

U.S. Department of Transportation

Notice of Funding Opportunity Number 693JJ321NF-AIDDP

**“Accelerated Innovation Deployment Demonstration Program”**

Issue Date:

July 1, 2021

Application Due Date:

September 28, 2021; 11:59 pm Eastern Time

Notice of Intent to Apply Due Date:

August 3, 2021; 11:59 pm Eastern Time

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The Federal Highway Administration (FHWA) is using [www.grants.gov](http://www.grants.gov) for issuance of this Notice of Funding Opportunity (NOFO). Applicants must register at [www.grants.gov](http://www.grants.gov) under NOFO Number 693JJ321NF-AIDDP to receive notifications of NOFO updates or amendments to this NOFO. It is the Applicant’s responsibility to monitor [www.grants.gov](http://www.grants.gov) site for any updates/amendments to this NOFO.

## SUMMARY INFORMATION

Funding Opportunity Summary:	The AID Demonstration Program provides incentive funding for eligible entities to accelerate the implementation of proven innovation in highway transportation. The FHWA makes up to \$10 million in Fiscal Year (FY) 2021 available.
Federal Agency Name:	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) Office of Innovative Program Delivery Center for Accelerating Innovation, Mail Drop: E63-311 1200 New Jersey Avenue, SE. Washington DC 20590 Attn: Jeffrey Zaharewicz
Funding Opportunity Title:	Accelerated Innovation Deployment (AID) Demonstration Program
Announcement Type:	This is the initial announcement of the FY 2021 AID Demonstration Program funding opportunity.
Funding Opportunity Number:	693JJ321NF-AIDDP
Type of Award:	The planned award type is a grant that is allocated to State departments of transportation (State DOT) through project authorizations, or for Federal Land Management Agencies (FLMA) and Tribes through existing agreements with FHWA Federal Lands Highway Divisions.
Assistance Listings: <i>(formally known as Catalog of Federal Domestic Assistance (CFDA) Number)</i>	20.200 Highway Research & Development
Notice of Intent (NOI) to Apply Due Date:	Send submissions to <a href="mailto:innovation@dot.gov">innovation@dot.gov</a> by 11:59 PM (Eastern Time) on August 3, 2021.
Application Due Date:	Electronic applications are due to <a href="http://www.grants.gov">www.grants.gov</a> by 11:59 PM (Eastern Time) on September 28, 2021.
Questions:	Submit via email: To: <a href="mailto:innovation@dot.gov">innovation@dot.gov</a> Subject: Questions for NOFO 693JJ321NF-AIDDP <ul style="list-style-type: none"> <li>on or before 5 pm (Eastern Time) on August 3, 2021.</li> </ul>

## FUNDING OPPORTUNITY INFORMATIONAL WEBINAR

The DOT will host an informational session regarding this funding opportunity focused on the AID Demonstration Program. This session will be conducted as a virtual forum and will focus on specific topics to help potential applicants gather additional information and ask specific questions.

Participation in this session is not mandatory in order to submit an application under this NOFO. However, we encourage potential applicants to take advantage of this opportunity to gather information regarding this specific funding opportunity.

### Informational Session:

#### Accelerated Innovation Deployment Demonstration Program

Virtual Webcast	Application Information for the Accelerated Innovation Deployment Demonstration Program
Date	July 27, 2021
Time	1:00 pm – 3:00 pm Eastern Time
Registration	Not required.
<b>Log In / Attend</b>	<b><a href="#">CLICK HERE</a> to join the Information Session.</b>

*NOTE: The Information Session is a Microsoft Teams Live Event and it will be recorded.*

## SECTION A – PROGRAM DESCRIPTION

The AID Demonstration Program is one aspect of the multifaceted Technology and Innovation Deployment Program (TIDP) approach and provides funding as an incentive for eligible entities to accelerate the implementation and adoption of proven innovation in highway transportation. The AID Demonstration provides incentive funding for activities eligible for assistance in any phase of a highway transportation project between project planning and project delivery including: planning, financing, operation, structures, materials, pavements, environment, and construction that address the TIDP goals:

- (A) Significantly accelerate the adoption of innovative technologies by the surface transportation community;
- (B) Provide leadership and incentives to demonstrate and promote state-of-the-art technologies, elevated performance standards, and new business practices in highway construction processes that result in improved safety, faster construction, reduced congestion from construction, and improved quality and user satisfaction;
- (C) Construct longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges;
- (D) Improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability; and
- (E) Develop and deploy new tools, technique, and practices to accelerate the adoption of innovation in all aspects of highway transportation.

The FHWA continues the AID Demonstration Program authorized within the TIDP under the Fixing America's Surface Transportation (FAST) Act (Pub. L. 114-94), which extends the TIDP under Title 23, United States Code (U.S.C.), Section 503(c), to implement accelerated innovation deployment. The TIDP relates to all aspects of highway transportation including planning, financing, operation, structures, materials, pavements, environment, and construction. Section 6002 of the FAST Act authorized \$67 million for TIDP for Fiscal Year (FY) 2016 and \$67.5 million for FYs 2017 through 2020.<sup>1</sup> Section 1101 of the Continuing Appropriations Act, 2021 and Other Extensions Act (Pub. L. 116-159) extends the surface transportation programs, including the Federal-aid highway program, under the FAST Act (Pub. L. 114-94) and title 23, U.S.C., through September 30, 2021. The FHWA expects up to \$10 million of TIDP funding to be made available for AID Demonstration Program in FY 2021.

