Will your agency be demonstrating an Every Day Counts (EDC) or other proven innovation on a highway transportation project soon? Funding assistance may be available through FHWA’s Accelerated Innovation Deployment (AID) Demonstration program to accelerate implementation and adoption of the proven innovation.

AID DEMONSTRATION BASICS

The AID Demonstration program provides funding as an incentive to accelerate the use of innovation in highway transportation projects. The Federal Highway Administration (FHWA) expects approximately $10 million to be made available for AID Demonstration grants in each of fiscal years 2016 through 2020 from amounts authorized within the Technology and Innovation Deployment Program (TIDP) under the Fixing America’s Surface Transportation (FAST) Act. The grants are administered through the FHWA Center for Accelerating Innovation.

WHAT TYPES OF PROJECTS ARE ELIGIBLE?

Projects submitted for an AID Demonstration grant must:

- Be eligible for assistance under title 23, United States Code.
- Be ready to initiate within 12 months of applying for AID Demonstration funding.
- Involve any phase of a highway transportation project between project planning and project delivery including planning, financing, operation, structures, materials, pavements, environment, and construction.
- Include an innovation proven in real-world highway transportation application,* though not routinely used by the applicant or the subrecipient. Address TIDP goals.

WHAT AMOUNT OF ASSISTANCE IS AVAILABLE?

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.

WHICH AGENCIES CAN APPLY?

Eligible entities are 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.

The Notice of Funding Opportunity published on September 1, 2016 provides additional eligibility and application information.

WHEN IS THE DEADLINE?

Completed applications are evaluated and award determinations are made on an open, rolling basis until the program ends or funding is no longer available. Go to Grants.gov to apply (search for Opportunity Number FHWA-2016-21063).

*The FHWA encourages use of the innovations included in the EDC Initiative.

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

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

HIGHLIGHTS

Kentucky Transportation Cabinet (KYTC) - Roundabout Installation in London, KY

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.”

Michigan Department of Transportation (MDOT) - US-131 over 3 Mile Road Bridge Replacement using Slide-in Bridge Construction (SIBC)

MDOT received an AID Demonstration grant in 2014 to replace the superstructure of the US-131 north- and southbound bridges over 3 Mile Road using SIBC method. The project also used the Construction Manager/General Contractor (CM/GC) 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!!”

MDOT and the Dickinson County Road Commission - Pine Mountain Road/Westwood Avenue Pavement Rehabilitation using Hot In-place Recycling (HIPR) and Warm Mix Asphalt (WMA)

This project was for the rehabilitation of 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.”

Oklahoma Department of Transportation (ODOT) - Safety Project Using High-Friction Surface Treatment (HFST) at Spot Locations

AID Demonstration funds were used 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) - Project Using HFST at Spot Locations

This safety project placed and evaluated HFST 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