Technology and Innovation Deployment Program (TIDP) Accelerated Innovation Deployment (AID) Demonstration

Program Guidance February 2014

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Purpose

The Federal Highway Administration (FHWA) Accelerated Innovation Deployment (AID) Demonstration grant program provides incentive funding for eligible entities to accelerate the implementation and adoption of innovation in highway transportation. Projects eligible for funding shall include proven innovative practices or technologies, including infrastructure and non-infrastructure strategies or activities, which the applicant or subrecipient intends to implement and adopt as a significant improvement from their conventional practice.

Introduction

The AID Demonstration funds are available for any project eligible for assistance under title 23, United States Code. Entities eligible to apply are State departments of transportation (DOT), Federal Land Management Agencies, and tribal governments. Metropolitan planning organizations (MPOs) and local governments may apply through the State DOT as subrecipients. The Notice of Funding Availability (NOFA) published on February 19, 2014 requests grant applications for the AID Demonstration and provides selection criteria, application requirements, and technical assistance with <u>Grants.gov</u> (*search: FHWA-2013-0048*) during the grant solicitation period. This Program Guidance document is intended to elaborate on the program details to assist in preparing applications and implementing the program.

Program Background

The Moving Ahead for Progress in the 21st Century Act (MAP-21) calls for a Technology and Innovation Deployment Program (TIDP) that includes three initiatives: accelerated innovation deployment (AID), future strategic highway research program (<u>SHRP 2</u>), and accelerated implementation and deployment of pavement technologies.

The TIDP relates to all aspects of highway transportation, including planning, financing, operation, structures, materials, pavements, environment, and construction. TIDP provides technical assistance to researchers, developers, and deployers and assists with development of improved tools and methods to accelerate the adoption of proven innovative practices and technologies as standard practices.

Per Section 52003 of MAP-21 and 503(c) of title 23, United States Code (U.S.C.), the **TIDP goals** are as follows:

- Significantly accelerate the adoption of innovative technologies by the surface transportation community;
- 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;
- Construct longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges;
- Improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability; and
- Develop and deploy new tools, techniques, and practices to accelerate the adoption of innovation in all aspects of highway transportation.

The AID program provides funding and other resources to offset the risk of trying an innovation. Coupled with Section 1304 of MAP-21 (23 U.S.C. 120(c)(3)) "<u>Innovative Project Delivery</u> <u>Methods</u>", AID offers States incentives such as funding and an increased Federal share for projects using innovations.

The AID program is designed to fulfill the following requirements:

- Establish and carry out demonstration programs;
- Provide technical assistance and training to researchers and developers; and

• Develop improved tools and methods to accelerate the adoption of proven innovative practices and technologies as standard practices.

This program guidance focuses on the AID program's **Demonstration grants**, which are administered through the FHWA Center for Accelerating Innovation (CAI).

Statutory References

- MAP-21 Title I, Section 51001 (a)(2);
- MAP-21 Title II, Section 52003; and
- Title 23, U.S.C. subsection 503(c)

Funding

A total of \$30 million is expected to be available for the AID Demonstration grant program under MAP-21. The FHWA has annual funding award goals of up to \$14,000,000 available to State DOTs and up to \$1,000,000 available to Federal Land Management Agencies and tribal governments. These funding goals will be reviewed and may be adjusted to reflect current priorities and needs. Subject to the number of eligible applications and the availability of funds, awards will be limited to two projects per State DOT applicant per year (up to one award for a State DOT project and up to one award for a subrecipient's project) and one project per Federal Land Management Agency or tribal government applicant per year. To ensure a wide variety of innovations and project types, FHWA will initially limit awards to three projects per innovation.

The amount of the award may be up to the **full cost of the innovation** in the project, but only **to a maximum of \$1,000,000**. States are also encouraged to use Section 1304 of MAP-21 (23 U.S.C. 120(c)(3)) "Innovative Project Delivery Methods" on projects that may qualify to increase the Federal share by up to 5 percent. Information on the "Innovative Project Delivery Methods" is available at <u>http://www.fhwa.dot.gov/map21/qandas/qaipd.cfm</u>. To emphasize, the AID Demonstration fund award is based on the **cost of the innovation** in a project, not the total project cost. The awarded AID Demonstration funds will be used in place of other Federal program funds and do not otherwise modify the Federal fund match requirements.