The TIDP funds are available at an 80 percent Federal share, which requires a minimum mandatory 20 percent cost share. The Federal share of a project or activity carried out with funds authorized under section 6002 of the FAST Act shall be 80 percent unless expressly specified otherwise by the Act or otherwise determined by the Secretary [FAST Act § 6002(c)(1)], with the remainder coming from non-Federal sources. Other Federal funds using their appropriate matching share may be leveraged for the deployment but cannot be considered

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<sup>1</sup> The funds are subject to the overall Federal-aid obligation limitation and the obligation limitation associated with these funds is available for 4 fiscal years. Therefore, the amount of the TIDP budget authority available in a fiscal year is limited by the imposition of the limitation on obligations per the relevant appropriations act.

as part of the AID Demonstration Program matching funds, which must come from non-Federal sources unless otherwise allowed by statute.

The AID Demonstration grants are available to State Departments of transportation (DOTs), Federal Land Management Agencies (FLMAs), and Tribal governments. Any Federally recognized Tribe identified on the list of “Indian Entities Recognized and Eligible to Receive Services from the Bureau of Indian Affairs” (published at [77 FR 47868](#)) is eligible to apply for AID Demonstration grants. Metropolitan planning organizations (MPOs) and local governments may apply through the State DOT as a subrecipient.

## **1. LEGISLATIVE AUTHORITY**

The AID Demonstration Program is authorized under 23 U.S.C. § 503(c) within the TIDP to implement accelerated innovation deployment. Section 1101 of the Continuing Appropriations Act, 2021 and Other Extensions Act (Pub. L. 116-159) extends the surface transportation programs, including the Federal-aid highway program, under the FAST Act (Pub. L. 114-94) and title 23, U.S.C., through September 30, 2021. These statutory authorities authorize the Secretary of Transportation to “carry out a technology and innovation deployment program relating to all aspects of highway transportation, including planning, financing, operation, structures, materials, pavements, environment, construction, and the duration of time between project planning and project delivery.”

## **2. ASSISTANCE LISTING NUMBER**

20.200 -- Highway Research and Development Program

## **3. BACKGROUND**

The AID Demonstration Program provides incentive funding to State DOTs, FLMAs, and Tribal governments to accelerate the implementation and adoption of proven innovation in transportation. Eligible projects include activities eligible for assistance under title 23, U.S.C. in any phase of a highway transportation project between project planning and project delivery including planning, financing, operation, structures, materials, pavements, environment, and construction that address the TIDP goals.

The FHWA has made TIDP funds available for the AID Demonstration Program since 2014, awarding between 10 to 15 grants per fiscal year. Information on previously awarded AID Demonstration projects can be found on the AID Demonstration Webpage: [www.fhwa.dot.gov/innovation/grants](http://www.fhwa.dot.gov/innovation/grants). This Webpage is updated as AID Demonstration awards are made.

## **4. PROGRAM GOALS AND OBJECTIVES**

The objective of the AID Demonstration program is to accelerate the deployment and adoption of proven innovative practices and technologies, and through enhanced technology transfer encourage a more widespread rate of adoption. The AID Demonstration program allows transportation agencies to mitigate risks associated with first-time or early adoption of

innovations on transportation projects. Projects submitted for AID Demonstration must address one or more of the TIDP goals: (A) significantly accelerate the adoption of innovative technologies by the surface transportation community; (B) provide leadership and incentives to demonstrate and promote state-of-the-art technologies, elevated performance standards, and new business practices in highway construction processes that result in improved safety, faster construction, reduced congestion from construction, and improved quality and user satisfaction; (C) construct longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges; (D) improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability; and (E) develop and deploy new tools, techniques, and practices to accelerate the adoption of innovation in all aspects of highway transportation.

## 5. ELIGIBLE PROJECTS

The FHWA is seeking applications for projects that implement proven innovation into transportation projects. Eligible project activities include planning, financing, operation, structures, materials, pavements, environment, and construction or in any phase of a highway transportation between project planning and project delivery.

An eligible project must be a pilot deployment for the applicant of a proven innovation previously deployed by others and must align with the previously described TIDP goals. The innovation must be proven in a real-world highway transportation application with documented benefits (in a form that is publicly available or verifiable), not routinely used by the applicant or the subrecipient, and represent a significant improvement from the applicant's or the subrecipient's conventional practice. The FHWA will use the Technology Readiness Level<sup>2</sup> (TRL) scale to evaluate the appropriateness of the innovation proposed for the AID Demonstration Program. The TRLs are formal metrics that support assessments of the maturity of a technology using a set of standard questions to measure progress of a technology towards maturity. Only applications proposing innovations with a TRL 7 or greater, as shown in Table 1, will be considered.

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<sup>2</sup> A TRL Assessment is a tool for determining the maturity of a technology. The Exploratory Advanced Research Program Technology Readiness Level Guidebook can be found here: <https://www.fhwa.dot.gov/publications/research/ear/17047/index.cfm>.

