Overview and Application Information for Automated Driving Systems (ADS) Demonstration Grants

Notice of Funding Opportunity (NOFO) Number 693JJ319NF00001

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Date: January 24, 2019
Time: 1:00 – 2:30pm (EST)

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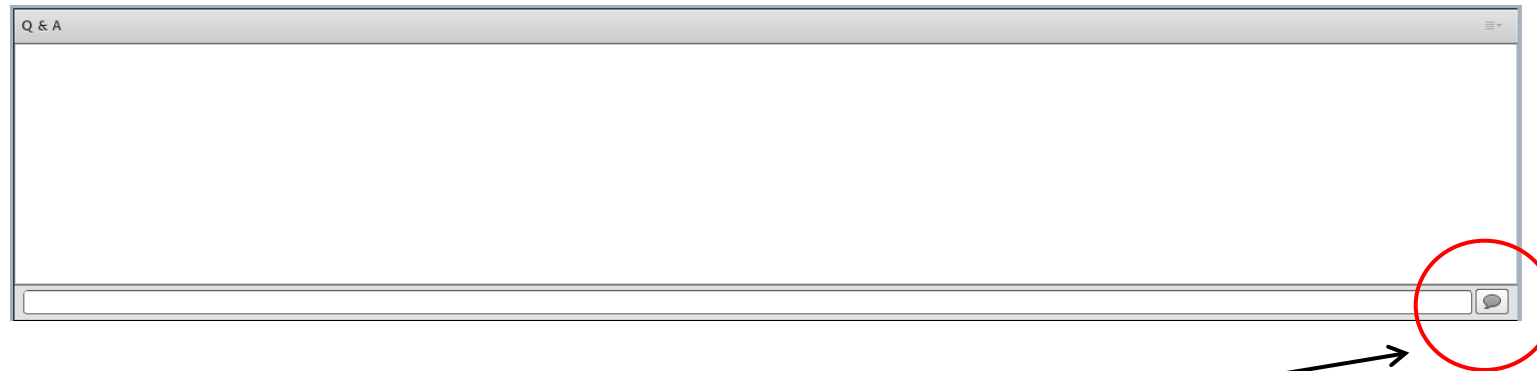# Ways to Participate

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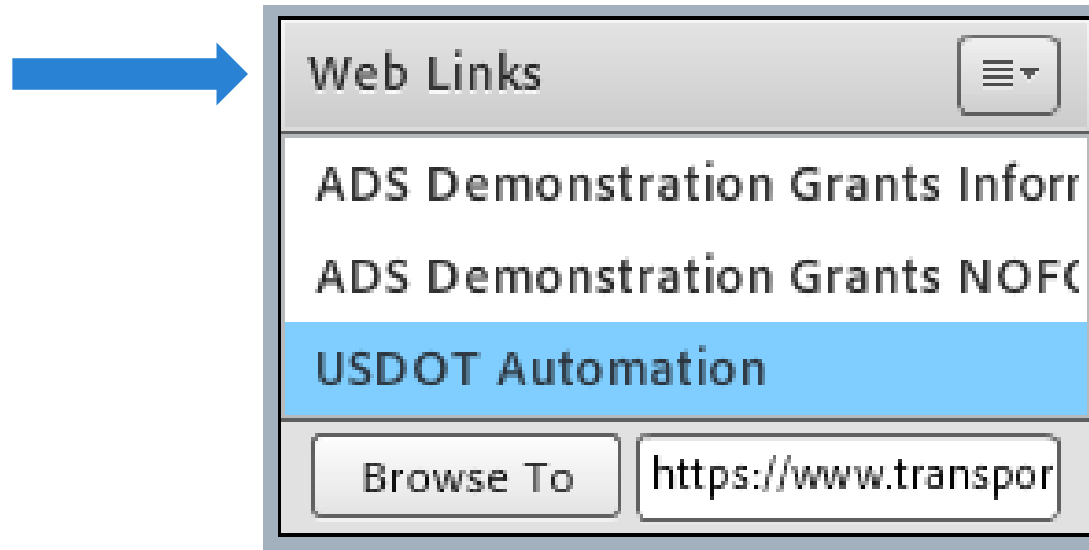- Questions will be addressed after the last presentation, as time permits.