Applicants must provide a funding request in the narrative application with a basis for determining the cost of the innovation in the project. [**NOTE**: *If funding for staff, materials, or other items is part of the innovation cost for an eligible project, the applicant will need to include it in the application for consideration.*]

Eligible Entity

Entities eligible to apply for funding ("Applicants") are State DOTs, Federal Land Management Agencies, and tribal governments. Consistent with other FHWA funding provided to tribes, federally recognized tribes identified on the list of "Indian Entities Recognized and Eligible to

Receive Services from the Bureau of Indian Affairs" (published at 77 FR 47868) are eligible to apply. Metropolitan planning organizations (MPOs) and local governments may apply through State DOTs as subrecipients. Applicants must submit applications electronically through <u>Grants.gov</u> (search: FHWA-2013-0048).

Eligible Project

An eligible project will meet all of the following requirements:

- Be eligible for assistance under title 23, U.S.C.;
- Be <u>ready to initiate</u> within 6 months of applying for AID Demonstration funding;
- Involve any aspect of highway transportation including planning, financing, operation, structures, materials, pavements, environment, and construction; and
- Include an innovation that:
 - aligns with <u>TIDP goals</u>;
 - must be proven in real-world application with documented benefits* (in a form that is publicly available or verifiable);
 - \circ is not routinely used by the applicant or the subrecipient; and
 - the applicant or the subrecipient intends to implement and adopt as a significant improvement from the applicant's or the subrecipient's conventional practice.

*The FHWA encourages the use of innovations included in the Every Day Counts (EDC) initiative. Innovations included in the EDC initiative need only to be cited. Examples and benefits of EDC innovations are included on the EDC website at http://www.fhwa.dot.gov/everydaycounts/.

Selection Criteria

The FHWA will use an open, rolling solicitation. Project readiness will be treated as primary selection criteria in FHWA's evaluation process.

- To address project readiness, the project must be ready to initiate within 6 months of applying for AID Demonstration funding. [NOTE: For this program, a project is considered "ready to initiate" at the stage when the awarded funds could be obligated to the project.]
- The innovation must not be routinely used by applicant or subrecipient and must be of significant improvement from the applicant's or subrecipient's conventional practice.
- If several applications submitted at the same time are rated as "Qualified" and exceed the amount of available funding, priority funding consideration will be given to **projects** that
 - o use an innovation that is included in the EDC initiative; and
 - \circ $\;$ have not received TIDP funding which includes the following:

- accelerated innovation deployment (AID) [NOTE: AID funds currently include State Transportation Innovation Council (STIC) Incentive and AID Demonstration];
- future strategic highway research program (<u>SHRP 2</u>); or
- accelerated implementation and deployment of pavement technologies.

All applications will be evaluated on a rolling basis and be assigned a rating of "Qualified" or "Not Qualified."

- Qualified:
 - project <u>ready to initiate</u> within 6 months of applying for AID Demonstration funding;
 - project innovation aligns with TIDP goals;
 - innovation is proven in real-world application with documented benefits, and not routinely used by the applicant or the subrecipient;
 - application describes the innovation's magnitude and scope of impact on the applicant's or the subrecipient's conventional practice;
 - o data is included that directly supports the requested funding amount;
 - information provided on performance goals and measures for respective innovation demonstration and deployment activities; and
 - o application indicates the applicant's or subrecipient's willingness to:
 - participate in monitoring and assessment activities regarding the effectiveness of the innovation(s) and subsequent technology transfer and information dissemination activities associated with the project;
 - 2. accept FHWA oversight of the project; and
 - 3. conduct before and after customer satisfaction determinations for construction projects.
- Not Qualified:
 - o project does not meet the eligibility requirements;
 - application does not meet the "Qualified" rating;
 - o application fails to address one or more of the application requirements;
 - applicant (or subrecipient, if applicable) received AID Demonstration funding within the current fiscal year; or
 - three projects with the innovation were already awarded AID Demonstration funding.