TABLE 1—TECHNOLOGY READINESS LEVELS (TRL)			
Phase	TRL	Description	Questions
Basic Research	1	Basic principles and research	<ul style="list-style-type: none"> <li>Do basic scientific principles support the concept?</li> <li>Has the technology development methodology or approach been developed?</li> </ul>
	2	Application formulated	<ul style="list-style-type: none"> <li>Are potential system applications identified?</li> <li>Are system components and the user interface at least partly described?</li> <li>Do preliminary analyses or experiments confirm that the application might meet the user need?</li> </ul>
	3	Proof of concept	<ul style="list-style-type: none"> <li>Are system performance metrics established?</li> <li>Is system feasibility fully established?</li> <li>Do experiments or modeling and simulation validate performance predictions of system capability?</li> <li>Does the technology address a need or introduce an innovation in the field of transportation?</li> </ul>
Applied Research	4	Components validated in laboratory environment	<ul style="list-style-type: none"> <li>Are end-user requirements documented?</li> <li>Does a plausible draft integration plan exist, and is component compatibility demonstrated?</li> <li>Were individual components successfully tested in a laboratory environment (a fully controlled test environment where a limited number of critical functions are tested)?</li> </ul>
	5	Integrated components demonstrated in a laboratory environment	<ul style="list-style-type: none"> <li>Are external and internal system interfaces documented?</li> <li>Are target and minimum operational requirements developed?</li> <li>Is component integration demonstrated in a laboratory environment (i.e., fully controlled setting)?</li> </ul>
Development	6	Prototype demonstrated in relevant environment	<ul style="list-style-type: none"> <li>Is the operational environment (i.e., user community, physical environment, and input data characteristics, as appropriate) fully known?</li> <li>Was the prototype tested in a realistic and relevant environment outside the laboratory?</li> <li>Does the prototype satisfy all operational requirements when confronted with realistic problems?</li> </ul>
	7	Prototype demonstrated in operational environment	<ul style="list-style-type: none"> <li>Are available components representative of production components?</li> <li>Is the fully integrated prototype demonstrated in an operational environment (i.e., real-world conditions, including the user community)?</li> <li>Are all interfaces tested individually under stressed and anomalous conditions?</li> </ul>
	8	Technology proven in operational environment	<ul style="list-style-type: none"> <li>Are all system components form, fit, and functionally compatible with each other and with the operational environment?</li> <li>Is the technology proven in an operational environment (i.e., meet target performance measures)?</li> <li>Was a rigorous test and evaluation process completed successfully?</li> <li>Does the technology meet its stated purpose and functionality as designed?</li> </ul>
Implementation	9	Technology refined and market ready	<ul style="list-style-type: none"> <li>Is the technology deployed in its intended operational environment?</li> <li>Is information about the technology disseminated to the user community?</li> <li>Is the technology adopted by the user community?</li> </ul> <p>Example: <a href="http://www.fhwa.dot.gov/innovation/everydaycounts/">www.fhwa.dot.gov/innovation/everydaycounts/</a>.</p>



The FHWA expects up to \$10 million of TIDP funding to be made available for AID Demonstration grants in FY 2021 pursuant to the Continuing Appropriations Act, 2021 and Other Extensions Act (Pub. L. 116-159). The FHWA has funding award goals of up to \$9 million available to State DOTs and up to \$1 million available to FLMAs and Tribal governments.

The amount of each award may be at an 80 percent Federal Share of the full cost to deploy the innovation, up to a maximum of \$1 million per award per project. Awards are limited to two per State DOT applicant per fiscal year, with one award for a State DOT and one award for a subrecipient applying through the State DOT, and limited to one award per applicant for individual FLMAs and Tribal governments, subject to the number of eligible applications and the availability of funds.

The FHWA encourages the use of innovations included in the Every Day Counts (EDC) initiative. Please go to the following link to see examples and benefits of EDC innovations: [www.fhwa.dot.gov/innovation/everydaycounts/](http://www.fhwa.dot.gov/innovation/everydaycounts/). FHWA is seeking projects that deploy advanced digital construction management systems (ADCMS) technologies and those that address the first-mile/last-mile solutions to advance autonomous vehicle technology to widespread use and acceptance. In addition to the agency's top priority of safety, to maximize the value of FY 2021 AID Demonstration funds for all Americans, the FHWA is looking for projects that directly address climate change, environmental justice impacts, and advance racial equity. Consistent with the Rural Opportunities to Use Transportation for Economic Success (ROUTES) Initiative, the Department seeks rural projects that address deteriorating conditions and disproportionately high fatality rates on rural transportation infrastructure. Applicants should clearly state, in the narrative, if the project includes any of the aforementioned technologies.

The FHWA is seeking a diverse pool of applicants and a variety of innovations and project types to consider for award. The FHWA encourages eligible applicants that have not previously received an award to apply. The FHWA will give priority consideration to projects using innovations that have not previously been funded through the AID Demonstration Program along with those projects using innovations that have not advanced to mainstream, widespread use and practice.

Innovations that have advanced to mainstream widespread use and practice will graduate from AID Demonstration funding eligibility.<sup>3</sup> The FHWA will continue to encourage and support deployment of these innovations through other training and technical support activities. The list of innovations that have graduated to widespread use and are therefore ineligible for these awards can be found at: [www.fhwa.dot.gov/innovation/grants](http://www.fhwa.dot.gov/innovation/grants). Projects that include innovations that have graduated into widespread practice will be considered on a case by case basis.

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<sup>3</sup> FHWA will consider use of graduated innovations on a case by case basis. The applicant should contact the Program Manager prior to submitting such an application. Upon receipt of the application, the Program Manager may contact the applicant and request additional justification to support the request for consideration.

Applications submitted in response to this notice are not automatically guaranteed an award. Applicants are encouraged to follow the applications to ensure submission of complete applications.

## **SECTION B – FEDERAL AWARD INFORMATION**

### **1. FUNDING AND NUMBER OF AWARDS**

The AID Demonstration is a competitive discretionary grant program. The FHWA intends to issue awards totaling up to \$10,000,000 for FY 2021, making between 10 to 15 AID Demonstration grants and with no single grant providing more than \$1,000,000 per fiscal year. The TIDP funds are available at an 80 percent Federal share, which requires a minimum mandatory 20 percent cost share of the total project cost.<sup>4</sup> The number of awards will be determined by the number and quality of proposals received in response to this NOFO and the availability of funding. However, the FHWA reserves the right to make more, fewer, or no awards. The FHWA also reserves the right to award less than the maximum amount presented in the proposal. Submission of an application in Grants.gov is not a guarantee of award.

- Award Minimum: \$100,000
- Award Maximum: \$1,000,000

Given the limited funding currently available, the Government may not be able to award grants to all eligible applications, nor even to all applications that meet or exceed the stated evaluation criteria.

### **2. TYPE OF AWARD**

The planned award type is a grant that is awarded to a State DOT through project authorization, or for FLMAs and Tribes through existing agreements with FHWA Federal Lands Highway Divisions.

### **3. UNEXPENDED FUNDS**

If the Government does not expend all funds under this NOFO, a second award cycle may occur at the sole discretion of the Government.