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Disclaimer

- This webinar will be conducted as a virtual forum and will help potential Applicants gather additional information about this Funding Opportunity and ask specific questions. Participation in this webinar is <u>not</u> mandatory to submit an application under this Notice of Funding Opportunity (NOFO).

- As soon as possible after the webinar, the U.S. DOT will post the webinar recording and presentation material at <u>www.transportation.gov/av/grants</u>.

Agenda

- **1:05pm – 1:10pm: Welcome**
  - Finch Fulton, Deputy Assistant Secretary for Transportation Policy, Office of the Secretary of Transportation-Policy (OST-P)
- **1:10pm – 1:15pm: Program Overview**
  - Sujeesh Kurup, Transportation Policy Specialist, Office of the Secretary of Transportation-Policy (OST-P)
- **1:15pm – 1:30pm: Priorities and Requirements**
  - Mohammed Yousuf, Research Transportation Specialist, Federal Highway Administration (FHWA)
- **1:30pm – 1:45pm: Data Management**
  - Ariel Gold, ITS JPO Data Program Manager; Daniel Morgan, Chief Data Officer, OST
- **1:45pm – 2:00pm: Application Process, Review and Selection of Awardees, and Grant Administration Info**
  - Sarah Tarpgaard, Contracting Officer/Agreement Officer, FHWA
- **2:00pm – 2:30pm: Q&A Discussion**

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Welcome

Finch Fulton, Deputy Assistant Secretary for Transportation Policy, OST-P

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Program Overview

Sujeesh Kurup, Transportation Policy Specialist, OST-P

ADS Demonstration Grants Program Overview

Public Law 115-141 appropriates funding for a "highly automated vehicle research and development program" to fund demonstration grants. Public Law 115-141 appropriates **$60,000,000** to be used for demonstration grants that test the safe integration of highly automated vehicles [Automated Driving Systems (ADS)] into our Nation's on-road transportation system.

- Award Ceiling: up to $10,000,000 per project
- Capped at up to $15,000,000 per State

Public Law 115-141: https://www.congress.gov/115/bills/hr1625/BILLS-115hr1625enr.pdf, Pg. 643.

Eligible Entities

- State and local governments, Tribal governments, transit agencies and authorities, metropolitan planning organizations, other subdivisions of State or local governments (including public port authorities/districts), public academic institutions, public research institutions, or a multijurisdictional group* thereof applying through a single lead Applicant.

- Private companies and private universities are **NOT** eligible Applicants. However, private companies and private universities may be sub-recipients or subcontractors to an awardee.

Multijurisdictional group means a combination of eligible Applicants comprised of at least two members, each of whom is an eligible Applicant. One Applicant must be identified as the lead entity to serve as prime awardee in the event an award is made.

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Estimated Timeline

Date	Action
December 21, 2018	NOFO issued
March 21, 2019	Applications due by 8:00 PM (Eastern Time) through www.Grants.gov
Spring 2019	Estimated announcement of selected awardees

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Priorities and Requirements

Mohammed Yousuf, Research Transportation Specialist, FHWA

Program Goals

1. Safety: Test the safe integration of ADS into the Nation's on-road transportation system. Fund projects that demonstrate how challenges to the safe integration of ADS into the Nation's on-road transportation system can be addressed.

2. Data for Safety Analysis and Rulemaking: Ensure significant data gathering and sharing of project data with U.S. DOT and the public throughout the project in near real time, either by streaming or periodic batch updates, and demonstrate significant commitment to leveraging the demonstration data and results in innovative ways. Fund demonstrations that provide data and information to identify risks, opportunities, and insights relevant for U.S. DOT safety and rulemaking priorities needed to remove governmental barriers to the safe integration of ADS technologies.

3. Collaboration: Create collaborative environments that harness the collective expertise, ingenuity, and knowledge of multiple stakeholders. These projects should include early and consistent stakeholder engagement, including early coordination with law enforcement, local public agencies, industry, transportation-challenged populations, the public, and other relevant stakeholders as applicable to conduct these demonstrations on terms that work for all parties.

