Materials Team Technical Director Chris Wagner says his team is customer focused. “We ask our stakeholders, ‘What’s new and emerging? What good things are you doing that we can take to other States to help them provide cost-effective, safe, durable, and sustainable pavements?’”

Once the needs are identified, FHWA Pavement and Materials staff work to address them. “It can take a long time to get new practices, tests, or technologies implemented within the State DOTs, so this program specifically focuses on trying to make that a faster process,” said Ahlstrom.



Source: FHWA

## ***FHWA staff who support the AID-PT program made significant strides in 2022:***

- Published the [Pavement Management Roadmap](#).
- Procured a larger, more advanced Mobile Asphalt Technology Center. A new Mobile Concrete Technology Center will arrive in 2024.
- Launched a [Climate Challenge](#) encouraging States to quantify greenhouse gas emissions from materials and practices related to pavement design, construction, and maintenance. FHWA dispersed \$7.1 million among 25 State transportation departments and provided technical assistance to help them meet the challenge.
- Participated in the [Buy Clean Task Force](#), to develop recommendations and policies to expand consideration of embodied emissions and pollutants of construction materials in Federal procurement and federally funded projects. FHWA continues to make sustainability and resiliency top priorities. In 2022, FHWA met with Federal agencies such as the Department of Energy, Environmental Protection Agency, General Services Administration, and the Department of Agriculture to coordinate efforts, align messages, and build relationships.
- Created an Every Day Counts innovation team to highlight the benefits of environmental product declarations (EPDs) called “[EPDs for Sustainable Project Delivery](#).”
- Completed research and collection of stakeholder feedback to draft a new [pavement design policy](#) that addresses the entire pavement lifecycle.
- Completed research on the continuous pavement friction measurement device and began deploying the technology to States.
- Introduced new test methods to allow stakeholders to optimize mix design, binder content, and recycled materials.
- Demonstrated performance-engineered mixtures and balanced mix design concepts in the field and educated stakeholders through webinars, peer exchanges, and workshops.
- Offered a host of pavement-related courses through the National Highway Institute, such as FHWA-NHI-131116 [Pavement Management Fundamentals](#), FHWA-NHI-131141 [Quality Assurance for Highway Construction Projects](#), and FHWA-NHI-131050 [Asphalt Pavement In-Place Recycling Techniques](#).
- Advanced pavement-related technologies by supporting pooled fund studies such as the [Demonstration to Advance New Pavement Technologies](#), [Resilience Approaches for Pavements and Geotechnical Assets](#), and [National Partnership to Implement Quality Preventive Maintenance Treatment Construction and Data Collection Practices](#).

Pavement and materials staff say they look forward to helping stakeholders overcome challenges in 2023 using the flexibility offered by the AID-PT program. “Everything doesn’t have to be technical assistance or a pooled fund study. We can meet stakeholders where they are, listen, respond, and tailor our support based on their needs. Every year, I am increasingly amazed at what the program accomplishes,” said Johnson.



# Innovation delivered to your doorstep

FHWA's Michael Praul makes a concrete presentation during a visit to Case Western Reserve University in Cleveland. Source: Joshua Brinegar

The Federal Highway Administration's (FHWA) Mobile Pavement Technology Center (MPTC) staff are reaching new audiences in more ways than ever. From construction sites to conferences and college classrooms, State and local highway agencies, contractors, academia, and university students have unique opportunities to learn about the latest pavement technologies.

***"Nobody else in the world has a traveling program like this."***

—Leslie Myers, FHWA

The mobile asphalt and concrete technology centers, known as the [MATC](#) and the [MCTC](#), crisscross the country, each traveling an average of 10,000 miles a year to take technology to the pavement community's doorstep. States invite FHWA to set up one of its 53-foot trailers near a pavement project to introduce emerging technologies into real-world construction projects. Each visit lasts about a month and includes training, demonstrations, and field evaluations.

"The MPTCs are unique," said FHWA Senior Asphalt Pavement Engineer Leslie Myers. "Nobody else in the world has a traveling program like this."

A new and improved MATC hit the road in 2023, and a new MCTC will be delivered in 2024. The upgraded centers offer new features such as an expandable section, like a recreational vehicle "slide out." For example, a 29-foot section in the MATC can extend 5 feet wider than the old trailer to accommodate 20 people for classroom-style training, demonstrations, and open-house events.



"Another exciting feature is the addition to the trailer's exterior," said Myers. "We now have a large awning that comes out, which allows us to demonstrate field equipment even when it's raining."

New roof-top solar panels will reduce the energy footprint of the MPTCs; a wheelchair lift enhances accessibility and improves workplace safety by providing a more ergonomic way to lift heavy mixture sample buckets into the trailer; and diamond-plated steel flooring allows staff to place hot asphalt buckets inside the lab. The MPTC team can perform more than 25 tests using pavement samples and lab equipment in both the MATC and MCTC.