If a grant recipient does not expend the funds made available for the grant award, remaining funds will be de-obligated within 90 days of the end of the period of performance as part of the closeout activities.

### **4. PERIOD OF PERFORMANCE**

The period of performance for awards under this Program will be one to three years from the effective date of the grant award. This time frame is inclusive of project implementation (up to 30 months) and report preparation (up to six months). The recipient must submit the grant closeout report to FHWA within 90 days after the end of the grant award period of performance.

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<sup>4</sup> The Federal share of a project or activity carried out with funds authorized under section 6002 of the FAST Act shall be 80 percent unless expressly specified otherwise by the act or otherwise determined by the Secretary. [FAST Act § 6002(c)(1)]

## **5. DEGREE OF FEDERAL INVOLVEMENT**

The FHWA anticipates limited Federal involvement with the AID Demonstration recipients during the course of these demonstration projects. The anticipated Federal involvement will include oversight, technical assistance, and guidance to the recipient.

## SECTION C – ELIGIBILITY INFORMATION

### 1. ELIGIBLE APPLICANTS

The FHWA will award AID Demonstration grants to State DOTs, FLMAs, and Tribal governments. Consistent with other FHWA funding provided to Tribes, any Federally recognized Tribe identified on the list of “Indian Entities Recognized and Eligible to Receive Services from the Bureau of Indian Affairs” (published at 77 FR 47868) is eligible to apply for AID Demonstration grants.

The MPOs and local governments may apply through the State DOT as a subrecipient.

### 2. COST SHARING OR MATCHING

Cost sharing or matching is required, with the maximum Federal share being 80 percent of the total cost of the project. Awardees must provide at least 20 percent of the total project cost (not 20 percent of the Federal share) as a matching share. Other Federal funds using their appropriate matching share may be leveraged for the deployment but cannot be considered as part of the AID Demonstration matching funds, which must come from non-Federal sources unless otherwise allowed by statute. For a more complete definition, please see the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards – Title 2, Code of Federal Regulations, Part 200 including section 200.306 on Cost Sharing or matching.

The cost share requirement pertains to the total project value. For example, if the total project value is \$100,000, the Federal Share cannot exceed \$80,000 and the cost share or matching must equal or exceed \$20,000 (20 percent of the total project value of \$100,000).

The FHWA will consider the following funds or contributions as a local match for the purpose of this program:

- Non-Federal funds
- Toll credits under Section 120(i) of Title 23

Further, State DOTs may use matching strategies available to them under the Federal-aid highway program such as “tapered match.”

However, FHWA cannot consider the following funds or contributions as a match:

- Funds already expended (or otherwise encumbered)
- Funds for which the source is ultimately a Federal program whose legislation does not allow use on other Federal projects.

### 3. ELIGIBLE USE OF FUNDS

The AID Demonstration funds are available for any project activities eligible for assistance under Title 23, U.S.C. Eligible activities may involve any phase of a highway transportation

project between project planning and project delivery, including planning, financing, operation, structures, materials, pavements, environment, and construction that address the TIDP goals mentioned in Section A (Program Description).

Projects eligible for funding must pilot and demonstrate proven innovative practices or technologies, which the applicant or subrecipient intends to implement and adopt as a significant improvement from the applicant's or the subrecipient's conventional practice.

#### **4. ELIGIBLE INNOVATIONS**

Projects eligible must deploy innovative technologies with a TRL 7 or greater, as shown in **Table 1—Technology Readiness Levels**, will be considered. Innovations that have advanced to mainstream, widespread use and practice will graduate from AID Demonstration funding eligibility.<sup>5</sup> Projects that include innovations that have graduated into widespread practice will be considered on a case by case basis. The list of innovations that have graduated into widespread practice can be found on the Center for Accelerating Innovation website: [www.fhwa.dot.gov/innovation/grants](http://www.fhwa.dot.gov/innovation/grants).

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<sup>5</sup> FHWA will consider use of graduated innovations on a case by case basis. The applicant should contact the Program Manager prior to submitting such an application. Upon receipt of the application, the Program Manager may contact the applicant and request additional justification to support the request for consideration.

## SECTION D – APPLICATION AND SUBMISSION INFORMATION

### 1. ADDRESS TO REQUEST APPLICATION PACKAGE

Applicants may obtain application forms at [grants.gov](http://grants.gov) under the NOFO number cited herein.

The Applicant must complete and submit all forms included in the application package for this notice as contained at [www.grants.gov](http://www.grants.gov).

Applicants who do not have broadband access and wish to obtain an application package by other means may contact the Center for Accelerating Innovation at [innovation@dot.gov](mailto:innovation@dot.gov) for direct assistance.

### 2. CONTENT AND FORM OF APPLICATION SUBMISSION

The application must include a cover page, the Project Narrative and the Standard Form 424 (Application for Federal Assistance) and Budget Information. Standard Forms (SF) are available online at [www.grants.gov/web/grants/forms/sf-424-family.html](http://www.grants.gov/web/grants/forms/sf-424-family.html). More detailed information about the cover page and Project Narrative follows.

i) Cover Page Including the Following Table (not included in the 10-page limitation):

Project Name		
Innovation(s)		
Does this project deploy an:		Yes/No
<ul style="list-style-type: none"> <li>• EDC Innovation</li> <li>• Advanced Digital Construction Management System</li> <li>• First &amp; Last Mile related to Autonomous Vehicle</li> </ul>		Yes/No
Previously Incurred Project Cost	\$	
Future Eligible Project Cost	\$	
Total Project Cost	\$	
AID Demonstration Request	\$	
Total Federal Funding ( <i>Including AID Demonstration</i> )	\$	
Are matching funds restricted to a specific project component? If so, identify which one?		Yes/No
Is the project currently programmed in the:		Yes/No
<ul style="list-style-type: none"> <li>• Transportation Improvement Program</li> <li>• Statewide Transportation Improvement Program</li> <li>• Metropolitan Planning Organization Long Range Transportation Plan</li> <li>• State Long Range Transportation Plan</li> <li>• Tribal Transportation Program Transportation Improvement Program</li> </ul>		<i>(Specify in which plan(s) the project is currently programmed)</i>
State(s) in which the project is located		