Program Focus Areas

1. Significant Public Benefit(s)

2. Addressing Market Failure and Other Compelling Public Needs

3. Economic Vitality

4. Complexity of Technology

5. Diversity of Projects

6. Transportation-Challenged Populations

7. Prototypes

Demonstration Requirements

- Each demonstration must focus on the **research and development of automation and ADS technology** (per the Society of Automotive Engineers [SAE] definitions), with a **preference for demonstrating L3 or greater automation technologies**.

- Each demonstration must include a **physical demonstration**. Modeling and simulation may be included activities; however, a physical demonstration is required.

- Each demonstration must include the **gathering and sharing of all relevant and required data with the U.S. DOT throughout the project**, in near real time. The Recipient must ensure the appropriate data are accessible to U.S. DOT and/or the public for a minimum of five years after the award period of performance expires.

Demonstration Requirements (cont.)

- Each demonstration must include input/output user interfaces on the ADS and related applications that are accessible and **allow users with varied abilities** to input a new destination or communicate route information to access information generated by the ADS.

- Each demonstration must address **how the demonstration can be scaled to be applicable across the Nation** to similar types of road environments and include an **outreach task** to share demonstration status, results, and lessons learned with other jurisdictions and the public, in furtherance of **technical exchange and knowledge transfer**.

Eligible Work Areas

- Technologies associated with ADS;

- Advanced communication systems supporting safety and/or mobility, including vehicle-to-vehicle and vehicle-to-infrastructure interoperable communications that benefit ADS integration;

- Innovative mobility solutions that involve deployment of automated vehicles;

- ADS that enhances safety and mobility for older adults and travelers with disabilities;

- Demonstration of shared interoperable fleet of automated vehicles; and

- Demonstration and validation of exchanges of data that can support and potentially accelerate the safe, efficient, and secure interoperable integration of ADS. Support the development of candidate system architecture content and the identification of, where needed, the development of voluntary consensus standards that can support large-scale, nationwide or global interoperable integration of ADS technologies into the on-road transportation system.

Data Management

Ariel Gold, ITS JPO Data Program Manager

Daniel Morgan, Chief Data Officer, OST

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U.S. DOT Objectives for Data Management

- Authorized analysts across the U.S. DOT modes have timely and consistent access to data from all ADS Demo projects to enable the Department to answer questions we have today and in the future
  - These data may contain Confidential Business Information (CBI) and/or Personally Identifiable Information (PII) if necessary to support project objectives, and will be managed within a controlled-access, collaborative data system

- The public has timely and consistent access to a subset of data from all ADS Demo projects to enable third-party research and application development
  - These data should contain no CBI or PII, and will be managed within one or more public data systems

- A project's data management plan will describe data types, users, and systems
  - A draft data management plan is required as part of the application; a more complete data management plan will be a required deliverable within 60 days after the effective data of award.

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Controlled-Access, Collaborative Data System

- U.S. DOT may make available a secure data system to store data for evaluation; more information is available at https://its.dot.gov/data/secure/

- Projects can designate an appropriate third-party system where U.S. DOT analysts can conduct their work, and describe how the system will enable controlled-access and collaboration at least equal to U.S. DOT's system

- Applicants should budget for the costs of data storage and sharing as appropriate so the U.S. DOT can understand the costs and benefits of different data management approaches

- U.S. DOT will use the information received to determine where controlled-access data will be managed.

Application Process, Review and Selection of Awardees, and Grant Administration Info

Sarah Tarpgaard, Contracting Officer/Agreement Officer, FHWA

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Application and Submission Information

- Applicants must submit their applications via Grants.gov under the Notice of Funding Opportunity Number: 693JJ319NF00001

- View the NOFO at https://www.grants.gov/web/grants/view-opportunity.html?oppId=310839.

- Applications are due on March 21, 2019, by 8:00 PM (Eastern Time) through www.Grants.gov

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Content of Application Submission

Part #	Title	Page Limit	Publicly Available?
1	Project Narrative and Technical Approach	25 pages max	Yes
2	Management Approach, Staffing Approach, and Capabilities	25 pages max	No
3	Draft Data Management Plan	No limit	No
4	Letters of Commitment	No limit	No
5	Application Standard Forms and Organizational Information	No limit	No
6	Budget Details	No limit	No

Application Part 1: Project Narrative and Technical Approach

- Introduction – include Summary Table

- Requires detailed descriptions of the following major areas:
  1. Executive Summary
  2. Goals
  3. Focus Areas
  4. Requirements
  5. Approach

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Application Part 2: Management Approach, Staffing Approach, and Capabilities

- Requires detailed descriptions of the following major areas:
    1. Management Approach
    2. Staffing Approach
    3. Capabilities

Application Part 3: Draft Data Management Plan

- Requires a preliminary overview of data that may be collected or created through the project. Include the following:
    1. Data Description
    2. Access Policies
    3. Data Storage

NOTE TO APPLICANTS: A more complete data management plan will be a required deliverable within 60 days after the effective date of award.

