

Are you implementing a proven transportation innovation?

Funding assistance, to deliver projects faster, better, and smarter, may be available through FHWA's Accelerated Innovation Deployment (AID) Demonstration.

AID DEMONSTRATION

The AID Demonstration program provides funding as an incentive to accelerate the deployment and adoption of proven innovative practices and technologies in highway transportation projects. The Federal Highway Administration (FHWA) anticipates approximately \$10 million for FY 2023 to be made available for AID Demonstration grants in 2023 and up to \$12.5 million per fiscal year for FYs 2024 – 2026 from amounts authorized within the Technology and Innovation Deployment Program (TIDP) under the Infrastructure Investment and Jobs Act. The grants are administered through the FHWA Office of Transportation Workforce Development and Technology Deployment.

ELIGIBLE PROJECTS

Projects submitted for an AID Demonstration grant must:

- Be eligible for assistance under title 23, United States Code.
- Be ready to initiate within 6 months of receiving an AID Demonstration award.
- Involve any phase of a highway transportation project between project planning and project delivery including planning, financing, operation, structures, materials, pavements, environment, and construction.
- Be a "pilot" deployment, by the applicant or subrecipient, of an innovation proven in real-world highway transportation application.
- Address one or more TIDP goals and other program requirements identified in the Notice of Funding Opportunity (NOFO) 693JJ324NF-AIDDP.

FUNDING

The AID Demonstration award is based on the cost of the innovation in a project (rather than the total project cost). The award amount may be up to the full cost of the innovation in the project, to a maximum of \$1 million. AID Demonstration funds are available at an 80 percent federal share, which require a minimum 20 percent cost share.

ELIGIBLE ENTITIES

The FHWA will award AID Demonstration grants to state departments of transportation (DOTs), federal land management agencies, and tribal governments. Metropolitan planning organizations and local governments may apply through the state DOT as subrecipients.

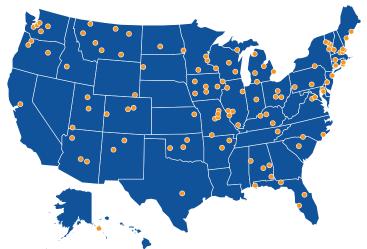
CALL FOR APPLICATIONS

The 2023-2026 AID Demonstration funding opportunity (NOFO 693JJ324NF-AIDDP) is available on Grants.gov.

*The FHWA encourages use of the innovations included in the EDC program. Examples and benefits of EDC innovations can be found at: http://www.fhwa.dot.gov/everydaycounts/

Accelerated Innovation Deployment (AID) Demonstration award recipients share their experiences delivering projects faster, better, and smarter

TOTAL AID DEMONSTRATION AWARDS AS OF AUGUST 2023: 127



For a complete list, visit: https://www.fhwa.dot.gov/innovation/grants/projects/

As part of the AID Demonstration program, award recipients submit a final report to FHWA. Each report documents the process, benefits, and lessons learned as well as methods to support rapid adoption of the innovation as standard practice.

INNOVATION HIGHLIGHTS

Roundabouts

Kentucky Transportation Cabinet (KYTC) received an AID Demonstration grant to offset the costs of installing a roundabout in London, KY. The roundabout yielded significant improvements in traffic flow and dramatic safety and operational benefits, such as eliminating the rush-hour standing queue and reducing crashes.

Final report excerpt: "It has proven an effective countermeasure that has mitigated or eliminated problems that hampered traffic operations at the previous four-way stop intersection."

Hot In-place Recycling (HIPR) and Warm Mix Asphalt (WMA)

The Michigan Department of Transportation (MDOT) and the Dickinson County Road Commission project was for the rehabilitation of Pine Mountain Road/Westwood Avenue, an all-season route, entering the cities of Iron Mountain and Kingsford, as well as an airport, resort, two school districts and several industries and businesses. Speed of construction was critical. By using HIPR for the base pavement and WMA for the surface, project delivery was accelerated, which resulted in less disruption for the public and improved worker safety.

Final report excerpt: "The Dickinson County Road Commission determined from the results of our data analysis and sense of satisfaction from the facility users that the HIPR method is a valuable but little used tool in the road preservation toolbox. We are adopting HIPR into our standard operating procedures as another tool in the pavement preservation toolbox, scoping each road to see if it is the proper fix. WMA will continue to be an option for contractors as it has been in the past."

Slide-in Bridge Construction (SBIC)

Michigan Department of Transportation (MDOT) received an AID Demonstration grant to replace the superstructure of the US-131 north- and south-bound bridges over 3 Mile Road using SIBC method. The project also used the Construction Manager/ General Contractor process that allowed MDOT to gain the contractor's input on design and delivery, as well as a schedule, to minimize traffic disruptions. Safety was another key goal of the project. There were no worksite accidents during the project, in large part due to workers not being adjacent to active traffic for the majority of the project.

Final report excerpt: "Using the SIBC method on this project performed better than expected. The overall project was deemed a success and the Michigan DOT has now added this innovative technology to its toolbox. Following is a comment that was sent to MDOT from an appreciative user, 'I am very impressed and pleased with the 131 bridge project in Mecosta County. Despite all of the work, my drive was never impacted. We drive up north every Friday and return the following Sunday. Last week we came home over the old southbound structure and upon returning this past Sunday, we crossed the brand new bridge! I've never experienced a bridge replacement project without a detour!! WELL DONE!!"

High-Friction Surface Treatment (HFST)

Oklahoma Department of Transportation (ODOT) used AID Demonstration funds to install HFST on four curves at three locations in the Oklahoma City metropolitan area. Previous applications of HFST in Oklahoma had been limited to two sites on rural two-lane highways with low average daily traffic. This project was chosen to evaluate the durability of HFST under extreme traffic volumes. Each curve had three travel lanes going in one direction. Also, the method of installation was fully automated.

Final report excerpt: "The ODOT determined from the preliminary results of our data analysis that installation of HFST on multi-lane high-volume highways is practicable and that dramatically improved friction numbers can be achieved. Revisions to ODOT standards for the application of HFST are under development. A program to systematically apply HFST to a number of selected curves each year has been initiated."

South Dakota Department of Transportation Safety (SDDOT) AID Demonstration project focused on safety, where HFST was placed and evaluated on four horizontal curves on the South Dakota State Highway System with higher than average accident rates. The curves—two on US14A near Deadwood and two on I-229 in Sioux Falls—experienced crash rates two to four times higher than average, with most incidents occurring during snow-packed or icy road conditions.

Final report excerpt: "The process of placing the HFST is very similar to how the SDDOT applies an epoxy deck seal on a bridge deck. As a result, we did not learn anything new on how the product is applied. The real lesson we learned was in the performance of HFST in snow and ice covered road conditions. We had an overall crash reduction rate of 78 percent."

To read the full AID Demonstration grant reports, go to: http://www.fhwa.dot.gov/innovation/grants/projects