Project Location: <i>(latitude/longitude)</i>	
Congressional District project is located in	
Does this project fall within <i>(entirely or partially)</i> a Federally designated community development zone? Yes/No. If yes, identify which Federally designated community development zones the project is located. <ul style="list-style-type: none"> <li>• Opportunity Zones</li> <li>• Empowerment Zones</li> <li>• Promise Zones</li> <li>• Choice Neighborhoods</li> </ul>	Yes/No. <i>(Specify which designated community development zone(s))</i>
Is this project located in a Rural Area?	Yes/No

## ii) Project Narrative Guidelines

The applicant or subrecipient shall respond to all the application requirements described below.

**FORMAT:** The supplemental narrative shall be prepared with standard formatting (e.g. a single-spaced document, using a standard 12-point font, such as Times New Roman, with 1-inch margins)

**LENGTH:** Answers to sections A through H below shall not exceed 15 pages.<sup>6</sup>

To ensure all submissions are evaluated fairly, applications that do not meet the identified format may be considered ineligible for consideration.

The application must include information required for FHWA to determine that the project satisfies requirements described in NOFO Sections A, B, and C and to address the selection criteria specified in Section E.

To the extent practicable, applicants should provide data and evidence of project merits in a form that is verifiable or publicly available. The FHWA may ask an applicant to supplement data in its application, but expects applications to be complete upon submission. Incomplete applications will be considered ineligible for consideration.

The applicant or subrecipient shall list the Project Narrative and any additional supporting documentation in the attachments section of the SF 424 mandatory form in Grants.gov to successfully complete the application process.

An application shall include sufficient information to verify that the project satisfies requirements described in NOFO Sections A, B, and C and allow the assessment of the selection criteria specified in Section E. The applicant or subrecipient is required to demonstrate

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<sup>6</sup> Applications should not exceed 15 pages in length, not including the Budget, Budget Narrative and other attachments. Additional information supporting the application, such as project location maps, technical information, and letters of endorsement may be submitted as addenda to the application and will not count against the application page limit, but should not exceed 25 pages for the supporting documentation. This information should be included on the SF 424 attachment list.



responsiveness in their proposal to the selection criteria with the most relevant information they can provide, regardless of whether such information is specifically requested or identified. The applicant or subrecipient shall provide concrete evidence of project milestones, financial capacity, and commitment to support project readiness.

The narrative should address the evaluation criteria set forth in Section E below by including, without limitation, a description of the activities, objective(s), benefits, performance goals and measures for the work to be performed, any organizational experience that would enhance an applicant's capacity to carry out the proposed project, and the resources to be provided to support the proposal. Additionally, the applicant should provide a description of how the activities will be monitored, assessed, and documented to determine the extent to which performance goals and measures are achieved, including a timeline of the proposed activities. Project Narrative must adhere to the following basic outline, and include relevant maps and graphics:

- A. **Project Abstract:** Briefly describe the work that is to be completed and indicate whether the project is part of a larger effort or stands alone. State the aspect of highway transportation and identify the TIDP goals that the innovation would address (maximum five sentences). Identify the specific innovation(s) that will be deployed and the applicable TRL for each that will be deployed using the AID Demonstration grant funding. The project abstract should succinctly describe how this specific request for AID Demonstration funding would be included in the project.
- B. **Project Readiness / Impact:** Provide a statement to confirm the project is ready to be authorized within six months of receiving the AID Demonstration award. Identify where the project is in the planning process and indicate compliance with the National Environmental Policy Act and other required permitting as applicable. Provide a brief description of how climate change and environmental justice were considered in the planning stage. Describe how the project reduces greenhouse gas emissions and supports State or local Climate Action Plans (Environmental Protection Agency Climate Change website - <https://www.epa.gov/climate-change>) or how environmental justice screening tools were employed. If either were not considered in the planning stage, the application should provide a statement as to why consideration is not applicable at this time. Describe how the project enhances racial equity and eliminates barriers to opportunity (Equity and Access Policy Statement - <https://www.transportation.gov/civil-rights/civil-rights-library/equity-and-access-policy-statement>). Identify where the project is in the applicant's and subrecipient's programming document (i.e. Transportation Improvement Program, Statewide Transportation Improvement Program, Metropolitan Planning Organization Long Range Transportation Plan, State Long Range Transportation Plan, or Tribal Transportation Program Transportation Improvement Plan). Include a project milestone chart that clearly identifies the proposed project start and anticipated completion date. Applicants must clearly identify project readiness and describe the project impact in the application package to be considered.
- C. **Project Description:** Provide a brief project description and identify project objective(s), the proposed innovation, documented benefits of the innovation supporting planned use, current organizational/institutional experience with the innovation, and the significant improvement to conventional practice expected. Failure to clearly identify the project

objective(s), documented benefits, and organizational/institutional experience, will result in an incomplete submission resulting in an ineligible application.