Application Part 4: Letters of Commitment

- Applicants are encouraged to submit letters of commitment from key stakeholders, proposed team members, and others, as appropriate, for the Applicant and the proposed demonstration. Letters of commitment should be submitted with letters scanned, organized, and combined into one file, with a table of contents listing included letters.

NOTE TO APPLICANTS: No page limit; not intended for public release online.

Application Part 5: Standard Forms & Organizational Information

a) Application Standard Forms (SFs)

    1. Include Standard Form 424 (Application for Federal Assistance), Standard Form 424B (Assurances for Non-Construction Programs), and the Certification Regarding Lobbying. Standard Forms (SFs) are available online at http://www.grants.gov/web/grants/forms/sf-424-family.html

b) Organizational Information

    1. Exceptions to the anticipated award terms and conditions as contained in Section F, Federal Award Administration Information

    2. Use of a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) Number

    3. Previous completion of an A-133 Single Audit

    4. Conflicts of Interest

    5. Terminated Contracts

    6. Review of Title 2 CFR §170

    7. Disclosure of violations of Federal criminal law involving fraud, bribery, or gratuity violations

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Application Part 6: Budget Details

- Present your estimated proposed budget to conduct the ADS demonstration, including:

    1. General Budget Table
    2. Detailed Budget by Year and Total Table
    3. Summary Budget Narrative by Project Component or Task
    4. Summary Budget Narrative by Cost Element

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Application Selection Criteria

1. TECHNICAL MERIT CRITERIA

GOALS: Degree that the proposed demonstration aligns with and/or satisfies the NOFO goals

FOCUS AREAS: Degree that the proposed demonstration aligns with and/or satisfies the NOFO focus areas

REQUIREMENTS: Degree that the proposed demonstration satisfies the NOFO requirements

APPROACH: Feasibility, Soundness, and Innovation of Approach

CAPABILITIES: Capabilities to Perform

2. COST

Relative cost will be considered in the award decision. The budget application will be analyzed to assess cost reasonableness and conformance to applicable cost principles. This evaluation factor will not be rated.

Application Review and Selection Process

- The U.S. DOT may utilize a phased approach for the review, selection, and award of applications depending upon the number, type, and quality of applications received.

- The review process consists of a technical evaluation phase and senior review. The Secretary will select the projects for award.

- The U.S. DOT will select for award the applications that are considered the most advantageous to U.S. DOT using the criteria cited in the NOFO and subject to the results of an Applicant risk assessment.

- The U.S. DOT will also consider for award a collection of projects that: (1) serve a variety of communities, including urban, suburban, and rural environments; and (2) serve a variety of transportation markets including freight, personal mobility, and public transportation.

- The U.S. DOT will prioritize projects that test applications with the greatest potential to serve transportation-challenged populations, including older adults and individuals with disabilities.

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Type of Award and Period of Performance

- Awards will be Cost Reimbursement grants.

- Funding will remain available until expended. Future NOFOs may be issued as needed for distribution of remaining available funds.

- Awards will vary in duration based on the proposed project. The anticipated period of performance is between 1 and 4 years from the effective date of award. Applicants shall propose a period of performance specific to their proposed demonstration project.

Cost Sharing or Matching

Cost sharing or matching will <u>not</u> be required but will be encouraged and considered. If proposed, the Government will evaluate cost share as part of the cost/budget review. The degree of cost share will be considered beneficial to the extent the cost share is considered feasible and demonstrates a furtherance of the goals of the ADS Demonstration program.

Contact Information

Address any questions to: ADSDemoGrants@dot.gov

Q&A Discussion

ADSDemoGrants@dot.gov

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