Evaluation Process

All applications will be evaluated on a rolling basis and assigned a rating of "Qualified" or "Not Qualified" as described in the Selection Criteria section above.

- An evaluation team of technical and professional staff with relevant experience and/or expertise will review, evaluate and rate each application received by FHWA through <u>Grants.gov</u> (*search: FHWA-2013-0048*).
- After reviewing the application, the evaluation team may contact the applicant to discuss the application and confirm understanding of the requirements for participation in AID Demonstration.
- Based on the information collected, the evaluation team will prepare a summary assessment rating the application along with the team's recommendation.
- Evaluation team will make a recommendation to FHWA Senior Leadership.
- FHWA Senior Leadership will make a final determination on the approval of awards.

Applicant Responsibilities

- Applicants are encouraged to apply as soon as the eligible project is <u>ready to initiate</u> within 6 months. Funds will be allocated upon award selection.
- Coordinate with the State DOT, MPOs, local governments, and other stakeholders, as necessary, to develop application.
- Applicant must indicate willingness to:
 - participate in monitoring and evaluation activities regarding the effectiveness of the innovation(s) and subsequent technology transfer and information dissemination activities associated with the project;

[NOTE: <u>Examples</u> of activities that may be considered include participate in interdisciplinary, multi-state and/or regional technology transfer activities; incorporate minority institutions such as Hispanic Serving Institutions (HSI), Historically Black Colleges and Universities (HBCUs); establish and institutionalize an innovation deployment award, on which the impact of the accelerated innovation deployment is documented in terms such as the potential for saving lives, reducing environmental impact, reducing vehicle operating cost and travel time, or overall improvement in quality of life for all road users; incorporate the feedback from communities and other non-traditional stakeholders, and how their active involvement improve the quality of life of present and future road users.]

- 2. accept FHWA oversight of the project; and
- 3. conduct a before and after customer satisfaction determination for construction projects.

- Ensure that the application complies with the submission requirements. A complete application includes (1) the Standard Form 424 (SF 424) and (2) the narrative attachment to the SF 424. An "Application Information" document along with a template for the narrative attachment is available on the FHWA website (http://www.fhwa.dot.gov/accelerating/grants).
- Submit complete application through <u>Grants.gov</u> (search: FHWA-2013-0048).

Award Recipient Responsibilities

- Obligate the awarded funds to the project within 6 months of fund allocation.
- Work with FHWA on the development and implementation of a plan to collect information and report on the project's performance with respect to the relevant outcomes that are expected to be achieved through the innovation in the project.
- Report on specified performance indicators for the project. Performance indicators will be identified for each project, and will consider the individual project's stated goals as well as resource constraints of the recipient. Performance indicators will not include formal goals or targets, but will include baseline measures as well as post-project outputs, and will inform the AID Demonstration program in working towards best practices, programmatic performance measures, and future decision making guidelines.
- Submit a final report to the FHWA within 6 months of project completion based on the plan developed as described above [**NOTE**: *information is also described in Section VII* "Performance Measurement" of the NOFA to document the process, benefits, and lessons learned including development and/or refinement of guidance, specifications or other tools and methods to support rapid adoption of the innovation(s) as standard practice].

FHWA Division Office Responsibilities

- Provide the solicitation memorandum and program information to partners.
- If applicable:
 - Participate on evaluation team;
 - Ensure that the AID Demonstration project is eligible for assistance under title 23, U.S.C.; and
 - Monitor the progress of awarded project and offer technical assistance.

FHWA Center for Accelerating Innovation (CAI) Responsibilities

- Develop program guidance.
- Coordinate evaluation team and review of applications.
- Provide recommendations for award to FHWA Senior Leadership.

- Allocate funds for Award Recipients.
- Work with Award Recipients to develop and implement plan to collect information and report on the project's performance (as described in Section VII "Performance Measurement" of the NOFA).
- Monitor spending levels and deliverables under the program.
- Share accomplishments and lessons learned nationally.

AID Demonstration Program Contact

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http://www.fhwa.dot.gov/accelerating/grants/index.cfm