- D. **Innovation Performance:** Identify project performance goals and associated measures as related to the implementation of the proposed innovation. Provide a brief description of how the innovation will be monitored, assessed, and documented to determine if the project performance goals and measures are achieved. Include a timeline/schedule of demonstration, deployment, implementation, and/or adoption activities. Failure to clearly identify the project performance goals and measures, as related to the implementation of the innovation, will result in an incomplete submission resulting in an ineligible application.
- E. **Applicant information and coordination with other entities:** Identify the applicant, and subrecipient(s) if applicable; provide a description of cooperation with other entities; and provide information regarding any other entities involved in the project.
- F. **Funding Request:** The applicant or subrecipient must submit the items below.
- **Detailed Budget:** Complete the detailed budget form SF 424 Budget Information (SF 424C Construction / SF 424A Non-Construction) that describes the costs associated with the proposed project.
  - **Budget Narrative:** Two-page limit. Summarize the basis for determining the cost of the innovation in the project (note: a project cost estimate may be the best source for providing this data and must be provided as an additional attachment). The budget narrative should also include a chart that includes: total project cost, AID Demonstration funding requested, Federal share and source, and non-Federal share and source. Failure to identify the project costs and Federal/non-Federal shares and source, as related to the implementation of the innovation, will result in an incomplete submission resulting in an ineligible application.
- G. **Eligibility and Selection Criteria:** Provide a brief description of how the project meets the statutory eligibility criteria as described in Section C (Eligibility Information) and the selection criteria identified in Section E. (Application Review Information).
- H. **Contact Information:** Include contact information requested as part of the SF-424. The FHWA will use this information to contact applicants and to inform parties of FHWA's decision regarding award determination. Contact information should be provided for a direct employee of the applicant. Contact information for a contractor, agent, or consultant of the lead applicant is insufficient for FHWA's purposes.

### Deliverables

Applicants shall provide a schedule and deliverables.

<b>Deliverable</b>	<b>Due Date</b>	<b>Section 508 Compliant?</b>
Data Collection and Implementation Plan	TBD - After Award	Not Required

Semi-Annual Project Progress Report	January 30, July 30	Not Required
Final Project Report (Template available <a href="http://www.fhwa.dot.gov/innovation/grants">www.fhwa.dot.gov/innovation/grants</a> )	six months after project completion	Required <sup>7</sup>

### Funding Description

The application must include a breakdown of estimated costs across project work areas or tasks, including an identification of funding sources and amounts. This includes:

- a complete list of activities to be funded by the request, including organizations and key staff involved; estimated costs; an identification of all funding sources that will supplement the requested funds and will be necessary to fully fund the request; and a timeline for completion of the activities to be supported.
- an indication of how the remaining minimum 20 percent of the total project value of the non-Federal share (cash or in-kind services) will be funded.

### **3. UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM)**

Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to: (i) Be registered in SAM before submitting its application; (ii) Provide a valid unique entity identifier in its application; and (iii) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

FHWA may not make an award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time FHWA is ready to make an award, the FHWA may determine that the applicant is not qualified to receive an award and use that determination as a basis for making an award to another applicant.

### **4. SUBMISSION DATES AND DEADLINES**

The AID Demonstration grant application must be received in Grants.gov by the application due date/time listed on page 3 of this NOFO.

#### Notice of Intent to Apply:

This communication is for governmental planning purposes and is not binding. Although not mandatory, submission of the Notice of Intent to Apply is strongly recommended to aid the government in conducting a fair and efficient evaluation. Eligible entities may declare their

<sup>7</sup> Section 508 requirements are included in NOFO Section F's General Terms and Conditions available online at: [www.fhwa.dot.gov/aaa/generaltermsconditions.cfm](http://www.fhwa.dot.gov/aaa/generaltermsconditions.cfm).

intention to apply for this funding opportunity by contacting the Center for Accelerating Innovation via email at [innovation@dot.gov](mailto:innovation@dot.gov) by the deadline stated on page 3 of this NOFO. Applications will not be accepted or considered with the Notice of Intent. Proposing entities must clearly identify the proposed innovation, Project Manager and Fiscal Officer. Include in the submission all partner organizations.

#### Applications:

It is the responsibility of the applicant to allow for sufficient time to meet the Grants.gov application requirements stated at the time of this posting and to adhere to submission deadlines. The deadline stated on page 3 is the date and time by which the Agency must receive the full and completed application, including all required sections. Applications received after the deadline will not be reviewed or considered.

### **5. INTERGOVERNMENTAL REVIEW**

An application under this NOFO is not subject to the State review under Executive Order 12372.

### **6. FUNDING RESTRICTIONS**

The FHWA will not reimburse any pre-award costs, application preparation costs, or research activities.

### **7. USE OF INFORMATION FOR OTHER DEPARTMENTAL PURPOSES**

Information collected from all applicant submissions may be used for Government purposes. In addition, information gathered through this notice may be used to conduct outreach and engagement related to future similar opportunities.

### **8. INTENT TO RELEASE NAMES OF APPLICANTS, APPLICATIONS, AND FINAL PROJECT REPORTS**

To expand public awareness of innovative technologies, concepts, and ideas, FHWA intends to only release publicly appropriate material if applicable after awards are made.

By submitting an application in response to this NOFO, the Applicant provides FHWA permission to release publicly:

- The names of all applicants after selection of the AID Demonstration awardees;
- Application documents after selection of the AID Demonstration awardees; and
- The final report after the AID Demonstration project is complete.

## SECTION E – APPLICATION REVIEW INFORMATION

### 1. CRITERIA FOR SELECTION OF GRANT AWARDS

#### ELIGIBILITY CRITERIA:

The FHWA will first screen all applications received by the due date to determine if the application is eligible. In addition to the eligibility criteria under Section C, FHWA will review the application for the following below criteria:

- Deadline submission was met
- Applicant eligibility was met
- SAM Registration
- SF-424 Application for Federal Assistance
- SF-424 includes a DUNS Number
- SF-424 lists any cost sharing or match amounts on line 18b
- SF-424A, Budget Information Form
- Budget Narrative
- Application/Project Narrative

#### TECHNICAL MERIT CRITERIA:

The FHWA will evaluate applications based on the following technical merit criteria, which are of equal importance. Applicants must address each criterion in the order presented below and respond to each in the Proposal Narrative.