## Equipment Loan Program

The FHWA has also expanded the free MATC equipment loan program with five additional calibration kits for the dielectric profiling system carts, a universal testing jig for balanced mix design tests, and more laser texture scanners to check the mean profile depth to potentially design asphalt mixtures for pavement surface macrotexture in addition to durability. Agencies, contractors, and academia can borrow equipment from either MPTCs for up to several months to determine if it meets their needs and whether an investment toward implementation is desirable.

## Conferences

While site visits are the program's foundation, MPTC staff also take the trailers to conferences. In 2023, the MATC stopped at the annual meeting of the National Association of County Engineers on the way back from a site visit in California. Through these opportunities, "we reached what was predominantly a local agency and engineering consultants audience, which we normally don't have the opportunity to do," said Myers. "Our goal was to make them aware of the types of equipment and practices that they may see on their paving jobs as well as conveying an emphasis on employing a quality mindset when it comes to asphalt pavements."

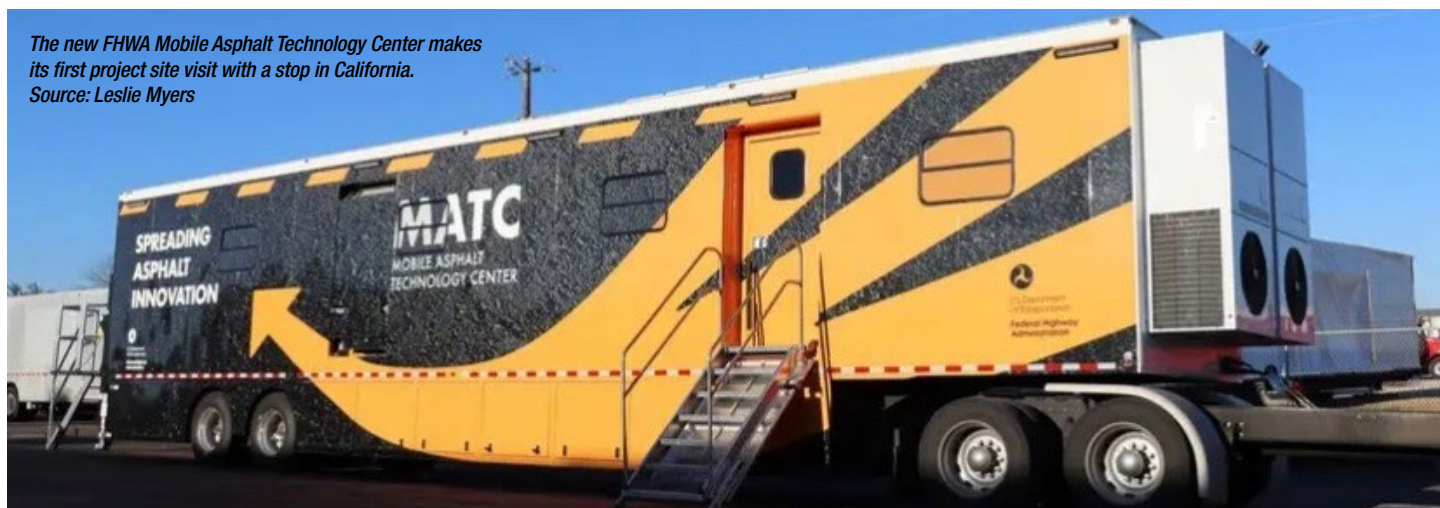
## Technology Tours

Many States want to advance their pavement programs but may not have a project in the right timeframe to align with the MPTC's schedule and availability, so FHWA staff created "technology tours." "In 2022, the MCTC spent two weeks in Ohio and took the concrete trailer to six cities," said FHWA Senior Concrete Engineer Michael Praul. "We completed 13 open house sessions; each session was 3 hours with half of the time spent in a classroom, and the other half was hands-on." The MCTC will offer tours in several States throughout 2023 and beyond.

## College Program

New pavement technologies aren't often discussed in college engineering classes, so MPTC staff have created a college program. Their first stop, led by the MCTC, included a full day at the Virginia Military Institute (VMI). "One of our engineers gave a presentation to a construction-oriented class to explain what quality control looks like in the real world and why it's important," said Praul. "Another engineer taught a concrete materials class and incorporated new technologies. We also did an auditorium presentation about the MPTC program and performance-engineered mixtures and how they're evolving nationally." In addition to VMI, the concrete team has completed campus days at Ohio State, Northern Ohio University, and Case Western Reserve and is planning campus days at Clarkson University in New York, Auburn University in Alabama, and Middle Tennessee State. "Word is spreading, and professors are seeing value in this new program," said Praul. "We're starting to treat it not as something we do in conjunction with a trip but as an effort unto itself."

Pavement stakeholders interested in learning more about innovative pavement technologies and practices through the MPTC program are encouraged to contact [Leslie Myers](#) (asphalt) and [Michael Praul](#) (concrete).



*The new FHWA Mobile Asphalt Technology Center makes its first project site visit with a stop in California.  
Source: Leslie Myers*

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Source: New Jersey DOT



Source: New Jersey DOT

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