- **Criterion 1 – Project Readiness**  
The project must be included in the applicant's and subrecipient's programming document (i.e. Transportation Improvement Program, Statewide Transportation Improvement Program, Metropolitan Planning Organization Long Range Transportation Plan, State Long Range Transportation Plan, or Tribal Transportation Program Transportation Improvement Plan); and must be ready to be authorized within six months of receiving the AID Demonstration award.
- **Criterion 2 – Pilot Deployment & Proven Technology**  
The project must be a pilot deployment for the applicant of a proven innovation previously deployed by others and align with the previously described TIDP goals. The TRL of the proposed innovation must be equal to 7 or greater as shown in Table 1. The proposed innovation must be proven in real-world application with documented benefits (in a form that is publicly available or verifiable), not routinely used by the applicant or the subrecipient, and represent a significant improvement from the applicant's or the subrecipient's conventional practice. Projects that include EDC innovations or ADCMS technologies, and first-mile/last-mile solutions related to Autonomous Vehicles shall be given additional consideration.
- **Criterion 3 – Project Impact**  
The narrative must clearly:
  - Identify overall project goal(s);

- Describe benefits and outcomes of the innovation deployment;
  - Explain the scope of impact on the applicant's (or the subrecipient's) conventional practice;
  - Demonstrate how the project has incorporated climate change and environmental justice in terms of a) planning and policy or b) design components with outcomes;
  - Identify how the project addresses racial equity and barriers in terms of: a) planning and policies; or b) project investments to redress prior inequities and barriers; and
  - Describe how innovation(s) will be deployed as standard practice in the future, if the AID Demonstration is successful.
- **Criterion 4 – Performance Goals & Measures**  
The application must present performance goals and measures for respective innovation demonstration and deployment activities. The application provides a willingness statement to revisit performance goals and measures if awarded.
  - **Criterion 5 – Monitoring & Effectiveness**  
The application describes how innovation will be monitored and how the effectiveness of the innovation(s) will be determined. The application provides a willingness statement to accept FHWA oversight of the project.
  - **Criterion 6 – Budget**  
The budget is in direct support of the requested funding amount.
    - SF 424C Construction / SF 424A Non-Construction
    - Budget Narrative

Clarity, quality, completeness and adherence to the NOFO application requirements. Incomplete applications will not be considered.

After evaluating proposals using the above criteria, the FHWA will further consider if the application:

- Supports economic vitality, including the creation of good jobs and the protection of workers' rights, at the national and regional level;
- Proposes a project that is in a Federally designated community development zones such as a qualified opportunity zone, Empowerment Zone, Promise Zone, or Choice Neighborhood. Applicants can find additional information about each of the designated zones at the sites below:
  - Opportunity Zones: (<https://opportunityzones.hud.gov/>)
  - Empowerment Zones: ([https://www.hud.gov/hudprograms/empowerment\\_zones](https://www.hud.gov/hudprograms/empowerment_zones))
  - Promise Zones: ([https://www.hud.gov/program\\_offices/field\\_policy\\_mgt/fieldpolicymgtpz](https://www.hud.gov/program_offices/field_policy_mgt/fieldpolicymgtpz))

- Choice Neighborhoods:  
([https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/cn](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/cn))
- Utilizes alternative funding sources and innovative financing models to attract non-Federal sources of infrastructure investment;
- Accounts for the life-cycle costs of the project to promote the state-of-good repair;
  - Is consistent with the Rural Opportunities to Use Transportation for Economic Success (ROUTES) Initiative. Clearly identifies how the project will address the challenges faced by rural areas.
- Includes innovative approaches to improve safety and expedite project delivery; and
- Holds the grant recipients accountable for their performance and achieving specific, measurable outcomes identified in the application.

### COST

Cost will be considered in the award decision. The budget application will be analyzed to assess cost reasonableness and conformance to applicable cost principles.

Applicants must provide the required matching funds, and supporting detail for these funds should be included in the application package.

Funding availability will also be considered in the award decision. This evaluation factor will not be rated, but will be considered in the award selection.

## **2. REVIEW AND SELECTION PROCESS**

The FHWA will utilize the following merit review process to evaluate applications.

The FHWA will establish a panel of technical and professional staff with relevant experience and/or expertise to review each eligible application, received by FHWA through Grants.gov, using the merit criteria above. Using the definitions below, the Government will identify strengths, weaknesses and risks relative to the stated merit criteria set forth above.

<b>Strength</b>	An aspect of an application that would positively impact the likelihood of the applicant successfully carrying out the proposed project, that exceeds the requirements for grant award.
<b>Weakness</b>	An aspect of an application that would negatively impact the likelihood of the applicant successfully carrying out the proposed project, that fails to meet the requirements for award.
<b>Risk</b>	An aspect of an application that presents an uncertainty as to the ability of the applicant successfully carrying out the proposed project and meet the requirements for award.

Based upon the strengths, weaknesses and risks identified, the Government will assign an adjectival rating from the table below to each merit criteria. An overall adjectival rating from the below table will be assigned to the application based on the adjectival ratings of the individual merit criteria.

<b>ADJECTIVAL RATING</b>	<b>DEFINITION</b>
<b>Exceptional</b>	The applicant's proposal is highly compelling, comprehensive and demonstrates a thorough understanding of the goals of the Program and the merit criteria. There are very few, if any, weaknesses or risks and if there are any, they are minor. Strengths far outweigh any weaknesses or risks.
<b>Exceeds Standards</b>	The applicant's proposal appropriately responds to the merit criteria and demonstrates a thorough understanding of the goals of the Program. The Applicant's response meets and exceeds the standard requirements for a "Meets Standard" rating but does not quite meet the standards for the Exceptional rating. There may be some weaknesses or risks, although they are mostly minor. Strengths outweigh any weaknesses or risks.
<b>Meets Standards</b>	The applicant's proposal is appropriate and adequately addresses the merit criteria. The application demonstrates an understanding of the program goals. There may be several weaknesses and/or risks; however, the combined impact of any strengths is approximately equal to the combined impact of any weaknesses or risks.
<b>Unacceptable</b>	The applicant's proposal does not provide sufficient information or does not respond adequately to the merit criteria, therefore, the applicant's proposal is inadequate. The proposal does not demonstrate a satisfactory understanding of the goals of the Program, contains many weaknesses or risks, and little or no strengths. Weaknesses or risks far outweigh any strengths.

The evaluation team will be responsible for reviewing, evaluating, and rating the applications as well as making funding recommendations to FHWA senior leadership.

The Government reserves the right to not make an award to a recipient based on the results of the risk assessment.

The Government reserves the right to use outside expertise and/or contractor support to perform application evaluation.

The Secretary of Transportation is the official responsible for final award approval. The Government is not obligated to make any award as a result of this notice.

The FHWA Program Coordinator is the official responsible for all communications with applicants following the publication of this NOFO through execution of final awards. After the Technical Evaluation Review and Management & Fiscal Review, the Government may consider the following factors prior to final selection.



- The FHWA will give priority consideration to projects using innovations that have not previously been funded through the AID Demonstration Program along with those projects using innovations that have not advanced to mainstream, widespread use and practice.
- To support Federal investment in distressed areas, the FHWA may also consider whether a project utilizing AID Demonstration funding is located in a Federally designated community development zones or in an area that meets the criteria for the ROUTES Initiative as identified in [DOT Order 5050.1](#).
- The FHWA seeks to select projects that have considered climate change and environmental justice in terms of a) planning and policy or b) design components with outcomes that address climate change. To address the planning and policies, the application should describe what specific climate change or environmental justice activities have been completed for this project. The application should state whether a project is incorporated in a climate action plan, whether an equitable development plan has been prepared, and whether tools such as EPA's EJSCREEN<sup>8</sup> have been applied in project planning.

### 3. RISK ASSESSMENT

Prior to award, each selected applicant will be subject to a risk assessment, as required by [2 CFR § 200.206](#). Depending on the level and severity of FHWA's risk assessment findings, FHWA may determine that the applicant is not qualified to receive the award. The FHWA may also impose additional grant award terms and conditions above its customary general terms and conditions.

The risk assessment is conducted in several parts:

- A debarment and suspension review that includes a check against the records in SAM (currently the Federal Awardee Performance and Integrity Information System).
- An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM.
- FHWA will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR § 200.206 Federal awarding agency review of risk posed by applicants; and

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<sup>8</sup> The EJSCREEN tool can be referenced on the EPA site: <https://ejscreen.epa.gov/mapper/>

- An evaluation of the applicant's Single Audit in accordance with the Single Audit Act, if applicable. FHWA may, at its discretion, request further information and/or conduct an audit to confirm compliance as indicated on the SF-LLL – Disclosure of Lobbying Activities form, as provided for in the United States Code or the Code of Federal Regulations.

Per the guidelines on governmentwide suspension and debarment in 2 CFR Part 180, the Government will confirm that the Applicant and any named sub applicants are not debarred, suspended, or otherwise excluded from or ineligible for participation in Federal programs or activities.

#### **4. ANTICIPATED FEDERAL AWARD DATES**

The FHWA anticipates completing the award process for AID Demonstration grants on or before March 31, 2021.

## SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION

### 1. FEDERAL AWARD NOTICES

If your organization's application is selected for award, you will be notified and sent an award document for signature. Applicants not selected for award will be notified in writing by FHWA.

Notice that an Applicant has been selected as a Recipient does not constitute approval of the application as submitted. Before the actual award, FHWA will enter into negotiations if necessary. If the negotiations do not result in an acceptable submittal, FHWA reserves the right to terminate the negotiation and decline to fund the Applicant.

### 2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

All awards will be administered pursuant to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards found in 2 CFR Part 200, as adopted by FHWA at 2 CFR Part 1201. Applicable Federal laws, rules, and regulations set forth in title 23, U.S.C., and title 23 of the CFR apply. For a list of the applicable laws, rules, regulations, executive orders, polices, guidelines, and requirements, please see <http://www.fhwa.dot.gov/aaa/generaltermsconditions.cfm>.

### 3. REPORTING

The FHWA is required to track recipient activities and requires reports on a routine basis. The following reports must be submitted electronically, unless otherwise requested by the FHWA:

**Semi-Annual Progress Reports:** The recipient must submit a semi-annual progress report which shall include an up-to-date summary of accomplishments and performance metrics by the recipient; obstacles and problems encountered, remedies or proposed solutions; noteworthy activities, events, or successes; and a Financial Statement of funds expended to date. Semi-annual Progress Reports must include the following details about the relevant Milestones and Goals:

- Detailed accounting of the activities conducted including activities of team members and number of students reached during the reporting period;
- Plans for accomplishments in the next reporting period;
- Problems or delays that the recipient has experienced in the conduct of the activities; and
- Updated SF-425 Federal Financial Report 4040-0014 and SF-425A Federal Financial Report Attachment to document expenditures and the status of funds.

**Final Project Report:** The Grant Recipient must prepare and electronically submit the Final Report to the AID Demonstration Program Manager within six months after project completion. The Final Project Report follow the AID Demonstration Final Project Report Template. This document and instruction guide is available on the AID Demonstration Webpage: [www.fhwa.dot.gov/innovation/grant](http://www.fhwa.dot.gov/innovation/grant). This report must be section 508 compliant.

## **SECTION G – FEDERAL AWARDING AGENCY CONTACTS**

Address any questions regarding this NOFO to the Program Coordinator listed on the [AID Demonstration](#) Web page at [www.fhwa.dot.gov/innovation/grants](http://www.fhwa.dot.gov/innovation/grants) or contact the Center for Accelerating Innovation via email at [Innovation@dot.gov](mailto:Innovation@dot.gov). Include NOFO 693JJ321NF-AIDDP in the Subject Line.